CEPH Accreditation Self-Study Report

MARCH 2021

BROWN
School of Public Health

Table of Contents

Guide to Acronyms and Abbreviations

AB	Bachelor of Arts
AM	Master of Arts
APHA	American Public Health Association
APHE	Applied Public Health Experience
ASPPH	Association of Schools and Programs of Public Health
AY	Academic Year
BRUNAP	Brown University AIDS Program
BSHS	Behavioral and Social Health Sciences
BSS	Behavioral and Social Sciences
BUSPH	Brown University School of Public Health
CAB	Community Advisory Board
CARE	Center for Animal Resources and Education
CAS	Committee on Academic Standing
CCC	College Curriculum Council
CDS	Center for Digital Scholarship
CHWs	Community Health Workers
CIS	Computing and Information Services
CMFA	Committee on Medical Faculty Appointments
CTR	Clinical and Translational Research
DGS	Director of Graduate Studies
DIAP	Diversity and Inclusion Action Plan
DIIRI	Dorcas International Institute of Rhode Island
DLD	Digital Learning & Design, Media Services
DSC	Doctoral Studies Committee
DUG	Departmental Undergraduate Group
DUS	Directors of Undergraduate Studies
EIP	Early Identification Program
ERF	Electronic Resource File
FTE	Full Time Equivalent
FAR	Faculty Activity Report
FY	Fiscal Year
GIP	Grant Incentive Program
GPD	Graduate Program Director
GSC	Graduate Student Council
GSIM	Graduate Student Information Management
HCHII	Hassenfeld Child Health Innovation Institute
HEZ	Health Equity Zone
HSPP	Health Services, Policy and Practice
HSR	Health Services Research
HUG	Historically underrepresented group
IDP	Individual Development Plan
IHI	International Health Institute
IMSD	Initiative for Maximizing Student Development
LEAD	Learning & Engaging Around Diversity
MD	Doctor of Medicine
mHealth	Mobile health
MPA	Master of Public Affairs
MPH	Master of Public Health
MTTG	Maximum time to graduation
NGO	Non-governmental organization
OIED	Office of Institutional Equity and Diversity
OIR	Office of Institutional Research
OGE	Open Graduate Education
OSP	Office for Sponsored Projects

OVPR	Office of the Vice-President for Research
PhD	Doctor of Philosophy
PHCC	Public Health Curriculum Committee
PHEC	Public Health Executive Committee
PHFA	Public Health Faculty Appointments
PHFAC	Public Health Faculty Affairs Committee
PIF	Primary Instructional Faculty
PLME	Program in Liberal Medical Education
PRAMS	Pregnancy Risk Assessment Monitoring System
RCR	Responsible Conduct in Research
RI	Rhode Island
RICAP	Rhode Island Community-Academic Partnership for Behavioral Health
RIDOH	Rhode Island Department of Health
RIPHA	Rhode Island Public Health Association
RIPHI	Rhode Island Public Health Institute
SAMHSA	Substance Abuse and Mental Health Services Administration
ScB	Bachelor of Science
ScM	Master of Science
SOCO	Single overriding communication objectives
SPH	School of Public Health
STATCOM	Statistics in the Community
TA	Teaching Assistant
TIPH	This is Public Health
TPAC	Tenure, Promotions, and Appointments Committee

Introduction

1) Describe the institutional environment, which includes the following:

    a. Year institution was established and its type (e.g., private, public, land-grant, etc.)

    Brown University is a private, nonprofit institution founded in 1764.

    b. Number of schools and colleges at the institution and the number of degrees offered by the institution at each level (bachelor's, master's, doctoral and professional preparation degrees)

    Brown has six schools:
- The College
- Graduate School
- School of Engineering
- School of Professional Studies
- School of Public Health
- Warren Alpert Medical School

The degrees conferred by the six schools are listed in the following table.

Degree Programs per Degree Level		
Level	**Degree**	**Total # of Degree Programs/Level**
Bachelor's	Bachelor of Arts (AB)	80
	Bachelor of Science (AB)	
Master's	Master of Arts (AM)	33
	Executive Masters	
	Master of Arts in Teaching (MAT)	
	Master of Fine Arts (MFA)	
	Master of Public Affairs (MPA)	
	Master of Public Health (MPH)	
	Master of Science (ScM)	
	Master of Science in Innovation Management & Entrepreneurship (ScMIME)	
Doctoral	Doctor of Philosophy (PhD)	51
	Doctor of Medicine (MD)	

    c. Number of university faculty, staff and students

Fall 2019 Headcount*	
Total students	9,971
Undergraduate	6,834
Graduate	2540
Medical	597
Faculty	1,508
Staff	3,201

*Fall 2019 is the most current data available.

    d. Brief statement of distinguishing university facts and characteristics

    Brown University is a private Ivy League university in Providence, Rhode Island. Founded in 1764, it is it is the seventh-oldest institution of higher education in the United State and the first

Ivy League school to accept students from all religious affiliations, a testament to the spirit of openness that still typifies Brown today. Originally located in Warren, Rhode Island, and called the College of Rhode Island, Brown moved to its current spot on College Hill overlooking Providence in 1770 and was renamed in 1804 in recognition of a $5,000 gift from Nicholas Brown, a prominent Providence businessman and alumnus, Class of 1786. The first building, the red-bricked University Hall built in 1770, still stands on the College Green. Today it is joined by nearly 230 other buildings on approximately 150 acres.

The 1890s saw a number of important changes. Brown admitted its first women and granted its first graduate degrees. While women came toward the start of the decade, 1881, the institution began to confer post-baccalaureate degrees toward the end, with master's awarded in 1888 and PhDs the following year.

Another period of transformation took place nearly 100 years later in the 1970s. Prompted by research conducted by two undergraduates, the University opted to eliminate all general education requirements for students seeking a bachelor's, emphasizing instead undergraduates' pursuit of their unique intellectual passions. This innovation, which came to be known as the Open Curriculum, rests on three principles: (1) Students should take an active role in their education by assuming responsibility for the direction of their learning, (2) An undergraduate education should be a process of individual and intellectual development, rather than simply a way to transmit a set body of information, and (3) The curriculum should encourage individuality, experimentation, and the integration and synthesis of different disciplines. The expectation that students serve as the architects of their courses of study has defined the undergraduate academic experience at Brown for the last 50 years.

The 1970s saw another important change. In 1975, Brown awarded its first MD degrees. The Brown Medical School changed its name to The Warren Alpert Medical School of Brown University in 2007 following a $100 million dollar pledge bestowed by The Warren Alpert Foundation.

In 2014, the 250th anniversary of Brown's founding, President Christina H. Paxson, the institution's 19th president, launched a strategic plan, *Building on Distinction: A New Plan for Brown*. The plan emphasizes interdisciplinarity, academic excellence, and campus development. She unveiled a companion plan, "Pathways to Diversity and Inclusion: An Action Plan for Brown University," two years later. The DIAP, as it colloquially called, details a set of concrete, achievable actions for developing an academic community that embodies social and intellectual diversity and in which students, faculty, and staff of all identities feel included. The plans undergird the University's comprehensive development campaign, which has achieved two-thirds of its $3-billion goal.

e. Names of all accrediting bodies (other than CEPH) to which the institution responds. The list must include the regional accreditor for the university as well as all specialized accreditors to which any school, college or other organizational unit at the university responds

Accrediting Bodies		
Body Type	**Accrediting Body**	**Most recent accreditation**
regional/institutional	New England Commission of Higher Education (NECHE)	2018
specialized	Accreditation Board for Engineering and Technology (ABET)	2015
	American Psychological Association (APA)	2019
	Liaison Committee on Medical Education (LCME)	2013

The University is also a member of the Association of American Universities, Association of American Medical Colleges, Council of Graduate Schools, Association of Research Libraries,

Association of Academic Health Sciences Libraries, Online Computerized Library Center, International Federation of Library Associations and Institutions, American Council on Education, American Association for Higher Education, Consortium on Financing Higher Education, and Council of Ivy League Presidents, among others.

f. Brief history and evolution of the school of public health (SPH) and related organizational elements, if applicable (e.g., date founded, educational focus, other degrees offered, rationale for offering public health education in unit, etc.)

The origins of the School of Public Health (SPH) can be traced to Brown's Department of Community Health, which was launched in 1971 in conjunction with the inauguration of the University's medical school. In 1988, Brown University Corporation approved an epidemiology doctoral program, and then seven years later approved a public health program to be housed in the University's Division of Biology and Medicine. While it was a Public Health Program, Dr. Terrie Fox Wetle served as the Associate Dean of Medicine for Public Health and Public Policy and reported to the Dean of the Division of Biology and Medicine. Brown launched its MPH program in 2000, and the program earned CEPH accreditation in 2002 (with reaccreditations in 2007 and 2014). In 2004, as part of the University's strategic plan, the Provost and Corporation of Brown approved an expansion plan for the Public Health Program. In 2005, a building was purchased to house public health research and education programs, and the Department of Community Health was organized into four disciplinary-based "sections." In 2011, the four sections evolved into separate departments within the Division of Biology and Medicine. The faculty and Corporation then approved plans for the Public Health Program to become a free-standing School of Public Health, effective July 1, 2013 with Dr. Wetle as founding dean. The School earned CEPH accreditation as a school of public health in June 2016. Dr. Bess Marcus, who in 2017 became the second dean, was succeeded in September 2020 by Dr. Ashish Jha. Four departments and 13 public health centers and institutes comprise the School (listed below). The Brown School of Public Health has more than 270 faculty members, 110 undergraduate concentrators, and 330 graduate students. It attracts over $63 million in annual external research and training funding.

School of Public Health Departments and Centers	
Department	**Public Health Center or Institute**
Behavioral and Social Sciences Biostatistics Epidemiology Health Services, Policy and Practice	Brown University AIDS Program Center for Alcohol and Addiction Studies Center for Behavioral and Preventive Medicine Center for Children's Environmental Health Center for Epidemiologic Research Center for Evidence Synthesis in Health Center for Gerontology and Healthcare Research Center for Health Promotion and Health Equity Center for Primary Care and Prevention Center for Statistical Sciences Hassenfeld Child Health Innovation Institute International Health Institute Mindfulness Center

2) Organizational charts that clearly depict the following related to the school (see ERF for PDF versions):

a. the school's internal organization, including the reporting lines to the dean: The first organizational chart shows the School's reporting lines and the second shows its academic programs.
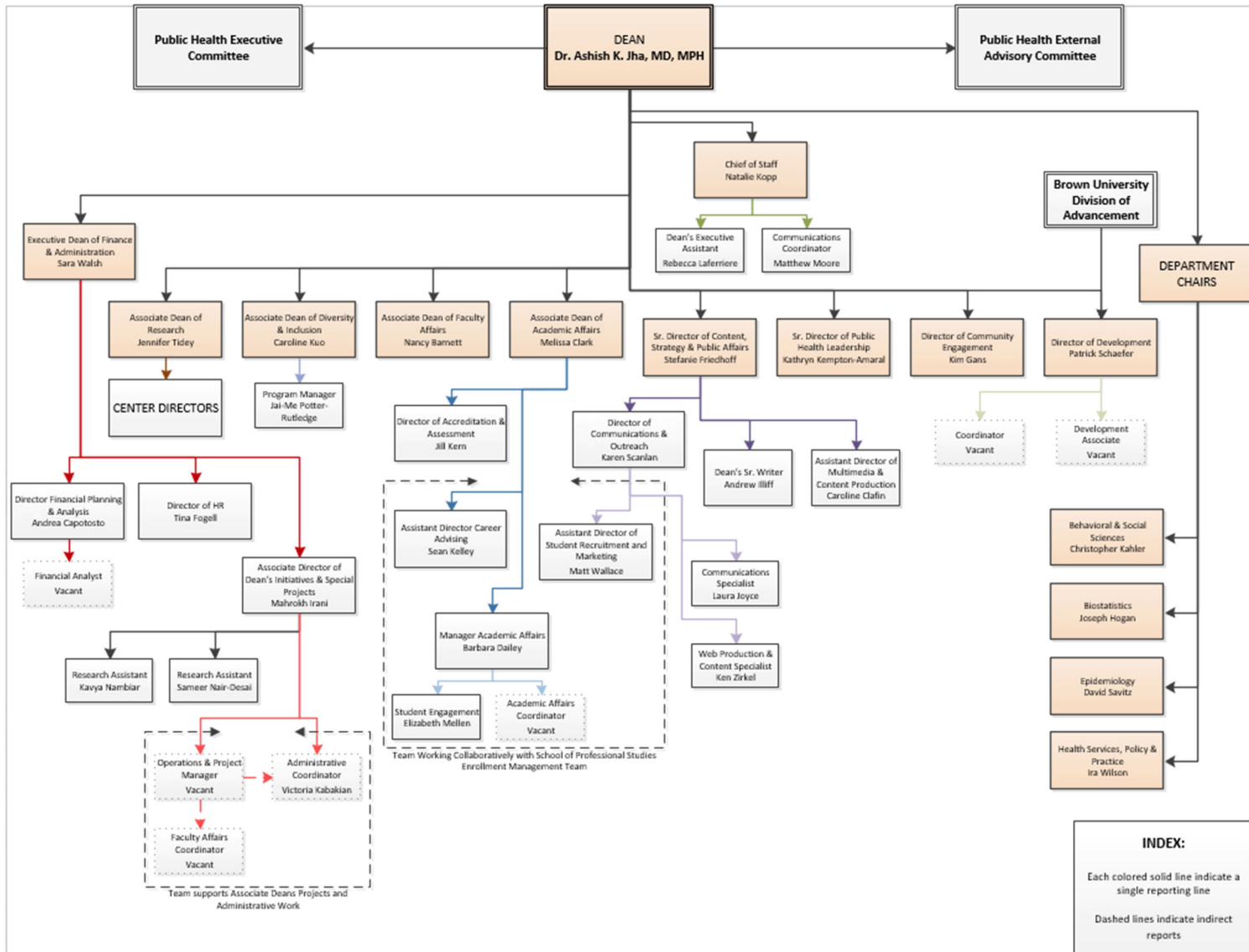
Figure 1. SPH reporting Lines
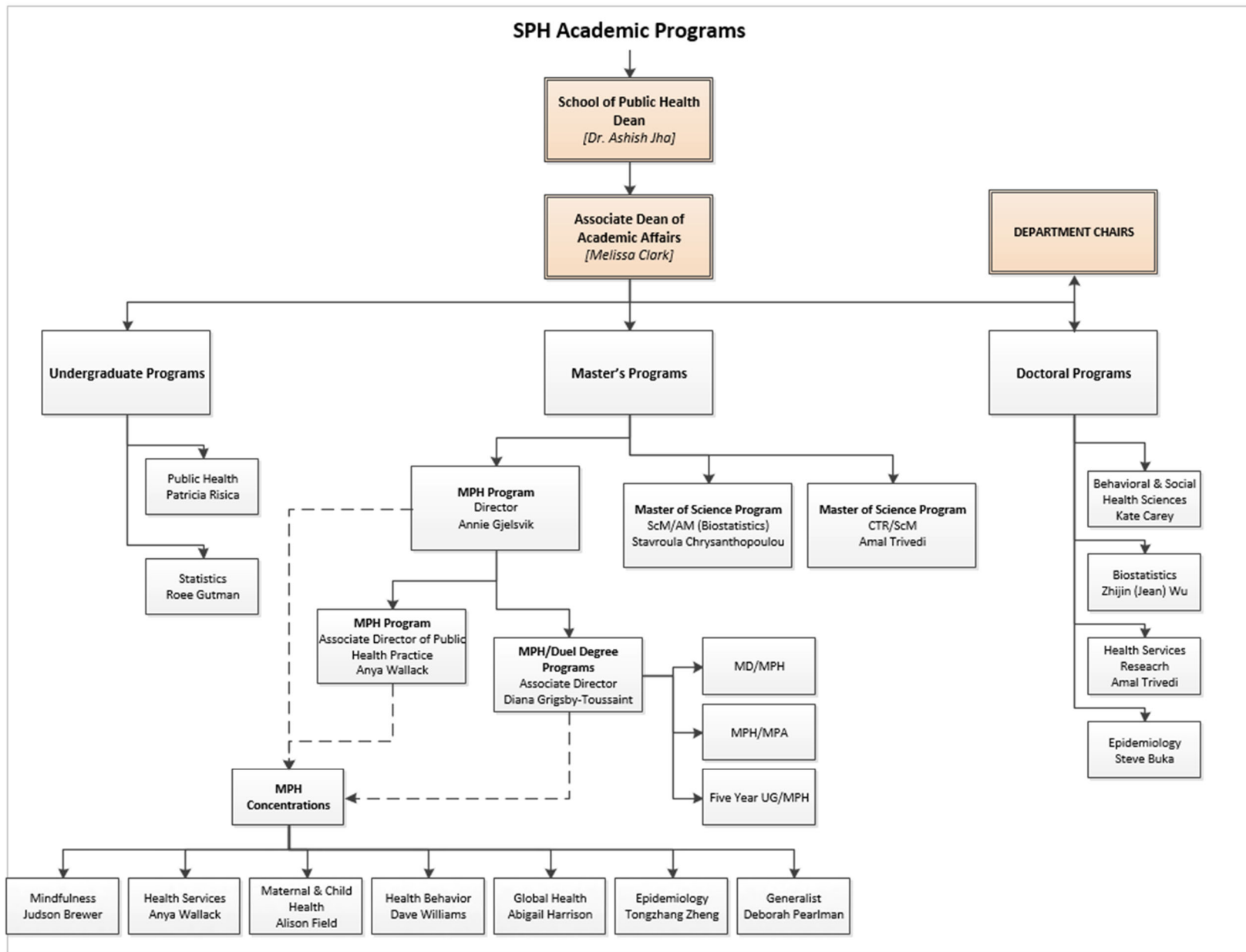
Figure 2. SPH academic and administrative departments

b. the relationship between school and other academic units within the institution. Organizational charts may include committee structure organization and reporting lines
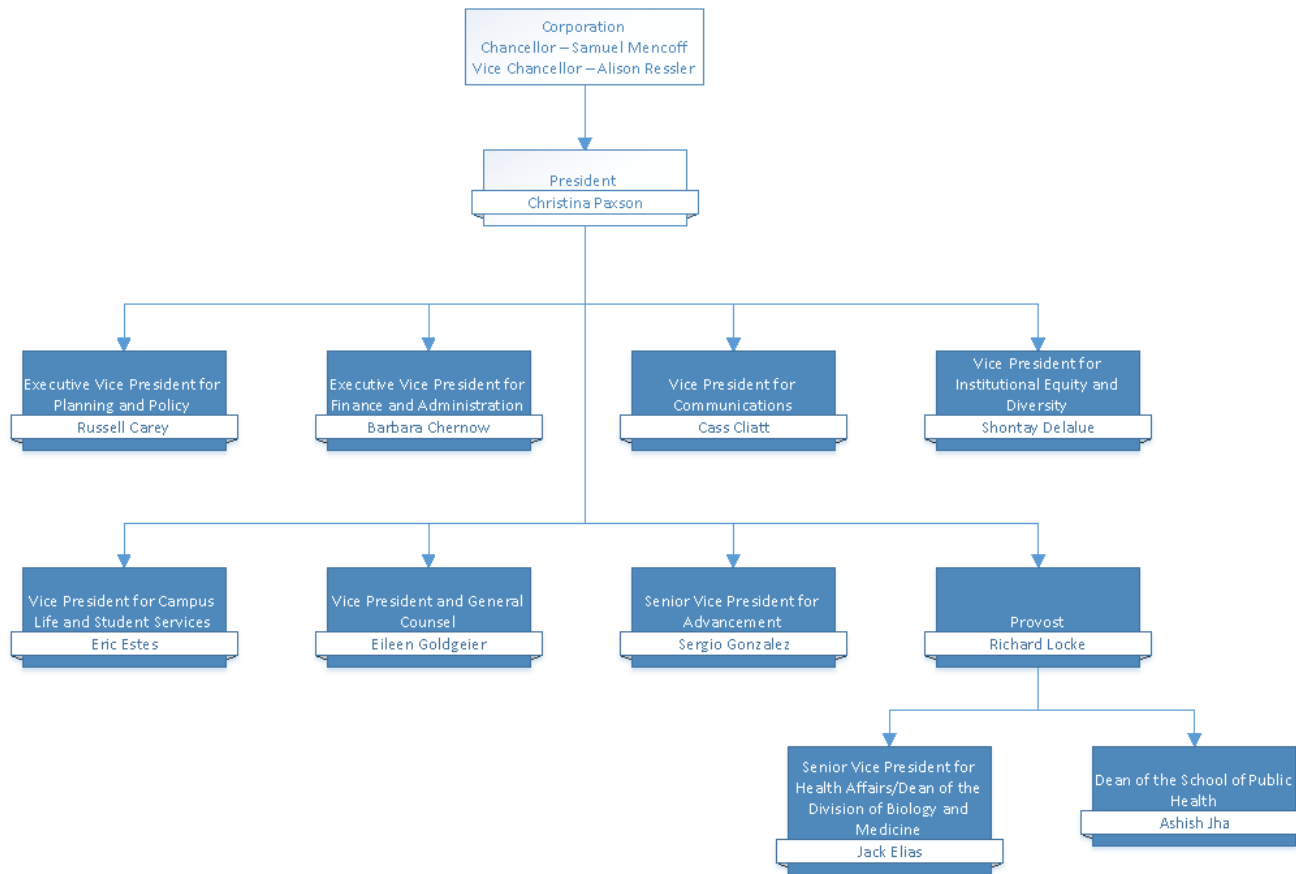
Figure 3. Brown University reporting lines

c. the lines of authority from the school's leader to the institution's chief executive officer (president, chancellor, etc.), including intermediate levels (e.g., reporting to the president through the provost)
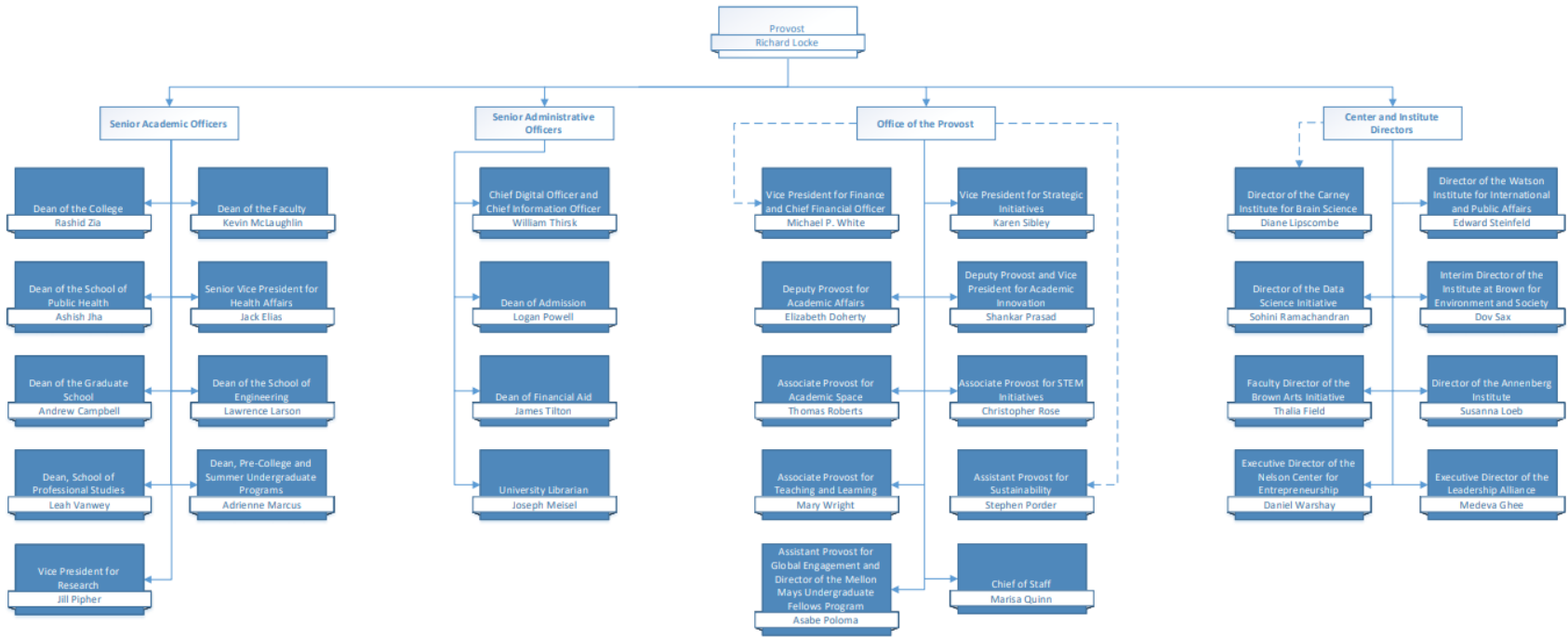
Figure 4. Brown University academic units

d. for multi-partner schools and schools (as defined in Criterion A2), organizational charts must depict all participating institutions

Not applicable.

3) An instructional matrix presenting all of the school's degree schools and concentrations including bachelors, masters and doctoral degrees, as appropriate. Present data in the format of Template Intro-1.*

Intro-1: Instructional Matrix - Degrees and Concentrations				Categorized as public health	Campus-based
Concentration		*Degree*			
Public Health		AB		AB	AB
Statistics		ScB			ScB
Master's Degrees		**Academic**	**Professional**		
Concentration		*Degree*	*Degree*		
Applied Epidemiology & Biostatistics**			MPH		
Biostatistics		AM, ScM		AM, ScM	AM, ScM
Clinical and Translational Research		ScM		ScM	ScM
Environmental Health**			MPH		
Epidemiology		ScM**	MPH	ScM, MPH	ScM, MPH
Generalist			MPH	MPH	MPH
Global Health		ScM**	MPH	ScM, MPH	ScM, MPH
Health Behavior		ScM**	MPH	ScM, MPH	ScM, MPH
Health Services			MPH	MPH	MPH
Maternal and Child Health			MPH	MPH	MPH
Mindfulness***			MPH	MPH	MPH
Doctoral Degrees		**Academic**	**Professional**		
Concentration		*Degree*	*Degree*		
Behavioral and Social Sciences		PhD		PhD	PhD
Biostatistics		PhD		PhD	PhD
Epidemiology		PhD		PhD	PhD
Health Services Research		PhD		PhD	PhD
Joint Degrees		**Academic**	**Professional**		
2nd Degree Area	**Public Health Concentration**				
Degree area earned in conjunction	*Existing or joint-specific*	*Degrees*	*Degrees*		
MPA	MPH in any concentration		MPA-MPH	MPA-MPH	MPA-MPH
MD	MPH in any concentration		MD-MPH	MD-MPH	MD-MPH
5-Year accelerated	AB or ScB in any undergraduate concentration; MPH in any concentration		AB or ScB-MPH	AB or ScB-MPH	AB or ScB-MPH
BA or BS from Tougaloo College	MPH in any concentration		BA or BS-MPH	BA or BS-MPH	BA or BS-MPH

 *The executive and distance-based columns were eliminated from the template because no Brown SPH programs apply
 **Discontinued for class entering Fall 2020
***Starting with class entering in Fall 2020

4) Enrollment data for all of the school's degree schools, including bachelors, masters and doctoral degrees, in the format of Template Intro-2. Schools that house "other" degrees and concentrations (as defined in Criterion D19) should separate those degrees and concentrations from the public health degrees for reporting student enrollments.

Intro-2: SPH Enrollment Data (September 2020)		Current Enrollment
Degree		
Master's		
	MPH (includes students in joint degree programs)	
	Applied Epidemiology & Biostatistics (Discontinued for class entering Fall 2020)	6
	Epidemiology	15
	Generalist	24
	Global Health	20
	Health Behavior	8
	Health Services	19
	Maternal and Child Health	8
	Mindfulness (Starting with class entering in Fall 2020)	0
	Academic public health master's	
	Behavioral & Social Health Sciences ScM (last cohort enrolled Fall 2019)	2
	Biostatistics AM	4
	Biostatistics ScM	28
	Clinical and Translational Research ScM	1
	Epidemiology ScM (last cohort enrolled Fall 2019)	7
	Global Health ScM (last cohort enrolled Fall 2020)	9
Doctoral		
	Academic public health doctoral	
	Behavioral and Social Sciences	16
	Biostatistics	21
	Epidemiology	17
	Health Services Research	26
Bachelor's		
	AB in public health	130
	All remaining bachelor's degrees (SPH)	
	ScB in Statistics	10

A1. Organization and Administrative Processes

The school demonstrates effective administrative processes that are sufficient to affirm its ability to fulfill its mission and goals and to conform to the conditions for accreditation.

The school establishes appropriate decision-making structures for all significant functions and designates appropriate committees or individuals for decision making and implementation.

The school ensures that faculty (including full-time and part-time faculty) regularly interact with their colleagues and are engaged in ways that benefit the instructional school (e.g., participating in instructional workshops, engaging in school-specific curriculum development and oversight).

1) List the school's standing and significant ad hoc committees. For each, indicate the formula for membership (e.g., two appointed faculty members from each concentration) and list the current members.

   The School's standing and significant ad hoc committees are described below along with the list of current members. Students are full voting members on any committee in which they are a member. Example agendas and minutes for each committee are in the ERF.

President's Advisory Council on Public Health
Charge: Help the School fulfill its mission; inspire broad excitement and foster visibility for the School; promote the school and its work in local and global communities; and advise the Dean on substantive matters that impact the School, its reputation, and its mission. Members will leverage their own resources to support the school by activating contacts for events and identifying other philanthropic supporters; contributing financially, as personally capable; and sharing their time and/or professional resources.

Membership selection and term length: Membership and term length are determined by the President of Brown University, and the committee reports annually to the President.

Meeting occurrence: Bi-annual. Interim conference calls, email communication, or additional meetings may occur.

Decisions are made by: Group consensus with a fall back to simple majority

Composition and Current Membership (Note: "P" indicates parent of a former or current Brown student, and graduation year)**:**

Brian A. McCarthy Jr. '81	Council Chair Vice Chairman, Healthcare Investment Banking, Bank of America Merrill Lynch
Diane S. Archer P'14	President, Just Care USA
Richard A. Barasch P'20	Partners Chairman of the Board, AdeptHealth
Peter Bennett	Founder, Peter Bennett Foundation
Susan Block Casdin	The Hassenfeld Committee
Christine G. Fisher P'17	Board of Director, Saving Mothers
Sophia Gushee '96	Founder, Nontoxic Living; author, *A to Z of D-Toxing*
Ronald Gutfleish, PhD '81, P'18	Portfolio Manager, Elm Ridge Capital Management, LLC
Dr. Jim Yong Kim '82	Vice Chairman and Partner, Global Infrastructure Partners
Jennifer Klein '87	Chief Strategy and Policy Officer, TIME'S UP
Patricia Lansing '96	Community Volunteer
Jennifer Luray '82	Senior Advisor, Research!America
Amber A. Paquette '00	Community Volunteer

Mya L. Roberson '16	PhD student and Robert Wood Johnson Foundation Health Policy Research Scholar, University of North Carolina at Chapel Hill Gillings School of Global Public Health
Stephen Robert '62	Co-Founder and Co-Chair, Source of Hope Foundation
Sabrina Spitaletta '99	Director, Center for Public Health, Milken Institute
Jane Jie Sun	CEO, Trip.com Group
Jon Warner	Chief of the Shoulder and Sports Medicine Services at The Massachusetts General Hospital (MGH)
Frank Williams	Co-Founder and Executive Chairman, Evolent Health
Sondra Ruth Zabar, MD, '87	Professor of Medicine, NYU School of Medicine

School of Public Health Executive Committee

Charge: Advise the Dean of Public Health on strategic issues and academic administration, plan activities across academic departments and programs, develop educational initiatives, advise on research initiatives and infrastructure, provide advice on administrative and fiscal issues, and provide general guidance for the School. The Committee also reviews and approves any Self-Study documents related to CEPH accreditation and annual reporting.

Membership selection and term length: Membership and length of service are determined by the leadership appointments of the members.

Meeting occurrence: Bi-monthly. Interim conference calls, email communication, or additional meetings may occur.

Decisions are made by: Decisions are ultimately made by the Dean but are informed by input and support from the committee.

Composition and Current membership:

Ashish Jha, MD, MPH	Committee Chair, Dean
Nancy Barnett, PhD	Associate Dean for Faculty Affairs
Melissa Clark, PhD	Associate Dean for Academic Affairs
Christopher Kahler, PhD	Chair, Department of Behavioral and Social Sciences
Caroline Kuo, DPhil	Associate Dean for Diversity & Inclusion
David Savitz, PhD	Interim Chair, Department of Epidemiology
Joseph Hogan, ScD	Chair, Department of Biostatistics
Jennifer Tidey, PhD	Associate Dean for Research
Sara Walsh, MBA	Executive Dean for Finance and Administration
Ira Wilson, MD	Chair, Department of Health Services, Policy and Practice

Committee on Public Health Faculty Appointments (PHFA)

Charge: Responsible for the review of recommendations for non-tenure-track, senior level appointments and promotions for School of Public Health faculty. "Senior-level" is defined as faculty who will be promoted to, or appointed at, the ranks of Associate or Full Professor, in non-tenure tracks. Has the responsibility of ensuring that these appointments and promotions are done in accordance with the academic standards of Brown University, the School of Public Health, and its respective Departments. Tenure-track and Lecturer/Senior Lecturer actions are processed through the University's Tenure, Promotions, and Appointments Committee (TPAC).

Membership selection and term length: Members are self-nominated, with guidance and suggestions from the Department Chairs. Nominees are then voted on by the voting faculty according to University rules about who is eligible to vote. Voting faculty include the Tenure Track, Research Scholar, (Research), and Teaching Scholar, but not the Professors of the Practice. Terms are for three years.

Meeting occurrence: Typically occur quarterly (two meetings per semester), but depend on the number of cases for review.

Decisions are made by: For a vote to occur, there must be a quorum (majority). Actions are voted on and require a majority vote of those present (or on phone).

Composition and Current Membership: There are eight voting members: six faculty members from the School of Public Health, one faculty member from the Division of Biology and Medicine, and one faculty member from Departments reporting to the Dean of the Faculty at the University. The committee is chaired by the Associate Dean for Faculty Affairs (non-voting). The Dean of Public Health may attend PHFA meetings, but does not vote. All committee members have the rank of Full Professor. Committee members represent the tenure-track and non-tenure-track faculty [(Research), Teaching Scholar, Research Scholar]. Each of the Departments in the School must be represented on the committee. Department Chairs are not eligible to serve on the committee.

Nancy Barnett, PhD	Committee Chair Associate Dean for Faculty Affairs; Professor of Behavioral and Social Sciences
Amy Nunn, PhD	Professor of Behavioral and Social Sciences
Stephen McGarvey, PhD	Professor of Epidemiology
Ana Abrantes, PhD	Professor of Psychiatry and Human Behavior
Thomas Trikalinos, MD PhD	Professor of Health Services, Policy and Practice
Jasjit Ahluwalia, MD, MPH	Professor of Behavioral and Social Sciences
Pedro Gozalo, PhD	Professor of Health Services, Policy and Practice
George Papandonatos, PhD	Professor of Biostatistics
David Lindstrom, PhD	Professor of Sociology

Public Health Curriculum Committee (PHCC)

Charge: Responsible for the quality of the educational offerings of all academic programs offered within the School of Public Health. Its membership represents all academic departments and all academic programs, from undergraduate to graduate (both master's and doctoral).

The PHCC functions by reviewing and voting to recommend, or not, the approval of all new academic offerings, be they degree programs or courses. Furthermore, any substantial change in the content and/or specificity of existing academic programs requires review by the PHCC and, if warranted, the Committee may choose to vote to approve, or not, the proposed change. New proposals for courses or degree programs must emanate from an existing program or from a department. Inter-departmental academic initiatives that are being proposed de-novo must first be approved as an initiative by the School of Public Health Executive Committee. Otherwise, such initiatives within existing graduate or undergraduate programs must emanate from, and be approved by, those programs before being sent to the PHCC for review, comment, and vote. In the event that a course or Executive Committee initiative is not approved, the department/faculty member receives recommendations for improvement from the PHCC.

Membership selection and term length: Faculty members are selected by Department Chairs to represent each degree program and serve at least one but no more than three consecutive academic years unless they direct one of the interdisciplinary master's programs (Master of Public Health [MPH], Clinical and Translational Research [CTR]) at which time length of service is determined by the leadership appointment. Students are selected in collaboration with the Graduate Student Council and serve at least one and up to two years.

Meeting occurrence: Monthly during the academic year.

Decisions are made by: Majority vote

Composition and Current Membership: The PHCC is chaired by the Associate Dean for Academic Affairs. Membership consists of faculty representatives from each degree program, a PhD student, an MPH student, an Academic Master's student, and staff members from the Academic Affairs team. Student representatives are expected to act as members of, and liaisons to, the School's Graduate Student Council, attending Council meetings in addition to Committee meetings and communicating relevant information and concerns between the two bodies.

Melissa Clark, PhD	Committee Chair Associate Dean for Academic Affairs, Professor of Health Services, Policy and Practice
Joseph Braun, PhD	Associate Professor of Epidemiology
Stavroula Chrysanthopoulou, PhD	Assistant Professor of Biostatistics
Barbara Dailey	Manager of Academic Affairs, Data and Compliance
Akilah Dulin, PhD	Associate Professor of Behavioral and Social Sciences
Omar Galarraga, PhD	Associate Professor of Health Services, Policy and Practice
Annie Gjelsvik, PhD	MPH Program Director, Associate Professor of Epidemiology
Ma Irene Quilantang	Academic Master's Student Representative
Patricia Risica, PhD	Undergraduate Program Director, Associate Professor of Behavioral and Social Sciences and Epidemiology
Amal Trivedi, MD	CTR Program Director, Professor of Health Services, Policy and Practice
Andrew Walch	MPH Student Representative
Jiabei Yang	PhD Student Representative

Doctoral Studies Committee (DSC)

Charge: Forum for discussing School- and University-wide topics that are relevant across the doctoral degrees offered within the School. The Committee is also a venue and resource for discussing and developing programmatic procedures for implementing degree requirements (e.g., qualifying exams) and logistical support for instructional delivery (e.g., TA assignments, course scheduling). The Committee interfaces with Public Health administration through the Associate Dean for Academic Affairs and the Manager of Academic Affairs, Data and Compliance.

Membership selection and term length: Membership and length of service for faculty and staff are determined by the leadership appointments of the members. Students are selected in collaboration with the Graduate Student Council and serve at least one and up to two years.

Meeting occurrence: Monthly during the academic year.

Decisions are made by: Majority vote

Composition and Current Membership: Every department or program offering a doctoral-level degree in Public Health has a Graduate Program Director (GPD). Each GPD [aka at Brown, Director of Graduate Studies (DGS)] is a member of the Committee. Doctoral students from Graduate Degree Programs are invited to serve on the committee to represent the ideas and needs of their cohorts. Program administrative staff members also serve as full committee members. Student representatives are expected to act as members of, and liaisons to, the School's Graduate Student Council, attending Council meetings in addition to Committee meetings and communicating relevant information and concerns between the two bodies.

Melissa Clark, PhD	Committee Chair Associate Dean for Academic Affairs; Professor, Health Services, Policy and Practice
Linda Angela	Department Manager, Behavioral and Social Sciences
Denise Arver	Academic Department Manager, Biostatistics

Vickie Beaulieu	Department Manager, Epidemiology
Holly Boyle	PhD Student in Behavioral and Social Sciences
Stephen Buka, PhD	Director of Graduate Study, Epidemiology PhD program
Kate Carey, PhD	Director of Graduate Study, Behavioral and Social Health Sciences, PhD program
Jerson Cochancela	PhD Student in Biostatistics
Barbara Dailey	Manager of Academic Affairs, Data and Compliance
Catherine Leopold	Department Manager, Health Services Policy and Practice
Elizabeth Mellen	Program Coordinator for Student Engagement
Shayla Nolen	PhD student in Epidemiology
Margot Schwartz (Fall)/ Bishnu Thapa (Spring)	PhD student in Health Services Research
Amal Trivedi, MD	Director of Graduate Study, Health Services Research PhD program
Zhijin (Jean) Wu, PhD	Director of Graduate Study, Biostatistics PhD program

Master of Public Health (MPH) Dean's Committee

Charge: Initiate and oversee short- and long-range strategic planning for the MPH Program; monitor MPH Program development and direction; integrate the MPH Program with overall direction and policies of the School of Public Health, and review and approve the Self-Study document for the Council on Education for Public Health.

Membership selection and term length: Membership and length of service is determined by the leadership appointments of the members.

Meeting occurrence: Monthly.

Decisions are made by: Majority vote.

Composition and Current Membership: Director, MPH Program; MPH Associate Director of Public Health Practice; MPH Associate Director of Dual Degree Programs; Manager, Interdisciplinary Education Programs; Associate Dean for Academic Affairs.

Annie Gjelsvik, PhD	Committee Chair MPH Program Director
Melissa Clark, PhD	Associate Dean for Academic Affairs
Diana Grigsby-Toussaint, PhD	MPH Associate Director of Dual Degree Programs
Diane Schlacter	Manager, Interdisciplinary Education Programs
Anya Wallack, PhD	MPH Associate Director of Public Health Practice

Master of Public Health (MPH) Leadership Committee

Charge: Coordinate activities and planning across all MPH concentrations, monitor student feedback and make suggestions for short- and long term strategic planning for the MPH Program, draft or review and approve Program policies; review student progress at the end of each semester; draft or review recruitment targets, recruitment plans and implications for resource needs.

Membership selection and term length: Faculty membership and length of service is determined by leadership appointments of the members

Meeting occurrence: Monthly during the academic year.

Decisions are made by: Majority vote.

Composition and Current Membership: MPH Program Director, MPH Associate Director of Public Health Practice; MPH Associate Director of Dual Degree Programs; Manager, Interdisciplinary Education Programs, Coordinator of Applied Learning Experiences and Professional Development, faculty members chosen to provide representation from each concentration, at least one MPH Core Advisor, Assistant Director of Student Recruiting and Marketing, Assistant Director of Career Advising.

Annie Gjelsvik, PhD	Committee Chair Director, MPH Program; Associate Professor of Epidemiology
Joann Barao	Coordinator of Applied Learning Experiences and Professional Development
Judson Brewer, MD, PhD	Mindfulness Concentration Lead, MPH Core Advisor; Associate Professor of Behavioral and Social Sciences
Akilah Dulin, PhD	Representative for Health Behavior Concentration; Associate Professor of Behavioral and Social Sciences
Alison Field, ScD	Maternal Child Health Concentration Lead; Professor of Epidemiology
Diana Grigsby-Toussaint, PhD	MPH Associate Director of Dual Degree Programs; Associate Professor of Behavioral and Social Sciences
Sean Kelley	Assistant Director of Career Advising
Steve McGarvey MPH, PhD	Global Health Concentration Lead, MPH Core Advisor; Professor of Epidemiology, Director of the International Health Institute
Deborah Pearlman, PhD	Generalist Concentration Lead, MPH Core Advisor; Associate Professor of Epidemiology
Diane Schlacter	Manager, Interdisciplinary Education Programs
Matthew Wallace	Assistant Director of Student Recruiting and Marketing
Anya Wallack, PhD	MPH Associate Director of Public Health Practice; Health Services Concentration Lead; Professor of the Practice of Health Services, Policy and Practice
Tongzhang Zheng, PhD	Epidemiology Concentration Lead; Professor of Epidemiology

Master of Public Health (MPH) Curriculum Committee

Charge: Develop, integrate, and implement the MPH curriculum, and ensure the quality of the MPH Program curriculum and teaching. Specifically, the Committee plans courses consistent with the Program mission and resources; identifies, reviews, and approves MPH courses (e.g., MPH faculty-initiated courses and courses in other Departments); guides the development and revision of MPH concentrations; guides revisions of existing MPH courses as suggested by course evaluations; reviews and integrates course syllabi to avoid duplications of material or gaps in content; establishes quality assurance procedures for teaching; and ensures that required competencies are being taught and appropriately assessed.

Membership selection and term length: Faculty membership and length of service are determined by the Department Chairs and concentration leadership appointments. A first-year and a continuing student are randomly selected from self-nominations and serve for two years. Alumni are appointed by the MPH Program Director and serve for three years. A representative from a public health practice setting is appointed by the MPH Program Director and serves for three years. A representative from among Core Advisors is selected by the MPH Program Director and serves for one year.

Meeting occurrence: Monthly during the academic year.

Decisions are made by: Majority vote.

Composition and Current Membership: MPH Program Director, MPH Associate Director of Public Health Practice; MPH Associate Director of Dual Degree Programs; two MPH students (one

first-year student and one continuing student), two alumni, one representative from a public health practice setting, and faculty members chosen to provide representation from each department and concentration.

Annie Gjelsvik, PhD	Committee Chair MPH Program Director; Associate Professor of Epidemiology
Judson Brewer, MD, PhD	Mindfulness Concentration Lead; MPH Core Advisor; Associate Professor of Behavioral and Social Sciences
Akilah Dulin, PhD	Representative for Health Behavior Concentration; Associate Professor of Behavioral and Social Sciences
Alison Field, ScD	Maternal Child Health Concentration Lead; Professor of Epidemiology
Diana Grigsby-Toussaint, PhD	MPH Associate Director of Dual Degree Programs; Associate Professor of Behavioral and Social Sciences
Lauren Koester	Second-year MPH student
Chantal Lewis, MPH	MPH Alumna; staff member?
Steve McGarvey PhD	Global Health Concentration Lead, MPH Core Advisor; Professor of Epidemiology, Director of the International Health Institute
Deborah Pearlman, PhD	Generalist Concentration Lead; MPH Core Advisor; Associate Professor of Epidemiology
Patricia Risica, DrPH	Undergraduate Program Director; Associate Professor of Behavioral and Social Sciences and Epidemiology
Allegra Scharff, MPH	MPH Alumna; Representative from public health practice setting (One Neighborhood Builders)
Diane Schlacter	Manager, Interdisciplinary Education Programs
Anya Wallack, PhD	MPH Associate Director of Public Health Practice; Health Services Concentration Lead; Professor of the Practice of Health Services, Policy and Practice
Krysta Pelowich	First-year MPH student

Master of Public Health (MPH) Admissions Committee

Charge: To ensure that the MPH Program takes all steps necessary to identify and admit qualified students. Specifically, the Committee establishes prerequisites for the MPH Program, develops strategies to recruit students to the Program, and establishes criteria for admission and selection of students to the standard MPH Program. The committee reviews applications and recommends students for admission and advises the Program Director and Associate Directors about the needs of individual students for financial aid.

Membership selection and term length: Faculty membership and length of service are determined by the Department Chairs and concentration leadership appointments. Alumni are appointed by the MPH Program Director and serve for renewable one-year terms. A representative from a public health practice setting is appointed by the MPH Program Director and serves for renewable one-year terms. A representative from among Core Advisors is selected by the MPH Program Director and serves for one year.

Meeting occurrence: Weekly from November to May.

Decisions are made by: Each applicant is assigned to two committee members, who thoroughly review and rank the applicant. If both reviewers agree on the rank, the applicant is admitted or rejected accordingly. If the reviewers don't agree on the rank, the reviewers present the applicant to the committee, and the committee votes on the rank. The decision is then made based on majority vote.

Composition and Current Membership: Faculty members representing a broad range of backgrounds and interests (including quantitative and qualitative aspects of public health; faculty

based at the University, in research centers; those from the Rhode Island Department of Health), and MPH Program graduates.

Annie Gjelsvik, PhD	Committee Chair MPH Program Director; Associate Professor of Epidemiology
Mariam Amanullah, MPH	MPH Alumna
Rosa Baier, MPH	MPH Alumna; Associate Professor of the Practice of Health Services, Policy and Practice
Joann Barao	Coordinator of Applied Learning Experiences and Professional Development
Judson Brewer, MD, PhD	Mindfulness Concentration Lead; MPH Core Advisor; Associate Professor of Behavioral & Social Sciences
Alison Field, ScD	Maternal Child Health Concentration Lead; Professor of Epidemiology
Alice Paul, PhD	Assistant Professor of Biostatistics
David Savitz, PhD	Representative for Epidemiology Concentration; Professor of Epidemiology
Steve McGarvey, PhD	Global Health Concentration Lead, MPH Core Advisor; Professor of Epidemiology, Director of the International Health Institute
Karine Monteiro, MPH	MPH Alumna; Assistant Professor of the Practice of Epidemiology
Patricia Nolan, MD, MPH	Adjunct Associate Professor of Health Services, Policy and Practice
Diane Schlacter	Manager, Interdisciplinary Education Programs
Anya Wallack, PhD	MPH Associate Director of Public Health Practice; Health Services Concentration Lead; Professor of the Practice of Health Services, Policy and Practice
Jennifer Pellowski, PhD	Representative of Health Behavior Concentration
Annie Gjelsvik, PhD	Committee Chair MPH Program Director; Associate Professor of Epidemiology

Clinical and Translational Research (CTR) and Master of Public Health (MPH) Dual Degree Admissions Committee

Charge: To ensure that the CTR and MPH Dual Degree Programs take all steps necessary to identify and admit qualified students. The programs include the Master of Science in Clinical and Translational Research, the Certificate in Clinical and Translational Research, the Undergraduate/MPH Dual Degree, the MD/MPH Dual Degree, and the MPH/MPA Dual Degree. Specifically, the Committee establishes prerequisites for the programs, develops strategies to recruit students to the programs, and establishes criteria for admission and selection of students to the programs. The committee reviews applications and recommends students for admission and advises the Program Directors about the needs of individual students for financial aid.

Membership selection and term length: Faculty membership and length of service is determined by the Department Chairs and leadership appointments. Alumni are appointed by the MPH and CTR Program Directors and serve for renewable one-year terms. A representative from a public health practice setting is appointed by the MPH and CTR Program Directors and serves for renewable one-year terms. A representative from among Undergraduate Advisors is selected by the MPH Program Director and serves for renewable one year terms. At least one member is a physician.

Meeting occurrence: Weekly from November to May.

Decisions are made by: Each applicant is assigned to two committee members, who thoroughly review and rank the applicant. If both reviewers agree on the rank, the applicant is admitted or rejected accordingly. If the reviewers don't agree on the rank, the reviewers present the applicant to the committee, and the committee votes on the rank. The decision is then made based on majority vote.

Composition and Current Membership: Faculty members representing a broad range of backgrounds and interests (including quantitative and qualitative aspects of public health; faculty based at the University, in research centers; those from the Rhode Island Department of Health). At least one member is a physician and at least one member is an undergraduate advisor.

Diana Grigsby-Toussaint, PhD	Committee Co-Chair MPH Associate Director of Dual Degree Programs; Associate Professor of Behavioral and Social Sciences
Amal Trivedi, MD, MPH	Committee Co-Chair CTR Program Director; Professor of Health Services, Policy and Practice and Medicine
Siraj Amanullah, MD, MPH	MPH alumna; Associate Professor of Emergency Medicine, Associate Professor of Health Services, Policy and Practice and Pediatrics,
John Fulton, PhD	Representative of the Rhode Island Department of Health; Undergraduate Advisor
Elizabeth Jackvony, MPH	Interdisciplinary Education Programs Coordinator
TBD	CTR alumna

Master's in Clinical and Translational Research (CTR) Academic Oversight Committee

Charge: To provide support for curriculum development as well as serve in an advisory role for students. The curriculum roles include reviewing and approving any changes to the academic program. The academic oversight role includes approving all thesis plans for students and reviewing the progress of all students twice per year.

Membership selection and term length: Members are nominated by the CTR Program Director and serve renewable four year terms.

Meeting occurrence: Quarterly.

Composition and Current Membership: Faculty trained in a broad range of disciplines relevant to clinical and translational research including medicine, pediatrics, health services research, and epidemiology. Members are also actively engaged in research and education in the area of clinical and translational research.

Amal Trivedi, MD	Committee Chair CTR Program Director, Professor of Health Services, Policy and Practice and Medicine
Elizabeth Chen, PhD	Associate Professor of Medical Science and Health Services, Policy and Practice
Annie Gjelsvik, PhD	MPH Program Director, Associate Professor of Epidemiology
Elizabeth Jackvony, MPH	Interdisciplinary Education Programs Coordinator
James Padbury, MD	Professor of Pediatrics
Theresa Shireman, PhD	Professor of Health Services, Policy and Practice
Vivian Sung, MD	Professor of Obstetrics and Gynecology
Ira Wilson, MD	Chair and Professor of Health Services, Policy and Practice

Undergraduate Studies Committee

Charge: Monitors the operation of the undergraduate concentration in Public Health (AB PH). Reviews course syllabi in regard to domain introduction and coverage. Advises the Director of Undergraduate Studies and the Associate Dean for Academic Affairs on topics such as direction of the concentration vis-à-vis trends in undergraduate public health education, desired competencies for degree graduates, timing and options for study abroad, possible areas of expansion and/or

deletion of requirements, and the undergraduate experience in courses that are service to the University and "feeders" into the concentration.

Membership selection and term length: Faculty members are selected by Department Chairs based on their teaching and advising responsibilities and serve at least one but no more than three consecutive academic years. Students are leaders in the Departmental Undergraduate Group (DUG) and serve at least one and up to two years.

Meeting occurrence: Monthly during the academic year.

Decisions are made by: Group consensus.

Composition and Current Membership: Faculty teaching required and/or highly subscribed courses, concentration advisors, undergraduate concentrators [typically Departmental Undergraduate Group (DUG) officers], a representative of the Rhode Island Department of Health, and the Director of Community Engagement. Academic Affairs staff members attend meetings and provide administrative support. All are considered full participants. The Associate Dean for Academic Affairs is a non-voting member.

Patricia Risica, ScD	Committee Chair Director of Undergraduate Studies, Associate Professor of Behavioral and Social Sciences and Epidemiology
Jasjit Ahluwalia, MD	Instructor for Public Health Senior Seminar; Concentration Advisor
Tayla von Ash, PhD	Instructor for World of Food; Concentration Advisor
Stephen Buka, ScD	Instructor for Fundamentals of Epidemiology
Melissa Clark, PhD	Associate Dean for Academic Affairs; Instructor for Introduction to Public Health (non-voting)
Barbara Dailey	Manager of Academic Affairs, Data and Compliance
John Fulton, PhD	Instructor for Public Health Policy; Concentration Advisor; Representative of the Rhode Island Department of Health;
Kim Gans, PhD	Director of Community Engagement
Elizabeth Mellen	Project Coordinator for Student Engagement
Jennifer Nazareno, PhD	Instructor for Intersectionality and Health Inequities
Jennifer Pellowski, PhD	Instructor for Introduction to Global Public Health Interventions
Ellie Rogoff	Undergraduate Student Representative
Nisha Trivedi, MD	Instructor for Public Health and the Environment; Concentration Advisor
Meghna Tummala	Undergraduate Student Representative

Center and Institute Directors Committee

Charge: Provides a forum for updates from the Dean, operational issues (e.g., space, computing resources), research administration issues, research proposals (submitted and under development), and opportunities for collaboration and shared services.

Membership selection and term length: Membership and length of service is determined by the leadership appointments of the members.

Meeting occurrence: Monthly.

Decisions are made by: Decisions are generally made by group consensus.

Composition and Current Membership: Dean; Associate Dean for Research, Executive Dean for Finance and Administration; Directors of the 10 public health Centers and Institutes located in the Public Health building and the 3 Centers/Institutes located in Brown-affiliated hospitals.

Ashish Jha, MD, MPH	Committee Chair Dean, School of Public Health
Joseph Braun, PhD	Director, Center for Children's Environmental Health; Associate Professor of Epidemiology
Laura Stroud, PhD	Director, Centers for Behavioral and Preventive Medicine; Professor of Psychiatry and Human Behavior; Professor of Behavioral and Social Sciences
Philip Chan, MD, MS/ Jacob van den Berg, PhD	Principal Investigator, Brown University AIDS Program (BRUNAP); Associate Professor of Medicine/BRUNAP Director, Assistant Professor of behavioral and Social Sciences
Charles Eaton, MD	Director, Center for Primary Care and Prevention; Professor of Family Medicine and Epidemiology
Eric Loucks, PhD	Director, Mindfulness Center, Associate Professor of Epidemiology, Behavioral and Social Sciences, and Medicine
Constantine Gatsonis, PhD	Director, Center for Statistical Sciences; Professor of Biostatistics
Stephen McGarvey, PhD, MPH	Director, International Health Institute; Pro Tem Director, Institute for Community Health Promotion; Professor of Epidemiology and Anthropology
Peter Monti, PhD	Director, Center for Alcohol and Addiction Studies; Professor of Behavioral and Social Sciences
David Savitz, MD PhD	Director, Center for Epidemiologic Research; Professor of Epidemiology, Obstetrics and Gynecology, and Pediatrics
Karen Scanlan	Director of Communication and Outreach
Theresa Shireman, PhD	Director, Center for Gerontology and Healthcare Research; Professor, Health Services, Policy and Practice
Jennifer Tidey, PhD	Associate Dean for Research
Thomas Trikalinos, MD, PhD	Director, Center for Evidence Synthesis in Health; Professor of Health Services, Policy and Practice
Patrick Vivier, PhD, MD	Director, Hassenfeld Child Health Innovation Institute; Professor of Health Services, Policy and Practice, Emergency Medicine, and Pediatrics
Sara Walsh, MBA	Executive Dean for Finance and Administration
David Williams, PhD	Director, Center for Health Promotion and Health Equity; Associate Professor of Behavioral & Social Sciences

Brown University School of Public Health and Rhode Island Department of Health Advisory Committee

Charge: The Director of the Rhode Island Department of Health (RIDOH) ("the Director") selects three staff, and the Dean of the Brown University School of Public Health (BUSPH) ("the Dean") selects three faculty to serve as the BUSPH/RIDOH Advisory Committee, hereinafter referred to as "the Advisory Committee," to advise the Dean and the Director concerning interactions between the entities. The Advisory Committee works to foster a close working relationship between the School and RIDOH, oversees activities relative to their Memorandum of Understanding, and submits their recommendations for action to the Dean and the Director for approval. Topics for discussion include potential areas for research collaboration, potential education collaborations, RIDOH and School accreditation requirements, relationships with other Rhode Island educational institutions, future topics for the Public Health Academic Working Group, and workforce development.

Membership selection and term length: Membership and term length from the Rhode Island Department of Health are determined by the Director. Members from the School are self-nominated in consultation with Chairs and term lengths are determined by collaboration between the Dean and the individual.

Meeting occurrence: Bimonthly.

Decisions are made by: Group consensus.

Composition and Current Membership: Co-chairpersons, one person representing the School and one representing the RIDOH; staff from RIDOH; faculty from the School.

Ashish Jha, MD, MPH	Committee Co-Chair Dean
Nicole Alexander-Scott, MD, MPH	Committee Co-Chair Director, Rhode Island Department of Health (RIDOH)
Laurie Leonard, MS	Director, RIDOH Academic Institute
Akilah Dulin, PhD	Associate Professor of Behavioral and Social Sciences
Rosa Baier, MPH	Associate Director, Center for Long-Term Quality and Innovation
Rosemarie Martin, PhD	Assistant Professor of Behavioral and Social Sciences
Ana Novais, MA	Deputy Director of the RIDOH
Deborah Pearlman, PhD	Associate Professor of the Practice of Epidemiology

School of Public Health Community Advisory Board (CAB)

Charge: Provides a formal forum for open communication between the broader Rhode Island public health community and School leadership and faculty; provides an opportunity for the School to learn about community health needs and helps to inform research and educational priorities for the School; allows Brown faculty members to share important lessons from their research with the community; provides faculty members opportunities to share their ideas with community members prior to a grant submission, or in interpreting study results; and aims to help translate the research emerging from the School into public health practice. The CAB might also be asked for feedback about research collaborations, and committees may be formed to focus on specific issues in accordance with CAB suggestions.

Membership selection and term length: CAB members are chosen by the Dean and the Director for Community Engagement to include community stakeholders/members who are leaders across a range of key sectors that have a profound effect on public health. School faculty and staff are also encouraged to nominate members. The CAB will consist of up to 25 members and will always include at least one member from the RI Department of Health and one member that represents health care. Other members will represent organizations working on important public health issues such as access to health care, addiction, food insecurity/access, tobacco control, violence, and LGBTQ health issues. The CAB will also include non-voting members from the School including faculty that do community engaged research and staff involved with student applied experiences. The community to faculty/staff ratio on the CAB will be at least 70:30. New voices and perspectives are added annually. The CAB will have diverse membership in terms of gender, race/ethnicity and/or sexual orientation. Going forward, the term length of CAB members will be 4 years with the ability to renew membership. Members who are inactive (i.e., fail to attend a meeting in a year) may be replaced sooner. CAB members can also request to shorten their term due to unforeseen circumstances.

Meeting occurrence: 3-4 times per year

Decisions are made by: Majority vote (only community members vote; Brown faculty and staff are non-voting members).

Composition and Current Membership: The current CAB has 19 members, including 13 community members and 6 School members. We will be adding several new community members this year to increase diversity and add new perspectives. Majority of members are from the community; to encourage dialogue and participation with Brown faculty and staff, with a modest number of non-voting Brown faculty and staff members.

Name	Organization	Title
Jane Hayward (Chair)	Rhode Island Health Center Association	President & CEO
Daniel Fitzgerald	American Lung Association	Director, Tobacco Free Rhode Island
PJ Fox III	Previous Executive Director of the Nonviolence Center	Currently Unaffiliated
Meghan Grady	Meals on Wheels of Rhode Island	Executive Director
Rachel Newman Greene	City of Providence Healthy Communities Office	Deputy Director
Owen Heleen	The Providence Center	Vice President, Strategy and Grants
Julius Kolawole	African Alliance	Director
Laurie Leonard	RI Department of Health	Director, RI Department of Health Academic Center
Ana Novais	RI Department of Health	Deputy Director
Marti Rosenberg	Executive Office of Health and Human Services	Director, State Innovation Model Test Grant (SIM)
Neta Taylor	YMCA of Greater Providence	VP Healthy Living + Membership
Marvin Ronning	Rhode Island Free Clinic	Finance, IT and Grants Director
Mark Treat	Upward Health	Chief Strategy Officer
Kim Gans	Brown School of Public Health	Director for Community Engagement
Joann Barao	Brown School of Public Health	Coordinator for Applied Public Health Experiences & Professional Development
Sara Becker	Brown School of Public Health	Associate Professor of Behavioral and Social Sciences, Associate Professor of Psychiatry and Human Behavior
Stephen Buka	Brown School of Public Health	Professor of Epidemiology
Kali Thomas	Brown School of Public Health	Associate Professor of Health Services, Policy and Practice
Liz Tobin-Tyler	Brown School of Public Health	Assistant Professor of Family Medicine & Health Services, Policy and Practice

Strategic Planning Steering Committee
 Phase 1: Creation of the Brown University School of Public Health Strategic Plan

   Charge Phase 1: Establish goals that guide investment priorities, establish linkages to the new University strategic plan, and present the School's opportunities and aspirations to its internal and external constituencies over the next five years.

 Phase 2: Implementation and Operationalization of the Brown University School of Public Health Strategic Plan

   Charge Phase 2: Implement and operationalize the strategic plan through revitalized oversight and success measurement. In Phase 2, committee members will track progress and adjust implementation strategies as necessary to effectively introduce identified strategic initiatives.

   Membership selection and term length: Membership selection for Phase 1 ensured that there was representation from all departments, including academic leadership (i.e., education programs), research center leadership, community engagement leadership, and students, with attention to diversity in professorial rank and student program (i.e., master's and doctoral). The group also

included the Director of Communication, the Director of Development, and all Associate Deans. This careful selection of members and the meeting process ensured representation from all entities within the school. Membership terms for Phase 1 were project-based and began in September 2018, and ended with the completion of the strategic plan in January of 2019.

Membership terms for Phase 2 and beyond will be two-year terms until a new strategic plan is created, at which time this cycle will repeat. The committee's composition will include standing positions to ensure proper leadership, historical context, and continuity. While these positions are standing, the individuals occupying the positions will change with natural shifting of School leadership, providing built-in diversity of the committee's membership. Previous committee members whose positions are not standing appointments may serve on other phases of the committee as long as each term follows a break of at least two years. Members with "standing representation" appointments have the option of being a standing member as long as they wish to serve or replace their membership with the appointment of a similar position, when available. The membership selection process as well as term length and guidelines can only be changed by group consensus in consultation with the School's Executive Committee.

Meetings occur: Monthly and ad hoc as needed.

Decisions are made by: In Phase 1, decisions were made by consensus; in Phase 2, decisions will be made by consensus in consultation with the Executive Committee.

Composition: Administrators, faculty, students, and staff from the School of Public Health. Note: Phase 2 began June 2019. With substantial leadership turnover in summer 2020, the new leadership team will meet with existing Phase 2 members and collaboratively decide whether the composition of the group needs to be altered.

Phase 1 Membership:

Laurie Ward, MBA	Sr. Director of Finance and Administration, Committee Co-Chair
Ira Wilson, PhD	Chair of Health Services, Policy and Practice, Committee Co-Chair
Nancy Barnett, PhD	Associate Dean for Faculty Affairs
Joseph Braun, PhD	Associate Professor of Epidemiology
Rachel Denlinger	Doctoral Student, Behavioral and Social Health Sciences
Kate Ellis, MPA	Assistant Director of Dean's Initiatives and Special Projects
Alison Field, ScD	Professor of Epidemiology and Pediatrics
Constantine Gatsonis, PhD	Professor of Biostatistics, Director of the Center for Statistical Sciences
Caroline Kuo, DPhil	Associate Dean for Diversity and Inclusion
Lacey Loomer	Doctoral Student, Health Services, Policy and Practice
Rebekah McKinney	Director of Development for School of Public Health
Amy Nunn, PhD	Associate Professor of Behavioral and Social Sciences and Medicine
Don Operario, PhD	Associate Dean for Academic Affairs
David Savitz, PhD	Associate Dean for Research
Karen Scanlan	Director of Communications and Outreach
Julie Skarha	Master's Student, Epidemiology
Adam Sullivan, PhD	Director, Biostatistics Master's Graduate Program
Patrick Vivier, MD, PhD	Director of Interdisciplinary Education
David Williams, PhD	Director, Center for Health Equity Research

Phase 2 Membership:

Position	Appointed	Title
Standing Membership/Representation		
Executive Leadership	Sara Walsh, MBA	Executive Dean for Finance and Administration
	David Savitz, PhD	Deputy Dean
Associate Deans	Nancy Barnett, PhD	Associate Dean for Academic Affairs; Professor of Behavioral and Social Sciences
	Melissa Clark, PhD	Associate Dean for Academic Affairs; Professor of Health Services, Policy and Practice
	Caroline Kuo, PhD	Associate Dean for Diversity and Inclusion; Associate Professor of Behavioral and Social Sciences
	Jennifer Tidey, PhD	Associate Dean for Research; Professor of Behavioral and Social Sciences
Department Chairs	Christopher Kahler, PhD	Chair and Professor of Behavioral and Social Sciences
	David Savitz, PhD	Interim Chair and Professor of Epidemiology
	Joseph Hogan, ScD	Chair and Professor of Biostatistics
	Ira Wilson, PhD	Chair and Professor of Health Services, Policy and Practice
Center Directors	Rosa Baier, MPH	Director of the Center for Long-Term Care Quality and Innovation; Associate Professor of the Practice
	Constantine Gatsonis, PhD	Director of the Center for Statistical Sciences; Founding Chair and Professor of Biostatistics
	Eric Loucks, PhD	Director of the Mindfulness Center; Associate Professor of Epidemiology
Senior Staff	Natalie Kopp	Dean's Chief of Staff
	Stefanie Friedhoff	Director of Content, Strategy and Public Affairs
2-Year Terms		
Center and Department Staff (2)	TBD	Center or Department Staff
	TBD	Center or Department Staff
Faculty Representative (4)	TBD	Tenure Track
	TBD	Tenure Track
	TBD	Research Scholar, Teaching Scholar, (Research)
	TBD	Research Scholar, Teaching Scholar, (Research)
Student Representative (2)	TBD	Student
	TBD	Student
Committee Staff	Mahrokh Irani	Associate Director, Dean's Initiatives and Special Projects
	TBD	TBD
	TBD	TBD

Diversity and Inclusion Committee

Charge: Advise, plan, and implement diversity and inclusion initiatives at the School of Public Health, guided by the Diversity and Inclusion Action Plan.

Membership selection and term length: Members of the committee are nominated through a School-wide process and serve a term of two years. We strive for a balance of individuals representing units, and representative of faculty, postdoctoral fellows, staff, graduate and undergraduate students.

Meeting occurrence: Monthly.

Decisions are made by: Majority vote.

Composition and Current Membership: Students, staff, postdoctoral fellows, and faculty.

Name	Title
Caroline Kuo, PhD	Committee Chair Associate Dean for Diversity and Inclusion, Associate Professor of Behavioral and Social Sciences
Tanya Benitez, PhD	Assistant Professor of Behavioral and Social Sciences, Center for Health Promotion and Health Equity
Katie Biello, PhD	Associate Professor of Behavioral and Social Sciences and Epidemiology
Ashley Gomez	Doctoral Student, Department of Behavioral and Social Sciences
Nicholas Jones	Doctoral Student, Department of Health Services, Policy and Practice
Alexandria Macmadu	Doctoral Student, Department of Epidemiology
Erin Miller	Student, AB/MPH
Deborah Pearlman, PhD	Associate Professor of the Practice of Epidemiology
Jai-Me Potter-Rutledge	Program Manager, Office of Diversity and Inclusion
Robert Rosales, PhD	Postdoctoral Fellow, Center for Alcohol and Addiction Studies
Theresa Shireman, PhD	Professor, Health Services, Policy and Practice; Center for Gerontology and Healthcare Research
Jon Steingrimsson, PhD	Assistant Professor of Biostatistics
Valerie White	Staff, Health Services, Policy and Practice

School of Public Health Staff Advisory Committee

Charge: To inform the Office of Diversity and Inclusion and School leadership of staff priorities around climate, training, and development, especially as they relate to diversity and inclusion.

Membership selection and term length: Members are nominated by their unit directors, with explicit support provided by unit directors and managers for participation for a one-year term.

Meeting occurrence: Up to 4 times per academic year.

Decisions are made by: Group consensus.

Composition and Current Membership: Staff leaders identified through a nomination process of department, center, and institute chairs.

Name	Title
Caroline Kuo, PhD	Committee Co-chair Associate Dean for Diversity and Inclusion, Associate Professor of Behavioral and Social Sciences
Jai-Me Potter-Rutledge	Committee Co-chair

	Program Manager, Office of Diversity and Inclusion
Joann Barao	Coordinator for Applied Learning Experiences and Professional Development, MPH Program
John Gomes	Administrative Assistant, Center for Statistical Sciences
Linda Angela	Department Manager, Behavioral and Social Sciences
Morayo Akande	Project Coordinator, Center for Alcohol and Addiction Studies
Currie Touloumtzis	Grants and Research Specialist, Centers for Epidemiology and Environmental Health

2) Briefly describe which committee(s) or other responsible parties make decisions on each of the following areas and how the decisions are made:

a. degree requirements

The Provost's Office has established a procedure for the review and approval of degree programs.

Graduate. For existing and newly proposed graduate programs, the Graduate Council sets procedural standards and policies. The Graduate Council, which is delegated by the full faculty of Brown with oversight of graduate education, reviews graduate curriculum, defines educational goals, evaluates whether the University structures can meet these goals, and approves courses. Chaired by the Dean of the Graduate School, its membership consists of faculty, graduate students, the Associate Deans of the Graduate School, the Associate Dean of Public Health for Academic Affairs, and the Associate Dean of Biology and Medicine for Academic Affairs. Within the parameters established by the Graduate School and documented in the Graduate School Handbook (see ERF), each program specifies their requirements for successful completion of the degree, with review, comment, and approval by the Graduate Council. Subsequent substantive changes to a program (e.g., increasing the number of required courses) also go through the Graduate Council in coordination with the Registrar's Office.

Undergraduate. For existing and newly proposed undergraduate concentrations (i.e., majors), the College Curriculum Council (CCC) sets procedural standards and policies. The CCC, which is delegated by the full faculty of Brown with oversight of undergraduate education, reviews undergraduate curriculum, defines educational goals, evaluates whether the University structures can meet these goals, and approves courses. Chaired by the Dean of the College, its membership consists of faculty, undergraduate and graduate students, an Associate Dean of the College, and the Registrar. The individual undergraduate concentrations establish their requirements for successful completion of the degree, with review, comment, and approval by the CCC. Subsequent substantive changes to a concentration (e.g., increasing the number of required courses) also go through the CCC in coordination with the Registrar's Office.

The Registrar's Office monitors students' course selections and progress relative to their programs' or concentrations' degree requirements.

b. curriculum design

Curriculum design takes place within the parameters set by University policy. The University sets the minimum number of credits (called "tuition units" at Brown) required for an undergraduate concentration, master's degree, and doctoral degree. At the School level, curriculum design is shaped by student requests, faculty expertise, emerging trends in the field, the School's strategic plan, and CEPH requirements.

When the need for a new course is identified, faculty submit a proposal to the curriculum committee of their program or department. The proposal, once approved, is sent to the college-level committee, the Public Health Curriculum Committee (PHCC). The PHCC is chaired by the School's Associate Dean for Academic Affairs and has faculty and student representatives from the School's degree programs. If the PHCC approves the course, it is given a final review by the Associate Dean for Academic Affairs. The Associate Dean authorizes the Manager of Academic Affairs, Data and Compliance to submit approved courses to the Registrar's Office via Banner, Brown's enterprise resource planning software. The Registrar then posts the courses to the Course Announcement Bulletin and places them in the online registration system.

When conditions emerge that have a significant impact on curriculum, the School involves a greater number of stakeholders in the curricular change process. For example, the 2016 CEPH criteria change allowed for much greater curriculum flexibility. In response, the School first tapped the MPH Executive Committee and MPH Curriculum Committee, which is composed of faculty, students, and alumni, to re-envision the MPH curriculum. What resulted was a 5:5:3 curriculum model in which students take five core courses, five concentration courses, and three electives. Because this model supported the development of more robust concentrations, the MPH Program invited the School's departments and research centers to identify new MPH concentrations that would capitalize on the School's distinctive areas of expertise and reflect the strategic plan's objectives. What emerged was the alignment of three concentrations with academic departments (Health Behavior, Epidemiology, and Health Services) and three with research centers (Global Health, Mindfulness, and Maternal and Child Health). Each concentration had a group of faculty develop its competencies and design its five required courses. The concentration plans were then refined through a review process that involved the participation of the MPH Curriculum Committee, MPH Executive Committee, School of Public Health Curriculum Committee, and Brown University Graduate Council. The School also consulted with CEPH.

c. student assessment policies and processes

Graduate. Instructors assess graduate students on the competencies embedded in their courses and assign students' course grades. The graduate programs hold a faculty meeting at the conclusion of each semester to review each student. Students receive at least one letter annually documenting their progress. Degree program staff use software, Brown's Graduate Student Information Management system (GSIM), to track students' achievement of each required milestone. The data entered into GSIM is used to certify to the Registrar when a student has met all graduation requirements. The Graduate School Handbook (see ERF) specifies the documentation that the student and program need to file with the Graduate School.

Undergraduate. Instructors assess undergraduate students on the competencies embedded in their courses and assign students' course grades. Once students declare a concentration, which they do before the end of their fourth semester, they are assigned a concentration advisor who guides them through their course plan and monitors their completion of degree requirements. Each semester, the Registrar sends documentation to the Director of Undergraduate Studies about the students who are expected to finish their degree requirements at the end of the term, who reviews the students' files and verifies eligibility for graduation. Final verification of eligibility to graduate takes place at a University-wide faculty meeting on the Friday before commencement.

d. admissions policies and/or decisions

Graduate. Graduate admissions policies are set by University and Graduate School leadership. The graduate program directors recommend School-wide admissions policies to the Public Health Executive Committee and Dean. Reflecting their interdisciplinarity, the MPH

and Clinical and Translational Master's degree programs have admissions committees with cross-department representation. Reflecting their single-discipline focus, each doctoral degree program and the Biostatistics Master's degree have their own department-based admissions committee. Graduate program admission applications for all graduate degrees in the School are submitted through SOPHAS. After the admissions committees conduct their programs' respective reviews, they convey their admission recommendations to the Graduate School, where the final decision on admission decisions are made. The Dean of the Graduate School sends official letters of acceptance to accepted applicants, and the individual programs follow up with degree-specific information, such as that regarding funding (e.g., stipend support for doctoral students, tuition scholarships for master's students).

Undergraduate. The School's two concentrations, Public Health and Statistics, are included on all University websites and in all publications that list concentrations (e.g., Focal Point; University Bulletin; Courses@Brown). The University Admissions Office notifies the Associate Dean for Academic Affairs about admitted students who listed the concentration on their application as an area of interest. Prior to the deadline date for applicants to make a choice of whether or not to accept Brown University's offer of acceptance, the Associate Dean for Academic Affairs sends a welcome letter to the students who identified Public Health or Statistics on their Brown applications to encourage them to contact the School before deciding on which of the universities that have accepted them to attend. In addition, the directors of undergraduate studies (DUS) and representatives from program departmental undergraduate groups (DUGs) participate in the Brown's undergraduate recruitment event for admitted students, A Day on College Hill. To enhance recruitment among Brown undergraduates, concentration advisors attend "concentration fairs" for Brown freshmen and sophomores. Students declare their intended concentration(s) by submitting a reflective writing assignment and proposed course plan to the concentration advisor for approval by the end of their fourth semester. Proposed course plans that meet the published requirements are then approved. In accordance with Brown University policy, faculty do not choose which students to admit to a concentration. Rather, undergraduates are free to pursue any concentration they declare.

e. faculty recruitment and promotion

The University sets the policies for faculty recruitment, retention, promotion, and tenure. Departments establish guidelines within the parameters of the University policies.

Recruitment. Department chairs initiate requests for new faculty positions. Prior to initiating a search, the Dean must approve departments' requests for tenure-track appointments, and the School's Executive Committee weighs in. The Dean and Executive Committee evaluate whether or not to initiate a tenure-track faculty search in light of the School's strategic plan (see ERF).

Departments conduct searches in accordance with the regulations specified in the University's Faculty Rules & Regulations (see ERF), the University's Handbook of Academic Administration (see ERF), their respective departmental Standards and Criteria (see ERF), and the administrative procedures established by the School. As specified by these polices, search committees are formed at the department level. Members include those in the home department and at least one representative from a different School department. As appropriate, faculty from other departments in the University are included on the search committee. The search plan, which includes the composition of the search committee, advertising plan, and outreach to achieve diversity in the pool of candidates, is approved by the School's Associate Dean for Faculty Affairs and the University Office of Diversity and Inclusion (ODI). After widely advertising open positions, the search committee reviews candidates, selects finalists for interviews, schedules scientific presentations by candidates, and reports their recommendations to the department. No search can progress to the campus interview phase, however, until ODI approves the "short list."

Hiring recommendations come through the department. The department chair provides a ranked list of finalists to the Associate Dean for Faculty Affairs with a hiring recommendation. Following the Associate Dean's review, the recommendation is submitted to ODI for its approval. Once approved by ODI, the Dean reviews the candidates. If approved by the Dean, junior faculty candidates are offered a position, while senior faculty appointments are subject to further review. Senior tenure-track candidates require the University's Tenure, Promotions, and Appointments Committee's consent to be hired, and senior non-tenure-track candidates require that of the School's Public Health Faculty Appointments Committee. Next, senior faculty appointments are reviewed by the Provost and in specified instances (i.e., tenure-track all ranks; senior appointments in academic tracks) by the University President and the Corporation. Offers are made to senior faculty who are approved at all levels.

Promotion and Tenure. The University's Handbook of Academic Administration (see ERF) describes Brown's tenure process. This process is reflected in each department's Standards & Criteria documents (see ERF).

Two relevant committees oversee promotion and tenure:

- Tenure, Promotions, and Appointments Committee (TPAC). The Tenure, Promotions, and Appointments Committee (TPAC) is the university committee that reviews dossiers for tenure and recommends actions to the Provost. TPAC members, all of whom are full professors, are elected by the University faculty. The committee is chaired by a faculty member and made up of two faculty from each of the University's four major sectors (i.e., Life Sciences, Physical Sciences, Social Sciences, and Humanities). The Dean of the Faculty, the Dean of the College, the Dean of Biology and Medicine, and the Dean of Public Health serve as *ex officio* members.

- Public Health Faculty Appointments Committee (PHFA). The Public Health Faculty Appointments Committee (PHFA) is the school committee that acts on appointments and promotions for non-tenure-track faculty. The Division of Biology and Medicine has a parallel body called the Committee on Medical Faculty Appointments (CMFA) that acts on appointments and promotions of the non-tenure-track faculty in the Division of Biology and Medicine. PHFA and CMFA actions are forwarded to their respective deans and then to the Provost.

Tenure-track: Newly hired, junior tenure-track faculty are subject to an eight-year "up-or-out" process. The eight years are divided into two four-year appointments.

Junior tenure-track faculty are evaluated annually by their department chair with input from senior faculty. The review covers the candidate's research, teaching, and service during the prior July-to-June academic year. The results of the review, vetted through the Dean and the Associate Dean for Faculty Affairs, are relayed to the faculty member by the chair and placed in the faculty member's permanent file. In addition to the university annual evaluation, all primary faculty within the School submit a Faculty Activity Report (FAR) early in the calendar year (January/February). The FAR is a computer-based, online report in which faculty list their teaching, research, and service accomplishments for the prior calendar year. All faculty, regardless of rank, meet with the chair to discuss the prior calendar year's activities and make plans for the coming year. Therefore, junior untenured, tenure-track faculty receive two reviews a year.

In year three of junior tenure-track faculty members' initial appointment period, a dossier is assembled for the reappointment review. The dossier is submitted to the University's Tenure, Promotion, and Appointments Committee, with the candidate's department chair available to answer questions when it is being considered. The review results in one of three outcomes:

reappointment for four years; reappointment for two years with a review for another two-year appointment; or denied, in which case faculty members have one year left on their contract.

Early in candidates' seventh year, their department chair forms a promotion committee, which assembles the dossier. The Faculty Rules and Regulations and the Handbook of Academic Administration (see ERF) specify the steps for preparing a dossier, including the solicitation of external referee letters, and lays out the other steps in the review process. Candidates submit at least three names for solicitation, while the department supplies the names of others. The Dean and Associate Dean for Faculty Affairs vet the proposed referees before solicitation occurs in order to ensure a strong list. Upon receipt of all dossier materials, the voting-eligible faculty of a department meet to discuss the candidate's dossier and take a vote. Minutes of all meetings are kept as part of the dossier. The department and the Associate Dean work with the Dean of the Faculty's Office to schedule the dossier's review by the Tenure, Promotions, and Appointments Committee (TPAC). The department chair is available to meet with TPAC when the dossier is reviewed and voted on. The TPAC makes a recommendation to the Provost, who in communication with the President, forwards the recommendation to the Corporation for final approval. All negative recommendations are reviewed at the university level by TPAC and the Committee on Faculty Equity and Diversity.

The promotion process for tenure-track faculty at SPH parallels that in the University's other departments and schools.

Non-Tenure Tracks: Non-tenure-track faculty can have one of five appointment types: Teaching Scholar, Research Scholar, (Research), Clinical, and Professor of the Practice. Each track has evaluation criteria associated with their expected activities, and these criteria are specified in the respective departmental standards and criteria handbooks (see ERF).

The Teaching Scholar track has few expectations for empirical research, but has an expectation for substantial instructional roles and related publications. The Research Scholar track has an emphasis on externally funded research with an expectation for some level of teaching or mentoring activity. The (Research) track is similar to the Research Scholar track in its emphasis on externally funded research but does not have an expectation for any teaching or mentoring activity. The Clinical faculty label is a vestige of the faculty tracks available when the former Public Health Program was located in the Division of Biology and Medicine. Clinical faculty were those with applied professional experience whose primary employment was at the Rhode Island Department of Health or other community-based organization. Although some SPH faculty are still designated Clinical, those with these credentials are now hired in the Professor of Practice track. Faculty on the Clinical and Practice tracks are expected to perform applied health-related activities and be recognized in their field as leaders in community health promotion and/or professional service.

Like tenure-track faculty, those not on the tenure-track submit the annual Faculty Activity Report in January/February. Their reports are reviewed by their department chair, center/institute director, and department's senior faculty.

Reappointments differ across tracks. Junior faculty in the (Research), Clinical, and Practice tracks are on 3-year renewable appointments, with no requirement that they go up for promotion review after a specified period of time. Junior-rank Teaching Scholars and Research Scholars have a mandatory up-or-out promotion from Assistant to Associate Professor after three three-year appointments. After promotion to a senior rank, reappointments can be indefinite, typically with a five-year reappointment period.

The promotion process for those on a non-tenure-track is similar to that for those on the tenure-track except that the primary review body is the Public Health Faculty Appointments Committee (PHFA), rather than the Tenure, Promotions, and Appointments Committee. A dossier is prepared that includes external letters of recommendation drawn from names

provided by the candidate and the department. The dossier is reviewed by an internal departmental committee before being forwarded to the PHFA, which submits its promotion recommendations to the Provost.

The promotion process for faculty who are not on the tenure track at SPH parallels that in the University's other departments and schools.

f. research and service activities

Brown University's Faculty Rules and Regulations (see ERF) and Handbook of Academic Administration (see ERF) provide broad guidance for the research and service expectations of faculty. Each academic department has a standards and procedures document that specifies its research and service criteria for appointments at each rank (i.e., assistant, associate, full) and track (i.e., tenure, non-tenure) (see ERF).

3) A copy of the bylaws or other policy documents that determine the rights and obligations of administrators, faculty and students in governance of the school.

The School of Public Health adheres to Brown University's policies. The Dean of the Faculty's *University Handbook of Academic Administration* (see ERF) provides administrative policies and procedures, and the Brown University Faculty Governance website provides faculty rules and regulations.

The Graduate School website houses The Graduate School Handbook, which specifies the most important policies, procedures, and practices that guide graduate education at Brown. Graduate students receive the *Graduate School Handbook* and their degrees programs' student handbook. (Copies of the SPH student handbooks can be found in the ERF).

Graduate students must abide by the academic conduct rules outlined in the Graduate School's Academic and Student Conduct Codes (see ERF). Undergraduates are likewise expected to observe and Academic Code (see ERF) and the Code of Student Conduct (see ERF), which outlines students' rights and responsibilities. Both incoming graduate and undergraduate students are required to take an online tutorial on the rules.

4) Briefly describe how faculty contribute to decision-making activities in the broader institutional setting, including a sample of faculty memberships and/or leadership positions on committees external to the unit of accreditation.

The following university committees have at least one eligible member from the SPH faculty: Committee on Medical Faculty Appointments; Committee on Faculty Equity and Diversity; and the Tenure, Promotions, and Appointments Committee.

University Committee	Current Representative(s)
Committee on Faculty Equity and Diversity	Barnett, Nancy Biello, Katie Kuo, Caroline
Committee on Medical Faculty Appointments	Gatsonis, Constantine
Tenure, Promotions, and Appointments Committee	Hogan, Joseph

In addition, School of Public Health faculty routinely serve on a number of university committees as illustrated on the next page.

Name	University Committee
Barnett, Nancy	Student Conduct Board
Biello, Katie	Committee on Faculty Equity and Diversity, Faculty Hearing Committee for Allegations of Gender-Based Discrimination
Braun, Joe	Sustaining Life on Earth
Carey, Kate	Office of Women in Medicine and Science Advisory Board
Cassidy, Rachel	Brown University Community Council
Chrysanthopoulou, Stavroula	Sheridan Center Advisory Board
Clark, Melissa	Graduate Council, University Graduate School Extended Leadership Committee
Eloyan, Ani	Faculty Executive Committee
Field, Alison	Research Advisory Board
Ghee, Medeva	Diversity Advisory Board, Initiative to Maximize Student Development Advisory Board, Brown-Tougaloo Advisory Committee, Mellon Mays Undergraduate Fellowship Program Advisory Board
Gjelsvik, Annie	Tougaloo College Campus Advisory committee
Gozalo, Pedro	Human Resources Advisory Board
Gutman, Roee	College Curriculum Council
Hogan, Joseph	Data Science Initiative Executive Committee, Center for AIDS Research Executive Committee
Kahler, Christopher	Provost's Chairs' Meeting Agenda Committee
Kuo, Caroline	Diversity Advisory Board
Lima, Julie	Office of Research Integrity's Brown Human Research Advisory Group
Liu, Simin	Human Resources Advisory Board
Marshall, Brandon	University Resources Committee
Martin, Rosemarie	Human Resources Advisory Board
Monti, Peter	CTR Professional Development Steering Committee
Nazareno, Jennifer	Diversity and Inclusion Committee
Nunn, Amy	Center for AIDS Research Committee on Community Engagement
Operario, Don	Brown University Global Health Task Force
Proulx, Jeffrey	Native American and Indigenous Studies Steering Committee
Savitz, David	Open Access Committee, Clinical and Translational Research, Advance-CTR Peer Review Committee
Trivedi, Amal	Clinical and Translational Research Steering Committee

van den Berg, Jacob	Brown's Global Health Scholars Program
Wallack, Anya	Title IX Council
Wetle, Terrie	Alpert Medical School Advisory Committee on Primary Care-Population Medicine Program, IMSD Advisory Board, Global Health Initiative Advisory Committee
White, Tara	Brown University MRI Research Facility Scientific Advisory Committee
Williams, David	Advisory Board, Sheridan Center for Teaching and Learning
Wilson, Ira	School of Professional Studies Committee on Academic Programs and Faculty Appointments
Wray, Tyler	Brown University Institutional Review Board
Wu, Zhijin	Faculty Hearing Committee for Allegations of Gender Based Discrimination

5) Describe how full-time and part-time faculty regularly interact with their colleagues (self-study document) and provide documentation of recent interactions, which may include minutes, attendee lists, etc.

Full-time and part-time faculty interact with each other in many different forums, both formal and informal. Invitations and attendance at faculty formal and informal forums do not distinguish between full and part-time faculty. All faculty are welcome and encouraged to attend. Formal interactions include monthly faculty meetings held by academic departments and research centers in which topics relevant to those entities are discussed and decisions made. There are also school-wide faculty meetings twice a semester. Moreover, faculty share their research with each other through presentations they deliver at the School.

Opportunities for more informal interaction take place monthly at the school-wide event, Coffee and Conversations with the Deans, in which the Dean and associate deans talk with faculty about whatever issues faculty raise. Faculty research presentations are often preceded by or followed by a reception or meal during which people are able to catch up with their colleagues. Another venue for socializing is provided at the lunch that the School of Public Health holds each semester for faculty of color at the Brown University Faculty Club. Departments within the School also sponsor events for informal interaction among faculty. For instance, the Department of Health Services, Policy and Practice has a monthly meeting for junior faculty to support their progress toward promotion. And to foster new collaborations within the department, the Department of Behavioral and Social Sciences will foot the bill when two faculty members who have not previously worked together meet over lunch.

6) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: We have a highly effective organizational structure with clear delineation of responsibilities with excellent working relationships among the different groups. Students play an active role in key School committees.

Challenges: As the School matures, our committee structure needs to evolve to meet increases in size and scope. Some current committees may need restructuring and other committee may need to be created.

Plans: We will review our organizational and governance structure annually and create ad hoc working groups as needed.

A2. Multi-Partner Schools (applicable ONLY if functioning as a "collaborative unit" as defined in CEPH procedures)

Not applicable.

A3. Student Engagement

Students have formal methods to participate in policy making and decision making within the school, and the school engages students as members on decision-making bodies whenever appropriate.

1) Describe student participation in policy making and decision making at the school level, including identification of all student members of school committees over the last three years, and student organizations involved in school governance. Schools should focus this discussion on students in public health degree programs.

   The University-wide Graduate Student Council (GSC) is the primary political and social body for graduate students at Brown. The GSC is comprised of representatives from each department and of officers elected from the entire graduate student population. The GSC holds monthly meetings and offers many events and free classes throughout the year. Public Health has representation on the GSC.

   Students actively participate in School of Public Health governance. The School has had a Graduate Student Council (SPH-GSC) since September 2014. The Council is open to all School of Public Health graduate students and postdocs. The leadership structure of the Graduate Student Council is comprised of a Chair and Co-chair of the general Council body, as well as a Chair and Co-chair for two subcommittees, Student Advocacy and Success Committee and Community Service and Engagement Committee, which focus on issues and events relevant to the respective subcommittees. In addition, there is an Immigration Working Group under the SPH-GSC. The goals of the SPH-GSC include: providing a forum for School graduate students and postdocs to express issues and concerns; organizing social events to bring students together to promote a sense of community within the School's student body; representing and advocating for student interests through collaboration with graduate student representatives serving on School committees; promoting and/or planning programs to facilitate the academic/professional career development of public health graduate students; organizing and/or promoting activities to enhance the relationship between the School's graduate student body and the greater Providence community; and selecting representatives to serve on the general Brown University Graduate Student Council. The SPH-GSC is represented on the School's Doctoral Graduate Program Steering Committee, and recommends graduate students to fill vacant positions on other committees (see ERF for membership and governance details).

   The undergraduate Public Health concentration has a DUG (Departmental Undergraduate Group), as do many concentrations across the University. The DUG is student-led, with a faculty advisor (Dr. Jasjit Ahluwalia), and offers a variety of activities during the academic year (e.g., information session on public health, research activities, presentations from alumni, service events). It is open to any interested student, not only declared Public Health concentrators. The DUG is asked to name the student representatives to the Undergraduate Studies Committee.

   There are student representatives on most School-wide committees as shown in the table below. Additionally, departments have their own committees with student representation. Students are full voting members on any committee in which they are a member.

Student Representation on School-Wide Committees	
Committee	Number of students
Diversity and Inclusion Committee	6*
Doctoral Studies Committee	4
MPH Curriculum Committee	2
Public Health Curriculum Committee	3
Undergraduate Studies Committee	2
Examples of other Significant Ad-Hoc Committees in past 3 years	

Strategic Planning Steering Committee	3
CEPH Self-Study Community Engagement Working Group	2
CEPH Self-Study School-Wide Goals Working Group	1
*Diversity and Inclusion is comprised of the following subcommittees: LEAD, Public Health Womxn of Color Collective, SPH Students of Color Affinity Group, and Immunization & Health. Collectively, there are 6 student leaders. There is also a Meals On Wheels Community Service Group (11 students) outside of the SPH-GSC and Diversity & Inclusion Committee.	

2) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School has a number of strengths with regard to student engagement. This includes strong communication between students, staff, and School leadership through a variety of formal and informal activities such as the Dean's Open Office Hours, a "Coffee and Conversation with the Deans" series, and monthly meetings between the Deans and the School's Graduate Student Council. In addition, there is valued student input on School-wide committees as well as departmental/program committees. Students are also engaged in inbound recruitment events, where prospective students are paired with one of our 17 student ambassadors. Next, student events are planned based on student feedback. Examples include a grant writing series for students held in 2019-2020, a webpage specific to Graduate Assistantship and Internship Opportunities, and an internal website page specifically for students that lists University and School resources for students. Finally, there is strong support for the Departmental Undergraduate Group including significant funding for participation in the annual Public Health Scholar Bowl.

Challenges: The School is challenged to find the best timing for holding student activities given competition for student time in other personal and professional activities. In addition, student engagement in student groups and on School and department committees is variable based on the student leaders and the shifting priorities of the study body. Finally, there are challenges with establishing and maintaining strong communication in the complex organizational structure within the School.

Plans: As the School grows in the size of the student body, we will continue to strengthen the support structures for student organizations to facilitate their vitality and impact. In addition, we plan to continue to evolve our communication strategies to students through listservs, student groups, and student leaders.

A4. Autonomy for Schools of Public Health

A school of public health operates at the highest level of organizational status and independence available within the university context. If there are other professional schools in the same university (e.g., medicine, nursing, law, etc.), the school of public health shall have the same degree of independence accorded to those professional schools. Independence and status are viewed within the context of institutional policies, procedures and practices.

1) Briefly describe the school's reporting lines up to the institution's chief executive officer. The response may refer to the organizational chart provided in the introduction.

   Brown University is governed by the Corporation, which is a bicameral body composed of a Board of Fellows with 12 members and a Board of Trustees with 42 members. The authority and responsibilities of the Corporation were set forth in the Charter of Brown University granted by the Colony of Rhode Island and Providence Plantations in 1764. The Corporation concerns itself with matters of policy and does not become involved in the daily administration of the University. The Corporation, comprised of five standing committees, meets annually three times per year in October, February, and May.

   The President, Dr. Christina Paxson, is responsible to the Corporation as Chief Executive Officer. She is responsible for the management and administration of the operations of the University. The officers of administration reporting directly to the President are: Provost, Executive Vice President for Finance and Administration; Vice President for Campus Life and Student Services; Executive Vice President for Planning and Policy; Vice President for Communications; Senior Vice President for Advancement; Vice President and General Counsel; Vice President for Institutional Equity and Diversity; and the Assistant to the President. The University Ombudsperson also reports directly to the President. The Senior Vice President for Health Affairs and Dean of Medicine and Biological Sciences and (per Ivy League rules) the Director of Athletics have dashed-line reporting to the President.

   The chief academic administrators within the purview of the Provost, Dr. Richard Locke, are the Dean of the Faculty, the Senior Vice President for Health Affairs and Dean of Medicine and Biological Sciences, and the Dean of the School of Public Health. Among them, these senior academic leaders supervise all of Brown's faculty, academic departments, institutes, and centers. The Dean of the School of Engineering currently reports jointly to the Provost and the Dean of the Faculty. Other deans and senior administrative officers reporting to the Provost are the deans of the College, the Graduate School, the School of Professional Studies, Pre-College and Summer Undergraduate Programs; the University Librarian; the Vice President for Research; Chief Digital Officer and Chief Information Officer; the Dean of Admission; and the Dean of Financial Aid. Senior staff consisting of a Vice President for Finance and Chief Financial Officer, a Deputy Provost for Academic Affairs, a Deputy Provost for Global Engagement and Strategic Initiatives, an Associate Provost for Academic Space, a Vice President for Strategic Initiatives, and a Chief of Staff, assist the Provost.

   Executive Vice President for Finance and Administration Barbara Chernow oversees the vice presidents for Facilities Management, Finance and Chief Financial Officer (jointly with the Provost), and Human Resources; the Vice President and Chief Investment Officer, as well as the Assistant Vice President for Business and Financial Services, the directors of Dining Services and Environmental Health and Safety, and the Chief University Auditor.

2) Describe the reporting lines and levels of autonomy of other professional schools located in the same institution and identify any differences between the school of public health's reporting lines/level of autonomy and those of other units.

   There are no differences in reporting lines and levels of autonomy for the School of Public Health relative to other schools in the University, with the exception of the School having its own Public

Health Faculty Appointments Committee for non-tenure-track faculty appointments and promotions. The Public Health Faculty Affairs Committee (PHFA) reviews the promotion recommendations and dossiers of non-tenure track faculty after review by department-level committees and vote by senior faculty at or above rank with primary full-time appointments in the department of the candidate. PHFA reviews the candidate's dossier, deliberates in a meeting, and votes on the promotion recommendation. The Public Health Associate Dean for Faculty Affairs reviews this recommendation, and the Dean makes the final decision. The Warren Alpert Medical School follows a similar process for non-tenure-track appointments.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School is a highly visible, integral part of the University. The Dean of Public Health, similar to the Dean of Engineering, the Dean of Biology and Medicine, and the Dean of the School of Professional Studies, reports directly to the Provost. The Dean of Public Health is a member of the President's Cabinet and Executive Committee as well as a member of the Provost's Leadership group comprised of senior deans throughout the University.

Challenges: As a recently created School, we are establishing our place and identity within the University. We continue to build and strengthen our place and identity within the University.

Plans: The transition to being a School of Public Health presents opportunities to strengthen our programs and expand our role in the University. We are working with the University in its current *Building on Distinction* strategic planning initiative, to take leadership in some areas and be collaborators in areas led by other units of the University. In 2019, the School of Public Health launched a comprehensive strategic plan, *Advancing Well-Being for All*. The plan is a culmination of a 15-month-long, inclusive process—led by a dedicated steering committee of faculty, staff, and students—and was informed by over 50 in-depth conversations with internal School stakeholders, colleagues from the Brown University campus, partners from the community, and the Advisory Council to President Paxson for Public Health. The plan represents a unified vision for making an impact on urgent health needs and improving health equity. The new vision and carefully selected population health areas of focus has a direct alignment with Brown's strategic plan, *Building on Distinction*, and positions the School to grow and achieve new and higher levels of prominence and distinction, leveraging the many opportunities that exist for innovative collaboration within the Brown community and beyond.

A5. Degree Offerings in Schools of Public Health

A school of public health offers a professional public health master's degree (e.g., MPH) in at least three distinct concentrations (as defined by competencies in Criterion D4) and public health doctoral degree programs (academic or professional) in at least two concentrations (as defined by competencies in Criterion D4). A school may offer more degrees or concentrations at either degree level.

1) Affirm that the school offers professional public health master's degree concentrations in at least three areas and public health doctoral degree programs of study in at least two areas. Template Intro-1 may be referenced for this purpose.

   The School offers master of public health degrees in seven* concentrations:
   - Epidemiology
   - Generalist
   - Global Health
   - Health Behavior
   - Health Services
   - Maternal and Child Health
   - Mindfulness

   2 additional concentrations (Applied Epidemiology & Biostatistics and Biostatistics) were discontinued for the class entering Fall 2020.

   The School offers doctoral degrees in four areas:
   - Behavioral and Social Sciences
   - Biostatistics
   - Epidemiology
   - Health Services Research

2) An official catalog or bulletin that lists the degrees offered by the school.

   Brown Bulletin Link

   Note: Please click on "Graduate" tab for more information pertaining to Brown's Graduate Programs.

B1. Guiding Statements

The school defines a *vision* that describes how the community/world will be different if the school achieves its aims.

The school defines a *mission statement* that identifies what the school will accomplish operationally in its instructional, community engagement and scholarly activities. The mission may also define the school's setting or community and priority population(s).

The school defines *goals* that describe strategies to accomplish the defined mission.

The school defines a statement of *values* that informs stakeholders about its core principles, beliefs and priorities.

1) A one- to three-page document that, at a minimum, presents the school's vision, mission, goals and values.

   The School's guiding statements are consistent with **Brown University's mission**, which is "to serve the community, the nation and the world by discovering, communicating and preserving knowledge and understanding in a spirit of free inquiry, and by educating and preparing students to discharge the offices of life with usefulness and reputation. We do this through a partnership of students and teachers in a unified community known as a university-college."

   School Vision

   To champion health and health equity around the world

   School Mission

   To improve the health of all populations, especially those most vulnerable, by producing world-class public health scholarship, forging strong community partnerships, and educating the next generation of diverse public health leaders.

   School Goals

   The Brown School of Public Health aims to achieve its mission by doing the following:

   1. Rigorously preparing the next generation of diverse public health leaders, from undergraduates through postdoctoral fellows, to address the health needs of all people, including those of historically underserved or vulnerable populations

   2. Generating world-class public health scholarship that addresses the health needs of all people, including historically underserved or vulnerable populations

   3. Cultivating strong partnerships with communities and governmental entities in order to address the health needs of all people, including historically underserved or vulnerable populations

   4. Ensuring that the School's infrastructure supports operational effectiveness, through enhanced philanthropy, improved financial practice, and expanded physical space

   School Values

   The School's values are the fundamental beliefs that guide our enduring attitudes and actions. These values are critical to preserving and enhancing the health and well-being of humanity.

- **Excellence** – The School aspires to the highest levels of **excellence** in research, education, and service to the community.

- **Equity** – The School is committed to undertaking scholarship, teaching, and service that advances the health of all populations, including and especially historically underserved or vulnerable communities.

- **Diversity and Inclusion** –The School continually strives to recruit students, faculty, and staff from a wide variety of cultures, backgrounds, and lived experiences and to foster a culture in which all people feel safe, included, and valued.

- **Collaboration** – The School fosters interdisciplinary **collaboration** among faculty, students, and staff.

- **Innovation** – The School stimulates **innovation**, creativity, and ingenuity in research, education, and community partnerships.

- **Community Focus** – The School forges respectful, ethical, high-impact partnerships to address local, national, and global **community** health needs.

2) If applicable, a school-specific strategic plan or other comparable document.

In 2017, the School launched a 15-month-long, inclusive strategic planning process under the leadership of former Dean Bess Marcus. A dedicated group of faculty, staff, and students comprised the steering committee that oversaw the process. Over 50 in-depth conversations with internal School stakeholders, colleagues from the Brown University campus, partners from the community, and the President's Advisory Council on Public Health informed the plan, *Advancing Well-Being for All*.

Through the identification of four public health themes, two scientific capabilities, and two organizational capabilities, *Advancing Well-Being for All* aims to build on the gains achieved by the School's previous strategic plan. The four public themes are (a) mental health, resilience, and mindfulness; (b) environmental health and climate change; (c) vulnerable life stages: children and older adults; and (d) addiction. The two scientific capabilities are (a) health data sciences and technology and (b) prevention and policy. The two organizational capabilities are (a) teaching, mentoring, and advising and (b) local, national, and global partnerships. The scientific capabilities crosscut the four public health themes, and the organizational capabilities reflect responsibilities within the School and between the School and our community partners, respectively.

The School's strategic plan can be found here. A copy is also available in the ERF.

In late 2020, the School launched a school-wide initiative, Operational Planning, under the direction of our new dean, Ashish Jha. This initiative aims to implement our strategic plan and other key activities designed to advance our vision, mission, goals, and values. Over 50 faculty, staff, students, and alumni are organized into 17 subcommittees of subject matter experts. Each subcommittee has an area of focus (e.g., research partnerships, student experience, space planning) and set of goals (e.g., increase technical capacity of School stakeholders to use systems more effectively; build research capacity in the area of addictions in older adults; streamline research funding processes to improve efficiency and limit administrative effort). The subcommittees are responsible for designing and conducting projects to achieve their Operational Planning goals. (See Operational Planning Goals in the ERF).

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School's mission, vision, and values build upon a strong practice of strategic planning in which a new plan has been consistently launched every five years since 1997, when the School was still a single program. Each plan has sought to advance 1) the health of populations and disease prevention, 2) interdisciplinary science, 3) linkages between the School and the wider world, and 4) a respect for the many cultures encompassed in local, national, and global communities.

Challenges: Only seven years old, the School has had the challenges associated with early-life-stage organizations, namely, a lack of (a) financial and human resource abundance and (b) fully developed organizational processes.

Plans: To address our challenges, the School launched a major initiative in December 2020: Operational Planning. Operational Planning provides a clear structure for identifying, prioritizing, implementing, and monitoring projects that will make a tangible impact on the School's strategic aims. Its purpose is to strengthen the School's education, research, partnerships, and operations in order to achieve the School's mission and goals.

B2. Graduation Rates

The school collects and analyzes graduation rate data for each public health degree offered (e.g., BS, MPH, MS, PhD, DrPH).

The school achieves graduation rates of 70% or greater for bachelor's and master's degrees and 60% or greater for doctoral degrees.

1) Graduation rate data for each degree in unit of accreditation. See Template B2-1.

Doctoral Programs:
Behavioral and Social Health Sciences, Biostatistics, Epidemiology, Health Services Research

B2-1: Doctoral Programs by Cohorts Entering Between 2014-15 and 2019-20							
*Maximum Time to Graduate: Up to 6 years							
	Cohort of Students	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
2014-15	# Students entered	16					
	# Students withdrew, dropped, etc.	1					
	# Students graduated	0					
	Cumulative graduation rate	0%					
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	15	16				
	# Students withdrew, dropped, etc.	0	0				
	# Students graduated	0	0				
	Cumulative graduation rate	0%	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	15	16	16			
	# Students withdrew, dropped, etc.	0	0	1			
	# Students graduated	0	0	0			
	Cumulative graduation rate	0%	0%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	15	16	15	16		
	# Students withdrew, dropped, etc.	0	0	0	0		
	# Students graduated	3	0	0	0		

B2-1: Doctoral Programs by Cohorts Entering Between 2014-15 and 2019-20							
*Maximum Time to Graduate: Up to 6 years							
	Cohort of Students	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
	Cumulative graduation rate	19%	0%	0%	0%		
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	12	16	15	16	21	
	# Students withdrew, dropped, etc.	0	0	0	1	0	
	# Students graduated	8	4	1	0	0	
	Cumulative graduation rate	69%	25%	6%	0%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)	4	12	14	15	21	21
	# Students withdrew, dropped, etc.	0	1	0	0	0	0
	# Students graduated	3	8	7	0	0	0
	Cumulative graduation rate	88%	75%	50%	0%	0%	0%

Academic Master's Programs:

AM/ScM Biostatistics, ScM Clinical and Translational Research

B2-1: Academic Master's Programs by Cohorts Entering Between 2015-16 and 2019-20						
*Maximum Time to Graduate: Up to 5 years						
	Cohort of Students	2015-16	2016-17	2017-18	2018-19	2019-20
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	18				
	# Students withdrew, dropped, etc.	0				
	# Students graduated	0				
	Cumulative graduation rate	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	18	20			

B2-1: Academic Master's Programs by Cohorts Entering Between 2015-16 and 2019-20					
*Maximum Time to Graduate: Up to 5 years					
Cohort of Students	2015-16	2016-17	2017-18	2018-19	2019-20
# Students withdrew, dropped, etc.	0	0			
# Students graduated	17	0			
Cumulative graduation rate	94.44%	0%			
2017-18 # Students continuing at beginning of this school year (or # entering for newest cohort)	1	20	21		
# Students withdrew, dropped, etc.	0	0	0		
# Students graduated	1	19	1		
Cumulative graduation rate	100%	95%	4.76%		
2018-19 # Students continuing at beginning of this school year (or # entering for newest cohort)	0	1	20	20	
# Students withdrew, dropped, etc.	0	0	0	0	
# Students graduated	0	0	20	0	
Cumulative graduation rate	100%	95%	100%	0%	
2019-20 # Students continuing at beginning of this school year (or # entering for newest cohort)	0	1	0	20	18
# Students withdrew, dropped, etc.	0	0	0	0	0
# Students graduated	0	0	0	17	0
Cumulative graduation rate	100%	95%	100%	85%	0%

MPH Program:

B2-1: MPH Program, by Cohorts Entering Between 2015-16 and 2019-20						
*Maximum Time to Graduate: Up to 5 years						
	Cohort of Students	2015-16	2016-17	2017-18	2018-19	2019-20
2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	49				
	# Students withdrew, dropped, etc.	1				
	# Students graduated	0				
	Cumulative graduation rate	0%				
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	48	50			
	# Students withdrew, dropped, etc.	2	1			
	# Students graduated	42	0			
	Cumulative graduation rate	86%	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	4	49	53		
	# Students withdrew, dropped, etc.	0	2	2		
	# Students graduated	2	35	0		
	Cumulative graduation rate	90%	70%	0%		
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	12	51	45	
	# Students withdrew, dropped, etc.	0	0	0	1	
	# Students graduated	1	10	45	0	
	Cumulative graduation rate	92%	90%	85%	0%	
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)	1	2	6	44	45

B2-1: MPH Program, by Cohorts Entering Between 2015-16 and 2019-20						
*Maximum Time to Graduate: Up to 5 years						
	Cohort of Students	2015-16	2016-17	2017-18	2018-19	2019-20
	# Students withdrew, dropped, etc.	0	0	0	0	1
	# Students graduated	0	1	3	26	0
	Cumulative graduation rate	92%	92%	91%	58%	0%

Undergraduate Program:

Students in Undergraduate Public Health Degree, by Junior Year Cohorts Between 2016-17 and 2019-20					
*Maximum Time to Graduate: 4 years from junior year (semester 5 or 6 in the spring semester), which allows for 6 years from entering.					
	Cohort of Students	2016-17	2017-18	2018-19	2019-20
2016-17	# Students entered	59			
	# Students withdrew, dropped, etc.	0			
	# Students graduated	0			
	Cumulative graduation rate	0%			
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	59	60		
	# Students withdrew, dropped, etc.	2	0		
	# Students graduated	56	0		
	Cumulative graduation rate	95%	0%		
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	1	60	50	
	# Students withdrew, dropped, etc.	0	3	0	
	# Students graduated	0	57	0	
	Cumulative graduation rate	95%	93%	0%	
2019-20	# Students entered	1	0	50	62
	# Students withdrew, dropped, etc.	1	0	1	0
	# Students graduated	0	0	47	0
	Cumulative graduation rate	95%	93%	94%	0%

2) Data on doctoral student progression in the format of Template B2-2.

B2-2: Doctoral Student Data for Year 2020-21				
	Behavioral and Social Health Sciences PhD	Biostatistics PhD	Epidemiology PhD	Health Services Research PhD
# newly admitted in 2020-21	2	6	4	6
# currently enrolled (total) in 2020-21	17	17	17	27
# completed coursework during 2019-20	3	12	3	1
# in candidacy status (cumulative) during 2019-20	9	4	8	8
# graduated in 2020	6	6	5	4

3) Explain the data presented above, including identification of factors contributing to any rates that do not meet this criterion's expectations and plans to address these factors.

Doctoral Programs: According to University Graduate School policy, students have up to 5 years after admission into the program to achieve candidacy. Similarly, it is University policy that the Dissertation should be completed within 5 years of admission to candidacy (approval of Dissertation proposal). Students are also guaranteed 5 years of funding. However, the norm in our doctoral programs is that the financial support is generally four years for those entering with a master's degree and five years for those without a master's degree. Financial support beyond the promised 5 years is contingent upon students making satisfactory academic progress in their program of study and availability of funds. Because of the financial support, the majority of students finish within six years. Therefore, we show data for the doctoral programs from 2014-2020.

Master's Programs: All degree requirements for the master's programs must be completed within five years. Therefore, we show data for the master's programs from 2015-2020. However, students in the MPH, Biostatistics ScM, and Clinical and Translational Research ScM generally graduate within two years, and students in the Biostatistics AM program generally graduate in one year.

Undergraduate Program: Undergraduate admissions happens at the University level. Per University Policy, Brown undergraduate students must be enrolled for the equivalent of eight full-time semesters of instruction, four of which must be in residence at Brown during fall and/or spring semesters. Students generally declare a concentration in their second year, but can also declare as freshmen, juniors, or seniors. Because they are able to add/drop concentrations at will, there is not a yearly cohort to track. Neither the University nor the School tracks concentrators as cohorts, and neither party has a mechanism for tracking add/drops of concentrations. Thus, we are not able to report on graduation rate for a specific undergraduate admitted cohort. Our approach is to report on the graduation rate of spring semester juniors (third-year students) as a cohort to graduate within the next 3 years [e.g., Spring 2016 juniors must graduate by May 2019 to be within the maximum time to graduation (MTTG)].

Thus, spring juniors represent each cohort in a given year. There is no maximum allowable time to graduation for undergraduates at Brown. Because the School has set the maximum time to degree as 6 years, the "cohort year" is the academic year that students were junior public health concentrators. We are using students who were in either semester 5 or 6 in the spring semester of a particular year as our defined entry point into a cohort, regardless of the number of credits earned, because that is how Brown tracks students (e.g., by semester). We are then giving students 3 years to complete their degree from that point. Graduation limit is adjusted accordingly depending on whether a student took time off prior to their spring semester junior year. If a student has taken time off before spring semester in their junior year, their outside graduation limit is brought forward accordingly.

As described, we are not able to follow the members of a cohort until they reach a defined outcome of graduation, withdrawal, transfer to a different degree, or dismissal in the typical way because neither the School nor the University tracks adding/dropping concentrations. Thus, if a student disappears from the concentration rolls, we have no idea why. Sometimes they just change their mind and choose another concentration. Sometimes public health is a second or third concentration they have decided not to complete. Thus, what is typically considered attrition is not really relevant when it comes to concentrations at Brown. That being said, we have devised this method as a way of determining how many juniors complete their public health concentration requirements, and noting when students have dropped off of the rolls rather than having completed them. The students may have successfully graduated from Brown within the 6 years but not opted to complete public health concentration requirements.

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: Graduation rates within maximum time to graduation are greater than 85% for all degree programs.

Challenges: Each program routinely tracks their graduation rates, but to date, the School has not had a systematic way of collecting and analyzing the data.

Plans: We are developing centralized mechanisms for reporting graduation rates by program so that within and across program trends can be detected, and program improvements made as needed.

B3. Post-Graduation Outcomes

The school collects and analyzes data on graduates' employment or enrollment in further education post-graduation, for each public health degree offered (e.g., BS, MPH, MS, PhD, DrPH).

The school achieves rates of 80% or greater employment or enrollment in further education within the defined time period for each degree.

1) Data on post-graduation outcomes (employment or enrollment in further education) for each degree. See Template B3-1.

Doctoral Programs:
  Behavioral and Social Health Sciences, Biostatistics, Epidemiology, Health Services Research

PhD Programs			
Post-Graduation Outcomes	**2017 Number and percentage**	**2018 Number and percentage**	**2019 Number and percentage**
Employed	16 (94%)	13 (64%)	9 (57%)
Continuing education/training (not employed)	0 (6%)	0 (27%)	0 (43%)
Not seeking employment or not seeking additional education by choice	0 (0%)	0 (0%)	0 (0%)
Actively seeking employment or enrollment in further education	0 (0%)	0 (0%)	0 (0%)
Unknown	0 (0%)	0 (9%)	0 (0%)
Total graduates (known + unknown)	16 (100%)	13 (100%)	9 (100%)

Academic Master's Programs:
  AM/ScM Biostatistics, ScM Clinical and Translational Research

Academic Master's Programs			
Post-Graduation Outcomes	**2017 Number and percentage**	**2018 Number and percentage**	**2019 Number and percentage**
Employed	18 (82%)	17 (77%)	16 (73%)
Continuing education/training (not employed)	3 (14%)	3 (14%)	4 (18%)
Not seeking employment or not seeking additional education by choice	0 (0%)	0 (0%)	0 (0%)
Actively seeking employment or enrollment in further education	0 (0%)	0 (0%)	0 (0%)
Unknown	1 (5%)	2 (9%)	2 (9%)
Total graduates (known + unknown)	22 (100%)	22 (100%)	22 (100%)

MPH Program			
Post-Graduation Outcomes	**2017 Number and percentage**	**2018 Number and percentage**	**2019 Number and percentage**
Employed	37 (71%)	31 (78%)	46 (74%)
Continuing education/training (not employed)	14 (27%)	7 (18%)	13 (21%)
Not seeking employment or not seeking additional education by choice	0 (0%)	0 (0%)	0 (0%)
Actively seeking employment or enrollment in further education	0 (0%)	0 (0%)	0 (0%)
Unknown	1 (2%)	2 (5%)	3 (5%)
Total graduates (known + unknown)	52 (100%)	40 (100%)	62 (100%)

Undergraduate Public Health Program:

Undergraduate Public Health (AB) Program			
Post-Graduation Outcomes	**2017 Number and percentage**	**2018 Number and percentage**	**2019 Number and percentage**
Employed	36 (67%)	30 (49%)	22 (38%)
Continuing education/training (not employed)	14 (26%)	23 (38%)	26 (45%)
Not seeking employment or not seeking additional education by choice	0 (0%)	1 (2%)	0 (0%)
Actively seeking employment or enrollment in further education	1 (2%)	0 (0%)	3 (5%)
Unknown	3 (5%)	7 (11%)	7 (12%)
Total graduates (known + unknown)	54 (100%)	61 (100%)	58 (100%)

2) Explain the data presented above, including identification of factors contributing to any rates that do not meet this criterion's expectations and plans to address these factors.

We collect information about post-graduation outcomes through a number of sources including Exit Surveys administered to graduating students by the School, Alumni Surveys administered by the University's Office of Institutional Research and the School, and by internet and LinkedIn searches conducted by the individual programs. Data presented above are the most recent available for each cohort in each program based on the combined use of these sources.

Postdoctoral positions/fellows for PhD programs are categorized as employment.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: Rates of employment or enrollment in further education are greater than 80% for all degree programs.

Challenges: We have tried a number of tactics to increase the response rates for the Exit Surveys administered to graduating students by the School. For instance, prior to 2017, we used non-standardized questions asked by the individual programs (decentralized survey administration). In 2017, we centralized the survey administration but retained a non-standardized approach to collecting data. In 2018, we moved to centralized survey administration and standardized templates for collecting the data. In 2019 and 2020, we decentralized survey administration but maintained standardized templates for data collection. Prior to standardization of the data, data quality was inconsistent and difficult to compare across programs. We have found using the standardized templates has improved data quality in recent years. We have also found that decentralized survey administration improves response rates by students because the surveys come from program directors and administrators who have closer relationships with students than the centralized Academic Affairs staff. However, having programs take ownership of the process of data collection and reporting remains a challenge.

Plans: We will continue to refine a comprehensive data collection strategy that engages programs so that they routinely track student outcomes and use the data to detect and employ program improvements as needed.

B4. Alumni Perceptions of Curricular Effectiveness

For each public health degree offered, the school collects information on alumni perceptions of their own success in achieving defined competencies and of their ability to apply these competencies in their post-graduation placements.

The school defines qualitative and/or quantitative methods designed to maximize response rates and provide useful information. Data from recent graduates within the last five years are typically most useful, as distal graduates may not have completed the curriculum that is currently offered.

1) Summarize the findings of alumni self-assessment of success in achieving competencies and ability to apply competencies after graduation.

   The most currently available data indicate that recent alumni feel that Brown prepared them for their current career. However, due to limited amount of information, these results should be interpreted with caution. Limited data are available about success in achieving competencies and ability to apply competencies after graduation.

2) Provide full documentation of the methodology and findings from alumni data collection.

   Every 4 years, the Brown University Office of Institutional Research (OIR) administers and analyzes an Alumni Survey to all master's and doctoral alumni who are 1, 5, and 10 years out of their program. The survey is sent by email followed by up to three reminders. No financial incentives are provided, but the emails direct alumni to the OIR website where the survey results from past years can be seen. The most recent survey included an item asking the extent to which the respondent agrees or disagrees with the following statement: "My education at Brown prepared me for my current career." Response rates are unavailable for School alumni in general or by program specifically. The most recent available data are from 2017.

   Results from 2017 are shown below for alumni who were one year out of their program. Sample sizes are too small to show results by program.

Table B4-1: Alumni Reports of Extent of Agreement that Brown Prepared Them for Current Career as Reported by Respondents One Year Out of Program		
Type of Program	Number Who Responded to Item	Percent Somewhat or Strongly Agree
Doctoral Programs	3	100%
Academic Master's Programs	5	100%
Master of Public Health Program	25	96%

In 2020, we asked OIR to **add two additional questions** about the impact of their School of Public Health program competencies:

How much do you agree or disagree with the following statements:

I was successful in achieving my program's competencies. (Response categories range from Strongly Agree, Somewhat Agree, Neither Agree or Disagree, Somewhat Disagree, to Strongly Disagree).

I was able to apply the competencies that I attained in my program after graduation. (Response categories range from Strongly Agree, Somewhat Agree, Neither Agree or Disagree, Somewhat Disagree, to Strongly Disagree).

OIR did not conduct a 2020 due to the COVID-19 pandemic.

In August 2020, the School conducted a survey of 2017-2020 public health graduates regarding their opinions on the competencies and their importance in the work place, suggestions about the curriculum, and changing practice and research needs. All employed alumni were asked about the importance of foundational competency areas in their workplace. MPH graduates were specifically asked about their satisfaction with their professional and academic growth in the foundational competency areas. Moving forward, this School alumni survey will be conducted of alumni that graduated 2 years ago, 4 years ago, and 8 years ago so that we do not overlap with the alumni surveys administered by the University's Office of Institutional Research.

Table B4-2: Alumni Feedback of Curricular Effectiveness	
Response Rates	
Doctoral Programs	
Behavioral and Social Health Sciences	40%
Biostatistics	45%
Epidemiology	36%
Health Services Research	45%
Master's Programs	
Biostatistics AM/ScM	30%
Clinical and Translational Research ScM	30%
MPH	36%
Undergraduate Programs	
Public Health AB	22%
Statistics ScB	23%
Class Year Representation	
Class of 2017	26%
Class of 2018	20%
Class of 2019	22%
Class of 2020	33%
Extent to which degree program met your educational goals (scale of 1-10 where 1=not at all and 10=very much)	Mean (SD)
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	9.8 (0.4)
Epidemiology	9.0 (1.2)
Health Services Research	9.6 (0.9)
Master's Programs	
Biostatistics AM/ScM	8.5 (1.2)
Clinical and Translational Research ScM	---
MPH	8.7 (1.1)
Undergraduate Programs	
Public Health AB	7.9 (1.3)
Statistics ScB	7.6 (1.9)
Satisfaction with way the School of Public Health prepared you for your chosen career (1=not at all satisfied to 5=very satisfied)	Mean (SD)
Doctoral Programs	

Table B4-2: Alumni Feedback of Curricular Effectiveness	
Behavioral and Social Health Sciences	---
Biostatistics	4.6 (0.5)
Epidemiology	4.6 (0.5)
Health Services Research	5.0 (0.0)
Master's Programs	
Biostatistics AM/ScM	4.4 (0.7)
Clinical and Translational Research ScM	---
MPH	4.3 (0.8)
Undergraduate Programs	
Public Health AB	4.2 (0.8)
Statistics ScB	4.0 (0.7)
Employed alumni only	
Importance of competencies in workplace (1=not at all important to 5=very important)	Mean (SD)
Evidence-based Approaches to Public Health	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	4.4 (0.9)
Epidemiology	3.7 (1.8)
Health Services Research	4.8 (0.4)
Master's Programs	
Biostatistics AM/ScM	4.5 (0.8)
Clinical and Translational Research ScM	---
MPH	4.7 (0.4)
Undergraduate Programs	
Public Health AB	4.1 (0.9)
Statistics ScB	---
Public Health and Health Care Systems	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	2.4 (1.7)
Epidemiology	3.8 (1.6)
Health Services Research	4.8 (0.4)
Master's Programs	
Biostatistics AM/ScM	3.2 (1.4)
Clinical and Translational Research ScM	---
MPH	4.3 (0.8)
Undergraduate Programs	
Public Health AB	4.3 (0.9)
Statistics ScB	---
Planning and Management to Promote Health:	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	2.8 (2.0)
Epidemiology	3.2 (1.2)
Health Services Research	4.0 (1.7)
Master's Programs	
Biostatistics AM/ScM	3.0 (1.3)
Clinical and Translational Research ScM	---

Table B4-2: Alumni Feedback of Curricular Effectiveness	
MPH	4.2 (0.9)
Undergraduate Programs	
Public Health AB	3.9 (0.9)
Statistics ScB	---
Policy in Public Health	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	2.4 (1.7)
Epidemiology	2.6 (1.1)
Health Services Research	4.4 (0.9)
Master's Programs	
Biostatistics AM/ScM	3.4 (1.4)
Clinical and Translational Research ScM	---
MPH	3.9 (1.0)
Undergraduate Programs	
Public Health AB	3.8 (1.3)
Statistics ScB	---
Leadership	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	4.2 (0.8)
Epidemiology	4.3 (0.8)
Health Services Research	4.4 (1.3)
Master's Programs	
Biostatistics AM/ScM	3.3 (1.1)
Clinical and Translational Research ScM	---
MPH	4.5 (0.7)
Undergraduate Programs	
Public Health AB	4.3 (0.6)
Statistics ScB	---
Communication	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	5.0 (0.0)
Epidemiology	4.3 (0.8)
Health Services Research	4.2 (1.3)
Master's Programs	
Biostatistics AM/ScM	4.5 (0.7)
Clinical and Translational Research ScM	---
MPH	4.6 (0.7)
Undergraduate Programs	
Public Health AB	4.8 (0.4)
Statistics ScB	---
Interprofessional Practice	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	5.0 (0.0)
Epidemiology	4.7 (0.5)
Health Services Research	4.8 (0.4)
Master's Programs	
Biostatistics AM/ScM	4.1 (0.7)

Table B4-2: Alumni Feedback of Curricular Effectiveness	
Clinical and Translational Research ScM	
MPH	4.6 (0.7)
Undergraduate Programs	
Public Health AB	4.4 (0.9)
Statistics ScB	---
Systems Thinking	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	4.6 (0.9)
Epidemiology	4.0 (1.1)
Health Services Research	4.8 (0.4)
Master's Programs	
Biostatistics AM/ScM	3.9 (1.2)
Clinical and Translational Research ScM	---
MPH	4.3 (0.8)
Undergraduate Programs	
Public Health AB	4.1 (1.0)
Statistics ScB	---
MPH graduate students only	
Satisfaction with contribution of School of Public Health to your professional and academic growth in competency areas (1=not at all satisfied to 5=very satisfied):	Mean (SD)
Evidence-based Approaches to Public Health	4.7 (0.5)
Public Health and Health Care Systems	4.3 (0.7)
Planning and Management to Promote Health:	4.1 (0.9)
Policy in Public Health	3.7 (0.9)
Leadership	4.0 (1.0)
Communication	4.1 (0.9)
Interprofessional Practice	3.9 (1.0)
Systems Thinking	4.1 (0.9)
Note: (SD)=standard deviation; --- = no results shown, fewer than 5 students	

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: We understand the importance of alumni perceptions of their own success in achieving defined competencies and of their ability to apply these competencies in their post-graduation placements. We have plans in place to address the data collection limitations previously encountered.

Challenges: Until Fall 2020, we had not collected quantitative or qualitative data on alumni perceptions related to competencies.

Plans: Starting in Fall 2020, the School, under the direction of Dr. Kim Gans (Director of Community Engagement) and Sean Kelley (Assistant Director of Career Advising) conducted a regular survey of public health graduates. The survey included questions about their opinions on the competencies and their importance in the workplace, and suggestions about the curriculum, and changing practice and research needs. These School alumni surveys will be conducted of alumni that graduated 2 years ago, 4 years ago and 8 years ago so that we do not overlap with

the alumni surveys administered by the University's Office of Institutional Research. In future years, we will include measures of satisfaction with competency attainment in programs other than the MPH.

B5. Defining Evaluation Practices

The school defines appropriate evaluation methods and measures that allow the school to determine its effectiveness in advancing its mission and goals. The evaluation plan is ongoing, systematic and well-documented. The chosen evaluation methods and measures must track the school's progress in 1) advancing the field of public health (addressing instruction, scholarship and service) and 2) promoting student success.

1) Present an evaluation plan that, at a minimum, lists the school's evaluation measures, methods and parties responsible for review. See Template B5-1.

   Evaluation is embedded in the School's quantitative and qualitative practices of monitoring performance. The School has two largely parallel—although occasionally intersecting—evaluation structures. One oversees the evaluation of the four goals that define our mission; the other, that of our 17 operational objectives. Both structures report to the School of Public Health Executive Committee. The Executive Committee, composed of the School's department chairs and senior members of the Dean's Office, is responsible for routinely reviewing the performance data provided by both structures to ensure that the School achieves measured excellence across our mission and operational indicators.

   Where section B1 details the Operational Planning structure, which is composed of 17 subcommittees on which faculty, staff, students, alumni, and community members serve, and provides its goals, Table B5-1 below describes the measures the school uses to evaluate our progress on our four mission goals related to instruction/student success, faculty scholarship, community service, and operational effectiveness.

   The School charges various entities with responsibility for collecting, reviewing, and summarizing the data that allows us to assess mission progress. These include, but are not limited to, the School's Office of Academic Affairs, Office of Faculty Affairs, Office of Research, and Office of Diversity and Inclusion. These entities present their summary reports to the Executive Committee and to those with the local authority to act on the data, which in a number of cases are the Operational Planning subcommittees.

   The table on the following pages lists the evaluation measures, data sources, and entities responsible for each mission goal.

   Definitions used in the table are as follows:

   - *Historically underrepresented groups (HUGs)*: US citizens or green card holders who have identified themselves as black, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander only; does not include those with multiple races

   - *Vulnerable populations:* women, children, racial and ethnic minorities, populations with special healthcare needs (chronic illness, disabilities, and end-of-life care needs), the elderly, low-income, under-insured, inner-city, rural, LGBTQ and gender non-conforming populations

	Table B5-1: Evaluation Measures		
	Evaluation measures	**Identify data source(s) and describe how raw data are analyzed and presented for decision making***	**Responsibility for review**
**Goal 1: Rigorously preparing the next generation of diverse public health leaders, from undergraduates through postdoctoral fellows, to address health needs of all people, including those of historically underserved or vulnerable populations**		
1.1	Percent of alumni who are satisfied with way the School of Public Health prepared them for their chosen career	Data source: Alumni Survey Description: The School's Survey Research Center collects the data. The School's Academic Affairs Office collects, analyzes, and summarizes responses to the following question on survey: "On a scale of 1=not at all satisfied and 5=very satisfied, how dissatisfied or satisfied are you with the way the Brown School of Public Health prepared you for your chosen career?"	• Alumni Experience Operational Planning Subcommittee • School Executive Committee
1.2	Percent of courses offered at each degree level that primarily focus on historically underserved or vulnerable populations	Data source: Banner course data Description: The School's Academic Affairs Office collects, analyzes, and summarizes undergraduate- and graduate-level courses by the defined characteristics each year; the data are tracked for all courses in the School's portfolio and for all courses offered in a given academic year	• Office of the Associate Dean for Academic Affairs • School Executive Committee
1.3	Percent of students at the undergraduate and graduate level who are members of a historically underrepresented group	Data source: Banner student data Description: The School's Office of Diversity and Inclusion collects, analyzes, and summarizes annual reports of these data	• Enrollment Management Operational Planning Subcommittee • School Executive Committee
1.4	Graduation rates of HUG students at the undergraduate and graduate level compared with their non-HUG classmates	Data source: Brown University Office of Institutional Research for undergraduate student data and Graduate School for graduate student data Description: The School's Office of Diversity and Inclusion collects, analyzes, and summarizes annual reports of these data	• Enrollment Management Operational Planning Subcommittee • School Executive Committee
1.5	Percent of undergraduate honors theses that focus specifically on the health needs of one or more historically underserved or vulnerable populations	Data source: Undergraduate theses Description: The School's Office of Academic Affairs collects the data, and the Undergraduate Studies Committee analyzes and summarizes the data	• Office of the Associate Dean for Academic Affairs • School Executive Committee
1.6	Percent of master's theses that focus specifically on the health needs of one or more historically underserved or vulnerable populations	Data source: Master's theses Description: The MPH Curriculum Committee, the Biostatistics Curriculum Committee, and the Master's in Clinical and Translational Research Academic Oversight	• Office of the Associate Dean for Academic Affairs • School Executive Committee

		Table B5-1: Evaluation Measures	
	Evaluation measures	**Identify data source(s) and describe how raw data are analyzed and presented for decision making***	**Responsibility for review**
		Committee collect, analyze, and summarize the data for their respective programs	
1.7	Percent of PhD dissertations that focus specifically on the health needs of one or more historically underserved or vulnerable populations	Data source: Doctoral Dissertations Description: The School's Office of Academic Affairs collects the data. Doctoral Program Committees analyze and summarize the data for their respective programs	• Office of the Associate Dean for Academic Affairs • School Executive Committee
1.8	Student scholarship rates, including publications and scientific presentations	Data source: Doctoral Student Digital CVs; PubMed; Alumni Surveys Description: The School's doctoral program committees collect, analyze, and summarize data from digital CVs that are annually required of students by the Graduate School; The School's Master's Programs collect, analyze, and summarize PubMed for graduating Master's students; As part of the Alumni Survey, which is administered by the School's Survey Research Center, graduates are asked to report on the publications and scientific presentations that resulted as part of their educational experience at the School. The School's Office of the Associate Dean of Academic Affairs analyzes and summarizes these data	• Office of the Associate Dean for Academic Affairs • School Executive Committee
Goal 2: Generating world-class public health scholarship that addresses the health needs of all people, including historically underserved or vulnerable populations			
2.1	Number of published peer-reviewed articles per faculty member in the past year	Data source: Academic Analytics, Faculty Activity Report (Calendar Year comparison) Description: The School's Office of the Associate Dean for Research collects the data from Academic Analytics (a database Brown licenses) and from the University's Faculty Activity report and analyzes and summarizes the data annually	• Office of the Associate Dean for Research • School Executive Committee
2.2	Percent of 2.1 that addresses the health needs of one or more historically underserved or vulnerable population in the past year	Data source: Faculty Activity Report based on search terms (Calendar Year comparison) Description: The School's Office of the Associate Dean for Research collects the data from Academic Analytics and Faculty Activity Report databases annually, using pre-defined search terms for historically underserved and vulnerable populations; analyzes; and summarizes the data	• Office of the Associate Dean for Research • School Executive Committee
2.3	Faculty citations	Data source: Academic Analytics	• Office of the Associate Dean for Research • School Executive Committee

		Table B5-1: Evaluation Measures	
	Evaluation measures	**Identify data source(s) and describe how raw data are analyzed and presented for decision making***	**Responsibility for review**
		Description: The School's Office of the Associate Dean for Research collects the data annually from Academic Analytics, analyzes, and summarizes the data	
2.4	Total extramural research funding adjusted by number of faculty	Data source: Academic Analytics Description: The School's Office of the Associate Dean for Research collects the data annually from Academic Analytics, analyzes, and summarizes the data	• Office of the Associate Dean for Research • School Executive Committee
2.5	Percent of 2.4 that addresses the health needs of one or more historically underserved or vulnerable population	Data source: Office of Sponsored Project's Grant Database Description: The School's Office of the Associate Dean for Research searches grant titles from the Office of Sponsored Project's grant database annually using pre-defined search terms for historically underserved and vulnerable populations, analyzes, and summarizes the data	• Office of the Associate Dean for Research • School Executive Committee
Goal 3: Cultivating strong partnerships with communities and governmental entities in order to address the health needs of all people, including historically underserved or vulnerable populations			
3.1	Percent of faculty who conduct community-engaged research	Data source: Faculty Activity Report Description: The University's Dean of the Faculty Office collects School of Public Health faculty members' responses to the following question on their Faculty Activity Report: "In the reporting year, has any of your research involved community engagement? This could include having community stakeholders as investigators, partners, or subcontractors; involving community stakeholders in intervention design, recruitment, data collection, study implementation, defining study questions, analyzing/interpreting study results, or disseminating study findings; including community partners as coauthors; having a study community advisory board, etc. If yes, describe at least one example." The School's Office of Faculty Affairs then analyzes and summarizes the data.	• Research Partnerships Operational Planning Subcommittee • School Executive Committee
3.2	Percent of 3.1 whose research is specifically designed to address the health needs of historically underserved or vulnerable populations	Data source: Faculty Activity Report Description: The University's Dean of the Faculty Office annually gathers data on faculty research involving community engagement from faculty members' Faculty Activity Reports. The School's Office of Faculty Affairs then analyzes and summarizes the data.	• Research Partnerships Operational Planning Subcommittee • School Executive Committee

	Table B5-1: Evaluation Measures		
	Evaluation measures	**Identify data source(s) and describe how raw data are analyzed and presented for decision making***	**Responsibility for review**
3.3	Percent of faculty who provide services (e.g., training) or resources (e.g., grant funding dollars) to a community or governmental organizations	Data source: Faculty Activity Report Description: The School's Office of Faculty Affairs collects School of Public Health faculty members' responses to the following question on their Faculty Activity Report: "[Community Service is] defined as service activities where you used your professional expertise to actively engage with the community through communication, collaboration, consultation, provision of technical assistance or other means of sharing your professional knowledge and skills to improve the health or well-being of members of the group being served." The School's Office of Faculty Affairs then analyzes and summarizes the data.	• Research Partnerships Operational Planning Subcommittee • School Executive Committee
3.4	Percent of 3.3 who have provided services or resources to a community or governmental organization whose mission is to address the health needs of historically underserved or vulnerable populations	Data source: Faculty Activity Report Description: The School's Office of Faculty Affairs collects, analyzes, and summarizes data on faculty members' research involving community service from the Faculty Activity Reports	• Research Partnerships Operational Planning Subcommittee • School Executive Committee
Goal 4: Ensuring that the School's infrastructure supports operational effectiveness, through enhanced philanthropy, improved financial practice, and expanded physical space			
4.1	Total dollar amount of current-use gifts and endowment principal	Data source: Workday (Financial System) Description: The School's Finance Team produces year-over-year comparisons of levels of gift and endowment principals to show trends	• Finance Operational Planning Subcommittee • School Executive Committee
4.2	Total number of donors, pledges, and cash payments	Data source: Phenix (Advancement/Fundraising System) Description: The School's Finance Team produces year-over-year comparisons of these data	• Finance Operational Planning Subcommittee • School Executive Committee
4.3	Reserve position of the School	Data source: Workday (Financial System) Description: The School's Finance Team reports out reserves by funding source and school organization unit to show year over year trends	• Finance Operational Planning Subcommittee • School Executive Committee
4.4	Percentage of revenue from grants, endowments, gifts, tuition, and university allocation	Data source: Workday (Financial System) Description: The School's Finance Team generates revenue reports by fund source to show trends	• Finance Operational Planning Subcommittee • School Executive Committee
4.5	Amount of total square footage and utilization breakdown	Data source: Facilities system of space data assigned to School by usage (e.g., office, research, classroom) Description: The School's Executive Dean of Finance and Administration summarizes year-over-year total square footage trends, usage, and efficiency	• Space Planning Operational Planning Subcommittee • School Executive Committee

2) Briefly describe how the chosen evaluation methods and measures track the school's progress in advancing the field of public health (including instruction, scholarship and service) and promoting student success.

Instruction and Student Success

Goal 1 describes the School's ambitions regarding teaching and learning—that is, to "*Rigorously prepare the next generation of diverse public health leaders, from undergraduates through postdoctoral fellows, to address health needs, including those of historically underserved or vulnerable populations*." The School tracks success towards this goal through a number of channels.

To assess the degree to which the School provides a rigorous education, we draw on data from the Alumni Survey administered by the School's Survey Research Center to identify the percent of alumni who are satisfied with their career preparation. We also use student scholarly productivity as a measure of the rigor of the education we provide. Data from digital CVs and PubMed are collated annually to assess students' scholarly productivity.

To evaluate the degree to which the School is preparing "diverse" public health leaders, we collect data annually on the percent of students at the undergraduate and graduate levels who are a member of a HUG. We also monitor the success of these students on a yearly basis by examining the graduation rates of HUGs at all degree levels compared with their non-HUG peers.

To determine the degree to which the School prepares students to address the health needs of historically underserved or vulnerable populations, we collect data from Banner, Brown University's enterprise resource planning system, on the percent of the School's courses at each degree level that primarily focus on historically underrepresented or vulnerable populations. We gauge students' commitment to serving these populations by tracking the number of undergraduate, Master's, and PhD theses/dissertations that focus specifically on the health needs of historically underrepresented or vulnerable groups.

Research and Scholarship

Goal 2 defines the School's ambitions regarding faculty scholarship—that is, to generate "*world-class public health scholarship that addresses the health needs of all people, including historically underserved or vulnerable populations*." The School tracks its success on this goal by monitoring faculty scholarship productivity across several metrics. Using the Brown University Faculty Activity Report and the Academic Analytics database, we count the annual number of peer-reviewed articles published by School faculty members, record their average citation indices, and track total extramural research. Furthermore, we count the frequency with which faculty scholarship addresses the health needs of one or more historically underrepresented or vulnerable populations.

Service and Partnerships

Goal 3 encapsulates the School's ambitions regarding community service—that is, to cultivate "*strong partnerships with communities and governmental entities that address the health needs of historically underserved or vulnerable populations*." The School tracks our success towards this goal through the Faculty Activity Report (FAR), which faculty submit once per calendar year. The School has tailored the University FAR so that School faculty are asked to report on their community-engaged research activities and the services or resources they provide to community or governmental organizations. The report also allows us to calculate the percentage of faculty members whose community-engaged research or service activities focus on addressing the health needs of historically underrepresented or vulnerable populations.

Operational Effectiveness

Goal 4 summarizes the School's ambitions regarding operational effectiveness—that is, to ensure *"that the School's infrastructure supports operational effectiveness, through enhanced philanthropy, improved financial practice, and expanded physical space."* The School evaluates our operational effectiveness using data pulled from our financial software, philanthropy software, and facilities system. These data allow us to appraise the School's fiscal and physical well-being.

3) Provide evidence of implementation of the plan described in Template B5-1. Evidence may include reports or data summaries prepared for review, minutes of meetings at which results were discussed, etc. Evidence must document examination of progress and impact on both public health as a field and student success.

See ERF *(filed in sequential order by evaluation measure, where data are currently available)*

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School has developed a comprehensive evaluation protocol to gather data from faculty, students, and graduates to enable us to assess our progress towards our mission and to improve our instruction, scholarship, and service.

Challenges: The School is new to the process of developing an official set of measures that will enable us to assess our mission. We anticipate that as we collect and analyze the data, we will find that certain measures need to be refined, some dropped, and others added. Until recently, the School did not have sufficient personnel or expertise to articulate these measures or consistently collect the data. Feedback from alumni, employers, and community partners has not been consistently gathered, for example. The School's creation of new administrative positions, notably the Director for Accreditation and Assessment, Director for Community Engagement, and Assistant Director for Career Advising, has afforded us the resources needed to execute our evaluation plan.

Plans: The School leadership will assess our goals and evaluation plan annually, identifying areas requiring additional attention and opportunities for improvement. Work is underway to enhance existing databases' reporting capabilities (e.g., for faculty service tracking) and to explore new software analytic tools that will enable us to consolidate all assessment-related data. The newly hired Director for Accreditation and Assessment will enable us to better monitor and coordinate the data collection efforts of the School's various entities.

B6. Use of Evaluation Data

The school engages in regular, substantive review of all evaluation findings, as well as strategic discussions about the implications of evaluation findings.

The school implements an explicit process for translating evaluation findings into programmatic plans and changes and provides evidence of changes implemented based on evaluation findings.

1) Provide two to four specific examples of programmatic changes undertaken in the last three years based on evaluation results. For each example, describe the specific evaluation finding and the groups or individuals responsible for determining the planned change, as well as identifying the change itself.

- **Example 1: Master's Working Group's Focus on the ScM Programs.** From June 2017 to June 2019, the Brown School of Public Health and Brown Graduate School met to review data on the University's public health degree programs and make strategic decisions about the programs' future (see ERF). The data identified the following problems:
    - There was substantial overlap between the ScM/AM programs and some concentrations within the MPH, which led to confusion in the marketplace and inconsistent experiences for our students.
    - Student evaluations of our programs showed lower satisfaction levels in recent years. This was particularly the case with our MPH students who reported that faculty were not sufficiently supportive.
    - Our ScM programs had variable course requirements, which increased competition among our programs and blurred distinctions with the MPH.
    - The large number of programs we delivered caused inefficiencies and diluted resources. Some courses had very small enrollments.

    Drawing on the working group's evidence-based findings and on data on the changing landscape of master's education, the School decided to enact the following programmatic changes:
    - Effective Academic Year 2021-22:
        - Incorporate the ScM in Epidemiology and the ScM in Behavioral and Social Health Sciences into the research-intensive MPH program as distinct curricular options.
        - Reduce the number of overlapping MPH concentrations, which included eliminating the individual concentrations in Biostatistics and in Epidemiology, while retaining the combined Applied Epidemiology and Biostatistics concentration.
        - Continue to innovate and introduce new MPH concentrations to provide master's students with both the depth and breadth unique to the Brown University School of Public Health.
    - Evaluate the Global Public Health ScM program after its third enrollment cycle (Spring 2020).

    After further review by the School's Executive Committee of program competencies and feedback from prospective and currently enrolled students, the following programmatic changes were decided by the Executive Committee in Spring 2020:
    - Effective for academic year 2022-23:
        - Incorporate the Global Public Health ScM into the research-intensive MPH program.
        - Eliminate the combined Applied Epidemiology and Biostatistics concentration in the MPH and revert back to an individual Epidemiology concentration.

- **Example 2: MPH Thesis Change.** The MPH program requires a thesis for all students as their Integrative Learning Experience. Evaluation information generated by MPH student exit interviews, faculty advisor meetings, and a May 2019 thesis dissemination survey (see ERF) indicated that to the detriment of the public health community, MPH students' thesis work was not being disseminated. As a result, the MPH Curriculum Committee and MPH Executive Committee approved new thesis requirements that emphasized dissemination.

  Effective with the 2019 entering cohort, MPH students are to produce a publishable paper and disseminate their findings to meet the requirements of the MPH thesis. Students have a number of options for disseminating their work, including the following: (1) submission of (a) an article to a peer-reviewed journal, (b) an abstract to a conference, or (c) a paper to the School's Public Health Research Day; or (2) presentation of the work as (a) a report or policy brief on a website, (b) a talk delivered to a public health organization, or (c) as testimony before a government body.

  The MPH Curriculum Committee and the MPH Leadership Committee are monitoring this change using theses published within two years of graduation.

- **Example 3: Behavioral and Social Health Sciences PhD Program Curricular Change.** Doctoral students' petitions to the Behavioral and Social Health Sciences (BSHS) Curriculum Committee were the source of evidence that drove the Committee to make a revision to the PhD curriculum. As part of the BSHS doctoral program's initial curricular design, students were required to choose two classes from a list of courses that provided an in-depth focus on a particular individual-level behavior with public health consequences (e.g., alcohol use, tobacco use, obesity). However, during the program's first six years, nearly half of the students petitioned the Curriculum Committee to request an exception to this requirement. Students sought to substitute courses that were more closely aligned with their research interests, including proposing independent study with a faculty member. Based on the information provided in the petitions, the faculty concluded that the list of courses was too narrow to serve students' needs. The Curriculum Committee, therefore, decided to expand the course list by redefining the list's focus on specific health behaviors to include classes from other departments within the School that have behavioral or social science relevance (e.g., PHP 2330: The Global Burden of Mental Illness: A Public Health Approach). Students are also now allowed to choose a course from one of the other programs' course lists—that is, a statistics, methods, or health equity course—if that better suits their educational objectives. The BSHS Curriculum Committee is monitoring doctoral students' petitions to determine whether the curricular change results in substantially fewer requests for course substitutions.

- **Example 4: Health Services Research PhD Program Curricular Change.** Although not a change that took place within the last three years, a data-driven intervention into the Health Services Research PhD Program curriculum six years ago has generated a sufficiently robust track record for the School to evaluate its effectiveness. In November 2014, Dr. Paul D. Cleary, Dean of the Yale School of Public Health; Dr. Donald Steinwachs, Professor and Chair emeritus, Department of Health Policy and Management at The Johns Hopkins University; and Dr. Kenneth Thorpe, Professor and Chair, Department of Health Policy and Management at Emory University, conducted an external review of the School's Department of Health Services, Policy and Practice. PhD students in the Health Services Research program were surveyed as part of the review. An important finding to emerge from the survey was doctoral students' desire for more advanced coursework in the field and, in particular, for methods classes that provided an integrated interdisciplinary and hands-on approach to the study of Health Services. They wanted courses that not only grounded them in the theory of research methods but also that had direct application to their own inquiry-based scholarship. In response, the program developed a two-semester course sequence, PHP 2455 A & B: Health Services Research Methods I and II. The sequence has been an overwhelming success. PHP 2455 A & B consistently receive high ratings and positive course evaluation

form comments. Moreover, the courses' reputation attracts enrollment from students in the School's other PhD programs.

2) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School has created an inclusive committee structure in which our four key stakeholder groups—that is, faculty, staff, students, and the external community—evaluate progress towards our mission. The committee structure has not only enabled us to include stakeholder input into problem identification, but also in solution implementation. As a result, the interventions the School implements reflect our community's culture and values.

Challenges: The School has not consistently collected evaluation data across all indicators to inform decisions in a holistic and systematic way. Although the informal evaluation processes the School has used when we were a small and young entity have been adequate, if not ideal, as the School grows and mature, we will need to develop more systematic evaluation procedures.

Plans: The creation of a new position at the School in November 2020, the Director for Accreditation and Assessment, will afford us the expertise and attention needed to establish systematic evaluation procedures. In addition, the School plans to consider the acquisition of software analytic tools to enhance reporting capabilities and consolidate assessment data.

C1. Fiscal Resources

The school has financial resources adequate to fulfill its stated mission and goals. Financial support is adequate to sustain all core functions, including offering coursework and other elements necessary to support the full array of degrees and ongoing operations.

1) Describe the school's budget processes, including all sources of funding. This description addresses the following, as applicable:

   The School has substantial resources available to support operations, and is considered a key area of growth for the University. The University recently implemented a new annual budget process to project all sources of revenue and expenses for a period of three years. This past year, the zero-based budget process produced an approved budget for FY21 and preliminary budgets for FY22 and FY23. This detailed process requires input from all center and department financial managers. The Dean and financial team have quarterly meetings to review current year results.

   Revenue

   Sources of revenue for FY20 are as follows:
   - 100% of tuition from Master's programs
   - Endowment and current use or directed gifts
   - University support including:
     - Transfer for undergraduate teaching
     - 3 semesters of doctoral student tuition and stipend for doctoral students
     - Support for strategic initiatives
     - Support for faculty retention
     - Transitional funding to balance budget until the other sources of revenue (especially endowment and current use gifts) are sufficient to balance the operating budget
   - Direct—and a portion of indirect—costs related to externally sponsored training grants and research grants and contracts (including a contract from the RI Department of Health (RIDOH) to support faculty working on RIDOH research projections and to sponsor graduate student Research Assistantships)
   - External support for graduate student Research Assistantships from several public health agencies and organizations
   - Reserve funds from Public Health Research Centers and the School
   - The School does not receive any appropriation from the State of Rhode Island

   These sources of funds are described below.

   Tuition from Master's Programs
   Tuition from master's programs has increased from $4.6m in FY16 to $5.8 million in FY20 driven primarily by shifts in the composition of programs and tuition increases.

   Endowment and Current Use or Directed Gifts
   The School launched a 5-year strategic plan, *Advancing Well-Being for All,* in Spring 2019. The plan provides strategic direction for the School and also a framework for fundraising. To meet the needs of the strategic plan initiatives, we have developed an estimated budget of $25 million. We are currently in the first phase of the fundraising plan with a goal of $6 million in gifts to support the first five initiatives. The School continues to be a high priority growth area for the University, with the President and Provost actively involved in fundraising. Since the start of the University plan, *Building on Distinction*, $32.3 million ($17.6 million in endowments and $14.7 in current use gifts), has been raised that directly benefits the School.

The School has a dedicated staff member (Patrick Schaefer) in the University Advancement Office to oversee fundraising initiatives and opportunities and to serve as a liaison to the other fundraisers. Once donor payments reach a prescribed level, endowments begin to generate income for the School in accordance with payment levels that are set annually by the Corporation of Brown University. Endowments that are generating income are shown in the table below. Estimated total annual distribution is $1.3M.

Endowments Generating Income
Professorships
• *Donald G. Millar Endowment* - Supports faculty conducting research in the Center for Alcohol and Addiction Studies.
• *Carol and Lawrence Sirovich Professorship for Public Health* - To support a professorship within the School of Public Health.
• *Edens Family Chair in Healthcare Communications and Technology* - Supports an assistant professorship with a preference for a population health scholar whose research interests include healthcare communications, services, and technology.
• *RGSS Assistant Professorship in Public Health* - To support an assistant professorship within the School of Public Health.
• *Alcohol and Addiction Studies Center Initiative* - For Endowed Chair to support the Director of the Center for Alcohol and Addiction Studies.
• *David S. Greer Professorship in Geriatrics* - Supported the Director of the Center for Gerontology and Healthcare Research. Upon the retirement of the Director and the appointment of a new professor in Geriatrics, the endowment was transferred to the Medical School to support that position.
Fellowships and Scholarships
• *Holly Peterson Endowed Fellowship for Public Health* - Supports graduate student fellowships within the School of Public Health with a preference for female students.
• *Fisher Graduate Fellowship in Public Health* - Supports graduate fellowships at the master's or doctoral level within the School.
• *Brown-Ukraine Fellowships in Public Health* - Supports two or more fellowships for students from Ukraine studying for the Master of Public Health or other public health master's degrees.
• *Gerontology Surdna Fellowship* - Endowed fellowship in Center for Gerontology and Healthcare Research to support physicians who wish to expand their knowledge and research skills in the field of aging.
• *RG Master of Public Health Scholarship* - Supports Master of Public Health endowed scholarships.
• *Peltz/Ruttenberg Master of Public Health Scholarship* - Supports graduate scholarships for students pursuing master's degrees in the School of Public Health.
Departmental and Programmatic Support
• *Gerontology Health Care Research Center* - Provides funds for clinical faculty to develop research expertise in geriatrics and gerontology.
• *Center for Alcohol and Addiction Studies* - Provides the Center for Alcohol and Addiction Studies annual income to supplement their operating budget.
• *Department of Community Health* - Income to provide fellowships in community health
• *Brown-Ukraine Public Health Exchange Fund* - Supports 1) Pinchuk Fellows (recipients of the Brown-Ukraine Fellowships in Public Health) including student travel, collaborations and research and 2) faculty research, travel, consultations, and collaborations related to public health.
• *Peltz/Ruttenberg Communication Innovation Fund* - Supports the School of Public Health to develop innovative ways of communicating public health information to the general public, as well as policy makers.

Departmental and Programmatic Support, continued
• *Ginsberg Aging Research Fund* - Provides support for medical or public health student projects mentored by the University's Center for Gerontology and Healthcare Research or other public health faculty for projects related to aging.
• *Longabaugh Trainee Research Development Fund* - To fund professional development activities and/or pilot studies in the Center for Alcohol and Addiction Studies to advance alcoholism treatment research.
• *Quint Fund* - Supports the Brown Center for Alcohol and Addiction Studies.
Research
• *Rohsenow Pilot Program and the Center for Alcohol and Addiction Studies* - Supports promising research by the Center for Alcohol and Addiction Studies faculty and postdoctoral fellows that is likely to lead to external funding.
• *Holly Peterson Endowed Research Fund* - Supports aging research, monitored by the Center for Gerontology and Healthcare Research or other public health faculty for projects related to aging.
• *The Helen Chaney Endowment for Alcohol Research* - Supports research on alcoholism.
Lectureships
• *Barnes Lectureship* - The Barnes Lectureship, in its 21st year, is intended to address issues pertinent to public health that speak most meaningfully to the interface between medicine and society. Each year the Barnes Lecture serves as the centerpiece of Brown's annual Public Health Research Day. Recent speakers have included Sandro Galea, Dorothy Hatsukami and Jon Kabat-Zinn.
• *Lipsitt-Duchin Lectureship* - The Lipsitt family established the Lewis P. and Edna Duchin Lipsitt Lectures in Child Behavior and Development in 2000 to celebrate the family's many years of association with Brown University and to preserve an interest in child psychology at the University. The annual Lipsitt-Duchin Lecture is co-sponsored by Brown University and Rhode Island KIDS COUNT. Rhode Island KIDS COUNT is a statewide children's policy organization that works to improve the health, economic wellbeing, safety, education and development of Rhode Island children.
Prizes
• *Nora Kahn Piore Awards* - Provides support for students who wish to undertake research in health services, with a focus on health status and access to health care by poor and underserved groups. The awards provide funding for research, travel and related costs in a range of fields including but not limited to health services, policy and practice; behavioral and social sciences; epidemiology; political science; and economics. Awards are made on a competitive basis each year.
• *Henry F. Izeman Prize* - Supports important training opportunities for Geriatric Medicine and Hospice and Palliative Medicine fellows at the medical school or School of Public Health.

Current Use or Directed Gifts
The School has a number of gifts that support strategic initiatives, scholarships, and budget relief.

The table below lists some of the major and regular gifts. In addition to the gifts listed, there are smaller gifts that support students, faculty and research. Estimated total contributions of $1.5M annually.

Major and Regular Gifts
• *The Public Health Annual Fund* - Established in 2008; generates a modest amount of discretionary income for the School of Public Health. As the number of alumni continues to grow, we are optimistic that the amount of revenue from this source will continue to increase.

- *School of Public Health Dean's Discretionary Fund* - Established in 2014 to support strategic initiatives of the Dean. In FY19, $95,000 was raised and spent on pilot research grants.
- *The Hassenfeld Child Health Innovation Initiative* - To discover and apply strategies to improve the lives of children and their families in Rhode Island, nationally and globally.
- *The Littaurer Foundation Loan Repayment Assistance Program* - Gifts assist graduating students and recent graduates who are choosing to serve in positions that impact improving population health and reaching underserved populations, but may not provide substantial compensation.
- *The Irene Diamond Fund Health Aging Initiative* - Used to link public health strategies and the delivery of care to improve the health of older Americans.
- *Mindfulness funds* - Gifts to the Mindfulness Center support mindfulness practice and a visiting scholar in the Mindfulness Center.

University Support

In addition to direct services provided by the University (e.g., Registrar, Library, Facilities, Human Resources, and Advancement), the School receives direct financial support from the University in its annual operating budget.

University support for undergraduate teaching ($3.9 million in FY20) recognizes the significant number of undergraduates enrolled in courses taught by School faculty (undergraduate enrollment in courses offered by the School in FY20 is approximately 1,700).

Students in Brown University doctoral programs are guaranteed five years of support (tuition, health fee, health and dental insurance, and stipend). School of Public Health doctoral programs receive financial support from the University for the first three semesters and intervening summer for each incoming doctoral student. During this period, incentives exist in which all or part of these funds can be "banked" for future use if the graduate program has other sources of funding (e.g., training or research grants) to support the student. Each doctoral program typically brings in four new students per year, but this can vary slightly in some years. The University also provides travel funds for Master's/Doctoral students for attendance at a professional meeting to present a paper or poster.

The Provost allocates funds for unanticipated opportunities and strategic initiatives in the School. Additionally, the University is providing transitional support for the School in an amount necessary to achieve a balanced budget. In FY19 and FY20, the transition amount is $926,000. We anticipate that it will decrease as income from endowment and current use gifts increase.

Please note, the University is working with Dean Jha towards a revised support model for the school in FY21 and beyond. While these changes have not been finalized, they will benefit the school long-term, providing the Dean more discretionary resources that may be used for investment.

Grant/Contract Direct and Indirect Costs

Most sponsored research activities are conducted within the Public Health Research Centers/Institutes. Ten research centers/institutes are based at Brown University: Center for Alcohol and Addiction Studies; Center for Children's Environmental Health; Center for Epidemiologic Research; Center for Evidence Synthesis in Health; Center for Gerontology and Healthcare Research; Center for Health Promotion and Health Equity; Center for Statistical Sciences; Hassenfeld Child Health Innovation Institute; International Health Institute; and Mindfulness Center.

In addition, there are two research centers at The Miriam Hospital (Brown University AIDS Program and the Centers for Behavioral and Preventive Medicine) and one at the Memorial Hospital of RI (Center for Primary Care and Prevention).

The Brown-based centers/institutes had over $64 million direct and indirect costs in FY20. This figure does not include the hospital-based centers. The wide array of research projects provide students with an opportunity to gain valuable experience while they pursue their degrees. The direct costs on research grants and contracts provide support for PhD students in Biostatistics, Epidemiology, Health Services Research, and Behavioral and Social Health Sciences, and also support Research Assistantships in all Master's Programs in the School of Public Health. External funds from community agencies and Brown affiliated hospitals are also important sources of support for Public Health doctoral and master's students.

The School receives 44% of indirect costs from external awards, and the University retains 56%; however, as noted above, as we finalize the new support model, we expect significantly more indirect costs to be returned to the school beginning in FY21. The operating budgets of the Brown-based Public Health Research Centers/Institutes are set each fiscal year as a percentage of the centers' and institutes' indirect cost recovery from the previous fiscal year. At the close of each fiscal year, remaining balances are transferred to the Centers' reserve accounts. Similarly, year-end deficits in operating accounts are covered by the Centers' reserve accounts. This incentive-based model of support for Centers/Institutes has been effective in developing their research programs. Reserve funds are also used to support pilot research projects, new initiatives, and bridge funding for faculty and staff who have gaps in their research funding.

Contract from the RI Department of Health
The continuing Public Health Assistantships and Faculty Services Program contract from the Rhode Island Department of Health, now in its 26th year, provides support for 7 faculty, 2 PhD students and 6-8 master's student Research Assistantships. The faculty have primary responsibility for ongoing projects at the Department of Health, but under the terms of our agreement, they have protected time for mentoring and advising students.

Reserve Funds
Financial unrestricted reserve funds in the School total slightly under $10 million in FY20.

These funds are distributed as follows:

- Research Centers/Institutes $8.093 million
- Doctoral programs $1.310 million
- Academic departments $0.372 million
- Dean's reserve $0.000 million

These discretionary funds are unrestricted and used to support the school's research and academic programs.

a) Briefly describe how the school pays for faculty salaries. If this varies by individual or appointment type, indicate this and provide examples.

Financial support for faculty depends on faculty type as follows:
- Tenure and tenure-track faculty are supported by professorships, school operating budget, and direct research funds. Academic year salary is guaranteed; summer salary is supported by sponsored or faculty incentive funds. Academic year salary for tenure and tenure-track faculty comprised approximately 72% of total faculty salaries in FY20.
- Teaching Scholars are supported by operating and research funds.
- Research faculty are supported by direct and indirect research costs; their salary is not guaranteed and relies on extramural funding.

b) Briefly describe how the school requests and/or obtains additional faculty or staff (additional = not replacements for individuals who left). If multiple models are possible, indicate this and provide examples.

All departments and centers have budgets for staff and faculty. Centers may increase staff and faculty based on increased grant activity. Departments may request an increase in staff or faculty depending on a number of metrics including number of faculty within their department, number of students, or specific course needs. The central finance team works with departments and centers to approve new hires. Incremental faculty or staff intended to fulfill the school's strategic mission or capitalize on an emerging opportunity may not follow this prescribed procedure; rather, discussions between senior leadership at the school and the University generally inform such decisions.

c) Describe how the school funds the following:

a. Operational costs (schools define "operational" in their own contexts; definition must be included in response)

Operational costs include ongoing expenses for staff, faculty, scholarships, student-related expenses, facility, research support, supplies, and services. Operational costs are funded by tuition revenue retained by the school from master's programs, indirect costs from external research, fundraising, and University support.

b. Student support, including scholarships, support for student conference travel, support for student activities, etc.

Student support includes scholarships and fellowships. The School supports student activities, in particular providing funding to the Graduate Student Council and the Departmental Undergraduate Group. The School has also provided support for graduate students to attend conferences and support for undergraduate public health concentrators to form student groups related to public health interests. Student support is funded from tuition, gifts, and other School revenue such as revenue from indirect cost recovery. As noted in the "University Support" section, the school also supports doctoral students via a component of its university allocation.

c. Faculty development expenses, including travel support. If this varies by individual or appointment type, indicate this and provide examples

The School's Centers and Institutes are critically important to the growth of our junior faculty. These units invest in new faculty when they are recruited and have established mechanisms for monitoring junior faculty productivity, performance, and plans for research proposal development. Center Directors or their designees meet with junior faculty to offer mentoring by reviewing publications, assisting in grant preparation, collaborating with other faculty and units, and to determine whether additional infrastructure resources are required to achieve academic goals. Centers/Institutes often contribute to start-up resources for new faculty in the form of research infrastructure (e.g., computers, research assistants, and funds for pilot studies) and can invest reserve funds to provide bridge funding for faculty if needed.

Tenure-track faculty are provided with start-up funds that align with the size and scope of their area of research. Funds may be used for a variety of purposes such as hiring research personnel, equipment, and travel to conferences. The Centers and/or the Dean's office typically provide start-up funds.

Other ways faculty are supported for their research and teaching include the following:

- Faculty Awards: Faculty awards granted by the School in 2019-2020 include *The Dean's Award for Excellence in Classroom Teaching in Public Health, The Dean's Award for Excellence in Mentoring in Public Health, The Dean's Award for Excellence in Research Collaboration in Public Health,* and the *Brown University Early Career Research Achievement Award.* In addition, our faculty have received multiple externally granted awards.

- Grant Incentive Program (GIP): For tenure-track faculty, there is a GIP that deposits up to 50% of faculty members' salary and fringe (above the 40% expected coverage of academic year salary) that is offset by external funds into the GIP account, which can be used to support research and career development activities for that faculty member and their students. This is an individual account that rolls over from year to year. A similar incentive program exists for "term/contract" faculty.

- Incentive Programs for Research Faculty: Research faculty are provided with incentive programs including *Incentive for New Grants and Contracts, Indirect Cost Incentive Program, Grant Incentive Program*, and the *Catalyst Grant Program.*

- Sheridan Center for Teaching and Learning: All faculty have access to the Sheridan Center for Teaching and Learning, which offers a range of programs for enhancing teaching. This includes events, workshops, and teaching observations with feedback.

- Mentoring Programs: Individual departments have developed mentoring programs. For example, the Department of Health Services, Policy and Practice and the Department of Behavioral and Social Sciences formally assign two senior faculty mentors to each junior faculty member, and they meet together at least once each term.

- Faculty are also provided with a variety of events to support their work. Examples include:
  o Monthly faculty meetings
  o Faculty promotion workshops
  o Grant writing workshops
  o Faculty recognition events
  o Coffee and Conversations with the Deans

Part-time faculty have access to the same resources as full-time faculty, including pre- and post-award support, space, and other School resources. They also have access to the career development programs within the School and the University. Examples include the annual grant writing workshop that is co-sponsored by the School of Public Health, Alpert Medical School, and the University Office of Research.

d) In general terms, describe how the school requests and/or obtains additional funds for operational costs, student support and faculty development expenses.

The School has discretion to redirect funding to support additional operating needs. If the School requires additional funding not included in the regular operating budget, the Dean may request funding from the Provost's office. These requests typically involve faculty retentions or target of opportunity hires, and hires that address other strategic needs. Certain additional student support needs may be addressed by requests to the Graduate School.

e) Explain how tuition and fees paid by students are returned to the school. If the school receives a share rather than the full amount, explain, in general terms, how the share returned is determined. If the school's funding is allocated in a way that does not bear a relationship to tuition and fees generated, indicate this and explain.

For Master's students, tuition and fees are billed and collected by the University. The University provides a revenue report to the School in January of each year. The School verifies enrollments through Banner registration reports. The University then provides a transfer equal to 100% of the annual revenue amount in the Spring of each year. The School does not receive a share of PhD tuition.

Undergraduate tuition and fees are also billed and collected directly by the University. Revenue is returned to the School via a University allocation amount, which is determined during the budgeting process each year, and generally increases by the inflationary increase percentage each year. Although the annual allocation amount is not directly tied to the undergraduate enrollment for a given year, it does recognize the significant number of undergraduates enrolled in classes taught by the School's faculty. The funds are transferred from the University to the School in the Spring of each year.

f) Explain how indirect costs associated with grants and contracts are returned to the school and/or individual faculty members. If the school and its faculty do not receive funding through this mechanism, explain.

The School currently receives 44% of its indirect cost recovery to help fund its research programs; however as noted, this is currently under review. 29.5% is returned to the research centers as part of their operating budget (outlined in the section labeled "Grant/Contract Direct and Indirect Costs" above), and 14.5% is held by the School to fund faculty incentives. The School has a number of incentive programs that reward faculty for research success, including *Incentive for New Grants and Contracts*, *Indirect Cost Incentive Program*, *Grant Incentive Program*, and the *Catalyst Grant Program*.

If the school is a multi-partner unit sponsored by two or more universities (as defined in Criterion A2), the responses must make clear the financial contributions of each sponsoring University to the overall school budget. The description must explain how tuition and other income is shared, including indirect cost returns for research generated by the school of public health faculty appointed at any institution.

Not applicable.

2) A clearly formulated school budget statement in the format of Template C1-1, showing sources of all available funds and expenditures by major categories, for the last five years.

C1-1: Sources of Funds and Expenditures by Major Category, 2016 to 2020 (million $)					
	2016	2017	2018	2019	2020
Source of Funds					
Tuition & Fees	$4.7	$5.7	$5.9	$6.1	$5.8
State Appropriation	---	---	---	---	---
University Funds	$5.3	$6.0	$6.2	$7.6	$8.7
Grants/Contracts	$26.1	$31.1	$39.0	$42.7	$48.3
Indirect Cost Recovery	$4.2	$4.6	$5.9	$6.5	$7.3
Endowment	$0.8	$0.9	$0.9	$0.9	$0.9
Gifts	$1.3	$1.5	$2.0	$2.8	$3.2
Other Income	$0.1	$0.0	$0.1	$0.1	$0.1
Total	**$42.4**	**$50.0**	**$59.9**	**$66.6**	**$74.2**
Expenditures					
Faculty Salaries & Benefits	$15.4	$17.0	$20.8	$23.0	$24.9
Staff Salaries & Benefits	$10.0	$10.9	$12.3	$14.2	$17.1
Operations (including facilities)	$7.0	$7.5	$5.8	$6.5	$6.1
Student Support	$5.5	$5.7	$6.0	$6.7	$7.2
University Tax	---	---	---	---	---
Other (Direct Costs-Grants and Contracts)	$4.9	$7.0	$9.3	$11.7	$13.4
Other (Internal funding and expense transfers)	($0.2)	$1.4	$4.5	$4.4	$4.5
Total	**$42.6**	**$49.6**	**$58.7**	**$66.4**	**$73.2**

If the school is a multi-partner unit sponsored by two or more universities (as defined in Criterion A2), the budget statement must make clear the financial contributions of each sponsoring university to the overall school budget.

Not applicable.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School has considerable resources and an ongoing commitment from the University to provide the support needed for the School to fulfill its stated mission and goals, and its instructional, research, and service objectives. Due to the outstanding productivity of our Faculty, the School has seen exceptionally strong gains in external funding from grants and contracts, with a 16% average annual increase from FY2016 to FY2020. The gains in external funding also provide important opportunities for our students. With recent large grants, we expect continued strong growth in external funding.

The University has invested resources well beyond the formal financial arrangement to ensure the School's continued growth and success. An independent higher education consulting firm was engaged for a year-long study charged with assessing the school's financial model and internal

capabilities to further its growth, impact, and mission. Recommendations from that engagement currently in the implementation phase include strengthening the School's financial relationship with the University via changes to its existing financial arrangement, as well as the University's investment in additional space for the School to allow its current programs to expand, and creating opportunities for new initiatives.

The School is implementing a strategic plan, *Advancing Well-Being for All,* to guide strategic growth from 2019 to 2024 and beyond. The plan includes expanding program offerings that align with the academic goals of the School, attracting new segments of students, and having a positive financial outlook.

The University has also recently appointed Dr. Ashish Jha, an accomplished physician, health policy researcher, and global health advocate, as the new Dean of the school. His background as a practitioner providing care for individual patients, a scholar focused on national and global public health systems, and a global health advocate engaged on major issues such as the impact of climate change on public health, makes him an exceptional leader to advance academic excellence and provide strategic direction for the school. Dr. Jha's efforts are supported by a $7.5M discretionary spending commitment from the University.

Challenges: Fundraising is an ongoing challenge. Raising additional endowments and gifts will reduce the reliance on tuition and indirect cost recovery as the major sources of revenue for the School.

Plans: We have developed an operating and fundraising plan that supports the strategic plan of the School as part of an effort to diversify the School's revenue sources. This plan includes expanding and synergizing the advancement and communications teams for enhanced fundraising that will align with the school's mission and goals.

C2. Faculty Resources

The school has adequate faculty, including primary instructional faculty and non-primary instructional faculty, to fulfill its stated mission and goals. This support is adequate to sustain all core functions, including offering coursework and advising students. The stability of resources is a factor in evaluating resource adequacy.

Students' access to a range of intellectual perspectives and to breadth of thought in their chosen fields of study is an important component of quality, as is faculty access to colleagues with shared interests and expertise.

All identified faculty must have regular instructional responsibility in the area. Individuals who perform research in a given area but do not have some regular expectations for instruction cannot serve as one of the three to five listed members.

1) A table demonstrating the adequacy of the school's instructional faculty resources in the format of Template C2-1.

   Please see Table C2-1 starting on next page.

CONCENTRATION	1st DEGREE LEVEL			2nd DEGREE LEVEL	3rd DEGREE LEVEL	ADDITIONAL FACULTY+
	PIF 1*	PIF 2*	FACULTY 3^	PIF 4*	PIF 5*	
Biostatistics ScB AM/ScM PhD	Joe Hogan, ScD 1.0	Ani Eloyan, PhD 1.0	Christopher Schmid, PhD 1.0	Zhijin Wu, PhD 1.0	Roee Gutman, PhD 1.0	PIF: 10 Non-PIF: 3
Behavioral & Social Sciences MPH PhD	David Williams, PhD 1.0	Tyler Wray, PhD 1.0	Christopher Kahler, PhD 1.0	Kate Carey, PhD 1.0		PIF: 36 Non-PIF: 3
Clinical and Translational Research ScM	Ira Wilson, MD 1.0	Theresa Shireman, PhD 1.0	Annie Gjelsvik, PhD 1.0			PIF: 0 Non-PIF: 0
Epidemiology MPH PhD	Brandon Marshall, PhD 1.0	Chanelle Howe, PhD 1.0	Joe Braun, PhD 1.0	Stephen Buka, ScD 1.0		PIF: 7 Non-PIF: 8
Generalist MPH	Deborah Pearlman, PhD 1.0	Melissa Clark, PhD 1.0	Diana Grigsby-Toussant, PhD 1.0			PIF: 1 Non-PIF: 0

Global Health MPH	Abigail Harrison, PhD 1.0	Stephen McGarvey, PhD 1.0	Don Operario, PhD 1.0			PIF: 2 Non-PIF: 0
Health Services MPH PhD	Anya Wallack, PhD 1.0	Omar Galarraga, PhD 1.0	Thomas Trikalinos, MD, PhD 1.0	Amal Trivedi, MD 1.0		PIF: 27 Non-PIF: 21
Maternal & Child Health MPH	Patrick Vivier, MD, PhD 1.0	David Savitz, PhD 1.0	Alison Field, PhD 1.0			PIF: 1 Non-PIF: 0
Mindfulness MPH	Eric Loucks, PhD 1.0	Judson Brewer, MD, PhD 1.0	Jeffrey Proulx, PhD 1.0			PIF: 0 Non-PIF: 0
Public Health AB	Patricia Risica, DrPH 1.0	Jasjit Ahluwalia, MD, MPH 1.0	Jennifer Nazareno, PhD 1.0			PIF: 2 Non-PIF: 1

TOTALS:		
	Named PIF	35
	Total PIF	121
	Non-PIF	35

2) All primary instructional faculty, by definition, are allocated 1.0 FTE. Schools must explain the method for calculating FTE for any non-primary instructional faculty presented in C2-1.

   FTE for non-primary instructional faculty were determined by adding the average number of hours per person per year spent in instructional-related activities divided by 1,950 hours, which are full-time equivalent hours at Brown University.

3) If applicable, provide a narrative explanation that supplements reviewers' understanding of data in the templates.

   All primary faculty in the School of Public Health are employed full-time. Therefore, all primary instructional faculty (both named and total) represent 1.0 FTE in C2-1. The numbers of non-primary instructional faculty shown in C2-1 represent the total number individuals in each category and overall, which represent a combined effort of 1.7 FTE.

4) Data on the following for the most recent year in the format of Template C2-2. See Template C2-2 for additional definitions and parameters.

**Template C2-2: Faculty Regularly Involved in
Advising, Mentoring and the Integrative Experience**

C2-2A: General advising & career counseling			
Degree level	Average	Min	Max
Bachelor's	13	1	39
Master's	5	5	6
Doctoral	2	1	5

C2-2B: Advising in MPH integrative experience		
Average	Min	Max
Primary faculty	1	3
Non-primary faculty	1	2

C2-2C: Supervision/Advising of bachelor's cumulative or experiential activity		
Average	Min	Max
Honors theses		
Primary faculty	1	3
Non-primary faculty	1	3
Senior capstone		
Primary faculty	1	32

C2-2D: Mentoring/primary advising on thesis, dissertation or DrPH integrative project			
Degree	Average	Min	Max
DrPH	N/A	N/A	N/A
PhD	2	1	5
MPH	1	1	3
Master's other than MPH	2	1	5

5) Quantitative data on student perceptions of the following for the most recent year. Schools should only present data on public health degrees and concentrations.

a. Class size and its relation to quality of learning (e.g., The class size was conducive to my learning)

Beginning in 2020, a question about class sizes was added to the anonymous School-wide satisfaction survey that is sent to both current and graduating students (undergraduate, master's, and doctoral) in mid-May to measure the quality of School resources. Results for students in each of the programs are as follows:

Satisfaction with Class Sizes (% somewhat or extremely satisfied) at the Brown School of Public Health by Program	
	2020
Doctoral Programs	
Behavioral and Social Health Sciences PhD	---
Biostatistics PhD	100%
Epidemiology PhD	80%
Health Services Research PhD	---
Master's Programs	
Clinical and Translational Research ScM	---
Biostatistics AM/ScM	94%
Master of Public Health	88%
Undergraduate Program	
Public Health AB	80%
--- Data not shown due to sample size less than 5	

b. Availability of faculty (i.e., Likert scale of 1-5, with 5 as very satisfied)

Beginning in 2020, two questions about faculty availability were added to the anonymous School-wide satisfaction survey that is sent to both current and graduating students (undergraduate, master's, and doctoral) in mid-May to measure the quality of School resources. The first question asked about availability of instructors in courses. The second question asked about faculty availability for thesis/project mentoring. Results for students in each of the programs are as follows:

Satisfaction with Availability of Faculty (% somewhat or extremely satisfied) at the Brown School of Public Health by Program	
	2020
Availability of instructors in courses	
Doctoral Programs	
Behavioral and Social Health Sciences PhD	---
Biostatistics PhD	100%
Epidemiology PhD	70%
Health Services Research PhD	---
Master's Programs	
Clinical and Translational Research ScM	---
Biostatistics AM/ScM	94%
Master of Public Health	96%
Undergraduate Program	
Public Health AB	84%

Satisfaction with Availability of Faculty (% somewhat or extremely satisfied) at the Brown School of Public Health by Program	
	2020
Faculty availability for thesis/project mentoring	
Doctoral Programs	
Behavioral and Social Health Sciences PhD	---
Biostatistics PhD	100%
Epidemiology PhD	60%
Health Services Research PhD	---
Master's Programs	
Clinical and Translational Research ScM	---
Biostatistics AM/ScM	93%
Master of Public Health	78%
Undergraduate Program	
Public Health AB	56%
--- Data not shown due to sample size less than 5	

6) Qualitative data on student perceptions of class size and availability of faculty. Only present data on public health degrees and concentrations.

In 2018-2020 School-wide student satisfaction surveys, students were provided two separate opportunities for open-ended responses about their experiences at the School. Themes from analyses of the free text related to perceptions of class size and faculty availability are described below by program type.

Class size

Doctoral Programs

Of 52 open text responses from doctoral students, 2 (4%) responses were about class size and were mixed. One mentioned small class size as a positive while the other described some class sizes as being too big and difficult to manage students from multiple programs (undergraduate, master's, doctoral).

Academic Master's Programs

Of the 38 open text responses from students in academic master's programs, 1 (3%) mentioned small class sizes as what they liked best about the program.

MPH Program

Of 61 open text responses from students in the MPH program, 5 (8%) mentioned class size. Three students provided positive comments about small class sizes. Two comments were more negative and illustrated below:

"The biostats class I attended comprised of undergrad, master and PhD students. It's hard for the professor to balance the needs of students from different fields."

"The MPH program stated class size would be 6-8 people; I have classes that are upwards of 30. I understand that core classes are larger, but that should have been explained."

Public Health Undergrad Program

Of 68 open text responses from students in the public health undergrad program, 0 were about class sizes.

Availability of Faculty

<u>Doctoral Programs</u>

Of 52 open text responses from doctoral students, 19 (37%) responses were about faculty availability. The comments were consistently positive about faculty. Illustrative examples are as follows:

"The best experience was the personal mentorship that Brown provide and how they help to overcome the life challenges during the study period. I had a really difficult situation in my life and my academic advisor and program coordinator was super helpful to overcome that."

"Having a small department has its advantages. I appreciate the fact that my advisor was invested in my research and my development throughout the course of my degree, which might not have been the case in a larger department/program."

"My advisor is very supportive and faculties in our department are very close to students in general."

<u>Academic Master's Programs</u>

Of the 38 open text responses from students in academic master's programs, 11 (29%) mentioned faculty and were consistently positive as illustrated below.

"Great mentorship from advisor."

"Faculty expertise and accessibility"

"Faculty members in this department are extremely approachable"

<u>MPH Program</u>

Of 61 open text responses from students in the MPH program, 15 (25%) mentioned faculty and were generally positive as illustrated below:

"My professors and the program staff cared about me as an individual, I developed strong personal relationships with faculty"

"Amazing access to professors"

"Individual attention that I received from my mentors was invaluable. The small size of the program allowed me to have great access to faculty and expand my network during my time at SPH."

Rare negative comments are below:

"Faculty are not as helpful or open to working with students. Research and their own projects take priority and they are frequently unavailable."

"Thesis advising is confusing and hard to come by"

<u>Public Health Undergrad Program</u>

Of 68 open text responses from students in the public health undergrad program, 15 (22%) were about faculty availability. In 2018 and 2019, the comments were generally more positive than negative about faculty availability as illustrated below:

"I liked that the faculty was generally very supportive to see my success and growth in my program."

"I love that faculty are willing to engage with undergrads on both a professional and personal level."

"I think that undergraduate advisors are great, but some are more familiar and helpful in advising than others."

"I would like to see more advising/mentorship for undergraduates, especially concerning research."

In 2020, the comments were generally negative as illustrated below:

"I think the advising and mentorship for undergraduates could be more personal. It feels like there is a focus on graduate students in the public health department at Brown (which is understandable), but a little more support for undergraduates would be nice."

"I found it difficult to get involved with research so much so that I ended up giving up after trying for 2 years. I also was very disappointed in the availability for thesis advising. I emailed nearly 30 professors and only 4 responded."

"The program makes it feel like undergraduates are a second thought and many times professors seem uninterested in teaching undergrads, given that most of them also teach grad students. I feel like the mentorship is also pretty impersonal and that advisors don't really make a ton of effort to check in aside from when I reach out."

"I felt very unsatisfied with the level of academic support from the public health department. Both within my concentration and the general department itself, I did not feel fully supported in my academic plans and endeavors."

7) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School has more than an adequate number of faculty to fulfill its mission and goals as they relate to core functions involving coursework and student advising. The number of available faculty has grown over time, and this growth is expected to continue as the School expands in size. In addition, there is a breadth of faculty expertise and intellectual perspectives. Across all programs, faculty in all ranks teach and advise students.

Challenges: We do not have a systematic way to easily track faculty regularly involved in advising, mentoring, and integrative experiences. We only have recent quantitative data regarding student perceptions about class sizes and faculty availability. Furthermore, the data are limited due to small numbers of students in some programs who participated in the most recent satisfaction surveys. Of the available quantitative satisfaction data, results suggest that students in two programs (Epidemiology PhD and Public Health AB) are less satisfied with faculty availability for thesis/project mentoring than students in other programs. The most recent qualitative data suggest that faculty availability for undergraduate public health students could be improved.

Plans: We are in the process of changing the Faculty Activity Report to track involvement in student advising, mentoring, and integrative experiences. We will continue to include questions in the satisfaction survey about class size, and faculty availability and work to improve response rates for the survey. We will develop program-specific qualitative approaches to obtain data about student satisfaction with class sizes and faculty availability with specific attention to methods that promote confidentiality and honest reporting. Programs with low satisfaction ratings will be required to determine the causes of the low satisfaction and adopt strategies to improve student experiences. Finally, we will increase the number of academic advisors in the MPH and undergraduate public health program so that the students have more access to advising.

C3. Staff and Other Personnel Resources

The school has staff and other personnel adequate to fulfill its stated mission and goals. The stability of resources is a factor in evaluating resource adequacy.

1) A table defining the number of the school's staff support for the year in which the site visit will take place by role or function in the format of Template C3-1. Designate any staff resources that are shared with other units outside the unit of accreditation.

Template C3-1. Staff Support*

Role/function	Headcount
Diversity and Inclusion	1.0
Financial and Administration	15.0
Human Resources	0.0
Information Technology	22.0
Marketing and Communication	13.0
Other Non-Instructional Staff	32.0
Research Administration (Post Award)	6.0
Research Administration (Pre Award)	5.0
Research Support	115.0
Student Affairs	2.0
Education/Instruction	6.0
Total	**217.0**

Data as of September 18, 2020

2) Provide a narrative description, which may be supported by data if applicable, of the contributions of other personnel.

Template C3-1 shows full and part-time staff in the School that work directly to support the education and research mission of the School. In addition, the School has the support and expertise of University infrastructure, personnel, and systems in all areas. Finally, the School hires students each semester to work with faculty and staff in support of the School's mission. For AY19-20, the School hired 45 students as graduate teaching assistants, 116 students as graduate research assistants, and 40 students as hourly employees.

3) Provide narrative and/or data that support the assertion that the school's staff and other personnel support is sufficient or not sufficient.

The staff levels at the School are sufficient to support our education and research mission. We have 217 total staff positions, 126 supporting research and 53 supporting the education and instruction mission. We also have 22 IT positions throughout the School supporting centers and departments, 13 communications positions, 15 finance and administrative positions, and 1 position to handle School-wide diversity and inclusion programming. All of these positions are dedicated to the work of the School. The school will be hiring a team of professionals in the coming months to support Human Resources, Financial Analysis and Planning, and Strategic Initiatives.

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The 217 dedicated staff, a plan to grow key administrative positions, and the support of the University means that the School has the necessary resources to support the mission.

Challenges: Adding staff at the right time to support growth is a key challenge.

Plans: We will continue to monitor staffing to determine the number of positions needed to fulfill the School's mission.

C4. Physical Resources

The school has physical resources adequate to fulfill its stated mission and goals and to support instructional schools. Physical resources include faculty and staff office space, classroom space, student shared space and laboratories, as applicable.

1) Briefly describe, with data as applicable, the following. (Note: square footage is not required unless specifically relevant to the school's narrative.)

Overview
The School occupies a total net square footage of 87,950 square feet in three locations. The School's primary location is at 121 South Main Street, with 74,270 square feet on floors 2 through 8 in an 11-story building owned by the University. That building is two blocks from the main campus on College Hill and four blocks from Brown's Warren Alpert Medical School. The School also occupies 10,199 square feet at One Davol Square, also a Brown-owned building and located less than 1 mile from the primary location at 121 South Main Street. Finally, the School occupies 3,481 square feet of lab space at 70 Ship Street. The School's academic departments and research centers/institutes share an infrastructure, which provides and promotes research and training opportunities. The University provides shuttle service, which connects the main campus, the School of Public Health, the Alpert Medical School, One Davol, and the Rhode Island Hospital/Hasbro Children's Hospital and Women and Infants Hospital medical complexes.

Faculty and Staff Office Space
The School provides office space for all core faculty, including tenure-track, (research), research scholar, teaching scholar, and a number of other affiliated faculty. Office or cubicle space and updated technology are provided to all staff. Faculty and staff may be located at any one of the three locations occupied by the School. Space is fully equipped and secured.

Teaching/Student Space:
The School has the following classrooms and student space:
- 81-seat auditorium style classroom
- 55-seat seminar/classroom
- Two 40-seat seminar/classrooms
- 31-seat computer classroom
- Six 10-20-seat seminar rooms
- Two computer labs (18 and 15 seats) available for teaching and for student use
- 350 square foot study room for master's students is located on the second floor
- 1,500 square feet for student study and lounge space
- Each doctoral student has his/her own 60-100 square foot carrel
- Small library
- Some classrooms have updated technology including lecture capture and teleconferencing capabilities. We are working to update all classrooms.

The School also has access to classroom space on the main campus. Classes that are comprised primarily of undergraduate students are usually taught in main campus classroom spaces.

Laboratories
Each research center has adequate facilities to carry out its research. Brown Environmental Health and Safety as well as the Occupational Safety and Health Administration (OSHA) have authorized the primary space at 121 South Main for blood testing and other lab tests related to research. The space is not zoned for clinical laboratory use that would allow for patient testing and care. The laboratory space at 70 Ship Street is dedicated clinical laboratory space and is located approximately three blocks from the main Public Health building. All buildings are American with Disabilities Act (ADA)-compliant and accessible by University Shuttle and by

public transportation. Laboratories are secured and only accessible by code-protected key-card access to researchers and staff conducting work in this space. Equipment also includes eight freezers (-80 degrees) at both 121 South Main Street at 70 Ship Street to store research specimens.

Specific laboratories in the School:

- **Center for Alcohol and Addiction Studies Addictive Behaviors Research Laboratory**: The laboratory suite is a 4,800 square foot facility that was renovated for conducting human laboratory studies of tobacco, alcohol, and other drug use. The suite contains 18 participant observation rooms, a room equipped for conducting physical examinations, a workroom for preparing and storing biological samples, a waiting area, and a bathroom for collecting urine samples. The observation rooms range from 72-134 square feet in size and contain comfortable chairs and tables that hold desktop computers for completing questionnaires and other assessments. The observation rooms are equipped with large one-way mirrors and intercoms to allow visibility and communication from central control areas, where staff and investigators sit while monitoring study sessions. The observation rooms and control areas are ventilated with a state-of-the-art system for venting cigarette smoke and marijuana vapor.

- **Blood Lab**: With an NIH-funded grant, the School and the Center for Alcohol and Addiction Studies are in the process of building a new state-of-the-art lab for collecting and analyzing blood and other samples from patients to measure chemical markers. These labs will be available to others at the School and across the Brown campus.

- **Center for Health Promotion and Health Equity Exercise Laboratory:** The exercise laboratory includes a 546 square foot room with four state-of-the-art Life Fitness commercial-grade treadmills, an automated blood pressure cuff, a medical scale, an assessment room for collecting biological samples, a changing area with lockers, and a waiting area.

- **Mindfulness Center EEG Lab:** This lab is an electrically shielded and sound attenuated testing room for conducting EEGs. The room is available to other centers within the School.

- **Laboratories for Molecular Medicine at 70 Ship Street**: Three research groups from the School have dedicated space at 70 Ship Street. Researchers have access to cold rooms, cell culture facilities, and shared University resources. Separate cell culture rooms equipped with biosafety laminar flow hoods (Class IIB) with dual Hepa filters (one with 100% external exhaust) are available for exclusive use of public health research groups. The laboratory is well-equipped with analytical instrumentation, two fume hoods, and other resources needed to carry out the funded work. Shared or Laboratory equipment available in the Department of Pathology and Laboratory Medicine on the fifth floor of 70 Ship Street that can be used by School faculty are as follows:
  - Nanodrop ND-1000 uv/vis spectrophotometer
  - Agilent 2100 bioanalyze
  - Sorvall RC-5B centrifuge and rotors
  - Beckman L8-M ultracentrifuge and rotors
  - Bio-Rad Gel Doc 2000 system
  - Molecular Devices Spectramax M2 Plate reader
  - Fujix Bas 1000 phosphorimager
  - Computers and software for cDNA microarray and PCR array analysis
  - Bio-Rad Gene Pulser II electroporator
  - Jung Frigocut 2800 N cryostat
  - Nikon E800 microscope equipped with brightfield, fluorescence, and phase contrast microscopy and a color digital camera and printer

- Arcturus PixCell II laser capture microdissection system equipped for brightfield and fluorescence
- Ultraspec 2000 UV/visible spectrophotometer
- Refrigerated bench-top centrifuges
- Millipore ultrapure water purification system
- Revco -80C freezers
- Thermolyne liquid nitrogen cryofreezers
- Agarsoe and Protein electrophoretic systems
- Probe sonicators and sonication water baths

Additional Laboratory Resources at Brown University

- **The Rhode Island Biobank:** This is a state-of-the-art cryogenic facility for human tissue and fluid samples. It is a core facility under the management of the Division of Biology & Medicine and supports biomedical research on the Brown campus

- **Molecular Pathology Core Laboratory**: This core facility, located at the Laboratories for Molecular Medicine at 70 Ship Street, provides scientific evaluation and diagnosis of pathologic alterations at both the cellular and organismal level for animal models of toxicant-induced disease. The following services are provided: paraffin, plastic and frozen tissue sample preparation for light microscopy; biological sample preparation for transmission and scanning electron microscopy; and whole mouse embryo embedding and serial sectioning.

- **The Genomics Core Facility**, located at 70 Ship Street, provides state-of-the-art genomics and proteomics equipment and services to researchers at Brown University. The facility offers Next Generation Sequencing, DNA/RNA shearing, sample QC, Affymetrix microarray, qPCR services and provides assistance with experimental design, troubleshooting, and data analysis.

- **The Leduc Bioimaging Facility**, open to all investigators, provides equipment and training dedicated to high-resolution imaging in the life sciences. The facility includes a Transmission Electron Microscope, a Scanning Electron Microscope, three Fluorescence Microscopes, a Fluorescence Stereomicroscope, four Confocal Laser Scanning Microscopes, a Multiphoton Microscope, and software for image analysis. The facility also maintains equipment for sample preparation, including a critical point dryer, sputter coater, and microtomes for ultrathin sectioning.

- **The Center for Animal Resources and Education (CARE**) ensures humane care by providing for the animals' daily care and housing and veterinary care when necessary. The CARE team is dedicated to supporting the education and research mission of the University, while maintaining compliance with federal, state, and institutional regulations, guidelines, and policies.

Other Services

- **Survey Center.** Public Health has recently updated its survey center with six call stations for conducting quantitative and qualitative computer-assisted telephone interviews in multiple languages. The call center operates seven days a week and is open mornings, afternoons, and evenings to maximize survey completions. The Survey Center also has state-of-the-art online data collection and management software applications.

2) Provide narrative and/or data that support the assertion that the physical space is sufficient or not sufficient.

Current physical space is sufficient, but we recognize that we are outgrowing our current space and will need additional space in the near future. The School is working with University planners to identify additional space.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School is fortunate to have resources available to fulfill its stated mission and goals, as well as its instructional, research, and service objectives. The spaces at 121 South Main, One Davol Square, and 70 Ship Street are accessible to the public health community and to the broader University campus, Medical School, affiliated hospitals, and community partners such as the Rhode Island Department of Health.

Challenges: Acquiring additional space is an important step to meet the School's research and educational goals. Additionally, the 2020 COVID-19 pandemic carries substantial density-specific issues related to teaching and research activities.

Plans: The School is working with University planners to identify additional space to accommodate growth. The School plans to continue to improve and update its current space and acquire more space within the next two years. School-wide and University-wide committee work is ongoing to adapt space to meet evolving federal health and safety guidelines related to the COVID-19 pandemic.

C5. Information and Technology Resources

The school has information and technology resources adequate to fulfill its stated mission and goals and to support instructional schools. Information and technology resources include library resources, student access to hardware and software (including access to specific software or other technology required for instructional schools), faculty access to hardware and software (including access to specific software required for the instructional schools offered) and technical assistance for students and faculty.

1) Briefly describe, with data if applicable, the following:

- library resources and support available for students and faculty

  Brown University libraries ensure access to hundreds of online databases and tens of thousands of journals, newspapers, and e-books, available to students and faculty from the School. The Brown community (faculty, students, and staff) has access to electronic content within the collections of each library within the Brown network. These resources can also be accessed virtually, including through a University-provided mobile app. Material that is unavailable at a Brown library can be obtained from other facilities including Rhode Island Hospital and the Department of Health libraries. The Brown Library holds more than 250 special collections, each home to rare, primary-source materials that enable rich, high-impact research. One special collection includes Alcohol and Addiction Studies. The University Library also has administrative responsibility for Media Services, which provides video collections and classroom support for media and computer-based instruction. The Brown University libraries are:

  - **Annmary Brown Memorial -** Houses exhibits of European and American paintings from the 17th through 20th centuries and other holdings.

  - **Champlin Memorial Library -** Located in the Warren Alpert Medical School building, provides digital access to an extensive collection of electronic journals, textbooks, and databases.

  - **John Carter Brown Library -** An independent center for advanced research in history and the humanities and known as the JCB. Founded in 1846, it has been located at Brown since 1901. Housed within the JCB is a globally renowned, constantly growing collection of primary historical sources pertaining to the Americas. The library serves scholars from across the United States and around the world.

  - **John Hay Library -** Houses special collections, rare books, manuscripts, and archives.

  - **John D. Rockefeller Jr. Library -** Known as "the Rock," is the primary teaching and research library for the arts, humanities, and social sciences.

  - **Orwig Music Library -** Houses music books, scores, periodicals, sound recordings, video recordings, and microforms.

  - **Sciences Library -** Houses medical and science materials and is home to the Friedman Study Center, the Science Center, the Map Collection, and more. The Sciences Library holds materials that support study and research in the fields of Medicine, Public Health, Psychology, Neural Science, Environmental Science, Biology, Chemistry, Geology, Physics, Engineering, Computer Science, and Pure and Applied Mathematics, and provides a wide range of services to the faculty,

students, and staff of Brown University.

Within the University Library is the Center for Digital Scholarship. The Center performs and promotes the use of digital technology for scholarship by the Brown community. They advise, design, and carry out projects and workshops for every discipline on campus. The Center specifically supports public health activities that include: Data management, retention, and sharing; Data visualization; and GIS and mapping. Additionally, the University has a designated Public Health and Research Support Librarian, who provides support to students and faculty within the School, and conducts support work both on-site and remotely from the University Library.

- student access to hardware and software (including access to specific software or other technology required for instructional schools)

The School has current-technology IT infrastructure, including a 10-gigabit optical network connecting it to other Brown buildings, and a 1-gigabit network within its buildings. The high-speed network allows the Brown community to connect to peer research institutions. The University's Computing and Information Services (CIS) provides infrastructure and security for all technology needs. CIS provides licenses for a variety of research-related software that can be installed by the user. Security Zones created by CIS allow IT staff within the School's academic departments and research centers the flexibility necessary to ensure appropriate levels of security. The Center for Computation and Visualization maintains a vast catalog of research software on the centralized High Performance Computing (HPC) resource. University support and consultation includes digital scholarship support, informatics support, research computing support, and research grant support.

For researchers with sensitive data, the University has a centralized HIPAA/FISMA compliant enclave (Stronghold) that provides isolated project spaces for faculty and students needing extra security for research not located in one of the School's two research centers that handle sensitive data or where compliance with specific standards is required. Stronghold only allows RDP KVM access (or the UNIX equivalent). All data exports and imports are carefully logged and processed through an air-gapped transfer service system. The Public Health building at 121 South Main Street contains a 1,029 net square foot server room with dedicated network capacity, power, cooling, and backup generator power.

The School has one embedded position from CIS. This position supports classrooms, faculty, students, and staff at all locations and involves the expertise of CIS as needed. The School also has other IT support positions based in Centers to support specific IT and data needs of those Centers.

Students have access to two computer labs that are available at 121 South Main Street for teaching and for student use. These labs are equipped with up-to-date workstations, a broad range of software, and publicly available databases used by students for research and courses. There are multiple power connections for laptops, conference tables, a photocopier, and printers for student use. On-site IT consulting services are available to all Public Health students with personal devices used for academics. All Public Health students have wireless access to several different printers within the building. A 44-inch color poster/plotter printer is located on site and managed by staff to handle project-related poster printing.

Students also have access to extensive CIS student and research support services, including the embedded CIS position within our main location. Students have access to research computing (terminal server) for the storage, access, and statistical analysis of sensitive/secure data. The server has various statistical software installed, including R, SAS, SPSS, Stata, and Stat-Transfer. Access to secure data is strictly controlled using file system permissions, and all data are backed up locally using a tape backup system. Public

Health Research Centers and Institutes manage the majority of research computing within Public Health.

Students have access to multiple tools provided by the University to support digital scholarship including but not limited to the following:
- Canvas – the primary tool for course websites with built-in tools for communication, collaboration, assignments, assessments, and the grade book.
- Top Hat – in-class personal response system
- Google Course Groups
- GIS and Storymap – software for visualizing spatial data.
- Lab Notebooks – cloud-based electronic lab notebook for instructors and students to input and organize laboratory data.

- faculty access to hardware and software (including access to specific software or other technology required for instructional schools)

Faculty have access to the School's current-technology IT infrastructure, including a 10-gigabit optical network connecting it to other Brown buildings and a 1-gigabit network within its buildings. The high-speed network allows the Brown community to connect to peer research institutions. The University's Computing and Information Services (CIS) provides infrastructure and security for all technology needs. CIS provides licenses for a variety of research-related software that can be installed by the user. Security Zones created by CIS allow IT staff within the School's academic departments and research centers the flexibility necessary to ensure appropriate levels of security. The Center for Computation and Visualization maintains a vast catalog of research software on the centralized High Performance Computing (HPC) resource. University support and consultation includes digital scholarship support, informatics support, research computing support, and research grant support.

Faculty have access to extensive CIS faculty and research support services, including the embedded CIS position. Faculty have access to research computing (terminal server) for the storage, access, and statistical analysis of sensitive/secure data. The server has various statistical software installed, including R, SAS, SPSS, Stata, and Stat-Transfer. Access to secure data is strictly controlled using file system permissions, and all data are backed up locally using a tape backup system. Public Health Research Centers and Institutes manage the majority of research computing within Public Health.

Faculty have access to multiple tools provided by the University to support digital scholarship including the following:
- Canvas – the primary tool for course websites with built-in tools for communication, collaboration, assignments, assessments, and the grade book.
- Top Hat – in-class personal response system.
- Google Course Groups
- GIS and Storymap – software for visualizing spatial data.
- Lab Notebooks – cloud-based electronic lab notebook for instructors and students to input and organize laboratory data.

The Digital Learning & Design, Media Services (DLD), reporting to CIS, provides support and expertise for online courses, media production, classroom design and technology, and digital tools for teaching and learning. The group works in close collaboration with faculty to design, develop, facilitate, and evaluate all manner of courses. Areas of expertise in DLD include data management planning; data visualization; digital publishing, archiving, and preservation; digital research project consulting, design, and implementation; GIS and mapping; textual and quantitative analysis; visual design and user-interface development; and digital spaces in the library.

The Center for Digital Scholarship (CDS), reporting through the University library, supports digital teaching and scholarship at Brown and beyond. The CDS team draws on all aspects of library expertise: project design and management, geospatial and data visualization, digital humanities, metadata, data management and preservation, digital publication, digitization, copyright review, and custom database and software development. CDS works with faculty to develop projects and activities that classes can carry out over the course of a semester. CDS teaches weekly workshops on the methods and tools of digital scholarship, providing opportunities for instructors to explore new tools they can use in the classroom or for students to get in-depth instruction related to a course project.

- technical assistance available for students and faculty

  Students and faculty have access to an IT administrator, from either CIS or a research center, who assists with hardware and software issues. Staff can also provide on-site technology assistance and support.

  The Digital Learning & Design, Media Services (DLD), through CIS, provides support and expertise for online courses, media production, classroom design and technology, and digital tools for teaching and learning. The group works in close collaboration with faculty to design, develop, facilitate, and evaluate all manner of courses.

  The Center for Digital Scholarship (CDS), reporting through the University library, supports digital teaching and scholarship at Brown and beyond. The CDS team draws on all aspects of library expertise: project design and management, geospatial and data visualization, digital humanities, metadata, data management and preservation, digital publication, digitization, copyright review, and custom database and software development. CDS works with faculty to develop projects and activities that classes can carry out over the course of a semester.

2) Provide narrative and/or data that support the assertion that information and technology resources are sufficient or not sufficient.

   Computing and Information Services (CIS) delivers high-quality information technology solutions that further Brown University's mission of excellence in education, research, and public leadership. Dedicated staff at the School serve the technology and technology access needs of faculty, students, and staff.

   Digital teaching and learning resources include multiple tools and support. The Center for Digital Scholarship (CDS) supports digital teaching and scholarship at Brown and beyond. Digital Learning and Design (DLD) performs and promotes the use of digital technology in a scholarly context.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

   Strengths: The School is fortunate to have resources available to fulfill its instructional, research, and service objectives. CIS and School staff provide secure technology and technology access for faculty, students, and staff.

   Challenges: As the School grows, scaling technical resources is an ongoing challenge.

   Plans: We are working to conform classroom technology to University standards so that servicing those classrooms can be more easily scaled. Going forward, the School will continue to improve and expand the available resources for our faculty, students, and staff.

D1. MPH & DrPH Foundational Public Health Knowledge

The school ensures that all MPH and DrPH graduates are grounded in foundational public health knowledge.

The school validates MPH and DrPH students' foundational public health knowledge through appropriate methods.

1) Provide a matrix, in the format of Template D1-1, which indicates how all MPH and DrPH students are grounded in each of the defined foundational public health learning objectives (1-12). The matrix must identify all options for MPH and DrPH students used by the school.

D1-1: Coverage for Foundational Public Health Learning Objectives for all MPH Concentrations	
Content	**Course**

1. Explain public health history, philosophy and values.	Public Health 1001
	   Module 1: General Overview
	     Session 1: Principles of Population Health: Population Health History

2. Identify the core functions of public health and the 10 Essential Services.*	Public Health 1001
	   Module 1: General Overview
	     Session 1: Principles of Population Health: Population Health History

3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.	Public Health 1001
	   Module 1: General Overview
	     Session 2: Public Health Data: Qualitative and Quantitative Data

4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program.	Public Health 1001
	   Module 2: Epidemiology
	     Session 1: Major Causes and Trends in Morbidity and Mortality

5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	Public Health 1001
	   Module 2: Epidemiology
	     Session 2: Primary, Secondary, and Tertiary Prevention in Public Health

6. Explain the critical importance of evidence in advancing public health knowledge.	Public Health 1001
	   Module 2: Epidemiology
	     Session 3: The Critical Importance of Evidence in Advancing Public Health Knowledge

7. Explain effects of environmental factors on a population's health.	Public Health 1001
	   Module 3: Environmental Health
	     Session 1: Effects of Environmental Health on a Population's Health

8. Explain biological and genetic factors that affect a population's health.	Public Health 1001
	   Module 2: Epidemiology
	     Session 4: Biologic and Genetic Factors that Affect a Population's Health

9. Explain behavioral and psychological factors that affect a population's health.	Public Health 1001
	   Module 4: Behavioral and Social Sciences
	     Session 1: Behavioral and Psychological Factors in Public Health

10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities.	Public Health 1001
	   Module 4: Behavioral and Social Sciences
	     Session 2: Social, Political and Economic Determinants of Health

11. Explain how globalization affects global burdens of disease.	Public Health 1001
	    Module 5: Global Health
	        Session 1: The Effect of Globalization on
	        Global Burdens of Disease

12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health).	Public Health 1001
	    Module 3: Environmental Health
	        Session 2: An Ecological Perspective on Health

2) Document the methods described above. This documentation must include all referenced syllabi, samples of tests or other assessments and web links or handbook excerpts that describe admissions prerequisites, as applicable.

All students in all School programs except those earning a Public Health AB are required to take an online, non-credit modular course covering the scope of public health, Public Health 1001. The course presents one module at a time, with each module made up of 1-4 sessions created by a Brown faculty member. Topics for each module are: (1) General public health; (2) Epidemiology; (3) Environmental Health; (4) Behavioral and Social Sciences; and (5) Global Health. Modules are designed to run for one scheduled week per session, during which a faculty member with expertise in that area will be available for questions using an online discussion. Assessments are administered at the end of each module and include both essay and multiple choice test formats. Assessments are graded by a topic-specific faculty member and are associated with the 12 foundational public health learning objectives.

The syllabus for Public Health 1001 can be found in the ERF.

3) If applicable, assessment of strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: Public Health 1001 is available and taught to all MPH students through the same online platform. We are confident in the fidelity of the course presentation to all students because the online environment provides consistent course level and depth of exposure for all students. In addition, any faculty or administrator can examine the course for discussion of the content. Students can complete the modules during any day/time convenient to their schedules, which does not require the program to schedule the course around other academic offerings, and does not require the faculty to be available at a time that might conflict with other teaching. Senior faculty from each department created both the course content and assessments to assure high-level instruction.

Challenges: Because we teach the course online, we do not utilize traditional opportunities for engaging students in face-to-face discussion.

Plans: As of 2020, incoming students are offered the course during the summer before attending the MPH program in the Fall. This provides an introduction to public health, and more specifically, an introduction to the MPH program. Students will have the opportunity to engage with public health content prior to arrival, whetting the appetite, so-to-speak, for an exciting and rigorous upcoming program.

D2. MPH Foundational Competencies

The school documents at least one specific, required assessment activity (e.g., component of existing course, paper, presentation, test) for each competency, during which faculty or other qualified individuals (e.g., preceptors) validate the student's ability to perform the competency.

Assessment opportunities may occur in foundational courses that are common to all students, in courses that are required for a concentration or in other educational requirements outside of designated coursework, but the school must assess *all* MPH students, at least once, on each competency. Assessment may occur in simulations, group projects, presentations, written products, etc. This requirement also applies to students completing an MPH in combination with another degree (e.g., joint, dual, concurrent degrees). For combined degree students, assessment may take place in either degree school.

1) List the coursework and other learning experiences required for the school's MPH degrees, including the required curriculum for each concentration and combined degree option. Information may be provided in the format of Template D2-1 or in hyperlinks to student handbooks or webpages, but the documentation must present a clear depiction of the requirements for each MPH degree.

   The MPH student handbook, which presents the requirements for each MPH degree program, is [available here](#).

   Coursework for each of the MPH concentrations is shown below. Please note that Brown University does not operate with a "credit hour" system. Brown employs a "tuition unit" system, in which one full-credit course earns one tuition unit. Courses generally meet twice a week for 80 minutes per session, or once a week for 150 minutes with some classes having additional required lab time or small group sessions.

D2-1: Requirements for MPH degree, Epidemiology		
Course number	**Course name***	**Credits***
PHP 1001	Public Health 1001	Non-credit activity to be completed in the first semester of enrollment. Prerequisite for entering PHP 2071.
	CITI Training	
	IRB Basics	
	Semester One Core Advisor Small Group Sessions	
	Online course offered by the SAS Institute - SAS Programming 1: Essentials	
	Online course offered by the SAS Institute - SAS Programming 2: Data Management	Non-credit activity to be completed by the end of the second semester after enrollment.
Complete all of the following core courses:		
PHP 2510 *	Principles of Biostatistics and Data Analysis	1 unit
PHP 2511 *	Introduction to Applied Regression Analysis	1 unit
PHP 2150 *	Foundations in Epidemiologic Research Methods	1 unit
PHP 2071	Applied Public Health: Systems and Practice	½ unit
PHP 2072	Applied Public Health: Policy, Leadership and Communication	½ unit
PHP 2355	Designing and Evaluating Public Health Interventions	1 unit
*If a student completes PHP 2120 or PHP 2507 or PHP 2507 & PHP 2508 before deciding on the Epidemiology Concentration, the student must meet with the Epidemiology Concentration Advisor and the MPH Program Director to request that PHP 2120 or PHP 2507 or PHP 2507 & PHP 2508 meet(s) the relevant core requirement(s). Based on an assessment of the student's background, course performance, and knowledge base and other Department of Epidemiology requirements, PHP 2120 or PHP 2507 or PHP 2507 & PHP 2508 may be able to substitute.		

D2-1: Requirements for MPH degree, Epidemiology		
Complete _all_ of the following concentration courses:		
PHP 2200	Intermediate Methods in Epidemiologic Research (Full credit course offered every year)	1 unit
PHP 2180	Interpretation and Application of Epidemiology (Full credit course offered every year)	1 unit
PHP 2260	Applied Epidemiologic Data Analysis (Full credit course offered every year)	1 unit
Complete _one_ of the following methods courses:		
PHP 1560/2560	Statistical Programming in R	1 unit
PHP 1895	Mindfulness Epidemiology**	
PHP 2030	Clinical Trials Methodology	
PHP 2040	Survey Research Methods	
PHP 2220B	Nutritional Epidemiology**	
PHP 2250	Advanced Quantitative Methods in Epidemiologic Research	
PHP 2440	Introduction to Pharmacoepidemiology	
PHP 2455A	Health Services Research Methods I	
PHP 2465A	Introduction to Health Decision Analysis	
PHP 2515	Fundamentals of Probability and Statistical Inference	
PHP 2516	Applied Longitudinal Data Analysis***(1/2 credit)	
PHP 2517	Applied Multilevel Data Analysis*** (1/2 credit)	
PHP 2530	Bayesian Statistical Methods	
PHP 2550	Practical Data Analysis	
PHP 2602	Analysis of Lifetime Data	
PHP 2610	Causal Inference and Missing Data	
PHP 2620	Statistical Methods in Bioinformatics I	
PHP 2650	Statistical Learning and Big Data	
Complete _one_ of the following substantive area courses:		
PHP 1700	Current Topics in Environmental Health	1 unit
PHP 1854	Infectious Disease Epidemiology	
PHP 1895	Mindfulness Epidemiology**	
PHP 1900	Epidemiology of Disorders and Diseases of Childhood and Young Adulthood	
PHP 1920	Social Determinants of Health	
PHP 1964	Cancer Epidemiology	
PHP 2108	Epidemiology of Cardio-Metabolic Health	
PHP 2130	Human Biology for Public Health	
PHP 2220B	Nutritional Epidemiology**	
PHP 2220F	Reproductive and Perinatal Epidemiology	
PHP 2220H	HIV Epidemiology	
PHP 2222E	Environmental and Occupational Epidemiology	
**Can be used as either a substantive or methods course, but cannot count towards both. _***1 full credit methods course can be met by taking both PHP 2516 and PHP 2517_		

D2-1: Requirements for MPH degree, Epidemiology	
Select three general MPH electives	3 units
Thesis focused on epidemiology	
Concentration Lead: Tongzhang Zheng, PhD	

D2-1: Requirements for MPH degree, Generalist Concentration		
Course number	**Course name***	**Credits***
PHP 1001	Public Health 1001	Non-credit activity to be completed in the first semester of enrollment. Prerequisite for entering PHP 2071.
	CITI Training	
	IRB Basics	
	Semester One Core Advisor Small Group Sessions	
Select one of the following course sequences:		
PHP 2507	Biostatistics & Applied Data Analysis I	2 units
PHP 2508	Biostatistics & Applied Data Analysis II	
or		
PHP 2510	Principles of Biostatistics & Data Analysis	
PHP 2511	Applied Regression Analysis	
Select one of the following courses:		
PHP 2120	Introduction to Methods in Epidemiologic Research	1 unit
PHP 2150	Foundations in Epidemiologic Research Methods	
Complete all of the following courses:		
PHP 2071	Applied Public Health: Systems and Practice	½ unit
PHP 2072	Applied Public Health: Policy, Leadership and Communication	½ unit
PHP 2355	Designing and Evaluating Public Health Interventions	1 unit
Individualized Generalist Concentration Core Course**		1 unit
Individualized Generalist Concentration Core Course**		1 unit
Individualized Generalist Concentration Core Course**		1 unit
Individualized Generalist Concentration Core Course**		1 unit
Individualized Generalist Concentration Core Course**		1 unit
Select three general MPH electives		3 units
Thesis relevant to the individualized generalist concentration		
Concentration Lead: Deborah Pearlman, PhD		

D2-1: Requirements for MPH degree, Global Health		
Course number	**Course name***	**Credits***
PHP 1001	Public Health 1001	Non-credit activity to be completed in the first semester of enrollment. Prerequisite for entering PHP 2071.
	CITI Training	
	IRB Basics	
	Semester One Core Advisor Small Group Sessions	

D2-1: Requirements for MPH degree, Global Health		
Select one of the following course sequences:		
PHP 2507	Biostatistics & Applied Data Analysis I	2 units
PHP 2508	Biostatistics & Applied Data Analysis II	
or		
PHP 2510	Principles of Biostatistics & Data Analysis	
PHP 2511	Applied Regression Analysis	
Select one of the following courses:		
PHP 2120	Introduction to Methods in Epidemiologic Research	1 unit
PHP 2150	Foundations in Epidemiologic Research Methods	
Complete all of the following courses:		
PHP 2071	Applied Public Health: Systems and Practice	½ unit
PHP 2072	Applied Public Health: Policy, Leadership and Communication	½ unit
PHP 2720	Implementing Public Health Programs and Interventions in the Global South	1 unit
Complete all of the following concentration courses:		
PHP 2710	Interdisciplinary Perspectives on Disability and Death in the Global South	1 unit
PHP 2730	Including the Excluded: Global Health Ethics	1 unit
PHP 2740	Learning Global Health by Doing Global Health	1 unit
PHP 2760	Critical Perspectives in Global Health	1 unit
Select one of the following concentration courses:		
PHP 1100	Comparative Health Systems	1 unit
PHP 1854	Infectious Disease Epidemiology	
PHP 1920	Social Determinants of Health	
PHP 1964	Cancer Epidemiology	
PHP 2018	Epidemiology of Cardio-Metabolic Health	
PHP 2030	Clinical Trials Methodology	
PHP 2040	Survey Research Methods	
PHP 2060	Qualitative Research Methods	
PHP 2220F	Reproductive and Perinatal Epidemiology	
PHP 2220H	HIV Epidemiology	
PHP 2300	Behavioral Research Methods	
PHP 2340	Behavioral and Social Science Theory for Health Promotion	
PHP 2355	Designing and Evaluating Public Health Interventions	
PHP 2365	Public Health Issues in LGBT Populations	
Thesis focused on global health		
Concentration Lead: Stephen McGarvey, PhD		

D2-1: Requirements for MPH degree, Health Behavior		
Course number	**Course name***	**Credits***
PHP 1001	Public Health 1001	Non-credit activity to be completed in the first semester of enrollment. Prerequisite for entering PHP 2071.
	CITI Training	
	IRB Basics	
	Semester One Core Advisor Small Group Sessions	
Select one of the following course sequences:		
PHP 2507	Biostatistics & Applied Data Analysis I	2 units
PHP 2508	Biostatistics & Applied Data Analysis II	
or		
PHP 2510	Principles of Biostatistics & Data Analysis	
PHP 2511	Applied Regression Analysis	
Select one of the following courses:		
PHP 2120	Introduction to Methods in Epidemiologic Research	1 unit
PHP 2150	Foundations in Epidemiologic Research Methods	
Complete all of the following courses:		
PHP 2071	Applied Public Health: Systems and Practice	½ unit
PHP 2072	Applied Public Health: Policy, Leadership and Communication	½ unit
PHP 2355	Designing and Evaluating Public Health Interventions	1 unit
Complete the following health behavior concentration courses:		
PHP 2340	Theories of Behavioral and Social Sciences in Public Health	1 unit
PHP 2380	Health Communications	1 unit
Select two of the following topic specific courses:		
PHP 1540	Alcohol Use and Misuse	2 units
PHP 1600	Obesity in the 21st Century: Causes, Consequences and Countermeasures	
PHP 1610	Tobacco, Disease and the Industry: cigs, e-cigs and more	
PHP 1885	Measuring Mindfulness	
PHP 1890	The Craving Mind	
PHP 2330	Behavioral and Social Approaches to HIV Prevention	
Select one of the following health disparities courses:		
PHP 1650	Race, Racism and Health	1 unit
PHP 1920	Social Determinants of Health	
PHP 2325	Place Matters: Exploring Community-Level Contexts on Health Behaviors	
PHP 2365	Public Health Issues in LGBT Populations	
Select three general MPH electives		3 units
Thesis focused on health behavior		
Concentration Lead: Akilah Dulin, PhD		

D2-1: Requirements for MPH degree, Health Services		
Course number	**Course name***	**Credits***
PHP 1001	Public Health 1001	Non-credit activity to be completed in the first semester of enrollment. Prerequisite for entering PHP 2071.
	CITI Training	
	IRB Basics	
	Semester One Core Advisor Small Group Sessions	
Select one of the following course sequences:		
PHP 2507	Biostatistics & Applied Data Analysis I	2 units
PHP 2508	Biostatistics & Applied Data Analysis II	
or		
PHP 2510	Principles of Biostatistics & Data Analysis	
PHP 2511	Applied Regression Analysis	
Select one of the following courses:		
PHP 2120	Introduction to Methods in Epidemiologic Research	1 unit
PHP 2150	Foundations in Epidemiologic Research Methods	
Complete all of the following courses:		
PHP 2071	Applied Public Health: Systems and Practice	½ unit
PHP 2072	Applied Public Health: Policy, Leadership and Communication	½ unit
PHP 2355	Designing and Evaluating Public Health Interventions	1 unit
Select one of the following primary data gathering courses:		
PHP 2040	Survey Research Methods	1 unit
PHP 2060	Qualitative Research Methods	
Complete the following health systems course:		
PHP 2400	The U.S. Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health	1 unit
Complete the following quality course:		
PHP 2450	Measuring and Improving the Quality of Health Care	1 unit
Select one of the following health services methods design courses:		
PHP 2030	Clinical Trials Methods	1 unit
PHP 2415	Introduction to Evidence Based Medicine	
PHP 2465A	Introduction to Health Decision Analysis	
Select one of the following health services methods analysis courses:		
PHP 1560/2560	Statistical Programming with R	1 unit
PHP 2260	Applied Epidemiological Analysis Using SAS	
PHP 2410E	Medicare: A Data Based Policy Examination	
PHP 2440	Introduction to Pharmacoepidemiology	
PHP 2455A	Health Services Research Methods I	
SOC 2612	Geographic Information Systems and Spatial Analysis for the Social Sciences	
SOC 2960G	Spatial Data Analysis Techniques in the Social Sciences	
Select three general MPH electives		3 units
Thesis focused on health services		
Concentration Lead: Anya Rader Wallack, PhD		

D2-1: Requirements for MPH degree, Maternal and Child Health		
Course number	**Course name***	**Credits***
PHP 1001	Public Health 1001	Non-credit activity to be completed in the first semester of enrollment. Prerequisite for entering PHP2071.
	CITI Training	
	IRB Basics	
	Semester One Core Advisor Small Group Sessions	
Select one of the following course sequences:		
PHP 2507	Biostatistics & Applied Data Analysis I	2 units
PHP 2508	Biostatistics & Applied Data Analysis II	
Or		
PHP 2510	Principles of Biostatistics & Data Analysis	
PHP 2511	Applied Regression Analysis	
Select one of the following courses:		
PHP 2120	Introduction to Methods in Epidemiologic Research	1 unit
PHP 2150	Foundations in Epidemiologic Research Methods	
Complete all of the following courses:		
PHP 2071	Applied Public Health: Systems and Practice	½ unit
PHP 2072	Applied Public Health: Policy, Leadership and Communication	½ unit
PHP 2355	Designing and Evaluating Public Health Interventions	1 unit
Complete all of the following maternal and child health courses:		
PHP 2023	Maternal and Child Health in the United States	1 unit
PHP 1950	Adolescent and Young Adult Health	1 unit
PHP 1900	Epidemiology of Disorders and Diseases of Childhood and Young Adulthood	1 unit
PHP 2220F	Reproductive and Perinatal Epidemiology	1 unit
Select one of the following applied research methods courses:		
PHP 2024	Engaged Scholarship for Maternal and Child Health	1 unit
PHP 2030	Clinical Trials Methods	
PHP 2040	Survey Research Methods	
PHP 2060	Qualitative Methods	
PHP 2300	Behavioral Research Methods	
PHP 2415	Introduction to Evidence Based Medicine	
GEOL 1320	Introduction to Geographic Info Systems for Environmental Applications	
SOC 2612	Geographic Info Systems and Spatial Analysis for the Social Sciences	
Select three general MPH electives		3 units
Thesis focused on maternal and child health		
Concentration Lead: Alison E. Field, ScD		

D2-1: Requirements for MPH degree, Mindfulness Concentration		
Course number	**Course name***	**Credits***
PHP 1001	Public Health 1001	Non-credit activity to be completed in the first semester of enrollment. Prerequisite for entering PHP 2071.
	CITI Training	
	IRB Basics	
	Semester One Core Advisor Small Group Sessions	
Select one of the following course sequences:		
PHP 2507	Biostatistics & Applied Data Analysis I	2 units
PHP 2508	Biostatistics & Applied Data Analysis II	
or		
PHP 2510	Principles of Biostatistics & Data Analysis	
PHP 2511	Applied Regression Analysis	
Select one of the following courses:		
PHP 2120	Introduction to Methods in Epidemiologic Research	1 unit
PHP 2150	Foundations in Epidemiologic Research Methods	
Complete all of the following courses:		
PHP 2071	Applied Public Health: Systems and Practice	½ unit
PHP 2072	Applied Public Health: Policy, Leadership and Communication	½ unit
PHP 2355	Designing and Evaluating Public Health Interventions	1 unit
Complete all of the following mindfulness courses:		
PHP 1880	Meditation, Mindfulness and Health	1 unit
PHP 1885	Measuring Mindfulness	1 unit
PHP 1895	Mindfulness Epidemiology	1 unit
Select one of the following sciences courses:		
PHP 1890	The Craving Mind	1 unit
COST 1020	The Cognitive Neuroscience of Meditation	
COST 1710B	Science and Meditation	
Select one of the following applied research methods courses:		
PHP 2030	Clinical Trials Methods	1 unit
PHP 2040	Survey Research Methods	
PHP 2060	Qualitative Methods	
PHP 2300	Behavioral Research Methods	
PHP 2415	Introduction to Evidence Based Medicine	
Select three general MPH electives		3 units
Thesis focused on mindfulness		
Concentration Lead: Judson Brewer, MD, PhD		

2) Provide a matrix, in the format of Template D2-2, which indicates the assessment activity for each of the foundational competencies. If the school addresses all of the listed foundational competencies in a single, common core curriculum, the school need only present a single matrix. If combined degree students do not complete the same core curriculum as students in the standalone MPH school, the school must present a separate matrix for each combined degree. If the school relies on concentration-specific courses to assess some of the foundational competencies listed above, the school must present a separate matrix for each concentration.

D2-2: Assessment of Competencies for MPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
Evidence-based Approaches to Public Health		
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	PHP 2120: Introduction to Methods in Epidemiologic Research or PHP 2150: Foundations in Epidemiologic Research Methods	PHP 2120: Graded exercises and exams include a food-borne outbreak investigation on a ship, investigating bicycling accidents, environmental exposures, pancreatic cancer, and a graded exercise simulating the spread of infectious disease through a population.
		PHP 2150: Assessed on both the midterm and final exam with prompts that present information on epidemiologic studies from a diverse set of settings and situations in public health practice and ask the student to apply epidemiologic methods to calculate and interpret epidemiologic measures as well as identify potential errors that could impact the accuracy of the results. Full example prompts are provided in the syllabus.
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	PHP 2355: Designing & Evaluating Public Health Interventions or PHP 2720: Implementing Public Health Programs and Interventions in the Global South	PHP 2355 (Fall): Needs assessment assignment asks students to design a needs assessment for their public health topic and population of choice including identification of existing quantitative data sources, and selecting the most appropriate qualitative methods, either a focus group or interview guide. Program impact/outcome evaluation assignment asks students to choose and justify quantitative methods that will help them understand how well the program they have designed has been implemented and is working to change health outcomes.
		PHP 2355 (Spring): Through a series of assignments completed over the course of the semester, students develop a proposal for a public health program that addresses a need in a real-world population. In the second part of the fourth assignment, students identify (a) research questions, (b) the participants best suited to address the questions, and (c) appropriate data collection methods.
		PHP 2720: Through a series of assignments completed over the course of the semester, students develop a proposal for an evidence-based health intervention into a Global South setting. MPH Competency #2 is assessed

		through (a) a draft project section (i.e., evaluation methods) and (b) the final project submission. In the evaluation methods section of the proposal, students must select and justify quantitative and qualitative data collection methods appropriate for a Global South context in order to evaluate the efficacy/impact of their conceptualized intervention.
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	Quantitative: PHP 2508: Biostatistics and Data Analysis II or Quantitative: PHP 2511: Applied Regression Analysis	PHP 2508: Final exam and final project. Using STATA statistical software, students analyze a real public health database (e.g., BRFSS) to answer a public health question. The final project is a manuscript-like paper including the introduction, methods, results, and discussion of those analyses. In addition, students' ability to analyze quantitative data using computer-based software is assessed via the second section (i.e., Part B) of each of five assignments in which they are required to analyze data using STATA.
		PHP 2511: Homework assignments include a mixture of theoretical questions and analytic questions. Analytic portions of the homework include using RStudio software to run regression models on provided data, present the results and interpret the output in the context of the problem.
	Qualitative: PHP 2355: Designing & Evaluating Public Health Interventions or Qualitative: PHP 2720: Implementing Public Health Programs and Interventions in the Global South	PHP 2355 (Fall): Needs assessment assignment requires students to summarize a focus group transcript from a real needs assessment project.
		PHP 2355 (Spring): Through a series of assignments completed over the course of the semester, students develop a proposal for a public health program that addresses a need in a real-world population. In the third part of the fourth assignment, students analyze a focus group transcript.
		PHP 2720: Assessed through the implementation science reading reflection (Class 11). This assignment asks students to read and analyze a real qualitative transcript of a focus group discussion with key stakeholders of an implementation project. Students analyze this transcript for key barriers and facilitators of the implementation project and link these to potential implementation strategies.
4. Interpret results of data analysis for public health research, policy or practice	PHP 2508: Biostatistics and Data Analysis II or PHP 2511: Applied Regression Analysis	PHP 2508: Final project in which students write a manuscript-like paper including the introduction, methods, results, and discussion of analyses they have conducted to address a public health question using real public health data.
		PHP 2511: The Final Project requires students to identify a research question, acquire data to answer the question (e.g., national data set, data from advisor), plan an appropriate statistical analysis, and write a brief report to disseminate findings. This assignment is completed

		individually and over the course of the full semester. The final product is peer reviewed as a class requirement ahead of submission of the final product (paper) at the end of the semester.
Public Health & Health Care Systems		
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings	PHP 2071: Applied Public Health: Systems and Practice	Written assignment based on in-class exercise. Students research two countries (the US plus one additional country) and then work in groups to compare 4-5 countries.
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels	PHP 2071: Applied Public Health: Systems and Practice	Written assignment discussing structural bias, social inequalities, and racism based on reading and guest speakers.
Planning & Management to Promote Health		
7. Assess population needs, assets and capacities that affect communities' health	PHP 2355: Designing & Evaluating Public Health Interventions or PHP 2720: Implementing Public Health Programs and Interventions in the Global South	PHP 2355 (Fall): The final assignment is a PowerPoint presentation describing in detail the needs assessment conducted to prepare for an intervention in a particular population from which cultural values and practices are applied to the design of a population-based intervention. Students select and detail qualitative methods to include in this needs assessment. Students are required to select qualitative and quantitative methods for evaluating the process, impact, and outcomes of the intervention and describe the anticipated budget to conduct the intervention.
		PHP 2355 (Spring): Through a series of assignments completed over the course of the semester, students develop a proposal for a public health program that addresses a need in a real-world population. In the second part of the fourth assignment, students are asked to identify 2-3 key questions about the needs, assets, and capacities that affect the health problem they are focusing on that they would want to ask members of the community they will be working with in their program as part of a community needs assessment.
		PHP 2720: Through a series of assignments completed over the course of the semester, students develop a proposal for an evidence-based health intervention into a Global South setting. MPH Competency #7 is assessed through (a) a draft project section that includes a

		description of the health issue and identified needs/gap in literature and (b) the final project submission. In both the draft section and final project, students must present their critical analysis of the population health needs as well as a SWOT assessment (Strengths, Weaknesses, Opportunities, and Threats) for the Global South setting of their choosing.
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs	PHP 2355: Designing & Evaluating Public Health Interventions or PHP 2720: Implementing Public Health Programs and Interventions in the Global South	PHP 2355 (Fall): The final PowerPoint assignment includes a needs assessment conducted to prepare for an intervention in a particular population from which cultural values and practices are applied to the design of a population-based intervention. Cultural values and practices are considered in Modules 2-9 concerning the application of behavioral theory in intervention and evaluation plan development.
		PHP 2355 (Spring): Through a series of assignments completed over the course of the semester, students develop a proposal for a public health program that addresses a need in a real-world population. As part of the fifth assignment, students are asked to discuss how the intervention or policy program they propose fits with the cultural values and practices of the community they are serving or how they might adjust the intervention/policy program so that it better fits the cultural values or practices of the community.
		PHP 2720: Through a series of assignments completed over the course of the semester, students develop a proposal for an evidence-based health intervention into a Global South setting. MPH Competency #8 is assessed through (a) two draft sections of the proposal (Section A: Description of the health issue, identified needs/gap in literature, SWOT assessment and Section F: Description of influences of social, structural, political, and organizational processes on health disparities and health program development and implementation) and (b) the final project submission. In Section A, students design an intervention that takes into consideration the unique needs and assets of a community. Students have to discuss and support each aspect of their intervention design for the given health issue with specific reference to the needs and assets of that community and discuss how it is culturally appropriate. In Section F, students develop an intervention evaluation plan that uses rigorous methods that are culturally appropriate. Students must discuss issues such as validation in similar contexts and languages as well as appropriate evaluation methods for population considerations (e.g., give thought to evaluation

		administration methodology if a population has low literacy). This competency is particularly relevant for this course in which (typically) Global North researchers are designing interventions for a Global South setting, which likely differs substantially in terms of cultural values and practices, social and structural influences, and political contexts that need to be taken into consideration for the design and implementation of a public health program. Students are expected to provide a critical evaluation for how their intervention design takes into consideration these important factors.
9. Design a population-based policy, program, project or intervention	PHP 2355: Designing & Evaluating Public Health Interventions or PHP 2720: Implementing Public Health Programs and Interventions in the Global South	PHP 2355 (Fall): The final assignment for this course is a PowerPoint presentation describing in detail the planning and creation of an intervention for a particular population applying cultural values and practices to the design and evaluation of the intervention.
		PHP 2355 (Spring): Through a series of assignments completed over the course of the semester, students develop a proposal for a public health program that addresses a need in a real-world population. The final assignment is the finished proposal in which each section describes an aspect of a policy, program, or intervention they have designed (e.g., significance of the health problem, logic model, intervention/policy description, needs assessment plan). Each section corresponds with an assignment they have completed throughout the semester, with the final project incorporating instructor feedback. Students are also asked to give a brief final presentation describing each of these sections.
		PHP 2720: Through a series of assignments completed over the course of the semester, students develop a proposal for an evidence-based health intervention into a Global South setting. MPH Competency #9 is assessed by (a) two draft project sections—one that provides a logic model/study design and one that describes the intervention, and (b) the final project submission in which students design an intervention. Students may design a project that intervenes at the individual, interpersonal (couple, family, etc.), community, or structural level. Students are responsible for designing an intervention that takes into account the needs of the population and the specific constraints and assets associated with working within a Global South setting, which often has restricted resources.
10. Explain basic principles and tools of	PHP 2355: Designing & Evaluating Public Health Interventions	PHP 2355 (Fall and Spring): Assignment #7 asks students to compose a comprehensive list of all resources they will need in order to design,

budget and resource management	or PHP 2720: Implementing Public Health Programs and Interventions in the Global South	implement, and evaluate their intervention program, including human resources (e.g., staff, interventionists, medical professionals, trainers), and physical resources (e.g., office space, office supplies, graphic design, etc.). This list is drawn from lectures and discussion in the weeks prior to this assignment that are focused on itemizing resources needed to support programs. In this assignment, students are also asked to provide an estimate of the costs of each of these resources and organize them into a budget table reflecting the projected costs of their program.
		PHP 2720: Through a series of assignments completed over the course of the semester, students develop a proposal for an evidence-based health intervention into a Global South setting. MPH Competency #10 is assessed through (a) a draft section on resources and budget and (b) the final project. Students are expected to complete a budget for their proposed intervention as well as provide a budget justification for each category of expenses. Students also need to demonstrate substantial thought in terms of human resource management, for example matching the level of education required for an interventionist with the types of educational work force availability in their unique Global South setting.
11. Select methods to evaluate public health programs	PHP 2355: Designing & Evaluating Public Health Interventions or PHP 2720: Implementing Public Health Programs and Interventions in the Global South	PHP 2355 (Fall and Spring): Assignment #6 asks students to design both a process and impact/outcome evaluation of the intervention program they've designed. It asks them to create a very detailed plan for each of these evaluations, including selecting key outcomes for each, and describing how they will assess them, among whom, and when (during a recipient's trajectory through the program) they will assess these variables.
		PHP 2720: Through a series of assignments completed over the course of the semester, students develop a proposal for a study to evaluate the implementation of an evidence-based health intervention into a Global South setting. MPH Competency #11 is assessed through (a) a draft section of the proposal (i.e., evaluation methods) and (b) the final project submission. For this assignment, students create a rigorous evaluation plan for their intervention while balancing the availability of resources in their setting. Students will also demonstrate the appropriateness of specific scales and measurement methodologies for the cultural context, languages spoken, and literacy levels of the target population.
Policy in Public Health		

12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence	PHP 2072: Applied Public Health: Policy, leadership and communication	Health Policy Assignment: Written assignment: Students identify a current public health topic in a specific population that is important to their work. They discuss the multiple dimensions of the policy-making process by answering the following prompts. 1. Provide a brief overview of the topic. 2. Identify a major public health policy that has been enacted in the past 10 years in this topic. Describe the process through which the policy was enacted, including the evidence used to support or contradict the policy and what ethical considerations were a part of the process. 3. Identify a new policy you think should be enacted and present evidence for the proposed policy.
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes	PHP 2072: Applied Public Health: Policy, leadership and communication	Health Policy Assignment: Written assignment: Students identify a current public health topic in a specific population that is important to their work. To assess this competency the prompt asks them to: 1. Propose strategies to identify stakeholders and build coalitions via power mapping.
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations	PHP 2072: Applied Public Health: Policy, leadership and communication	Health Policy Assignment: Written assignment: Students identify a current public health topic in a specific population that is important to their work by answering the following prompts: 1. Identify a new policy you think should be enacted and present evidence for the proposed policy, including how it will improve health in diverse populations. 2. Create an advocacy plan.
15. Evaluate policies for their impact on public health and health equity	PHP 2072: Applied Public Health: Policy, leadership and communication	Health Policy Assignment: Written assignment: Students identify a current public health topic in a specific population that is important to their work by answering the following prompts: 1. How would you evaluate this policy for impact on public health and health equity? What measures would you use? What data would you use? What adverse impacts are possible in your target population(s) or other populations? How will you assess for possible adverse impacts?
Leadership		
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making	PHP 2072: Applied Public Health: Policy, leadership and communication	Written assignment: Students apply principles of leadership governance and management through a case study of an organization. (For most students this is their applied learning experience site. A student may, however, choose a different site with instructor permission). In a set of structured questions students first complete basic information about the site (vision/mission, governance and finance structure, populations served, how organization sets goals and activities to meet vision/mission

		(decision making)). Second, students gather information from a leader in the organization via brief structured interviews. Third, the students apply leadership skills in writing about how to guide the organization through change as if they were the new CEO/board director/president (leader) of the organization.
		A sample of prompts:
		  A. How would you adapt the vision of the organization to meet current pressing public health issues for the target populations?
		  B. What are 1-2 improvements that could be made for empowering employees/ volunteers/strategic partners of the internship site?
		  C. What organizations or groups do you think the internship site should collaborate with to achieve your vision from Part A? How can your internship site achieve collaboration with those organizations or groups and/or increase collaboration with current partners?
		  D. What are 1-2 other areas for improvement? How would you make decisions about implementing changes for these proposed improvements?

17. Apply negotiation and mediation skills to address organizational or community challenges	PHP 2072: Applied Public Health: Policy, leadership and communication	Students work on two in-class negotiations using "Preparing for Conflict and Negotiation: A Case Study on Perinatal Depression" from the Women's and Children's Health Policy Center at Johns Hopkins Bloomberg School of Public Health. During these sessions students apply negotiation and mediation skills by assuming different roles in negotiations and coming up with workable solutions to intra- and inter-agency budget and priority issues. A written assignment based on the second in-class exercise asks the students:
		  1. How effective was the negotiation in gaining a workable solution?
		  2. How would you characterize the differences in positions among the characters?
		  3. How did the negotiations in this round differ from those in the first round?
		  4. Were the major players able to distinguish the problem from the people?
		  5. What could you have done differently to negotiate a better outcome?

Communication		
18. Select communication strategies for different audiences and sectors	PHP 1001 (online course): Public Health 1001	In a short essay, students select communication strategies appropriate for a given audience, and describe the importance of cultural competence in that communication.
19. Communicate audience-appropriate public health content,	PHP 2072: Applied Public Health: Policy,	Students present audience-appropriate public health content orally and in writing in their Applied Public Health Experience. PHP2071:

both in writing and through oral presentation	leadership and communication	Applied Public Health: Systems and Practice presents the material, and students incorporate this into their APHE proposal. SPH then provides the APHE mentors at all sites with a standardized rubric for assessing students' communication of audience-appropriate public health content. Mentors complete the rubric, which they supplement with qualitative comments. The 2072 instructor factors the rubric and comments into students' course grades and provides students with feedback on their communication skills. (For the APHE mentor evaluation form, which includes the communicate audience-appropriate public health content rubric, see ERF).
20. Describe the importance of cultural competence in communicating public health content	PHP 1001 (online course): Public Health 1001	In a short essay, students select communication strategies appropriate for a given audience, and describe the importance of cultural competence in that communication.
Interprofessional Practice		
21. Perform effectively on interprofessional teams	PHP 2072: Applied Public Health: Policy, leadership and communication	Students submit a form to the instructor of PHP 2072: Applied Public Health: Policy, Leadership, and Communication in order for him or her to review and approve their Applied Public Health Experience (APHE). So that students can use the interprofessional team skills they were taught in 2071: Applied Public Health: Systems and Practice in their APHE, the form requires students to provide evidence that they will be working on an interprofessional team during the experience. SPH provides the APHE mentors at all sites with a standardized rubric for assessing students' effectiveness on the interprofessional team. The rubric is based on the IPEC competencies outlined on CEPH's site. Mentors complete the rubric, which they supplement with qualitative comments. The 2072 instructor factors the rubric and comments into students' course grades and provides students with feedback on their interprofessional skills. (For the APHE application form and APHE mentor evaluation, which includes the interprofessional competency rubric, see ERF).
Systems Thinking		
22. Apply systems thinking tools to a public health issue	PHP 2071: Applied Public Health: Systems and Practice	Written assignment based on an in-class exercise in which students work in groups in class on an incomplete information vignette. They work through defining the problem, assessing goals and unintended consequences of an intervention, and proposing a rapid PDSA cycle. The in-class exercise includes having students draw a causal loop diagram prior to writing the text.

3) Include the most recent syllabus from each course listed in Template D2-1, or written guidelines, such as a handbook, for any required elements listed in Template D2-1 that do not have a syllabus.

Each of the following syllabi can be found in the ERF:
- PHP 2120: Introduction to Methods in Epidemiologic Research
- PHP 2150: Foundations in Epidemiologic Research Methods
- PHP 2355: Designing & Evaluating Public Health Interventions
- PHP 2720: Implementing Public Health Programs and Interventions in the Global South
- PHP 2508: Biostatistics and Data Analysis II
- PHP 2511: Applied Regression Analysis
- PHP 2071: Applied Public Health: Systems and Practice
- PHP 2072: Applied Public Health: Policy, leadership and communication
- PHP 1001: Public Health 1001

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: Consistent with the Brown philosophy of providing individualized education, we provide choice for 4 of the 6 courses required for the foundational competencies. This helps students individualize their education even as they all receive training in the foundational competencies. For instance, there are two options for Epidemiology and two options for the Biostatistics sequences. While we have provided one example of assessment for each course that addresses a foundational competency, many competencies are addressed in multiple courses. Students have opportunities to learn the competency from different perspectives and demonstrate the competency in different ways. For instance, multiple courses have students communicate audience-appropriate public health content. Two half-credit courses (PHP 2071 & PHP 2072) were designed specifically to address some foundational competencies. These courses weave preparing for, experiencing, and reflecting on the Applied Public Health Experience (APHE) into course content. This helps students make important connections between their applied work and the foundational competencies. For instance, students use their APHE to apply principles of leadership, governance and management. In PHP 2071: Applied Public Health: Systems and Practice, they prepare the groundwork for understanding an organization. During their time at an organization, they interview a leader of the organization, and in PHP 2072: Applied Public Health: Policy, Leadership and Communication, they answer questions as if they were a new leader of the organization about developing a vision, empowering others, fostering collaboration, and guiding decisions.

Challenges: Having student choice in which courses to take introduces complexity in ensuring that there is consistency in student attainment of the competencies despite independent ways of assessing the competencies.

Plans: We continuously review the courses that are responsible for assessment of foundational competencies. For instance, 2019 student feedback indicated that too many competencies were being assessed in two half-credit courses, resulting in courses that were overloaded. We re-distributed assessment of two foundational competencies to another course to help with this balance. We will continue to monitor student feedback about courses in general and about competency attainment in the MPH program specifically.

D3. DrPH Foundational Competencies (if applicable)

Not applicable.

D4. MPH & DrPH Concentration Competencies

The school defines at least five distinct competencies for each concentration or generalist degree at each degree level in addition to those listed in Criterion D2 or D3.

The school documents at least one specific, required assessment activity (e.g., component of existing course, paper, presentation, test) for each defined competency, during which faculty or other qualified individuals (e.g., preceptors) validate the student's ability to perform the competency.

If the school intends to prepare students for a specific credential (e.g., CHES/MCHES) that has defined competencies, the school documents coverage and assessment of those competencies throughout the curriculum.

1) Provide a matrix, in the format of Template D4-1, that lists at least five competencies in addition to those defined in Criterion D2 or D3 for each MPH or DrPH concentration or generalist degree, including combined degree options, and indicates at least one assessment activity for each of the listed competencies. Typically, the school will present a separate matrix for each concentration.

D4-1: MPH Epidemiology Concentration		
Competency	**Course**	**Specific assessment Opportunity**
1. Write an original research paper based on an epidemiologic research question formulated to help fill the gaps in a given substantive area.	PHP 2260: Applied Epidemiologic Data Analysis	Final Research Paper: Students prepare an original research paper on a topic of interest using an available dataset. Within the research paper, students must pose their own research question(s) along with relevant hypotheses. They also must include an introduction/ background section which reviews relevant literature, including gaps in knowledge, and a rationale for the need of their particular research question.
2. Evaluate strengths and weaknesses of study designs commonly used in epidemiologic research for answering epidemiologic research questions.	PHP 2200: Intermediate Methods in Epidemiologic Research	Homework 2 and Exam 1 test students' understanding of common study designs used in epidemiologic research including the circumstances under which one design may be preferred over another and the limitations of different sample statistics depending on the underlying study design. Specifically, students are given a series of epidemiologic research questions and asked to evaluate the most appropriate study design for answering the question and interpret estimates based on their answer. Students are also graded on their ability to evaluate the strengths and weaknesses of each design for answering the given research question.
3. Use causal diagrams to identify threats to study validity and approaches to minimize such threats.	PHP 2200: Intermediate Methods in Epidemiologic Research	All four of the homework assignments either ask students to construct a causal diagram, specifically a directed acyclic graph (DAG), for a given scenario or to interpret a provided DAG.

D4-1: MPH Epidemiology Concentration		
Competency	**Course**	**Specific assessment Opportunity**
		In each homework, students are graded on (1) their ability to identify threats to validity, specifically confounding and selection bias, based on the appropriate DAG for the research question posed and (2) explain the best approach for minimizing the threat to validity within the context of the topic being covered. For example, in homework 3 students are asked to use standardization methods for obtaining unbiased estimates based on the DAG, whereas in homework 4 they are asked to use regression methods.
4. Develop and implement the most appropriate analysis plan to analyze data to answer a specific epidemiologic research question.	PHP 2200: Intermediate Methods in Epidemiologic Research	In Homework 3 and 4 students are provided a research question and a dataset and are required to develop and then implement an appropriate analysis plan for analyzing data to answer the specific epidemiologic research question. Students are graded on the clarity of the analytic plan, the interpretation of their results, and the appropriateness of their conclusions.
5. Evaluate scientific evidence regarding a specific epidemiologic research question.	PHP 2180: Interpretation and Application of Epidemiology	Students are evaluated based on their participation in class discussion, specifically the extent to which they are able to assess epidemiologic study quality for application to public health questions. The midterm and final exam call for an evaluation of an assigned article with questions to be answered that require identifying and weighing the key determinants of study quality, including susceptibility to biases and random error and the study's implications for public health decisions. The course paper calls for selection of an article from the literature and interpreting the study's contribution for three different audiences: epidemiology colleagues, health department officials, and the media/general public. This exercise requires examining and distilling information for translation to scientists, public health practitioners, and the lay public.
6. Justify the design and analysis for their own epidemiologic study.	PHP 2260: Applied Epidemiologic Data Analysis	Final Research Paper: Students prepare an original research paper on a topic of interest using an available dataset. After choosing the dataset and research question, students must propose the

D4-1: MPH Epidemiology Concentration		
Competency	**Course**	**Specific assessment Opportunity**
		appropriate methodological/analytic approach to best answer their research question(s) using their dataset. They also must include a methods section that describes and justifies their analytic approach for their own epidemiologic research study.
7. Write and present the findings and implications of their own epidemiologic study.	PHP 2260: Applied Epidemiologic Data Analysis	Final Research Paper and Final Presentation. For the Final Research Paper, students prepare their own original research paper on a topic of interest using an available dataset. Within the research paper, students must include introduction/background, methods, results, discussion, and appropriate tables for presenting results. The paper is formatted as a publishable-quality manuscript. For the Final Presentation, students present their original research to the class, including the key findings and implications.
8. Select the most appropriate epidemiologic study design that can be used to answer a specific epidemiologic research question.	PHP 2200: Intermediate Methods in Epidemiologic Research	Homework 2 and Exam 1 test students understanding of common study designs used in epidemiologic research including the circumstances under which one design may be preferred over another and the limitations of different sample statistics depending on the underlying study design. Specifically, students are given a series of epidemiologic research questions and asked to evaluate the most appropriate study design for answering the question and interpret estimates based on their answer. Students are also graded on their ability to evaluate the strengths and weaknesses of each design for answering the given research question.

D4-1: MPH Global Health Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
1. Evaluate the population health measures of a specific global health a) infectious disease, or closely related disease, and b) a non-communicable disease (NCD) in a specific low and middle income country (LMIC), or region, or in a resource poor defined population.	PHP 2710: Interdisciplinary Perspectives on Disability and Death in the Global South	In specific weeks' analytic writings, students describe the population health measures for specific diseases, including the extent of the health problem, risk factors, temporal trends, and associations of these diseases with, proximate risk factors, and more ultimate structural historical, socio-economic, political, and environmental factors.
2. Apply a health equity framework to a specific global public health issue.	PHP 2730: Including the Excluded: Global Health Ethics	Evaluated through a critical reading response using the following prompt: "In this reading response, you should explicitly discuss how the reading guides your thinking on how to advance health equity; you may wish to describe how the reading has informed your planning for a future global health project and/or research. Your response should put forth a critical argument and detail questions that are raised by reading."
3. Evaluate best practices for establishing global research collaborations.	PHP 2740: Learning Global Health by Doing Global Health	Assessed in <u>at least two</u> required weekly critical analytic writing assignments based on in-depth reading of multidisciplinary texts on the topic of best practices in collaborative global engagement. Further assessed in the final paper for the semester, a critical essay on stakeholder engagement and best practices for field research.
4. Analyze strategies for implementing rigorous ethical approaches to research with vulnerable populations and conduct of global research.	PHP 2730: Including the Excluded	Evaluated through a midterm paper in which students present their critical analysis of strategies for implementing rigorous ethical approaches to research with vulnerable populations and conduct of global research by presenting a study proposal that coincides with a Brown IRB application including if applicable, an amendment to an existing parent study if the project is nested within a faculty member's IRB-approved parent study.

D4-1: MPH Global Health Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
5. Ensure intervention designs are both culturally appropriate, reflecting the needs within resource-constrained settings, and have sufficient rigor to provide quality evidence.	PHP 2720: Implementing Public Health Programs and Interventions	Through a series of assignments completed over the course of the semester, students develop a proposal for an evidence-based health intervention into a Global South setting. MPH Global Health Competency #5 is assessed through (a) two draft sections of the proposal and (b) the final project submission. In the first section of the proposal that is used to assess this competency, students design an intervention that takes into consideration the unique needs and assets of a community. Students have to discuss and support each aspect of their intervention design for the given health issue with specific reference to the needs and assets of that community and discuss how it is culturally appropriate. In the second section of the proposal used to asses this competency, students develop an intervention evaluation plan that uses rigorous methods that are culturally appropriate. Students must discuss issues such as validation in similar contexts and languages, as well as appropriate evaluation methods for population considerations (e.g., give thought to evaluation administration methodology if a population has low literacy).
6. Apply an implementation science theory, model, or framework to the development of a research study to test an implementation strategy in a global setting.	PHP 2720: Implementing Public Health Programs and Interventions	Implementation Evaluation Proposal. In a separate assignment from the one in which students propose a health intervention, students select an existing evidence-based intervention and design a study to evaluate the implementation of that intervention in a Global South setting. MPH Global Health Competency #6 is assessed through students' implementation science evaluation proposals and presentations. These proposals are to have an implementation logic model, overview of the implementation science framework that inform the research design, and description of the research methods to be used, including the operationalization of implementation strategies.

D4-1: MPH Global Health Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
7. Develop an inventory of multi-disciplinary programs, initiatives, organizations, and policies that contain key interventions to address global health inequalities.	PHP 2710: Interdisciplinary Perspectives on Death & Disability in the Global South	Students in week 6 of the course develop through reading assignments and their chosen health conditions a comprehensive inventory of current programs, initiatives, organizations, and policies tbat act to intervene on a specific disease or risk factor in a specific global region or low or middle income country.
8. Design, write, and present a health brief reporting research findings from global health research.	PHP 2760: Critical Perspectives in Global Health	Assessed through a major assignment in which students design, write, and present a health brief reporting research findings from their own or other research, in a format suitable for a public health or lay audience. The assignment is in the form of a pamphlet or informational poster.

D4:1 MPH Health Behavior Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
1. Explain the similarities and differences, strengths and weaknesses of predominant behavioral and social science theories for public health.	PHP 2340: Behavioral and Social Science Theory for Health Promotion	Assessment: Midterm and Final Exam Sample question: What is the major strength of the transtheoretical model compared to social cognitive theory and the theory of planned behavior? What is a weakness of the transtheoretical model? What is the major strength of Rothman's theory of behavioral maintenance compared to the transtheoretical model?
2. Apply the component principles of behavioral and social science theories to health behaviors.	PHP 2340: Behavioral and Social Science Theory for Health Promotion	Assessment: Midterm and Final Exam Sample question: Imagine you are asked to promote exercise among older adults in an assisted living facility. You first want to understand the beliefs that they have about exercise. Based on the guidelines provided in your readings on the theory of planned behavior, how would you go about doing this? Next, you want to develop an intervention to target change in 2-3 beliefs that will in turn lead to increases in exercise behavior. What information would help you determine which beliefs to target?
3. Examine how behavioral and social science theories can be used to facilitate change in health-related behaviors.	PHP 2340: Behavioral and Social Science Theory for Health Promotion	Assessment: Midterm and Final Exam Sample question: Describe four components of a potential multi-faceted soft-drink reduction intervention. The four intervention

D4:1 MPH Health Behavior Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
		components should be informed by one concept each from (a) the social-cognitive framework (or one of the theories consistent with the SCT framework); (b) the dual process framework; (c) the ecological framework; and (d) the critical-cultural paradigm.
4. Apply principles of health literacy and communication best practices to develop a brief health communication.	PHP 2380: Health Communications	Data/Policy Brief: This assignment requires students to write a two-page data or policy brief that is targeted to a specific audience and adheres to recommended practices for written communications.
5. Design health communications to promote behavior change that results in decreased risks for disease and/or promote wellness.	PHP 2380: Health Communications	Social Marketing Project: The Social Marketing Project, which is composed of two written graded assignments, requires students to develop a proposal for a health communication campaign. In Part 1, they conduct the social marketing research and analysis that will be the foundation of the campaign. In Part 2, they (a) develop a communication strategy, including describing their campaign materials and how they would pilot test them, (b) explain how they would implement the campaign, and (c) detail how they would evaluate the campaign.
6. Develop a plan to monitor and assess the reach, fidelity, and outcome of health communications.	PHP 2380: Health Communications	Social Marketing Project Part 2. The Social Marketing Project, which is composed of two written graded assignments, requires students to develop a proposal for a health communication campaign. A core component of Part 2 includes students' development of an evaluation plan for their campaign, including how they would assess short- and medium-term outcomes and gather data. Students are to include a logic model or PRECEDE-PROCEED diagram that summarizes their evaluation plan.
7. Examine the causes and consequences of health disparities from the perspective of multiple behavioral and social science perspectives.	PHP 1650, Race, Racism and Health or	Assessment: Students will be expected to engage in discussions related to the causes and consequences of racial and ethnic disparities and will be expected to synthesize their understanding of these disparities on exams and a term paper.
	PHP 1920: Social Determinants of Health or	Term Paper: Literature review of evidence on a specific social determinant of health. This may include presenting on the state of evidence for a novel potential social circumstance that was only minimally, or not covered, in class or presenting the

D4:1 MPH Health Behavior Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
		evidence of how a particular social circumstance covered in class may influence a particular health outcome not covered in class. Students are encouraged to utilize Hill's criteria of causal inference as a guide to evaluate the level of evidence on a social determinant of health.
	PHP 2325: Place Matters: Exploring Community-Level Contexts on Health Behaviors or	Public Health in Practice (PHiP): (1) identify relevant measures to conduct built environment assessments; (2) provide background literature to frame the need to conduct these assessments and how these built environment features relate to health outcomes; (3) train your team in the use of these built environment assessment; (4) detail methods of your approach to built environment assessments; (5) conduct these built environment assessments within defined areas of the city of Providence; (6) conduct inter-rater reliability of the scores from each team member; (7) draft a manuscript; (8) present your findings using a TEDx style "Ignite" presentation format; and (9) create a policy brief.
	PHP 2365: Public Health Issues in LGBT Populations	Final paper: A researched and professionally written scientific qualitative or quantitative paper addressing a specific health issue relevant to LGBT or sexual/gender minority populations. The paper must: Address an issue of public health significance; Be grounded in a theoretical/conceptual framework; Describe research methods, analysis, and findings; and Offer evidence-based conclusions and recommendations

D4-1: Health Services Research Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
1. Organize and present information drawn from multiple sources that characterize the economic, political and financial forces that shape the way in which the health care system interacts.	PHP 2400: The US Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health	Assessed multiple times in the course through Homework Assignments; Weekly Online Discussion Submissions; Case Study; and Final Paper. As an example, the final paper is an individual submission of a report or research paper on a topic of the student's choosing relevant to the course. Each student's submission is evaluated against a rubric

D4-1: Health Services Research Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
		with components including relevant research, political analysis, original data analysis, findings and conclusions, and limitations and areas for further work. Details of the homework assignments, weekly online discussion submissions and case study are provided in an appendix to the syllabus in the ERF.
2. Critically evaluate the relative strengths and weaknesses of evidence and research regarding the performance of components of the health care system.	PHP 2400: The US Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health	The final paper requires students to identify research and to conduct analyses to investigate their paper topic and to support their findings, conclusions, and recommendations. Students must also identify limitations in their research and suggest further work as appropriate. The midterm exam requires that students critically evaluate the relative strengths and weaknesses of evidence and research about performance of health care systems. Examples of prompts are provided in an appendix to the syllabus in the ERF.
3. Design a primary data gathering instrument/protocol.	PHP 2060: Qualitative Research Methods or	Create and refine interview/focus group protocol. The assignment occurs in several steps and requires students to create questions designed to illuminate the research topic. Through interaction and feedback from classmates and instructors, students design, cognitively test, and refine questions for an interview or focus group protocol to explore their topic. Students are required to include specific types of questions, worded in open-ended format, including grand tour and follow-up questions, as well as examples of probes. The product of this assignment is a refined interview/focus group protocol, prepared in a professional manner. This protocol is then used to conduct interviews/focus groups as part of the final project.
	PHP 2040: Survey Research Methods	Paper-based questionnaire assignment: The questionnaire design assignment requires students to develop a questionnaire. Students are required to include specific types of questions, improve wording, question order, structure, format, and coding as appropriate. The product of this assignment is a questionnaire, prepared in a professional manner.

D4-1: Health Services Research Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
4. Collect primary data to address a public health issue.	PHP 2060: Qualitative Research Methods or	Final project: The Final Project consists of an oral presentation to the class and a final paper. Students choose a topic of interest and a mode of data collection (interviews or focus groups) to explore the targeted public health issue. Students are required to identify a sample of potential participants for data collection, create a strategy to recruit participants, conduct interviews or focus groups with these participants, and construct and maintain an audit trail. They enter qualitative data into NVivo or a similar software package and conduct a rigorous analysis to code transcripts and identify themes.
	PHP 2040: Survey Research Methods	Final Project: The Final Project requires students to plan and conduct a small-scale primary data collection project. Students choose a topic of interest, design and administer a data collection protocol, enter data from the questionnaires into a statistical package, analyze the data using appropriate descriptive and analytic procedures, and present and evaluate the results into a written document.
5. Evaluate the strengths and limitations of primary data collection methods.	PHP 2060: Qualitative Research Methods or	Final paper and oral presentation: Students conduct an 8-10 minute oral presentation to the class, including a slide set that documents the public health issue, incorporates the background, methodological steps, resulting themes, supporting quotes, and discussion, including strengths and limitations of their chosen primary data collection method. The required 8-10 page final paper must be accompanied by supporting documents that include all coded transcripts and a fully developed audit trail.
	PHP 2040: Survey Research Methods	Final Exam Example Questions: 1. When surveying health professionals, which mode of data collection has the highest response rate? 2. What are the characteristics of web-based survey software to consider when deciding which to use for a study?
6. Develop a performance measure.	PHP 2450: Measuring and	Assignment 1. This assignment requires students to develop a performance

D4-1: Health Services Research Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
	Improving the Quality of Health Care	measure in an area of interest. Students must define how they would collect the indicator, including the source of data, the eligible population, and the numerator and denominator, if applicable. They must also describe why this indicator meets the criteria of a desirable quality indicator as described by AHRQ.
7. Develop a hypothetical run chart to assess whether an intervention to improve performance was successful.	PHP 2450: Measuring and Improving the Quality of Health Care	Assignment 4. Using the performance measure students developed in Assignment 1, they describe an intervention to improve performance on the measure and develop a hypothetical run chart to assess whether the intervention was successful. This website provides a template and description.
8. Develop a pay-for-performance scheme to enhance a quality improvement effort.	PHP 2450: Measuring and Improving the Quality of Health Care	Assignment 5: For the same performance measure students developed in Assignment 1, they develop a pay-for-performance scheme. Students must describe the key design features, including the level of accountability, the type and magnitude of the incentive, and how rewards/penalties are assigned. They will discuss potential unintended consequences they would be concerned about.

D4-1: Maternal and Child Health Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
1. Evaluate the extent of a maternal and child health problem in a defined population.	PHP 2023: Maternal and Child Health in the US	Assignment 1. Over the course of the semester, students create an action plan to address a maternal and child health problem in a specific community, usually the State of Rhode Island, but other communities may be the focus. The first assignment focuses on the "Extent of the Problem and Risk Factors." When possible, this should include a range of data covering the current and historical burden of the health problem in Rhode Island, including time trends, factors that contribute to the extent of the problem, geographic patterns, risk factors and disparities, national and/or regional comparisons, etc.

D4-1: Maternal and Child Health Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
2. Recommend the interventions a defined community should undertake to address a given maternal or child health problem.	PHP 2023: Maternal and Child Health in the US	Assignment 3. Based on their work in two previous assignments, in Assignment 3 students complete a summary and action plan to address the issue they identified in Assignment 1 so that within five years, Rhode Island (or the target community) could see substantial health gains on this issue. This includes: • How is RI (or the target community) doing, relative to where it could or should be? (One to two pages, double spaced, normal font, plus references). • Three to four recommendations of the most important things Rhode Island should do to see substantial health gains on this issue. (No more than four pages, double spaced, normal font, plus references for each recommendation). In addition to the written assignment, students also present the summary and recommendations in class.
3. Evaluate the effectiveness of policies related to maternal or child health.	PHP 1950: Adolescent and Young Adult Health	Students research a policy or program and write a synthesis of the evidence that supported the development of the policy/program and evaluate its effectiveness.
4. Concisely synthesize data from studies on barriers to maternal or child health.	PHP 1950: Adolescent and Young Adult Health	Homework 1 and 2: Students synthesize results from multiple studies, identify the most common barriers to health, and propose possible solutions to overcome the barriers.
5. Critique the methods used in maternal or child health epidemiologic research.	PHP 2220F: Reproductive and Perinatal Epidemiology	Reading Reflections, Class Discussion, Midterm, and Final Exam: Students critically evaluate epidemiologic research methods through their weekly reflections on assigned readings and participation in class discussions during which scientific articles are critiqued in a journal club format.
6. Use age-appropriate epidemiologic methods to design a study of maternal or child health.	PHP 1900: Epidemiology of Disorders and Diseases of Childhood and Young Adulthood	Homework 1, 2, 3, and 4: Students propose how they would study a particular disorder or disease (e.g., asthma, autism) addressing such questions as: What age range should be studied? Who could provide valid information on the exposures and outcomes? What study design should be used? Students must address research relevant to childhood, adolescence, and young adulthood. Students must use references that cite original research papers.

D4-1: Mindfulness Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
1. Evaluate the evidence for mindfulness's impact on physical and mental health.	PHP 1880: Meditation, Mindfulness and Health	Exams: Weekly exams are focused on specific health outcomes or mindfulness interventions. Paragraph questions assess knowledge about relative impacts of mindfulness on physical health and mental health to fulfill the following learning outcomes: • Explain the state of the evidence on causal associations between mindfulness and various health outcomes and disease risk factors (e.g., obesity, physical activity, sleep, depression, and anxiety). • Describe plausible mechanisms by which mindfulness may influence health. Term Paper: The topic of the term paper is a literature review of evidence on the relation between a specific mindfulness intervention and a particular health outcome. For example, the paper could present on the state of evidence for a novel mindfulness intervention that has not been covered in class, or only minimally covered in class (e.g., Mindfulness-Based Relapse Prevention, Prison Mindfulness Institute Intervention, Mindfulness-Based Eating Awareness Training, and Dialectical Behavior Therapy and Health). Another option would be to present on the evidence of how a particular mindfulness-based intervention already covered in class (e.g., Mindfulness-Based Stress Reduction, Mindfulness-Based Cognitive Therapy) may influence a particular health outcome that was not covered in class (e.g., diabetes). Students are encouraged to utilize Hill's criteria of causal inference as a guide to evaluate the level of evidence on the mindfulness-based intervention. This is a chance for students to delve more deeply in an area that they are particularly interested in. The papers should include: • State of the evidence on causal associations between the mindfulness-based intervention and the health outcome

D4-1: Mindfulness Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
		• Plausible mechanisms by which the mindfulness-based intervention could influence health. • Assessment of studies in the field for methodological rigor. • Strengths and weaknesses of current research on this topic
2. Analyze the strengths and limitations of the major types of mindfulness interventions.	PHP 1880: Meditation, Mindfulness and Health	Week 6 Quiz: Impacts of Mindfulness on Anxiety: Question #1: Please describe the overall relative strengths and limitations of (A) in-person vs. online mindfulness-delivered interventions, and more specifically (B) the in-person Mindfulness-Based Stress Reduction program vs. the online app Unwinding Anxiety. Week 8 Quiz: Acceptance and Commitment Therapy: Question #2: Please compare the strengths and limitations of Acceptance and Commitment Therapy vs. Mindfulness-Based Stress Reduction. Include the following areas in your answer: (A) participant burden, (B) intervention efficiency, (C) ability of program to adapt to specific patient characteristics (e.g., gender, race, culture), and (D) how well each program fits within the medical system and related health insurance reimbursement.
3. Assess the methods researchers have used to understand the mechanisms of mindfulness.	PHP 1885: Measuring Mindfulness	Homework. Each week students are required to read primary research on mindfulness and write a synopsis in which they discuss the pros and cons of the papers' methodology for measuring mindfulness.
4. Utilize a directed acyclic graph (DAG) to develop a testable theoretical framework for how mindfulness interventions influence health outcomes.	PHP 1895: Mindfulness Epidemiology	Exams. The exams are composed of short answer and short essay (e.g., 1-2 paragraph answer) questions. The questions aim to assess whether students are able to utilize a directed acyclic graph (DAG) to develop a testable theoretical framework for how mindfulness interventions could influence a health outcome, including confounders, effect measure modifiers, and mediators. Term Paper: the topic of the term paper is a methodologically rigorous protocol

D4-1: Mindfulness Concentration		
Competency	**Course**	**Specific Assessment Opportunity**
		for a mindfulness study, including considerations such as study population, generalizability, study setting, study design, primary outcomes, confounders, mediators, effect modifiers, follow-up time, data analysis plan, strengths, and limitations, along with clinical and population health implications of the study design. A directed acyclic graph must be included to depict the hypothesis being tested, alongside mediators, effect modifiers, and confounders.
5. Create a mindfulness research protocol and data analysis plan.	PHP 1895: Mindfulness Epidemiology	Term Paper. The topic of the term paper should be a methodologically rigorous protocol for a mindfulness study, including considerations such as study population, generalizability, study setting, study design, primary outcomes, confounders, mediators, effect modifiers, follow-up time, data analysis plan, strengths, and limitations, along with clinical and population health implications of the study design.

2) For degrees that allow students to tailor competencies at an individual level in consultation with an advisor, the school must present evidence, including policies and sample documents, that demonstrate that each student and advisor create a matrix in the format of Template D4-1 for the plan of study. Include a description of policies in the self-study document and at least five sample matrices in the electronic resource file.

Students who are in the Generalist Concentration develop their competencies with the guidance of the Generalist Concentration Lead. Each concentration has an identified faculty Concentration Lead. The Concentration Faculty Lead provides leadership in the development, refinement, and implementation of the concentrations in the MPH Program at the School. In addition to the responsibilities of all Concentration Leads, the Generalist Concentration Lead is responsible for working "with students to identify their area of study and develop competencies and a course plan that meets CEPH requirements." Students work with their Core Advisors and the Concentration Lead through their first semester to identify competencies and ensure that the competencies will be evaluated in their Concentration Courses. The overall policies about the Generalist Concentration are available on its web page.

All students complete an Academic Plan by the first day of classes of their second semester. In the course plan, students identify their concentration. Students selecting a Generalist Concentration identify at least five competencies that align with the courses listed in their Concentration Course Selection (see MPH Academic Form Template in ERF).

The following are five examples of recent student competency grids for students selecting the generalist concentration (see ERF):

- Example 1: Health Communications in Pediatric Emergency Medicine

- Example 2: Gerontology
- Example 3: Design Thinking in Healthcare
- Example 4: Health Justice
- Example 5: Humanitarian Response in Global Emergency Care

3) Include the most recent syllabus for each course listed in Template D4-1, or written guidelines for any required elements listed in Template D4-1 that do not have a syllabus.

Each of the following syllabi can be found in the ERF:

Epidemiology MPH Concentration
    PHP 2180: Interpretation and Application of Epidemiology
    PHP 2200: Intermediate Methods in Epidemiologic Research
    PHP 2260: Applied Epidemiologic Data Analysis

Global Health MPH Concentration
    PHP 2710: Interdisciplinary Perspectives on Disability and Death in the Global South
    PHP 2720: Implementing Public Health Programs and Interventions
    PHP 2730: Including the Excluded: Global Health Ethics
    PHP 2740: Learning Global Health by Doing Global Health
    PHP 2760: Critical Perspectives in Global Health

Health Behavior MPH Concentration
    PHP 2340: Behavioral and Social Science Theory for Health Promotion
    PHP 2380: Health Communications
    PHP 1920: Social Determinants of Health
    PHP 2325: Place Matters: Exploring Community-Level Contexts on Health Behaviors
    PHP 2365: Public Health Issues in LGBT Populations

Health Services MPH Concentration
    PHP 2040: Survey Research Methods
    PHP 2060: Qualitative Research Methods
    PHP 2400: The US Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health
    PHP 2450: Measuring and Improving the Quality of Health Care

Maternal and Child Health MPH Concentration
    PHP 1950: Adolescent and Young Adult Health
    PHP 1900: Epidemiology of Disorders and Diseases of Childhood and Young Adulthood
    PHP 2023: Maternal and Child Health in the US
    PHP 2220F: Reproductive and Perinatal Epidemiology

Mindfulness MPH Concentration
    PHP 1880: Meditation, Mindfulness and Health
    PHP 1885: Measuring Mindfulness
    PHP 1895: Mindfulness Epidemiology

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The 2016 CEPH Criteria changes have provided exciting opportunities to design concentrations that have depth and can engage students in a methodologic or substantive area. Faculty throughout the School have been actively engaged with input from students and alumni through the MPH curriculum committee. This process has led to new course offerings, clear competency statements, and greater engagement in the concentration areas, including identifying

strong faculty leads for each concentration and centering the concentration in a department or research center for support of the students.

Challenges: The focus on concentrations is a major change in our MPH Program, which had heavily focused on the Generalist approach. As a very new model, developing vibrant concentrations is an iterative process, working through the specifics of competencies, course selections, applied learning experiences, and systems development. This has required incremental changes during the development period, which can be challenging as new programs develop, existing ones substantially refined, and some eliminated. We have focused on flexibility to help students maximize their experience during this time of change.

Plans: We will focus on continuing quality improvement for the existing MPH concentrations and will explore opportunities for developing new concentrations in emerging areas of strength in the School.

D5. MPH Applied Practice Experiences

MPH students demonstrate competency attainment through applied practice experiences.

The applied practice experiences allow each student to demonstrate attainment of at least five competencies, of which at least three must be foundational competencies (as defined in Criterion D2). The competencies need not be identical from student to student, but the applied experiences must be structured to ensure that all students complete experiences addressing at least five competencies, as specified above. The applied experiences may also address additional foundational or concentration-specific competencies, if appropriate.

The school assesses each student's competency attainment in practical and applied settings through a portfolio approach, which demonstrates and allows assessment of competency attainment. It must include at least two products. Examples include written assignments, projects, videos, multi-media presentations, spreadsheets, websites, posters, photos or other digital artifacts of learning. Materials may be produced and maintained (either by the school or by individual students) in any physical or electronic form chosen by the school.

1) Briefly describe how the school identifies competencies attained in applied practice experiences for each MPH student, including a description of any relevant policies.

All MPH students complete an Applied Public Health Experience (APHE). The School has a full-time Applied Learning Experience & Professional Development Coordinator who works with the MPH Associate Director of Public Health Practice to develop and maintain APHE sites for students. The MPH Program maintains active connection with multiple local and international sites in which students have APHE placements. Examples are shown in Table D5-2. Students are free to identify their own APHE site provided they secure a mentor and obtain the approval of the instructor of PHP 2071: Applied Public Health: Systems and Practice.

To enable students to design their APHE, the School provides guidance starting in the MPH program's new student orientation and throughout the first semester of the program. Table D5-1 delineates the structured activities conducted prior to the spring semester of the first year that are designed to prepare students for the APHE.

D5-1: First-Year MPH Activities Associated with Applied Public Health Experience			
Time period	**Activity**	**Applied Public Health Experience (APHE) Relevance**	**People involved**
Orientation	Curriculum overview	APHE requirements and opportunities presented	MPH Director; MPH Associate Director of Public Health Practice
Orientation	Public Health: Ready, Set, Go!	Individual and group activities take place to identify skills, knowledge, and experience needed for their career trajectories. Students then brainstorm public health organizations in which those skills, knowledge, and experience can be obtained.	MPH Associate Director of Public Health Practice; Coordinator for Applied Learning Experience & Professional Development
September and forward	Emails of new APHE Opportunities	APHE opportunities are emailed to all MPH students as the opportunities arise. The Coordinator for Applied Learning Experience & Professional Development sends a follow-up email to students for	Coordinator for Applied Learning Experience & Professional Development

D5-1: First-Year MPH Activities Associated with Applied Public Health Experience			
Time period	**Activity**	**Applied Public Health Experience (APHE) Relevance**	**People involved**
		whom a specific opportunity is particularly relevant.	
September – December, monthly	Program lunches	The lunches are designed to enable students to talk with MPH staff and faculty about any topic, including identifying APHE sites	MPH staff and faculty
September onward	Individual meetings with Coordinator for Applied Learning Experience & Professional Development	The Coordinator for Applied Learning Experience & Professional Development has an open-door policy. Most students meet with her one or more times to discuss academic and career trajectories, including getting connected to an APHE site.	Coordinator for Applied Learning Experience & Professional Development
September	Core advising session 1	Each student gives a brief presentation (~5-8 minutes) on a topic of individual interest in public health, using a 1-page handout (template provided) to aid in the oral presentation. The presentation includes information on organizations (local, regional, national, and international) that are involved in public health work in the topic area. This is followed by a group discussion of public health problems, with students articulating public health issues and/or populations they will examine for consideration in the applied public health practice experience and thesis requirements.	Core advisors
September	RI Department of Health (RIDOH) Academic Center Director presentation	Presentation to first-year students by the RIDOH Academic Center Director on APHE and thesis opportunities at RIDOH	MPH Associate Director of Public Health Practice; Coordinator for Applied Learning Experience & Professional Development
October	Second-year student APHE poster presentation	First-year students are required to attend the second-year APHE poster presentation event in order to see breadth of APHE possibilities. The first-year students then have the chance to speak with individual second-year students to obtain in-depth information on a specific site.	MPH Director; MPH Associate Director of Public Health Practice; Coordinator for Applied Learning Experience & Professional Development; second-year students

D5-1: First-Year MPH Activities Associated with Applied Public Health Experience			
Time period	**Activity**	**Applied Public Health Experience (APHE) Relevance**	**People involved**
October	Core advising session 2	Second-year MPH students present their completed MPH APHE. They discuss how they identified their APHE site and mentor/supervisor, as well as the background, goals, activities, and final project/deliverable they completed. First-year students then have a facilitated group discussion on the steps they are taking to identify an APHE in an area of public health interest.	Core advisors; second-year students
November	Core advising session 3	The third core advising session consists of brief student presentations and a group discussion. Students talk about their ideas and/or current plans for the MPH APHE and thesis project, using the respective forms as guidelines to aid in the discussion. Discussion of the APHE should include information on the agency/organization, the expected types of tasks/activities, and the proposed final project.	Core advisors

In the second semester of the first year, students enroll in PHP2071: Applied Public Health: Systems and Practice. As part of the course, they complete an Applied Public Health Experience Plan Form, which is part of the Applied Public Health Experience Guidelines document (see ERF). The form requires students to validate that their APHE will enable them to demonstrate CEPH Foundational Competency 21 (i.e., perform effectively on interprofessional teams) and CEPH Foundational Competency 19 (Communicate audience-appropriate public health content, both in writing and through oral presentation) as two of five competencies. It also requires that they specify the one additional Foundational Competency and two Foundational or Concentration competencies that they plan to meet in the APHE and describe the APHE products they will create to demonstrate the attainment of each. Students work with the course instructor, Coordinator for Applied Learning Experience & Professional Development, and APHE mentor to identify the products that will be of public health use for the APHE site.

APHE mentors sign the form indicating that they approve the proposal, are willing to serve as a mentor, and agree to complete the Mentor Evaluation MPH APHE & Interprofessional Team Assessment (which includes an interprofessional team skills evaluation rubric and a Communicate audience-appropriate public health content, both in writing and through oral presentation, rubric (see ERF)). The PHP 2071 professor reviews the proposal, provides feedback as necessary, and approves the APHE plan. The policies relevant to the Applied Public Health Experience are in the document labeled Applied Public Health Experience Guidelines (see ERF).

D5-2: Example Applied Public Health Experiences by Site and Title	
Site	**Title**
Center for Prisoner Health and Human Rights	Evaluating the Implementation and Impact of a Novel Medication Assisted Treatment Program in a Unified Jail and Prison System (E-MAT)
Day One Sexual Assault and Trauma Center	A Sexual Violence Prevention Program for Elementary Schools in Rhode Island
Dorcas International Institute	Health Curriculum Development for Refugee Youth
Faculdade de Medicina, Sao Paulo, Brazil, Rio de Janerio, Brazil	Knowledge and Acceptability of PrEP Among MSM in Salvador, Brazil
Neighborhood Health of Rhode Island	Characteristic Differences of Older v. Younger Adults with Chronic Pain on Medication-Assisted Treatment for Opioid Use Disorder
Rhode Island Department of Behavioral Health, Developmental Disabilities, and Hospitals	Statewide Needs Assessment for Behavioral Healthcare
Rhode Island Department of Health	Developing an Adolescent Health Strategic Plan
Rhode Island Department of Health	RI Pregnancy Risk Assessment Monitoring System (PRAMS) Program Data Book (2012-2015 data)
Rhode Island Department of Health	Understanding the Context of Resources in Newport, Rhode Island for Families and Children 0-5 Years Old
Rhode Island Free Clinic	Implementing the WISEWOMAN Program at the Rhode Island Free Clinic
Rhode Island Hospital	Evaluation for Standard and Mobile Health (mHealth)-Supported Clinical Diagnostic Tools for Assessing Dehydration in Patients with Diarrhea in Rural Bangladesh
Waves for Change	Monitoring and Evaluation Consultant: Waves for Change—A Surf-Based HIV Education and Community Building Intervention

MPH students complete the Applied Public Health Experience during their second semester or in the summer between the first and second year. In the fall of their second year, they submit their APHE products to Canvas, Brown's learning management platform. Because students, faculty, and staff have access to these documents on Canvas, the learning management system functions as an online portfolio of APHE artifacts. The APHE mentor completes an evaluation form, including the interprofessional team skills rubric, and sends it to the instructor of PHP 2072: Applied Public Health: Policy, Leadership, and Communication. The instructor reviews students' products and mentor evaluations to assess the degree to which students have met the competencies specified in their APHE plan. Upon sharing the mentor evaluation and their own feedback with the students, the PHP 2017 instructor assigns them a course grade.

2) Provide documentation, including syllabi and handbooks, of the official requirements through which students complete the applied practice experience.

Documentation is in four documents in the ERF:
1. Applied Public Health Experience Guidelines
2. Mentor Evaluation MPH APHE & Interprofessional Team Assessment
3. PHP 2071: Applied Public Health: Systems and Practice syllabus
4. PHP 2072: Applied Public Health: Policy, Leadership, and Communication syllabus

3) Provide samples of practice-related materials for individual students from each concentration or generalist degree. The samples must also include materials from students completing combined degree schools, if applicable. The school must provide samples of complete sets of materials (i.e., Template D5-1 and the work products/documents that demonstrate at least five competencies) from at least five students in the last three years for each concentration or generalist degree. If the school has not produced five students for which complete samples are available, note this and provide all available samples.

Examples of practice-related materials for individuals in the 2018 and 2019 entering cohorts for each of the following concentrations are available in the ERF:
- Generalist
- Global Health
- Health Behavior
- Health Services
- Maternal and Child Health

We do not have examples of practice related materials for the new Epidemiology concentration or Mindfulness concentration. These concentrations were added for the cohort entering in Fall 2020, so students have not yet completed the applied public health experience.

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: A key strength of the APHE is the large variety of sites. Students are able to craft an APHE that is specific to their academic and career goals. For the 2019 entering cohort, there were over 25 unique organizations that housed an APHE. These included government agencies; international non-governmental organizations (NGOs); community organizations in RI, other states, and other countries; health insurance providers; and clinical agencies.

A second strength is the program's close relationship with the Rhode Island Department of Health (RIDOH). Five of the students in the 2019 entering cohort did their APHE in various RIDOH divisions.

A third strength is that many of the APHE sites have long-term relationships with the program. Examples include the Rhode Island Free Clinic, Neighborhood Health Plan of Rhode Island, Doctors Without Borders (Kenya), Waves for Change (South Africa), and Academic Model Providing Access to Healthcare (AMPATH) (Kenya). As a result of the enduring nature of these relationships, the School has been able to make sustained contributions to these organizations.

A final strength is the program's annual poster session. In the fall, students present posters depicting their APHE at an all-school event to which community partners are invited. This event affords first-year students the opportunity to see the breadth of APHE possibilities and to learn about sites in which they are interested.

Challenges: The one foreseeable challenge is that of increasing the number and variety of high-quality APHE sites as the School grows the MPH program.

Plans: Plans to increase the number of sites to accommodate anticipated growth in the MPH program include calling on the Director of Community Engagement, which is a position new to the School, to help us identify additional opportunities; formalizing relationships with long-term sites through MOUs; and fundraising to provide financial support for more students to work at community sites that are unable to provide paid experiences.

D6. DrPH Applied Practice Experience (if applicable)

Not applicable.

D7. MPH Integrative Learning Experience

MPH students complete an integrative learning experience (ILE) that demonstrates synthesis of foundational and concentration competencies. Students in consultation with faculty select foundational and concentration-specific competencies appropriate to the student's educational and professional goals.

Professional certification exams (e.g., CPH, CHES/MCHES, REHS, RHIA) may serve as an element of the ILE, but are not in and of themselves sufficient to satisfy this criterion.

The school identifies assessment methods that ensure that at least one faculty member reviews each student's performance in the ILE and ensures that the experience addresses the selected foundational and concentration-specific competencies. Faculty assessment may be supplemented with assessments from other qualified individuals (e.g., preceptors).

1) List, in the format of Template D7-1, the integrative learning experience for each MPH concentration, generalist degree or combined degree option that includes the MPH. The template also requires the school to explain, for each experience, how it ensures that the experience demonstrates synthesis of competencies.

MPH Integrative Learning Experience for ALL Concentrations	
Integrative learning experience (list all options)	**How competencies are synthesized**
Thesis	Starting with the 2019 entering cohort, students self-identify competencies in the proposal stage; the MPH Associate Director of Public Health Practice approves the thesis proposal and identified competencies; a member of the thesis mentor team (at least two members, one of which is faculty) uses a rubric that is populated with the competencies to assess the synthesis of competencies in the thesis; the MPH Associate Director of Public Health Practice reviews the competencies and assures synthesis prior to approving the thesis.

2) Briefly summarize the process, expectations and assessment for each integrative learning experience.

Students begin developing their thesis topic during the first year of study. As part of mandatory Core Advising Sessions and PHP 2071: Applied Public Health: Systems and Practice (see ERF), students work in small groups with their respective core advisors to think through a public health issue from problem definition, to risk factors, to intervention. They then build on this to develop a thesis idea, which they present and refine in the Core Advisor small group sessions. The Core Advisor, the Coordinator for Applied Learning Experiences and Professional Development, the MPH Associate Director of Public Health Practice, the MPH Program Director, and a broad range of faculty are available to work with students to identify an appropriate thesis topic, thesis advisor, and thesis reader. Once the student has developed a thesis topic and identified advisors, they complete a thesis proposal form, which includes a dissemination plan, and have it signed by their thesis advisors. Students identify, with advisor feedback and consultation, 3-5 Foundational and Concentration-specific competencies that will be demonstrated by the thesis as a part of the proposal. The proposal is then reviewed by the MPH Associate Director of Public Health Practice. Once approved, a copy of the thesis guidelines and the approved thesis proposal are emailed to the student and advisors. Once the MPH Program Associate Director has approved the thesis proposal, the thesis advisor and thesis reader are responsible for supervising the thesis process. At the completion of the thesis, at least one member of the thesis mentor team uses the pre-

populated rubric to assess the synthesis of competencies. The MPH Associate Director of Public Health Practice reviews the competencies and assures synthesis prior to approving the thesis.

3) Provide documentation, including syllabi and/or handbooks, which communicates integrative learning experience policies and procedures to students.

   See MPH Thesis Guidelines 2019 and MPH Thesis Guidelines 2020 in the ERF. The examples provided in the ERF were prepared by students using the 2019 MPH Thesis Guidelines. We updated the documentation in 2020 to include assessment of competencies as a part of the thesis. We provide the 2020 Guidelines to demonstrate this change.

4) Provide documentation, including rubrics or guidelines, which explains the methods through which faculty and/or other qualified individuals assess the integrative learning experience with regard to students' demonstration of the selected competencies.

   The MPH Thesis Guidelines updated April 2020 provide the method through which students work with thesis advisors to select competencies as a part of the thesis proposal process. Thesis advisors are asked to affirm that students met the competencies in a rubric provided when students complete the thesis.

   The Brown University School of Public Health MPH Thesis competency assessment rubric is provided in the document titled MPH Thesis Guidelines 2020 (page 13).

5) Include completed, graded samples of deliverables associated with each integrative learning experience option from different concentrations, if applicable. The school must provide at least 10% of the number produced in the last three years or five examples, whichever is greater.

   See ERF for the following examples:

   Epidemiology Concentration

   We do not yet have examples of theses for the new Epidemiology Concentration. The concentration was added for the cohort entering in Fall 2020.

   Generalist Concentration

   1. "Strategies for Improving the Lives of U.S. Women Aged 40 and Above Living with HIV/AIDS: An Evidence Map; and Does information from ClinicalTrials.gov Increase Transparency and Reduce Bias? Results from a Five-Report Case Series"
   2. "Understanding Rhode Island's Declining Abortion Rate: A Mixed-Methods, Longitudinal Analysis"
   3. "Postpartum Depression and its Effects on Early Child Care Practices and Infant Development; and Postpartum Depression Symptoms and Sleep-Related Child Care Practices among U.S Mothers"
   4. "Comparing Treatment Response between Older and Younger Hepatitis C Patients on Direct Acting Antiviral Agents"
   5. "Hepatitis B Virus Surveillance and Prevention in Rhode Island Amid Ongoing Outbreaks in the United States"
   6. "Analysis of Media Articles Reporting Law Enforcement and First Responder Contact with Fentanyl"
   7. "Mother Knows Best: Grounding Ethical Research Focused on Pregnant and Postpartum Women Living with HIV in Maternal Decision Making in the Option B+ Era; and 'This is my life we are talking about': Adaptive Strategies for HIV Care Retention and Treatment Adherence among Postpartum Women Living with HIV in Cape Town, South Africa"
   8. "Evaluating the Efficacy of a Sexual Harassment and Bullying Prevention Program among 5th Grade Students in Pawtucket, Rhode Island"

Global Health Concentration

1. "Stigma on Testing and Treatment: An Analysis of HIV in Southeast Asia"
2. *"'I am going to make tricks… whereby I am going to be a new person again':* Reimagining the Framework for HIV Care Engagement from a Cascade to a Cycle Model"
3. "The Impact of Hospitalization on Ukrainian Adolescents Who Have Completed Tuberculosis Treatment in Kyiv City, Ukraine"
4. "Contraceptive Preference Trajectories Postpartum: A Longitudinal Qualitative Study of Women Living with HIV in Cape Town, South Africa"
5. "An Examination of Burnout in College Food Service Workers; and Emerging Strategies with the Double Burden of Malnutrition Amongst Nutrition Assistance Programs Working in Urban Centers of Developing Countries: Common Themes in Food Systems Adjusting to the Global Nutrition Transition"
6. "Formative Assessment Using Mixed Methods to Identify the Nutrition Education Needs of Refugees in Rhode Island"

Health Behavior Concentration

1. "Exploring the Complex Relationship between Perceived Social Support, Cybervictimization, and Negative Emotional Outcomes"
2. "Mental Illness and Opioid Use Disorder (OUD) Comorbidity: Utilization of Mental Health Care"
3. "Literature Review on College Student Fruit and Vegetable Consumption Interventions; and The Impact of a Campus Fruit and Vegetable Program on the Fruit and Vegetable Intake of College Students"
4. "'I'm Doing This Test so I Can Benefit from PrEP': Attitudes toward HIV Testing and Intended Uptake of Pre-Exposure Prophylaxis among Adolescents in South Africa; and Intimate Partner Violence and Sexual Agency among Married Women and Girls in the Philippines: 2017 Philippines National Demographic and Health Survey"
5. "Neighborhood Disorder, Collective Efficacy, Social Support, and Diet: A Systematic Review; and The Role of Neighborhood Disorder, Collective Efficacy, and Social Support on Fruit and Vegetable Intake in Low Income Communities"

Health Services Concentration

1. "A Spatial Analysis of the Food Environment and Overweight and Obesity among Rhode Island Youth"
2. "'I go to therapy for conversations without judgment': Insights into Mental Health and Mental Health Service Use and Satisfaction among Sexual Minority Women"
3. "Statin Adherence and Associated Cardiovascular Hospitalizations among Medicare Advantage Beneficiaries"
4. "Consolidation in the Electronic Health Record Market, 2009-2017"
5. "Pediatric Emergency Care Coordinator (PECC) Program Evaluation and Impact on Pediatric Prehospital Care"

Maternal and Child Health Concentration

1. "State-wide assessment of third grade achievement for children involved in child protective services"
2. "Childhood Overweight/Obesity and the Physical Activity Environment in Rhode Island"
3. "Infant Feeding and Nutrition Perceptions of Family Child Care Providers: A Qualitative Analysis"

<u>Mindfulness Concentration</u>:

New; no students have completed a thesis yet. The concentration was added for the cohort entering in Fall 2020.

6) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: A key signature of the Brown MPH is the development of skills to collect, analyze, and translate data for public health policy and practice. A great strength of our program is that all students undertake a substantive public health project, working with high quality mentors, including accomplished public health researchers and public health practitioners. Students have produced high-quality work that has been published in journals and/or accepted for presentation at local, national, and international meetings. In addition, starting in 2019, all students identify and execute a dissemination plan for their thesis so that the work being done by MPH students has impact on research, policy, or practice.

Challenges: Identification and assessment of MPH Thesis foundational and concentration-specific competencies were not collected routinely until 2019.

Plans: The MPH program has developed the necessary structures and guidelines to address the fact that identification and assessment of MPH Thesis foundational and concentration-specific competencies was not collected routinely and will continue to refine the structures and guidelines as needed.

D8. DrPH Integrative Learning Experience

Not applicable.

D9. Public Health Bachelor's Degree General Curriculum

The overall undergraduate curriculum (e.g., general education, liberal learning, essential knowledge and competencies, etc.) introduces students to the domains. The curriculum addresses these domains through any combination of learning experiences throughout the undergraduate curriculum, including general education courses defined by the institution as well as concentration and major requirements or electives.

- List the coursework required for the school's bachelor's degree.

Requirements for Undergraduate Public Health AB	
Course number	**Course name***
Complete <u>all</u> of the following core courses	
PHP 0310	Health Care in the United States
PHP 0320	Introduction to Public Health
PHP 0850	Fundamentals of Epidemiology
PHP 1501	Essentials of Data Analysis
PHP 1910	Public Health Senior Seminar
Complete <u>one</u> course in each of the 7 content areas	
(1) HEALTHCARE SYSTEMS & POLICY (Choose 1)	
PHP 0330	Public Health Policy
PHP 0650	From Manufacturer to Patient: Why is the Cost of Prescription Drugs So Darn High?
PHP 1100	Comparative Health Care Systems
PHP 1480	Introduction to Public Health Economics
(2) GLOBAL PUBLIC HEALTH (Choose 1)	
PHP 0700	Global Public Health Interventions
PHP 0720	Public Health and the Environment
PHP 1070	The Burden of Disease in Developing Countries
PHP 1160	The Global Burden of Mental Health
PHP 1400	HIV AIDS in Africa
PHP 1802S	Human Security & Humanitarian Response
(3) ENVIRONMENTAL HEALTH & POLICY (Choose 1)	
PHP 0720	Public Health and the Environment
PHP 1101	World of Food
PHP 1700	Current Topics in Environmental Health
(4) HEALTH DISPARITIES (Choose 1)	
PHP 0400	Introduction to Health Disparities and Making the Connection between Structure, Social Determinants and Health Equity
PHP 1650	Race, Racism and Health
PHP 1680I	Pathology to Power: Disability, Health and Community
PHP 1680U	Intersectionality & Health Inequities

PHP 1820	Better Prisoner & Community Health
PHP 1920	Social Determinants of Health

(5) SOCIAL & BEHAVIORAL SCIENCE FOR PREVENTION (Choose 1)	
PHP 0400	Introduction to Health Disparities and Making the Connection between Structure, Social Determinants and Health Equity
PHP 0700	Global Public Health Interventions
PHP 1101	World of Food
PHP 1540	Alcohol Use & Misuse
PHP 1600	Obesity in the 21st Century
PHP 1610	Tobacco, Disease, & Industry
PHP 1650	Race, Racism and Health
PHP 1680U	Intersectionality & Health Inequities
PHP 1690	Technology & Health Behavior Change
PHP 1920	Social Determinants of Health

(6) HUMANITIES/FINE ARTS/HUMANISTIC SOCIAL SCIENCES - PUBLIC HEALTH ELECTIVE (Choose 1)	
AFRI 0550	African American Health Activism from Emancipation to AIDS
AFRI 1060W	Policy Culture & Discourse that Shape Health & Access to Healthcare
AFRI 1060Z	Race: Sexuality: and Mental Disability History
AMST 1600C	The Anti-Trafficking Savior Complex
AMST 1601	Health & Healing in American History (also STS 1110, GNSS 1960B)
COLT 0610Y	Women's Writing in the Arab World
COLT 1810P	Literature and Medicine
COST 0100	Introduction to Contemplative Studies
ENGL 1030C	Writing Science
ENGL 1140D	Writing Diversity: A Workshop
ETHN 1750B	Treaty Rights & Food Fights: Eating Local in Indian Country
ETHN 1890J	Native American Environmental Health Movements
GNSS 0090C	Reproductive Health: Science and Politics
GNSS 0120	Introduction to Gender and Sexuality Studies
GNSS 1961H	Literature, Imaginations & the Law: Human Rights & Literature
HISP 0490A	Spanish for Health Care Workers
HISP 0750Q	Health, Illness & Medicine in Spanish American Literature & Film
HIST 0150H	Food and Drugs in History
HIST 0270B	From the Columbian Exchange to Climate Change
HIST 0286A	History of Medicine I: Medical Traditions in the Old World <1700
HIST 0537B	Tropical Delights: Imagining Brazil in History and Culture
HIST 1080	Humanitarianism and Conflict in Africa
HIST 1830M	From Medieval Bedlam to Prozac Nation
HIST 1960Q	Medicine and Public Health in Africa

HIST 1972H	US Human Rights in a Global Age
HIST 1977I	Gender, Race, and Medicine in the Americas
HMAN 1970G	Intl Perspectives on NGOs, PH, & Health Care Inequalities
HMAN 1973P	Neurodiversity: Science, Politics, Culture
LACA 1503H	Sexuality, Human Rights, & Health: Latin American Perspectives
LITR 1151T	Poetry for Healing Territories
PHIL 0060	Modern Science and Human Values
PHIL 0260	Philosophy of Social Science
PHIL 0390	Global Justice
PHIL 0650	Psychology and Philosophy of Happiness
POBS 1501E	Histories of Global Health from Lusophone Africa
RELS 0250	Bodily Practice and Religion
TAPS 1281W	Artists and Scientists as Partners
TAPS 1281Z	Artists and Scientists as Partners: Theory to Practice
(7) BIOLOGY/HUMAN PHYSIOLOGY ELECTIVE (Choose 1)	
BIOL 0200	The Foundation of Living Systems
BIOL 0470	Genetics
BIOL 0510	Introductory Microbiology
BIOL 0530	Principles of Immunology
BIOL 0800	Principles of Physiology
(8) If Honors Track	
PHP 1980	Honors Thesis Prep (2 semesters)

A description of all courses is available here.

- Provide official documentation of the required components and total length of the degree, in the form of an institutional catalog or online resource. Provide hyperlinks to documents if they are available online, or include copies of any documents that are not available online.

  Description of degree requirements is available here and here.

  The institutional catalog is available here.

- Provide a matrix, in the format of Template D9-1, which indicates the courses/experience(s) that ensure that students are introduced to each of the domains indicated. Template D9-1 requires the school to identify the experiences that introduce each domain.

D9-1: Introduction to Domains	
Domains	**Courses and other learning experiences through which students are introduced to the domains specified**
Science: Introduction to the foundations of scientific knowledge, including the	There is a Biology/Human Physiology elective course requirement. Students choose one of the following five selectives:

D9-1: Introduction to Domains	
Domains	**Courses and other learning experiences through which students are introduced to the domains specified**
biological and life sciences and the concepts of health and disease	BIOL 0200: The Foundation of Living Systems BIOL 0470: Genetics BIOL 0510: Microbiology BIOL 0530: Principles of Immunology BIOL 0800: Principles of Physiology AP Biology will not exempt students from this requirement. We anticipate that most students will take BIOL 0200. Students who place out of BIOL 0200 with AP credit can choose one of the other four (4) courses.
Social and Behavioral Sciences: Introduction to the foundations of social and behavioral sciences	PHP 0320: Introduction to Public Health introduces bachelor's degree students in Public Health to the "Social and Behavioral Sciences" domain. In addition to this core required course, all bachelor's degree students are required to select from one approved course in the curricular area of "Social and Behavioral Sciences for Prevention"
Math/Quantitative Reasoning: Introduction to basic statistics	Two core courses for the Bachelor's degree in Public Health focus almost exclusively on statistics and quantitative reasoning: PHP 1501: Essentials of Data Analysis and PHP 0850: Fundamentals of Epidemiology. Students interested in gaining more quantitative skills can do so through multiple elective options that emphasize statistics and quantitative reasoning.
Humanities/Fine Arts: Introduction to the humanities/fine arts	Bachelor's degree students in Public Health are required to take at least one elective course in the Humanities and Fine Arts. A list of approved Humanities and Fine Arts electives has been identified from departments including (but not limited to) Africana Studies, American Studies, English, History, Philosophy, Religious Studies, Theater, and Performance Studies.

- If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: Brown's Open Curriculum is rooted in the liberal arts tradition that encourages a breadth of education across multiple domains resulting in both disciplinary and interdisciplinary knowledge in the arts, humanities, life/physical sciences, and social sciences. Enrollment data reveal that Brown undergraduates consistently self-distribute their courses across the curriculum. Students are encouraged to consider Brown's liberal learning goals in the development of their individual courses of study, which are:
- Work on your speaking and writing
- Understand differences among cultures
- Evaluate human behavior
- Learn what it means to study the past
- Experience scientific inquiry
- Develop a facility with symbolic languages
- Expand your reading skills
- Enhance your aesthetic sensibility

- Embrace diversity
- Collaborate fully
- Engage with your communities - Apply what you have learned

The School has been reviewing and revising the AB in Public Health program curriculum since the emergence of the 2016 criteria. Despite Brown's data on breadth of study and our own knowledge of students' past courses of study, we added a Humanities/Fine Arts requirement to ensure that all of our students have exposure in this important area, knowing that for many it would be additional exposure. We knew that a large majority of our students already took at least one Biology/Human Physiology class, but, again, we added a Biology requirement to ensure that all of our students received this exposure. We feel that these changes strengthen our concentration and ensure a breadth of study for every public health student. We are confident that all Brown students in the program receive a very solid education in the four domains.

Challenges: Our students would likely benefit from more opportunities to engage with communities to apply what they have learned.

Plans: We have recently instituted additional changes to our requirements, which we expand upon in D10. We expect that the addition of two additional content areas and a number of new undergraduate-focused classes will improve the rigor and scope of the curriculum. PHP 1910: Public Health Senior Seminar will be required of all concentrators, both honors and non-honors, and will cover particular required knowledge domains.

The School has also recently implemented a Director of Community Engagement and an Assistant Director of Career Advising to work toward the enhancement of community engagement opportunities for our undergraduates.

We will evaluate the latest changes and continue to refine the curriculum as needed. We will also work with course instructors to ensure that we offer all students high quality, rigorous courses.

D10. Public Health Bachelor's Degree Foundational Domains

The requirements for the public health major or concentration provide instruction in the domains. The curriculum addresses these domains through any combination of learning experiences throughout the requirements for the major or concentration coursework (i.e., the school may identify multiple learning experiences that address a domain—the domains listed below do not each require a single designated course).

If the school intends to prepare students for a specific credential, the curriculum must also address the areas of instruction required for credential eligibility (e.g., CHES).

1) Provide a matrix, in the format of Template D10-1, which indicates the courses/experience(s) that ensure that students are exposed to each of the domains indicated. Template D10-1 requires the school to identify the learning experiences that introduce and reinforce each domain. Include a footnote with the template that provides the school's definition of "introduced" and "covered."

    We have designed our curriculum to provide instruction in the foundational domains through core and content area courses. We have five content areas: healthcare systems and policy, global public health, environmental health and policy, health disparities, and social and behavioral science for prevention. Students are required to take the core courses and must select at least one course from each of the content areas. In keeping with the tradition of Brown undergraduate education, we have provided students with as many content area options as possible.

    Students are exposed to the domains in at least two courses as shown in Table D10-1. At least one course introduces the material, defined as foundational knowledge presented and at least one assignment relates to the topic. At least one other course covers the material, defined as the topic being a major component of the course including at least one learning outcome and containing two or more assignments related to the topic. At a minimum, each content area course introduces and/or covers the same domains. Therefore, a particular domain is introduced or covered as designated in Table D10-1 regardless of which content area course is chosen by a student. Although not noted in Table D10-1, individual courses in the content areas may introduce or cover additional domains.

    Please see Table D10-1 starting on next page.

D10-1: Undergraduate Public Health Domains										
	Course Number (See Footnotes for Course Names)									
	CORE COURSES					HEALTH CARE SYSTEMS AND POLICY COURSES	GLOBAL PUBLIC HEALTH COURSES	ENVIRON-MENTAL HEALTH AND POLICY COURSES	HEALTH DISPARITIES COURSES	SOCIAL & BEHAVIORAL SCIENCE FOR PREVENTION COURSES
Public Health Domains	**PHP 0310**	**PHP 0320**	**PHP 0850**	**PHP 1501**	**PHP 1910**	**PHP 0330 PHP 0650 PHP 1100 PHP 1480**	**PHP 0700 PHP 0720 PHP 1070**	**PHP 0720 PHP 1101 PHP 1700**	**PHP 0400 PHP 1650 PHP 1680I PHP 1680U PHP 1820 PHP 1920**	**PHP 0400 PHP 0700 PHP 1101 PHP 1540 PHP 1600 PHP 1610 PHP 1650 PHP 1680U PHP 1690 PHP 1920**
Overview of Public Health: Address the history and philosophy of public health as well as its core values, concepts, and functions across the globe and in society										
Public Health History	C	C	I							
Public Health Philosophy	C	C	I							
Core PH Values	C	C	I							
Core PH Concepts	I	C	I			C				
Global Functions of Public Health		I					C			
Societal Functions of Public Health	C	C	I					I		
Role and Importance of Data in Public Health: Address the basic concepts, methods, and tools of public health data collection, use, and analysis and why evidence-based approaches are an essential part of public health practice										

D10-1: Undergraduate Public Health Domains										
	Course Number (See Footnotes for Course Names)									
	CORE COURSES					HEALTH CARE SYSTEMS AND POLICY COURSES	GLOBAL PUBLIC HEALTH COURSES	ENVIRON-MENTAL HEALTH AND POLICY COURSES	HEALTH DISPARITIES COURSES	SOCIAL & BEHAVIORAL SCIENCE FOR PREVENTION COURSES
Public Health Domains	**PHP 0310**	**PHP 0320**	**PHP 0850**	**PHP 1501**	**PHP 1910**	**PHP 0330 PHP 0650 PHP 1100 PHP 1480**	**PHP 0700 PHP 0720 PHP 1070**	**PHP 0720 PHP 1101 PHP 1700**	**PHP 0400 PHP 1650 PHP 1680I PHP 1680U PHP 1820 PHP 1920**	**PHP 0400 PHP 0700 PHP 1101 PHP 1540 PHP 1600 PHP 1610 PHP 1650 PHP 1680U PHP 1690 PHP 1920**
Basic Concepts of Data Collection			C	C						
Basic Methods of Data Collection			C	C						
Basic Tools of Data Collection			C	C						
Data Usage	I		C	C	I					
Data Analysis	I		C	C						
Evidence-based Approaches	I	C	C					I	I	
Identifying and Addressing Population Health Challenges: Address the concepts of population health, and the basic processes, approaches, and interventions that identify and address the major health-related needs and concerns of populations										
Population Health Concepts	I	I	C		I		C			

D10-1: Undergraduate Public Health Domains										
	Course Number (See Footnotes for Course Names)									
Public Health Domains	CORE COURSES					HEALTH CARE SYSTEMS AND POLICY COURSES	GLOBAL PUBLIC HEALTH COURSES	ENVIRON-MENTAL HEALTH AND POLICY COURSES	HEALTH DISPARITIES COURSES	SOCIAL & BEHAVIORAL SCIENCE FOR PREVENTION COURSES
	PHP 0310	PHP 0320	PHP 0850	PHP 1501	PHP 1910	PHP 0330 PHP 0650 PHP 1100 PHP 1480	PHP 0700 PHP 0720 PHP 1070	PHP 0720 PHP 1101 PHP 1700	PHP 0400 PHP 1650 PHP 1680I PHP 1680U PHP 1820 PHP 1920	PHP 0400 PHP 0700 PHP 1101 PHP 1540 PHP 1600 PHP 1610 PHP 1650 PHP 1680U PHP 1690 PHP 1920
Introduction to Processes and Approaches to Identify Needs and Concerns of Populations	I	I					C	I	C	
Introduction to Approaches and Interventions to Address Needs and Concerns of Populations	I	I					C	I	C	
Human Health: Address the underlying science of human health and disease including opportunities for promoting and protecting health across the life course										
Science of Human Health and Disease	I	C	C		I				I	
Health Promotion		C			I					C
Health Protection	I	C								
Determinants of Health: Address the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities										

D10-1: Undergraduate Public Health Domains										
Public Health Domains	Course Number (See Footnotes for Course Names)									
	CORE COURSES					HEALTH CARE SYSTEMS AND POLICY COURSES	GLOBAL PUBLIC HEALTH COURSES	ENVIRON-MENTAL HEALTH AND POLICY COURSES	HEALTH DISPARITIES COURSES	SOCIAL & BEHAVIORAL SCIENCE FOR PREVENTION COURSES
	PHP 0310	**PHP 0320**	**PHP 0850**	**PHP 1501**	**PHP 1910**	**PHP 0330 PHP 0650 PHP 1100 PHP 1480**	**PHP 0700 PHP 0720 PHP 1070**	**PHP 0720 PHP 1101 PHP 1700**	**PHP 0400 PHP 1650 PHP 1680I PHP 1680U PHP 1820 PHP 1920**	**PHP 0400 PHP 0700 PHP 1101 PHP 1540 PHP 1600 PHP 1610 PHP 1650 PHP 1680U PHP 1690 PHP 1920**
Socio-economic Impacts on Human Health and Health Disparities	I	I			I		C	I	C	C
Behavioral Factors Impacts on Human Health and Health Disparities	I	I							C	C
Biological Factors Impacts on Human Health and Health Disparities	I		C		I				C	
Environmental Factors Impacts on Human Health and Health Disparities	I	I						C		
Project Implementation: Address the fundamental concepts and features of project implementation, including planning, assessment, and evaluation										
Introduction to Planning Concepts and Features		I			C	I				
Introduction to Assessment Concepts and Features		I			C					
Introduction to Evaluation Concepts and Features		I			C					

Public Health Domains	Course Number (See Footnotes for Course Names)								
	CORE COURSES					HEALTH CARE SYSTEMS AND POLICY COURSES	GLOBAL PUBLIC HEALTH COURSES	ENVIRON-MENTAL HEALTH AND POLICY COURSES	HEALTH DISPARITIES COURSES	SOCIAL & BEHAVIORAL SCIENCE FOR PREVENTION COURSES
	PHP 0310	PHP 0320	PHP 0850	PHP 1501	PHP 1910	PHP 0330 PHP 0650 PHP 1100 PHP 1480	PHP 0700 PHP 0720 PHP 1070	PHP 0720 PHP 1101 PHP 1700	PHP 0400 PHP 1650 PHP 1680I PHP 1680U PHP 1820 PHP 1920	PHP 0400 PHP 0700 PHP 1101 PHP 1540 PHP 1600 PHP 1610 PHP 1650 PHP 1680U PHP 1690 PHP 1920
Overview of the Health System: Address the fundamental characteristics and organizational structures of the U.S. health system as well as to the differences in systems in other countries										
Characteristics and Structures of the U.S. Health System	C	I								
Comparative Health Systems	I						C			
Health Policy, Law, Ethics, and Economics: Address the basic concepts of legal, ethical, economic, and regulatory dimensions of health care and public health policy, and the roles, influences and responsibilities of the different agencies and branches of government										
Legal dimensions of health care and public health policy		I				C				

D10-1: Undergraduate Public Health Domains

Public Health Domains	Course Number (See Footnotes for Course Names)									
	CORE COURSES					HEALTH CARE SYSTEMS AND POLICY COURSES	GLOBAL PUBLIC HEALTH COURSES	ENVIRON-MENTAL HEALTH AND POLICY COURSES	HEALTH DISPARITIES COURSES	SOCIAL & BEHAVIORAL SCIENCE FOR PREVENTION COURSES
	PHP 0310	**PHP 0320**	**PHP 0850**	**PHP 1501**	**PHP 1910**	**PHP 0330 PHP 0650 PHP 1100 PHP 1480**	**PHP 0700 PHP 0720 PHP 1070**	**PHP 0720 PHP 1101 PHP 1700**	**PHP 0400 PHP 1650 PHP 1680I PHP 1680U PHP 1820 PHP 1920**	**PHP 0400 PHP 0700 PHP 1101 PHP 1540 PHP 1600 PHP 1610 PHP 1650 PHP 1680U PHP 1690 PHP 1920**
Ethical dimensions of health care and public health policy	I	I			I	C			C	
Economical dimensions of health care and public health policy	C (health care)	I				C (health policy)				
Regulatory dimensions of health care and public health policy	I	I	I		I	C				
Governmental Agency Roles in health care and public health policy	I	I				C	C	I		
Health Communications: Address the basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology										
Technical writing			C		C					
Professional writing					C					
Use of Mass Media			I		C					
Use of Electronic Technology					C					

Footnotes:

Introduced (I): Indicates a course where foundational knowledge is presented and at least one assignment relates to the topic

Covered (C): A course in which the topic is a major component, including at least one learning outcome, and containing two or more assignments relating to the topic

Course Names:

Core:
PHP 0310: Health Care in the United States
PHP 0320: Introduction to Public Health
PHP 0850: Fundamentals of Epidemiology
PHP 1501: Essentials of Data Analysis
PHP 1910: Public Health Senior Seminar

Policy Courses:
PHP 0330: Public Health Policy
PHP 0650: From Manufacturer to Patient: Why is the Cost of Prescription Drugs So Darn High?
PHP 1100: Comparative Health Care Systems
PHP 1480: Introduction to Public Health Economics

Global Health Courses:
PHP 0700: Global Public Health Interventions
PHP 0720: Public Health and the Environment
PHP 1070: The Burden of Disease in Developing Countries

Environmental Health Courses
PHP 0720: Public Health and the Environment
PHP 1101: World of Food
PHP 1700: Current Topics in Environmental Health

Health Disparities Courses
PHP 0400: Introduction to Health Disparities and Making the Connection between Structure, Social Determinants and Health Equity
PHP 1650: Race, Racism and Health
PHP 1680I: Pathology to Power: Disability, Health and Community
PHP 1680U: Intersectionality & Health Inequities
PHP 1820: Better Prisoner & Community Health
PHP 1920: Social Determinants of Health

Social and Behavioral Courses
PHP 0400: Introduction to Health Disparities and Making the Connection between Structure, Social Determinants and Health Equity
PHP 0700: Global Public Health Interventions
PHP 1101: World of Food
PHP 1540: Alcohol Use & Misuse
PHP 1600: Obesity in the 21st Century
PHP 1610: Tobacco, Disease, & Industry
PHP 1650: Race, Racism and Health
PHP 1680U: Intersectionality & Health Inequities
PHP 1690: Technology & Health Behavior Change
PHP 1920: Social Determinants of Health

2) Include the most recent syllabus from each course listed in Template D10-1, or written guidelines, such as a handbook, for any required experience(s) listed in Template D10-1 that do not have a syllabus.

Each of the following syllabi can be found in the ERF:

Core Courses
    PHP 0310: Health Care in the United States
    PHP 0320: Introduction to Public Health
    PHP 0850: Fundamentals of Epidemiology
    PHP 1501: Essentials of Data Analysis
    PHP 1910: Public Health Senior Seminar

Policy Courses
    PHP 0330: Public Health Policy
    PHP 0650: From Manufacturer to Patient: Why is the Cost of Prescription Drugs So Darn High?
    PHP 1100: Comparative Health Care Systems
    PHP 1480: Introduction to Public Health Economics

Global Health Courses
    PHP 0700: Introduction to Global Public Health Interventions
    PHP 0720: Public Health and the Environment
    PHP 1070: The Burden of Disease in Developing Countries

Environmental Health Courses
    PHP 0720: Public Health and the Environment
    PHP 1101: World of Food
    PHP 1700: Current Topics in Environmental Health

Health Disparities Courses
    PHP 0400: Introduction to Health Disparities and Making the Connection between Structure, Social Determinants and Health Equity
    PHP 1650: Race, Racism and Health
    PHP 1680I: Pathology to Power: Disability, Health and Community
    PHP 1680U: Intersectionality & Health Inequities
    PHP 1820: Better Prisoner & Community Health
    PHP 1920: Social Determinants of Health

Social and Behavioral Courses
    PHP 0400: Introduction to Health Disparities and Making the Connection between Structure, Social Determinants and Health Equity
    PHP 0700: Introduction to Global Public Health Interventions
    PHP 1101: World of Food
    PHP 1540: Alcohol Use & Misuse
    PHP 1600: Obesity in the 21st Century
    PHP 1610: Tobacco, Disease, & Industry
    PHP 1650: Race, Racism and Health
    PHP 1680U: Intersectionality & Health Inequities
    PHP 1690: Technology & Health Behavior Change
    PHP 1920: Social Determinants of Health

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School has been reviewing and revising the AB in Public Health program curriculum since the emergence of the 2016 criteria. We instituted prior changes as part of the

compliance reporting process that addressed the Humanities/Fine Arts and Biology requirements as well as some of the communication domains. We have continued to evaluate the program, proposing additional changes that we feel strengthen our program and align better with accreditation standards. The revised AB public health degree requirements were carefully considered—and the proposed changes painstakingly designed by both our Undergraduate Studies Committee and our reaccreditation team—and then approved by our School-wide curriculum committee and Brown's College Curriculum Council (CCC).

Challenges: There have been identified weaknesses in our undergraduate program related to rigor and inconsistency in course offerings. In addition, students were able to meet many of the program requirements with courses outside the School. There is consensus that the proposed changes will improve the rigor of our concentration and better prepare our concentrators for both continued education and employment in the broad public health arena. The changes were designed to address possible gaps in preparation permitted by our former configuration as well to ensure that our students are meeting degree requirements with primarily public health courses. While still allowing for individualization, the proposed requirements ensure that, having been educated to the standard expected of accredited programs in public health, all of our degree recipients acquire the public health knowledge and develop the public health skills essential to their success.

We recognize that while we have covered all domains, there are a few instances where we have not shown introduction of a domain. We will continue to refine the curriculum and our representation of it so that we are able to show adequate introduction and coverage of domains across all the content areas.

Plans: Below summarizes the most recent changes approved by the Brown University College Curriculum Council in May 2020. We will evaluate these changes and continue to refine the curriculum as needed. We will also work with course instructors to ensure that we offer high-quality, rigorous courses to all students.
1. *Two approved General electives* are to be eliminated and replaced by two new content areas: *Global Public Health elective* and *Health Disparities elective*, where students are to select one course from a list of possible options.
2. Beyond the required core courses, each of the content areas includes a number of electives from which students choose to fulfill that requirement. With the exception of the Humanities/Fine Arts/Humanistic Social Sciences and the Biology requirements, all of the courses meeting public health degree requirements will now be courses offered in the School (labeled PHP courses), which will have been evaluated as covering particular CEPH knowledge domains.
3. Public Health Senior Seminar (PHP 1910) will revert to being required of all concentrators, both honors and non-honors, and will cover particular required knowledge domains. We will hold two (2) separate sections to accommodate the increased number of students in the class.

The number of required courses for non-honors students will remain unchanged at 12. Honors students will have additional course requirements, bringing the number of courses required to 14.

The School now has a Director of Accreditation and Assessment, who will assist the undergraduate program with refinement of the curriculum and syllabi to ensure robust introduction and coverage of all domains.

D11. Public Health Bachelor's Degree Foundational Competencies

Students must demonstrate the following competencies:

- **the ability to communicate public health information, in both oral and written forms, through a variety of media and to diverse audiences**
- **the ability to locate, use, evaluate and synthesize public health information**

1) Provide a matrix, in the format of Template D11-1, which indicates the assessment opportunities that ensure that students demonstrate the stated competencies.

D11-1: Public Health Bachelor's Degree Foundational Competencies		
Competency	**Course**	**Specific assessment opportunity**
Public Health Communication: Students should be able to communicate public health information, in both oral and written forms and through a variety of media, to diverse audiences.		
Oral communication	PHP 1910: Public Health Senior Seminar	Short In-Class Presentation: Students provide an oral presentation summarizing a public health article using the scientific literature to reflect on and support, or refute the article and then participate in a question and answer session about the presentation. Communication Project: Students are randomly assigned to "public health communications teams." Each team is randomly assigned to one of the fictional, but nevertheless "real world" public health scenarios situated in the state of Rhode Island in response to which they produce "SOCOs" (single overriding communication objectives) and a communications plan that utilizes multiple media to engage diverse audiences. Teams present their PowerPoint communications plans followed by a question and answer session about the presentation.
Written communication	PHP 1910: Public Health Senior Seminar	Written Project: Students complete a written paper that can be a proposed research project, a proposed policy to address a public health topic, a review of the literature on a controversial subject (e.g., injection safe zones, e-cigarettes, and modified risk tobacco products), a literature review on a specific topic, a systematic review, or a manuscript for peer-reviewed publication. Students also write a public health data brief.
Communicate with diverse audiences	PHP 1910: Public Health Senior Seminar	Communication Project: Students are randomly assigned to "public health communications teams." Each team is randomly assigned to one of the fictional, but nevertheless "real world" public health scenarios situated in the state of Rhode Island in response to which they produce "SOCOs" (single overriding communication objectives) and a communications plan that

D11-1: Public Health Bachelor's Degree Foundational Competencies		
Competency	**Course**	**Specific assessment opportunity**
		utilizes multiple media to <u>engage diverse audiences</u>. Teams present their PowerPoint communications plans followed by a question and answer session about the presentation. Audiences for the presentation include the communications team of the Rhode Island Department of Health, the instructor, and students enrolled in the course. Public Health Data Brief: Students write a data brief targeted to the general public and Rhode Island legislators about a complex data subject in text and graphics that provide readers with easily comprehensible information in a compact publication or webpage.
Communicate through variety of media	PHP 1910: Public Health Senior Seminar	Communication Project: Students are randomly assigned to "public health communications teams." Each team is randomly assigned to one of the fictional, but nevertheless "real world" public health scenarios situated in the state of Rhode Island in response to which they produce "SOCOs" (single overriding communication objectives) and a communications plan that utilizes multiple media to engage diverse audiences. Teams present their PowerPoint communications plans followed by a question and answer session about the presentation. Public Health Data Brief: Students write a data brief targeted to the general public and Rhode Island legislators about a complex data subject in text and graphics that provide readers with easily comprehensible information in a compact publication or webpage.
Information Literacy: Students should be able to locate, use, evaluate and synthesize public health information	PHP 1910: Public Health Senior Seminar	There are four major projects completed by students that engage their information literacy: Short In-Class Presentation: Students provide an oral presentation summarizing a public health article using the scientific literature to reflect on and support, or refute the article and then participate in a question and answer session about the presentation. Communication Project: Students are randomly assigned to "public health communications teams." Each team is randomly assigned to one of the fictional, but nevertheless "real world" public health scenarios situated in the state of Rhode Island in response to which they produce "SOCOs" (single overriding communication

D11-1: Public Health Bachelor's Degree Foundational Competencies		
Competency	**Course**	**Specific assessment opportunity**
		objectives) and a communications plan that utilizes multiple media to engage diverse audiences. Public Health Data Brief: Students write a data brief targeted to the general public and Rhode Island legislators about a complex data subject in text and graphics that provide readers with easily comprehensible information in a compact publication or webpage. Written Project: Students complete a written paper that can be a proposed research project, a proposed policy to address a public health topic, a review of the literature on a controversial subject (e.g., injection safe zones, e-cigarettes, and modified risk tobacco products), a literature review on a specific topic, a systematic review, or a manuscript for peer-reviewed publication.
Locate information	PHP 1910: Public Health Senior Seminar	Students must locate information: • in the scientific literature to use for their Short In-Class Oral Presentation summarizing a public health article and for their chosen comprehensive Written Project • to be used in creating their SOCO and communications plan for their Communication Project • for their Public Health Data Brief
Use information	PHP 1910: Public Health Senior Seminar	Students use located information to: • prepare their Short In-Class Oral Presentation and answer questions during the presentation • work together to create their SOCO and communications plan for their Communication Project • prepare their Public Health Data Brief • decide upon, plan and execute their Written Project
Evaluate information	PHP 1910: Public Health Senior Seminar	Students must evaluate the information to: • decide whether they will support or refute the article in their Short In-Class Oral Presentation • determine what to include in their SOCO and strategize the best approach to their communications plan for their Communication Project • determine what to include in their Data Brief and how to frame their Written Project
Synthesize information	PHP 1910: Public Health Senior Seminar	Students must synthesize the information to: • understand the issues and support their chosen arguments for their Short In-Class Oral Presentation

D11-1: Public Health Bachelor's Degree Foundational Competencies		
Competency	**Course**	**Specific assessment opportunity**
		• tease out the single overriding communication objectives of their scenario and devise an effective communications plan for their Communication Project • write a Data Brief in an easily comprehensible format • complete a high quality Written Project • reflect on their reading and to prepare and give their elevator pitch

2) Include the most recent syllabus from each course listed in Template D11-1, or written guidelines, such as handbook, for any required elements listed in Template D11-1 that do not have a syllabus.

   The syllabus for PHP 1910: Public Health Senior Seminar is available in the ERF.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

   Strengths: We assess the competencies in the senior capstone course, which is required of all students. Students have the opportunity to be exposed to the material and skills associated with each competency throughout their course of study in the program, which is then reinforced and assessed as part of the capstone course. Students are asked to integrate and apply knowledge through assignments designed to help them practice and master critical skills and competencies in public health communication.

   Challenges: To date, we do not have a mechanism other than the course evaluations to determine students' perceptions about their preparation for the senior capstone course and the evaluation of the competencies.

   Plans: As part of a general approach to systematically evaluating the program on an ongoing basis, we will include mechanisms to obtain student feedback about our approach to teaching the material and skills to address the competencies.

D12. Public Health Bachelor's Degree Cumulative and Experiential Activities

Students have opportunities to integrate, synthesize and apply knowledge through cumulative and experiential activities. All students complete a cumulative, integrative and scholarly or applied experience or inquiry project that serves as a capstone to the education experience. These experiences may include, but are not limited to, internships, service-learning projects, senior seminars, portfolio projects, research papers or honors theses. Schools encourage exposure to local-level public health professionals and/or agencies that engage in public health practice.

1) Provide a matrix, in the format of Template D12-1, which identifies the cumulative and experiential activities through which students have the opportunity to integrate, synthesize and apply knowledge as indicated.

D12-1: Cumulative and Experiential Activities in the Public Health Bachelor's Degree	
Cumulative and Experiential Activity (internships, research papers, service-learning projects, etc.)	**How activity provides students the opportunity to integrate, synthesize, and apply knowledge.**
PHP 1910: Public Health Senior Seminar	This dynamic course is designed to provide an overarching capstone experience to seniors graduating with a bachelor's degree in Public Health. The course is intended to provide students with exposure to concepts, topics, and skills that will be applicable in the workforce and in graduate school, including public speaking, applied communication skills, scientific writing, and teamwork. Students learn from various guest lecturers and professionals in the field and are asked to engage with real world scenarios and solutions to hone and practice applied public health skills. Coursework has students utilizing and strengthening oral and written communication skills, as well as learning public health communications techniques and strategies. Critical skills such as literature searches, use of bibliographic software, critiquing the literature through journal club, working in teams, preparing a data brief, writing research papers, and communicating with diverse audiences through a variety of media are practiced. Students are asked to integrate, synthesize, and apply knowledge seamlessly in preparing and executing reading reflections, an Oral Presentation, a Communications Project, a Data Brief, and a final Written Project. The course provides students with an opportunity to synthesize and reflect on the knowledge gained during the undergraduate degree program, and important knowledge and skills that can be used as they transition to the next stage of their careers.
PHP 1980: Honor's Thesis Prep	Honors students complete a faculty-mentored and supervised honors thesis experience that offers the opportunity to integrate, synthesize, and apply knowledge. Many students collect, analyze, and write up primary or secondary quantitative or qualitative data, while others focus on a systematic or literature review. To do this successfully, students must integrate and synthesize knowledge and then apply it to their chosen topic.

D12-1: Cumulative and Experiential Activities in the Public Health Bachelor's Degree	
Cumulative and Experiential Activity (internships, research papers, service-learning projects, etc.)	**How activity provides students the opportunity to integrate, synthesize, and apply knowledge.**
	Students apply to the honors track in the semester before senior year. Their required grades must be a balance of As over Bs. In addition, they must write a short research prospectus and identify a primary faculty advisor and thesis reader. Work often begins the summer before senior year, then formally though the 2-course sequence PHP 1980: Honors Thesis Preparation (taken during the Fall and Spring semesters of their senior year), which is supervised by a faculty advisor. Students undertake a significant writing exercise under the close supervision of a faculty advisor and are expected to turn in two or more extensive drafts on which faculty comment and offer suggestions, before submission of the final paper at the end of the second semester of PHP 1980. Students are required to provide a professional presentation of their thesis findings (e.g., oral presentation using PowerPoint) to a diverse audience of students/staff/faculty from the School and affiliated University and community entities and/or a poster presentation of findings at a large School-wide conference that is open to the public and is attended by other University partners, such as the Medical School, as well as by community partners such as the Department of Health and community-based organizations. This is an additional opportunity for seniors who are pursuing honors to integrate and synthesize knowledge from across the curriculum into a capstone final project.

2) Include examples of student work that relate to the cumulative and experiential activities.

Examples of projects described below from PHP 1910: Public Health Senior Seminar can be found in the ERF:

1. Capstone Project Example: "Narrative Review and Recommendations for Future Public Health Intervention: Racialized Obstetric Violence in the United States"
2. Capstone Project Example: "Breaking Down the Healthy Immigrant Effect: A Cigarette Use Risk Profile for LatinX Immigrants in the United States"
3. Communication Module Example: "Vaccination for Fifth Disease"
4. Communication Module Example: "Mycoplasma Pneumoniae Vaccine Education and Promotion Program"

Examples of senior Honors Theses described below can be found in the ERF:

1. "Palliative Care Integration in Pediatric Oncology: Alignment of Physician Perspectives with WHO Guidelines in 11 Eurasian Countries"
2. "ENDS and Young Adults: A Mixed Methods Exploration of the Influence of Online Marketing on Electronic Nicotine Delivery Systems (ENDS) Use and Perceived Health Effects in Young Adults"

3. "The Burden of Malnutrition and Food Insecurity among United States Resettled Refugees: A Critical Review of the Literature and Case Study"

3) Briefly describe the means through which the school implements the cumulative experience and field exposure requirements.

All public health concentrators complete a capstone project. PHP 1910: Public Health Senior Seminar, taken in the seventh (penultimate) semester, is designed as an overarching capstone experience for public health students. Through multiple activities and simulations, students are afforded an engaging opportunity to bring together all aspects of their public health education. Students accepted into the honors track prepare an honors thesis as an additional capstone experience.

4) Include handbooks, websites, forms and other documentation relating to the cumulative experience and field exposure. Provide hyperlinks to documents if they are available online, or include electronic copies of any documents that are not available online.

The syllabus for PHP 1910: Public Health Senior Seminar and PHP 1980: Honors Thesis Prep can be found in the ERF.

See Honors Track at Public Health Undergraduate Curriculum

D13. Public Health Bachelor's Degree Cross-Cutting Concepts and Experiences

The overall undergraduate curriculum and public health major curriculum expose students to concepts and experiences necessary for success in the workplace, further education and lifelong learning. Students are exposed to concepts through any combination of learning experiences and co-curricular experiences.

1) Briefly describe, in the format of Template D13-1, of the manner in which the curriculum and co-curricular experiences expose students to the concepts identified.

D13-1: Public Health Bachelor's Degree Cross-Cutting Concepts and Experiences	
Concept	**Manner in which the curriculum and co-curricular experiences expose students to the concepts**
Advocacy for protection and promotion of the public's health at all levels of society	Advocacy for protection and promotion of the health of the public is emphasized in readings and lectures in required core course PHP 0320: Introduction to Public Health, specifically in the readings for Lecture 19. The School offers a range of Diversity and Health Equity courses that include advocacy for various populations, such as PHP 1680I: Pathology to Power: Disability, Health and Community; PHP 1680U: Intersectionality and Health Inequities; and PHP 1820: Designing Education for Better Prisoner & Community Health. Co-curricular programs also provide students with exposure to this concept. For example: • The concept underpins the annual Barnes Lecture in Public Health, in which a distinguished public health leader/professional provides a large public lecture at the School on issues "pertinent to public health that speak to the interface between medicine and society." • The School's Committee for Diversity and Inclusion sponsors programming and events (e.g., lectures, speaker panels, films, and discussion groups) that address the responsibility of public health to protect and promote the health of society's diverse communities (e.g., topics have included racism and stress; public health and equality for LGBT populations; the legacy of Henrietta Lacks; Black History Month lectures/discussions on race and health, and on the aftermath of the Flint water crisis). • The School is a member of the Rhode Island Public Health Association (RIPHA), which allows for free membership for all students, faculty, and staff. RIPHA offers public health advocacy workshops each year as well as tours of the state house given by a public health advocating General Assembly Member. Students are offered participation in advocacy also through writing, editing or preparing presentations of RIPHA data and/or advocacy briefs, which are used to engage General Assembly members and the public at large in advocacy. In addition to direct advocacy at the state level, the School has a student chapter of RIPHA, which collaborates with student groups from the 13 other member colleges, universities, schools, and health programs from around Rhode Island. The leadership of the program's student-led Departmental Undergraduate Group (DUG) coordinates closely with the School's RIPHA student chapter to provide activities with and for students, and to consider advocacy focused on Brown public health policies.

D13-1: Public Health Bachelor's Degree Cross-Cutting Concepts and Experiences	
Concept	**Manner in which the curriculum and co-curricular experiences expose students to the concepts**
Community dynamics	Community dynamics are explored in required core course PHP 0320: Introduction to Public Health, where students are exposed to the community dynamics that motivate public health advocacy and interventions for a range of public health problems. Community dynamics are frequently discussed in programming sponsored by the School's Committee for Diversity and Inclusion (e.g., recent programs on race, racism, and community health inequities; on equality, health equality, and inclusion of sexual and gender minority populations), and in colloquia series sponsored by School-affiliated research centers such as the Center for Health Promotion and Health Equity, Center for AIDS Research, Center for Alcohol and Addiction Studies, and Center for Epidemiologic Research. Although all colloquia are open to all students in the School of Public Health, honors students are particularly encouraged to attend talks/presentations at Centers with which their advisors are affiliated. The School has a close relationship with Brown University's Swearer Center, a University-wide resource that focuses on engaged scholarship, community engagement, and social innovation, and which provides students with opportunities for applying their academic talents in community-based organizations to reflect on the translation of scholarship to society and contribute to social change.
Critical thinking and creativity	Critical thinking and creativity are at the heart of Brown University's "Open Curriculum," a unique and defining feature of the student experience. Brown has no required University-level core curriculum or distribution requirements that students must complete to graduate. Instead, students are encouraged to take courses that span the range of disciplinary and professional fields, as well as to think creatively about how to hybridize across disciplinary, methodological, and professional approaches to create a personalized educational experience. Thus, students at Brown have unparalleled freedom to shape their own education and to make their college curricula a more thorough reflection of their own interests and aspirations. Brown's Open Curriculum is based on three principles. First, students ought to take an active role in their education by assuming responsibility for the direction of their learning. Second, an undergraduate education is seen as a process of individual and intellectual development, rather than simply a way to transmit a set body of information. Finally, the curriculum should encourage individuality, experimentation, and the integration and synthesis of different disciplines. Specifically within the public health undergraduate concentration, critical thinking and creativity are emphasized in required core course, PHP 1910: Public Health Senior Seminar, where students are encouraged to critically explore current public health issues and present their work in-person and/or via various oral and written assignments demonstrating critical thinking in evaluating evidence. The weekly reading reflections and questions provide fertile ground for critical thinking and generation of creative ideas and solutions. Students are also exposed to these concepts in all of the Policy courses (PHP 0330: Public Health Policy; PHP 0650: From Manufacturer to Patient: Why is the Cost of Prescription Drugs So Darn High?; PHP 1100: Comparative Health Care Systems; PHP 1480: Introduction to Public Health Economics) and the Health Disparities courses (PHP 1650, Race, Racism

D13-1: Public Health Bachelor's Degree Cross-Cutting Concepts and Experiences	
Concept	**Manner in which the curriculum and co-curricular experiences expose students to the concepts**
	and Health; PHP 1680I: Pathology to Power: Disability, Health and Community; PHP 1680U: Intersectionality & Health Inequities; PHP 1820: Better Prisoner & Community Health; PHP 1920: Social Determinants of Health)
Cultural contexts in which public health professionals work	Cultural contexts in which public health professionals work is addressed in required core course PHP 0320: Introduction to Public Health, where students discuss the context of health disparities and community-level approaches. Cultural contexts of public health professions are also explored in co-curricular programming, including activities sponsored by the School's Committee for Diversity and Inclusion, research colloquia series in which speakers describe the cultural context of public health problems and services/interventions (e.g., by the Center for Alcohol and Addiction Studies, Center for AIDS Research, Hassenfeld Child Health Innovation Institute, Center for Health Policy and Health Equity Research, Center for Gerontology and Healthcare Research).
Ethical decision making as related to self and society	In required core course PHP 0310: Health Care in the United States, students are exposed to lectures and readings that address ethics, values, and professional responsibilities in public health. In PHP 1910: Public Health Senior Seminar, students explore ethical decision making while engaging with a guest speaker from the tobacco industry working on harm reduction.
Independent work and a personal work ethic	Independent work and personal work ethic is stressed in all courses at Brown. A core expectation of undergraduate students, emphasized in individual undergraduate advising meetings, is to work independently and to develop a professional work ethic in relation to the study of public health. Coursework requirements state that students must submit independent work. Specifically, in PHP 1910: Public Health Senior Seminar, students do independent research for individual presentations and written projects.
Networking	Networking is emphasized in PHP 1910: Public Health Senior Seminar through learning to create an effective elevator pitch and other networking exercises and opportunities. The class includes peer networking with the intent to create a cohort of alumni to stay in touch with each other and support each other after graduation, and professional networking opportunities through guest presenters. The School's Assistant Director of Career Advising sponsors events and platforms that offer networking opportunities, including LinkedIn tools: Brown Public Health Careers (a private group for students and alumni), and two networking groups: School of Public Health Alumni and Brown University Alumni The CareerLAB is a University-wide resource that hosts networking events for students with alumni, working professionals, and employers. CareerLAB coordinates the BrownConnect program, which facilitates personalized networking opportunities for all Brown undergraduates with successful alumni in their fields of interest. The program's Departmental Undergraduate Group (DUG) regularly convenes networking events where students can interact with one another as well as with faculty, alumni, and professionals in the field. They also hold

D13-1: Public Health Bachelor's Degree Cross-Cutting Concepts and Experiences	
Concept	**Manner in which the curriculum and co-curricular experiences expose students to the concepts**
	joint events with the School's Graduate Student Council, which provide additional networking opportunities. The Rhode Island Public Health Association, of which the School is a member, offers many opportunities annually to engage with other public health professionals in private, academic, government, and nonprofit employment as well as students in health fields from around the state. Networking is emphasized among students, and between students and public health professionals to provide mentoring as well as future employment opportunities.
Organizational dynamics	Organizational dynamics are emphasized in PHP 0310: Health Care in the United States through lectures, readings, and section assignments to illuminate for students the importance of understanding the role of organizations (e.g., government agencies, nonprofit and community-based organizations, provider institutions) in the delivery of public health services.
Professionalism	Professionalism is emphasized in PHP 0310: Health Care in the United States as well as in PHP 1910: Public Health Senior Seminar and the Policy courses. All of these courses emphasize to students the importance of professional conduct in working with colleagues, with community and professional partners, with academic advisors and peers, and with clients or research participants. PHP 1910 offers opportunities to hone professional skills The Brown University CareerLAB also offers co-curricular workshops on professional skills to prepare students as they enter the workforce.
Research methods	Research methods are heavily stressed in required core courses including PHP 0310: Health Care in the United States, PHP 0320: Introduction to Public Health, as well as in PHP 1910: Public Health Senior Seminar and the Policy courses. Although methods are taught at different levels depending on the course, each course consistently emphasizes the importance of rigorous methods as well as the range of methods necessary for informing public health decisions.
Systems thinking	In core course PHP 0310: Health Care in the United States, systems thinking is emphasized in lectures, readings, and section assignments. The course provides for students an understanding of the systems approach, which guides the delivery of health care in the U.S. In core course PHP 0320: Introduction to Public Health, students are exposed in the lectures and readings.
Teamwork and leadership	PHP 0310: Health Care in the United States emphasizes teamwork and leadership in lectures, readings, and section assignments. In PHP 1910: Public Health Senior Seminar, activities simulate the practice of effective workplace skills, such as group work, running effective meetings, fostering innovation, and leadership. Students work in teams on a number of skills-based assignments, most notably, the Communications module and presentation. All of the Global Health courses also include team-based learning activities.

2) Provide syllabi for all required coursework for the major and/or courses that relate to the domains listed above. Syllabi should be provided as individual files in the electronic resource file and should reflect the current semester or most recent offering of the course.

Each of the following syllabi can be found in the ERF:

- PHP 0310: Health Care in the United States
- PHP 0320: Introduction to Public Health
- PHP 0330: Public Health Policy
- PHP 0650: From Manufacturer to Patient: Why is the Cost of Prescription Drugs So Darn High?
- PHP 1100: Comparative Health Care Systems
- PHP 1480: Introduction to Public Health Economics
- PHP 1650: Race, Racism and Health
- PHP 1680I: Pathology to Power: Disability, Health and Community
- PHP 1680U: Intersectionality & Health Inequities
- PHP 1820: Better Prisoner & Community Health
- PHP 1910: Public Health Senior Seminar
- PHP 1920: Social Determinants of Health

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: Our experience with, and commitment to, the Brown ethos, the robust advising structure and resources, as well as the coursework and co-curricular and mentoring experiences, gives us great confidence that all of our students are very strong in these areas:
- Critical thinking and creativity
- Ethical decision making as related to self and society
- Independent work and a personal work ethic
- Research methods
- Teamwork and leadership

Our public health curriculum and rich co-curricular environment support students in the following areas:
- Advocacy for protection and promotion of the public's health at all levels of society
- Cultural contexts in which public health professionals work
- Community dynamics
- Networking
- Professionalism

Two examples illustrate student experiences with the concepts listed above:
- Students can become involved in the active Departmental Undergraduate Group (DUG) and the new Public Health Project Committee, which connects the DUG with 13 other public health programs, colleges, and universities around the state of Rhode Island as student chapters of the Rhode Island Public Health Association (RIPHA). Our new Director of Undergraduate Studies, Dr. Patricia Markham Risica, is the RIPHA Advocacy Committee Chair and the Immediate Past President of RIPHA. The current DUG Co-President advocated for this group, and the School has provided a budget for program activities. This arm of the DUG, which arose from student passion for collaboration and engagement, advocacy, and action, gives students a way to have a public health impact on the Brown campus and the wider community. The DUG holds peer advising and mentoring events as well as professional development and networking events.

- In Spring 2020, students were engaged in writing and editing data and advocacy briefs during three advocacy workshops. In addition, they had several opportunities to tour the Rhode Island State House and be honored on the floor of the house during session, which was hosted by a strong public health advocate and member of the Rhode Island General Assembly.

Students are exposed to the following concepts in their coursework:
- Organizational dynamics
- Systems thinking

It is important to note that in Template 13-1, we have generally listed the courses taken by every student. However, students are also exposed to many of the concept areas in course electives.

Challenges: We have not formally evaluated faculty and student perceptions of the level of exposure to the D13 concepts in student coursework and co-curricular experiences to identify and address weaknesses. We do not have a tracking system to catalogue student-related community engagement activities of students.

Plans: We will establish a mechanism for regularly evaluating the level of exposure to the concepts. We also will develop a tracking system to catalogue student-related community engagement. Brown CareerLAB and our new Director of Community Engagement and Assistant Director of Career Advising will create more content and host additional events to support these areas.

D14. MPH Program Length

An MPH degree requires at least 42 semester-credits, 56 quarter-credits or the equivalent for completion.

Schools use university definitions for credit hours.

1) Provide information about the minimum credit-hour requirements for all MPH degree options. If the university uses a unit of academic credit or an academic term different from the standard semester or quarter, explain the difference and present an equivalency in table or narrative form.

   The academic year at Brown University consists of two semesters (Fall, Spring), each of which is approximately 15 weeks in length. The semester course is the unit of credit, rather than having a course count for a specific number of "credit hours." A full unit is defined as a course taken for the duration of one semester and, for purposes of evaluation, is considered the approximate equivalent of four semester/credit hours. Degree requirements at Brown are based on the total number of course units that students must complete. The vast majority of courses at Brown are considered full course units, but there are some half-credit courses. Half-credit courses either end half way through the semester or are otherwise half the time commitment of full-credit courses. A half-credit course is considered the approximate equivalent of two semester/credit hours. During the Fall and Spring semesters, classes are typically scheduled in standard meeting times that meet either three days per week for 50 minutes each; two days per week for 1 hour and 20 minutes each; or seminar courses that meet one day per week for 2 hours and 30 minutes. Courses may have additional sessions for labs or small group work.

   The MPH Program has 13 course units (12 full-credit courses and 2 half-credit courses). This is the equivalent of 52 credits. Students who have taken graduate-level health-related courses prior to enrolling in the MPH may request to reduce the number of required electives. Requests for reduced course loads, including the syllabus and transcript for the courses taken, must be approved by the MPH Program Director prior to enrolling. Courses taken as part of an undergraduate program will not be considered. When the MPH Program approves a student for a reduced course load, we let the Graduate School and Registrar know in advance of the student enrolling. Students who do not request a waiver in advance have the option of transferring in two courses after they have matriculated, in accordance with University/Registrar rules.

   Students who enrolled prior to Fall 2020 could request to waive up to 4 elective courses. This rule was developed with guidance from CEPH during a past MPH accreditation site visit, but it meant that some students were graduating with fewer than 10.5 courses (42 credits) completed at Brown University. In May 2020, the MPH Program adopted a new rule for students who began in Fall 2020 or later. Students are able to request to reduce their elective courses taken at Brown by a maximum of 2 courses, so that all students will graduate with a minimum of 11 courses (44 credits) taken at Brown University.

2) Define a credit with regard to classroom/contact hours.

   For purposes of evaluation, Brown courses are considered the approximate equivalent of four semester hours. While most courses only meet in person for roughly 2.5 hours of seat time per week, the reasonable expectation is that out-of-class reading assignments, research, labs, projects, and other activities required of typical Brown courses will require much more than a 2:1 ratio per seat hour, which is affirmed under both federal definitions of a credit hour, as well as with our regional accrediting body, the New England Association of Schools and Colleges. We have been provided guidance on this issue from our University Registrar.

D15. DrPH Program Length

Not applicable.

D16. Bachelor's Degree Program Length

A public health bachelor's degree requires completion of a total number of credit units commensurate with other similar degree schools in the university.

Schools use university definitions for credit hours.

1) Provide information about the minimum credit-hour requirements for all bachelor's degree options. If the university uses a unit of academic credit or an academic term different from the standard semester or quarter, explain the difference and present an equivalency in table or narrative form.

   As described on the Brown Office of the Registrar: The College website, each student is normally expected to enroll in four courses in each of their eight semesters for a total of 32 courses. Tuition payments are based on the norm of 32 courses and eight semesters of full-time residence at Brown.

   As described on the Undergraduate Degree Requirements website, students are required to achieve a passing grade in a minimum of 30 Brown course credits or their equivalent in approved transfer courses. A maximum of 15 transfer courses and no more than four summer courses (at Brown or elsewhere) or winter courses (taken at Brown) may count toward this requirement.

   Of the 30-32 courses required to earn the bachelor's degree at Brown, 12 (non-honors) or 14 (honors) courses are required for completion of the undergraduate concentration in Public Health.

2) Define a credit with regard to classroom/contact hours.

   One semester credit hour is defined at Brown University as a weekly minimum of one hour in class (or other required educational meetings such as labs) plus two hours of out-of-class work. Formally, therefore, a four-credit course should require four classroom hours and eight hours of out-of-class hours each week in a 15-week term. Deficiency in class time can be made up for by additional out of class time on a 2:1 basis (i.e., a four-credit class meeting for three hours per week should carry a minimum expectation of 10 hours of out-of-class work). The total of in-class hours and out-of-class work for a four-credit course should be approximately 180 hours. All of Brown's classes carry four credits, but there is great variation in the hours of required meetings per week. Bachelor's degrees require a minimum of 120 credits.

3) Describe policies and procedures for acceptance of coursework completed at other institutions, including community colleges.

   Policies and procedures for acceptance of coursework completed at other institutions are provided on the Brown Office of the Registrar: The College web page and briefly described below.

   Students who wish to study at other U.S. institutions for transfer credit toward their Brown degree may do so with prior approval of the appropriate departments and the Committee on Academic Standing (CAS) either in the summer months (cannot exceed four credits inclusive of any Brown summer credit) or during the fall/spring semester. The CAS delegates the authority to approve petitions for such programs to a specific dean of the College.

   Students planning to study elsewhere in the U.S. consult the Dean of the College website. Then they work out a program and present it to their concentration advisor and other appropriate faculty members for approval.

   In a semester system, one Brown course is considered the equivalent of four semester-hours. In a quarter system, one Brown course is considered the equivalent of six quarter-hours. For that

reason, the number of course transfer credits received for study away from Brown may not be equal to the number of courses taken. For example, a student taking four three-semester-hour courses (12 semester credit hours) receives the equivalent of three Brown course credits, while a student taking three four-quarter-hour courses (12 quarter credit hours) receives the equivalent of two Brown course credits.

To be considered for transfer credit, courses need to be completed with a grade of C or better, and an official transcript received by the Brown University Office of the Registrar from a regionally accredited, degree granting, two- or four-year host institution. All transfer credit must receive Faculty and Committee on Academic Standing approval. Students are responsible for clarifying in advance any concerns regarding the amount of transfer credit that may be awarded.

Students returning from study elsewhere in the U.S. may receive up to eight course credits for work undertaken during one academic year, but normally no more than four concentration credits may be awarded. Credit cannot be granted until the student has successfully completed the work and has had an official transcript sent to the Office of the Registrar. Students who take a semester or year for study elsewhere must meet with one of the deans of the College to request a leave of absence from Brown.

To receive credit for foreign study, students are required to spend at least one semester enrolled in a foreign institution of higher learning, subject to the same rules and regulations as the host institution's regular students. There are two exceptions: (1), where the language of study is one in which sufficient proficiency is unlikely to be achieved by the average Brown undergraduate, but the student should study the language while in the country; and (2) where the usual assessment procedures may not be appropriate, in which case special arrangements may have to be made. Students will not receive credit for study in itinerant programs (i.e., those that travel through many sites rather than based in one primary site). They also will not get credit for courses taken at institutions created for overseas study for Americans, with special exceptions: for study of a specific area and/or field research unavailable at Brown or better pursued at a foreign site or in sites where "the average Brown student" cannot study alongside local students because of the language.

4) If applicable, provide articulation agreements with community colleges that address acceptance of coursework.

   Not applicable.

5) Provide information about the minimum credit-hour requirements for coursework for the major in at least two similar bachelor's degree programs in the home institution.

   Below are the course requirements (i.e., credit hour requirements) for bachelor's degree programs at Brown University that are similar to the undergraduate public health program.

   - Health and Human Biology: 14 courses
     - Health and Human Biology Requirements
   - Public Policy: 10 courses plus capstone
     - Public Policy Requirements

   A table showing the requirements for the AB in Public Health; Health and Human Biology; and Public Policy is provided on the next page.

Public Health (AB)	Health & Human Biology (AB)	Public Policy (AB)
12 courses (14 courses for honors)	14 courses	11-12 courses
Part A: Core Courses (4)	**Part A. Background Courses (4)**	**Part A. Core Courses (5)**
PHP 0310 PHP 0320 PHP 0850 PHP 1501 PHP 1910 (see Part D: Senior Capstone)	MATH 0090 BIOL 0200 CHEM 0330 Statistics or Methods Course	PLCY 0110 Economics for Public Policy (1) PLCY 1400 Statistics for Public Policy (1) PLCY 1200
Part B/C: Defined Electives (7)	**Part B. Core Courses (5)**	**Part B. Broad Policy Electives (3)**
• Environmental Health and Policy elective (1) • Health, Health Care Systems and Policy elective (1) • Social and Behavioral Science for Prevention elective (1) • Global Health elective (1) • Health Disparities elective (1) • Biology/Human Physiology elective (1) • Humanities/Fine Arts - Public Health elective (1)	• Genetics (1) • Structure/Function/ Development (1) • Organismal/Population Biology (1) • Biology Electives (2)	Take 3 courses in 3 different policy areas. Examples of policy areas to choose from: • Environmental Policy • Government, Law & Ethics • Health Policy • Social Policy • Urban Policy • Technology Policy
	Part C. Theme Courses (4)	**Part C. Specialization Policy Electives (2)**
	Choose from 1 of 4 theme options: 1) Brain Health and Behavior 2) Environmental Health 3) Global/International Health 4) Social Context of Health and Disease	Take two additional courses in one of the policy areas you chose (total of 3 courses in one specialization area).
Part D: Senior Capstone (1-3)	**Part D. Senior Capstone (1)**	**Part D. Senior Capstone (choose 1 option)**
• All students take PHP 1910: Senior Seminar • Students who pursue the Honors Track take 2 semesters of PHP 1980: Honor's Thesis Preparation in addition to PHP 1910	• Option 1. Independent research/study • Option 2. Advanced Seminar • Option 3. Off campus experience coupled with independent study Honors students may register for BIOL 1950/1960 independent study courses to support honors theses research, though this is not required.	• Honors Thesis (PLCY 1970 (IAPA 1851)): two-semesters • Independent Study • Public Policy Internship • Research Assistantship • UTRA Assistantship • Designated Senior Seminar

Explanatory notes for comparison table

When a course is required, it is listed by course number. When a student has options to choose from to fulfill a requirement, the course numbers are not listed. All of the numbers in parentheses represent the number of courses associated with the requirement.

Part A
- Public Health: The core courses or Background Courses are specific courses, and, hence, are listed.

- <u>Health and Human Biology</u>: The core courses or Background Courses are specific courses, and, hence, are listed.
- <u>Public Policy</u>: Students choose from course options in each of the five core areas.

<u>Parts B and C</u>
- <u>Public Health Defined Electives</u>: The numbers in parentheses represent the number of classes required: Seven total defined elective courses – one in each of the seven areas (students choose one each from a list of curated options in each area).
- <u>Health and Human Biology</u>: Students choose one course from a number of options in each of the five core areas, and then four theme courses from one of four themes.
- <u>Public Policy</u>: Students take three electives in three different policy areas, so no numbers were put in parentheses next to any of these areas. They then take two additional courses in one of the policy areas chosen (for a total of three courses in one specialization area).

<u>Part D</u>
- <u>Public Health</u>: All students take PHP 1910 as their capstone course. If they do honors, they take two additional capstone courses (i.e., two semesters of PHP 1980). Hence, the table states "1-3 capstone courses."
- <u>Health and Human Biology</u>: Students take one capstone course. They choose from one of three options.
- <u>Public Policy</u>: Students take one capstone course by choosing one of the listed options.

D17. Academic Public Health Master's Degrees

These students also complete coursework and other experiences, outside of the major paper or project, that substantively address scientific and analytic approaches to discovery and translation of public health knowledge in the context of a population health framework.

Finally, students complete coursework that provides instruction in the foundational public health knowledge at an appropriate level of complexity. This instruction may be delivered through online, in-person or blended methodologies, but it must meet the following requirements while covering the defined content areas.

The school identifies at least one required assessment activity for each of the foundational public health learning objectives.

The school validates academic public health master's students' foundational public health knowledge through appropriate methods.

1) List the curricular requirements for each relevant degree in the unit of accreditation.

Biostatistics AM/ScM

The Master's program in Biostatistics includes an AM and ScM option. The ScM requires 10 courses in total, 3 of which are electives. The ScM also requires a written thesis/project. The AM, open only to Brown students either through a Fifth-Year option for undergraduates or through an Open Graduate Education option for current doctoral students in other degree programs, requires 8 courses, 4 of which are electives. All students are also required to attend the weekly Journal Club and Career Seminar Series and take PHP 1001, an online non-credit course covering the foundations of public health.

Biostatistics AM/ScM Course Requirements
Public Health 1001 (not for credit, online course)
Required Courses (for both AM/ScM)
Theory and methods of statistical inference (Choose 1 Below):
PHP 2515: Fundamentals of Probability and Inference OR PHP 2520: Inference I
PHP 2550: Practical Data Analysis
PHP 2560: Statistical Programming with R
PHP 2514: Applied Generalized Linear Models
Additional Required Courses for ScM (electives for AM)
PHP 2516: Applied Longitudinal Models (1/2 Course)
PHP 2517: Applied Multilevel Models (1/2 Course)
PHP 2610: Causal Inference & Missing Data
PHP 2650: Statistical Learning/Big Data
Electives (for both AM/ScM)
Statistical Electives
PHP 2030: Clinical Trials Methodology
PHP 2530: Bayesian Statistical Methods
PHP 2580: Statistical Inference II
PHP 2601: Linear Models
PHP 2602: Analysis of Lifetime Data
PHP 2605: Generalized Linear Models
PHP 2620: Statistical Methods for Bioinformatics
PHP 2980: Graduate Independent Study & Thesis Research
Epidemiology Electives
EPI 2120: Introduction to Methods in Epidemiologic Research
EPI 2150: Foundation in Epidemiologic Research Methods

Biostatistics AM/ScM Course Requirements
EPI 2200: Intermediate Epidemiologic Methods
Programming and Data Science Electives
PHP 2561: Methods in Informatics and Data Science for Health
CSCI 1420: Machine Learning
CSCI 1470: Deep Learning
CSCI 1570: Design an Analysis of Algorithms
CSCI 1810: Computational and Molecular Biology
CSCI 1820: Algorithmic Foundations in Computational Biology

Clinical and Translational Research (CTR) ScM

Students in the Master of Science in Clinical and Translational Research program complete nine credit-bearing courses, including an epidemiology methods course, a two-course sequence in biostatistics and applied data analysis, two courses in advanced research methods, a scientific writing course, and two electives, and participate in two half-credit seminar courses. Students are also required to complete the online, not for credit course, Public Health 1001. Given the applied nature of the program, students work closely with advisors to develop a thesis portfolio composed of a first author abstract submitted to a regional, national, or international conference, and either two first-author, publishable-quality research manuscripts or one first-author, publishable-quality manuscript and a grant proposal.

CTR Course Requirements
Public Health 1001 (not for credit, online course)
Introduction to Research Methods
Students must take one of the following two courses:
PHP 2120: Introduction to Methods in Epidemiologic Research OR
PHP 2150: Foundations in Epidemiologic Research Methods
Biostatistics and Applied Data Analysis
Students must complete one of the following two course sequences:
Sequence 1:
PHP 2507: Biostatistics and Applied Data Analysis I
PHP 2508: Biostatistics and Applied Data Analysis II
Sequence 2:
PHP 2510: Principles of Biostatistics and Data Analysis
PHP 2511: Applied Regression Analysis
Scientific Writing
Students must take the following course:
PHP 2090: Research Grant Writing for Public Health
Advanced Research Methods
Students must take two of the following advanced methods courses:
PHP 1560/2560: Statistical Programming in R
PHP 2030: Clinical Trials Methodology
PHP 2040: Survey Research Methods
PHP 2060: Qualitative Methods in Health Research
PHP 2180: Interpretation and Application of Epidemiology
PHP 2410E: Medicare: A Data-Based Policy Examination
PHP 2415: Introduction to Evidence-Based Medicine
PHP 2465A: Introduction to Health Decision Analysis

2) Provide a matrix, in the format of Template D17-1, which indicates the required assessment opportunities for each of the defined foundational public health learning objectives (1-12). Typically, the school will present a separate matrix for each degree school, but matrices may be combined if requirements are identical.

All students in the Academic Public Health Master's Degrees (Biostatistics AM/ScM and Clinical and Translational Research ScM) take Public Health 1001, in which the foundational public health learning objectives are assessed.

D17-1: Assessment of Foundational Public Health Learning Objectives for the Biostatistics AM/ScM and Clinical and Translational Research ScM		
Content	**Course**	**Specific assessment opportunity**
1. Explain public health history, philosophy, and values	Public Health 1001	Module 1 Session 1 Assessment: Describe the history of public health. Include at least three transformative events that shaped public health. What is the overall philosophy of public health? To what values does public health as a practical science ascribe?
2. Identify the core functions of public health and the 10 Essential Services*	Public Health 1001	Module 1 Session 1 Assessment: The ten essential public health services include which of the following: What are the three core public health functions?
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	Public Health 1001	Module 1 Session 2 Assessment: Explain the difference between qualitative and quantitative data including an example where you would use each type of data.
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	Public Health 1001	Module 2 Session 1 Assessment: List the major causes of mortality within the United States today. Have these changed over time? Are they different than the major causes of mortality globally? If so, discuss how. How do causes of morbidity and mortality differ among geographic and demographic subgroups of the US population? Provide examples in your discussion.
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	Public Health 1001	Module 2 Session 2 Assessment: Explain the difference between primary, secondary, and tertiary prevention, and provide an example of each. Discuss the purpose of screening in each prevention strategy.

	D17-1: Assessment of Foundational Public Health Learning Objectives for the Biostatistics AM/ScM and Clinical and Translational Research ScM		
	Content	**Course**	**Specific assessment opportunity**
6.	Explain the critical importance of evidence in advancing public health knowledge	Public Health 1001	Module 2 Session 3 Assessment: What is Evidence Based Public Health (EBPH)? Discuss the strengths and weaknesses of observational studies in the context of EBPH.
7.	Explain effects of environmental factors on a population's health	Public Health 1001	Module 3 Session 1 Assessment: Provide one example of environmental impacts/risk factors that impact human health and explain how they are connected. Explain what environmental justice is and discuss why it is important in the context of promoting health for all.
8.	Explain biological and genetic factors that affect a population's health	Public Health 1001	Module 2 Session 4 Assessment: Explain how identifying biologic and genetic determinants of health can help to address public health problems even though they may not be modifiable directly. Provide examples of specific health outcomes in your explanation.
9.	Explain behavioral and psychological factors that affect a population's health	Public Health 1001	Module 4 Session 1 Assessment: Explain two behavioral factors and how they increase risk of non-communicable disease. Explain an intervention that has been used to help people change their behavior to reduce risk of non-communicable disease(s).
10.	Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	Public Health 1001	Module 4 Session 2 Assessment: Explain how income impacts health. Explain how education impacts health. List one aspect of racism that is apparent and one that is not and indicate why you think this difference exists. Select one social determinant of health and indicate how you would measure it to reduce disparities associated with one outcome of interest.
11.	Explain how globalization affects global burdens of disease	Public Health 1001	Module 5 Assessment: One of the primary ways that globalization has affected the global burden of disease is through the emergence of non-communicable diseases (NCDs). Using specific examples from the course readings, explain how the epidemiological and health transitions have contributed to increases in NCDs in lower and middle income countries.

D17-1: Assessment of Foundational Public Health Learning Objectives for the Biostatistics AM/ScM and Clinical and Translational Research ScM		
Content	**Course**	**Specific assessment opportunity**
		Describe at least two specific mechanisms underlying the transition to the higher burden of NCDs in lower and middle income countries.
12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health)	Public Health 1001	Module 3 Session 2 Assessment: Explain the One Health approach to promoting human health, and why it is important in the context of public health.

3) Provide a matrix, in the format of Template D17-2, which lists competencies for each relevant degree and concentration. The matrix indicates at least one assessment activity for each of the listed competencies. Typically, the school will present a separate matrix for each concentration. Note: these competencies are defined by the school and are distinct from the foundational public health learning objectives defined in this criterion.

D17-2: Biostatistics AM/ScM		
Competency	**Course**	**Specific assessment opportunity**
1. Use probabilistic and statistical concepts and methods to describe and draw inferences from biomedical data.	PHP 2515: Fundamentals of Probability and Statistical Inference	Homework assignments, Exams Each homework assignment will include questions on distributions and assumptions on binary, count, and continuous variables. Most exercises will report biomedical examples and biological data Example exam question: Calculate $E(X)$ and $Var(X)$ of the variable X, the time to recovery (in days) from the H1N1 flu. Also, each homework and exam will perform statistical techniques in order to better understand the distribution of the data and draw conclusion on that. Example exam question: Marginal densities of the variables in a joint distribution. Plot the histograms of the marginal densities of X and Y. Are X and Y independent?
2. Apply appropriate statistical methods to analyze data of different types and structures.	PHP 2514: Applied Generalized Linear Models	Homework Assignments, Exams, Final Project Homework 1-Q3: Use publicly available data from the Sleep Heart Health Study (SHHS), and fit the appropriate generalized linear model to assess the association between sleep apnea and heart disease adjusting for important risk factors.

D17-2: Biostatistics AM/ScM		
Competency	**Course**	**Specific assessment opportunity**
		Homework 2-Q1&2: Use publicly available data from a real study to examine the association of respiratory function and second-hand smoking. Perform model selection procedures to identify the model that best describes this association after adjusting for important risk factors and interaction terms. Final Project: Identify a research question, and a database that they can use to address their research question, and decide on appropriate data analytic approaches to analyze the data. Write a report on the research question, the process they used to identify and implement statistical models for the analysis of their data, and a discussion of the results.
3. Prepare report of methods, results, and interpretations from a simulation that investigates the properties of a statistical method.	PHP 2515: Fundamentals of Probability and Statistical Inference	Report: At the end of the course the students prepare a report addressing different simulation scenarios. In this way, they explore statistical inference and perform hypothesis testing for the different simulation settings. Example report question: Find the maximum likelihood estimator of the given function after a simulation of 1,000 sample from a normal distribution. Describe the findings and report what you discovered. Also, the report will include plot, statistical measure, and statistical checking in order to define all the distributional properties of the simulation scenario considered. Example report question: Generate a sample of size $n = 500$ from the distribution defined. Perform the bootstrap and compute the correlation coefficient for B = 10000 Bootstrap samples. Plot a histogram of the Bootstrap. Discuss your findings.
4. Perform power analysis and sample size calculations to determine the required number of subjects to carry out scientific studies.	PHP 2515: Fundamentals of Probability and Statistical Inference	Homework assignments, Exams: The homework assignment and exam also focus on test inference to compute power analysis and the optimum sample size to determine scientific conclusion. Example exam question: What is the power function of a determined test? Compute the sample size required for testing this hypothesis with power. Explain your reasoning and derivation of each step.
5. Use statistical software for data management,	PHP 2560: Statistical	Weekly programming labs, the midterm project addressing a larger question in a

D17-2: Biostatistics AM/ScM		
Competency	**Course**	**Specific assessment opportunity**
implementation of comprehensive statistical analysis, and presentation of results.	Programming with R	computational notebook, and a final project creating a Shiny App. All of these assignments involve data management and statistical analysis using student-developed, computational tools. The latter two assignments are partially graded on presentation of the results through the notebook and app, respectively.
6. Write report of comprehensive and novel statistical analysis of public health data.	PHP 2550: Practical Data Analysis	Final Project. The final project consists of either a comprehensive analysis of data of the student's choice or an in-depth discussion of a data analysis topic not covered in detail in class. Either choice must be made with agreement from the instructor who provides topic and data analysis suggestions for students who need them. The project grade is determined based on the in-class presentation and the written report. The writing is graded based on clarity of the statement and solution of the problem. Students must do individual projects.

D17-2: Clinical and Translational ScM Concentration		
Competency	**Course**	**Specific assessment opportunity**
1. Develop and refine a research question or hypothesis	PHP 2470: Topics in Clinical and Translational Research	Submission and discussion of a proposed research study. The description of the project must include a research question, a testable hypothesis, and the scientific background/rationale for the question. Students present the project in class and moderate a 45-minute discussion.
2. Select appropriate methods to address a research question or hypothesis	PHP 2120: Introduction to Methods in Epidemiologic Research	PHP 2120: Multiple exam questions ask students to select different study designs best capable of answering specific research questions as well as to identify the strengths and weaknesses of the major research methods used in epidemiology.
	PHP 2150: Foundations in Epidemiological Research Methods	PHP 2150: Homework Assignments in which students are required to determine the appropriate study design and calculate and interpret the appropriate relative measure of association for a research question.
3. Critique health research literature	PHP 2120: Introduction to Methods in Epidemiologic Research	PHP 2120: The final exam contains multiple questions where students are required to read, interpret, and critique several recently-published scientific articles.

D17-2: Clinical and Translational ScM Concentration		
Competency	**Course**	**Specific assessment opportunity**
	PHP 2150: Foundations in Epidemiologic Research Methods	PHP 2150: Homework Assignments in which students are required to evaluate published research articles
4. For a specific research question, contrast generalizability and limitations of data from different sources	PHP 2470: Topics in CTR	Submission and discussion of the methods of a research study. The description of the methods must include a research question, study design, and other key details including the sources of data, key outcome and exposure variables, proposed analyses, generalizability, and limitations. Students present the project in class and moderate a 45-minute discussion.
5. Apply current statistical methods in the analysis of a given data set	PHP 2508: Biostatistics and Applied Data Analysis II	Final project in which students write a manuscript-like paper including the introduction, methods, results, and discussion of analyses they have conducted to address a public health question using real public health data
	PHP 2511: Applied Regression Analysis	Homework Assignments: mixture of theoretical questions and analytic questions. Analytic portions of the homework include running regression models on provided data, presenting the results and interpreting the output in the context of the problem

Final Project: requires students to identify a research question, acquire data to answer the question (e.g., national data set, data from advisor), plan an appropriate statistical analysis and write a brief report to disseminate findings. This assignment is completed individually and over the course of the full semester. The final product is peer reviewed as a class requirement ahead of submission of the final product (paper) at the end of the semester. |
| 6. Communicate scientific findings | PHP 2090: Research Grant Writing for Public Health | Write NIH-style proposal, oral presentation of proposal, and peer-review group work. In addition to their written proposal and presentation, students communicate the science, methods, and aims of their proposal to their peer-review group, which includes individuals without subject-matter knowledge in that area. |
| 7. Translate research findings into policy and practice | PHP 2090: Research Grant Writing for Public Health | Write an NIH-style proposal for submission and orally present this proposal to the class. Students learn to inform health policies and clinical practice by synthesizing the literature, identifying |

D17-2: Clinical and Translational ScM Concentration		
Competency	**Course**	**Specific assessment opportunity**
		critical knowledge gaps, and developing research studies to address those gaps. Students develop a set of achievable aims to address these knowledge gaps and convey this information in written (proposal) and oral format (presentation).

4) Identify required coursework and other experiences that address the variety of public health research methods employed in the context of a population health framework to foster discovery and translation of public health knowledge and a brief narrative that explains how the instruction and assessment is equivalent to that typically associated with a three-semester-credit course.

Biostatistics AM/ScM

Students take an online, non-credit modular course covering the scope of public health, Public Health 1001. The course presents one module at a time, with each module made up of 1-4 sessions created by a Brown faculty member. Topics for each module are: (1) General public health; (2) Epidemiology; (3) Environmental Health; (4) Behavioral and Social Sciences; and (5) Global Health. Modules are designed to run for one scheduled week per session, during which a faculty member with expertise in that area will be available for questions using an online discussion. Assessments are administered at the end of each module and include both essay and multiple choice test formats. Assessments are graded by a topic-specific faculty member. This course takes about 55 hours to complete.

In addition, students in both the ScM and AM programs complete courses in data analysis that require completion of final projects that involve a deep investigation into a method or application related to the analysis of public health data. Students in the ScM also complete a written project or thesis that develops a new method, explores one or more existing methods, or analyzes data related to public health.

Clinical and Translational Research (CTR) ScM

The program provides rigorous training in research methods in population health to foster discovery and translation of public health knowledge. Students take an online, non-credit modular course covering the scope of public health, Public Health 1001. The course presents one module at a time, with each module made up of 1-4 sessions created by a Brown faculty member. Topics for each module are: (1) General public health; (2) Epidemiology; (3) Environmental Health; (4) Behavioral and Social Sciences; and (5) Global Health. Modules are designed to run for one scheduled week per session, during which a faculty member with expertise in that area will be available for questions using an online discussion. Assessments are administered at the end of each module and include both essay and multiple choice test formats. Assessments are graded by a topic-specific faculty member. This course takes about 55 hours to complete.

In addition, students take a year-long, two-course sequence in biostatistics and data analysis, a course in epidemiology, two courses in advanced research methods, a course in scientific writing, a choice of electives that include methods training, and participation in two half-credit seminar courses. Given the applied nature of the program, students work closely with advisors to develop a thesis portfolio composed of a first author abstract submitted to a regional, national, or international conference, and either two first-author, publishable-quality research manuscripts or one first-author, publishable-quality manuscript, and a grant proposal.

5) Briefly summarize policies and procedures relating to production and assessment of the final research project or paper.

<u>Biostatistics AM/ScM</u>

Students in the ScM program are required to write a project/thesis in one of the following areas:

1. Development of a new analytic method
2. Detailed study of an existing method, or comparison of performance of various methods (e.g., simulation studies)
3. Development of new software packages for statistical programming including published repository, documentation, and vignettes
4. A review or synthesis of a new or emerging statistical methodology or application

All projects and theses require a significant amount of work and a written document. A thesis must follow the Brown Graduate School Guidelines and be published in this manner. Projects allow for students to engage in work that is just as rigorous but is not sufficient to submit for publication with the student as first author. For example, students might be involved in analysis of clinical trials or other data that they are not allowed to publish at the time of the Graduate School deadline.

Primary review and assessment is conducted by the student's thesis/project faculty advisor and affiliated reader and follows the published Guidelines for the Development and Submission of the ScM in Biostatistics Thesis/Project (see ERF). The initial proposal is reviewed and approved by the Biostatistics Academic Programs Committee. Progress is assessed with regularly scheduled sign-offs by the advisor during the second year and through regular student progress meetings held at the end of each semester with the whole faculty.

Students in the AM program are not required to complete a final project/thesis but do complete a final paper for the course in PHP 2550: Practical Data Analysis, required of both AM and ScM students. The final paper, which must be done individually by students, consists of either a comprehensive analysis of data of the student's choice or an in-depth discussion of a data analysis topic not covered in detail in the class. The final paper grade is determined based on the in-class presentation and the written report.

<u>Clinical and Translational Research (CTR) ScM</u>

Given the applied nature of the program, students develop a thesis portfolio to meet the following thesis requirements. These requirements are developmental in nature and are completed throughout the student's studies. The thesis requirements are designed to help move students forward in their career in clinical and translational research. Each student works with his/her thesis advisor and reader to determine the best timing for completion of the requirements.

All CTR students are required to complete a thesis, which are composed of the following parts:

- First-author submitted abstract to regional, national, or international meeting
- First-author, publishable-quality paper
- Submittable grant proposal
  or
- First-author submitted abstract to regional, national, or international meeting
- Two first-author, publishable-quality papers

Thesis plans must be approved by the thesis advisor, thesis reader, and program director. The thesis advisor and thesis reader must approve the final thesis product.

6) Provide links to handbooks or webpages that contain the full list of policies and procedures governing production and assessment of the final research project or paper for each degree school.

Biostatistics ScM

Guidelines for the Development and Submission of the ScM in Biostatistics Thesis/Project (see ERF)

Brown University Master's Thesis Guidelines

Brown University Graduate School Handbook

Clinical and Translational Research (CTR) ScM

Master of Science in Clinical and Translational Research Student Handbook

Brown University Master's Thesis Guidelines

Brown University Graduate School Handbook

7) Include completed, graded samples of deliverables associated with the major paper or project. The school must provide at least 10% of the number produced in the last three years or five examples, whichever is greater.

See the ERF for the following examples:

Biostatistics ScM

1. "Comparison of Methods for Handling Missing Outcome Data in Randomized Controlled Trials"
2. "Simulation-based Comparison of Methods for Meta-analysis of Single Proportions and Rates"
3. "Harnessing the Power of Machine Learning Methods for Enhancing HIV Care and Treatment Within Resource-Limited Settings"
4. "Selection of Clinical Text Features for Classifying Suicide Attempts"
5. "Statistical Methods for Task-Evoked Functional Connectivity"

Biostatistics AM

1. "An Introduction to Decision Trees and Random Forests for Classification: Predicting Progression to Diabetes Postpartum Among Women Diagnosed with Gestational Diabetes during Pregnancy"
2. "Multiple Imputation Treatment of the IOD Dataset"
3. "Statistical Learning of Scott County Injection Network Data"
4. "Model Selection in Predicting Wimbledon Outcomes"
5. "Survey Weighting Methods"

Clinical and Translational Research (CTR) ScM

1. "Family Engagement in Patient Care in the Intensive Care Unit – Identifying Means by which to Reduce Stress Related Symptoms for Informal Caregivers"
2. "Intoxication and Flame Burn Injuries in Young Adults in the United States; and Referral Patterns of Burn Injury in Rural Kenya"
3. "Transfusion, Mortality and Hemoglobin Level: Associations among Emergency Department Patients in Kigali, Rwanda"

4. "Racial and Ethnic Disparities Following the New York State Sepsis and The Restrictive Intravenous Fluid Trial in Severe Sepsis and Septic Shock (RIFTS1)"
5. "Gender Differences in Risk Factors Associated with Pulmonary Artery Systolic Pressure, Heart Failure and Mortality in African American Individuals: Jackson Heart Study," and "Association of Elevated Plasma Adiponectin Levels with Pulmonary Hypertension, Mortality and Heart Failure in African Americans: Jackson Heart Study"

8) Briefly explain how the school ensures that the instruction and assessment in basic public health knowledge is generally equivalent to the instruction and assessment typically associated with a three-semester-credit course.

Please note that Brown University does not use a credit hour system. Degree requirements are based on the number of courses required. A full credit Brown University course is equivalent to a four-credit course.

Biostatistics AM/ScM

Students take an online, non-credit modular course covering the scope of public health, Public Health 1001. The course presents one module at a time, with each module made up of 1-4 sessions created by a Brown faculty member. Topics for each module are: (1) General public health; (2) Epidemiology; (3) Environmental Health; (4) Behavioral and Social Sciences; and (5) Global Health. Modules are designed to run for one scheduled week per session, during which a faculty member with expertise in that area will be available for questions using an online discussion. Assessments are administered at the end of each module and include both essay and multiple choice test formats. Assessments are graded by a topic-specific faculty member. This course takes about 55 hours to complete.

Clinical and Translational Research (CTR) ScM

Students take an online, non-credit modular course covering the scope of public health, Public Health 1001. The course presents one module at a time, with each module made up of 1-4 sessions created by a Brown faculty member. Topics for each module are: (1) General public health; (2) Epidemiology; (3) Environmental Health; (4) Behavioral and Social Sciences; and (5) Global Health. Modules are designed to run for one scheduled week per session, during which a faculty member with expertise in that area will be available for questions using an online discussion. Assessments are administered at the end of each module and include both essay and multiple choice test formats. Assessments are graded by a topic-specific faculty member. This course takes about 55 hours to complete.

9) Include the most recent syllabus for any course listed in the documentation requests above, or written guidelines for any required elements that do not have a syllabus.

Biostatistics AM/ScM

The syllabus for Public Health 1001 is located in the ERF.

Clinical and Translational Research (CTR) ScM

The syllabus for Public Health 1001 is located in the ERF.

10) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

<u>Biostatistics AM/ScM</u>

Strengths: The Program strengths can be assessed in several ways. First the number of applications has grown, while the class size has stabilized at about 20 per year. From 2016/17-2019/20, the number of applications increased from 40 to 61 for the AM degree and from 104 to 194 for the ScM degree. Almost all of these are from applicants outside Brown, so in the future these numbers will be combined into the ScM degree program. The number of applicants to the 5th Year program that will be the primary source of our AM degree has also remained steady at between 1 and 3 per year. Our applicants score very well on standardized tests and have high undergraduate grade point averages.

Another strong indicator of the Program's success is its graduation outcomes and career placements. Among all students matriculating into the AM and ScM degree programs since 2016, graduation rates are 100% in years 2017-18 and 2018-19 and 95% in 2019-20. Career outcomes are identified through exit surveys and web searches. Our graduates are well-placed. In 2017, career outcomes where identified at 100%. In 2018 and 2019, responses were less than 100%. We were, however, able to identify employment or advanced studies for 60% of our Master's alumni. Data for 2020 are not yet available.

Challenges: The Biostatistics Department has identified the need to modernize its Master's program to better address the needs of students in the current workforce and to respond to student feedback. Statisticians working in the modern data science environment must have expertise in theory and methods of statistical inference, a well-developed skill set in machine learning and computer programming, and strong communication skills.

Another challenge that has been recognized for a while, but that is common in many statistics and biostatistics programs, is the lack of diversity of the applicant pool. Typically, only 10-20% of program applicants are US citizens or permanent residents, and many of the international students are East Asian citizens, mainly from China. The program does a good job in attracting the domestic applicants, usually ending with a class of about 40-50% domestic students. However, the number of students applying and matriculating from historically underrepresented groups is very small.

Plans: The program has decided to matriculate all students entering from outside Brown into the ScM degree option and to increase the number of courses required for a degree to 10 while requiring all students to complete a written project or a thesis to obtain a full research experience. The only students who will matriculate into the AM program (requiring 8 course credits) will be fifth-year students who enter upon completing their undergraduate degree at Brown and Open Graduate Education (OGE) students who are enrolled in another PhD program at Brown but who want to obtain a concurrent Master's degree in Biostatistics. These two types of students are fundamentally different from those enrolling from outside Brown for several reasons. The fifth-year students are required to have two graduate credits upon entry into the Master's to be able to complete a Master's with a 3-3 course load in two semesters. Often, these students have taken additional statistics or computing courses as undergraduates and so will finish with more than 8 courses among the Program's offerings. The OGE students will usually be applying their statistics to their PhD dissertations and often will be taking statistics-related courses in their home departments, so again they will have additional training outside of their Master's curriculum.

The program plans to engage in a variety of initiatives to both increase the diversity of the student body and to provide it greater support. First, it will be working closely with the School to identify opportunities to showcase the program at recruiting events focused on domestic and underrepresented students. Second, it will work with the School to continue to search for

additional funds for scholarships for students who cannot afford the Master's tuition. Third, it will continue to partner with other undergraduate programs to identify Brown students interested in doing the Fifth-Year program.

<u>Clinical and Translational Research (CTR) ScM</u>

Strengths: The program offers rigorous research training including formal coursework, a seminar series focused on research mentorship, and a thesis process that fosters career progression in the field.

Challenges: The focus of the program is on serving the needs of doctorally-trained clinicians and basic scientists. To date, students have been physicians, either fellows in training or faculty. It is challenging for physicians to balance the rigorous research training with their clinical responsibilities.

Plans: The program will continue to work closely with the students and their clinical departments to help students be successful in their research and clinical goals. We also plan to grow the program. We will work with clinical departments at the Brown University affiliated hospitals to identify opportunities to expand participation by clinical faculty and clinical fellows. This will include exploring summer course options and greater funding for scholarships.

D18. Academic Public Health Doctoral Degrees

These students also complete coursework and other experiences, outside of the major paper or project, that substantively address scientific and analytic approaches to discovery and translation of public health knowledge in the context of a population health framework.

These students complete doctoral-level, advanced coursework and other experiences that distinguish the school of study from a master's degree in the same field.

The school defines appropriate policies for advancement to candidacy, within the context of the institution.

Finally, students complete coursework that provides instruction in the foundational public health knowledge at an appropriate level of complexity. This instruction may be delivered through online, in-person or blended methodologies, but it must meet the following requirements while covering the defined content areas.

The school identifies at least one required assessment activity for each of the foundational public health learning objectives.

The school validates academic doctoral students' foundational public health knowledge through appropriate methods.

1) List the curricular requirements for each non-DrPH doctoral degree in the unit of accreditation, EXCLUDING requirements associated with the final research project. The list must indicate (using shading) each required curricular element that a) is designed expressly for doctoral, rather than master's, students or b) would not typically be associated with completion of a master's degree in the same area of study.

   The school may present accompanying narrative to provide context and information that aids reviewers' understanding of the ways in which doctoral study is distinguished from master's-level study. This narrative is especially important for institutions that do not formally distinguish master's-level courses from doctoral-level courses.

   The school will present a separate list for each degree program and concentration as appropriate.

   Behavioral and Social Health Sciences PhD

   The PhD in Behavioral and Social Health Sciences has the following requirements: five core courses, three statistics courses (two required, one elective), four methods courses (three required, one elective), one health equity course, and three behavioral and social science elective courses (one required, two electives). In addition, they are required to take a non-credit online course in foundations of public health knowledge, take a non-credit course in Responsible Conduct in Research (RCR), participate in a journal club series, and do a teaching experience.

   The approved courses for this curriculum are presented below; in some cases, courses not on this list may be petitioned to count for requirements. The shaded courses are ones specifically for doctoral students only or not generally associated with completion of the health behavior concentration in the MPH program.

Behavioral and Social Health Sciences PhD Requirements
Public Health 1001 (not for credit, online course)
Required Core Courses (5 courses)
PHP 2300: Research Methods in Behavioral Science
PHP 2340: Behavioral and Social Science Theory for Health Promotion

Behavioral and Social Health Sciences PhD Requirements
PHP 2360: Developing + Testing Theory-Driven, Evidence Based Psychosocial and Behavioral Health Interventions (Doctoral only)
PHP 2380: Health Communication
PHP 2361: Proseminar in Health Behavior Intervention Research (Doctoral only)
Statistics Courses (2 required, 1 elective)
PHP 2510: Principles of Biostatistics and Data Analysis [or equivalent], (Required)
PHP 2511: Applied Regression Analysis [or equivalent], (Required)
PHP 2250: Advanced Quantitative Methods in Epidemiology
PHP 2514: Applied Generalized Linear Models
PHP 2516: Applied Longitudinal Data Analysis (1/2 credit course)
PHP 2517: Applied Multilevel Data Analysis (1/2 credit course)
PHP 2530: Bayesian Statistical Methods
PHP 2550: Practical Data Analysis
PHP 2601: Linear Models
PHP 2602: Analysis of Lifetime Data
PHP 2610: Causal Inference and Missing Data
CLPS 2908: Multivariate Statistical Techniques
SOC 2020: Multivariate Statistical Methods II
SOC 2240: Event History Analysis
Methods Courses (3 required,1 elective)
PHP 2090: Research Grant Writing for Public Health (Required)
PHP 2120: Intro to Methods in Epidemiologic Research (Required or PHP 2150)
PHP 2150: Foundations in Epidemiologic Research Methods (Required or PHP 2120)
PHP 2980: Graduate Independent Study in BSHS Methods (Required)
PHP 1885: Measuring Mindfulness
ANTH 2230: Medical Anthropology
PHP 2019: Measurement Issues in Health Care
PHP 2030: Clinical Trials Methodology
PHP 2040: Survey Research Methods
PHP 2060: Qualitative Methods in Health Research
PHP 2200: Intermediate Methods in Epidemiologic Research
SOC 2210: Qualitative Methods
SOC 2612: Geographic Informational Systems and Spatial Analysis for the Social Sciences
Health Equity Courses (1 elective)
PHP 1920: Social Determinants of Health
PHP 1680U: Intersectionality and Health Inequities
PHP 2025: Including the Excluded: Global Health and Ethics
PHP 2325: Place Matters: Exploring Community-Level Contexts on Health Behaviors, Outcomes, and Disparities
PHP 2365: Public Health Issues in LGBT Populations
PHP 2710: Interdisciplinary Perspectives on Disability and Death in the Global South
Behavioral and Social Science Elective Courses (1 required, 2 electives)
PHP 2980: Graduate Independent Study in a BSHS Substantive Area
PHP 1540: Alcohol Use and Misuse
PHP 1600: Obesity in the 21st Century: Causes, Consequences and Countermeasures
PHP 1610: Tobacco, Disease and the Industry: cigs, e-cigs, and more
PHP 1890: The Craving Mind
PHP 2023: Maternal and Child Health in the US
PHP 2130: Human Biology for Public Health
PHP 2160: Global Burden of Mental Illness: A Public Health Approach
PHP 2330: Behavioral and Social Approaches to HIV Prevention
PHP 2345: Affect, Emotion, and Health Behavior
PHP 2365: Public Health Issues in LGBT Populations

Behavioral and Social Health Sciences PhD Requirements
PHP 2330: Behavioral and Social Approaches to HIV Prevention
PHP 2370: Etiology of Substance Use Disorders (Doctoral only)
PHP 2371: Psychosocial and Pharmacologic Treatment of Substance Abuse (Doctoral only)
Students also must take a non-credit course in Responsible Conduct in Research (RCR), participate in a journal club series, and do a teaching experience.

Biostatistics PhD

The curriculum for the PhD in Biostatistics is divided into four core areas: theory and foundation of statistical inference, general biostatistical methods, advanced training in specialized domain areas, and foundation in public health. Owing to the inherently interdisciplinary nature of biomedical research, biostatistics students are also required to demonstrate competency in a substantive field of application; examples include (but are not limited to) genetics, economics, demography, molecular biology, epidemiology, infectious diseases, and cancer biology. This competency is demonstrated via successful completion of at least one graduate course (1000 or 2000 level) in another department or graduate program. The selection of this course must be approved by the Graduate Program Director. Students also must take a non-credit online course in foundations of public health knowledge, take a non-credit course in Responsible Conduct in Research (RCR), and have a teaching experience (either as Teaching Assistant, or taking an Independent Study with a faculty member to gain teaching experience, or as an Instructor for the department's other training activities).

Specific course requirements are shown below (courses taken at other institutions can be used to meet one or more course requirements). The shaded courses are ones specifically for doctoral students only or not generally associated with completion of the Biostatistics Master's program.

Biostatistics PhD Requirements
Public Health 1001 (not for credit, online course)
Required Core Courses
PHP 2520: Statistical Inference I
PHP 2530: Bayesian Statistical Methods
PHP 2550: Practical Data Analysis
PHP 2580: Statistical Inference II
PHP 2601: Linear Models
PHP 2605: Generalized Linear Models
PHP 2602: Analysis of Lifetime Data
PHP 2610: Causal Inference and Missing Data
PHP 2950 : PhD Journal Club
PHP 2120: Introduction to Methods in Epidemiologic Research
Elective Courses (≥5, including ≥2 from Biostatistics and 1 in substantive field of application)
PHP 2030: Clinical Trials Methodology
PHP 2620: Statistical Methods for Bioinformatics
PHP 2650: Statistical Learning and Big Data
PHP 2690: Advanced Topics in Biostatistics
Qualifying Courses in other departments (Applied Math, Economics, Computer Science), with approval from the Graduate Director
Students also must take a non-credit course in Responsible Conduct in Research (RCR) and have a teaching experience.

Epidemiology PhD

All students in the program are required to take 13 courses for credit, including nine core courses, two or more methods elective courses, and two or more substantive elective courses. Students also must take a non-credit online course in foundations of public health knowledge, take a non-credit course in Responsible Conduct in Research (RCR), take a non-credit introductory course in SAS data management, participate in the journal club series, and fulfill the teaching requirement.

The shaded courses are ones specifically for doctoral students only or not generally associated with completion of the epidemiology concentration in the MPH program.

Epidemiology PhD Requirements
Public Health 1001 (not for credit, online course)
Required Core Courses
PHP 2150: Foundations in Epidemiologic Research Methods
PHP 2200: Intermediate Methods in Epidemiologic Research
PHP 2250: Advanced Quantitative Methods for Epidemiologic Research
PHP 2180: Interpretation and Application of Epidemiology
PHP 2510: Principles of Biostatistics and Data Analysis
PHP 2511: Applied Regression Analysis
PHP 2090: Research Grant Writing for Public Health
PHP 2130: Human Biology for Epidemiology
Selectives (≥2 methods courses)
PHP 2560: Statistical Programming in R
PHP 1895: Mindfulness Epidemiology
PHP 2030: Clinical Trials Methodology
PHP 2040: Survey Research Methods
PHP 2220B: Nutritional Epidemiology
PHP 2260: Applied Epidemiologic Analysis Using SAS
PHP 2430: Analysis of Population Based Datasets
PHP 2440: Introduction to Pharmacoepidemiology
PHP 2455A: Health Services Research Methods I
PHP 2455B: Health Services Research Methods II
PHP 2465: Introduction to Health Decision Analysis
PHP 2520: Statistical Inference I
PHP 2530: Bayesian Statistical Methods
PHP 2550: Practical Data Analysis
PHP 2601: Linear and Generalized Linear Models
PHP 2602: Analysis of Lifetime Data
PHP 2610: Causal Inference and Missing Data
PHP 2620: Statistical Methods in Bioinformatics I
Selectives (≥2 additional substantive epidemiology courses)
PHP 1700: Introduction to Environmental Health
PHP 1854: The Epidemiology and Control of Infectious Diseases
PHP 1880: Meditation, Mindfulness, and Health
PHP 1900: Epidemiology of Disorders and Diseases of Childhood and Young Adulthood
PHP 1920: Social Determinants of Health
PHP 1960: Epidemiology of Chronic Disease
PHP 1964: Cancer Epidemiology and Prevention
PHP 2018: The Epidemiology of Cardio-metabolic Health
PHP 2170: Injury as a Public Health Problem
PHP 2220C: Perinatal Epidemiology
PHP 2220E: Topics in Environmental and Occupational Epidemiology

Epidemiology PhD Requirements
PHP 2220H: Epidemiology, Treatment and Prevention of HIV
PHP 2440: Introduction to Pharmacoepidemiology
PHP 2371: Psychosocial and Pharmacologic Treatment of Substance Use Disorders
Written Departmental Qualifying Examination: Students are required to pass a written qualifying exam, which tests their knowledge on intermediate and advanced Epidemiology. For full-time students the qualifying exam is taken at the end of the fourth semester (June).
Teaching Requirements: This is accomplished by: (a) serving as a Teaching Assistant in a course taught by departmental faculty for at least one semester, (b) completing a New Teaching Assistants Orientation conducted by The Harriet W. Sheridan Center for Teaching and Learning prior to the start of the Teaching Assistantship, and (c) completing an additional semester long Teaching Experience (for credit), which involves 10+ hours per week in advanced teaching activities (e.g., lectures, syllabus development, development of new course content).
Grant Writing Requirement: Using skills learned in PHP 2090: Research Grant Writing for Public Health, which they take during the third semester, students are expected to continue grant writing, with the goal of submitting a grant application at the end of the third semester, or during the fourth semester (depending on deadlines for differing submission opportunities)
Students also must take a non-credit course in Responsible Conduct in Research (RCR) and do an online graduate student course on SAS data management

Health Services Research PhD

The PhD in Health Services Research builds upon the methodological foundation of epidemiology and biostatistics, but extends beyond to incorporate social science theory pertinent to health services research. Students must take 11 required courses and elective courses needed to reach 24 tuition units if matriculating into the program without a master's degree or 16 if matriculating with a master's degree. In addition, they are required to take a non-credit online course in foundations of public health knowledge, take a non-credit course in Responsible Conduct in Research (RCR), and do a teaching experience.

The approved courses for this curriculum are presented below. The shaded courses are ones specifically for doctoral students only or not generally associated with completion of the health services concentration in the MPH program.

HSR PhD Requirements
Public Health 1001 (not for credit, online course)
Required Core Courses
PHP 2090: Research Grant Writing for Public Health
PHP 2150: Foundations at an Epidemiological Research
PHP 2200: Intermediate Methods in Epidemiologic Research
PHP 2400: The U.S. Healthcare System: Case Studies in Financing, Delivery, Regulation and Public Health
PHP 2410E: Medicare: A Data Based Policy Examination
PHP 2450: Measuring and Improving the Quality of Health Care
PHP 2455A: Health Services Research I
PHP 2455B: Health Services Research II
PHP 2465: Introduction to Health Decision Analysis
PHP 2510: Principles of Biostatics and Data Analysis
PHP 2950: PhD Journal Club
Elective Courses
PHP 2250: Advanced Quantitative Methods in Epidemiological Research
PHP 2365: Public Health Issues in LGBT Populations
PHP 2385: Local and Global Community Engagement to Reduce Health Disparities
PHP 2445: Minding the Gap: The U.S. Healthcare Safety Net

HSR PhD Requirements
PHP 2530: Bayesian Statistical Methods
PHP 2550: Practical Data Analysis
PHP 2601: Analysis of Lifetime Data
PHP 2603: Analysis of Longitudinal Data
PHP 2604: Statistical Methods for Spatial Data
PHP 2610: Causal Inference and Missing Data
PHP 2690: Statistical Foundations of Data Science
PHP 2980: Graduate Independent Study
Students also must take a non-credit course in Responsible Conduct in Research (RCR) and do a teaching experience.

2) Provide a matrix, in the format of Template D18-1, which indicates the required assessment opportunities for each of the defined foundational public health learning objectives (1-12). Typically, the school will present a separate matrix for each degree program, but matrices may be combined if requirements are identical.

Students in all four doctoral programs meet the foundational public health learning objectives through Public Health 1001 as shown below:

D18-1: Assessment of Foundational Public Health Learning Objectives for the Behavioral and Social Sciences PhD, Biostatistics PhD, Epidemiology PhD, and Health Services Research PhD		
Content	**Course**	**Specific assessment opportunity**
1. Explain public health history, philosophy and values.	Public Health 1001	Module 1 Session 1 Assessment: Describe the history of public health. Include at least three transformative events that shaped public health. What is the overall philosophy of public health? To what values does public health as a practical science ascribe?
2. Identify the core functions of public health and the 10 Essential Services.*	Public Health 1001	Module 1 Session 1 Assessment: The ten essential public health services include which of the following: What are the three core public health functions?
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.	Public Health 1001	Module 1 Session 2 Assessment: Explain the difference between qualitative and quantitative data including an example where you would use each type of data.
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program.	Public Health 1001	Module 2 Session 1 Assessment: List the major causes of mortality within the United States today. Have these changed over time? Are they different than the major causes of mortality globally? If so, discuss how. How do causes of morbidity and mortality differ among geographic and demographic subgroups of the US population? Provide examples in your discussion.

	D18-1: Assessment of Foundational Public Health Learning Objectives for the Behavioral and Social Sciences PhD, Biostatistics PhD, Epidemiology PhD, and Health Services Research PhD		
	Content	**Course**	**Specific assessment opportunity**
5.	Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	Public Health 1001	Module 2 Session 2 Assessment: Explain the difference between primary, secondary, and tertiary prevention, and provide an example of each. Discuss the purpose of screening in each prevention strategy.
6.	Explain the critical importance of evidence in advancing public health knowledge	Public Health 1001	Module 2 Session 3 Assessment: What is Evidence Based Public Health (EBPH)? Discuss the strengths and weaknesses of observational studies in the context of EBPH.
7.	Explain effects of environmental factors on a population's health.	Public Health 1001	Module 3 Session 1 Assessment: Provide one example of environmental impacts/risk factors that impact human health and explain how they are connected. Explain what environmental justice is and discuss why it is important in the context of promoting health for all.
8.	Explain biological and genetic factors that affect a population's health.	Public Health 1001	Module 2 Session 4 Assessment: Explain how identifying biologic and genetic determinants of health can help to address public health problems even though they may not be modifiable directly. Provide examples of specific health outcomes in your explanation.
9.	Explain behavioral and psychological factors that affect a population's health.	Public Health 1001	Module 4 Session 1 Assessment: Explain two behavioral factors and how they increase risk of non-communicable disease. Explain an intervention that has been used to help people change their behavior to reduce risk of non-communicable disease(s).
10.	Explain the social, political and economic determinants of health and how they contribute to population health and health inequities.	Public Health 1001	Module 4 Session 2 Assessment: Explain how income impacts health. Explain how education impacts health. List one aspect of racism that is apparent and one that is not and indicate why you think this difference exists. Select one social determinant of health and indicate how you would measure it to reduce disparities associated with one outcome of interest.
11.	Explain how globalization affects global burdens of disease.	Public Health 1001	Module 5 Assessment: One of the primary ways that globalization has affected the global burden of disease is through the emergence of non-communicable diseases (NCDs). Using specific examples from the

D18-1: Assessment of Foundational Public Health Learning Objectives for the Behavioral and Social Sciences PhD, Biostatistics PhD, Epidemiology PhD, and Health Services Research PhD		
Content	**Course**	**Specific assessment opportunity**
		course readings, explain how the epidemiological and health transitions have contributed to increases in NCDs in lower and middle income countries. Describe at least two specific mechanisms underlying the transition to the higher burden of NCDs in lower and middle income countries.
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health).	Public Health 1001	Module 3 Session 2 Assessment: Explain the One Health approach to promoting human health, and why it is important in the context of public health.

3) Provide a matrix, in the format of Template D18-2, which lists competencies for each relevant degree and concentration. The matrix indicates at least one assessment activity for each of the listed competencies. Typically, the school will present a separate matrix for each concentration. Note: these competencies are defined by the school and are distinct from the introductory public health learning objectives defined in this criterion.

D18-2: Behavioral and Social Health Sciences PhD		
Competency	**Course**	**Specific assessment opportunity**
1. Analyze and explain a specific health behavior using component principles of behavioral and/or social science theory.	PHP 2340: Behavioral and Social Science Theory for Health Promotion	Term Paper: 10-15 pages (maximum 15 pages double-spaced) on how a theory (or theories) of your choice can be used to understand a specific health-related behavior of your choice in a specific population and context.
2. Critically evaluate quantitative and/or qualitative research methods and draw appropriate inferences from research findings.	PHP 2300: Research Methods in Behavioral Science	Assessment: Paper 2: Systematic review. The goal of Paper 2 is to identify, synthesize, and appraise the evidence for the effectiveness of a behavioral/ social intervention for a specific public health problem. Students select a public health problem, identify a behavioral/ social intervention approach to address the problem, and conduct a systematic search of the published literature during the past 5-10 years on the efficacy/ effectiveness of that intervention, based on primary research papers indexed in PubMed. Students write a paper that summarizes the research evidence, critically appraise the evidence, identify gaps in knowledge, and make recommendations for future research.

D18-2: Behavioral and Social Health Sciences PhD		
Competency	**Course**	**Specific assessment opportunity**
	OR (if waived out of 2300) PHP 2361: Proseminar in Health Behavior Intervention Research	Final paper: Complete a critical review of an intervention literature (if waived out of 2300). Students write a final review paper that provides a critical review of the state of the science on a specific health behavior intervention or intervention strategy for a given health problem of their choice; the review should provide a methodological critique using concepts learned in this and other classes, laying out the limitations of current research and suggesting directions for future research.
3. Develop or refine a theory-based public health intervention with clear behavior change goal(s).	PHP 2360: Developing + Testing Theory-Driven, Evidence Based Psychosocial and Behavioral Health Interventions	Through a series of assignments completed over the course of the semester, students develop a proposal for a theory-based public health intervention with clear behavior change goals. In the first assignment, students identify a public health problem, population at risk, level at which to intervene, and guiding theory. In the second assignment, they state the intervention's specific aims, provide a model of the intervention effects (i.e., a diagram with theoretical mediators and moderators), and flesh out more fully the intervention's theoretical framework. In the third assignment, students craft a well-developed background and significance section of the proposal and identify the new and innovative aspects of the proposed intervention. In the final project, students deliver a completed proposal.
	OR (if waived out of 2360) PHP 2380: Health Communication	Social Marketing Project: The Social Marketing Project, which is composed of two written graded assignments, requires students to develop a proposal for a health communication campaign. In Part 1, they conduct the social marketing research and analysis that will be the foundation of the campaign. In Part 2, they (a) develop a communication strategy, including describing their campaign materials and how they would pilot test them, (b) explain how they would implement the campaign, and (c) detail how they would evaluate the campaign.
4. Design a plan to evaluate the fidelity, the active	PHP 2360: Developing +	Through a series of assignments completed over the course of the

D18-2: Behavioral and Social Health Sciences PhD		
Competency	**Course**	**Specific assessment opportunity**
ingredients/ mechanisms of change, and the efficacy of a health behavior intervention.	Testing Theory-Driven, Evidence Based Psychosocial and Behavioral Health Interventions	semester, students develop a proposal for a theory-based public health intervention with clear behavior change goals. For the third assignment, students develop a detailed plan for how to evaluate their proposed intervention, including the fidelity and effectiveness of the intervention. They are asked to consider the following questions: How will they optimize fidelity? How will they evaluate it? How will they operationalize their outcome(s)? What will they use to define efficacy/effectiveness? What specific measures will they use to evaluate these outcomes? And they are asked to name at least one validated instrument to assess an intervention outcome.
	OR (if waived out of 2360) PHP 2380: Health Communication	Social Marketing Project Part 2. The Social Marketing Project, which is composed of two written graded assignments, requires students to develop a proposal for a health communication campaign. A core component of Part 2 includes students' development of an evaluation plan for their campaign, including how they would assess short- and medium-term outcomes and gather data. Students are to include a logic model or PRECEDE-PROCEED diagram that summarizes their evaluation plan.
5. Appraise the state of knowledge and knowledge gaps within a substantive area of health behavior.	Qualifying Exam Part II	Qualifying Exam Part II: In this take-home part of the exam, the student responds to 4 questions related to their substantive area of research, selected from the question lists generated from the preparatory Independent Studies. The Independent Studies establish a student's substantive focus by in-depth reading about a health behavior or problem. During the Spring of the first year, students and advisors jointly identify a suitable topic for a focused *substantive review* and develop an associated reading list; final products will include a final course paper (a literature review or empirical paper) and a set of 4-5 questions reflecting key questions/ unresolved issues in the field. In the Fall of the second year, students and advisors identify key *methodological*

D18-2: Behavioral and Social Health Sciences PhD		
Competency	**Course**	**Specific assessment opportunity**
		challenges and innovations in studying this topic and develop an associated reading list; again, final products include a final course paper and set of 4-5 key questions. The literature, papers, and questions serve as the basis for the individualized portion of the qualifying exam. (For additional details, see Behavioral and Social Health Sciences Doctoral Program Handbook in ERF)
6. Design and conduct original research on health behaviors and outcomes, using appropriate methods and analyses, and adhering to ethical research principles.	Dissertation Proposal and Defense	Dissertations consist of three distinct, thematically linked, publishable-quality papers targeted to specific journal(s). The formulation of the hypotheses and/or thesis must be original. At least two of the papers should be data-focused (including qualitative research, meta-analysis, and/or secondary data analysis); of these, at least one of the papers must involve quantitative data analysis, and at least one of the papers must involve new data collection (typically requiring IRB review). One of the papers may be a systematic review or a theoretical paper that offers a novel contribution to the literature. (For additional details, see Behavioral and Social Health Sciences Doctoral Program Handbook in ERF)
7. Demonstrate advanced communication skills by authoring original research that is disseminated to the broader scientific community.	Dissertation defense AND	The dissertation defense is the culmination of the doctoral candidate's work, and involves both a written and oral communication of the 3 dissertation studies. The candidate first submits the written dissertation to a faculty committee, who will evaluate the scientific integrity and originality of the written product. A member of the Behavioral and Social Sciences faculty chairs the public defense meeting. The defense begins with an oral presentation of 30-45 minutes. After the oral presentation, the public is invited to ask questions of the candidate. At the end of the public question period, the committee members and candidate move to another room to continue the oral examination. Candidates must successfully defend their work to the satisfaction of the committee. (For additional details, see Behavioral and

D18-2: Behavioral and Social Health Sciences PhD		
Competency	**Course**	**Specific assessment opportunity**
		Social Health Sciences Doctoral Program Handbook in ERF)
	Co-author at least one peer-reviewed publication(s) or presentation(s)	Under the mentorship of their primary advisors, students are encouraged to publish their research in peer-reviewed journals and present their findings at professional conferences. The mentorship model includes affiliation with a research team in their first year, and active support for conducting and disseminating original research, including financial support from the School of Public Health and Graduate School for attending conferences to present research.

D18-2: Biostatistics PhD		
Competency	**Course**	**Specific assessment opportunity**
1. Implement advanced statistical models for the purposes of estimation, comparison, prediction, and adjustment in non-standard settings.	PHP 2602: Analysis of Lifetime Data	Take home exam: The take home exam asks students to analyze a right censored dataset (non-standard setting) using several techniques and submit a one page report of the findings. This includes estimating the relationship between the failure time and the covariates, evaluating if the underlying assumptions are satisfied, comparing survival between different groups, and predicting survival for individual participants. All of these tasks require adjustments for the presence of censoring.
2. Formulate a public health question in statistical terms and choose a study design to address the public health question.	PHP 2605: Generalized Linear Models	Homework Assignments: Problem sets with 8-10 questions, and an additional applied coding problem challenge students to implement model-fitting algorithms and conduct inference on a real data set. Final Project: Detailed statistical analysis of a dataset chosen by the student. The project grade will be determined based on the clarity of solutions proposed in both a written and oral report.
3. Explain statistical concepts and methods to a broad audiences (e.g., undergraduate students, clinicians or medical researchers).	PHP 2550: Practical Data Analysis	Final Project: The final project will consist of a comprehensive analysis of data of the student's choice or an in-depth discussion of a data analysis topic not covered in detail in class. Either choice must be made with agreement

D18-2: Biostatistics PhD		
Competency	**Course**	**Specific assessment opportunity**
		from the instructor who will provide topic and data analysis suggestions for students who need them. The project grade will be determined based the in-class presentation and the written report. The writing will be graded based on clarity of the statement and solution of the problem. Students must do individual projects.
4. Integrate new developments in the statistical literature for challenging research problems in public health.	PHP 2580: Statistical Inference II	Homework Sets: Students will develop solutions to methodologic questions included in biweekly assignments during the semester. The problem sets require students to develop working knowledge and understanding of advanced statistical methodology, with emphasis on recent developments. Topics will include Bayesian methods for understanding multi-level data; rank-based non-parametric methods with applications to the assessment of diagnostic tests and Receiver Operating Characteristic curve analysis; bootstrap and other resampling methodology; and statistical machine learning, with emphasis on methods for classification and prediction, neural networks and deep learning. Midterm and Final examinations: will comprise several questions designed to test the ability of students to make creative use of concepts and theoretical tools discussed in the course. The questions will require students to synthesize their knowledge and understanding of concepts and techniques from several parts of the course.
5. Discover gaps in current inferential methods that limit further public health research and create solutions based on rigorous theoretical justification.	PHP 2602: Analysis of Lifetime Data	Homework and Final Exam. Example questions addressing this are: • Identify gaps in the developments of two-phase sampling designs and derive properties of estimators that fill those gaps. This includes the commonly used cost-saving case-cohort and nested case control studies where covariate information is collected on all failures but only on a subset of the non-failures. • Identify gaps in prior developments of residual based model checking and fill

D18-2: Biostatistics PhD		
Competency	**Course**	**Specific assessment opportunity**
		those gaps by deriving properties of several types of residuals that can be used for checking whether the proportional hazard assumption holds (an important assumption underlying the commonly used proportional hazards model).
6. Create original computer code for advanced statistical techniques.	PHP 2530: Bayesian Statistical Methods	All of the problem sets include using computer code to derive advanced models. The final project requires writing advanced computer code to analyze advanced statistical models.
7. Evaluate the statistical properties of new methods using mathematical and computer tools.	PHP 2601: Linear Models	Homework Assignments: Problem sets with 8-10 questions, and an additional applied coding problem challenge students to implement model-fitting algorithms and conduct inference on a real data set. Final Project: Detailed statistical analysis of a dataset chosen by the student. The project grade will be determined based on the clarity of solutions proposed in both a written and oral report.

D18-2: Epidemiology PhD		
Competency	**Course**	**Specific assessment opportunity**
1. Master and critique contemporary methodological approaches for causal inference including counterfactual theory and causal diagrams.	PHP 2250: Advanced Quantitative Methods in Epidemiologic Research	Final Exam: Example final exam questions: • Based on the provided DAG, discuss the limitation(s) of using a standard regression model to estimate the effect of interest. • What alternative approach would circumvent the limitation(s) that you identified in the previous question and how would this circumvention occur? • What assumptions does this alternative approach make?
2. Conduct and interpret appropriate analyses of epidemiologic data using generalized linear models and other advanced statistical approaches.	PHP 2200: Intermediate Methods in Epidemiologic Research	In homework assignments and Exam 2, students are asked to interpret and compare results from different models (e.g., linear, logistic, Poisson) applied to the same data and research question.
3. Evaluate multiple lines of scientific evidence concerning a topic of importance to the field of epidemiology reflecting	PHP 2180: Interpretation and Application of Epidemiology	Students are evaluated based on their participation in class discussion, specifically the extent to which they are able to identify and articulate the key determinants of the strength of evidence

D18-2: Epidemiology PhD		
Competency	**Course**	**Specific assessment opportunity**
integration of subject matter knowledge and command of methodologic principles.		from specific epidemiologic studies drawing on advanced epidemiologic and statistical methods. The midterm and final exam call for an evaluation of an assigned article with questions to be answered that require identifying and weighing the key determinants of validity, including susceptibility to biases and random error, providing an informed critical evaluation. The course paper calls for selection of an article from the literature and interpreting the study's contribution for three different audiences: epidemiology colleagues, health department officials, and the media/general public. This exercise requires examining and distilling information for translation to scientists, public health practitioners, and the lay public.
4. Design, write, and submit a research study that can appropriately and efficiently examine an epidemiologic research question of interest.	PHP 2090: Research Grant Writing for Public Health	Write an NIH-style proposal for submission. Students put together a complete NIH-format grant application that includes the specific aims, research strategy, abstract/narrative, and grant administrative documents.
5. Critically analyze an existing epidemiologic literature to identify key gaps in current knowledge to formulate new research objectives.	PHP 2090: Research Grant Writing for Public Health	Write an NIH-style proposal for submission. Students synthesize literature relevant to their proposal, clearly communicate these gaps, and develop a set of achievable aims to address these gaps.

D18-2: Health Services Research PhD		
Competency	**Course**	**Specific assessment opportunity**
1. Execute scientifically rigorous analyses of healthcare data.	PHP 2455B: Health Services Research (HSR) Methods II	Assignments require students to perform analyses implementing the material covered in class using research datasets that are either anonymized and publicly available or perturbed and shared with permission from the data custodians.
2. Interpret the findings of health services research.	PHP 2455B: Health Services Research (HSR) Methods II	Assignments consist of a series of directed questions that require students to obtain and interpret descriptions of the data, identify the relevant targets of inference, propose statistical models to estimate their targets of inference, and interpret their results for different

D18-2: Health Services Research PhD		
Competency	**Course**	**Specific assessment opportunity**
		audiences (i.e., other health services researchers, policy makers with little background in the relevant methods).
3. Synthesize the state of evidence within a substantive area of health services or health policy research.	PHP 2090: Research Grant Writing for Public Health	Students write a grant application that synthesizes the state of evidence that supports the proposed study's research question.
4. Use a health services research theoretical framework to design an original study that addresses a significant gap in the health services or policy research literature.	PHP 2980: Graduate Independent Study and Thesis Research	Thesis proposal (See Health Services Research Doctoral Program Handbook in ERF)
5. Produce a publishable health sciences research monograph that demonstrates mastery of scholarly writing.	PHP 2980: Graduate Independent Study and Thesis Research	Dissertation (See Health Services Research Doctoral Program Handbook in ERF)

4) Identify required coursework and other experiences that address the variety of public health research methods employed in the context of a population health framework to foster discovery and translation of public health knowledge and a brief narrative that explains how the instruction and assessment is equivalent to that typically associated with a three-semester-credit course.

Please note that Brown University does not use a credit hour system. Degree requirements are based on the number of courses required. A full-credit Brown University course is equivalent to a four-credit course.

Students in all four doctoral programs take an online, non-credit modular course covering the scope of public health, Public Health 1001. The course presents one module at a time, with each module made up of 1-4 sessions created by a Brown faculty member. Topics for each module are: (1) General public health; (2) Epidemiology; (3) Environmental Health; (4) Behavioral and Social Health Sciences; and (5) Global Health. Modules are designed to run for one scheduled week per session, during which a faculty member with expertise in that area will be available for questions using an online discussion. Assessments, which are taken at the end of each module including both essay and multiple-choice test formats, are graded by a topic-specific faculty member. This course takes about 55 hours to complete.

Additional ways that the programs address public health research methods in the context of a population health framework are described below.

<u>Behavioral and Social Health Sciences PhD</u>

Students are required to take a research methods course in each of the areas of (a) behavioral science, (b) epidemiology, and (c) an elective that could cover research methods in anthropology, clinical trials, survey research, qualitative research, or GIS/spatial analysis. Three of the core courses address methods related to intervention development and evaluation,

advanced topics in health intervention research, and health communication theory and methods. Finally, students participate in a course over 2.5 to 3 years in the form of Journal Club, which exposes them to a range of external speakers covering a variety of research methodologies, as well as research in content areas represented by faculty research programs.

<u>Biostatistics PhD</u>

Students are required to take eight core courses in statistical methods including foundation of statistical inference and general biostatistics methods, as well as demonstrate competency in applying these methods to a substantive field such as epidemiology or infectious disease. Students are also required to take a course in Epidemiology and participate in journal club.

<u>Epidemiology PhD</u>

All students are required to take 13 courses for credit, including 9 core courses, 2 or more methods selective courses, and 2 or more substantive selective courses. These include at least four courses in epidemiology methods covering: basic measures of disease occurrence and association; basic and advanced study designs; sources of epidemiologic data; and advanced causal inference methods. Two or more courses in biostatistics cover basic and intermediate methods for categorical and continuous variables, including multivariate approaches. Additional courses cover scientific and grant writing, fundamentals of human biology, research ethics, statistical programming, and advanced epidemiologic and biostatistics methods.

<u>Health Services Research PhD</u>

Students are required to take a two-semester methods sequence that covers topics on causal modeling (e.g., graphical and counterfactual models and identification analysis), study design (randomized trials, observational cohort studies, regression discontinuity designs), statistical modeling (e.g., regression methods for clustered data, survival analysis), and estimation and inference for causal parameters (e.g., g-methods for time-fixed and time-varying treatments, including the g-formula, inverse probability weighting, and doubly robust estimation).

5) Briefly summarize policies and procedures relating to production and assessment of the final research project or paper.

<u>Behavioral and Social Health Sciences PhD</u>

Dissertations consist of three distinct, thematically-linked, publishable quality papers targeted to specific journal(s). The formulation of the hypotheses and/or thesis must be original. At least two of the papers are data-focused (including qualitative research, meta-analysis, and/or secondary data analysis); of these, at least one of the papers must involve quantitative data analysis, and at least one of the papers must involve new data collection (typically requiring IRB review). One of the papers may be a systematic review or a theoretical paper that offers a novel contribution to the literature. The dissertation is typically structured in five chapters: an introductory chapter that provides common background and frames the research questions, Study 1, Study 2, Study 3, and a discussion/conclusion chapter that integrates the findings of the 3 dissertation studies.

Students must pass their qualifying examinations prior to proposing their dissertation. Any member of the Behavioral and Social Health Sciences faculty may serve as a dissertation advisor. Students select a dissertation committee that typically consists of three Brown University faculty members with relevant expertise. Students create a written proposal describing their planned Dissertation research and present the proposal to their Dissertation committee. In the Dissertation Proposal Defense meeting, the student provides an oral presentation of the proposal, and the committee submits questions to the student, who must clarify and defend the proposed work. A student becomes a doctoral candidate when the

dissertation proposal is approved by all committee members. Upon becoming a candidate, the student meets with the dissertation committee at least twice a year to review progress.

Students work closely with their advisors and committee members to determine when the dissertation is ready to defend. The defense meeting is chaired by a member of the Behavioral and Social Health Sciences faculty and is open to the public. The defense begins with an oral presentation of approximately 30 minutes. After the oral presentation, the public is invited to ask questions of the candidate; at the end of the public question period the committee members and candidate move to another room to continue the examination. Committee members then direct questions to the candidate. Outcomes consist of pass with distinction, pass, pass with minor revisions, pass conditional on major revisions, and no pass. Final copies of the dissertation are filed with the Graduate School.

Biostatistics PhD

Dissertations consist of three chapters, each of a publishable research paper, under a unified theme, that describe innovations in statistical methodology to address challenges in biomedical and public health research. After the written Qualifying Exam, the student identifies their potential thesis advisor. Depending on the theme of the thesis proposal, the student identifies the other dissertation committee members, with the consultation of the advisor. The committee must include at least three members and at least two from the Biostatistics Department. The committee often includes a domain expert to provide advising on the scientific perspective that goes beyond statistics. The Graduate Program Director approves the committee composition.

The student develops a written dissertation proposal that includes the significance of the problem, literature review, the three aims corresponding to their three thesis chapters, proposed approaches, and preliminary results that support the feasibility of their proposed approaches. They submit the written proposal to the committee and schedule an oral exam. The oral exam includes a presentation of the thesis proposal followed by the committee raising questions and the student clarifying or defending the proposal. The outcome of the oral exam includes pass (the student moves to thesis research phase), conditional pass (the student has to revise the written proposal but does not have to retake the exam), or no pass (the student has to revise the written proposal and has to retake the exam).

Once the student passes the oral exam, they enter thesis research phase and meet with their committee at least once a semester to report the progress and solicit feedback. The dissertation defense begins with a public presentation, questions by the committee members, questions by the other audience members, and a closed-door discussion among the committee. The outcomes include pass (where minor revisions of the written thesis may be asked for), conditional pass (where additional work may be asked for and considered major revision), and no pass. Final copies of the dissertation are filed with the Graduate School.

Epidemiology

Dissertations are largely comprised of three published or publication-quality manuscripts appropriate for peer-reviewed journals in epidemiology and related disciplines. Students must pass their written qualifying examinations (typically at the end of semester four) prior to selecting a dissertation chair and committee and progressing to the oral examination and their dissertation work. Any member of the graduate faculty with an appointment in the Department of Epidemiology may serve as a doctoral dissertation advisor. The dissertation advisor provides ongoing supervision and consultation for the conceptualization, design, conduct, analysis, and interpretation of the research project. The committee must include two graduate faculty members from the student's degree program, one of whom has a primary appointment in the Department of Epidemiology. The third member can be affiliated with another department but must be a Brown faculty member such as a faculty member from the Department of Biostatistics or another faculty member with expertise as a quantitative

methodologist. Additional committee members from other institutions may also be included. Final composition of the committee must be communicated to the Graduate Program Director and Department Chair and approved before the oral examination of the dissertation proposal.

Following selection of a dissertation committee, the student generates a written proposal describing their planned Dissertation research and presents this as part of an oral examination. The oral exam consists of three parts: 1) written proposal; 2) oral presentation and examination by committee; and 3) faculty evaluation. It is chaired by a committee member other than the dissertation advisor. The *written proposal* is comprised of: (a) Summary that includes the specific aims of the work to be conducted; (b) Background and literature review; (c) Preliminary Studies; and (d) Proposed work. The *oral presentation and examination* includes an oral presentation by the student followed by committee members directing questions to the candidate. The chair of the oral exam summarizes the discussion and the outcome of the exam for the *faculty evaluation.*

A student becomes a doctoral candidate when the dissertation proposal is approved by all committee members. Upon becoming a candidate, the student meets with the dissertation committee at least twice a year to review progress. Students work closely with their advisors and committee members to determine when the dissertation is ready to defend. The defense meeting is chaired by a member of the Epidemiology faculty and is open to the public. The defense begins with an oral presentation of approximately 30 minutes. After the oral presentation, the public is invited to ask questions of the candidate; at the end of the public question period the committee members and candidate move to another room to continue the examination. Committee members direct questions to the candidate. Outcomes consist of pass with distinction, pass, pass with minor revisions, pass conditional on major revisions, and no pass. Final copies of the dissertation are filed with the Graduate School.

Health Services Research

Dissertations are largely composed of three published or publication-quality manuscripts appropriate for peer-reviewed journals in health services and related disciplines. Students must pass their written examinations prior to selecting a dissertation chair and committee and progressing to the oral examination. Any member of the graduate faculty in health services research can potentially serve as a doctoral thesis advisor. The minimum size of a doctoral committee is three faculty members. Final composition of the committee must be communicated to the Graduate Program Director and approved before the oral examination.

The oral exam consists of a written proposal and oral examination by committee. The written proposal has four components: (a) a summary that includes the specific aims of the work to be conducted; (b) study background and literature review; (c) preliminary studies; and (d) the proposed work. The written proposal may take the form of a dissertation grant proposal either submitted or planned to be submitted. The oral examination is attended by the thesis committee and chaired by the dissertation advisor. It includes an oral presentation by the student followed by committee members posing questions to the candidate. The chair of the oral exam summarizes the discussion and the outcome of the exam in a written memo to the candidate. The evaluation results are full pass, conditional pass, and not pass. Those earning full pass and who have successfully completed all pre-candidate requirements are then admitted to PhD candidacy. Those earning conditional pass may either be asked to re-take the oral exam or to address significant deficiencies in the proposal. The committee must agree that any shortcomings have been adequately addressed before the student is admitted to candidacy. A "not pass" means the student may be directed to re-take the oral exam altogether or may be declined candidacy to the PhD degree.

Upon becoming a PhD candidate, the student must plan at least twice-yearly meetings with the committee to review progress. Students work closely with their advisors and committee members to determine when the dissertation is ready to be defended. The defense begins with

an oral presentation followed by a question-and-answer period. At the conclusion of the presentation, the thesis committee meets in private to make a final determination of the acceptability of the thesis and discuss any changes needed for the final version. Outcomes consist of pass, pass conditional on major revisions, and no pass. Final copies of the dissertation are filed with the Graduate School.

6) Provide links to handbooks or webpages that contain the full list of policies and procedures governing production and assessment of the final research project or paper for each degree school.

Behavioral and Social Health Sciences PhD

The Student Handbook is available in the ERF and linked here.

Biostatistics PhD

The Student Handbook is available in the ERF and linked here.

Epidemiology PhD

The Student Handbook is available in the ERF and linked here.

Health Services Research PhD

The Student Handbook is available in the ERF and linked here.

7) Include completed, graded samples of deliverables associated with the advanced research project. The school must provide at least 10% of the number produced in the last three years or five examples, whichever is greater.

Behavioral and Social Health Sciences PhD (see ERF)

1. "The Effects of Menthol Flavoring in Cigarettes on Tobacco Product Selection, Use, and Perceptions of Harm: Implications for Tobacco Regulation"
2. "When Outcomes Matter: A Temporal Analysis of Beliefs in the Exercise and Smoking Domains"
3. "Genetic Underpinning of Physical Activity Adherence: Affective Response to Physical Activity as an Intermediate Phenotype"
4. "Sleep and Physical Activity Among Latinx Children: Formative Research for Obesity Prevention Intervention Development"
5. "Modeling the socio-ecological factors of HIV Prevention Services among Filipinx Transgender Women and Cisgender Men"

Biostatistics PhD (see ERF)

1. "Pathway Analysis of Genomic Data"
2. "Statistical Methods for Structural Imaging Data"
3. "Record Linkage and Causal Inference with Applications to Health Services Research"
4. "Meta-Analysis of N-of-1 Trials Using Bayesian Hierarchical Models"
5. "Dimension Reduction for Single Cell RNA Sequencing"

Epidemiology PhD (see ERF)

1. "The Impact of Non-Medical & Prescribed Opioids on Heroin Use among Military Veterans"
2. "Early life exposure to chemical mixtures: Implications for neonatal outcomes and cognitive abilities"

3. "The neurodevelopment impact of prenatal bacterial infection on adult psychosis: evidence from the New England Family Study"
4. "Dietary lipids, relevant gene networks, and biological interactions underlying obesity and cardiovascular disease"
5. "From Surviving a Plague to Ending the Epidemic: Using Biomedical HIV Prevention to Reduce Disparities among Gay and Bisexual Men in the United States"

Health Services Research PhD (see ERF)

1. "Evaluating the real-world use, effectiveness, and cost of cancer therapies in older adults using routinely collected data"
2. "Propagating Ambiguity into Decision Analyses of Test-and-Treat Strategies"
3. "The Impact of Rural Add-on Payment on Medicare Beneficiary Access and Outcomes"
4. "The Validity of Medicare Advantage 5-Star Ratings"
5. "Effects of Involuntary Plan Switching on Coverage Continuity, Medication Adherence, and Utilization: Evidence from Medicaid Managed Care Plan Exits"

8) Briefly explain how the school ensures that the instruction and assessment in introductory public health knowledge is generally equivalent to the instruction and assessment typically associated with a three semester-credit course.

Please note that Brown University does not use a credit hour system. Degree requirements are based on the number of courses required. A full-credit Brown University course is equivalent to a four-credit course.

All Doctoral Programs

Students take an online, non-credit modular course covering the scope of public health, Public Health 1001. The course presents one module at a time, with each module made up of 1-4 sessions created by a Brown faculty member. Topics for each module are: (1) General public health; (2) Epidemiology; (3) Environmental Health; (4) Behavioral and Social Sciences; and (5) Global Health. Modules are designed to run for one scheduled week per session, during which a faculty member with expertise in that area will be available for questions using an online discussion. Assessments, which are taken at the end of each module including both essay and multiple choice test formats, are graded by a topic-specific faculty member. This course takes about 55 hours to complete.

9) Include the most recent syllabus for any course listed in the documentation requests above, or written guidelines for any required elements that do not have a syllabus.

The syllabus for Public Health 1001 is located in the ERF.

10) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Behavioral and Social Health Sciences PhD

Strengths: The program has a thoughtfully sequenced set of core courses that emphasize intervention development, a flexible curriculum that can incorporate courses from outside of the School as electives when they serve a student's program of study, a 3-study dissertation model that provides students with the opportunity to demonstrate a programmatic research focus, and a strong mentoring model that results in opportunities for students to gain experiences publishing and presenting their work throughout their graduate school years.

Challenges: The small size of our program and School create challenges in the area of curriculum development such that specialty and/or advanced courses that would serve the PhD

program do not always have enough students enrolled to be offered regularly. Teaching faculty resources are often drawn to high-demand courses serving undergraduates or MPH students. Areas for improvement include (a) limited opportunities to offer advanced courses that provide more depth in topics such as health communication, theory, or qualitative methods; and (b) limited range of courses offered by BSS faculty (e.g., we aim to develop more behavioral and social health sciences methods courses such as community-based participatory research, mHealth methods).

Plans: The Department plans to (a) emphasize high-priority teaching areas when hiring new faculty; (b) engage in discussions with other PhD programs about course offerings that might serve more than one program to enhance enrollment, and (c) structure faculty course offerings such that teaching faculty alternate two different courses in at least one semester to expand the offerings on an every-other-year basis.

Biostatistics PhD

Strengths: The program has had very successful completion rates. For example, since 2014-15, 27 students have matriculated into the program. Eight of the 27 have completed their degree, 17 are continuing students, and only two have been dropped from the Program. Second, 100% of the alumni have had successful career outcomes (with job offers in the sector of their choice before completion).

Challenges: The small cohort size and the diverse academic background at matriculation make it difficult to sustain advanced, PhD-only courses to address research-specific topics because the program is unable to offer courses for only 2-3 students, and the offerings can be challenging in terms of frequency and timing.

Plans: The Department plans to diversify the training in teaching to give students more classroom teaching experience, provide early exposure in research to get students engaged in research activity before completing their core coursework, and collaborate with other graduate programs in and beyond the School to provide training in academic writing.

Epidemiology PhD

Strengths: Students produce three or more published or submission-ready manuscripts for major journals in the field of epidemiology. There is considerable independence and autonomy in student choice of research focus. Early attention to grant writing and submission of dissertation research applications enhance student independence and autonomy. There is strong faculty availability and contribution to the final student products. There is coordinated oversight of the program by a dedicated faculty member (Director of Doctoral Program). With these combinations of factors, the great majority of students are able to complete all doctoral requirements within four years, emerging with multiple solid epidemiology publications that position them well for subsequent career opportunities.

Challenges: As a small and growing program, some elements of the process require additional documentation and communication to achieve greater consistency for newer faculty and students. Providing oversight and ensuring consistent high quality while at the same time promoting student autonomy and independence (a hallmark of the program) requires a high level of faculty effort. Student research topics are sometimes limited by current areas of funded faculty research. Options for independent dissertation research awards are limited for international students (who are not eligible to submit NIH F31 applications).

Plans: Additional written documentation is required to summarize our intensive student-focused advising procedures and ensure that all faculty, and new faculty in particular, are familiar with our policies, procedures, and timelines. The department will prepare this additional information, disseminate to all faculty, and review procedures prior to the start of each academic year.

<u>Health Services Research PhD</u>

Strengths: The program has strong advising and mentoring. Students in the program have been very successful as evidenced by the number of manuscripts accepted for publication and number of grants awarded as well as positions obtained following graduation. There is a strong sense of collegiality and collaboration between students, faculty, and staff members in the Department and across Brown.

Challenges: Although the program has strengths in many important areas of public health and health policy, it does not have a portfolio of funded research in all domains of health services research. As a relatively small and growing school, there will necessarily be some areas of research in which the department does not have a critical mass of funded faculty researchers. In addition, the relatively small size in terms of doctoral students and teaching faculty limits the number of advanced methods courses that can be offered. The program therefore incorporates advanced methods training through independent studies and supervised research experiences rather than formal didactic courses. Another challenge is that of recruiting students from historically underrepresented backgrounds, though as noted below, strides continue to be made in this area.

Plans: The program plans to continue to implement efforts to broaden and diversify the applicant pool and increase the yield of accepted and admitted candidates from historically underrepresented groups (HUGs). It will build on ongoing efforts, which have resulted in three consecutive recruiting cycles in which at least one applicant from a HUG was recruited. Recruitment efforts have included actively working with the Graduate School in recruitment activities for students from HUGs; engagement with minority organizations involved in health policy; and outreach to the McNair Scholars Program, a program funded by the U.S. Department of Education designed to prepare undergraduate students who are first-generation students with financial need or students from groups who have been traditionally underrepresented in graduate education for doctoral studies.

D19. All Remaining Degrees

Students enrolled in any of the SPH's degree programs that are not addressed in Criteria D2, D3, D9, D17 or D18 complete coursework that provides instruction in the foundational public health knowledge at a level of complexity appropriate to the level of the student's degree program.

The instruction and assessment of students' foundational public health knowledge are equivalent in depth to the instruction and assessment that would typically be associated with a three-semester-credit class, regardless of the number of credits awarded for the experience or the mode of delivery.

The school identifies at least one required assessment activity for each of the foundational public health learning objectives.

1) Provide a matrix in the format of Template D19-1 that indicates the required assessment opportunities for each of the defined foundational public health learning objectives (1-12). Typically, the school will present a separate matrix for each degree program, but matrices may be combined if requirements are identical.

    All students in the Undergraduate Statistics ScB take Public Health 1001, in which the foundational public health learning objectives are assessed.

D19-1: Assessment of Foundational Public Health Learning Objectives for the Undergraduate Statistics ScB		
Content	**Course**	**Specific assessment opportunity**
1. Explain public health history, philosophy, and values	Public Health 1001	Module 1 Session 1 Assessment: Describe the history of public health. Include at least three transformative events that shaped public health. What is the overall philosophy of public health? To what values does public health as a practical science ascribe?
2. Identify the core functions of public health and the 10 Essential Services*	Public Health 1001	Module 1 Session 1 Assessment: The ten essential public health services include which of the following: What are the three core public health functions?
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	Public Health 1001	Module 1 Session 2 Assessment: Explain the difference between qualitative and quantitative data including an example where you would use each type of data.
4. List major causes and trends of morbidity and mortality in the US or other community	Public Health 1001	Module 2 Session 1 Assessment: List the major causes of mortality within the United States today. Have these changed over time? Are they different than the major causes of mortality globally? If so, discuss how.

D19-1: Assessment of Foundational Public Health Learning Objectives for the Undergraduate Statistics ScB		
Content	**Course**	**Specific assessment opportunity**
relevant to the school or program		How do causes of morbidity and mortality differ among geographic and demographic subgroups of the US population? Provide examples in your discussion.
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	Public Health 1001	Module 2 Session 2 Assessment: Explain the difference between primary, secondary, and tertiary prevention, and provide an example of each. Discuss the purpose of screening in each prevention strategy.
6. Explain the critical importance of evidence in advancing public health knowledge	Public Health 1001	Module 2 Session 3 Assessment: What is Evidence Based Public Health (EBPH)? Discuss the strengths and weaknesses of observational studies in the context of EBPH.
7. Explain effects of environmental factors on a population's health	Public Health 1001	Module 3 Session 1 Assessment: Provide one example of environmental impacts/risk factors that impact human health and explain how they are connected.

Explain what environmental justice is and discuss why it is important in the context of promoting health for all. |
| 8. Explain biological and genetic factors that affect a population's health | Public Health 1001 | Module 2 Session 4 Assessment: Explain how identifying biologic and genetic determinants of health can help to address public health problems even though they may not be modifiable directly. Provide examples of specific health outcomes in your explanation. |
| 9. Explain behavioral and psychological factors that affect a population's health | Public Health 1001 | Module 4 Session 1 Assessment: Explain two behavioral factors and how they increase risk of non-communicable disease.

Explain an intervention that has been used to help people change their behavior to reduce risk of non-communicable disease(s). |
| 10. Explain the social, political, and economic determinants of health and how they contribute to population health | Public Health 1001 | Module 4 Session 2 Assessment: Explain how income impacts health.

Explain how education impacts health.

List one aspect of racism that is apparent and one that is not and indicate why you think this difference exists. |

<table>
<tr><td colspan="3" align="center">**D19-1: Assessment of Foundational Public Health Learning Objectives for the Undergraduate Statistics ScB**</td></tr>
<tr><td align="center">**Content**</td><td align="center">**Course**</td><td align="center">**Specific assessment opportunity**</td></tr>
<tr>
<td>and health inequities</td>
<td></td>
<td>Select one social determinant of health and indicate how you would measure it to reduce disparities associated with one outcome of interest.</td>
</tr>
<tr>
<td>11. Explain how globalization affects global burdens of disease</td>
<td>Public Health 1001</td>
<td>Module 5 Assessment:
One of the primary ways that globalization has affected the global burden of disease is through the emergence of non-communicable diseases (NCDs). Using specific examples from the course readings, explain how the epidemiological and health transitions have contributed to increases in NCDs in lower and middle income countries.

Describe at least two specific mechanisms underlying the transition to the higher burden of NCDs in lower and middle income countries.</td>
</tr>
<tr>
<td>12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)</td>
<td>Public Health 1001</td>
<td>Module 3 Session 2 Assessment:
Explain the One Health approach to promoting human health, and why it is important in the context of public health.</td>
</tr>
</table>

2) Briefly explain how the school ensures that the instruction and assessment in introductory public health knowledge is generally equivalent to the instruction and assessment typically associated with a three-semester-credit course.

Please note that Brown University does not use a credit hour system. Degree requirements are based on the number of courses required. A full credit Brown University course is equivalent to a four-credit course.

Statistics ScB

Students take an online, non-credit modular course covering the scope of public health, Public Health 1001. The course presents one module at a time, with each module made up of 1-4 sessions created by a Brown faculty member. Topics for each module are: (1) General public health; (2) Epidemiology; (3) Environmental Health; (4) Behavioral and Social Sciences; and (5) Global Health. Modules are designed to run for one scheduled week per session, during which a faculty member with expertise in that area will be available for questions using an online discussion. Assessments, which are taken at the end of each module including both essay and multiple choice test formats, are graded by a topic-specific faculty member. This course takes about 55 hours to complete.

3) Include the most recent syllabus for any course listed in the documentation requests above, or written guidelines for any required elements that do not have a syllabus.

   The syllabus for Public Health 1001 is located in the ERF.

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

   Strengths: Students in the undergraduate statistics program are exposed to the same foundational introductory public health knowledge as all other students in the School.

   Challenges: The program includes students with wide-ranging academic and career interests, some of which have interests outside of public health. Furthermore, many of the courses required in the program are taught outside the School (e.g., Applied Mathematics). Therefore, many students in the program have little to no interest in the material covered in PHP 1001. In addition, systems are needed to track students to ensure that they complete the course outside of their required for-credit courses.

   Plans: We will continue to pursue ways to engage students in the statistics program in PHP 1001 with examples that have general broad appeal related to health-related current events. In addition, we will continue to develop effective systems to monitor and track completion of this requirement.

D20. Distance Education

Not applicable.

E1. Faculty Alignment with Degrees Offered

Faculty teach and supervise students in areas of knowledge with which they are thoroughly familiar and qualified by the totality of their education and experience.

Faculty education and experience is appropriate for the degree level (bachelors, masters, doctoral) and the nature of the degree (research, professional practice, etc.) with which they are associated.

1) Provide a table showing the school's primary instructional faculty in the format of Template E1-1. The template presents data effective at the beginning of the academic year in which the final self-study is submitted to CEPH and must be updated at the beginning of the site visit if any changes have occurred since final self-study submission. The identification of instructional areas must correspond to the data presented in Template C2-1.

   Please see Table E1-1 starting on the next page.

E1-1: Primary Instructional Faculty Alignment with Degrees Offered						
Name	Title/Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in C2-1
Ahluwalia, Jasjit	Professor	Tenure-Track	MD MPH	Tulane U. School of Public Health and Tropical Medicine	Medicine, Public Health	Public Health
Aston, Elizabeth	Assistant Professor	(Research)	PhD	Wake Forest U. School of Medicine	Neuroscience	Behavioral and Social Sciences
Baier, Rosa	Associate Professor of the Practice	Professor of the Practice	MPH	Brown U.	Public Health	Heath Services
Balk, Ethan	Associate Professor	(Research)	PhD	Sackler School of Medicine	Medicine, Biostatistics, Epidemiology	Health Services
Bardenheier, Barbara	Assistant Professor	Research Scholar	PhD MPH	Emory University	Epidemiology Biostatistics	Health Services
Barnett, Nancy	Professor	Research Scholar	PhD MS	U. of Washington	Clinical Psychology	Behavioral and Social Sciences
Becker, Sara	Associate Professor	(Research)	PhD MA	Duke U.	Clinical Psychology	Behavioral and Social Sciences
Belanger, Emmanuelle	Assistant Professor	Research Scholar	PhD MS	McGill U. Canada Utrecht U. Netherlands	Psychiatry, Family Medicine Social Psychology	Health Services
Bengtson, Angela	Assistant Professor	Tenure-Track	PhD MA	U. of NC Chapel Hill U. of Denver	Epidemiology International Development	Maternal and Child Health
Benitez, Tanya	Assistant Professor	(Research)	PhD MSW	U. of Alabama at Birmingham (UAB) State U. of New York at Stony Brook	Health Education/Promotion Social Work	Behavioral and Social Sciences
Bernstein, Michael	Assistant Professor	Research Scholar	PhD	U. of Rhode Island	Behavioral Science	Behavioral and Social Sciences
Biello, Katie	Associate Professor	(Research)	PhD MPH	Yale U. Boston U.	Epidemiology Epidemiology/International Health	Behavioral and Social Sciences
Bohlen, Lauren	Assistant Professor	Research Scholar	PhD MS	Pennsylvania State U.	Biobehavioral Health	Behavioral and Social Sciences
Braun, Joseph	Associate Professor	Tenure-Track	PhD MSPH	U. of NC Chapel Hill	Epidemiology	Epidemiology
Brewer, Judson	Associate Professor	Tenure-Track	MD PhD	Washington U. School of Medicine	Medicine Immunology	Mindfulness

E1-1: Primary Instructional Faculty Alignment with Degrees Offered						
Name	Title/Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in C2-1
Buka, Stephen	Professor	Tenure-Track	ScD	Harvard U.	Epidemiology	Epidemiology
Carey, Kate	Professor	Tenure-Track	PhD MA	Vanderbilt U.	Clinical Psychology Cognitive Psychology	Behavioral and Social Sciences
Cassidy, Rachel	Assistant Professor	(Research)	PhD	U. of Florida	Psychology	Behavioral and Social Sciences
Celio, Mark	Assistant Professor	(Research)	MD PhD MS	Loyola U. Binghamton University (SUNY)	Clinical Psychology Psychology	Behavioral and Social Sciences
Chrysanthopoulou, Stavroula	Assistant Professor	Research Scholar	PhD	Brown U.	Biostatistics	Biostatistics
Cioe, Patricia	Assistant Professor	Research Scholar	PhD	U. of Massachusetts	Nursing	Behavioral and Social Sciences
Clark, Melissa	Professor	Teaching Scholar	PhD MS	U. of Illinois at Chicago	Community Health Sciences	Generalist
Crawford, Lorin	Assistant Professor	Tenure-Track	PhD	Duke U.	Statistical Science	Biostatistics
Danko, Kristin	Assistant Professor	Research Scholar	PhD MSc	U. of Ottawa U. of British Columbia	Epidemiology U. of British Columbia	Health Services
DeVito, Roberta	Assistant Professor	Tenure-Track	PhD MS	Università degli Studi di Padova Università Europea di Roma	Statistical Science	Biostatistics
Duan, Fenghai	Associate Professor	Research Scholar	PhD MS	Yale U. Institute of Biophysics	Biostatistics Molecular Biology	Biostatistics
Dulin, Akilah	Assistant Professor	Tenure-Track	PhD MA	U. of Alabama Birmingham	Medical Sociology Sociology	Behavioral and Social Sciences
Dunsiger, Shira	Assistant Professor	(Research)	PhD	Brown U.	Biostatistics	Biostatistics
Eloyan, Ani	Assistant Professor	Tenure-Track	PhD MS	North Carolina U.	Statistics	Biostatistics
Field, Alison	Professor	Tenure-Track	ScD	Harvard School of Public Health	Epidemiology	Maternal and Child Health
Gadbois, Emily	Assistant Professor	Research Scholar	MA MS PhD	U. Massachusetts	Research Psychology Gerontology Gerontology	Health Services
Galarraga, Omar	Associate Professor	Tenure-Track	PhD MA	Johns Hopkins U.	Health Economics	Health Services
Gareen, Ilana	Associate Professor	(Research)	PhD MPH	UCLA Yale U.	Epidemiology	Epidemiology

E1-1: Primary Instructional Faculty Alignment with Degrees Offered						
Name	Title/Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in C2-1
Gatsonis, Constantine	Professor	Tenure-Track	PhD MS	Cornell U.	Mathematical Statistics Mathematics	Biostatistics
Gjelsvik, Annie	Assistant Professor	Teaching Scholar	PhD	Brown U.	Epidemiology	Clinical and Translational Research
Goedel, William	Assistant Professor	(Research)	PhD	Brown U.	Epidemiology	Epidemiology
Goodyear Chavanne, Kimberly	Assistant Professor	(Research)	PhD	George Mason U.	Neuroscience	Behavioral and Social Sciences
Gozalo, Pedro	Associate Professor	(Research)	PhD MS	U. of CA, San Diego London School of Economics U.K.	Economics Economics and Mathematical Economics	Health Services
Grigsby-Toussaint, Diana	Associate Professor	Tenure-Track	PhD	U. of Illinois at Chicago Boston U.	Maternal/Child Health Epidemiology International Health	Generalist
Gunn, Rachel	Assistant Professor	Research Scholar	PhD	Indiana U. - Bloomington	Clinical Science	Behavioral and Social Sciences
Gutman, Roee	Associate Professor	Tenure-Track	PhD MA MS	Harvard U. Tel Aviv U.	Statistics Statistics	Biostatistics
Harrison, Jill	Assistant Professor of the Practice	Professor of the Practice	PhD	Virginia Tech	Sociology/Gerontology	Health Services
Harrison, Abigail	Associate Professor	(Research)	PhD	London School of Hygiene and Tropical Medicine, U. of London	Epidemiology and Population Health	Global Health
Helseth, Sarah	Assistant Professor	Research Scholar	PhD	Florida International U.	Clinical Science of Child and Adolescent Psychology	Behavioral and Social Sciences
Hogan, Joseph	Professor	Tenure-Track	ScD MS	Harvard U. U. of Southern CA	Biostatistics Statistics	Biostatistics
Howe, Chanelle	Assistant Professor	Tenure-Track	PhD MS	Johns Hopkins U. Columbia U.	Epidemiology/Biostatistics Epidemiology	Epidemiology
Hughto, Jaclyn	Assistant Professor	Research Scholar	PhD MPH	Yale U. Emory U	Chronic Disease Epidemiology Behavioral Science/Health Education	Behavioral and Social Sciences
Jackson, Kristina	Professor (Research)	(Research)	PhD MA	Arizona State U.	Social Psychology	Behavioral and Social Sciences

E1-1: Primary Instructional Faculty Alignment with Degrees Offered						
Name	Title/Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in C2-1
Janssen, Tim	Assistant Professor	(Research)	PhD MS	U. of Amsterdam, Netherlands U. of Maastricht, Netherlands	Developmental Psychology Health and Social Psychology	Behavioral and Social Sciences
Jha, Ashish	Professor	Tenure-Track	MD MPH	Harvard U.	Medicine Public Health	Health Services
Joyce, Nina	Assistant Professor	Tenure-Track	PhD MPH	Brown U. School of Public Health Tufts U. School of Medicine	Epidemiology Biostatistics and Epidemiology	Epidemiology
Jutkowitz, Eric	Assistant Professor	Research Scholar	PhD	U. of Minnesota	Health Services Research Policy and Practice	Health Services
Kahler, Christopher	Professor	Tenure-Track	PhD MS	Rutgers U.	Psychology	Behavioral and Social Sciences
Kelsey, Karl	Professor	Tenure-Track	MD MoH	U. of Minnesota Harvard U.	Environmental Health	Epidemiology
Kuo, Caroline	Associate Professor	(Research)	PhD MS	Oxford	Social Policy International Development	Global Health
Laws, Michael Barton	Assistant Professor	Research Scholar	PhD MA	Tufts U. Brandeis U.	Medical Sociology	Health Services
Li, Nan	Assistant Professor	(Research)	PhD MS	U. of North Carolina at Chapel Hill U. of Texas Health Science Center at Houston	Epidemiology	Epidemiology
Lima, Julie	Assistant Professor	Research Scholar	PhD, MA MPH	Brown U. Boston U, School of Public Health	Sociology Health Promotion/Disease Prevention & Epidemiology/Biostatistics	Health Services
Liu, Tao	Associate Professor	Research Scholar	PhD MS	U. of Pennsylvania Iowa U.	Biostatistics Statistics	Biostatistics
Liu, Simin	Professor	Tenure-Track	MD ScD MPH	Jinan U. In China Harvard U.	Medicine Epidemiology and Nutrition	Epidemiology
Loucks, Eric	Associate Professor	Tenure-Track	PhD	U. of British Columbia	Pharmacology & Therapeutics	Mindfulness
Lurie, Mark	Associate Professor	Tenure-Track	PhD MA	Johns Hopkins U. of Florida	Public Health African History	Generalist

	E1-1: Primary Instructional Faculty Alignment with Degrees Offered					
Name	**Title/Academic Rank**	**Tenure Status or Classification**	**Graduate Degrees Earned**	**Institution(s) from which degree(s) were earned**	**Discipline in which degrees were earned**	**Concentration affiliated with in C2-1**
Magill, Molly	Associate Professor	(Research)	PhD MSW	Boston College	Clinical Social Work	Behavioral and Social Sciences
Marcus, Bess	Professor	Tenure-Track	PhD MS	Auburn University	Clinical Psychology	Behavioral and Social Sciences
Marshall, Brandon	Associate Professor	Tenure-Track	PhD MS	U. of British Columbia	Epidemiology	Epidemiology
Martin, Rosemarie	Assistant Professor	Research Scholar	PhD	U. of Rhode Island	Experimental Psychology	Behavioral and Social Sciences
McCreedy, Ellen	Assistant Professor	Research Scholar	PhD MPH	U. of Minnesota U. of South Florida	Health Services Research, Policy and Administration Global Health Epidemiology	Health Services
McGarvey, Stephen	Professor	Research Scholar	PhD MA MPH	Pennsylvania State U. Yale U.	Anthropology Epidemiology	Global Health
Meisel, Matthew	Assistant Professor	Research Scholar	PhD	U. of Georgia	Psychology	Behavioral and Social Sciences
Merrill, Jennifer	Assistant Professor	Research Scholar	PhD MA	SUNY Buffalo	Clinical Psychology Psychology	Behavioral and Social Sciences
Metrik, Jane	Associate Professor	(Research)	PhD MS	San Diego State/ U. of California, SD	Clinical Psychology	Behavioral and Social Sciences
Meyers, David	Assistant Professor	Research Scholar	PhD MPH	Brown U. Tufts U.	Health Services Research Epidemiology and Biostatistics	Health Services
Micalizzi, Lauren	Assistant Professor	(Research)	PhD	Boston U.	Psychology	Behavioral and Social Sciences
Mills, Whitney	Assistant Professor	(Research)	PhD	U. of South Florida	Aging Studies	Health Services
Monnig, Mollie	Assistant Professor	Research Scholar	PhD MA	University of New Mexico	Clinical Psychology	Behavioral and Social Sciences
Monti, Peter	Professor	Tenure-Track	PhD MA	U. of Rhode Island William and Mary	Psychology	Behavioral and Social Sciences
Mor, Vincent	Professor	Tenure-Track	PhD MEd	Brandeis U. Northeastern U.	Sociology Rehab. Administration	Health Services
Moyo, Patience	Assistant Professor	Research Scholar	PhD MS	U. of Maryland Baltimore	Pharmaceutical Health Services Research	Health Services
Murphy, Cara	Assistant Professor	Research Scholar	PhD MS	U. of Georgia	Clinical Psychology	Behavioral and Social Sciences

Name	Title/Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in C2-1
E1-1: Primary Instructional Faculty Alignment with Degrees Offered						
Nazareno, Jennifer	Assistant Professor	Teaching Scholar	PhD MSW	U. of California San Francisco	Medical Sociology Social Welfare Health and Geriatric Services	Public Health
Nunn, Amy	Associate Professor	Research Scholar	ScD MS	Harvard School of Public Health	Population and International Health	Behavioral and Social Sciences
Operario, Don	Professor	Tenure-Track	PhD MS	U. of MA Amherst	Social Psychology	Global Health
Panagiotou, Orestis	Assistant Professor	(Research)	MD PhD	U. of Ioannina School of Medicine	Medicine Epidemiology	Health Services
Papandonatos, George	Associate Professor	(Research)	PhD	U. of Minnesota	Statistics	Biostatistics
Paul, Alice	Assistant Professor	Teaching Scholar	PhD	Cornell U.	Operations Research and Information Engineering	Biostatistics
Pearlman, Deborah	Associate Professor of the Practice	Professor of the Practice	PhD	Brandeis U.	Health Policy	Generalist
Pellowski, Jennifer	Assistant Professor	Research Scholar	PhD MA	U. of Connecticut Storrs	Social Psychology	Global Health
Proulx, Jeffrey	Assistant Professor	(Research)	PhD MS	Oregon State U.	Human Development and Family Studies	Mindfulness
Rahman, Momotazur Md	Assistant Professor	Research Scholar	PhD	Brown U.	Economics	Health Services
Resnik, Linda	Professor	Research Scholar	PhD MS	Nova Southeastern U. Boston, U.	Physical Therapy	Health Services
Risica, Patricia	Associate Professor	Research Scholar	MPH DrPH	Johns Hopkins U.	Epidemiology	Public Health
Rivera-Hernandez, Maricruz	Assistant Professor	Research Scholar	PhD MEn	Miami U.	Gerontology Health and Environment	Health Services
Rogers, Michelle	Assistant Professor	(Research)	PhD MA	Brown U. Cornell U.	Sociology	Behavioral and Social Sciences
Rohsenow, Damaris	Professor	(Research)	PhD	U. of Washington	Clinical Psychology	Behavioral and Social Sciences
Rosen, Rochelle	Assistant Professor	Research Scholar	PhD	Brown U.	Anthropology	Behavioral and Social Sciences
Saldanha, Ian	Assistant Professor	Research Scholar	PhD MPH MBBS	Johns Hopkins Grant Medical College	Epidemiology Public Health Medicine and Surgery	Health Services

	E1-1: Primary Instructional Faculty Alignment with Degrees Offered					
Name	Title/Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in C2-1
Savitz, David	Professor	Tenure-Track	PhD MS	U. of Pittsburgh Ohio State U.	Epidemiology Preventive Medicine	Maternal and Child Health
Schmid, Christopher	Professor	Tenure-Track	PhD MA	Harvard U.	Statistics	Biostatistics
Scott, Kelli	Assistant Professor	Research Scholar	PhD	Indiana U.	Psychology (Clinical Science)	Behavioral and Social Sciences
Shield, Renee	Clinical Professor	Clinical	PhD MA	Brown U. U. of Texas, Austin	Anthropology	Health Services
Shireman, Theresa	Professor	Tenure-Track	PhD MS	U. of Wisconsin-Madison U. of Iowa	Pharmaceutical Economics Epidemiology & Policy	Clinical and Translational Research
Sokolovsky, Alexander	Assistant Professor	Research Scholar	PhD MA	U. of Illinois at Chicago	Clinical Psychology	Behavioral and Social Sciences
Steingrimsson, Jon	Assistant Professor	Tenure-Track	PhD MS	Cornell U. U. of Copenhagen	Statistics	Biostatistics
Thomas, Kali	Associate Professor	Research Scholar	PhD MA	U. of South Florida	Gerontology	Health Services
Tidey, Jennifer	Professor	Research Scholar	PhD MS	Tufts U.	Experimental Psychology	Behavioral and Social Sciences
Trikalinos, Thomas	Associate Professor	Tenure-Track	MD PhD	U. of Ioannina	Medicine Molecular Epidemiology	Health Services
Trivedi, Amal	Associate Professor	Tenure-Track	MD MPH	U. of California, LA Harvard U.	Medicine, Health Policy & Management	Health Services
Trivedi, Nisha	Assistant Professor	Teaching Scholar	MD MPH	Brown U. Harvard U.	Medicine Global Health	Public Health
van den Berg, Jacob	Assistant Professor	(Research)	PhD	U of Florida	Counseling Psychology	Behavioral and Social Sciences
Vivier, Patrick	Professor	Teaching Scholar	MD PhD	Brown U. Johns Hopkins U.	Medicine Health Policy	Maternal and Child Health
von Ash, Tayla	Assistant Professor	Tenure-Track	ScD MPH	Harvard U. Yale U.	Social and Behavioral Sciences and Public Health Nutrition Social and Behavioral Sciences	Public Health
Wallack, Anya	Professor of the Practice	Professor of the Practice	PhD	Brandeis U. Heller School for Social Policy and Management	Social Policy	Health Services
Wetle, Terrie	Professor	Tenure-Track	PhD MS	Portland State U.	Urban Studies Psychology	Health Services

	E1-1: Primary Instructional Faculty Alignment with Degrees Offered					
Name	Title/Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in C2-1
White, Tara	Assistant Professor	(Research)	PhD	Cornell U.	Developmental Psychology	Behavioral and Social Sciences
Williams, David	Associate Professor	Tenure-Track	PhD MS	Virginia Tech	Clinical Psychology	Behavioral and Social Sciences
Wilson, Ira	Professor	Tenure-Track	MD MS	Harvard U.	Medicine Epidemiology	Clinical and Translational Research
Wray, Tyler	Assistant Professor	Tenure-Track	PhD MS	U. of South Dakota Emporia State U.	Clinical Psychology	Behavioral and Social Sciences
Wu, Zhijin	Associate Professor	Tenure-Track	PhD MS	Johns Hopkins U. U. of Southern California	Biostatistics Molecular Biology	Biostatistics
Zhang, Tingting	Assistant Professor	Research Scholar	PhD M.Sc.	U. of British Columbia Simon Fraser U.	Pharmacoepidemiology Population and Public Health	Health Services
Zheng, Tongzhang	Professor	Tenure-Track	ScD	Harvard U.	Global Health	Epidemiology
Zullo, Andrew	Assistant Professor	Research Scholar	PhD ScM	Brown U.	Pharmacoepidemiology Epidemiology	Health Services

2) Provide summary data on the qualifications of any other faculty with significant involvement in the school's public health instruction in the format of Template E1-2. Schools define "significant" in their own contexts but, at a minimum, include any individuals who regularly provide instruction or supervision for required courses and other experiences listed in the criterion on Curriculum. Reporting on individuals who supervise individual students' practice experience (preceptors, etc.) is not required. The identification of instructional areas must correspond to the data presented in Template C2-1.

Please see Table E1-2 starting on the next page.

Name	Academic Rank	Title and Current Employment	FTE or % Time Allocated	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which - degrees were earned	Concentration affiliated with in Template C2-1

Name	Academic Rank	Title and Current Employment	FTE or % Time Allocated	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which - degrees were earned	Concentration affiliated with in Template C2-1
Bentkover, Judith	Professor of the Practice	Judith Bentkover & Associates, President	<1% (5 hours)	PhD MA	Tufts U.	Economics	Health Services
Berger, Blythe	Adjunct Assistant Professor	Team Lead, Perinatal and Early Childhood Health, RI DOH	5%	ScD	Harvard U. SPH	Maternal and Child Health/Public Health	Health Services
Brockmann, Bradley	Assistant Professor of the Practice	Assistant Professor of the Practice of Health Services, Policy and Practice	15%	JD	Michigan State U.	Law	Health Services
Caffrey, Aisling	Adjunct Assistant Professor	Tenured Associate Professor of Health Outcomes Department of Pharmacy Practice, College of Pharmacy U. of Rhode Island	6%	PhD MS	College of Pharmacy, U of Rhode Island State U of New York at Albany, SPH	Pharmacoepidemiology Pharmacoeconomics Epidemiology, Concentration in Infectious Diseases	Heath Services
Cappelleri, Joseph	Adjunct Professor	Executive Director, Statistical Scientist, Statistics, Pfizer Inc, Biostatistics, Groton,	2%	PhD MPH MS	Cornell U. Harvard U. City U. New York	Psychometrics Epidemiology Statistics	Biostatistics
Caron, Colleen	Assistant Professor of the Practice	Independent Data Analytic and Research Consultant ICF, Fairfax VA: Center for the States	1%	PhD MS	Temple U U Connecticut	Public Health Interdisciplinary Health Research and Education	Epidemiology
Chait, Laurence	Adjunct Assistant Professor	Chait and Associates Inc, Founder, Chairman, President, and Managing Director	<1% (5 hours)	MBA	Harvard U.	Business Education/Administration	Health Services
Chen, Elizabeth	Associate Professor	Interim Director of the Center for Biomedical Informatics, Alpert Medical School	15%	PhD MA	Tufts U. Columbia U.	Biomedical Informatics	Health Services

Name	Academic Rank	Title and Current Employment	FTE or % Time Allocated	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which - degrees were earned	Concentration affiliated with in Template C2-1
			E1-2: Non-Primary Instructional Faculty Regularly Involved in Instruction				
Clyne, Ailis	Adjunct Assistant Professor	Medical Director RI DOH Division of Community Health and Equity - Division of Environmental Health Maternal Child Block Grant Program	1%	MD MPH	Brown U. U. Massachusetts Medical School Worcester	Medicine Public Health	Health Services
Danilack, Valery	Assistant Professor of Epidemiology (Research)	Women & Infants Hospital / Division of Research Assistant Professor of Obstetrics and Gynecology	15%	PhD MPH	Brown U. Yale U.	Public Health/Epidemiology	Epidemiology
Dore, David	Adjunct Assistant Professor	Vice President, Health Services Research, UnitedHealth Group Research & Development	<1% (5 hours)	PhD PharmD	Brown U. U. of Rhode Island	Epidemiology PharmD	Health Services
Dumont, Dorothy	Assistant Professor of the Practice	Senior Public Health Epidemiologist, Rhode Island Department of Health	1%	PhD MPH	Boston College Brown U.	History Public Health	Epidemiology
Fulton, John	Clinical Associate Professor	Clinical Associate Professor of Behavioral and Social Sciences	8%	PhD MA	Brown U. Brown U.	Sociology Sociology/Education	Public Health
Gans, Kim	Adjunct Professor	Tenured Professor Department of Human Development and Family Studies and Center for Health Interventions and Prevention U. of Connecticut	4%	PhD MPH	U. of Rhode Island U. of North Carolina	Biological Sciences/Nutrition Public Health	Behavioral and Social Sciences

Name	Academic Rank	Title and Current Employment	FTE or % Time Allocated	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which - degrees were earned	Concentration affiliated with in Template C2-1
		E1-2: Non-Primary Instructional Faculty Regularly Involved in Instruction					
Goodspeed, Scott	Adjunct Assistant Professor	Program Director, Executive Master of Healthcare Leadership, Brown U.	<1% (5 hours)	MHA DHA	U. Minnesota Medical U. of S. Carolina	Hospital Administration Health Administration and Leadership	Health Services
Gradie, Margaret	Adjunct Assistant Professor	Chief, Office of Primary Care and Rural Health/Principal Public Health Promotion Specialist, RI DOH	1%	PhD MA	U. Massachusetts Amherst	Biological Anthropology	Health Services
Hawley, Nicola	Adjunct Assistant Professor	Co-Investigator (Research) Yale U. SPH and Graduate School.	5%	PhD	Loughborough U.	Human Biology	Epidemiology
Jiang, Yongwen	Assistant Professor of the Practice	Epidemiologist III (Infectious/Chronic Diseases), Surveillance Analysis and Reporting Unit, Health Statistics and Surveillance Section, Connecticut DOH	2%	PhD MSPH	Beijing U. Southeast U. China	Epidemiology	Epidemiology
Julian, Ernest	Adjunct Assistant Professor	Chief, Center for Food Protection Chair, Institutional Review Board RIDOH	2%	PhD MA	U. of Connecticut	Adult and Vocational Education	Health Services
King, Ewa	Assistant Professor of the Practice	Principal Investigator for Biomonitoring studies RIDOH State Health Laboratories	<1% (5 hours)	PhD MSE	Lodz U. Technology	Chemistry Engineering/Food Chemistry and Technology	Health Services
Kinsdale, Jon	Adjunct Assistant Professor	Senior Strategy Advisor to the Wakely Consulting Group, Associate Professor of the Practice at Boston University	7.5%	PhD	U of Michigan	History	Health Services

Name	Academic Rank	Title and Current Employment	FTE or % Time Allocated	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which - degrees were earned	Concentration affiliated with in Template C2-1
			E1-2: Non-Primary Instructional Faculty Regularly Involved in Instruction				
Koller, Christopher	Professor of the Practice	President, Milbank Memorial Fund, New York	15%	MA	Yale U.	Public and Private Management (MPPM)	Health Services
Linkletter, Crystal	Adjunct Assistant Professor	Lead Data Scientist The LEGO Group	15%	PhD MSc.	Simon Fraser U.	Statistics	Biostatistics
Lechner, William	Adjunct Assistant Professor	Assistant Professor (tenure-track), Kent State University, Department of Psychological Sciences	10%	PhD MS	Oklahoma State U.	Clinical Psychology	Behavioral and Social Sciences
Monteiro, Karine	Assistant Professor of the Practice	Assistant Professor of the Practice	6%	MPH	Brown U.	Public Health	Epidemiology
Mwangi, Ann	Adjunct Assistant Professor	Ag Director, Institute of Biomedical Informatics, Moi University	2.5%	PhD MSc MSc	Brown U. U. Centrum Belgium	Biostatistics Applied Biostatistics	Biostatistics
Nolan, Patricia	Adjunct Associate Professor	Volunteer Chair of the Tobacco Free RI network, Board member of Hallworth House Member of Prematurity Prevention Task Force, Alumni Associations/RI DOH	4%	MD MPH	McGill U Columbia U.	Public Health management and Social/ Environmental Determinants of Health	Health Services
Peto, Randolph	Adjunct Assistant Professor	Faculty: Institute for Healthcare Improvement, Boston MA	15%	MD MPH	Drexel U. College of Medicine Harvard U.	Health Services	Health Services
Rosenthal, Samantha	Adjunct Assistant Professor	Assistant Professor, Johnson & Wales U., Providence RI	15%	PhD MPH	Brown U.	Epidemiology/Public Health	Epidemiology

Name	Academic Rank	Title and Current Employment	FTE or % Time Allocated	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which - degrees were earned	Concentration affiliated with in Template C2-1
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<table>

E1-2: Non-Primary Instructional Faculty Regularly Involved in Instruction

Name	Academic Rank	Title and Current Employment	FTE or % Time Allocated	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which - degrees were earned	Concentration affiliated with in Template C2-1
Sammartino, Cara	Adjunct Associate Professor	Department of Health Science, Johnson & Wales University Providence, RI	1%	PhD MSPH	Brown U. Emory U.	Health Services Research, Policy and Practice	Health Services
Sherwin, Angela	Adjunct Assistant Professor of the Practice	President, Population Health Managed Services Organization; Steward Health Care	<1% (5 hours)	MPH	Brown U.	Public Health	Health Services
Schneider, Mark	Adjunct Assistant Professor	Vice President, Corporate Information Technology, Medstar Health	10%	MBA	Cornell U.	Business/Healthcare Administration	Health Services
Sundstrom, Beth	Adjunct Assistant Professor	College of Charleston, Charleston, South Carolina, Associate Professor	<1% (5 hours)	PhD MPH	U. of Maryland - College Park Brown U	Health Communications Public Relations Public Health	Health Services
Tinajero, Alvaro	Clinical Assistant Professor	Senior Epidemiologist/ Evaluator Center for Health Data and Analysis Rhode Island Department of Health	2%	MD MPH	Ecuador State U. Harvard U.	Medicine Public Health/Biostatistics	Epidemiology
White, Wendy	Adjunct Associate Professor	Brown University Tougaloo Dual Degree MPH Program Coordinator	<1% (5 hours)	PhD MPH	Jackson State U.	Environmental Science MPH, Epidemiology	Health Services

</table>

3) Include CVs for all individuals listed in the templates above.

The CVs for the faculty listed in Templates E1-1 and E1-2 can be found in the ERF.

4) If applicable, provide a narrative explanation that supplements reviewers' understanding of data in the templates.

Faculty listed in Template E1-1 have primary appointments in a Department within the School. Although their faculty appointment (e.g., tenure status or classification) may differ, all of these faculty members are funded full-time through the School. Faculty listed in Template E1-2 are classified as non-primary faculty because their funding is through mechanisms other than the School. Faculty listed in Template E1-2 have variable amounts of involvement in instruction to students in the School during an academic year based on given responsibilities for that year such as lecturing in a course or serving as a thesis advisor. Percent effort shown in the Template reflects an average of the past three years.

5) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: We have a large number of faculty with a breadth of content and methodological expertise. Faculty at all ranks and across classifications (e.g., tenure, research, and practice) are involved in instruction.

Challenges: While we have many non-primary faculty actively involved in instruction and mentoring of students, there is currently not a systematic way to track what non-primary faculty are specifically doing as it relates to instruction. We currently do not have a way to systematically evaluate faculty perceptions and experiences with instruction outside formal classroom settings.

Plans: We will modify the annual faculty activity report to document the involvement of non-primary faculty involved in instruction through guest lectures, committee work, and mentoring students. We will develop an evaluation tool to capture faculty perceptions and experiences with instruction outside formal classroom settings.

E2. Integration of Faculty with Practice Experience

To assure a broad public health perspective, the school employs faculty who have professional experience in settings outside of academia and have demonstrated competence in public health practice. Schools encourage faculty to maintain ongoing practice links with public health agencies, especially at state and local levels.

To assure the relevance of curricula and individual learning experiences to current and future practice needs and opportunities, schools regularly involve public health practitioners and other individuals involved in public health work through arrangements that may include adjunct and part-time faculty appointments, guest lectures, involvement in committee work, mentoring students, etc.

1) Describe the manner in which the public health faculty complement integrates perspectives from the field of practice, including information on appointment tracks for practitioners, if applicable. Faculty with significant practice experience outside of that which is typically associated with an academic career should also be identified.

    There are four primary ways in which the School faculty integrate perspectives from the field of practice.

    1. **Professor of Practice track:** The School has a Professor of the Practice track. These are faculty who "are hired to enhance Brown's pedagogical mission and whose qualifications are earned primarily through professional experience rather than scholarly credentials." There are three faculty in the Behavioral and Social Science Department, six faculty in the Epidemiology Department, and 12 faculty in the Health Services, Policy and Practice Department. In addition, the School has two individuals in the Clinical Practice track, who are long-standing faculty in the University who were appointed prior to the development of the Professor of the Practice track. The School no longer appoints individuals into the Clinical Practice track.

        Below are examples of the faculty in the Professor of Practice track and their connection to practice:

Faculty	Brown appointment	Practice work
Colleen Caron	Assistant Professor of the Practice of Epidemiology	Director of the Data Analytics, Evaluation and Performance Division at the Rhode Island Department of Children, Youth & Families
Dorothy Dumont	Assistant Professor of the Practice of Epidemiology	Senior Public Health Epidemiologist at the Rhode Island Department of Health
John Fulton	Clinical Associate Professor	Worked at the Rhode Island Department of Health from 1986–2017 in multiple roles. Last appointment prior to retirement was as Chief Health Program Evaluator, Division of Infectious Disease and Epidemiology
William Hollinshead	Assistant Professor of the Practice of Epidemiology	Retired Medical Director and Chief of Family Health at the Rhode Island Department of Health. Has served as Vice President of the Rhode Island Chapter of the American Academy of Pediatrics, on the boards for Rhode

		Island Kids Count, Reach Out and Read, the Rhode Island Parent Information Network, Successful Start
Ewa King	Assistant Professor of the Practice of Health Services, Policy and Practice	Associate Director of Health, Rhode Island Department of Health, Division of State Laboratories & Medical Examiners
Ana Novais	Assistant Professor of the Practice of Health Services, Policy and Practice	Deputy Director, Rhode Island Department of Health
Deborah Pearlman	Associate Professor of the Practice of Epidemiology	Epidemiologist for the RI Department of Health with experience in community-based programs.
Peter Simon	Associate Professor of the Practice of Epidemiology	Worked at the Rhode Island Department of Health from 1978-2013. Last appointment was as the Medical Director for the Division of Community, Family, Health and Equity.
Anya Rader Wallack	Professor of the Practice in the Department of Health Services Associate Director of the Center for Evidence Synthesis in Health	Served previously in Rhode Island state government as Director of HealthSource RI, Rhode Island's health insurance exchange, then Medicaid Director, and then Acting Secretary of Health and Human Services. Also has served in Vermont state government as Chair of Vermont's Green Mountain Care Board, and as Special Assistant for Health Reform for two Governors. Outside of state government, has been interim President of the Blue Cross & Blue Shield of Massachusetts Foundation, Executive Director of the Massachusetts Medicaid Policy Institute and a consultant specializing in state health policy.
Samuel Zwetchkenbaum	Assistant Professor of the Practice of Health Services, Policy and Practice	Rhode Island State Dental Director, Director of Oral Health Program, Rhode Island Department of Health and Medicaid Dental Director, Executive Office of Health and Human Services.

2. **Faculty integrate practice into formal courses:** Several courses integrate public health practice into coursework. Some courses have guest lecturers from public health practice. For instance, both PHP 2071: Applied Public Health: Systems and Practice and PHP 2072: Applied Public Health: Policy, Leadership, and Communication (required courses for all MPH students), integrate guest lectures from public health practice professionals. In the 2019/2020 academic year, guest lectures included a former director of the Rhode Island Department of Health, a representative in the Rhode Island State Legislature, the Chief of the Center for Food Protection at the Rhode Island Department of Health, the Director of a Free Clinic in Rhode Island, and the leader of the Women's Resource Center. In PHP 1854: The

Epidemiology and Control of Infectious Disease, guest lecturers include the Director of the only publicly funded STD clinic in Rhode Island and the Primary Investigator for the Global Emergency Response and Recovery Project for the International Medical Corps.

Several courses also incorporate practice into coursework by having students work with professors, practice professionals, and community members to produce public health practice products. For instance, students enrolled in PHP 2507 and PHP 2508: Biostatistics and Applied Data Analysis I & II work with Rhode Island Department of Health personnel to produce Rhode Island Department of Health Data Briefs based on Rhode Island Maternal Child Health strategic objectives (Pregnancy Risk Assessment Monitoring System [PRAMS] data) and Rhode Island Behavioral Risk Factor Surveillance System program dissemination objectives. The Centers for Disease Control and Prevention PRAMS program highlighted the collaboration between these School courses and the Rhode Island Department of Health with a "PRAMMY Award" for "Unique Partnerships and Collaborations" and as the lead webinar in the PRAMS series "PRAMS State-Level Best Practices" in February 2020. A second example is that in PHP 2450: Measuring and Improving the Quality of Health Care, students complete a quality improvement project based at a community organization such as Healthcentric Advisors (a nationally recognized, nonprofit healthcare quality improvement organization). Other examples include: PHP 2380: Health Communication; PHP 2325: Place Matters: Exploring Community-Level Contexts on Health Behaviors, Outcomes and Disparities; PHP 1820: Designing Education for Better Prisoner & Community Health, and PHP 1680I: Pathology to Power: Disability, Health and Community.

3. **Students are mentored by practice professionals:** Students are mentored by public health practice professionals in their Applied Public Health Experience (see D.5) and often in their theses. For the cohort completing theses in May 2019, there were 62 students with a total of 96 mentors (some mentors mentored more than one student). For the cohort completing theses in May 2020, there were 31 students with a total of 56 mentors. Mentors came from a diverse range of faculty, researchers, and public health practice with 21 in 2019 and 12 in 2020 being applied public health professionals.

4. **Faculty are integrated into public health practice locally, nationally, and internationally:** In addition to academic work and research, School faculty are integrated into public health practice, locally, nationally, and internationally. Below are selected recent examples.

   Hassenfeld Child Health Innovation Institute (HCHII): The HCHII is led by Dr. Patrick Vivier (Professor of Health Services, Policy and Practice) and involves multiple faculty members of the School including Drs. Melissa Clark (Professor of Health Services, Policy and Practice) and Michelle Rogers (Assistant Professor of Behavioral and Social Sciences). Example projects conducted by the HCHII are as follows:

   - 2019 Hunger Survey: Members of the HCHII conducted the 2019 Rhode Island Hunger Survey for the Community Food Bank, which involved interviews with 419 clients of food pantries and meal programs across the state. The results of the survey informed the Food Bank's strategic planning and advocacy efforts. The Rhode Island Community Food Bank awarded the HCHII its 2019 Guy Abelson Food Bank Leadership Award for their efforts on the 2019 Hunger Survey.

   - RI-AIR (Rhode Island Asthma Integrated Response) Program: This initiative involves the development, implementation, and evaluation of an integrated identification, screening, and referral network for children with asthma in Rhode Island. This is made possible through a partnership with the Rhode Island Department of Health and additional funding from the National Heart Lung and Blood Institute (NHLBI) to establish a Center for Asthma Empowerment. The Rhode Island Asthma Collaborative facilitates data collection and referral to evidence-based asthma

programs for low-income families and is implemented in school and home settings. It also involves an evaluation of the effectiveness of the program, through the assessment of individual and community-level asthma outcomes, and an annual process evaluation and assessment of future sustainability.

- Medicaid Asthma "Hot Spot" Analysis: The HCHII has partnered with the Rhode Island Department of Health and the Rhode Island Medicaid program, to examine data from multiple sources, including Medicaid claims data, hospital data, and national datasets. The purpose of this project is to geographically identify hot spots for asthma and examine neighborhood characteristics associated with asthma.

International Health Institute (IHI): The IHI's mission is to apply interdisciplinary perspectives to research and training to improve the health of populations in developing countries. IHI faculty have established research collaborations with institutions in low and middle income countries and developed supervised research experiences for Brown University undergraduate, graduate, and medical students with foreign partners. Core Faculty include Drs. *Stephen McGarvey* (Professor of Epidemiology and Anthropology, and Director of the IHI), *Angela Bengtson* (Assistant Professor of Epidemiology), *Omar Galarraga* (Associate Professor of Health Services, Policy and Practice), *Abigail Harrison* (Assistant Professor of Behavioral and Social Sciences, *Caroline Kuo* (Associate Professor of Behavioral and Social Sciences and Associate Dean for Diversity and Inclusion), *Mark Lurie* (Associate Professor of Epidemiology), *Don Operario* (Professor of Behavioral and Social Sciences), and *Jennifer Pellowski* (Assistant Professor of Behavioral and Social Sciences). Examples of the multiple Applied Practice projects being done by faculty in connection with IHI is as follows.

- Issues of migration and health with colleagues at the Agincourt Demographic Surveillance System in Limpopo Province, South Africa

- Behavioral issues among HIV-infected urban and rural patients with the Perinatal HIV Research Unit at Baragwanath Hospital in Soweto, South Africa

- Feasibility of HIV prevention among HIV-positive patients with the South African Medical Research Council's Health Systems Research Unit in Cape Town

Dr. Joseph Hogan (Professor of Biostatistics) is partnering with Moi University in Eldoret, Kenya on a project aimed at improving HIV-related biostatistics and epidemiology training.

Dr. Brandon Marshall (Associated Professor of Epidemiology) and his team are collaborating with the Rhode Island Governor's Overdose Prevention and Intervention Task Force, the Rhode Island Department of Health, and the Rhode Island Department of Behavioral Healthcare and Developmental Disabilities and Hospitals on Prevent Overdose RI, a data dashboard that is designed to provide community members, health professionals, and policymakers with timely data to track Rhode Island's progress toward reaching the goals outlined in the Action Plan, the state's plan to address the overdose crisis. The dashboard offers the latest data on addiction and overdose in Rhode Island as well as resources on preventing overdose for a variety of audiences, including loved ones of opioid users, healthcare providers, and more. Drs. Marshall, Josiah Rich (Professor of Medicine with secondary appointment in Epidemiology) and Traci Green (Adjunct, Department of Epidemiology) are Expert Advisors to the Rhode Island Governor's Overdose Prevention and Intervention Task Force**.** The Task Force has set an ambitious goal to reduce opioid overdose deaths by one-third within three years.

Dr. Kali Thomas (Associate Professor of Health Services, Policy and Practice) has partnered with Meals on Wheels to implement an early warning system for declining health among seniors who use the service.

Dr. Rosemarie Martin (Associate Professor of Behavioral and Social Sciences) is focusing on increasing access to medications for opioid use disorder (MOUD) in correctional settings. Her team has expanded linkage to MOUD treatment in the community, resulting in a significant drop in statewide overdose deaths post-release. They also expanded MOUD access among justice-involved individuals using a multidisciplinary team (law enforcement, substance use clinician, and peer navigator). Services are provided to adults involved in the RI Adult Drug Court diversion program, RI 6th District Court Pre-trial Services, and the RI Department of Corrections (RIDOC) awaiting trial population. She is also Contact Principal Investigator of a Helping End Addiction Long Term (HEAL) Justice Community Opioid Innovation Network (JCOIN) Clinical Research Center (CRC) that is testing strategies to implement MOUD in seven community justice settings across three states.

Dr. M. Barton Laws (Associate Professor of Health Services, Policy and Practice) is the leader of The Rhode Island Community-Academic Partnership for Behavioral Health (RICAP), a collaboration between Brown University and the Substance Use and Mental Health Leadership Council of Rhode Island. Additional participants include the Mental Health Association of Rhode Island, National Alliance on Mental Illness -- Rhode Island, RICARES (the statewide association of recovery communities), and Oasis Wellness and Recovery Center. RICAP engages people with lived experience of mental health and substance use disorders, behavioral health agencies and providers, academic investigators, and other stakeholders in an ongoing, structured partnership.

Dr. Akilah Dulin (Associate Professor of Behavioral and Social Sciences) serves as the program evaluator for the Princes to Kings (P2K) Mentorship Initiative that is operated by the Providence Boys and Girls Club. P2K's mission is to improve high school graduation rates among African American, Latino and Southeast Asian males between the ages of 12-18 years attending schools (Roger Williams Middle School, Gilbert Stuart Middle School, and Alvarez High School) in the West End and South Side of Providence, RI. P2K hopes to achieve its aim through a comprehensive mentorship program, academic supports, and leadership development opportunities.

Dr. Sara J. Becker (Associate Professor of Behavioral and Social Sciences) serves as the Project Director/PI of the SAMHSA-funded New England Addiction Technology Transfer Center. The mission of the Center is to accelerate the adoption and implementation of evidence-based and promising addiction treatment and recovery-oriented practices and services; heighten the awareness, knowledge, and skills of the workforce that addresses the needs of people with substance use or other behavioral health disorders; and foster regional alliances among culturally diverse practitioners, researchers, policy makers, funders, and the recovery community. This Center provides training and technical assistance support to thousands of front-line addiction treatment providers per year.

Dr. Patricia Risica (Associate Professor of Behavior and Social Sciences) served as President of the Rhode Island Public Health Association (RIPHA) from 2017-2019 and is now Advocacy Chair. RIPHA is a nonprofit organization that works toward the advancement of public health. RIPHA is the Rhode Island affiliate of the American Public Health Association. Their mission is to influence public health policy and promote public health practice in Rhode Island. Their work includes taking leadership on issues of population and environmental health, promoting the discussion of issues and dissemination of information concerning public health policy, conducting educational programs to increase public health knowledge and promote healthy behavior among members and the public at large, and fostering collaborations to protect and promote the health of Rhode Island residents. In addition to Dr. Risica, many School faculty are involved in RIPHA activities and committees.

Dr. Amy Nunn (Associate Professor of Behavior and Social Sciences) serves as Director of the Rhode Island Public Health Institute (RIPHI). The School has actively supported RIPHI, which is a nonprofit community-based organization that conducts collaborative work informed by research that aims to address real-world public health problems. Their activities fall into four categories: direct service, research, policy/advocacy, and training. Direct service activities over the past several years have included: 1) Food on the Move, a mobile produce market that brings fresh fruits and vegetables to neighborhoods throughout Rhode Island and lowers the cost of healthy food through a SNAP incentive program. 2) Open Door Health, a primary care clinic for the LGBTQ+ population that provides cutting-edge medical care in a respectful, accepting, and affirming manner; and 3) Faith in Action, a partnership with African American faith institutions and leaders that promotes HIV testing and treatment and fights stigma associated with HIV by training clergy and community members and creating access to care.

The *Mindfulness Center* at Brown brings together top academics in research with leading educators in mindfulness. Dedicated to rigorous research and student-centered education, the goal of the Center is to offer programs that improve individual lives and organizational effectiveness. Mindfulness courses are offered in-person and live-online, in the local community, as well as nationally and globally. Training includes Mindfulness-Based Stress Reduction (MBSR) teacher training, mindfulness classes for individuals, and mindfulness training through global affiliates and strategic partnerships.

2) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The Professor of the Practice track integrates public health professionals from state agencies and practice sites such as the Rhode Island Department of Health; Rhode Island Department of Children, Youth, and Families; and Health and Human Services into the faculty. These faculty maintain ongoing practice connections. In addition, there are multiple venues through which students interact with practice professionals, such as guest lectures, applied public health experiences, and mentorship during thesis work.

The School and the Rhode Island Department of Health (RIDOH) are in the fourth year of their formalized academic partnership via a memorandum of understanding (see ERF) established to strengthen and enhance an existing, mutually beneficial relationship between RIDOH and the School, based on information sharing, teaching, public health research, and the evaluation of public health interventions. This formal framework builds upon years of close cooperation and other formal contracts, including a continuing Public Health Assistantships and Faculty Services Program, now in its 26th year, which provides support for select numbers of faculty and graduate student Research Assistantships. The faculty have the primary responsibility for ongoing projects at the Department of Health, but under the terms of our agreement (see ERF), they have protected time for teaching and advising students. These activities along with many other examples of formal and informal collaborations between Rhode Island's two accredited public health entities speak to the School's direct contribution and engagement with public health practice in the classroom and in the community.

Several faculty doing public health practice have active roles in the School. For example, Dr. John Fulton, a retired member of the Rhode Island Department of Health, teaches an undergraduate course and is a member of the Undergraduate Curriculum Committee. Brad Brockmann, Assistant Professor of the Practice in the Department of Health Services, Policy and Practice at the School and teaches a course in the School and won the Howard R. Swearer Engaged Faculty Award for Teaching in 2020. Dr. Kim Gans, Adjunct Professor in the Department of Behavioral and Social Sciences is the inaugural Director of Community Engagement for the School. This role will facilitate more encouragement and tracking of faculty's experience and practice links in settings outside of academia and further involvement of public health practitioners in activities of the School.

Challenges: While many core faculty are active in work related to public health practice, there is currently not a systematic way to track what faculty are doing. Faculty are asked in their annual activity reports to list their research, teaching, and service, but there isn't a clear way to document public health practice, and many of these activities may go undercounted.

While there are many public health practitioners and other individuals involved in public health work engaged in the School through guest lectures, committee work, and mentoring students, this work is not always systematically documented or recognized.

Plans: Recently, two new administrators were hired: Kim Gans, Director of Community Engagement and Sean Kelley, Assistant Director of Career Advising. They will lead efforts to increase and track faculty and student involvement in community and professional service going forward. Planned activities are as follows:

- Modify the annual Faculty Activity Reports to ask questions that better reflect faculty's public health practice experience in settings outside of academia; demonstrated competence in public health practice; practice links with state and local public health agencies; and integration of public health practice into formal courses. The Faculty Activity Report has been modified, and data capture began as of January 1, 2021.

- Develop a system to document the involvement of public health practitioners and other individuals involved in public health work through guest lectures, committee work, and mentoring students.

- Add a public health practitioner to the School-wide public health curriculum committee meeting.

- Work with the School's Office of Communications and Outreach to create and distribute an e-newsletter that reaches students and community partners to connect them with each other, highlight service opportunities, and showcase community engagement/service by public health students and faculty. This will include using storytelling methods and social media as well as LinkedIn, *Brown Alumni Magazine*, and *The Brown Daily Herald*.

- Explore the possibility of offering an Engaged Faculty Award in the School of Public Health.

- Explore the development of a Public Health Community Engagement Scholars Program similar to the School's Health Communications Scholars Program, which was made possible through the generosity of an anonymous donor. The Community Engagement Scholar would be open to any public health master's student and be guaranteed for one semester, with the potential for renewal in the second semester. The student would receive a scholarship to cover 25% of tuition per semester for 10 hours of work per week. The Community Engagement Scholar would work closely with the Assistant Director of Career Advising and the Director of Community Engagement to assist in their work to enhance professional development and community engagement in the School.

A longer term goal is to establish a fully staffed Office of Public Health Practice and Community Engagement in the School. Development funds/donations and/or state funds may be necessary to make this happen.

E3. Faculty Instructional Effectiveness

The school ensures that systems, policies and procedures are in place to document that all faculty (full-time and part-time) are current in their areas of instructional responsibility and in pedagogical methods.

The school establishes and consistently applies procedures for evaluating faculty competence and performance in instruction.

The school supports professional development and advancement in instructional effectiveness.

1) Describe the means through which the school ensures that faculty are informed and maintain currency in their areas of instructional responsibility. The description must address both primary instructional and non-primary instructional faculty and should provide examples as relevant.

The School has many ways to support professional development and advancement in instructional effectiveness. All of these methods are available for both primary and non-primary instructional faculty, including:

1. Providing access to the Sheridan Center for Teaching and Learning. The Sheridan Center provides:
   a. Evidence-based programs for the Brown teaching and learning community on teaching, learning, writing, and assessment;
   b. Publications and online resources addressing a wide range of teaching and learning topics, including inclusive teaching, writing pedagogy, and course design;
   c. Evidence-based course design institutes to enhance student learning in key liberal arts skill areas, such as writing, problem-solving, and research;
   d. Instructional trainings, including orientations for new instructors and Early Career Faculty Roundtables;
   e. Individual consultation and course observation with feedback and recommendations about how to improve teaching.
2. Providing training in the use of teaching technologies through the University library and the Computing and Informational Services.
3. Providing an extensive seminar in mentoring, along with continued support through The Center for Translational Research.

There is also the expectation from the School and its departments that faculty are professionally active and attend trainings at disciplinary conferences that support their continued instructional effectiveness, including learning new teaching techniques and improving their classroom management, curricula development, and assignment ideas.

2) Describe the school's procedures for evaluating faculty instructional effectiveness. Include a description of the processes used for student course evaluations and peer evaluations, if applicable.

1. **Course evaluations.** At the completion of every semester, students complete evaluations online. As a School, we are able to add specific questions to these course evaluations. After course grades are submitted, the evaluations are provided to the instructors and are compiled in the School's Office of Academic Affairs, after which the compilation is sent to the Department Chairs to be discussed with faculty during their annual evaluations. These evaluations are included in promotion dossiers as representative of faculty teaching achievement and effectiveness.

   The School has a relatively nontraditional system for courses; we have a shared model whereby students may take courses in any department. The Public Health Curriculum Committee is tasked with ensuring that courses meet the needs of students across departments; for example, ensuring that a course taught in Epidemiology adequately addresses the needs of students from the other departments. However, since only the faculty member and their Chair receive course evaluations

(consistent with University policies and procedures), addressing instructional effectiveness from the perspective of the other departments can be challenging. Since course evaluations are not shared with the Public Health Curriculum Committee, the Associate Dean for Academic Affairs must work with the Chairs to determine if their courses are meeting the needs of students in other departments. The Chair is then responsible for addressing issues in instructional effectiveness with their faculty; these approaches might include changing the structure of the class (e.g., make it smaller, add a lab) or requiring the faculty member to seek instructional support from the Sheridan Center.

2. **Peer evaluations.** All Assistant Professors on the tenure-track are observed in classroom teaching by senior faculty in their department at least once. The Department Chair selects a senior faculty member with some expertise in the topical area of the course, and this faculty member attends the class and provides a report and direct feedback to the instructor and the Department Chair about the class, including recommendations for improvement. Peer evaluations are included in the faculty member dossiers for promotion. We have not historically had the same process in place for non-tenure-track faculty who teach courses, but going forward we will conduct similar peer evaluations for Teaching Scholars and faculty for whom teaching is an expectation of their faculty track and employment contract.

3) Describe available university and programmatic support for continuous improvement in faculty's instructional roles. Provide three to five examples of school involvement in or use of these resources. The description must address both primary instructional faculty and non-primary instructional faculty.

University and Programmatic Support

As above, the Sheridan Center for Teaching and Learning is the primary way that the University provides support for improvement in faculty's instructional roles. The University also provides travel funds for faculty who wish to travel to a conference, thus supporting development of faculty learning new content and instructional techniques.

One major way the University has provided programmatic support has been in Spring 2020 when all classes had to shift to remote learning due to the COVID-19 pandemic. Computing and Information Services, the Sheridan Center, and the University Library provided resources very quickly. They provided remote demonstrations of tools for remote teaching, with access outside of typical work hours, and were highly responsive to instructor needs. The Public Health computer management staff provided webcams, managed remote access authentication, and provided general support. These resources were available to all (primary and non-primary) instructional faculty.

The University offers sabbaticals to tenure-track and tenured faculty so that they can enhance their knowledge in their field. Untenured tenure-track faculty are eligible for a junior sabbatical once before tenure review. Tenured faculty are eligible for sabbaticals once every six semesters in residence. Sabbaticals are granted to faculty to increase their value to the University through enhanced opportunities for professional renewal, planned travel, study, formal education, research, writing, or other experience of professional value. Eligible faculty must apply for sabbatical and provide a clear plan for their work during their sabbatical. Teaching scholars are eligible for course relief on the same schedule and with the same stipulations.

Each year during the annual review process with Department Chairs, instructional faculty discuss their course evaluations. The Chairs problem solve issues with the course and identify strategies for the faculty member to use to address any problems with the course. These conversations are recorded in the feedback provided to the faculty member, and goals are set for the following semester that the course is taught.

- Dr. Christopher Kahler (Behavioral and Social Sciences) and Dr. Alison Field (Epidemiology) recently served on the University's committee to revise the course evaluation instrument. They reviewed literature on best practices and shared with the committee experiences in the department of Behavioral and Social Sciences (BSS) with assessing diversity and inclusion in the classroom. Items that were piloted in BSS courses helped inform the final items selected. The Course Feedback Form (see ERF) provides the most robust and consistent feedback for faculty on how students experience their courses and are discussed annually with Department Chairs in individual meetings.

- An example of how the Sheridan Center's resources have been used: Early in their career at Brown, a faculty member in BSS received feedback from students that expectations for some assignments were unclear and that certain concepts could be explained better. The faculty member worked with staff at the Sheridan Center, who reviewed their syllabus, met with them, sat in on a class, and provided them written feedback on their practices. The changes implemented resulted in increased student satisfaction with the course.

- A tenure-track faculty member prior to going up for tenure asked the Sheridan Center to record one of their lectures for a class in the MPH program. The Center provided feedback on teaching and used examples from the recording to give their comments and suggestions.

4) Describe the role of evaluations of instructional effectiveness in decisions about faculty advancement.

All instructional faculty receive course evaluations that are reviewed by their Chair and the Associate Dean for Academic Affairs at least annually. These evaluations are a primary basis for determining a faculty member's success in course instruction. All course evaluations and a summary of a faculty member's courses are included in all major evaluations for faculty advancement, including annually for determining merit-based salary increases, during reappointment for untenured tenure-track faculty, during tenure review at the Associate Professor level, and in promotion dossiers for promotion to Professor.

It is an explicit expectation that faculty show evidence of teaching effectiveness in order to be promoted or tenured. During promotion review, external referees are explicitly asked to comment on the candidate's contribution to teaching. The process of the Tenure, Promotions, and Appointments Committee (TPAC) for tenure-track faculty and the Public Health Faculty Appointment (PHFA) Committee for non-tenure-track faculty ensure that the evaluation of a faculty member for promotion includes review and discussion of their teaching evaluations, how they have attempted to improve their teaching, and peer and external reviewers' impressions of their teaching.

5) Select at least three indicators, with one from each of the listed categories that are meaningful to the school and relate to instructional quality. Describe the school's approach and progress over the last three years for each of the chosen indicators. In addition to at least three from the lists in the criteria, the school may add indicators that are significant to its own mission and context.

1. **Faculty currency: Annual or other regular reviews of faculty productivity, relation of scholarship to instruction**

   Each year during the annual review of the faculty, faculty are asked in the University's Faculty Activity Report (FAR) to: 1) present their productivity in teaching, research, and service by answering a series of questions about their prior year work; 2) present their plans for the next 1, 2, and 3 years; and 3) identify areas for improvement. There is also a close accounting of how students are involved in research and publishing with faculty. Of note, the FAR has a section specifically addressing topics of importance for faculty in public health, including involvement in community-based research and organizations. Faculty also upload a statement summarizing their recent work and goals, and an updated CV. These reports provide an opportunity for faculty to

reflect on their work and to identify areas for development through a structured review process with their Department Chairs and Research Center Directors. These leaders review each faculty member's productivity in terms of teaching, research, and service, and meet with the faculty in person to discuss their annual review, including their teaching evaluations and expectations for the coming year. The Chair or Center Director provides a formal letter summarizing the review for each faculty member, including how they are progressing toward promotion (if relevant), and expectations and recommendations for the coming year. If needed, improvements are identified during the annual meeting, and the faculty member is referred to campus-based professional resources.

One metric of faculty relating scholarship to instruction is the proportion of faculty who engage their students in their extramural service (see table). Note: The FAR is completed in January for the previous calendar year. Therefore, the most recent available data are from 2019. Going forward, we will also record the percent of publications that include students from one of our undergraduate or graduate programs as part of the FAR.

Indicator	Target	2017	2018	2019
Number of faculty engaging with students in extramural service	10%	7%	5%	6%

2. **Faculty instructional technique: Student satisfaction with instructional quality**

Detailed course evaluations are administered at the end of every semester; these evaluations include ratings of the course material and the instructor, and have both scaled and open-ended answer options. Course evaluations are closely reviewed by the faculty, their Chairs, and the Associate Dean for Academic Affairs, and are the basis for ensuring that the course work is addressing student needs and that the faculty teaching techniques are of the highest caliber. This information is incorporated into annual reviews and promotion review, and is a primary source of information for School and University teaching award nominations.

Recently a new course evaluation approach was created at the University level following a comprehensive review. Informed by student ratings research, practices used by peer institutions, and feedback from Brown faculty and undergraduate and graduate students, the new questions were piloted in Spring 2018 by a small number of courses in a range of disciplines. The more user-friendly and flexible form launched in the 2019-20 academic year. In addition to the standard set of questions, Instructors and Department Chairs or Program Directors can develop a limited number of custom questions or select from a bank of questions designed by the review committee in consultation with the Sheridan Center for Teaching and Learning. Reports are available for each course and include enrollment, percent responses, and mean response score for each question. Faculty may also use the system to ask students for feedback mid-semester to allow for adjustments to their teaching strategy. Chairs and the Associate Dean for Academic Affairs closely review evaluations to identify patterns in responding for the same course. The student responses are used in the annual teaching evaluation for each faculty member. Given the changes in the course evaluation forms, data are only available for the most recent academic year.

Indicator	Target	2019-2020
Proportion of courses with effectiveness of course rated as 4 or higher (scale 1-5)	90%	89%
Proportion of courses with effectiveness of instructor rated as 4 or higher (scale 1-5)	90%	94%

3. School- or program-level outcomes: Courses that integrate technology in innovative ways to enhance learning

Computing and Information Services (CIS) provides support and oversight for technologies used in the classroom and provides a staff person in the School. In the area of Teaching and Learning, CIS provides academic technology training workshops, classroom technology support, and digitization of course materials, instructional project development, lecture capture, and many tools that facilitate communication of course material and communication between faculty and students. Faculty can experiment with collaborative and active teaching approaches in the Teaching Lab, an environment supported by Academic Technology staff; in this lab faculty can try out new technologies or group assignments before fully incorporating them into the regular class curriculum. All classrooms in the School have technology that allows for computer-based projection, lecture capture, and video streaming abilities. Students can also use their own devices to connect with the classroom technologies.

We think about the technologies available to faculty as comprising two groups. The first group is the broadest and includes the more common technologies, such as Zoom, lecture capture, and digitalization of course materials. The second group is limited to only those more advanced technologies or trainings, including use of the Teaching Lab and academic technology training workshops. Over the past three years, the use of any technology in the classroom to enhance learning has been high, and we will focus the coming years on encouraging the more advanced technologies.

Indicator	Target	2017-2018	2018-2019	2019-2020
Proportion of faculty using any learning technology	75%	73%	74%	88%
Proportion of faculty using more advanced learning technology	40%	34%	30%	33%

6) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The University and the School have numerous resources to promote faculty instructional effectiveness, including Sheridan Center and CIS workshops, one-on-one consultations, and curriculum development support.

Challenges: Currently, the Public Health Curriculum Committee does not have access to teaching evaluations, which makes it challenging to evaluate the appropriateness of the curricula for students in different departments and for the Curriculum Committee to have a good indication of instructional quality. In addition, the model at Brown University (not specific to the School) is that peer evaluations occur during the Assistant Professor years but not beyond. Therefore, the norm at Brown is not to observe senior faculty teaching.

Plans: The Curriculum Committee has a strong plan for ensuring the quality of our curriculum. An annual student satisfaction survey will be consistently implemented and include questions about student experiences in the classroom. We will add items as needed to the Faculty Activity Report.

E4. Faculty Scholarship

The school has policies and practices in place to support faculty involvement in scholarly activities. As many faculty as possible are involved in research and scholarly activity in some form, whether funded or unfunded. Ongoing participation in research and scholarly activity ensures that faculty are relevant and current in their field of expertise, that their work is peer reviewed and that they are content experts.

The types and extent of faculty research align with university and school missions and relate to the types of degrees offered.

Faculty integrate research and scholarship with their instructional activities. Research allows faculty to bring real-world examples into the classroom to update and inspire teaching and provides opportunities for students to engage in research activities, if desired or appropriate for the degree program.

1) Describe the school's definition of and expectations regarding faculty research and scholarly activity.

   Brown University is a research-intensive university with strong expectations for research productivity for faculty. Tenure-track faculty in the School are guaranteed 60% of the 10-month salary, equivalent to 50% of their 12-month salary, and must provide funding (typically through external grants) for the remainder of their salary. The full-time teaching load for tenure-track faculty is one course per semester with the expectation that non-teaching time will be spent in research activities. Non-tenure-track faculty, except for Teaching Scholars who have contracts that cover their salaries to teach, must provide funding for all of their salaries. Thus, research and scholarly activity is an essential component of all faculty activities.

   The research scholarship expectations of faculty are provided in the department standards and criteria. In general, scholarship is expected to advance the field by providing new knowledge or new applications of existing approaches to address public health problems. This scholarship is primarily evaluated through peer review. Products that reflect research scholarship include peer reviewed journal publications, review papers, research protocols, books, and book chapters. Scholarship is also disseminated through national and international presentations.

   Scholarship in teaching is represented through sharing of teaching pedagogy, technical advancements in classroom teaching, development of new curricula and academic programs, and publication of textbooks or other teaching materials.

   Those faculty who are primarily practice faculty (i.e., Professors of the Practice) produce scholarship in the form of technical reports, applications of practice in various settings, and public health policy dissemination.

   All faculty are evaluated at least annually on their scholarly activity relevant for their track. This process entails review by their department chair (for tenure-track faculty) and/or center director (for non-tenure-track faculty) and completion of the University Faculty Activity Report, which enumerates scholarship, grantsmanship, teaching, mentoring, advising, and service to the department, School, University, and field. The Associate Dean for Faculty Affairs in collaboration with department chairs manages this process, which requires in-person meetings with each faculty and their chair or center director, direct and written feedback about their progress, and review of goals and expectations for the following year. As above, the mix and type of scholarly activity varies based on a faculty member's track.

2) Describe available university and school support for research and scholarly activities.

<u>University level support for research</u>

- The [Office of the Vice President for Research](#) (OVPR) provides pre-and post-award support for grant applications and research (through the Office of Sponsored Projects). Pre-award activities include ensuring proposals meet application requirements of funders; post-award operations ensure compliance with policies and procedures relevant to sponsored program accounts, financial reporting and billing, effort reporting, and F&A rate proposals.

- The Office of Research Integrity (ORI) supports the Brown University research community by providing guidance, education, and resources to facilitate the conduct of ethical research in accordance with governing federal and state regulations and University policies. The ORI provides administrative support and regulatory advisement to the University's Institutional Review Board (IRB), Institutional Animal Care and Use Committee (IACUC), and Conflict of Interest Review Board; assists researchers with adhering to requirements associated with international research collaborations; manages the intake, review, and approval of Data Use Agreements for research; promotes integrity in research by providing training in the ethical and responsible conduct of research; and handles allegations of research misconduct.

- OVPR also has a program of seed grants, including small and moderate size grants; each year faculty in the School have competed successfully for one or more of these grants. OVPR has other mechanisms to support grant submissions, including a grant resubmission award for grant applications with good but not fundable scores.

- OVPR has staff that provide grant writing seminars and other support, particularly when the grant application requires collaboration with other entities on campus or when the application is larger or more complex than typical grant applications. The Associate Dean for Research in the School has regular meetings with staff in the OVPR and serves on relevant committees, including the seed award review committee.

- Other support provided by the University for research and scholarly activities includes travel awards for faculty for conference travel and library resources that support searches for needed literature, meta analyses, data sharing, and other needs for scholarly activities.

<u>School level support for research and scholarly activities</u>

The highest-level support from the School comes from the administrative offices, led by the Associate Dean for Research and the Executive Dean for Finance and Administration.

- The Associate Dean for Research provides support for grant preparations, serves as a liaison to the University office of the Vice President for Research, and manages the Catalyst Awards, a School-level annual pilot grant program that provides investigators with up to $20,000 for projects that support the direction of the School's strategic plan. Created by the School's second Dean (Dean Bess Marcus), to date the program has funded 11 projects with more than $200,000 over the last three years.

- The Executive Dean for Finance and Administration oversees all expenditures in the School and oversees the staff that provide pre- and post- award support for grant funded research.

- The School provides startup packages for tenure-track faculty. These funds may be used to support their professional development or research, teaching, and service activities. For example, faculty often use discretionary funds to support travel to professional

meetings to present their research or to cover the costs associated with publishing in peer-reviewed journals.

- A Grant Incentive Program (GIP) is available for all tenure-track faculty and those term faculty who have a portion of their salary guaranteed by the School. Under this program, a percentage of the salary/fringe, which is offset by external funding from grants and contracts, is transferred to a flexible research reserve account that can be used for research and academic purposes.

Other support for research and scholarly activities is provided within the academic department or research centers' infrastructures. The School's Centers/Institutes are described elsewhere; each is home to a robust research program, and the Center/Institute resources are available to faculty and students.

- Research center staff provide pre-award preparation of applications and grants management when grants are awarded.

- Post-award resources include preparing subcontracts, support with hiring research staff, managing purchasing, and providing other general support for conducting research.

- Research centers also have internal committees that assist with mock grant reviews and provide funds for external reviewers to read grant applications. Some research centers also provide funding for pilot awards to support research and grant applications.

- Individual departments have mentoring programs that pair junior faculty with one or two senior faculty who the junior faculty member chooses or are recommended. These programs provide support in excelling at teaching and research, understanding policies and procedures, developing professional networks, and positioning the faculty member for promotion.

3) Describe and provide three to five examples of faculty research activities and how faculty integrate research and scholarly activities and experience into their instruction of students.

Dr. Annie Gjelsvik (Associate Professor of Epidemiology) teaches Master of Public Health students in PHP 2071: Applied Public Health. A primary element of this class is that students must develop and conduct a hypothesis-driven investigation using available data sets. Through instruction, Dr. Gjelsvik guides students to develop their research question, conduct literature reviews, and perform data analysis. The culmination of this class is the production of a research poster that is presented for others in the School to view.

Dr. Kate Carey (Professor of Behavioral and Social Sciences) teaches PHP 1540: Alcohol Use and Misuse. The course is highly research focused, with guest lectures from faculty from the nationally recognized Center for Alcohol and Addiction Studies. The course also encourages students and gives credit for students participating in research activities – examples of these activities include participating in pilot studies, serving in an informal focus group, or helping to refine measures or study procedures; all activities include interaction with the faculty member conducting the research.

Dr. Vincent Mor (Professor of Health Services, Policy and Practice) conducts health services research using Medicare health insurance claims focused on the elderly population and particularly those with high needs and who use long-term care services and supports. In his course, PHP 2401E: Medicare: A Data Based Policy Examination, he covers the history of Medicare and major policy innovations through the lens of the published literature on topics ranging from prospective payment to creating, applying, and paying according to quality indicators. Students are given access to real Medicare claims data and must complete a variety of assignments using these data in which they learn and practice computer programming skills

like merging, matching, aggregating, and concatenating data across different data sets. Each assignment is designed to emulate analyses commonly used in the literature to examine the effect of policy changes so that students can see how the analyses they read about were actually done. In this way, the analysis methods used in the published literature becomes alive to the students.

Dr. Lorin Crawford (RGSS Assistant Professor of Biostatistics) has experience developing nonparametric regression and machine learning models to analyze molecular data from genomic association studies. In the course PHP 2650: Generalized Linear Models, students learn advanced regression techniques for modeling data that have non-Gaussian error distributions. Dr. Crawford uses his own research projects to provide students with the opportunity to connect the theoretical underpinnings of these methods to real world applications in public health. Throughout the course, students analyze different types of discrete genomic data derived from studies involving Dr. Crawford's lab, and must present their findings to the class.

4) Describe and provide three to five examples of student opportunities for involvement in faculty research and scholarly activities.

Brown is home to 13 active, nationally renowned public health research Centers and Institutes. In addition to conducting nationally recognized public health-relevant research, these Centers/Institutes provide many and varied opportunities to participate in large-scale population-based research and public health intervention studies.

All academic master's and MPH students must complete a thesis, as do undergraduate honors students. Thesis research entails identifying an advisor and a reader, developing a proposal, submitting that proposal to the program for approval, conducting the research with regular interaction with the thesis advisor, and presenting the research in written form (in many cases in preparation for publication). Often, students work directly with the thesis advisor's data.

Doctoral students are engaged in faculty research projects as doctoral research assistants. This support covers salary for 20 hours of research work per week. Doctoral students have opportunities to present abstracts at national and international conferences and conduct their doctoral research, which involves multiyear engagement to produce a doctoral dissertation. Students commonly publish with their mentors and/or faculty advisors.

Dr. Nancy Barnett (Professor of Behavioral and Social Sciences) has, across two cycles of funding in an R01-funded research study, incorporated students in major ways that have provided research opportunities for students while also benefitting the research, which focuses on alcohol use in college student social networks. First, she has developed a Student Advisory Group that meets weekly over the course of a semester during project start-up to advise on issues related to research recruitment, consent, measurement, intervention, and compensation. Some of these students then serve as undergraduate research assistants, contributing to the recruitment campaign, participating in role plays during counselor training, and assisting with measures programming and development. One MPH student has produced a thesis using data from this study.

Alexander Phillips is an undergraduate pre-med student engaged with Dr. Ira Wilson (Professor of Health Services, Policy and Practice). Alexander is working in collaboration with the state of Rhode Island to study health care cost trends in the state. He meets regularly with Dr. Wilson and the research team, will continue this work during his senior year, and will produce a senior thesis.

Dr. Alison Field (Professor of Epidemiology) has included students in her eating disorder-related research in the Growing Up Today Study (GUTS). Working with GUTS provides students with an opportunity to work on the largest study of eating disorders in the United States and to conduct longitudinal analyses with more than 20 years of follow-up. One of the PhD students who worked on the study conducted an analysis on the duration, stability, and natural history of eating

disorders among females. Her abstract to the Eating Disorders Research Society (EDRS) was selected as the best student paper, and she presented her paper at the 2018 EDRS conference in Sydney, Australia. The paper was subsequently published in the Journal of Adolescent Health in 2019 and has already been cited in peer-reviewed papers.

Dr. Brandon Marshall (Associate Professor of Epidemiology) is conducting research to assess the efficacy of a fentanyl overdose prevention intervention (including distribution of fentanyl test strips) on reducing rates of overdose among people who use drugs. This NIH-funded, 5-year, randomized clinical trial is comparing rates of overdose among adults who receive a theory-based intervention with take-home fentanyl testing compared to rates among participants in a control condition who receive standard overdose education and naloxone distribution. Student involvement includes a PhD student who is working on this project as part her dissertation work. Also involved is an MPH student and an undergraduate public health concentrator who are engaged as research assistants. Another MPH student completed his internship with the project in the summer of 2020.

5) Describe the role of research and scholarly activity in decisions about faculty advancement.

Research and scholarly activity are an essential component of advancement for most faculty in the School. The exceptions are that primary research is not required of either the Teaching Scholar or Professor of the Practice Track, and (traditional) scholarly activity is not required of the Professor of the Practice track. See table below.

Track	Research	Scholarly Activity
Tenure	Required	Required
Research Scholar	Required	Required
(Research)	Required	Required
Teaching Scholar	Not Required	Required
Professor of Practice	Not Required	Not Required

The departments within the School (Behavioral and Social Sciences, Biostatistics, Epidemiology, and Health Services, Policy and Practice) articulate the expectations about research involvement and progress and scholarly activity (see Departmental Standards and Criteria, and Handbook for Academic Administration in the ERF). All department criteria are aligned so that individuals in the same track in different departments have similar expectations to meet for promotion.

There are multiple sources of materials used every year for faculty evaluations. Every year each faculty member completes a University Faculty Activity Report (FAR) that includes information about courses, students advised, grants awarded, publications and presentations, and service. The FAR includes an area specific to the School to ensure that we can record all activities of specific interest to the School. After completing the FAR, faculty upload an updated version of their CV and a narrative highlighting their activities and accomplishments during the past year, their progress on goals set the previous year, and their goals for the next year. Center Directors and department chairs access this information and course evaluations for their reviews. Center Directors are the primary evaluators for non-tenure-track faculty, and Department Chairs are the evaluators for tenure-track faculty. The overall assessment is based on each faculty member's track and rank, departmental expectations, and anticipated activities agreed upon during the previous year's meeting. Each year, faculty receive a written summary from their evaluator, which provides a review of their past-year activities and recommendations for the next year. In-person meetings are also conducted to discuss the reviews. Chairs/directors use an electronic merit review tool that retains their written reviews from prior years and allows for a numerical evaluation for each (research/teaching/service) category for between- and within-person comparisons and for determining annual salary increases.

Promotion review follows University guidelines for faculty in the tenure track and closely aligned School guidelines for non-tenure-track faculty. The role and expectations for research and

scholarship are described in detail in each department's standards and criteria. The documentation provided for promotion includes an updated CV that details research and their scholarly activities and accomplishments; a personal statement that describes the impact of past scholarship, grants, teaching, and service; and representative publications. There are no requirements that the personal statement include specific content, but we do recommend that it includes the following parts: a summary of the overarching theme of research/scholarship, a description of key areas of scholarship, metrics that illustrate the impact of their work on their field (e.g., number of publications, number of first/last/second author publications, h-index, citations, and other metrics as relevant to the particular discipline), details about grant-funded research, teaching information including pedagogy and relevant details of importance for referees, and service. These materials are evaluated at each stage of the promotion process, which include a vote of department faculty, external reviews from experts in the faculty member's field, the relevant University/School committee, the Dean of Public Health, the Provost, and the President of Brown University.

We note that Teaching Scholars receive a review concentrated on their teaching pedagogy and innovations; they are expected to show scholarship that may be related to a specific research area or that focuses specifically on teaching activities. Further, the expectation for Professors of the Practice involves showing active engagement in the practice of public health. This can be met in a number of ways, including leadership of public health and/or medical organizations, or applying public health practice in their employed work.

6) Select at least three of the measures that are meaningful to the school and demonstrate its success in research and scholarly activities. Provide a target for each measure and data from the last three years in the format of Template E4-1. In addition to at least three from the list in the criteria, the school may add measures that are significant to its own mission and context.

Faculty activities are monitored annually using the Faculty Activity Report, which automatically includes indexed peer-reviewed publications. Grant funding is summarized annually by the Office of Sponsored Projects.

All criteria appear in Template E4-1. For each of the research and scholarly activities, the School has selected aspirational targets. Except for Professors of the Practice, all our faculty are expected to be involved in some sort of scholarship, so a high goal for peer-reviewed publications is attainable. Further, the total number of peer-reviewed journal articles published each year is expected to climb quickly as the School grows and we continue to add faculty each year. Similarly, we expect that total grant dollars will increase, and our ranking among schools of public health will remain high.

E4-1: Outcome Measures for Faculty Research and Scholarly Activities				
Outcome Measure	**Target**	**Year 1 (2017)**	**Year 2 (2018)**	**Year 3 (2019)**
Total number of articles published in peer-reviewed journals (FAR)	1,200/year by 2022	775	996	1,065
Faculty presentations at professional meetings (FAR)	220 by 2022	210	195	201
Total extramural research funding (OSP)	Increase 5% each year over baseline	$51 million (+24%)	$57 million (+11%)	$63 million (+12%)
Total extramural research proposals submitted (OSP)	Increase 5% each year over baseline	353 (-2%)	349 (-1%)	377 (+8%)

Total NIH research dollars among Schools of Public Health (NIH)	Top 10	9th	9th	6th
Notes. Data for extramural research funding includes direct and indirect expenses. Data for the Year 3 extramural research funding includes projected figures. Sources are the Brown Faculty Activity Report, Office for Sponsored Projects (OSP) database, and NIH Reporter.				

7) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: Research grants and publications are expected of most faculty. Tenure-track faculty are covered for only 50% of their 12-month salary, and non-tenure-track (Research Scholar and (Research)) must support themselves fully with grant dollars. Thus, faculty motivation is high to submit grant applications, to be successful in competing for grant-funded research, and to prepare and publish impactful peer reviewed papers that follow the completion of research. Furthermore, the amount and quality of faculty research are reviewed during annual reviews and are essential criteria for promotion.

Another strength of the University and the School are the pre-and post-award resources available to faculty to support scholarly activity. The School's financial and administrative staff are assisted by the University's Office of Sponsored Programs and grants administrators. The School's grants administrators are experienced professionals who meet regularly to discuss best practices. The Associate Dean for Research supports the establishment of faculty collaborations and supports efforts to acquire pilot funding.

The University and School also provide extensive intellectual resources to support the research and scholarly activities of our faculty, including mentoring programs, grant-writing workshops, funds for external reviews, and technical support for data management and sharing. Furthermore, our annual review process ensures that we can address faculty who are struggling and provide proactive support and mentoring.

Challenges: The School is a relatively young school that has seen considerable recent growth in its faculty. The largest proportion of faculty are Assistant Professors with growing research portfolios. In addition, some of our senior faculty and those with a strong research funding history are aging and expected to retire in the next 5-10 years, making the goal to continue to increase our federal funding challenging. In addition, approximately two-thirds of the faculty are not on the tenure track, so they receive little financial support from the School. While that allows them to focus primarily on their research and grant writing, it can limit scholarly innovation for those faculty because they have little guaranteed salary provided by the School or University. Finally, we have not had a way to systematically collect information about scholarly innovation beyond funded grants.

Plans: The School recently enhanced its support of scholarly research by funding an Associate Dean for Research to support the development and completion of high value research. As noted in response to question 2, the Associate Dean for Research works closely with the University Office of the Vice President for Research and its Office of Sponsored Projects to ensure the University is optimally working with the School. Importantly, the School, under the leadership of the Associate Dean for Research is developing and supporting initiatives that directly address the new strategic plan, including focusing on specific areas of priority and encouraging cross-disciplinary collaborations. In addition, we will modify the annual Faculty Activity Reports to ask questions that better reflect how faculty integrate research and scholarly activities and experience into their instruction of students, as well as student opportunities for involvement in faculty research and scholarly activities. The Faculty Activity Report has been modified, and data capture began as of January 1, 2021.

E5. Faculty Extramural Service

The school defines expectations regarding faculty extramural service activity. Participation in internal university committees is not within the definition of this section. Service as described here refers to contributions of professional expertise to the community, including professional practice. It is an explicit activity undertaken for the benefit of the greater society, over and beyond what is accomplished through instruction and research.

As many faculty as possible are actively engaged with the community through communication, collaboration, consultation, provision of technical assistance and other means of sharing the school's professional knowledge and skills. While these activities may generate revenue, the value of faculty service is not measured in financial terms.

1. Describe the school's definition and expectations regarding faculty extramural service activity. Explain how these relate/compare to university definitions and expectations.

   Brown's definition of *faculty service* includes activities internal and external to the University. A stronger emphasis is placed on *internal activities*, including mentoring and advising students and serving on committees at the departmental, School/College, or University level. Faculty *extramural service* is defined as an explicit activity undertaken for the benefit of the greater society, above and beyond what is accomplished through instruction and research. Extramural/external service refers to contributions of professional expertise to the public, including professional practice. Examples of service include consulting with public or private organizations on issues relevant to public health; providing testimony or technical support to administrative, legislative, and judicial bodies; serving as board members and officers of professional associations; reviewing grant applications; and serving as members of community-based organizations, community advisory boards, or other groups. The University policy on external faculty service limits outside professional activities to one day per week.

   Expectations that School faculty participate in both internal and external service are outlined in the School's appointment and promotion guidelines, and progress toward meeting these expectations is discussed by the faculty member and chair during their annual review. Providing community service and professional expertise to the community varies by faculty member, according to their disciplinary area, research, and interests. While there is an expectation that faculty will work to engage with the local community in ways that are consistent with their expertise, including providing consultation and collaboration to community organizations, there is no explicit expectation that all faculty have a specific type of community involvement.

2. Describe available university and school support for extramural service activities.

   The School does not provide financial support to all faculty for extramural activities. However, when an activity is aligned with the School's goals, resources are provided to support that activity, including work that intersects with community organizations that serve under-resourced populations and the Rhode Island Department of Health. The School has a Community Advisory Board comprised of individual representatives from the local community and chaired by a faculty member. The CAB serves an advisory role to public health-based community-based research and joint work with community-based organizations.

3. Describe and provide three to five examples of faculty extramural service activities and how faculty integrate service experiences into their instruction of students.

   Dr. Mark Lurie (Associate Professor of Epidemiology) and Dr. Joe Braun (Associate Professor of Epidemiology) teach a grant writing course for the doctoral students in the School. Most students go on to write grants to support their dissertation research. Drs. Lurie and Braun both serve on study sections and integrate their experience into the course.

Dr. Jasjit Ahluwalia (Professor of Behavioral and Social Sciences) serves as a member of the Federal Interagency Committee on Smoking and Health (a congressionally mandated advisory committee), chaired by the U.S. Surgeon General. These experiences are integrated into his course, PHP 1610: Tobacco, Disease and the Industry: cigs, e-cigs and more.

Dr. Deborah Pearlman (Associate Professor of the Practice of Epidemiology) is an epidemiologist who conducts analyses of population-based surveys to monitor the health of Rhode Islanders. Findings from these analyses are shared with state agencies and community-based partners. In her role, she serves on the following committees at the Rhode Island Department of Health: The Pregnancy Risk Assessment and Monitoring Survey Advisory Committee, the Behavioral Risk Factor Surveillance Survey Advisory Committee, the Youth Risk Behavior Survey Advisory Committee, and the Community Health Assessment Group. Several MPH students have worked with Dr. Pearlman on thesis projects related to these population-based surveys.

Dr. Brandon Marshall (Associate Professor of Epidemiology) serves as Scientific Director of PreventOverdoseRI.org, a CDC-funded, statewide overdose information and surveillance dashboard. This is a collaboration between the School, the Rhode Island Department of Health, and other state agencies. Doctoral, master's, and undergraduate students have worked with Dr. Marshall on theses related to this work.

Dr. Patrick Vivier (Professor of Health Services, Policy and Practice) leads the Hassenfeld Institute's collaboration with state government as part of the Governor's initiative to improve third grade reading. The School is an active partner in monthly meetings with all state agencies working with children and with three urban school districts. The Hassenfeld Institute is also collaborating with the Rhode Island Department of Health on issues including asthma, lead poisoning, and developmental screening. These experiences are integrated into his course, PHP 2023: Maternal and Child Health in the US. With Dr. Melissa Clark (Professor of Health Services, Policy and Practice), the Hassenfeld Institute also partners with the Rhode Island Food Bank on a survey of food insecurity in the state. The Hassenfeld Institute received the Guy Abelson Food Bank Leadership Award for their efforts on the 2019 Hunger Survey. Dr. Clark integrated experiences about conducting the Hunger Survey into her course, PHP 2040: Survey Research Methods. Finally, several undergraduate MPH students have conducted their theses with Drs. Vivier and Clark, or with other Hassenfeld Institute faculty.

4. Describe and provide three to five examples of student opportunities for involvement in faculty extramural service.

Dr. Jennifer Tidey (Professor of Behavioral and Social Sciences) involves her doctoral students in manuscript reviews. Both Dr. Tidey and the students complete the review independently and then meet to discuss and finalize the review for the peer-reviewed journal. Dr. Tidey provides tip sheets for student reviewers with suggestions concerning tone, review structure, and length. This process trains students in how to conduct competent reviews and provides them credit with the journals for completing the review.

Dr. Amy Nunn (Associate Professor of Behavioral and Social Sciences) oversees an experiential learning program for students to conduct community service and research projects in Salvador da Bahia, Brazil. Over 20 students have studied and served abroad through this program, which is supported by a Brazil Initiative grant from the Brown University Watson Institute.

Dr. Jennifer Nazareno (Associate Professor of Behavioral and Social Sciences) organized and hosted a community engagement panel in her course PHP 1680U: Intersectionality and Health Inequities. Community leaders from local nonprofit organizations focused on health and education served on the panel. Organizations involved included Breakthrough Providence, Clinica Esperanza, Sojourner House, Youth Pride, AIDS Care Ocean State, Childhood Lead Action Project, The Samaritans of Rhode Island, and Rhode Island for Community and Justice.

Rosa Baier (Associate Professor of the Practice in Health Services, Policy and Practice) facilitates engaged scholarship in two ways: first in the course PHP 2450: Measuring and Improving the Quality of Health Care, where she identifies and matches students with community-based quality improvement projects, and second in the Center for Long-Term Care Quality and Innovation, where she establishes collaborative research partnerships between healthcare providers and the academic community to identify, test, and disseminate innovative practices to improve care for older adults.

Dr. Annie Gjelsvik (Associate Professor of Epidemiology) has collaborated with the Rhode Island Department of Health (RIDOH), supporting students interested in Maternal Child Health (MCH) who prepare RIDOH issue briefs on select RIDOH MCH strategic objectives using RI Pregnancy Risk Assessment Monitoring System (RIPRAMS) data. She began this collaboration to increase students' ability to identify policy recommendations from data analyses, provide students with practical communication experience, and connect students to public health practitioners in Rhode Island. Students work within the structure of the courses and under the guidance of RIDOH personnel. Students present their work in three venues: the RIDOH, the March of Dimes Prematurity Summit, and the Health in All Policies conference at the RI Statehouse. Eight Issue Briefs from this collaboration have been published on the RIDOH website. This collaboration is being used by the RIDOH Public Health Academic Workgroup as a model for RIDOH academic partnerships, and the Centers for Disease Prevention and Control have highlighted this collaboration with an award at the 2018 PRAMS National meeting.

5. Select at least three of the indicators that are meaningful to the school and relate to service. Describe the school's approach and progress over the last three years for each of the chosen indicators. In addition to at least three from the list in the criteria, the school may add indicators that are significant to its own mission and context.

   a. Since extramural service is most typically understood as service to the Academy—for example serving as an editorial board member for a peer reviewed journal, serving on a leadership role in a disciplinary organization, or serving as a grant reviewer for funding bodies—we have created this category first and distinguish it from community-based service. For this purpose we do not include membership in an organization or serving as a peer reviewer for journals. The indicator for this category is number of faculty serving in an extramural role in areas related to their discipline, and the target is 60% involvement.

   b. Community-based service is the second indicator, which we define as any service to a group within the community that has the goal of improving the health or well-being of members of the group being served. Examples include working with a health organization to facilitate research or dissemination of information, serving in an advisory capacity to public health-related organizations, serving as a program evaluator, or directly developing programming in the community that addresses the needs of that community. Because we do not have explicit expectations regarding community engagement for our faculty, we have the target that 33% will have one or more activities in the list above, with the expectation to maintain this level at a minimum.

   c. Shared faculty/student involvement in extramural service, including examples from both service to the Academy and to the local, regional, national, and international communities. Examples include participating in extramural roles with professional organizations, engagement between faculty and students in various service roles, and students becoming involved in faculty community-based research. The current target is that 10% of faculty with extramural service would show evidence of involving students in that work. We note that data collection for this indicator has not been comprehensive in 2017-2019 data, and the corresponding target is likely an underestimate. We plan to improve data collection for this indicator and anticipate a dramatic increase as a result.

Indicator	Target	Year 1 (2017)	Year 2 (2018)	Year 3 (2019)
Percent of faculty serving an extramural service role for their discipline	60%	66%	55%	57%
Percent of faculty participating in community-based research or service	33%	28%	23%	28%
Percent of faculty engaging with students in extramural service, defined as professional expertise to the community, including professional practice	10%	7%	5%	6%

6. Describe the role of service in decisions about faculty advancement.

   Extramural service is included in the criteria for annual evaluation and for evaluation for promotion. Faculty must show service to the extramural community. This can be in the form of participation in their disciplinary organization; leadership on local, regional, national, or international organizations; participation in governing boards; and/or serving as an extramural journal and/or grant reviewer. Expectations differ for faculty at different ranks, with leadership and national reputation important at the time of review for promotion to Associate Professor, and some global impact and international reputation at the Professor rank. Though it is reviewed positively, community-based research and/or service are not required in either annual evaluations or promotion processes; neither is including students in extramural service.

7. If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

   Strengths: There are considerable strengths in the area of professional extramural activities as defined in 5a above. Most faculty engage in their disciplinary area and serve on external/extramural committees. The faculty who are involved in community-based extramural service as in 5b above are highly productive and committed faculty whose primary research intersects directly with the communities that they are serving; their work has direct applications, and they engage the community in producing that research as well as ensuring it addresses the community needs.

   Challenges: A minority of faculty at the School of Public Health are engaged in extramural service as defined in 5b above. Reasons for this have to do with disciplinary orientation; for example, disciplines (e.g., Biostatistics) that have less obvious connection with communities are less likely to have faculty involved in the community service side of the work. Further, the pressure of busy academic schedules, the need for all faculty to fund their salaries and research through grants, and a lack of a concrete incentive for faculty to engage in this way reduce the inclination for faculty to participate in community-based work unless it is directly applicable to their research. Importantly, community-based service tends to be time consuming, and there is no criterion for evaluation or promotion that requires this activity. Faculty may be discouraged by individual mentors in some cases from doing community service because it detracts from their progress in scientific domains.

   Plans: The current structure of faculty expectations and specifically the lack of incentives and financial support for community work is not likely to produce a dramatic increase in community involvement. The leaders in the School will continue to work to educate the University on this topic. In addition, planned activities include:

- Modifying the annual Faculty Activity Reports to ask questions that better reflect faculty's extramural service activities, community engagement, and integration of community service into their instruction of students, as well as student opportunities for involvement in faculty scholarly activities related to extramural service.

- Creating a new Faculty Community Engagement Award that will be awarded annually beginning in Spring 2021.

F1. Community Involvement in School Evaluation and Assessment

The school engages constituents, including community stakeholders, alumni, employers and other relevant community partners. Stakeholders may include professionals in sectors other than health (e.g., attorneys, architects, parks and recreation personnel).

Specifically, the school ensures that constituents provide regular feedback on its student outcomes, curriculum and overall planning processes, including the self-study process.

1) Describe any formal structures for constituent input (e.g., community advisory board, alumni association, etc.). List members and/or officers as applicable, with their credentials and professional affiliations.

President's Advisory Council on Public Health

The President's Advisory Council on Public Health, composed of high-profile individuals across a range of professions and industries, helps the School fulfill its mission; promotes the School and its work in local and global communities; and advises the Dean on substantive matters that impact the School, its reputation, and its mission. Members leverage their own resources to support the School by activating contacts for events and identifying other philanthropic supporters; contributing financially, as personally capable; and sharing their time and professional resources. All Advisory Council members are appointed by the President of Brown University, and the committee reports annually to the President. Meetings occur on a bi-annual basis with interim conference calls, email communication, or additional meetings as needed. Decisions are made by group consensus, with a simple majority as a fallback when a consensus cannot be reached.

Current membership (Note: "P" indicates parent of a former or current Brown student, and graduation year)**:**

Brian A. McCarthy Jr. '81	Council Chair Vice Chairman, Healthcare Investment Banking, Bank of America Merrill Lynch
Diane S. Archer P'14	President, Just Care USA
Richard A. Barasch P'20	Partners Chairman of the Board, AdeptHealth
Peter Bennett	Founder, Peter Bennett Foundation
Susan Block Casdin	The Hassenfeld Committee
Christine G. Fisher P'17	Board of Director, Saving Mothers
Sophia Gushee '96	Founder, Nontoxic Living; author, *A to Z of D-Toxing*
Ronald Gutfleish, PhD '81, P'18	Portfolio Manager, Elm Ridge Capital Management, LLC
Dr. Jim Yong Kim '82	Vice Chairman and Partner, Global Infrastructure Partners
Jennifer Klein '87	Chief Strategy and Policy Officer, TIME'S UP
Patricia Lansing '96	Community Volunteer
Jennifer Luray '82	Senior Advisor, Research!America
Amber A. Paquette '00	Community Volunteer
Mya L. Roberson '16	PhD student and Robert Wood Johnson Foundation Health Policy Research Scholar, University of North Carolina at Chapel Hill Gillings School of Global Public Health
Stephen Robert '62	Co-Founder and Co-Chair, Source of Hope Foundation
Sabrina Spitaletta '99	Director, Center for Public Health, Milken Institute
Jane Jie Sun	CEO, Trip.com Group
Jon Warner	Chief of the Shoulder and Sports Medicine Services at The Massachusetts General Hospital (MGH)

| Frank Williams | Co-Founder and Executive Chairman, Evolent Health |
| Sondra Ruth Zabar, MD, '87 | Professor of Medicine, NYU School of Medicine |

Brown University School of Public Health and Rhode Island Department of Health Advisory Committee

The Brown University School of Public Health (BUSPH) and Rhode Island Department of Health (RIDOH) Advisory Committee ("the Advisory Committee"), made up of three faculty appointed by the BUSPH Dean ("the Dean") and three staff appointed by the RIDOH Director ("the Director"), works to foster a close working relationship between BUSPH and RIDOH, oversees activities stemming from their Memorandum of Understanding (see ERF), and submits recommendations for action to the Dean and Director approval. Topics they consider include potential areas for research collaboration, potential educational collaborations, RIDOH and BUSPH accreditation requirements, relationships with other Rhode Island educational institutions, topics for the Public Health Academic Working Group, and workforce development. Meetings occur bimonthly. Decisions are made by group consensus.

Current membership:

Ashish Jha, MD, MPH	Committee Chair Dean, Professor of Health Services, Policy and Practice
Nicole Alexander-Scott, MD, MPH	Committee Co-Chair Director, Rhode Island Department of Health
Laurie Leonard, MS	Director, Rhode Island Department of Health Academic Institute
Akilah Dulin, PhD	Associate Professor of Behavioral and Social Sciences
Rosa Baier, MPH	Associate Director, Center for Long-Term Quality and Innovation; Associate Professor of the Practice of Health Services, Policy and Practice
Rosemarie Martin, PhD	Assistant Professor of Behavioral and Social Sciences
Ana Novais, MA	Deputy Director, Rhode Island Department of Health
Deborah Pearlman, PhD	Associate Professor of the Practice of Epidemiology

School of Public Health Community Advisory Board

The School of Public Health Community Advisory Board provides a formal forum for open communication between the broader Rhode Island public health community and School leadership and faculty; provides an opportunity for the School to learn about community health needs and helps to inform research and educational priorities for the School; allows Brown faculty members to share important lessons from their research with the community; provides faculty members opportunities to share their ideas with community members prior to a grant submission, or in interpreting study results; and aims to help translate the research emerging from the School into public health practice. Meetings occur 3-4 times per year, and decisions are made by majority vote.

Current membership:

Name	Organization	Title
Jane Hayward (Chair)	Rhode Island Health Center Association	President & CEO
Daniel Fitzgerald	American Lung Association	Director, Tobacco Free Rhode Island
PJ Fox III	Previous Executive Director of the Nonviolence Center	Currently Unaffiliated
Meghan Grady	Meals on Wheels of Rhode Island	Executive Director

Rachel Newman Greene	City of Providence Healthy Communities Office	Deputy Director
Owen Heleen	The Providence Center	Vice President, Strategy and Grants
Julius Kolawole	African Alliance	Director
Laurie Leonard	RI Department of Health	Director, RI Department of Health Academic Center
Ana Novais	RI Department of Health	Deputy Director
Marti Rosenberg	Executive Office of Health and Human Services	Director, State Innovation Model Test Grant (SIM)
Neta Taylor	YMCA of Greater Providence	VP Healthy Living + Membership
Marvin Ronning	Rhode Island Free Clinic	Finance, IT and Grants Director
Mark Treat	Upward Health	Chief Strategy Officer
Kim Gans	Brown School of Public Health	Director for Community Engagement
Joann Barao	Brown School of Public Health	Coordinator for Applied Public Health Experiences & Professional Development
Sara Becker	Brown School of Public Health	Associate Professor of Behavioral and Social Sciences, Associate Professor of Psychiatry and Human Behavior
Stephen Buka	Brown School of Public Health	Professor of Epidemiology
Kali Thomas	Brown School of Public Health	Associate Professor of Health Services, Policy and Practice
Liz Tobin-Tyler	Brown School of Public Health	Assistant Professor of Family Medicine & Health Services, Policy and Practice

School of Public Health Community Engagement Committee

The purpose of the School of Public Health Community Engagement Committee, a body made up of Brown University School of Public Health faculty and staff with seats for an alum and a community member, is to provide planning and guidance for community engagement, implement and track progress on community-focused initiatives in the School's strategic plan, and advise on the following:
- Enhancing relationships with our current partners and building new relationships with other community stakeholders;
- Enhancing collaborations between community partners and School of Public Health students, faculty, and staff;
- Enhancing School awareness of, and participation in, community engagement/service opportunities;
- Identifying issues most important in advancing the community's well-being;
- Developing training programs for faculty who are interested in conducting community-based research, scholarship, and service; and
- Enhancing training of the public health workforce of the greater Brown community;

Meetings occur at least once per semester or more often as necessary. Decisions are made by majority.

Current membership:

Name	Organization	Title
Kim Gans	Brown School of Public Health	Committee Chair Adjunct Professor and Director of Community Engagement

Joann Barao	Brown School of Public Health	Coordinator for Applied Learning Experience & Professional Development
Melissa Clark	Brown School of Public Health	Associate Dean for Academic Affairs
Edyth Dwyer	Brown University	Second year MPA-MPH student
Augustine Kang, PhD	Brown School of Public Health	Faculty Investigator, Alumni member, 2020 Behavioral and Social Health Sciences Doctoral program graduate
M. Barton Laws	Brown School of Public Health	Associate Professor of Health Services, Policy and Practice
Amy Nunn	Brown School of Public Health and Director RI Public Health Institute	Associate Professor of Behavioral and Social Sciences, Associate Professor of Medicine and Director RI Public Health Institute
Patricia Risica	Brown School of Public Health	Associate Professor of Behavioral and Social Sciences, Director of Undergraduate Program
Hanna Shephard	Applied Epidemiology Fellow with the Centers for Disease Control and Prevention and Council of State and Territorial Epidemiologists	Alumni member, 2020 MPH graduate
Kira DiClemente	Brown School of Public Health	Doctoral Student Behavioral and Social Sciences
Hilda Castillo	Hasbro Children's Hospital Primary Care Clinic	Program Coordinator, Connect for Health Community Partner

2) Describe how the school engages external constituents in regular assessment of the content and currency of public health curricula and their relevance to current practice and future directions.

In 2017, Bess Marcus, PhD, who was dean at the time, launched a 15-month-long inclusive strategic planning process led by a steering committee of faculty, staff, and students. The plan, *Advancing Well-Being for All*, was informed by over 50 in-depth conversations with internal School stakeholders, colleagues from the Brown University campus, partners from the community, and the President's Advisory Council on Public Health. Also informing the plan were one-on-one community partner stakeholder sessions with the Director of the Rhode Island Department of Health (RIDOH), Academic Director of the RIDOH, and President & CEO of the Rhode Island Health Center Association. To ensure the relevance of School curricula and competencies, these conversations were supplemented by input into the current and future directions of public health provided by the School of Public Health Community Advisory Board, and the RIDOH Academic Institute Steering Committee.

In addition to the strategic planning process, external constituents are involved in the regular assessment of the content and currency of the School's curricula and their relevance to current practice and future directions via the School of Public Health Community Advisory Board (CAB). As noted above, the CAB meets 3-4 times a year and provides a forum for regular communication between the broader RI public health community and the School. These meetings afford opportunities for the School to learn about community health needs that can inform research and educational priorities. The Director of Community Engagement also holds one-on-one meetings with each member of the Community Advisory Board to obtain their input into the curriculum, competencies important to their workplaces, and changing practice and research needs.

3) Describe how the school's external partners contribute to the ongoing operations of the school. At a minimum, this discussion should include community engagement in the following:

a) Development of the vision, mission, values, goals and evaluation measures

The School has a number of standing committees in which external partners are involved in an ongoing way in the development of the School's vision, mission, values, goals, and evaluation measures. These include the President's Advisory Council on Public Health, composed of high-profile individuals across a range of professions and industries, which meets twice a year to advise the Dean on substantive matters that impact the School and its mission; the School of Public Health Community Advisory Board, which meets 3-4 times per year; and the Brown University School of Public Health and Rhode Island Department of Health Advisory Committee, which meets bimonthly.

Moreover, the School's strategic planning process that took place in 2018-2019 included multiple external stakeholders' discussions about the School's identity and operation.

Examples of external stakeholder meetings to inform the School's strategic direction included:

- Community partner focus group (Fall 2018)
- President's Advisory Council meeting (Fall 2018)
- Virtual alumni meeting (Fall 2018)

Through a collective and inclusive planning process with external stakeholders, the School identified four core population health themes: *Mental Health, Resilience, and Mindfulness; Environmental Health and Climate Change; Vulnerable Life Stages: Children and Older Adults; and Addiction*. In addition, the School also identified *Scientific and Organizational capabilities* intended to bring its research, educational, and service activities to bear for the benefit of society.

b) Development of the self-study document

The School of Public Health Community Advisory Board participated in the self-study process by reviewing programs' competencies and curricula and providing feedback. Likewise, data from the 2020 Employer Survey, which is a questionnaire sent to those who have hired Brown SPH alumni in the last three years, and from the 2020 Brown SPH Alumni Survey, which is an instrument sent to those who have graduated during the last three years, have informed the institution's self-study process by providing insight into the strengths and limitations of the education the School delivers. The information gathered from the Community Advisory Board, employers, and alumni has been incorporated into this document. In addition to participating in the self-study process, Community Advisory Board members and alumni were asked to read relevant sections of this report and provide feedback. (See Alumni Feedback Invitation and CAB Feedback Invitation in the ERF) Feedback was gathered via email and a focus group. CAB and alumni largely agreed with the strengths, weaknesses, and plans put forth in the report but had some wording suggestions and additional ideas to consider in our future plans. (See Alumni & CAB Feedback on Self-Study Report and Alumni Focus Group Feedback on Self-Study Report in the ERF). The curriculum committees, Director of Community Engagement, Assistant Director of Career Services, and Associate Dean for Academic Affairs will consider their recommendations in future planning.

c) Assessment of changing practice and research needs

The President's Advisory Council on Public Health, Health Advisory Committee, and Community Advisory Board monitor changes to public health practice and identify ongoing research needs. Examples of other efforts to have external partners weigh in on changing practice and research needs include the following:

- The Rhode Island Community-Academic Partnership for Behavioral Health (RICAP). RICAP is a collaboration between the School of Public Health and the Substance Use and Mental Health Leadership Council of Rhode Island. Additional participants include the Mental Health Association of Rhode Island, National Alliance on Mental Illness – Rhode Island, RICARES (the statewide association of recovery communities), and Oasis Wellness and Recovery Center. Under the direction of a Steering Committee, which included representatives from all of the partner organizations, RICAP sponsored four symposia with 35 – 50 participants. One featured small task groups in which participants prioritized topics for stakeholder-engaged research based on the first-person experiences that Rhode Islanders with mental health and substance use disorders presented at the start of the symposium. Another provided an overview of how to conduct community-engaged research and then used the priority topics generated in the earlier symposium to flesh out a research agenda (see ERF).

- The Brown Swearer Center for Community Engagement and Advance-Clinical Translational Research. Brown University's Swearer Center for Community Engagement undertook an in-depth community engagement concept mapping activity with Advance-Clinical Translational Research (Advance-CTR) in 2018-2019. Advance-CTR trains clinical and translational researchers in Rhode Island through a partnership composed of Brown, the University of Rhode Island, Care New England, Lifespan, Providence VA Medical Center, and the Rhode Island Quality Institute. The concept mapping activity was rolled out in three stages. In the first, the 90 organizations that comprise the Swearer Center's Community Partner Network were invited to participate in the process by brainstorming their health-related goals for their communities. In the second stage, 25 partners drew on the 71 items generated in the first stage to identify a list of 15 in-need communities in the state and prioritize community needs based on their importance and the feasibility of addressing them. In the third stage, the findings were fed back to the members of the Community Partner Network, and the members were asked to validate the results. The School intends to use the concept mapping findings in our future planning. (For a list of the highest ranked communities and needs, see Group Concept Mapping in the ERF).

- Brown School of Public Health Alumni Survey. In September 2020, the School surveyed graduates of the Classes of 2017 through 2020 about the changing health care practice and research needs that the School should consider when revising the curriculum and setting research priorities. The qualitative data were analyzed, and nine themes emerged (e.g., the importance of a diversity/anti-racism/health equity focus; the role of technology in public health). The School plans to draw on these findings to inform curricular and research priorities. (See 2020 SPH Alumni Survey Findings in the ERF).

- Community Advisory Board. In Fall 2020, the School asked the Community Advisory Board to generate a list of the most pressing public health research and practice needs. They were also asked to identify the changes they would like to see to the MPH curriculum. We plan to use the lists, the former of which included items such as the need for agility and the importance of scientific communication, and the latter of which included items like enhancing soft-skills training and program evaluation skills,

in future research prioritization and curricular reform activities. (See CAB Feedback in the ERF).

d) Assessment of school graduates' ability to perform competencies in an employment setting

The two main ways the School has sought to assess graduates' effectiveness in their jobs is through an employer survey and an alumni survey. Both instruments were administered most recently in 2020.

The 2020 Brown School of Public Health Employer Survey, which was sent to those who have hired SPH graduates during the last three years, asked respondents to evaluate the degree to which the SPH alumni who work at their organization were prepared to succeed. As the 2020 SPH Employer Survey Findings in the ERF show, in 2020, employers rated Brown alumni as 4.5 on average on a five-point scale where 5=very prepared, and 1=not at all prepared.

The 2020 Brown School of Public Health Alumni Survey asked students from the three most recent graduating classes to indicate the degree to which they were satisfied with the School's contribution to their growth on seven core competencies (e.g., evidence-based approaches to public health, interprofessional practice, systems thinking). As the 2020 SPH Alumni Survey Findings in the ERF show, alumni rated their satisfaction level as 4.1 on average on a five-point scale where 5=very satisfied, and 1=not at all satisfied.

4) Provide documentation (e.g., minutes, notes, committee reports, etc.) of external contribution in at least two of the areas noted in documentation request 3.

The following documents are in the ERF:
- Brown School of Public Health-RI Department of Health Memoranda of Understanding
- Example minutes from Community Advisory Board meetings
- Minutes from the community partner focus group meeting in Fall 2018 (see 3.a. above)
- Minutes from the President's Advisory Council meeting in Fall 2018 (see 3.a. above)
- Minutes from a virtual alumni meeting in Fall 2018 (see 3.a. above)
- Slides/meeting guides for the formal Strategic Planning steering committee meetings (see 3.a. above)
- 2020 SPH Employer Survey Findings (see 3.b. and 3.d. above)
- 2020 SPH Alumni Survey Findings (see 3.b. and 3.d. above)
- Rhode Island Community-Academic Partnership for Behavioral Health (RICAP) community symposia presentation (see 3.c. above)
- PowerPoint presentation on Swearer/Advance-CTR concept mapping activity (see 3.c. above)
- Community Advisory Board Feedback on Public Health's Changing Practice and Research Needs (see 3.c. above)
- Community Advisory Board Feedback on How the School Could Revise Curricula to Improve Graduates' Career-Readiness (see 3.c. above)

5) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School elicits community stakeholders', employers', and alumni input into and feedback on student outcomes, curricula, and overall planning processes. Moreover, we have several standing committees that are regularly consulted on these matters. Recently, three new staff positions were created to lead these efforts going forward: Director of Community Engagement, Director for Assessment and Accreditation, and Assistant Director of Career Advising.

Challenges: Because the School did not have staff in place to conduct the alumni and employer surveys on a regular (e.g., biennial basis), these data have only been collected in preparation for CEPH reviews. Neither the Public Health Curriculum Committee nor the Undergraduate Curriculum Committee has alumni members, and the Public Health Curriculum Committee does not yet have a community member.

Plans: With the creation of three new staff positions at the School, we have plans in place to enhance community involvement in school evaluation and assessment even further.

Alumni Involvement. The Director of Community Engagement, Director for Accreditation and Assessment, and Assistant Director of Career Advising will collaboratively oversee the administration of a regular alumni survey starting in the 2021-22 academic year. The survey will gather graduates' views on competencies, curriculum, changing health care practices, and current research needs. In addition to the data that the School collects from alumni, the Brown University Office of Institutional Research has added two questions to the annual surveys it sends to the public health master's and doctoral alumni who are one, five, and 10 years out and undergraduates who are five and 10 years out. Specifically, going forward, alumni will be asked to rate the extent to which they were "successful in achieving [their] program's competencies" and "able to apply the competencies that [they] attained in [their] program after graduation." To supplement the surveys with qualitative data about alumni experiences, the School plans to conduct focus groups with our graduates at annual conferences like that of the American Public Health Association (APHA). Having added an alumni page to the School of Public Health page on LinkedIn, we also intend to encourage those who have earned degrees at the School to use the page to provide input into curricula, goals, plans, and evaluation metrics. Moreover, we are going to add an alumni seat on the school-wide Public Health Curriculum Committee and on the Undergraduate Curriculum Committee.

Community Involvement. Going forward, we will have the Community Advisory Board review curricula and competencies on an annual basis to ensure their currency with workplace needs. We will also ask the members for their input on the community's changing practice and research needs. To supplement these efforts, the Director of Community Engagement will continue to meet one-on-one with each Community Advisory Board member at least once every three years. We will also create a seat for a community partner member on the school-wide Public Health Curriculum Committee.

To broaden the community partners from whom we solicit input, we plan to add questions about competencies, curricula, and changing practice, research, and workforce needs to the MPH Applied Public Health Experience mentor evaluation form. This will allow the community members who serve as mentors for MPH students' Applied Public Health Experience to participate in shaping the direction of the School. Moreover, the Director of Community Engagement will meet one-on-one with at least 10% of the mentors each year to obtain their feedback on these matters.

F2. Student Involvement in Community and Professional Service

Community and professional service opportunities, in addition to those used to satisfy Criterion D4, are available to all students. Experiences should help students to gain an understanding of the contexts in which public health work is performed outside of an academic setting and the importance of learning and contributing to professional advancement in the field.

1) Describe how students are introduced to service, community engagement and professional development activities and how they are encouraged to participate.

   Students are introduced to service, community engagement, and professional development activities through the School's degree programs and co-curricular opportunities.

   • Community Engagement

     ○ Community Engagement in the Curriculum. The School provides students with curricular opportunities for community engagement. Our premier community engagement program is the Applied Public Health Experience (APHE), which is required of MPH students. As detailed in D5, students may choose to undertake their APHE at one of the organizations with whom the program has an ongoing relationship, such as the Rhode Island Department of Health, Rhode Island Free Clinic, or Doctors Without Borders, or they may identify their own site provided it meets the APHE requirements.

       Students in all School programs may participate in community-engaged activities through elective courses that feature field work and service projects that benefit those in the greater Providence area. These courses include PHP 2380: Health Communication; PHP 2325: Place Matters: Exploring Community-Level Contexts on Health Behaviors, Outcomes and Disparities; PHP 1820: Designing Education for Better Prisoner and Community Health; PHP 2450: Measuring and Improving the Quality of Health Care; and PHP 1680I: Pathology to Power: Disability, Health and Community.

     ○ Community Engagement Through Extracurricular Activities. Reflecting Brown's renowned public service orientation, the University and School provide many extracurricular opportunities for students to engage with the community.

       ▪ Undergraduates. Bachelor's students can participate in community engagement activities by serving on the Departmental Undergraduate Group (DUG) or attending the events they sponsor. DUG is a student-led organization of undergraduate public health concentrators who plan community service and professional development events. The group undertakes at least one each semester, such as assembling safe sex kits in cooperation with AIDS Care Rhode Island. The group also holds an annual public health internship and research panel in which panelists talk about public health-related internships and strategies for finding them.

         Undergraduates are also afforded community service opportunities through the Brown University Swearer Center for Public Service. The Swearer Center brings scholars, students, staff, practitioners, and community members together to address community challenges. More than 80 community-based organizations partner with the Center, many of which have a public health mission.

         Of the undergraduates concentrating in public health, more than one-fifth in 2018-19 (37/168) and 2019-20 (38/166) participated in a Swearer Center community service program. Examples of these programs include Connect for Health in which students help low-income families access resources such as utilities assistance, public benefits, and food; Self Expression for Adults with Developmental Disabilities in which students create art in collaboration with adults with intellectual and

developmental disabilities; and Sexual Health Advocacy through Peer Education in which Brown undergraduates facilitate workshops for those in high school to discuss topics related to sexual health.

- Graduate Students and Postdoctoral Fellows. Graduate students and postdoctoral fellows comprise the community service subcommittee of the Public Health Graduate Student Council. The subcommittee organizes public service and social justice activities for graduate students to participate in, such as delivering food to homebound persons via Meals on Wheels, serving as pen pals to elderly adults in assisted living, and facilitating the activities of the School's Student Actions against Anti-Black Racism work group.

- Professional Development. The School has a webinar series for students to obtain professional development on public health careers. Recent webinars have included "Maximizing Your Career Competitiveness," "Advice for Navigating Your Career Search: A Q&A with Recent Alumni," and "Public Health PhD Career Options Outside of Academia."

  Students can also access professional development opportunities through Brown University's career center, CareerLAB. CareerLAB has counselors available to meet with students one-on-one to help them clarify and pursue their professional goals. The center also delivers workshops, houses online resources, and puts on a career fair each fall.

- Dissemination of Opportunities and Encouragement to Participate. Opportunities for student involvement in service, community engagement, and professional development are disseminated and encouraged through a number of channels: an email the SPH Assistant Director for Career Advising sends every two weeks to the School's approximately 400 students; a School of Public Health monthly newsletter, Career and Community; the School of Public Health careers calendar; the Opportunities Database, a searchable database for students to find public health-related community service, internship, and employment opportunities; and the SPH Careers Group on LinkedIn. The Swearer Center's BrownEngage database enables students to explore community engagement opportunities, access trainings, and register for events. CareerLAB's BrownConnect platform helps students find mentors, internships, and job opportunities from those in the Brown community. Finally, CareerLAB's Handshake is an online tool that lists jobs for which employers are looking to recruit Brown students.

2) Provide examples of professional and community service opportunities in which public health students have participated in the last three years.

   Brown School of Public Health students participate in a wide variety of professional and community service activities. As noted above, MPH students complete an Applied Public Health Experience (APHE) that entails community service. Undergraduates pursue many volunteer opportunities. And students throughout the School have created community service groups.

   - Applied Public Health Experience Sites. A complete list of APHE student placements for 2016-2019 are available in the ERF. Select examples from each year are shown on the next page.

Sample Applied Public Health Experience Placements, 2016-2019	
Organization	**Title of Project**
2016-2017	
Watson Institute	Brown International Advanced Research Institute on Humanitarian Response and Post Conflict Reconstruction
Hasbro Children's Hospital	Pediatric Hematology Oncology Fellowship
Rhode Island Hospital Injury Prevention Center	4-Safety Program
The Providence Center, Recovery Navigation Program	Recovery Navigation Internship
Rhode Island Department of Health: Community Health Equity	WISEWOMAN Program Internship
2017-2018	
Global Health Institute	MSM and HIV Policy Solutions
Center for Alcohol and Addiction Studies	Substance Use and Mental Health in Rhode Island (2017) - A State Epidemiological Profile
Rhode Island Department of Health	Youth Tobacco Prevention and the Rhode Island Model Tobacco Policy
Lurie Children's Hospital	Lurie Children's Health Communities Internship
Human Rights Watch	Assessing the Impact of 90 Milli-Morphine Equivalent Cap Policy on Patients with Chronic Pain
Walden Behavioral Care	Summer Internship at Walden Behavioral Care
2018-2019	
Rhode Island Public Health Institute	The Association between Shopping at Food on the Move and Nutrition-related Health Outcomes and the Association between Shopping at Food on the Move and Food Security Status
Médecins Sans Frontières (MSF) South Africa	Health Care Worker Engagement Workshop: How to Approach Disengagement from Care in Khayelitsha, South Africa
Dorcas International of Rhode Island	Bringing a Public Health Perspective to Dorcas International Institute of Rhode Island
SCMC, Shanghai, China	Designing an Effective and Culturally Appropriate Pamphlet to Promote PrEP to Gay Men in Urban China
Rhode Island Department of Health: Center for HIV, Hepatitis, STDs & TB Epidemiology	Examining Use of Expedited Partner Therapy for Chlamydia Cases in Rhode Island

- Undergraduate Volunteer Work. Exemplifying the University's and School's public service ethos, many undergraduates devote time to non-profit and public sector organization volunteer work. To capture students' experiences, the School conducts an annual community service survey of those concentrating in public health.[1] The 2017-18 and 2018-19 surveys, which had response rates of 42% and 29%, respectively, revealed that nearly 40% (n=64) of the 2017-18 respondents and more than a third (n=39) of those in 2018-19 participated in at least one activity. The sites where public health concentrators volunteered are listed on the next page.

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[1] The School did not administer the survey in 2019-20 due to COVID-19.

Organizations and Agencies for which Public Health Undergraduate Students Volunteered, 2017-2019	
AIDS Project Rhode Island	Islamic Society of Greater Manchester
AIDS Walk	Meals on Wheels
American Liver Foundation	The Miriam Hospital
American Red Cross	Mountain of Fire and Miracles Ministries
Barrington Adult Youth Team	Narragansett Indian Tribe
Big Brothers Big Sisters of the Ocean State	National Kidney Foundation
Big Brothers Big Sisters of Massachusetts Bay	Ocean State Church of Christ
Boystown (Rhode Island)	PACE RI
Branch Avenue Community Health Fair	Petey Greene Program
Brown Elementary Afterschool Mentoring Program	Planned Parenthood of Southern New England
Brown Emergency Medical Services	Presbyterian Church for immigrants
Brown Market Shares – CSA	Princes to Kings
Brown Refugee Youth Training and Enrichment	Project Outreach
Brown Sustainability Strategic Planning and Advisory Committee	Project WEBER RENEW
Brown University Global Brigades	Providence Animal Rescue League
Camp Kesem at Brown University	Providence Healthy Communities Office
Childhood Lead Action Project	Rhode Island Department of Health
Cincinnati Pride Festival	Rhode Island Free Clinic
Clinica Esperanza/Hope Clinic	Rhode Island HIV/STD Clinic
Connect for Health	RI Court-Appointed Special Advocates Program (CASA)
D'Abate Elementary School	Samaritans of Rhode Island
Day One	San Miguel School
Exeter Animal Shelter	Science Olympiad
Fight for Air Climb	Seven Hills
Foster Forward of Rhode Island	Sole Train
Friends of India Point Park	SquashBusters
Girls on the Run Rhode Island	St. Mary's Home for Children
Global Brigade	Statistics in the Community
Habitat for Humanity	Students for Saving Mothers
Hasbro Children's Hospital	Sustainable International Medical Relief Organization
Hope Hospice and Palliative Care of Rhode Island	Swamp Camp Services, Inc.
Health Leads/Connect for Health	Swearer Classroom Program
Hope High School	U.S. House of Representatives
House of Hope	Vartan Gregorian School
Inspiring Minds	WaterFire of Providence, RI
Interpreter's Aid Program	Women's Refugee Care

- Brown School of Public Health Community Service Groups. Brown School of Public Health students have created three community service groups in addition to the Departmental Undergraduate Group (DUG) described above.

  o School of Public Health Immigration Working Group (IWG). Brown School of Public Health students launched the Immigration Working Group in 2018-19 in collaboration with the School's Diversity and Inclusion Office. The IWG, on which nine master's and doctoral students currently serve, focuses on health equity issues among documented,

undocumented, and mixed status immigrant families. Their accomplishments include the following:

- A four-part immigration seminar series focused on health inequities faced by documented and undocumented students (e.g., food insecurity and SNAP enrollment for undocumented families; the impacts of immigration enforcement on early childhood health and development)

- A seminar focused on how sex work and sex trafficking affect the sexual health of migrants

- Student-led allies skills training to enable students to help undocumented families navigate the legal system

   o <u>Statistics in the Community (STATCOM)</u>. STATCOM is a graduate student-led statistical consulting volunteer group that serves community partners. In collaboration with the Swearer Center, the group provides program evaluation, statistical analysis, and reporting for non-profit and public sector organizations.

   o <u>Brown School of Public Health Student Chapter of the Rhode Island Public Health Association</u>. In 2017, the School established a student chapter of the Rhode Island Affiliate of the American Public Health Association. Approximately 10 undergraduates currently comprise Brown's chapter. The chapter undertakes projects to address public health-related issues that affect Brown University students. Recent events include a vegetarian pizza night focused on student nutrition and a mindfulness session designed to help students relieve stress during final exams.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: Brown University and the School have a strong public service ethic. The University's commitment to community engagement is evident in our having created one of the first public service centers in the nation 35 years ago, the Swearer Center, which employs more than a dozen staff. The ethic is also reflected in the availability of community-engaged elective courses at the School and the decision many public health students make to volunteer their time to undertake service and community engagement activities when not required to. Another key strength is the excellence of the MPH program's Applied Public Health Experience. Finally, the School's addition of two new positions, the Director for Community Engagement and Assistant Director for Career Advising, have helped bolster student involvement in community service and opportunities for professional development.

Challenges: No program at the School other than the MPH has community service as a required part of the curriculum. In exit surveys, public health concentrators have expressed a desire for more community-engaged coursework. Graduate students have also indicated that they wished they could participate in community service activities or unpaid internships but need remunerated work to pay for tuition and living expenses. These findings suggest a need to offer more community service coursework and provide funds to support students to participate in unpaid community and professional service activities.

Plans: The School's Undergraduate Curriculum Committee has begun to discuss how to formalize community engagement as part of the undergraduate curriculum. Discussions have focused on the possibility of modifying existing courses, developing new courses, and collaborating with departments outside the School that offer community-engaged courses.

The Swearer Center is developing a community engagement certificate program for undergraduates, which will be open to public health concentrators. The School's Director of

Community Engagement will coordinate efforts between the Swearer Center and SPH Undergraduate Curriculum Committee.

We also plan to explore the development of a Public Health Community Engagement Scholars Program modeled after the School's Health Communications Scholars Program. If the program were to mirror the Communications Scholar Program, one public health master's student would receive a scholarship to cover 25% of his or her tuition for 10 hours of work per week for a semester, with the potential for renewal in the second semester. The student would assist the Director of Community Engagement and Assistant Director of Career Advising in their community engagement activities.

The School was recently approved for a Brown chapter of The Delta Omega Honorary Society in Public Health. The chapter will induct its first student members with outstanding performance and devotion to the field and foster student community service in Spring 2021.

F3. Assessment of the Community's Professional Development Needs

The school periodically assesses the professional development needs of individuals currently serving public health functions in its self-defined priority community or communities.

1) Define the school's professional community or communities of interest and the rationale for this choice.

   The Brown School of Public Health's professional community or communities of interest include the following:

   - **Public health practitioners**: Including those employed by the Rhode Island Department of Health and practitioners employed in community health including free clinics, neighborhood health clinics, and community health centers. This includes those engaged in gender health equity work and addictions work as part of the public health workforce.

   - **Employees and clients of public health and social service community organizations** whose work supports and/or impacts public health in our target communities, including our Community Advisory Board, local government including the Providence Mayor's Health Communities Office, and a range of community-based organizations that serve as research partners with faculty, serve (or could serve) as internship sites for our students, and employ our alumni.

   - **Staff and residents of the 10 Health Equity Zones (HEZs) in Rhode Island**. Rhode Island's HEZ initiative is an innovative, place-based approach that brings communities together to build the infrastructure needed to achieve healthy, systemic changes at the local level. Rhode Island's HEZs are geographic areas designed to achieve health equity by eliminating health disparities using place-based strategies to promote healthy communities. They create a platform for neighbors and community partners to come together in new ways and address the root causes of uneven health outcomes at the local level. Each HEZ is led by a collaborative that represents the diverse makeup of the community, including its residents. Through a collaborative, community-led process, each HEZ conducts a community health needs assessment and implements a data-driven plan of action to address the unique social, economic, and environmental factors that are preventing people from being as healthy as possible.

   - **Brown University alumni including Public Health alumni and Medical School alumni** are part of the public health workforce broadly defined because they advance public health knowledge, practice, and research in their own careers and need to continue to enhance their public health knowledge, skill-building, and leadership opportunities across their career course.

   Rationale: Ongoing assessment of the professional development and continuing education needs of the groups and individuals described above is essential to ensuring that the school maximizes its resources to deliver meaningful training that strengthens the capacity of and builds competencies within the public health workforce. This ties in with the mission of the School, which is to inspire and rigorously prepare the next generation of diverse public health leaders, from undergraduates through postdoctoral fellows, both in the classroom and through personalized, direct training and applied experiences; make new discoveries and develop novel methods that improve the public's health and achieve health equity from our local to our global communities; and cultivate strong bi-directional partnerships with communities and governmental entities, both locally and around the globe, to advance equity by addressing the public health needs of vulnerable populations.

2) Describe how the school periodically assesses the professional development needs of its priority community or communities, and provide summary results of these assessments. Describe how often assessment occurs

The School periodically assesses the professional development needs of its priority communities via several committees including the School of Public Health and Rhode Island Department of Health Advisory Committee (yearly) and the School of Public Health Community Advisory Board (CAB) (yearly) (see descriptions in F1). Examples of specific assessments are described below.

In September 2020, **the Community Advisory Board (CAB)** met and discussed professional development needs of the public health workforce. The CAB mentioned that many community-based organizations have curtailed professional development because of budget cuts. Therefore, technical assistance, workshops, and training from the School would be greatly appreciated. Themes from that conversation included the need for:

- Technical assistance to grass roots organizations about basic metrics for impact/outcome evaluation including logic models/intervention mapping

- Language and tools to talk about institutional racism in terms of public health

- Training around public health models

- Training on data analysis

- Clear communication about how the School can be a resource to community organizations and the point of contact when there are questions

- Centralized clearinghouse for professional development opportunities from the School

Going forward, we will assess these needs from the CAB on a yearly basis during one of our regularly-scheduled meetings.

In September 2020, we conducted an **Alumni Survey of the classes of 2017 through 2020 that asked about professional development needs.** Specifically, we asked: "The Brown University School of Public Health would like to offer continued training and education in public health knowledge, skill-building, and leadership opportunities for alumni. What kinds of programs would you like to see?" Themes from open-ended responses included:

- **Skill Building opportunities for alumni:**
  o Research related training like grant writing; introductions to new methods, tools, techniques that faculty are using
  o Statistical programming training, further or refresher training in statistical analysis methods; data visualization lessons using R, ggplot, adobe illustrator, tableau, etc.; training in coding
  o Professional development: administration/management/leadership skills including how to lead multi-disciplinary teams, navigate interpersonal situations in the workplace, deal with workplace politics/be a good mediator; accountability and self-reflection workshops dealing with positionality in the workplace
  o Media and communication training; training in policy/advocacy
  o Could include certificate programs, multi-day workshops, lectures, conferences, or online modules

- **Career Development:** advice on public health career paths, career opportunities, career panels, opportunities to hear from/work with leaders in many fields (government, hospitals, insurance, non-profits, industry, education); professional development.

- **Topical Workshops/Access to speakers:**
  - Pressing health-social justice issues
  - 2-3 day workshops on specialized topics; very base components of equitable health, i.e., "Intro to transgender health and healthcare," "Racism and How to be an Antiracist in Health Systems Evaluation," "Introduction to Implementation Science," "Cross-Cultural Collaboration," etc.
  - Environmental Health, nutrition and physical activity policy, pediatric research
  - Cutting edge findings in public health
  - Programs related to current events (i.e., COVID-19, pandemic preparedness)
  - Talks from leaders in public health
  - Information about latest public health crises when they break
  - Design thinking

- **Networking Opportunities and Events for Alumni**, learning about the work that other public health alumni do, feedback on grants or manuscripts from other alumni, SPH-leadership opportunities for alumni

- **Opportunities for alumni to mentor SPH students**

Going forward, Alumni Surveys will be conducted every two years.

The SAMHSA-funded New England Addiction Technology Transfer Center is directed by Dr. Sara Becker (Associate Professor of Behavioral and Social Sciences). The mission of the Center is to heighten the awareness, knowledge, and skills of the workforce that addresses the needs of people with substance use or other behavioral health disorders; to accelerate the adoption and implementation of evidence-based and promising addiction treatment and recovery-oriented practices and services; and to foster regional alliances among culturally diverse practitioners, researchers, policymakers, funders, and the recovery community. The Center conducts qualitative interviews, surveys, and assessments with community partners and attends site visits with community partners to understand organizational workflow and needs. They also participate in community or regional advisory board meetings. They design intervention and implementation strategies to meet the needs of community partners; analyze mixed-methods data collected from patients, providers, and organizations; co-author publications with community partners; and contribute to community-engaged grant proposals. School of Public Health students have been involved in all facets of this work. This Center provides training and technical assistance support to thousands of front-line addiction treatment providers per year. Some of their most popular training programs include Leadership Development Program, didactic workshops and conferences, online distance learning courses, ECHO virtual coaching, and external facilitation. They also develop collaborative relationships with providers and organizations in the treatment, criminal justice, faith, medical, education, and recovery communities.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School assesses the professional development needs of individuals currently serving public health functions in its self-defined priority community or communities.

Challenges: There has not been a systematic methodology for assessing these professional development needs regularly from all relevant communities of interest.

Plans: Recently, two new administrators were hired: Sean Kelley, Assistant Director of Career Advising and Dr. Kim Gans, Director of Community Engagement, who will lead these efforts going forward. We will create a plan for systematically assessing professional development needs of all of our constituent groups. Methods will include one-on-one or group meetings, focus groups, community forums, and/or surveys. Specific plans include:

- Utilize community needs assessments done by local hospitals every 3 years to determine professional development needs of individuals currently serving public health functions in their surrounding communities as well as needs for community engagement. For example, Rhode Island Hospital in Providence is the largest private, not-for-profit hospital in the state and also home to Hasbro Children's Hospital, the state's only facility dedicated to pediatric care. They last conducted a community needs assessment in 2016 using community forums with 239 Providence residents, key informant interviews, and secondary data sources, and determined the following needs:

  a) Access to Care and Health Literacy
  b) Healthy Weight and Nutrition – increased access to healthful food and support to achieve and maintain a healthy diet and heathy weight
  c) Substance Use Disorders
  d) Cardiac Health including expanding access to programs that prevent disease such as screening initiatives, free education and awareness programs, and community activities
  e) Cancer – Cancer screening and prevention as well as expanding the reach of psychosocial care, palliative care, and survivorship programs.

  Dr. Gans will meet with the Lifespan Community Health Institute to determine how the School can help address professional development needs related to the above identified needs.

- Rhode Island's 10 Health Equity Zones all used a collaborative, community-led process to conduct a community health needs assessment in their geographic areas. Dr. Gans will meet with directors and staff of all HEZ locations to determine how the School can help address professional development needs related to their identified needs.

- Advance CTR has also conducted a community needs assessment (see above) as well as compiling other needs assessments done in the State. Dr. Gans has met with them, and we will utilize this information to make professional development plans for the future.

- The RI Department of Health regularly conducts workforce assessments. Dr. Gans has met with them, and we will utilize this information to make professional development plans for the future.

- Conduct regular Alumni Surveys (every two years) to assess the needs for continued training and education in public health knowledge, skill-building, and leadership opportunities.

- Use our LinkedIn alumni group page to conduct quick polls to ask about needs for professional development in addition to regular surveys.

- Create brief evaluation forms at School events, trainings, and lectures that community members attend and ask them what other kinds of events, trainings, and lectures would be helpful to them. This could be also done via be email if people RSVP for events in advance.

- Use the School's social media accounts to conduct quick polls with our community partners about needs for professional development.

- Regularly meet with the Public Health Academic Center Working Group to assess professional development needs

- Explore the development of a Public Health Community Engagement Scholars Program similar to the School's Health Communications Scholars Program, which was made possible

through the generosity of an anonymous donor. The Community Engagement Scholar would be open to any public health master's student and be guaranteed for one semester, with the potential for renewal in the second semester. The student would receive a scholarship to cover 25% of tuition per semester for 10 hours of work per week. The Community Engagement Scholar would work closely with the Assistant Director of Career Advising and the Director of Community Engagement to assist in their work to enhance professional development and community engagement in the School.

A longer term goal is to establish a fully staffed Office of Public Health Practice and Community Engagement in the Brown School of Public Health. Development funds/donations and/or state funds may be necessary to make this happen.

F4. Delivery of Professional Development Opportunities for the Workforce

The school advances public health by addressing the professional development needs of the current public health workforce, broadly defined, based on assessment activities described in Criterion F3. Professional development offerings can be for-credit or not-for-credit and can be one-time or sustained offerings.

1) Describe the school's process for developing and implementing professional development activities for the workforce and ensuring that these activities align with needs identified in Criterion F3.

   Currently, the process for developing and implementing professional development activities for the workforce and ensuring that these activities align with needs is informal. Needs are identified in various ways through committee meetings, strategic planning, faculty and students identifying needs through their connections with the community, and community stakeholders directly contacting the School. These needs are communicated to School leadership with programs developed as resources, time, and staffing allow.

2) Provide two to three examples of education/training activities offered by the school in the last three years in response to community-identified needs. For each activity, include the number of external participants served (i.e., individuals who are not faculty or students at the institution that houses the school).

   In the Spring of 2019, MPH student Hanna Shephard worked with the Supplemental Nutrition Assistance Education Program (SNAP-Ed) to develop a nutrition education professional development series for East African refugee Community Health Workers (CHWs) at Dorcas International Institute of Rhode Island (DIIRI), a refugee resettlement agency in Providence. The need for this professional development was determined by DIIRI and communicated to the student and then to the School. In the United States, resettled refugees are disproportionately low-income and food insecure, and they experience difficulty navigating the US food environment. However, all refugees are eligible for SNAP upon resettlement. SNAP-Ed is an existing evidence-based nutrition education program designed to improve the likelihood that participants eligible for SNAP will make nutritious food choices within a limited budget. In collaboration with SNAP-Ed, Hanna held several focus group discussions and key informant interviews to inform the design of a professional development series for refugee CHWs from East Africa (the largest refugee subpopulation in RI). In order to improve the cultural appropriateness of the SNAP-Ed material for refugees resettling in Rhode Island, 8 CHWs from DIIRI were trained to deliver the material to their refugee clients, which number in the hundreds. The series took place over six weeks and included topics such as basic teaching concepts, food safety, and practical cooking skills, as well as some of the standardized nutrition information like MyPlate and the Food Pyramid. This professional development series was designed to help CHWs meet the nutrition education needs of their refugee clients resettling in Rhode Island.

   In Fall of 2018, the School hosted 300 alumni who attended a celebration event titled, "Innovators in Achieving Black Health Equity: Building Environments that Produce Optimal Health for All," featuring 3 prominent alumni who described their work to advance health equity for communities of color. The alumni were Dr. Nicole Alexander-Scott, Director for the Rhode Island Department of Health; Griffin Rodgers, Director for the National Institute of Diabetes and Digestive and Kidney Diseases; and Cedric Bright, Associate Dean at the University of North Carolina. The need for this event was determined by conversations with alumni and discussions among faculty and administrators regarding important current public health issues because health disparities experienced by Black communities and health equity is a strategic focus area for the School's work (as encapsulated in the strategic plan).

   We also view the broader community engaged in gender health equity work as part of the public health workforce. We have been engaged in sponsorship of professional conferences to advance

the issue of gender health equity. For example, in Spring of 2019, we co-sponsored the Rhode Island Trans Health Conference, which offers continuing medical education credits and was attended by over 300 people including nurses, doctors, community health workers, researchers, and advocates working on Trans Health issues. Health disparities experienced by trans communities across a variety of important health outcomes, combined with health equity being a strategic focus area for the School's work, and conversations with community partners expressing need/interest in transgender health led us to focus on these activities.

The School of Public Health holds several events annually to celebrate National Public Health Week including trainings, lectures, and the annual Public Health Research Day conference, which highlights the research accomplishments of our students, trainees, and partners. The poster session encourages interaction among members of the greater Brown community and external partners. In 2020, the event was moved to a virtual format due to COVID-19, but in 2019, the School celebrated National Public Health Week by bringing together the campus community and our local community members and partners to celebrate public health and to highlight key health issues. The School hosted wellness activities throughout the week including yoga sessions, acupuncture, mindfulness training, and sessions by Wellness to Go on food psychology and the benefits of resistance bands. The Brown Statistics C.V. Starr Lecture was held featuring Nilanjan Chatterjee, PHD, from Johns Hopkins University, who spoke about "Leveraging Polygenicity of Complex Traits to Inform Biology, Causality and Prediction." The School of Public Health's Immigration Working Group presented R. Gabriela Barajas-Gonzalez, PhD, from the NYU Langone School of Medicine for "The Threat of Immigration Enforcement: Impact on Child Well-Being." The 20th annual Barnes Lecture featured mindfulness pioneer Jon Kabat-Zinn for "The Public Health Roots of Mindfulness-Based Stress Reduction." Four members of the School of Public Health's Community Advisory Board presented a Public Health Career Panel in which they discussed their career paths and gave advice on getting public health work done in Rhode Island. National Public Health Week is always well attended by employees of the Rhode Island Department of Health and social service/health organizations, public health alumni, and local health practitioners in addition to public health faculty and students. National Public Health week activities reach approximately 300 people. The topics of immigration and child well-being and mindfulness were determined by conversations and needs identified by our community partners together with public health faculty and administrators and fit with our strategic plan.

The School has actively supported the Rhode Island Public Health Institute (RIPHI), which is a nonprofit community-based organization that conducts collaborative work informed by research that aims to address real-world public health problems directed by Amy Nunn, Associate Professor in Behavioral and Social Sciences. Its activities fall into four categories: service, research, policy/advocacy, and training. Training activities over the past several years have included training federally qualified health center staff in how to evaluate its successful medicated assisted treatment (MAT) programs; helping a federally qualified health center implement routine preventive health screenings through EMR prompts and ongoing staff trainings; developing and evaluating a social media and communications strategy for Open Door Health; and conducting a statewide survey of Rhode Island physical education (PE) instructors in RI public schools about how to promote more vigorous physical activity in public school PE classes.

In February 2020, the School hosted a screening of the film "Pushout: Criminalization of Black Girls in the Schools" and a community panel town hall discussion. Prior to identifying panelists, Dr. Akilah Dulin (from the Center for Health Promotion and Health Equity), Associate Dean for Diversity and Inclusion Caroline Kuo, and Program Manager, Diversity and Inclusion Initiatives Jai-Me Potter-Rutledge identified community members to partner with. We worked with Angela Ankoma of United Way and community member Akilah Alleyne. Dr. Ernestine Jennings, Clinical Assistant Professor of Psychiatry and Human Behavior at the Warren Alpert Medical School at Brown, moderated the panel. Panelists included Dana Benton, Providence Public Schools Manger of Social Emotional Services; Sara Monteiro, Interim Director of Special Projects at Community College of Rhode Island; and Olubunmi Olatunji, Program Director at Youth in Action. The event was open to Brown University staff, students, and faculty and the Rhode Island

community, and approximately 50-60 people attended. This event was chosen because health equity is a strategic focus area for the School's work and due to Black criminalization being an important topic in current events, which was of interest to students, faculty, alumni, and partners.

In April 2018, Dr. Dulin, partnered with Director of Communications and Outreach Karen Scanlan and Communications Specialist Laura Joyce to work with a community organization, Boys and Girls Club, and their program Princes to Kings (co-sponsored by the Rhode Island Department of Health), its participants (Latino and African American boys ages 12 – 18), and program art director/manager Scott Lapham to host One Gun Gone Exhibit: Art to Advocacy to bring the issues of gun violence to light from the perspectives of boys living in Providence. This program was open to the community and began with remarks from Scott Lapham and One Gun Gone student participants as well as discussion and reflection upon each of the art exhibits. This event was chosen because health equity is a strategic focus area for the School's work and because of gun violence being a critically relevant topic in current events, which was of interest to students, faculty, and partners. Since this was an ongoing exhibit, attendance was not taken.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The School conducts many professional development activities for the public health workforce.

Challenges: There has not been a regular, systematic effort to develop specific programs based on results of needs assessments with all our public health constituents identified in F3. Parking at the Brown School of Public Health (and Brown University in general) is difficult and deters the public health workforce from participating in professional development activities. The School has not systematically recorded attendance and conducted evaluations of professional development programs. The School does not have a fully staffed Office of Public Health Practice/Community Engagement, so professional development activities currently have to be delivered by faculty who are not currently compensated for such work. While the School has an extremely talented group of faculty with expertise that could provide professional development to the public health workforce, most faculty are focused on research, and thus conducting professional development work may not be a high priority for them.

Plans: Recently, two new administrators were hired: Sean Kelley, Assistant Director of Career Advising and Dr. Kim Gans, Director of Community Engagement, who will lead these efforts going forward. We will create a plan for systematically assessing professional development needs of all of our constituent groups and providing professional development opportunities based on those identified needs. Activities include:

- Use the needs assessments activities of constituent groups in F3 to develop a plan to deliver professional development opportunities specifically linked to the identified needs over the next several years.

- Create a mechanism for community organizations to request specific professional development activities from the School.

- Create a system for cataloging the professional development opportunities that are being offered by departments, centers, and individual faculty, staff, and students

- During National Public Health Week, include trainings, lectures, or workshops to meet the specific needs of our populations of interest identified via the needs assessment in F3.

- Work to provide continuing education credits for various disciplines for our training events and lectures.

- Develop a feasible plan for measuring attendance and conducting evaluations of professional development programs.

- Given the parking situation at Brown and the current COVID-19 epidemic, look into developing professional development activities that are offered online. This would also be beneficial to public health alumni that don't live in the Rhode Island area.

- Work more closely with the New England Public Health Training Center (NEPHTC), a six-state consortium to develop and implement online learning opportunities, faculty-student collaborations, and field placements that aims to strengthen the competency of the New England public health workforce. Funded through the HRSA and housed at Boston University. NEPHTC delivers a wide range of training programs and services, including a Health Equity Internship Program to engage students with practice opportunities working on health equity projects.

- Explore the development of a Public Health Community Engagement Scholars Program similar to the School's Health Communications Scholars Program, which was made possible through the generosity of an anonymous donor. The Community Engagement Scholar would be open to any public health master's student and be guaranteed for one semester, with the potential for renewal in the second semester. The student would receive a scholarship to cover 25% of tuition per semester for 10 hours of work per week. The Community Engagement Scholar would work closely with the Assistant Director of Career Advising and the Director of Community Engagement to assist in their work to enhance professional development and community engagement in the School.

The longer-term goal is to establish a fully staffed Office of Public Health Practice and Community Engagement in the Brown School of Public Health. Development funds/donations and/or state funds may be necessary to make this happen.

G1. Diversity and Cultural Competence

Aspects of diversity may include age, country of birth, disability, ethnicity, gender, gender identity, language, national origin, race, historical under-representation, refugee status, religion, culture, sexual orientation, health status, community affiliation and socioeconomic status. This list is not intended to be exhaustive.

Cultural competence, in this criterion's context, refers to competencies for working with diverse individuals and communities in ways that are appropriate and responsive to relevant cultural factors. Requisite competencies include self-awareness, open-minded inquiry and assessment and the ability to recognize and adapt to cultural differences, especially as these differences may vary from the school's dominant culture. Reflecting on the public health context, recognizing that cultural differences affect all aspects of health and health systems, cultural competence refers to the competencies for recognizing and adapting to cultural differences and being conscious of these differences in the school's scholarship and/or community engagement.

1) List the school's self-defined, priority under-represented populations; explain why these groups are of particular interest and importance to the school; and describe the process used to define the priority population(s). These populations must include both faculty and students and may include staff, if appropriate. Populations may differ among these groups.

   Brown University School of Public Health has identified historically underrepresented groups of faculty and graduate students as priority populations. In the School, we believe that the public's health is best served by having a diverse workforce that brings a broad range of skills, backgrounds, experiences, and perspectives to improving health. As such, training the next generation of diverse public health scholars and practitioners is essential to the work of our School. We have chosen to specifically focus on recruitment and retention of faculty and graduate students from historically underrepresented backgrounds given health inequities impacting these communities, and the need for leaders from these communities to contribute to diverse perspectives in regards to how we approach and implement public health research and education. We use the definition of under-representative groups from a National Science Foundation workforce report: "Underrepresented minorities include individuals who have identified themselves as Black, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander only and does not include those with multiple race." (Kannankutty N. 2003 College Graduates in the U.S. Workforce).

   Data from 2019-2020 show the following in regards to representation of these priority populations: For the 119 faculty who hold primary appointments at the School (all faculty tracks including Tenure, Teaching Scholar, Research Scholar, (Research)), 11 (10%) are from historically underrepresented groups; this number does not count those who have opted not to share their identity in our data collection systems or who are international (even if they identify as Black, for example). For incoming graduate students, 21 (19%) are from historically underrepresented groups; this number does not count those who have opted not to share their identity in our data collection systems, who identify as being from more than one racial group, or who are international (even if they identify as Black, for example).

   Although we have identified historical underrepresented groups as our priority populations, we respect that diversity encompasses a broad range of factors including race, ethnicity, gender, sexual orientation, economic background, disciplinary training, and a broad range of other factors and value diversity across a number of intersecting identities. We also note that not all factors lend themselves to easy identification, categorization, and counting for the purposes of setting goals and assessing achievement of diversity.

2) List the school's specific goals for increasing the representation and supporting the persistence (if applicable) and ongoing success of the specific populations defined in documentation request 1.

We have set specific goals for recruiting additional faculty and graduate students from historically underrepresented groups.

Goal for Students:

Our goal for graduate students is to support efforts to ensure a critical mass of graduate students from historically underrepresented groups (HUG) using latest available data from the National Science Foundation as our guide; those data showed 22% representation for HUG graduate students in science and engineering fields.

We have made good progress during the initial CEPH accreditation cycle towards our goal of increased representation of students from historically underrepresented groups. In our previous CEPH self-study, we set a goal based on a published report that showed that 13% of college graduates in the United States workforce were underrepresented minorities (Kannankutty N. 2003 College Graduates in the U.S. Workforce: A Profile. *InfoBrief*. National Science Foundation, December 2005). In the last CEPH accreditation process, we set a goal for the five-year period of 2015-2020, using 18% as our guide. We have made progress in diversifying graduate students (see documentation under request 5). In our graduate programs, we currently have 19% representation from historically underrepresented (HUG) minorities.

Goal for Faculty:

Our goal for faculty with primary appointments at the School is to double the representation of faculty from historically underrepresented groups within 5 years. Doubling primary appointed faculty in the school would mean moving from 11 individuals (10%) from historically underrepresented groups (5 Tenure Track; 6 (Research) track, Teaching Scholar, or Research Scholar) to 22 individuals by 2025. As a comparison, latest available data from the National Science Foundation showed 9% for HUG faculty in science and engineering fields.

In our last CEPH accreditation, our goal for diverse faculty was 10%, and we have met these with 10% of our faculty from HUG backgrounds.

The unique composition of the school poses some challenges that we will attend to as we work towards our goals. These challenges include the following. First, we have limited tenure-track lines, and the "opening" of these lines are often unpredictable (e.g., retirement, transitions to other institutions). Second, our School faculty are comprised of a unique combination of tenured/tenure-track faculty (38%) and research and term track faculty (62%). All faculty are expected to generate grants (i.e., soft-money) to cover a significant proportion of their salaries. The proportion of salary coverage varies by track, with research track faculty responsible for generating the largest proportion of their salary from grants (typically 100% of their salary). This unique soft-money environment affects recruitment and retention outcomes that can be unpredictable. For example, data show bias in external reviews for grant applications written by scientists of color that affects research awards from the National Institutes of Health (see 2011 and 2016 articles by Ginther et al., in Science and Academic Medicine). Thus, external bias can adversely impact representational diversity in a School largely dependent upon soft money. Regardless, we feel we have made strides to recruit and retain diverse faculty. This has involved close collaboration at all levels of leadership, including search committee chairs, research center directors, department chairs, and deans.

3) List the actions and strategies identified to advance the goals defined in documentation request 2, and describe the process used to define the actions and strategies. The process may include collection and/or analysis of school-specific data; convening stakeholder discussions and documenting their results; and other appropriate tools and strategies.

The School's systematic and widespread commitment to diversity is demonstrated in a variety of ways. For example, since our first CEPH accreditation process, the School has taken the following steps to advance our goals around diversity and inclusion:

a) Created and funded a new Associate Dean's position for Diversity and Inclusion (Dr. Caroline Kuo) and full-time staff to support the activities of diversity, inclusion, and equity at the School (Jai-Me Potter-Rutledge, Program Manager for Diversity and Inclusion Initiatives). The Associate Dean is integrated into all leadership structures of the School.

b) Diversity, inclusion, and equity are standing topics of discussion at all leadership meetings and have also been incorporated as standing topics in department and research center faculty meetings.

c) The School has put significant financial investment into this portfolio to support activities for recruitment, retention, and capacity building of the School community to advance diversity, inclusion, and equity.

d) The School has created two new School leadership committees focused on diversity, inclusion, and equity activities: (1) The School's Diversity and Inclusion Action Planning Committee; and (2) The School Staff Advisory Committee. Both committees include members that are nominated by the entire School community. The first committee represents a broad cross-section of students, staff, faculty, and administrators.

e) A written 5-year strategic plan (the Diversity and Inclusion Action Plan) for diversity, inclusion, and equity activities that is viewed as a "living" document and is updated each year. This plan is publicly posted for the Brown Community here. The School's Diversity and Inclusion Action Plan was prepared by the Diversity and Inclusion Planning Committee, comprising 26 members of the SPH community—students, staff, postdoctoral fellows, and faculty—representing the School's four academic Departments and multiple Centers and Institutes. The Committee convened weekly over three months to engage in discussion, information gathering, and consultation with outside diversity experts. The Committee identified recommendations, concrete action steps, and measurable outcomes designed to enhance the representation of historically underrepresented groups within SPH faculty, students, and staff, and to advance the School's culture of diversity and inclusion.

   i) The School's plan is designed to be consistent with the University's Diversity and Inclusion Action Plan. However, the School plan is complementary to the University plan with more specific unit goals and plans that reflect the unique context of the School community and the discipline of public health. The University plan is publicly available here. The School plan includes the following:

   - Detailed annual data on the School's underrepresented populations (when we are legally, consistently, and comprehensively able to elicit these data).

   - Descriptions of innovative strategies, programs, and policies designed to recruit, develop, promote, and retain diverse students, faculty, trainees, and faculty.

   - Descriptions of innovative strategies, programs, and policies designed to build capacity in our community, and to develop an inclusive climate free of harassment and discrimination and that values the contributions of all forms of diversity.

Brown University has strong policies and programs to recruit, admit, retain, and graduate a diverse student body for underceraduate students (which is relevant because we take "fifth" year undergraduates into our master's programs) and for graduate students. The School benefits from diversity programs in both the undergraduate College and Graduate School. In the undergraduate College, special recruitment initiatives are in place to bring underrepresented talent to Brown including special recruitment programs for military veterans and students of all socioeconomic programs (we have need-blind admission and if admitted, no student needs to take a loan but will be given the Brown Promise—this means that 100% of every student's demonstrated need is met with an initial package that includes scholarship and work only, with no loans required). At the Graduate School, we work closely with the Dean of Diversity Initiatives to recruit and retain diverse talent. For example, the Graduate School hosts specific recruitment events for graduate student applicants (Fall Preview Day) and for these students after they are accepted to Brown, to increase levels of matriculation into Brown graduate programs (Super Monday); both these events are described more below. The Graduate School sponsors monthly Multicultural Graduate Student (MGS) events for students from traditionally underrepresented groups. These events include dinners with invited guest speakers, academic achievement and cultural celebrations, and social networking activities.

We complement these University partnerships with our own School activities. Each year, we build upon intentional strategies to recruit and retain diverse talent within the School and track these data annually (see documentation under request 5). Here we feature some, but not all highlights of some strategies being used.

The School continues to focus on recruiting a diverse pipeline of talented graduate students. We continue to build on new strategies implemented starting AY2017-2018, including (1) a coordinated process of outreach and recruitment efforts with the Graduate School, Initiative for Maximizing Student Development (IMSD), and the Leadership Alliance including, for example, hosting of McNair Scholar visits; (2) targeting of conferences where diverse talent are present including the Annual Biomedical Research Conference for Minority Students and the Morehouse College Public Health Fair, and coordination with other campus entities (Leadership Alliance, Medical School, Graduate School) who can recruit for SPH if our budget does not allow for us to be physically present; (3) attendance of the Associate Dean for Diversity and Inclusion at focused recruitment events and, when budget allows, with a student; (4) appointment of diversity representatives to sit on admissions committees; and (5) investment and active participation in Fall Preview Day and Super Monday where potential applicants and those offered admission are invited to visit Brown and meet faculty and students (all fully funded by Brown).

We also initiated a number of new recruitment strategies. First, we expanded our Student Ambassador program—students who are currently enrolled or recent alumni—to feature current students and alumni with a diversity of experience who can speak first-hand to students about their experiences at Brown and in the School. Recently, we specifically expanded diversity representation in this program. Second, we worked with our Assistant Director for Recruitment and Marketing to establish a database of influencers at institutions across the country to build a stronger pool of diverse applicants. Third, to address the challenge of application fees, we have prominently incorporated fee waiver information into the SOPHAS application portal. Fourth, we have reviewed and revised our recruitment strategy, adding new venues for recruitment of diverse incoming students.

We have also worked to retain diverse student talent along the pipeline. First, students (and their faculty mentors) are supported by the School in the process of applying for National Institutes of Health diversity supplements and grants (a similar process of support is given to faculty, as described above in the faculty section). This includes individualized support from the Associate Deans for Research and Diversity. Second, we have worked with the University's

Foundations Office to identify more than 130 new opportunities for foundation grants that can support students and postdoctoral fellows from the School, including those of diverse background, and launched training in how to apply for Foundation grants. Third, we launched a School of Public Health Graduate Students of Color Group, who formed their own mission statement and helped to guide strategic decisions around programming. Programming focuses on supporting students in networking with peers and mentors and engaging with faculty in strategies that can help them navigate unique challenges around identity that arise in the academic and career pipelines of public health. These students meet regularly with Deans and faculty throughout the academic year to develop capacity. The students can take advantage of formal networking with new or existing mentors through the Student Connecting Talent program, where the School pays for regular 1-on-1 lunches between students and mentors.

We also are key partners for several University-wide initiatives designed to develop a strong pipeline of diverse students, to retain diverse students and to enhance their academic experience. These are described here:

Diversity Fellowships: These fellowships were created in early 2017, as part of the University and Graduate School Diversity and Inclusion Action Plans (DIAPs), for admission beginning in 2017-18. These fellowships are intended to diversify doctoral programs, with priority given to students from historically underrepresented groups. Diversity Fellowships are for top admitted doctoral candidates from across the disciplines, who receive enhanced stipends for three years and a one-time $1,000 research account.

IMSD (Initiative to Maximize Student Development): The IMSD program at Brown, titled "Advancing the culture of PhD learning and scholarship in Biology and Health Sciences," provides research training support for students in underrepresented groups to significantly increase the participation of these groups within the fields of biomedical and behavioral research. Associate Dean for Diversity and Inclusion at the School, Caroline Kuo, sits on their advisory committee. This ongoing program enhances partnerships with Minority-Serving Institutions to encourage and increase opportunities for minority students in biology and public health graduate training fields and promote graduate student development across the Brown campus. The program strives for community, collaboration, and excellence in an innovative interactive learning environment. Participants are identified from incoming PhD cohorts spanning 12 graduate programs in Biology and Medicine and Public Health. Each student receives a unique advising plan and support structure, continuing throughout their graduate careers at Brown. Students participate in special training modules open to all graduate students to build expertise that will foster academic achievement and success in graduate school. These training modules focus on areas such as "scientific writing," "demystifying the PhD experience," and "graphic presentations of biological data" areas that may not have been fully developed at undergraduate institutions. The School of Public Health has consistently been a part of the program.

Brown University-Tougaloo College Program: This is a 5-decade long institutional partnership (since 1964) between Brown University and Tougaloo College, a Historically Black College. We have consistently had high-level School leadership on the Brown Advisory Committee for the Brown-Tougaloo Partnership. This partnership includes an Early Identification Program (EIP) with Tougaloo, through which promising undergraduates are identified for admission to the MPH Program, with current discussions underway to expand this to the Biostatistics master's degree in the School. This combined undergraduate/MPH in Public Health Education is five (or six) years in length and offers students the opportunity to be awarded a bachelor's degree from Tougaloo College and a Master of Public Health (MPH) degree from Brown University. It requires that students complete the existing degree requirements for both institutions. Students are officially Tougaloo undergraduates during the first four years and Brown MPH graduate students in year five (and, if needed, year six). As with all Brown undergraduates, students in the Brown-Tougaloo program have the opportunity to take graduate-level courses while they are undergraduates, thus beginning to

fulfill graduate level MPH requirements during their undergraduate years by spending time at Brown University. It is imperative that students work closely with advisors at both institutions to develop a plan to meet all requirements. Depending on the undergraduate major chosen, some courses taken at Brown may count toward the undergraduate degree. All core MPH requirements must be completed at Brown University. Up to four MPH electives may be taken outside of Brown, but they must be graduate-level courses that are approved in advance by the Brown MPH Program Academic Advisor and the Director of the Brown MPH Program. The first student was accepted into the Program during the Spring 2013 admissions process.

This partnership also reflects a plethora of other activities including co-lectures and joint research and education programs with Tougaloo College as a Vanguard Center for the Jackson Heart Study. This fosters active collaborations between faculty and students at both institutions.

In June 2020, a new initiative was launched to further expand this partnership. The Health Equity Scholars Program was established to provide select, highly qualified students from historically underrepresented groups: 1) A full tuition scholarship for the MPH program at Brown University; 2) Enhanced mentorship as part of their program experience; and 3) Internships focused on addressing the impact of racism and other social determinants of health. The program launched with an initial commitment of five fellowship positions available to be awarded in the 2020-2021 academic year. In this first year, eligible applicants will include current Tougaloo students applying to the Brown-Tougaloo Partnership in Public Health and Alumni of Tougaloo College who are applying to the Brown University MPH Program.

Leadership Alliance. Brown University is the central office for the Leadership Alliance. The Leadership Alliance was established in 1992 as a consortium of 23 institutions to address the shortage of underrepresented minorities in graduate programs in the sciences at competitive universities. It is now a consortium of 30 institutions. The goal of this increased representation is to train, mentor, and inspire a diverse group of students from a wide range of cultural and academic backgrounds into competitive graduate training programs and professional research-based careers. The primary issue addressed by the Leadership Alliance is the relatively low participation of underrepresented racial and ethnic minorities in the academic areas as educators, leaders, and decision makers. The Leadership Alliance's contribution to overcoming this discrepancy is to expand the opportunities for underrepresented students and increase the participation of those students in the academic enterprise. The mentoring begins at the undergraduate level with the [Summer Research Early Identification Program (SR-EIP)](#), its flagship program. The SR-EIP introduces students to the world of research-based careers by providing hands-on research experiences in all academic disciplines. Faculty in the School are active participants in this program as mentors. The Executive Director of the Alliance is Dr. Medeva Ghee, who has a faculty appointment in the School of Public Health. Dr. Ghee also teaches a course through Public Health (PHP 1400: HIV/AIDS in Africa: A Multidisciplinary Approach to Support HIV/AIDS Care and Treatment Programs).

Faculty

Brown University has [clear policies and programs to promote and retain diverse faculty](#). The Office of Institutional Diversity partners with Departments in faculty recruitment, and the University has a special "target of opportunity" program to further enhance diversity among the faculty. The Brown School of Public Health follows University policies and benefits from University programs for faculty recruitment and retention.

The School also continues to refine strategies for **recruitment of diverse faculty** initiated in AY2018-19. For all searches, we have codified the following steps to increase representational diversity. First, we start the search process with Associate Dean for Diversity and Inclusion

Caroline Kuo and Associate Dean for Faculty Affairs Nancy Barnett engaging the search committee chair, department chair, and the diversity representative assigned to the search committee. This engagement is designed to better prepare the diversity representatives on every search committee by gaining both their and the search chair's buy-in on the value of intentional recruitment strategies for diverse faculty candidates. Second, we provide examples of diversity statements and other language that can be utilized in advertisements to signal to applicants the diversity, inclusion, and equity values of our School. Third, we have worked to expand the list of places where we advertise, focusing on new avenues where we can reach diverse faculty talent and strengthen the pool of diverse faculty who apply to positions at the School. Fourth, we have aggregated best practices for increasing representation in the faculty search processes, shared these resources, and developed a roadmap to guide the search chair and to arm the diversity representative with methods to promote more active engagement and support of search committee members around diversity. We piloted this roadmap in AY2018-19 and refined it in AY2019-20. The idea of this roadmap is to develop a replicable protocol that can institutionalize best practices to support the recruitment of diverse faculty in future searches. We also have seen more active utilization of the Office of Institutional Equity and Diversity (OIED) support (such as review of advertisement language), buy-in of the search chairs around diversity goals for recruitment, preparation of diversity representatives, and engagement of committee members in discussion regarding issues such as how implicit bias can affect searches. These School strategies are complemented by department-specific changes including strategic use of advertising budgets to support a diverse applicant pool. We continue to explore new strategies to increase representational diversity during recruitment, including requiring all search committee members to train in unconscious bias, and requesting that applicants submit a diversity statement describing how they wish to contribute to the School's mission around diversity, inclusion, and equity should they join the School's faculty.

Strategies to increase representational diversity require including developing approaches to enhance **retention of diverse faculty**. We have enhanced support for faculty who wish to utilize National Institutes of Health diversity grant mechanisms (including diversity supplements and grants) to support students, postdoctoral trainees, and early career faculty. In addition to advertising these grant opportunities, facilitating hands-on assistance in the application procedures via Associate Deans Jennifer Tidey and Caroline Kuo, we now complete a data pull so that faculty who are eligible for these supplements are notified early on. Our previous and current Associate Deans for Research launched a number of initiatives designed to increase efficiency in research (such as centralized School assistance for IRB applications) and to retain faculty (such as pilot awards designed to increase the probability of externally funded grants). Although these initiatives target all faculty regardless of identity, these new resources can help even the playing field for external factors that might adversely affect retention of diverse talented faculty. We have also formed the School's **Faculty of Color Group**. This group holds regular semester events attended by Deans and other University leadership to raise challenges faced by this group, discuss successful strategies, create formal networks for peer mentorship, and build capacity. These School efforts are complemented by formalized professional mentorship within the School to underrepresented minority faculty within their departments. The School also participates in various University activities designed to support minority faculty, including the **Brown University Faculty of Color** network, which offers mentorship, networking, and social events, and **Women in Science and Medicine** (which includes faculty from historically underrepresented groups), a professional networking group at Brown that covers topical areas for career development for women, and more.

Postdoctoral fellows are an important population in the faculty pipeline. We have hosted 2 of the prestigious University **Presidential Postdoctoral Fellows** who have both joined the faculty. The Center for Alcohol and Addiction Studies is part of the Psychology Training Consortium, which has a long-standing Diversity Committee (co-chaired by Assistant Professor Jacob van den Berg). This committee runs an active Diversity Mentoring Program designed to support postdoctoral fellows (and early career faculty) who are from diverse backgrounds and/or involved in research with diverse populations.

The School continues to be engaged in international/global diversity training initiatives:

- Brown University and the University of the Philippines Training Program for the Prevention of HIV in Vulnerable Populations. PI: Don Operario, NIH Grant# 1D43TW010565, 2017-2022.
- Building Research in Interdisciplinary Gender and HIV through the Social Sciences (The BRIDGES Programme). PIs: Christopher Colvin (University of Cape Town) and Mark Lurie (Brown University), NIH Grant# 1D43TW011308, 2019-2024.
- Brown Moi Partnership for Biostatistics Training in HIV. PI: Joseph Hogan, NIH Grant# 1D43TW010050, 2015-2020.

4) List the actions and strategies identified that create and maintain a culturally competent environment and describe the process used to develop them. The description addresses curricular requirements; assurance that students are exposed to faculty, staff, preceptors, guest lecturers and community agencies reflective of the diversity in their communities; and faculty and student scholarship and/or community engagement activities.

We utilize several strategies to engage our entire School community and to maintain momentum on building a diverse, inclusive, and equitable environment. First, we have built infrastructure for diversity and inclusion action implementation spearheaded by three main groups: (1) a School-wide diversity and inclusion committee of faculty, students, and staff nominated by their peers for a two-year service term, and representing departments, centers, and institutes across the School; (2) a School-wide staff advisory committee whose members serve a one-year term and are nominated by previous committee members as well as School leadership; (3) School leadership (Deans, Executive Committee, Center Directors); and (4) School community members. Two departments (Biostatistics and Health Services, Policy and Practice) and two centers (Center for Alcohol and Addiction Studies and the Mindfulness Center) have also chosen to meet their unique diversity and inclusion needs via their own department and/or center diversity committees.

At the half-way point of the current Diversity and Inclusion Plan (DIAP) implementation, we held a diversity and inclusion **Strategic Retreat** to evaluate the School's progress towards the 5-year DIAP goals. This retreat was designed to evaluate whether we needed to modify the Diversity and Inclusion Plan to meet new emerging needs. Several new areas of focus were identified in this retreat and will guide the remainder of the Diversity and Inclusion Plan strategy for the remainder of the original 5-year period. On an annual basis, the School-wide diversity and inclusion committee assesses how well we are progressing toward objectives in the DIAP, and prioritizes activities to be accomplished in the next year. This complements the external University process described under documentation request 6. We have also built a robust diversity and inclusion communication infrastructure and continue to utilize the communication infrastructure to ensure that we respond to emerging needs around equity, diversity, and inclusion. These channels include: (1) a dedicated diversity and inclusion website for the School; (2) a dedicated email address for diversity and inclusion at the School; (3) an electronic suggestion box; and (4) weekly office hours for diversity and inclusion. School leadership meetings help to coordinate activities around equity, diversity, and inclusion across the leadership structure. Diversity and inclusion remains a standing agenda topic at regularly scheduled committee meetings, including Deans meetings (weekly), Executive Committee (bi-weekly), Graduate Studies Committee (monthly), Undergraduate Studies Committee (monthly), School-wide Curriculum Committee (monthly), and departmental/program faculty and curriculum committees (monthly). We use these standing agendas to identify new challenges, gain and maintain leadership buy-in and insight for various diversity and inclusion activities, and update leadership on DIAP implementation.

The School's Public Health Curriculum Committee (PHCC) also reviews new course proposals to identify diversity within existing courses and new opportunities to increase diversity in course curricula. Furthermore, given data that suggest including a diversity statement in syllabi can set expectations for classroom environments and show students that faculty value and respect

difference in intellectual discussions (Cornell Center for Teaching Excellence resource, POD Network conference, 2011), the PHCC also regularly reviews course syllabi and suggests opportunities for refinement of diversity statements.

The School's previous and current Associate Deans for Academic Affairs have led the following activities to **expand and enhance curricular offerings** around diversity and inclusion. A series of Master's program strategic retreats have been conducted to enhance a cohesive strategy of growth. There has been development of courses that enhance learning around diversity, inclusion, and equity in relation to public health, including consideration of new tracks in the MPH program that prepare all students in all degree programs to work with diverse populations. Class offerings include the following:

- PHP 0400:   Health Disparities
- PHP 1070:   The Burden of Disease in Developing Countries
- PHP 1100:   Comparative Health Care Systems
- PHP 1680I: Pathology to Power: Disability, Health and Community
- PHP 1680U: Intersectionality and Health Inequities
- PHP 1650:   Race, Racism and Health
- PHP 1820:   Designing Education for Better Prisoner & Community Health
- PHP 1900H: Racial/Ethnic, Socioeconomic, and Other Group-Based Health Disparities in the US
- PHP 1920:   Social Determinants of Health
- PHP 2325:   Place Matters: Exploring Community-Level Contexts on Health Behaviors, Outcomes and Disparities
- PHP 2365:   Public Health Issues in LGBT Populations
- PHP 2445:   Minding the Gap: The U.S. Healthcare Safety Net
- PHP 2710:   Interdisciplinary Perspectives on Disability and Death in the Global South
- UNIV 1089: Global Dynamics and Critical Perspectives on Immigrant Entrepreneurship in the US

The following courses provide methodological approaches to studying health disparities and other issues related to diversity and inclusion:

- PHP 0850:   Fundamentals of Epidemiology
- PHP 2018:   Epidemiology of Cardio-Metabolic Health
- PHP 2040:   Applied Research Methods
- PHP 2120:   Introduction to Methods in Epidemiologic Research
- PHP 2150:   Foundations in Epidemiologic Research Methods
- PHP 2360:   Designing and Evaluating Public Health Interventions
- PHP 2511:   Applied Regression Analysis

The following courses provide exposure to diverse populations in international settings:

- PHP 1070:   The Burden of Disease in Developing Countries
- PHP 1160:   The Global Burden of Mental Illness: A Public Health Approach
- PHP 1400:   HIV/AIDS in Africa: A Multidisciplinary Approach to Support HIV/AIDS Care and Treatment Programs
- PHP 1802S: Human Security and Humanitarian Response: Increasing Effectiveness & Accountability
- PHP 2025:   Including the Excluded: Global Health Ethics
- PHP 2220C: Perinatal Epidemiology: Women and Infants' Health during Pregnancy in a Global Context
- PHP 2480:   Selected Topics in Global Health Economics
- PHP 2720:   Implementing Public Health Programs and Interventions in the Global South
- PHP 2740:   Global Health Thesis Seminar: Learning Global Health by Doing Global Health

- PHP 2760: Critical Perspectives in Global Health
- UNIV 1089: Global Dynamics and Critical Perspectives on Immigrant Entrepreneurship in the US

Some departments elected to complete a review to identify gaps/opportunities for enhancing diversity-related content in current curriculum. This review has yielded wide-ranging changes in a number of courses including class discussions, required readings, and assignments. For example, enhanced curricular offerings emerged from the Department of Biostatistics. As part of the Data Science Initiative, the department led a course in Probability, Statistics, and Machine Learning; for the final project, students were required to analyze a dataset of 467 deaths by police from Jan-May 2015 that was originally reported in *The Guardian*. This dataset had information on victims as well as the location where the victim was killed. Students modeled the data to determine whether the killings indicated any racial bias. As part of a new track in data science, the Department of Biostatistics also offered a course in Health Data Science that had a different topic each week, often presented by outside speakers. Among the topics covered were Private Health Insurance Data, Medicare Data, Electronic Medical Records, Clinical Decision Making, and Combining Data from Different Sources; classes were organized with discussion and many of these topics addressed issues of inequality.

We have also focused on improving inclusive teaching. For example, we now send out an excellence in teaching practices packet at the beginning of each academic year that (1) encourages faculty to include or revisit their existing diversity and inclusion statements and (2) aggregates resources for inclusive teaching, drawing from resources across campus as well as links to external resources for inclusive teaching. There have been several revised syllabi as a result. There have been innovations within specific departments, institutes, and centers. For example, the Department of Behavioral and Social Sciences completed piloting of set of course evaluation questions for assessing inclusion in the classroom environment. This was done because of the recognition that generating data in the form of student feedback is important for refining faculty performance in diverse and inclusive teaching practices. The chair, Dr. Christopher Kahler, also sits on the University committee on the course feedback tool. As a result, course evaluation questions added by this Department have also informed efforts at the University level. Finally, in designing the Health Behavior concentration within the MPH, the Department of Behavioral and Social Sciences instituted a requirement for students to take at least one course related to diversity and health disparities/health equity.

The School has also supported a number of initiatives to enrich scholarly learning outside of the classroom around the issues of diversity and inclusion as they relate to public health science and careers. This has included various local, regional, and national research, practicum, and other learning opportunities for students. Examples include the following:

Rhode Island Public Health Institute (RIPHI): The Rhode Island Public Health Institute's mission is to promote community health and to eliminate health disparities in Rhode Island and beyond. RIPHI is directed by Dr. Amy Nunn. The RIPHI is a significant entity at Brown University, in that it was established to be a nonprofit organization that could receive funding for projects in public health that are not specifically categorized as "research." RIPHI partners with Brown University, the Rhode Island Department of Health, and community agencies to develop innovative public health programs, conduct translational and policy research, and train students and public health practitioners. RIPHI's community programs reflect commitment to developing effective, evidence-based interventions that create positive change in communities. Areas of emphasis are Public Health Programs and Community Service, Community Engagement in Programs and Research, Educational Training in Public Health, Translational Research, and Public Policy and Dissemination of Best Public Health Practices. Examples where students can learn from and conduct research with community partners include Food on the Move, a year-round mobile market aimed at reducing food insecurity, including a 50% discount on produce purchased with Supplemental Nutrition Assistance Program (SNAP) dollars. Another example includes Open Door Health, which provides primary and sexual health care to LGBTQ Rhode

Islanders and the community at large. Two current programs are faith-based, and not located in Rhode Island (Philly Faith in Action, Mississippi Faith in Action).

Brown University and the University of the Philippines Training Program for the Prevention of HIV in Vulnerable Populations: The School has an NIH D43 that establishes a partnership between the University of the Philippines Manila (UPM) and Brown University. This training program builds on a previous successful partnership and collaboration between UPM and Brown: the Fogarty AIDS International Training Research Program (AITRP), which trained 21 HIV scientists in the Philippines on clinical aspects of HIV infection, basic HIV epidemiology, and behavioral prevention counseling. The program is further expanding research and educational/curricular capacity at UPM by: (1) Using long-term training to expand the cohort of research scientists focusing on HIV intervention research with men who have sex with men (MSM) and transgender women in the Philippines [2 PhD and 5 master's students over 5 years]; (2) Facilitating revision and expansion of UPM curriculum on HIV interventions with vulnerable populations; and (3) Establishing an annual Workshop for Research on HIV Interventions with Vulnerable Populations, based at UPM, for dissemination of research findings, professional networking, and mobilizing new research projects.

Brown University and the University of Cape Town Training Program for Social Science HIV: The School had an NIH R24 partnership with the University of Cape Town's School of Public Health and Family Medicine (UCT-SPHFM). This partnership had the overarching goal of developing a new cadre of rigorously trained HIV social scientists who can provide sustainable interdisciplinary solutions to HIV/AIDS. Using a model of bi-directional exchange, the partnership leveraged investments by building on natural synergies between our institutions, which have a history of excellence, complementary strengths, and an existing foundation of successful collaborative research. Our partnership drew on Brown's experience in social and behavioral science HIV/AIDS research, including the Department of Behavioral and Social Sciences, to offer enhanced technical capacity for development of a similar new Division at UCT-SPHFM. Although the R24 has now ended (and the mechanism was not renewable), we accomplished a great deal including: 1) development of academic capacity through curriculum development and strengthened teaching and mentoring systems, 2) fostering a culture of excellence in the interdisciplinary HIV social science research environment, and 3) building on these investments to create innovative social science research opportunities in three strategic areas, or GAP themes: Gender in HIV/AIDS Risk and Response, Antiretroviral Therapy Adherence and Expansion, and HIV Prevention for Women, Youth and Families.

BRIDGES Training Programme: The School has built on the previous NIH R24 described above (Brown University and the University of Cape Town Training Program for Social Science HIV) for a new NIH D43. This D43 training program seeks to invest in developing our advanced graduate training—of PhD and postdoctoral fellows—in priority research areas of Gender and HIV. The overall objective of the BRIDGES training program is to strengthen the institutional training platform for innovative gender and HIV social science research in South/sub-Saharan Africa. The project cuts across global, national, and NIH "high priorities" for HIV research in its two Thematic Areas of focus: 1) Reducing HIV incidence in adolescent girls and young women, and 2) Improving the performance of men in the HIV cascade. Training activities are delivered through collaboration with a diverse team from University of Cape Town alongside faculty from Brown University, the Desmond Tutu HIV Foundation (DTHF), South African Medical Research Council (SAMRC), and Sonke Gender Justice.

AMPATH program with Moi University in Kenya, Africa: The School participates in an institutional partnership with Kenya. Academic Model Providing Access to Healthcare (AMPATH) is a partnership between Moi University School of Medicine, Moi Teaching and Referral Hospital (Kenya's second national referral hospital), and a consortium of US medical schools led by Indiana University. AMPATH promotes and fosters a comprehensive approach to HIV/AIDS control that complements and enhances the existing health infrastructure. AMPATH addresses food and income security needs, delivers and monitors antiretroviral

treatment, and fosters prevention of HIV transmission through community-based health education and prevention of maternal to child transmission. Importantly, AMPATH works with all levels of health providers from the highest levels of government to community health workers (CHWs) to provide effective and culturally appropriate care. Dr. Joseph Hogan is Co-Director of the Biostatistics Core for AMPATH, and Dr. Omar Galarraga is a participating investigator. In addition, under a The Fogarty AIDS International Training Program in Clinical Research grant, five Public Health students are being supported (doctoral and master's, across Biostatistics, Epidemiology, and Behavioral and Social Sciences).

School faculty and students also participate in **Global Health Research Day**. The purpose of the annual Global Health Research Day is to showcase research done by a wide variety of Brown students working in global health. This includes Framework in Global Health Scholars, the Minority Health and Health Disparities International Research Training Program (MHIRT), Global Health Scholarly Concentrators from the Medical School, Global Health Track MPH students, Global Public Health ScM students, and students participating in the Brazil Community Health Fellows Program.

We also cultivate diversity, equity, and inclusion capacity through a large number of **events.** We highlight just a handful here including "Innovators in Achieving Black Health Equity: Building Environments that Produce Optimal Health for All," where alumni spoke about their contributions to address health equity as part of the 50-year celebration for the Black Student Walkout (Fall 2018); sponsorship of the Rhode Island Trans Health Conference (Spring 2019), including registration fees for any faculty, postdoctoral fellow, or student from the School who wanted to attend; "Strength and Resilience in African American Families" (Spring 2019), a keynote seminar by Dr. Stephanie Coard to celebrate Black History Month; and sponsorship of a satellite location for the student-led Minority Health Conference facilitated by doctoral student Shekinah Fashaw, who brought this conference to the School (2018, 2019, 2020). The office also continues to sponsor the popular School-wide reading group called "Learning & Engaging Around Diversity (LEAD)" which is student-initiated and student-run. The reading group explores various issues relevant to diversity and inclusion in public health.

We have discovered that **partnering with entities across campus** can help us achieve our goals, create new synergies across campus units, and promote interdisciplinary learning. For example, in Fall 2019, we partnered with the Office of Diversity and Multicultural Affairs at Warren Alpert Medical School (led by Associate Dean Joseph Diaz) to explore issues of race, ethics, and effective public health communication by examining "The Immortal Life of Henrietta Lacks." This included forming a reading club complemented by a film screening and panel discussion. We also partnered with the Center for the Study of Race and Ethnicity in America (led by Associate Dean of the Faculty for Special Initiatives and Director of the Center for the Study of Race and Ethnicity in America, Dr. Tricia Rose and Co-Director of the Center for the Study of Race and Ethnicity in America, Stephanie Larrieux) for a four-part lecture series in the 2018-2019 academic year examining innovative approaches towards health equity, especially among communities of color. This lecture series was supported through the generous sponsorship from OIED, the President's Office, and the Office of Diversity and Multicultural Affairs at the Medical School. The investment from these offices allowed us to bring well-known health equity innovators such as Dr. Mona Hanna-Attisha, who identified the lead crisis in Flint, Michigan.

5) Provide quantitative and qualitative data that document the school's approaches, successes and/or challenges in increasing representation and supporting persistence and ongoing success of the priority population(s) defined in documentation request 1.

We value many dimensions of diversity as reflected in our diversity statement under documentation request 1. Data reported below do not reflect all aspects of diversity that we wish to cultivate. This is because data are limited to aspects of identity that are allowable as categories for mandatory data collection, e.g., race and sex.

<u>Students</u>

For students, our latest data from 2019-2020 show that we have exceeded the goal of 18% set in our last CEPH self-study process for graduate students, with 19% representation from historically underrepresented (HUG) minorities (see Table G.1.1).

Table G.1.1. **Proportion of Underrepresented Groups for School of Public Health Undergraduate and Graduate Students**								
Category/Definition	Goal**	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Undergraduate public health concentrators: historically underrepresented racial/ethnic minorities*	NA†	19.2%	21.6%	38.1%	37.0%	30.6%	29.0%	30.6%
Undergraduate biostatistics concentrators (counted within public health, starting AY 2016-2017)*	NA†	NA	NA	NA	7.7%	0.0%	0.0%	11.1%
Graduate student application pool: historically underrepresented racial/ethnic minorities*	15.0%	13.0%	11.0%	9.9%	10.5%	9.3%	10.5%	11.4%
Incoming graduate students: historically underrepresented racial/ethnic minorities*	18.0%	14.0%	12.9%	12.4%	17.6%	6.1%	21.2%	19.1%
**Five-year goals (AY 2020-21) based on the 2015 CEPH accreditation self-study *Data reflect the application pool for the academic year shown. If the same candidate applies to more than one program, they are double counted. We exclude special/non-degree students. We compared graduate school generated application data with registrar data; we present the registrar data, which is based off of actual enrollment data. † No goal was provided in the 2015 CEPH accreditation self-study. The School does not control admissions for undergraduate concentrators in public health, but we do track data on this.								

Success in increasing student diversity reflects new strategic efforts. For **Fall Preview Day** (where potential applicants are invited to come visit Brown and meet faculty and students, fully funded by Brown), our success increases each year. For example, in 2019, 5 of the 12 visiting students applied for admission for AY 2020-2021. For **Super Monday** (where diverse students who have been offered admission are invited to visit Brown and meet faculty and students, fully funded by Brown), our success also increases each year. We are also seeing successful yield from new recruitment venues; for example, Associate Dean for Diversity and Inclusion recruits at the Annual Biomedical Research Conference for Minority Students (ABRCMS). This conference is focused on long-term yield because many sophomores and juniors attend. In

2019, 4 out of 39 students we had contact with applied for AY 2020-2021, and 1 was offered admission with a scholarship.

Faculty

The School has **43 tenured/tenure-track faculty**. There are 5 HUG faculty (12% of the tenured/tenure-track faculty). The HUG and sex distributions have remained relatively constant due to the limited opportunities to hire in this track, so change in the aggregate numbers is gradual. HUG faculty members are concentrated early in the career pipeline. (See Table G.1.2).

Table G.1.2.
Summary of School of Public Health Tenured and Tenure-Track Faculty

		2015-2016	2016-2017	2017-2018	2018-2019	2018-2019				
		All	All	All	All	BIOST	BSS	EPI	HSPP	All
Professor	Total	17	17	19	20	4	7	6	5	22
	HUG	1	1	1	1	0	1	0	0	1
	Female	4	4	5	5	1	2	1	2	6
Associate	Total	5	6	9	12	1	4	5	3	13
	HUG	0	0	1	1	0	1	1	1	3
	Female	1	1	1	1	0	2	1	1	4
Assistant	Total	12	10	9	7	4	1	2	1	8
	HUG	3	3	3	3	1	0	0	0	1
	Female	4	3	3	4	2	0	2	0	4
All	Total	**35**	**33**	**37**	**39**	9	12	13	9	**43**
	HUG	**4 (11%)**	**4 (12%)**	**5 (13%)**	**5 (13%)**	1	2	1	1	**5 (12%)**
	Female	**9 (26%)**	**8 (24%)**	**9 (24%)**	**10 (26%)**	3	4	4	3	**14 (33%)**

BIOST=Biostatistics; BSS=Behavioral and Social Sciences; EPI=Epidemiology; HSPP=Health Services, Policy and Practice

The School has 70 research and term track faculty whose primary appointments are in one of the SPH departments. There are 6 research and term faculty (9%) who identify as HUG (see Table G.1.3). This has been an improvement over the past few years.

Table G.1.3.
Summary of Research and Term Faculty with Primary Appointments in School of Public Health

		2015-2016	2016-2017	2017-2018	2018-2019	2018-2019				
		All	All	All	All	BIOST	BSS	EPI	HSPP	All
Professor	Total	6	6	7	11	1	4	1	5	11
	HUG	0	0	0	0	0	0	0	1	1
	Female	5	5	5	7	0	4	0	3	7
Associate	Total	7	9	12	17	2	9	2	3	16
	HUG	1	1	1	1	0	0	0	0	0
	Female	2	4	7	12	0	9	2	0	11
Assistant	Total	27	28	34	37	1	26	2	14	43
	HUG	1	0	3	10	0	4	0	1	5
	Female	19	20	21	22	1	18	2	10	31
All	Total	**40**	**43**	**53**	**65**	4	39	5	22	**70**
	HUG	**2 (5%)**	**1 (2%)**	**4 (8%)**	**11 (17%)**	0	4	0	2	**6 (9%)**
						1	31	4	13	

	Female	26 (65%)	29 (67%)	33 (62%)	42 (65%)					49 (70%)

BIOST=Biostatistics; BSS=Behavioral and Social Sciences; EPI=Epidemiology; HSPP=Health Services, Policy and Practice

6) Provide student and faculty (and staff, if applicable) perceptions of the school's climate regarding diversity and cultural competence.

Brown University has clear, strong policies to support a climate free of harassment and discrimination, where diversity is supported. These policies are posted on the University's website. The Brown University Title IX officer, Ms. Rene Davis, leads the University-wide initiative to ensure compliance with federal and institutional standards about non-discrimination. The School follows the Brown University policies and is committed to maintaining a supportive environment. We also offer School-specific trainings by experts designed to build competence in an optimal climate. Examples of onsite training focused on policy and practice include Title IX policies and responsible employee roles, Cleary Act policies and responsibilities, and best practices in implementing active bystander intervention actions to prevent harassment and discrimination.

Brown University has a strong emphasis on supporting diversity in the working and learning environment. This priority is clearly stated on the University website. The University also sponsors events and programs, including the current diversity and inclusion professional development program, the goal of which is to develop "concepts, skills, and effective approaches to engaging thoughtfully in a diverse, equitable, and inclusive academic community." The project has included a series of lectures on diversity-related topics. There are also specific training programs for faculty, staff, and students, including online modules and in-person learning sessions (see here, for example). We also offer School-specific trainings by experts designed to build competence in diversity, inclusion, and equity. For example, in research centers and departments, we offered training in how to combat implicit and unconscious bias, training in how to challenge micro aggressions, discussions on agreed upon positive climate norms, and facilitated discussions on how to challenge negative climate norms.

In the School, in partnership with the University, we evaluate climate every two years. Our most recent climate data on the School community comes from the 2018 Campus Climate Survey, released in 2019. Key data points about perceptions of School climate related to diversity and inclusion are as follows:

Students

Undergraduate students join the School in their junior year, after they declare their concentration (i.e., major) as public health. The majority of diversity programming for undergraduates occurs at the College, which is responsible for the majority of undergraduate activities at Brown. As such, no data were available for undergraduates on department-specific competence around discussing matters of diversity, equity, and inclusion.

Undergraduate students in the School were asked to evaluate the implementation of the Diversity and Inclusion Action Plan with the following climate points, rated on a scale of 1 "strongly disagree" to 5 "strongly agree":

1. ***I have noticed a positive shift in faculty's competence to discuss matters of diversity, equity and inclusion in the classroom.***
Undergraduate students are reflecting on all faculty, and it is noteworthy that their exposure to faculty in the School primarily occurs in their junior and senior year. Public Health undergraduate students in the University had an average response of 3.14, which is slightly lower on this climate point than the University as a whole (3.32).

2. ***My knowledge base on matters of diversity, equity, and inclusion has increased.***
   Public Health undergraduate students had an average response 3.75. The School performed on par for this climate point compared to the University as a whole (3.76).
3. ***Opportunities to increase my knowledge base and skill set on matters of diversity, equity, and inclusion have been made available to me.***
   Public Health undergraduate students had an average response 3.79. The School performed on par for this climate point compared to the University as a whole (3.79).
4. ***There has been a noticeable effort to increase support for undergraduate students from HUGs at Brown.***
   In this climate point, undergraduate students are reflecting on on-campus support, which primarily takes place via the undergraduate College in Brown rather than the School because concentrations are declared sophomore year, and thus exposure to the School occurs primarily in their last two years. Public Health undergraduate students had an average response 3.04. The School performed slightly lower on this climate point compared to the University as a whole (3.35).

Graduate students in the School were asked to evaluate the implementation of the Diversity and Inclusion Action Plan with the following climate points, rated on a scale of 1 "strongly disagree" to 5 "strongly agree":

1. ***I have noticed a positive shift in faculty's competence to discuss matters of diversity, equity and inclusion in the classroom.***
   Graduate students had an average response 3.21. The School performed better on this climate point than the University as a whole (3.05).
2. ***I have noticed a positive shift in my department's competence to address and navigate matters of diversity, equity, and inclusion.***
   Graduate students had an average response 3.60. The School performed better on this climate point than the University as a whole (3.19).
3. ***My knowledge base on matters of diversity, equity, and inclusion has increased.***
   Graduate students had an average response 3.67. The School performed better on this climate point compared to the University as a whole (3.35).
4. ***Opportunities to increase my knowledge base and skill set on matters of diversity, equity, and inclusion have been made available to me.***
   Graduate students had an average response 3.93. The School performed better on this climate point compared to the University as a whole (3.50).
5. ***There has been a noticeable effort to increase support for graduate students from HUGs at Brown.***
   Graduate students had an average response 3.50. The School performed better on this climate point compared to the University as a whole (3.16).

Faculty

Faculty in the School were asked to comment on climate on a scale of 1 "strongly disagree" to 5 "strongly agree." They noted:

1. ***My department is a welcoming place for faculty from historically underrepresented groups (HUG). (The department here refers to any department in the School of Public Health).***
   Faculty had an average response of 3.95. The School performed on par for this climate point with University as a whole (3.98).

Faculty in the School were also asked to evaluate the implementation of the Diversity and Inclusion Action Plan:

2. ***I have noticed a positive shift in my department's competence to address and navigate matters of diversity, equity, and inclusion.***
   Faculty had an average response of 3.81, with 61% of faculty respondents noting "agree" or "strongly agree." The School performed better on this climate point than the University as a whole (3.60).
3. ***My knowledge base on matters of diversity, equity, and inclusion has increased.***
   Faculty had an average response of 3.90. The School performed slightly better on this climate point compared to the University as a whole (3.81).
4. ***Opportunities to increase my knowledge base and skill set on matters of diversity, equity, and inclusion have been made available to me.***
   Faculty had an average response of 4.03. The School performed better on this climate point than the University as a whole (3.85).

Staff

Staff were asked to comment on climate on a scale of 1 "strongly disagree" to 5 "strongly agree." They noted:

1. ***My department is a welcoming place for staff from historically underrepresented groups (HUG). (The department here refers to any department in the School of Public Health).***
   Staff had an average response of 4.01. The School performed better on this climate point than the University as a whole (3.86).

Staff were asked to evaluate the implementation of the Diversity and Inclusion Action Plan:

2. ***I have noticed a positive shift in my department's competence to address and navigate matters of diversity, equity, and inclusion.***
   Staff had an average response of 3.67, with 61% of staff respondents noting "agree" or "strongly agree." The School performed better on this climate point than the University as a whole (3.60).
3. ***My knowledge base on matters of diversity, equity, and inclusion has increased.***
   Staff had an average response of 3.70.The School performed slightly lower on this climate point compared to the University as a whole (3.79).
4. ***Opportunities to increase my knowledge base and skill set on matters of diversity, equity, and inclusion have been made available to me.***
   Staff had an average response 3.87. The School performed better on this climate point than the University as a whole (3.84).

We also share data from the School's performance on the 5-year strategic plan (the Diversity and Inclusion Action Plan) for diversity, inclusion, and equity activities that is viewed as a "living" document and is updated each year. This plan is publicly posted for the Brown Community here. The School's Diversity and Inclusion Action Plan monitored and evaluated by the University's Office of Institutional Equity and Diversity, which includes written feedback on School performance from members of that office and the Provost. Each year since the plan has been in place, independent feedback has been extremely positive, with the School viewed as a standout among units within the University. For example, feedback on our annual progress have included the following illustrative comments:

- "*The School of Public Health continues to be exemplary in advancing diversity and inclusion at Brown. Your focus on retention of historically underrepresented groups (HUG) faculty is particularly notable and could offer useful insights to other departments across Brown that are facing similar issues. Similarly the School's*

attention to recruiting diverse graduate students is important and we expect to see progress on this front given the hiring of a new dean for diversity and inclusion at SPH."

- "*We found your investments in addressing faculty, student, and staff climate issues to be exemplary, especially the cross cutting efforts to improve climate School-wide (like the Women of Color Affinity Group and the Staff Advisory Committee).*"

- "*It is evident that you strive for a balanced approach to diversity and inclusion that is both proactive (expanding the curriculum for the upcoming academic year) and reactive (responding to the specific needs of students in your community such as those who are Undocumented/DACA identified).*"

- "*We are heartened by the significant progress that departments have made in promoting inclusive environments in their communities through open forums, representative task forces, and regular check-ins with faculty, students, and staff. We are similarly pleased that many departments have been successful in recruiting HUG faculty and/or graduate and undergraduate students to Brown*."

- "*The committee noted the School continues to make important progress in advancing compositional diversity. Your work to improve the faculty search process to cultivate diverse pools of outstanding candidates, and to successfully recruit these individuals are impressive. Similarly, your focus on retention are crucial and we look forward to engaging you in sharing best practices with other academic departments along this dimension.*"

- "*The School's commitment to sharing the responsibilities for advancing diversity and inclusion across the community of students, faculty and staff is evident and extremely important for ensuring long term sustainability; notably the efforts that the School has made to engage staff in this work and in investing in and supporting staff more broadly. The staff mentoring program is a model, as is the creation of the Staff Advisory Committee.*"

7) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: First, we used a collaborative process to form a strategic plan for diversity, inclusion, and equity, and we view this plan as a living document that can be adapted. This strategic plan is important for orienting the community to proactively engage collectively around goals. The "living" element of the plan is also important, as it allows the School to be nimble and to proactively address newly arising challenges around diversity, inclusion, and equity. Second, advancing diversity, inclusion, and equity are integrated as priorities in all portfolios in the School, including Faculty Affairs and Academic Affairs. For example, diversity, inclusion, and equity topics appear as regular agenda items in School leadership meetings and have also been incorporated as standing topics in department and research center faculty meetings. This approach ensures that ownership of these priorities is advanced by all in the School, and that ideas to achieve our goals are elicited from the community in a persistent manner. Third, we work to elevate different voices regarding how to advance diversity, inclusion, and equity through the School's standing committee on diversity (The Diversity and Inclusion Planning Committee) where there is shared responsibility with students, staff, postdoctoral fellows, and faculty nominated by their peers to serve, with service extending no more than two years (to limit burnout, and to share responsibility) and with a focus on ensuring that all members are engaged. Fourth, the School has put significant financial and human power investment into advancing diversity, inclusion, and equity, including creation of an office with clear leadership, staffing, and programmatic investment to achieve School goals in this portfolio. Fifth, we strive for a balanced approach to diversity and inclusion that is both proactive (cross-cutting efforts to improve climate school-wide like the

Women of Color Affinity Group, Faculty of Color Group, Students of Color Affinity Group) and reactive (responding to the specific needs of students in your community such as those who are Undocumented/DACA). Finally, we strive for a data-driven approach to guide our efforts, tracking progress towards goals and adapting strategy as needed to achieve goals via regular data collection and reporting efforts including the annual report reviewing diversity activities and the climate survey, both which are available publicly to the School and University community.

Challenges: Our ability to recruit and retain faculty and students from HUG backgrounds continues to be challenged by the unique composition of the School with limited tenure-track lines, limited "openings" of these lines, and a composition of faculty that is dominated by research-track faculty who are expected to generate grants (i.e., soft money) to cover 100% of their salary. This unique soft-money environment affects recruitment and retention outcomes that can be unpredictable and can impact student recruitment. For example, the grant environment can impact a faculty member's ability to support funding for doctoral students (whose costs are covered via grants) and master's students (whose research experiences may be supported by faculty research grants). The grant environment can reflect bias in external reviews for grant applications—with publications on NIH awards showing that minority faculty are adversely affected—which can affect our ability to achieve goals for both faculty and student diversity. The fact that our School is highly collaborative and consultative is both a strength and challenge. The emphasis on collaboration and consultation is a challenge in so far as this can slow the pace of responding to urgent crises.

Plans: We plan to continue efforts to advance diversity, inclusion, and equity, focusing on increasing representational diversity and expanding programming to address climate and inclusion, and to continue to deliver training and academics that substantively address issues of diversity, inclusion, and equity. We also want to expand our efforts to address financial barriers for graduate students from historically underrepresented backgrounds, especially at the master's level. Our efforts over the coming years will ensure that the work around diversity, inclusion, and equity remains central to the research, education, programming, and service of the School over the next accreditation period.

H1. Academic Advising

The school provides an accessible and supportive academic advising system for students. Each student has access, from the time of enrollment, to advisors who are actively engaged and knowledgeable about the school's curricula and about specific courses and programs of study. Qualified faculty and/or staff serve as advisors in monitoring student progress and identifying and supporting those who may experience difficulty in progressing through courses or completing other degree requirements. Orientation, including written guidance, is provided to all entering students.

1) Describe the school's academic advising services. If services differ by degree and/or concentration, a description should be provided for each public health degree offering.

   Academic advising for each of the public health degree offerings in the School are described below for the doctoral, master's, and undergraduate programs, respectively.

   Doctoral Programs

   Behavioral and Social Sciences (PhD): All students have primary research advisors and secondary advisors. Students are matched with a faculty advisor upon admission. Admission signifies willingness of one or more faculty members to serve as primary advisor. A student is generally admitted to work with a primary advisor based on match between student and faculty interests and availability of faculty. The primary advisor will typically provide funding for that student and serve as instructor for Independent Studies and as Dissertation advisor. The secondary advisor's role is as an additional source of guidance on timely completion of program milestones, general professional development, mentorship, and academic advocacy. Students meet with primary advisors regularly throughout the academic year and are prompted to meet with secondary advisors at least once per semester. Students and advisors create draft Individual Development Plans (IDPs) in their first semester of the program, and they meet annually to update their IDPs. The Director of Graduate Studies also provides academic and career advising to students as needed. A PhD Curriculum Completion Checklist is included in the Handbook for students to track the completion of their requirements and to use in advising meetings. The Department Manager maintains an official Program of Study for each student, and serves as a resource to students. Students may change advisors and are encouraged to consult with their primary and secondary advisors, or the Doctoral Program Director, to initiate such a change.

   Biostatistics (PhD): At the time of admission into the program, each student is assigned a faculty academic advisor. During the first two years of study, the academic advisor assists the student in planning for meeting degree requirements and objectives and in the process of course selection. The academic advisor is expected to be familiar with the student's academic background, particularly with respect to previous graduate coursework. The Graduate Program Director makes the assignment of an academic advisor. Students meet with their academic advisor two to three times per semester. In the initial meetings with the academic advisor, students plan a curricular program for up to two years. It is not necessary that this initial plan be adhered to throughout the two-year period, but it gives a rough outline of courses to be taken and milestones to be met. It is understood that in some cases an individual student may wish to change academic advisors. This can be done at any time by petitioning the Graduate Program Director. It is expected that if any problems or conflicts arise, students will discuss these first with their academic advisor, but may also contact the Graduate Program Director.

   Epidemiology (PhD): Each student is assigned a faculty academic advisor when admitted into the doctoral program. Advisors and students meet during orientation, prior to the start of classes, and review the general departmental timeline, expectations, and course plans for the upcoming semesters. Throughout the first two years of study, the academic advisor assists the student through the process of course selection to optimally meet degree requirements and objectives. The academic advisor is expected to be familiar with the student's academic background,

interests, career objectives, and previous graduate coursework. The assignment of an academic advisor is made by the Doctoral Graduate Program Director and Department Chair. Students meet with their academic advisor regularly throughout the semester, and at a minimum of two to three times per semester. Students have the option to change academic advisors at any time. If needed, the Doctoral Graduate Program Director is available to help orchestrate a change in academic advisor. Throughout their time in the program, students are informed that if any problems, concerns, or conflicts arise, students should discuss these first with their academic advisor, but may also contact the Doctoral Graduate Program Director at any time.

Health Services Research (PhD): The Director of Graduate Studies assigns each incoming student an academic advisor to assist the student in charting an academic course to assure that key benchmarks are met. The advisor is expected to be familiar with the student's academic background, particularly with respect to previous graduate coursework. The academic advisor not only assists in the selection of courses, but also in shaping academic, career, and personal goals. Further, the academic advisor assists the student in developing strategies for achieving these goals. Students are assigned an advisor based on expressed interests and workload capacity of the faculty member to take on mentorship responsibility. Students meet with their academic advisor at least once per semester. In the initial meetings with the academic advisor, students plan a curricular program for up to two years and together complete an Individual Development Plan as well as a mentor-mentee contract. The plan includes setting target dates for completion of milestones. It is understood that in some cases an individual student may wish to change academic advisors. This can be done any time by requesting a change from the Graduate Program Director. In addition to an academic faculty advisor, there is an alumni mentor program that pairs a health services research alum with each first-year student as well as a peer mentoring program that assigns all incoming students to a big sibling. As the student's research trajectory becomes clear, the academic advisor is formally replaced by the dissertation advisor. The student selects the dissertation advisor who may be the same as the academic advisor.

Master's Programs

Biostatistics (AM/ScM): At the time of admission into the program, each student is assigned a faculty academic advisor. The academic advisor assists the student in planning for meeting degree requirements and objectives and in the process of course selection. The academic advisor is expected to be familiar with the student's academic background, particularly with respect to previous graduate coursework. The assignment of an academic advisor is made by the Graduate Program Director. Students meet with their academic advisor several times per semester, in both individual and group settings. In the initial meetings with the academic advisor, students plan a curricular program, considerate of current and future semesters. Students are encouraged to meet with their advisors as needed. It is understood that in some cases an individual student may wish to change academic advisors. This can be done at any time by petitioning the Graduate Program Director.

Through the advising process and participation in the Master's Journal Club, students are led through the process of approaching and engaging faculty and are encouraged to investigate research areas of interest. Once a faculty member and research topic has been identified for their thesis, ScM students may change their primary advisor to their selected thesis advisor. The Master's Journal Club and Career Information sessions are also prime opportunities for academic and career development advising through group discussions led by or held privately with the Associate Director of the Master's Program (see ERF).

Clinical and Translational Research (CTR; ScM): Because this is a small program, the Program Director serves as the academic advisor for all students assisting with any issues related to completing degree requirements. The program maintains a progress summary sheet for each student, documenting all courses taken and how each course satisfies the curriculum requirements. The summary sheet also documents when the thesis topic, thesis advisor, and thesis reader are approved. Twice per year the progress of all students is formally reviewed with

written feedback to the students. Throughout their time in the program, students participate in a required seminar series that focuses on research mentoring, including providing feedback on research plans/projects, including the thesis. These sessions are led by two senior faculty, including the Chair of the Department of Health Services, Policy and Practice and the Program Director. Each student must have his or her thesis proposal and choice of the thesis advisor/reader team approved by the Program Director to assure that it is appropriate for the program and the student's training goals. Once the thesis proposal and advising team is approved, it is the responsibility of the thesis advisor and thesis reader to monitor the progress of the student and determine when the student's thesis is satisfactory. The thesis advisor, thesis reader, and Program Director sign off on the thesis when it is completed.

Master of Public Health (MPH): The MPH Program has a structured advising system, whereby students are assigned in groups of five or six students to one faculty Core Advisor. The students meet in small groups with their respective faculty Core Advisor in regularly scheduled sessions during their first year in the MPH Program. These required sessions include a meeting during orientation, four meetings during the Fall semester, and four meetings during the Spring semester. During the required small group Core Advisor sessions, the students learn about research and present core concepts of public health under the guidance of the faculty Core Advisor. In addition, the students explore applied public health experience opportunities; consider strategies for formulating thesis projects, as well as connecting with appropriate thesis advisors and readers; and discuss course selections aligned with specific individual career goals. Students are encouraged to meet individually with their respective faculty Core Advisor in addition to the scheduled small group meetings.

All MPH students have ready access to the MPH Program Director, MPH Associate Director of Public Health Practice, MPH Associate Director of Dual Degree Programs, Interdisciplinary Education Programs Manager, Interdisciplinary Education Programs Coordinator, and Coordinator for Applied Learning Experiences & Professional Development for advice and guidance on course selections, applied public health experience opportunities, and thesis topics.

All students submit a proposed MPH academic course plan by the start of the second semester, which includes the respective student's intended MPH concentration. Each academic plan is reviewed by the MPH Program Director, who provides feedback, including required course adjustments, if needed, for each student's plan. Each student's academic course plan receives final approval from the MPH Program Director, and a copy of the approved plan is uploaded to Canvas, the electronic course site, for each respective MPH student's review. If the students want to include elective courses on their course plans that are not on the approved MPH elective list, they must seek approval from the MPH Program Director. Students are encouraged to meet and discuss any such courses with the MPH Program Director before they submit their course plans.

In addition to the MPH faculty and staff, each MPH concentration has a faculty lead, who is available to discuss their respective concentration. During the Fall semester, the MPH Program schedules a lunch time session with each of the concentration leads, and students are encouraged to attend the sessions to learn more about the various concentrations.

By the end of the first academic year, MPH students are required to submit a thesis proposal, which includes the approval of the respective thesis advisor and thesis reader. Once the thesis proposal is approved by the MPH Associate Director of Public Health Practice and respective MPH Concentration Leader, students are advised primarily by their respective thesis advising team; however, students can also schedule individual meetings with their faculty Core Advisor.

Undergraduate Programs

Public Health (AB): The University maintains an extensive advising structure that supports students through their academic career. In the first two years, this includes assigned first- and second-year advisors, additional Faculty Advising Fellows and Randall Advisors, specialized

deans, and a peer advising system. The University requires undergraduate students to declare a concentration by the end of their sophomore year, whereupon a concentration advisor is added to their advising scaffolding, serving as a primary resource on the concentration and their academic interests. In order to declare Public Health as a concentration, students first meet with the Program Coordinator for Student Engagement, who offers regular group sessions and is available for individual meetings. At this meeting, students learn about the concentration requirements, discuss their course plans, and are given access to declare in the ASK (Advising Sidekick) portal, which provides an electronic interface that tracks interaction between the advisor and students as they progress through the concentration. The student's concentration declaration in ASK consists of three parts: (1) Personal Statement, addressing topics related to choice of concentration, experiences consistent with Brown's ideals for a liberal education, and work done so far to improve writing abilities; (2) Course Plan: Proposed list and timing of courses planned to take to meet concentration requirements; and (3) Additional Academic Goals.

Upon submitting their declaration, students are randomly assigned a concentration advisor from a team of five to six advisors. The declaration provides the advisor with rich material about the new advisee in preparation for their first meeting. Advisors are notified of new declarations and reach out to welcome students. Students are encouraged to meet with their advisor after declaring to begin the advising and mentoring relationship, obtain answers to any remaining questions, and finalize the concentration plan. Advisors list their office hours/availability and contact information on the Undergraduate Advisors page. Students seek support from their advisors for a variety of reasons, namely: Concentration requirements; Course substitutions; AP credits; Study abroad/away; Transferring credits from other institutions; the 5th-year MPH program; Double concentrating; Brown's writing requirement; Honors track in Public Health; Independent studies; Independent concentration; Academic difficulties; and Career advice.

Statistics: The Director of the Statistics Concentration is the faculty academic advisor. The academic advisor assists the student in planning for meeting degree requirements and objectives and in the process of course selection. The academic advisor is expected to be familiar with the student's academic background.

Students meet with the academic advisor several times during the academic year, in individual settings. During the meetings with the academic advisor, students plan the curricular program, considerate of current and future semesters, as well as plan for work after graduation. Students are encouraged to meet with their advisor as needed.

Through the advising process and through meetings with the academic advisor, students are led through the process of approaching and engaging faculty and encouraged to investigate research areas of interest for capstone or thesis topics. Students identify their thesis/capstone advisor by the first semester of the senior year. The thesis/capstone advisor leads the student through a research project through independent study. Sometimes, the advisor may not be from the School of Public Health, which requires a written statement of the proposed work at the start of the independent study.

2) Explain how advisors are selected and oriented to their roles and responsibilities.

Selection and orientation of academic advisors for each of the public health degree offerings in the School are described below for the doctoral, master's, and undergraduate programs, respectively.

<u>Doctoral Programs</u>

Behavioral and Social Sciences (PhD): Faculty indicate interest in advising doctoral students, and available advisors are listed on the Behavioral and Social Health Sciences (BSHS) website. The admissions process uses a fit model; applicants identify their research interests and potential advisors, and potential advisors are consulted during the admissions process. By the time

students are admitted into the program, faculty advisor assignments and corresponding funding have already been coordinated and finalized. Secondary advisors are assigned once students arrive on campus, based on their interests/goals. Advisors attend an orientation when they take on new students, conducted by the Director of Graduate Studies and Department Manager. The program has developed a BSHS Advisor Manual that is distributed to all advisors and updated annually in the summer. The Director of Graduate Studies sends emails throughout the year alerting new advisors to program-related activities (e.g., preparation for independent studies that serve as preparation for Qualifying Exams, soliciting their feedback on how their students are doing mid-year), and answers questions that come up. Behavioral and Social Science Department meeting agendas regularly include updates on graduate programs to keep the faculty informed.

Biostatistics (PhD): First-year advisors are selected by the Director of the Doctoral Program based on the incoming student's research interests expressed through their application as well as through conversations with faculty members during the PhD Recruitment Day event. These selections are made in consultation with Department faculty and in consideration of current advising loads. Faculty receive their new advisees' application package. Faculty orientation to advising is given during a departmental faculty meeting. Resources and materials from the School of Public Health and from the Brown Graduate School are provided, including Best Practices developed at Brown University, as well as Mentoring Guides from peer institutes. Junior faculty also receive advice from their senior faculty mentors.

Epidemiology (PhD): Selection of advisors begins prior to admission, as the Doctoral Admissions Committee reviews applicants, interests, and potential alignment with faculty. Candidates typically meet with potential advisors when visiting our program as part of our recruitment efforts. Final decisions are made by the Doctoral Graduate Program Director and Department Chair once each new incoming class is known. Advisors are oriented to their roles and responsibilities throughout the academic year during monthly faculty meetings. Prior to each new academic year, updated copies of the department graduate handbook, along with information on key changes are provided to all faculty.

Health Services Research (PhD): The Director of Graduate Studies assigns each incoming student an academic advisor to assist the student in charting an academic course to assure that key benchmarks are met. Incoming students are asked to send a list of their preferred advisors, and the Director of Graduate Studies tries to assign students to their top choice. If a faculty member has never advised a student, a team approach may be used to include a senior faculty member on the advising team. First-time faculty advisors are supported by student progress meetings where the faculty meet as a group to discuss all of the doctoral students and share issues/concerns that have arisen with respect to advising/mentoring. First-time advisors are also paired with more experienced faculty members to form a team advising structure for students.

Master's Programs

Biostatistics (AM/ScM): First-year Academic Advisors are selected by the Director of the Master's Program. Consideration is given to current advising loads of faculty as well as identified research interests of incoming students, if such information is available. Faculty are oriented to the role and responsibilities of advising through the Department's written guidelines contained in the Master's Advising Program (see ERF). These guidelines were developed to provide a basic structure with recommended timelines, agendas, and reading materials to foster a coherent and effective advising plan for the Program's Master's students. ScM students choose their thesis advisor by mutual arrangement with a faculty member.

Clinical and Translational Research (CTR-ScM): Due to the small size of the program, the Program Director, Dr. Amal Trivedi, is the academic advisor for all CTR students. In addition, Drs. Ira Wilson and Amal Trivedi provide structured advising on research planning in required seminars. Each student selects a thesis advisor and reader for their thesis project. Students

formulate the thesis topic during the first year of study. Drs. Trivedi and Wilson are available to assist students with selecting an appropriate thesis topic, thesis advisor, and thesis reader.

Master of Public Health (MPH): The MPH Program Director consults with the Chairs of the four departments to identify faculty who can serve as MPH Core Advisors. The MPH Program Associate Director of Public Health Practice and the Coordinator for Applied Learning Experiences and Professional Development meet with each new faculty Core Advisor to orient them to their role. In addition, the faculty Core Advisors are provided written guidelines that outline the details of each core advising group session.

<u>Undergraduate Programs</u>

Public Health (AB): Advisors are selected by the Director of Undergraduate Studies and Associate Dean for Academic Affairs in consultation with departmental chairs. Faculty are selected based on their interest in the undergraduate program or previous undergraduate thesis mentoring, and so as to include a broad diversity based on gender, race, ethnicity, and years of service. Faculty are oriented to the role and responsibilities of advising through the University's [Concentration Advisor Handbook](#). New advisors meet with the Director of Undergraduate Studies, the Manager of Academic Affairs, Data and Compliance, and the Program Coordinator for Student Engagement to become acclimated to the advisor role, review concentration requirements, and discuss common student issues and available resources. There are also ongoing meetings for advisors to meet as a group to discuss shared experiences.

Statistics: The Director of the Statistics Concentration is oriented to the role and responsibilities of advising through the University's [Concentration Advisor Handbook](#). All of the academic advising is performed by the concentration advisor. New thesis/capstone advisors discuss the project with the Director of the Statistics Concentration to confirm that the project fulfills the concentration requirements.

3) Provide a sample of advising materials and resources, such as student handbooks and plans of study, which provide additional guidance to students.

Graduate Students

The [Brown University Graduate School Handbook](#) is relevant to all graduate programs.

Advising materials and resources for each of the public health degree offerings in the School are described below for the doctoral, master's, and undergraduate programs, respectively.

<u>Doctoral Programs</u>

Behavioral and Social Sciences (PhD):

[Student Handbook](#), including sections on Advising/Mentoring, PhD Milestones Guide, and Student Evaluations that address procedures and expectations for student-advisor relations.

Biostatistics (PhD):

See Department's [Student Handbook](#)

Epidemiology (PhD):

[Student Handbook](#)

Health Services (PhD):

[Student Handbook](#)

Master's Programs

Biostatistics (AM/ScM):

- See [Student Handbook](#)
- See Sample Study Plan (Appendix D in Handbook)
- See Guidelines for the Development and Submission of the ScM in Biostatistics Thesis/Project (Attachment C in Handbook)
- See Department [Student Google Website](#)

Clinical and Translational Research (CTR-ScM):

- Link to Student Handbook: [Master of Science in Clinical and Translational Research Student Handbook](#)
- Link to Thesis Guidelines: [Brown University Master's Thesis Guidelines](#)

Master of Public Health (MPH):

- [Student Handbook](#)
- MPH Thesis Guidelines can be found on the MPH Learning Community course site on CANVAS, the electronic course manager program. See [in the ERF](#).

Undergraduate Students

Undergraduate Programs

Public Health (AB)

- *[Brown Focal Point](#)* page
- *[AB PH Home](#)* page
- *[The Curriculum](#)* page
- *[Declaring & Advising](#)* page
- *[Requirements Class of 2021 & 2022](#)*

Statistics (ScB)

Links to Program Description on [School of Public Health website](#) and [University website](#).

4) Provide data reflecting the level of student satisfaction with academic advising during each of the last three years. Include survey response rates, if applicable.

Over the last three years, data about student satisfaction with academic advising has been captured by the Enrolled Student Surveys (e.g., Doctoral Education Survey, Master's Education Survey) administered and analyzed by the University's Office of Institutional Research and the Satisfaction Survey administered by the School of Public Health. In addition, in 2020, data were collected from alumni about their experiences with academic advising. Each survey, its methodology, response rates, and major findings related to academic advising are presented below.

Enrolled Student Surveys

All enrolled graduate students are surveyed annually about their experiences within their program. The survey is confidential; results are shared with departments and the graduate school only in the aggregate, and only in ways that make it impossible to identify individuals. The survey content is specific to the program (i.e., Doctoral Education Survey, Master's Education Survey). After an initial email to request participation, 3 or 4 reminders are sent. The email communication emphasizes the importance of the survey and directs students to the Office of Institutional Research website where survey results from past years can be seen. Students are further encouraged to participate by communications from the graduate school. Incentives to complete the survey have varied over the years. For instance, the Graduate Student Council has been given $1 per completed survey for their events budget, or all respondents have been eligible for a random drawing of a gift card. The exact number and value offered changes from year to year, but has ranged from 5 to 15 gift cards, each worth $100. Please note that the survey questions changed after 2018 to provide more comprehensive data. Therefore, responses shown below for 2018 are those for which students generally or strongly agreed and are labeled as positive responses. The responses shown for 2019 are those for which students answered good, very good, or excellent and are labeled as positive responses. The 2020 Enrolled Student Survey (sent in March 2020) is not available due to low response rates attributed to COVID-19.

Student Satisfaction Related to Academic Advising as Reported in the Enrolled Student Survey by Program and Year (2017-2019)			
	2017	2018	2019
Doctoral Programs			
Response Rates			
Behavioral and Social Health Sciences	90%	93%	88%
Biostatistics	54%	53%	55%
Epidemiology	55%	75%	47%
Health Services Research	82%	56%	70%
Item			
Quality of academic advising and guidance (1=Poor, 5=Excellent)			
Behavioral and Social Health Sciences	4.4	4.2	4.5
Biostatistics	4.0	3.8	3.0
Epidemiology	3.9	3.8	4.1
Health Services Research	4.3	4.6	4.4
My advisor discusses my research with me on a regular basis (1=Strongly disagree, 5=Strongly agree)			
Behavioral and Social Health Sciences	---	5.0	5.0
Biostatistics	---	---	---
Epidemiology		4.5	
Health Services Research	5.0	---	4.6
My advisor gives me constructive feedback on my work (1=Strongly disagree, 5=Strongly agree)			
Behavioral and Social Health Sciences	---	5.0	4.9
Biostatistics	---	---	---
Epidemiology	---	4.7	---
Health Services Research	4.8	---	4.0

Student Satisfaction Related to Academic Advising as Reported in the Enrolled Student Survey by Program and Year (2017-2019)			
	2017	2018	2019
My advisor clearly states expectations for my academic progress (1=Strongly disagree, 5=Strongly agree)			
Behavioral and Social Health Sciences	---	4.3	4.7
Biostatistics	---	---	---
Epidemiology	---	4.5	---
Health Services Research	4.2	---	3.8
My advisor has reasonable expectations for my academic progress (1=Strongly disagree, 5=Strongly agree)			
Behavioral and Social Health Sciences	---	4.7	5.0
Biostatistics	---	---	---
Epidemiology	---	4.7	---
Health Services Research	4.8	---	4.0
My advisor promotes my professional development (1=Strongly disagree, 5=Strongly agree)			
Behavioral and Social Health Sciences	---	4.7	4.7
Biostatistics	---	---	---
Epidemiology	---	4.5	---
Health Services Research	4.2	---	3.8
Respondents who had substantive contact with primary advisor more than once per semester			
Behavioral and Social Health Sciences	100%	100%	100%
Biostatistics	100%	88%	100%
Epidemiology	100%	92%	100%
Health Services Research	100%	100%	100%
Pre-candidacy respondents who received organized exposure to faculty and their current research interests			
Behavioral and Social Health Sciences	88%	71%	63%
Biostatistics	---	17%	57%
Epidemiology	100%	---	---
Health Services Research	89%	100%	89%
Pre-candidacy respondents who received early research opportunities			
Behavioral and Social Health Sciences	100%	86%	88%
Biostatistics	---	83%	86%
Epidemiology	71%	100%	
Health Services Research	89%	100%	89%
Pre-candidacy respondents who received a written assessment of academic progress			
Behavioral and Social Health Sciences	88%	57%	75%
Biostatistics	---	50%	57%
Epidemiology	100%	100%	
Health Services Research	89%	83%	89%
Pre-candidacy respondents who had a meeting with the Director of Graduate Studies and/or other faculty			
Behavioral and Social Health Sciences	100%	71%	75%
Biostatistics	---	67%	57%
Epidemiology	100%	100%	---
Health Services Research	67%	67%	89%

Student Satisfaction Related to Academic Advising as Reported in the Enrolled Student Survey by Program and Year (2017-2019)			
	2017	2018	2019
Respondents admitted to candidacy who received helpful advice on developing the dissertation topic			
Behavioral and Social Health Sciences	100%	91%	100%
Biostatistics	100%	100%	88%
Epidemiology	88%	100%	100%
Health Services Research	100%	100%	100%
Respondents admitted to candidacy who received helpful advice conducting dissertation research			
Behavioral and Social Health Sciences	100%	88%	100%
Biostatistics	100%	100%	88%
Epidemiology	88%	100%	100%
Health Services Research	100%	80%	100%
Respondents admitted to candidacy who received helpful advice on writing and revising the dissertation			
Behavioral and Social Health Sciences	100%	88%	86%
Biostatistics	100%	100%	83%
Epidemiology	100%	100%	100%
Health Services Research	100%	100%	100%
Master's Programs*			
Response Rates			
Biostatistics	45%	67%	46%
MPH	66%	72%	74%
Item			
My NON-THESIS ADVISOR clearly states expectations for my academic progress (% generally or strongly agree)			
Biostatistics	NA	NA	61%
MPH	NA	NA	74%
My NON-THESIS ADVISOR discusses my progress in the program with me on a regular basis (% generally or strongly agree)			
Biostatistics	NA	NA	61%
MPH	NA	NA	77%
My NON-THESIS ADVISOR gives me constructive feedback on my work (% generally or strongly agree)			
Biostatistics	NA	NA	46%
MPH	NA	NA	81%
My THESIS ADVISOR clearly states expectations for my academic progress (% generally or strongly agree)			
Biostatistics	NA	82%	92%
MPH	NA	65%	74%
My THESIS ADVISOR discusses my progress in the program with me on a regular basis (% generally or strongly agree)			
Biostatistics	NA	78%	93%
MPH	NA	63%	74%

Student Satisfaction Related to Academic Advising as Reported in the Enrolled Student Survey by Program and Year (2017-2019)			
	2017	2018	2019
My THESIS ADVISOR gives me constructive feedback on my work (% generally or strongly agree)			
Biostatistics	NA	78%	92%
MPH	NA	70%	92%
Respondents who had substantive contact with NON-THESIS advisor more than once per semester (% generally or strongly agree)			
Biostatistics	NA	NA	60%
MPH	NA	NA	87%
Respondents who had substantive contact with THESIS advisor more than once per semester (% generally or strongly agree)			
Biostatistics	100%	87%	100%
MPH	79%	86%	100%
Note: *Data are not shown for the Clinical and Translation ScM because of fewer than 5 students in all years; --- = no results shown, fewer than 5 students; NA = not asked			

Satisfaction Survey

Since 2018, an anonymous School-wide satisfaction survey (in Google Docs) has been sent to both current and graduating students (undergraduate, master's, and PhD) in mid-May to measure the quality of School resources provided. In a continuous effort to improve response rates to the goal of >80%, an initial email from the Associate Dean for Academic Affairs was sent to all current and graduating students detailing the surveys they would receive, what they measured, and why there were important. As a follow-up, and again to maximize response rates, survey invitations were emailed directly to current and graduating students from departmental administrators/program directors with whom they have the most consistent contact during their programs. As an anonymous survey, follow-up posed a challenge, so administrators were charged with using their most successful communications channels to maximize response rates. Results for students in each of the programs are as follows:

Level of Satisfaction with Academic Advising Resources at the Brown School of Public Health by Program and Year			
	2018	2019	2020
Response Rates			
Doctoral Programs			
Behavioral and Social Health Sciences PhD	NA	NA	5%
Biostatistics PhD	NA	NA	38%
Epidemiology PhD	88%	67%	56%
Health Services Research PhD	100%	NA	42%
Master's Programs			
Biostatistics AM/ScM	NA	NA	49%
Clinical and Translational Research ScM	50%	19%	0%
Master of Public Health	60%	19%	26%
Undergraduate Program			
Public Health AB	52%	21%	15%
Statistics ScB	NA	NA	43%

Level of Satisfaction with Academic Advising Resources at the Brown School of Public Health by Program and Year			
	2018	2019	2020
Item			
Satisfaction with general academic advising (% somewhat or extremely satisfied)			
Doctoral Programs			
Behavioral and Social Health Sciences PhD	---	---	---
Biostatistics PhD	NA	100%	89%
Epidemiology PhD	100%	---	40%
Health Services Research PhD	---	---	---
Master's Programs			
Biostatistics AM/ScM	NA	87%	76%
Clinical and Translational Research ScM	---	---	---
Master of Public Health	67%	54%	75%
Undergraduate Program			
Public Health AB	48%	33%	42%
Statistics ScB	---	---	---
Satisfaction with personal mentorship (% somewhat or extremely satisfied)			
Doctoral Programs			
Behavioral and Social Health Sciences PhD	---	---	---
Biostatistics PhD	NA	100%	89%
Epidemiology PhD	100%	---	50%
Health Services Research PhD	---	---	---
Master's Programs			
Biostatistics AM/ScM	NA	79%	87%
Clinical and Translational Research ScM	---	---	---
Master of Public Health	83%	69%	68%
Undergraduate Program			
Public Health AB	55%	50%	48%
Statistics ScB	---	---	---
Note: --- = no results shown, fewer than 5 students			

Fall 2020 Alumni Survey

Starting in August 2020, the School conducted a survey of public health graduates regarding their opinions on the competencies and their importance in the work place, suggestions about the curriculum, and changing practice and research needs. The survey also included questions about academic advising. Moving forward, these surveys will be conducted of alumni that graduated 2 years ago, 4 years ago, and 8 years ago so that we do not overlap with the alumni surveys administered by the University's Office of Institutional Research. Respondents were offered a Brown School of Public Health face mask for completing this survey.

Level of Alumni Satisfaction with Academic Advising Resources at the Brown School of Public Health	
Response Rates	
Doctoral Programs	
Behavioral and Social Health Sciences	40%
Biostatistics	45%
Epidemiology	36%

Level of Alumni Satisfaction with Academic Advising Resources at the Brown School of Public Health	
Health Services Research	45%
Master's Programs	
Biostatistics AM/ScM	30%
Clinical and Translational Research ScM	30%
MPH	36%
Undergraduate Programs	
Public Health AB	22%
Statistics ScB	23%
Class Year Representation	
Class of 2017	26%
Class of 2018	20%
Class of 2019	22%
Class of 2020	33%
Satisfaction with academic advising from *faculty* (1=not at all satisfied to 5=very satisfied)	Mean (SD)
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	5.0 (0.0)
Epidemiology	4.1 (1.1)
Health Services Research	5.0 (0.0)
Master's Programs	
Biostatistics AM/ScM	4.4 (0.7)
Clinical and Translational Research ScM	---
MPH	4.4 (0.8)
Undergraduate Programs	
Public Health AB	3.6 (1.2)
Statistics ScB	4.0 (1.0)
Satisfaction with academic advising from *staff* (1=not at all satisfied to 5=very satisfied)	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	4.6 (0.5)
Epidemiology	3.7 (1.1)
Health Services Research	4.4 (0.5)
Master's Programs	
Biostatistics AM/ScM	4.3 (0.8)
Clinical and Translational Research ScM	---
MPH	4.4 (0.8)
Undergraduate Programs	
Public Health AB	3.6 (1.1)
Statistics ScB	3.8 (1.3)
Percentage of respondents providing qualitative feedback regarding *academic advising*	1%
Note: (SD)=standard deviation; --- = no results shown, fewer than 5 students	

<u>Other Program-Specific Evaluations of Student Satisfaction with Academic Advising</u>

Biostatistics AM/ScM

In 2017-18, the Program successfully received feedback from 12 of 15 ScM and AM graduates. Nine of those individuals responded to the section in the survey that included an item about advising, and 100% expressed satisfaction with the level of advising received. In addition to the School-wide satisfaction survey, additional feedback about advising and counseling was obtained in 2018-29 and 2019-20 as part of Master's Journal Club and Career Development Series, which meets every Monday.

Master of Public Health

In addition to collecting feedback at the School level, the MPH Program has solicited feedback from MPH students in a variety of ways.

At the end of the *2017/18 academic year*, the MPH Program hosted multiple year-end luncheon meetings, so students could give feedback in person. There were separate luncheon meetings for graduating students and continuing students. For the luncheon meetings, 9 out of 40 graduating students attended, and 11 continuing students attended. One of the themes that was identified about advising was that students were not happy that the MPH Core Advisor groups were part of the required course, PHP 2070: Public Health/Community Service Internship. The MPH Core Advisor groups were included in the course to ensure that students would attend, but students felt like they were having to pay for advising because they were paying for the course. As a result of the feedback, for the cohort starting in Fall 2018, the MPH Core Advisor meetings were no longer included in the PHP 2070 course. Instead, attendance in the MPH Core Advisor meetings was made a pre-requisite for PHP 2071 and PHP 2072 (the two half-credit courses that replaced PHP 2070) in order to remove any perception that students were paying for advising.

At the end of the *2018/19 academic year*, the MPH Program collected feedback through multiple venues designed to provide all students an avenue for providing feedback. Graduating students were invited to two lunches to provide feedback as a group. Twenty-two students provided feedback this way through thoughtful and engaged conversations. For students who were unable to attend these sessions, there was an anonymous Google form for feedback. Eighteen students provided feedback through that form (total=40; 65% of graduating class of 62 students). First-year students were engaged in providing feedback in a required course (PHP 2071). Students were asked to create groups of 5-6 students and discuss four questions with one student acting as a note taker. There were 30 students in attendance and five groups (71% of 42 students). In general, Advising was seen as a strength of the MPH Program. However, there were areas identified for improvement. Connecting to a thesis topic and an advising team was a varied experience for students. For some students the process was straightforward, while for others it was difficult and time consuming. In addition, students wanted more formal peer advising opportunities from second-year MPH students for first-year MPH students. Some students were connected to networks where this worked well, while others, without these informal connections, had a harder time. Below summarizes the recommended strategies that resulted from this feedback.

- <u>Encourage the School to add "MPH Concentration Lead" and "MPH Core Advisor" to the yearly Faculty Activity Report</u>: Students are looking for connections with faculty, in general and in their specific areas of interest. MPH Concentration Leads and MPH Core Advisors are an increasingly important component of the growing MPH Program, and faculty working with MPH students should be recognized.

- Pilot registration advising drop-in hours: Pilot having registration drop-in hours in the computer lab during open registration. This will be staffed by MPH faculty and staff who can offer advice on courses and how to use Banner to register. Ideally, there would also be a paid second-year MPH student who could attend and provide student-to-student advice.

- Have a master's-level "Community Fellow": This would be a master's-level second-year MPH student paid hourly for about 3 hours per week to have office hours to provide help with Banner/Canvas and other student-related practical issues for which first-year MPH students may not reach out to faculty or staff for assistance.

- Institute concentration advising lunches in Fall and Spring: To connect students to MPH concentrations of potential interest early and to provide in-person advising from a Concentration Lead, host a luncheon meeting in each semester for Concentration Leads to meet with MPH students. The Fall luncheons should be held on different days, and students should be encouraged to "shop" concentrations in which they might be interested. In the Spring semester, it should be expected that students will have declared a concentration (although switching is allowed). The luncheons should be for both first- and second-year students to encourage community and peer support. An MPH Program faculty or staff member should also attend each luncheon meeting to assess them and provide support. In the Fall, it is expected that first-year students will have questions about choosing their respective MPH concentration, best course plan, and what kind of research and applied public health work is happening in the School in that concentration area. In the Spring, it is expected that first-year students will have follow-up questions about the same topics, as well as concrete questions about identifying a thesis advising team and topic within the respective concentration.

- Provide list of MPH concentrators to departments and identified faculty for each concentration: To encourage connection between faculty in all Departments with MPH students, the MPH Program should provide a list twice a year to Department Chairs and Concentration Leads of MPH students interested in that area. To do this, the MPH Program should collect student interest information during orientation (check all that apply), and the list of first-year students will have students in more than one area. Students declare a concentration in January of the first year, so the list should be updated and re-sent in early February.

- Increase career advising in public health: Within the MPH student body, many students were primarily interested in research and further academic work. However, many others were interested in careers outside of academia. Students feel that advising for academic careers and next steps is strong, but feel that there could be more resources for students looking for jobs outside of academia.

- Continue to adapt MPH Core Advisor meetings/feedback loop: Keep twice-yearly meetings of MPH Core Advisors to review student progress and keep yearly September meetings with MPH Core Advisors to update them on changes to the MPH Program. Concentration Leads should be included in the September meeting to increase communication between these two groups and address questions they have in common.

At the end of the *2019/20 academic year*, all MPH students were invited to attend a year-end meeting to discuss their experiences in the MPH Program. Due to COVID-19, we held the meetings via Zoom. We held two sessions for first-year students and two sessions for continuing/graduating students. Seven first-year students and five continuing/graduating students attended a session. The first-year students all reported that they liked the core advising groups. One second-year student mentioned that she could have used more individual advising. Another second-year student mentioned that the global health students

were already connected for their field experience and thesis projects by Spring, so their Spring core advising sessions could have used more structure, since they did not need the sessions to talk about how to get connected to projects.

Because attendance at the year-end Zoom meetings was low, so we also sent a survey to all MPH students who did not attend a year-end Zoom meeting. Eleven students responded. Students were asked what components of the program they liked most and least. Of the 10 who responded to the question about what components of the MPH Program they liked the most, five mentioned either advising, core advising groups, or individual connections with research mentors. Of the 10 who responded to the question about what components they liked the least, only one mentioned advising, and that student commented that the number of core advising sessions was excessive.

5) Describe the orientation processes. If these differ by degree and/or concentration, provide a brief overview of each.

Graduate student orientation is provided by the University Graduate School, the School of Public Health, and the individual programs. Orientation begins with the University Graduate School Orientation (Graduate Student Orientations), which includes an International Student Orientation (2 days), an Optional Graduate Student of Color Orientation (2 days), and an Orientation for All Graduate Students (1 day). The School has changed its Orientation based on student feedback. Most recent orientations have been two days, with the first day focused on School-wide topics and the second day focused on program-specific topics. Example agendas for the School-wide topics are available in the ERF. Also based on student feedback, the School-wide topics were covered by dividing students into six groups of 16-21 students who moved through six 1/2-hour sessions: Collaborating with Communications; Academic & Career Resources; Advising & Mentoring; Academic Code; "Getting Started on the Right Foot"; and Responding to Student Needs Around Diversity & Inclusion. Descriptions of program-specific orientation activities are described below.

Undergraduate student orientation is provided through the University and is not specific to undergraduate concentrations. Orientation to the undergraduate concentrations are described in Part 1 above.

Doctoral Programs

Behavioral and Social Sciences (PhD): Incoming PhD students receive emails from the Department Manager over the summer with information about School and Program Orientation dates and introducing the incoming cohort to current students on a more personal level, sharing with them their contact information and inviting them to ask questions regarding moving to the area. They also receive an email from the Director of Graduate Studies explaining (a) typical course selections for the first semester and (b) the process for requesting course waivers for prior coursework. The program also sends an email to the students confirming their advisor and appointment details before the beginning of the Fall semester. During the second day of the School's orientation, we host a luncheon for the new cohort to meet current student and faculty representatives and hold an hour-long breakout session with the Director of Graduate Studies and Department Manager. This small group meeting reviews important guidelines regarding course selection and registration, advising, individual development plans, program milestones, and resources such as the Handbook and Curriculum Checklist. In recent years we have added a Student Panel to help new students connect with established students around the student experience.

Biostatistics (PhD): Orientation to the program begins almost immediately upon acceptance. The program communicates information on the School's orientation dates as well as those of the Graduate School, the Office of International Scholars and Students Services, and Students of Color. On Day 2 of the School's Orientation, students participate in breakout sessions with

Department PhD Program leadership and individual faculty members, which provides individual space to discuss the opportunities afforded within the Department as well as the School and University, academic interests and anticipated timeline and course options, and research interests as well as to learn about faculty research areas of focus. All incoming students are also provided the opportunity for engagement with the School's Peer Mentoring program. Other communications offer details on a dedicated Student website with a webpage for the orientation of students in the Biostatistics Department.

Epidemiology (PhD): Communication with accepted incoming students is ongoing prior to orientation. Students receive communications from the Department Manager detailing the process of entering Brown, the orientation process, Department and School policies, funding, and travel. The Department Manager also answers any questions the students may have regarding their move and integration to the School. On day two of orientation, students begin by meeting with the Department Chair and Graduate Program Director. This meeting provides an overview of Epidemiology faculty and their research areas, core course requirements, additional department non-credit requirements, research partnership opportunities and assistantships, grant submission processes, potential career outcomes, and expectations following program completion. The incoming students then participate in a Q&A panel session with current students. The remaining time allows for a department-wide lunch followed by social activities to encourage 1:1 or smaller group interactions.

Health Services Research (PhD): Incoming students receive communication from the Academic Program Manager in the summer requesting advising preferences. We also communicate information about their matched academic advisor, big sib, and alumni mentor. Students also receive information about orientation and the program handbook, and we offer to connect them to contacts in our program who can facilitate a successful transition to Brown/Providence. On Day 2 of the orientation, students meet with the program director and program manager in a breakout session to discuss course selection and registration, advising, individual development plans, and program milestones. There is also a lunch with program faculty and current students and a student panel covering the graduate student experience. Students also meet with their big sib.

<u>Master's Programs</u>

Biostatistics (AM/ScM): Orientation to the Program begins almost immediately upon acceptance. The Department communicates information on the School's orientation dates as well as those of the Graduate School, the Office of International Scholars and Students Services, and Students of Color. This communication, as well as those provided throughout the summer, offer information on pre-study training and mandatory courses on R Programming, a DataCamp group in which incoming students can communicate with one another and participate in statistical and mathematical courses, and offering information on the Department's August Statistical Computing Workshop. This Computing Workshop is mandatory for all master's students to attend two weeks prior to the official orientation activities. On Day 2 of the School's orientation, students participate in breakout sessions with Department Master's Program leadership to review the Program's requirements, a familiarization of the types of research taking place by Department faculty and with School and University collaborators, as well as an introduction to the Program's Journal Club and Career Development Series, to name a few. This time is also used to introduce the Program's study plan and timeline as well as introduce incoming students to resources within the Department and School to allow them to explore research opportunities and internships. All incoming students are also provided the opportunity for engagement with the School's Peer Mentoring program.

Clinical and Translation Research (ScM): On Day 2 of the School's orientation, students have the opportunity to meet with the Program Director, faculty, and staff. The Program Director does an overview of the program requirements, and the students receive a copy of the student

handbook at that time. Students who are unable to attend orientation due to their clinical schedules are encouraged to set up a separate meeting with the Program Director.

Master of Public Health (MPH): On Day 2 of the School's orientation, students meet with the MPH Program Director, the MPH Program Associate Directors, MPH Program staff, and the MPH Core Advisors. The Day 2 sessions include an overview of the MPH program, an overview of the MPH concentrations, lunch with their core advisors, and a panel with faculty teaching the core courses.

6) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Behavioral and Social Health Sciences (PhD)

Strengths: There are close working relationships between advisors and PhD students that result in productive collaborations and timely progression through the program. A steadily expanding base of faculty have become PhD advisors. We have seen high student satisfaction ratings with regard to advising as reflected on the Enrolled Student Surveys.

Challenges: More opportunities are needed for preparing advanced students for careers (academic and non-academic). There needs to be more regularized opportunities for information exchange with students related to program requirements and funding options. There are faculty needs for information and support as the program grows and involves more faculty.

Plans: First, the program is holding program-focused career panels each semester to bring in PhD-level professionals to discuss different career paths. Second, the program is facilitating communication with students in several ways. Examples include holding annual Town Halls with the students and selected faculty to hear student concerns and aspirations for the program; working to maintain accurate and current information on the program website; the Director of Graduate Studies attending student Journal Club meetings once or twice a year to discuss program requirements such as preparation for the qualifying exam; and institution of a "Dissertation Prep" meeting in the late Spring semester geared towards second-year students (having just finished qualifying exams) and their advisors to orient them to the process of preparing and defending a program's dissertation proposal. Third, having identified the need for general support and information exchange among faculty about advising challenges, the program has initiated PhD Advisor lunches once a semester, and have created an Advisor Manual.

Biostatistics PhD

Strengths: The low student to faculty ratio allows students intensive and frequent interaction with faculty members. The flexibility of the advising structure before a student finalizes the thesis topic allows students to explore research areas freely. The program also allows a student to have their thesis advisor different from the Principal Investigator that provides their Research Assistantship, which to the greatest extent protects their academic freedom without limiting it to funding source.

Challenges: Most of the faculty do not have a large group of multiple students at every stage of their study. Compared to large programs, this limits the extent of peer mentoring opportunities among students.

Plans: The program will strengthen ties with alumni and invite them to share their experiences and to reflect on their graduate education.

<u>Epidemiology PhD</u>

Strengths: The program is small in size, has an excellent faculty to student ratio, and embraces the Brown culture fostering student independence, autonomy, and personalized learning. Through the application and recruitment stages, the program begins to develop a sense of student interests and career goals. Faculty are almost always prepared to accept a new advisee, and availability for orientation and ongoing meetings is high. Students are encouraged to meet and work with other faculty, and in instances where students are interested in having a different advisor, these are instituted quite readily. There is also substantial student input in students being matched early to an advisor, the ability to switch advisors, the benefits of recent student-led graduate peer advising, the systems to monitor advising processes (including written feedback from the Graduate Program Director twice each year), two annual lunch meetings with the Graduate Program Director, and regular access to the Department Chair.

Challenges: There have been lapses in information flow about best practices and new procedures related to busy faculty with some turnover. Aligning student interests, funded research assistantships, and primary advisors is an ongoing challenge.

Plans: Additional written documentation is required to summarize our intensive student-focused advising procedures and ensure that all faculty, and in particular, new faculty, are familiar with our policies, procedures and timelines. The program will prepare this additional information, disseminate to all faculty, and review procedures prior to the start of each academic year.

<u>Health Services Research PhD</u>

Strengths: The program has strong advising and mentoring. Students in the program have been very successful as evidenced by the number of manuscripts accepted for publication and number of grants awarded, as well as positions obtained following graduation. There is a strong sense of collegiality and collaboration between students, faculty, and staff members in the Department and across Brown.

Challenges: First, although the program has strengths in many important areas of public health and health policy, there is not a portfolio of funded research in all domains of health services research. As a relatively small and growing School, there will necessarily be some areas of research in which there is not a critical mass of funded faculty researchers. Second, the relatively small size in terms of doctoral students and teaching faculty limits the number of advanced methods courses that can be offered. The program therefore incorporates advanced methods training through independent studies and supervised research experiences rather than formal didactic courses. Finally, the program is continually working to improve the recruitment of students from historically underrepresented backgrounds, though as noted below, strides continue to be made in this area.

Plans: The program plans to continue to implement efforts to broaden and diversify the applicant pool and increase the yield of accepted and admitted under-represented minority candidates. It will build on ongoing efforts, which have resulted in three consecutive recruiting cycles in which at least one applicant from a historically underrepresented group was recruited. Recruitment efforts have included actively working with the Graduate School in recruitment activities for students from historically underrepresented groups; engagement with minority organizations involved in health policy; and outreach to the McNair Scholars Program, a program funded by the U.S. Department of Education designed to prepare undergraduate students who are first-generation students with financial need or students from groups who have been traditionally underrepresented in graduate education for doctoral studies.

<u>Biostatistics AM/ScM</u>

Strengths: The program has developed a careful advising plan with extensive documentation. These documents are constantly updated to reflect any changes in practice. This has led to a well-organized advising process. A key addition to the advising process has been the creation of a Master's Journal Club, with mandatory participation for first-year master's students. The Master's Journal Club offers students opportunities to be mentored and advised on a weekly basis and provides opportunities to address concerns and issues as well as to provide guidance, instruction, and encouragement. The Journal Club has been identified by the Graduate School as a flagship program and used as an example of an effective and prime model for University Master's programs.

Challenges: While the advising program is working well, the relatively large student to faculty ratio caused by the small faculty is an area that needs improvement. Graduate advising is currently sufficient for students within the program, but the faculty size limits the involvement that faculty can have in advising students in other programs.

Plans: The Department of Biostatistics has recently hired two Teaching Scholars, which will help with capacity. In addition, the Department has requested two additional tenure-track faculty, which should be approved when the University removes its hiring freeze.

<u>Clinical and Translational Research ScM</u>

Strengths: Students have access to highly qualified and motivated faculty advisors. A research seminar is required to help ensure ongoing research mentorship and advising.

Challenges: Students are challenged to take advantage of all advising opportunities given their busy clinical schedules.

Plans: The program will continue to work with the clinical departments to coordinate activities from the ScM program with the mentorship students receive in their home clinical department.

<u>Master of Public Health (MPH)</u>

Strengths: Advising is generally seen as a strength of the MPH program. Overall, students give positive feedback about the MPH core advising structure. The program continually adjusts the amount of structure and assignments in the required core advisor sessions based on feedback from students.

Challenges: Connecting to thesis advisors has been a variable experience for students. The program has taken steps to address this, which are described below in the plans for improvement.

Plans: The program is taking measures to encourage connection between faculty and MPH students by inviting students to attend concentration advising lunches in the Fall, and by collecting student interest information during orientation to assist with connecting students to faculty. We have also taken steps to strengthen the role of the respective MPH concentration leads. The MPH concentration leads for each concentration will be more readily available to meet with students to discuss thesis development, as well as to advise students on appropriate faculty advisors for specific areas of public health interest. This should make the process of connecting to thesis advisors more focused and streamlined for MPH students. The program has also requested that the School add "MPH Concentration Lead" and "MPH Core Advisor" to the yearly Faculty Activity Report to encourage ways for faculty working with MPH students to be recognized.

<u>Public Health AB</u>

Strengths: Undergraduate (UG) students in public health are assigned an academic adviser as they declare their concentration in public health. We have increased the total number of advisers from six (2019-2020) to 10 during the 2020-2021 academic year. This has allowed for far fewer students to be advised by a given faculty member, providing more time for engagement with each student.

Challenges: Supporting students during their undergraduate experience could be improved. Surveys of past students indicate that their connections with advisers did not meet respondents' expectations. Some of this dissatisfaction may be due to the student to faculty advisor ratio being relatively high in prior years. Another reason may be prior curriculum requirements that allowed substantial flexibility but likely resulted in inconsistencies for students. Finally, there has not been a formal mechanism to onboard new faculty advisors.

Plans: We will expand the orientation and training for academic advisors with special emphasis on finding thesis advisors, encouraging and finding community engagement opportunities, and career counseling.

<u>Statistics ScB</u>

Strengths: The program is small in size, so students receive personalized attention. The program embraces the Brown culture of fostering student independence, autonomy, and personalized learning through a capstone/thesis project. Students are invited to participate in departmental events and interact with other undergraduate and graduate students to foster an inclusive and welcoming environment.

Challenges: The number of undergraduate courses offered by the department is relatively limited and is under public health course designation (e.g., PHP). This is partly responsible for the small size of the concentration and makes finding the "statistics" courses challenging.

Plans: The Department of Biostatistics has recently hired two Teaching Scholars, which will help with capacity. The program will consider designating the courses offered by the department under course designations specific to Biostatistics.

H2. Career Advising

The school provides accessible and supportive career advising services for students. Each student, including those who may be currently employed, has access to qualified faculty and/or staff who are actively engaged, knowledgeable about the workforce and sensitive to his or her professional development needs and can provide appropriate career placement advice. Career advising services may take a variety of forms, including but not limited to individualized consultations, resume workshops, mock interviews, career fairs, professional panels, networking events, employer presentations and online job databases.

The school provides such resources for both currently enrolled students and alumni. The school may accomplish this through a variety of formal or informal mechanisms including connecting graduates with professional associations, making faculty and other alumni available for networking and advice, etc.

1) Describe the school's career advising and services. If services differ by degree and/or concentration, a brief description should be provided for each. Include an explanation of efforts to tailor services to meet students' specific needs.

   University

   At the University, students at all levels are encouraged to take advantage of the comprehensive resources available through Brown's CareerLAB (Careers & Life After Brown). Examples of CareerLAB's offerings, in alphabetical order are:

   a) Brown Connect & Summer Institute, a summer internship program designed for students to work directly for/with alumni, often funded in the form of summer internships. The Brown Connect Summer Institute offers a formalized program for students to engage with Brown parents, alumni, faculty, and staff through case study discussions, skills workshops, and industry expert conversations.
   b) Fall and Spring internship and career fairs and the "Careers in the Common Good" fair in partnership with the Rhode Island School of Design (RISD).
   c) Handshake, Brown's internship and job platform, facilitates hundreds of annual CareerLAB-led workshops, information sessions, group advising sessions, alumni-hosted conversations, and industry-specific events.
   d) International student-focused resources and programming, in partnership with the Office of International Student and Scholar Services (OISSS).
   e) One-on-one career counseling, offering optional strengths assessments, navigational support, and job offer negotiation advice. These sessions also include resume review, mock interviews, and networking advice.
   f) Participation in orientation for undergraduate concentrators and graduate students
   g) Peer advising, predominantly for undergraduate concentrators navigating early stages of the internship and career search processes.
   h) Pre-professional advising for students interested in advanced study.

   School of Public Health

   Understanding the unique needs of public health graduates, the School is committed to offering substantive, diverse, and personalized career advising services to complement those offered by the University. As of May 2020, an Assistant Director of Career Advising was hired to formalize School-wide career advising services, act as a liaison between the University's CareerLAB and program-level support, and to provide direct career advising support to students and alumni. These services include, but are not limited to:

   a) A menu of advising opportunities based on level of study/engagement detailing career advising resources for students and alumni. Establishment of a quick guide for employers

to maximize opportunity-sharing. Within these services, the School intends to encourage annual or bi-annual one-on-one sessions for all students and promote ad hoc advising for alumni as needed.

b) A robust, centralized website/portal for students and alumni to access resources and navigate career advising options and expanded options for employers to get involved. This complements the student opportunity page. A centralized email address (created in May 2020) streamlines decentralized avenues of job-sharing (sph-careers@brown.edu). It allows for content partnership and cross-promotion with Brown CareerLAB, promotion of available tools to highlight departmental career-related opportunities to the broader public health audience on the School's calendar using a new careers-focused tag, and inclusion of an email opt-in block for the newsletter described in e) below.

c) Development of a new public health-specific **database** of available internship, research, and employment opportunities to complement targeted recruitment opportunities in Handshake.

d) Weekly, standardized office hours with online appointment-booking capabilities for personalized career advising sessions.

e) An opt-in monthly newsletter with career-focused tips, featured internships/jobs, and alumni highlights. This is also an avenue to promote free subscription services available to Brown students and alumni such as the LinkedIn Learning suite and Rosetta Stone language app.

f) Professional membership opportunities including the Rhode Island Public Health Association (free membership) and Delta Omega Honor Society (student-led chapter-creation).

g) Collaboration with on-campus partners to maximize limited resources. Currently, these partnerships include the following:

- CareerLAB is invited to the School's graduate student orientation to introduce valuable campus resources
- Nelson Center for Entrepreneurship: for students interested in starting businesses
- Sheridan Center for Teaching and Learning: for students interested in learning best practices in teaching/considering careers in academia
- Swearer Center: for students to seek out community engagement opportunities
- Watson Center for International and Public Affairs: for students interested in global affairs

Programs

Program-specific career advising services are described below for doctoral, master's, and undergraduate students.

Doctoral Students

Behavioral and Social Sciences PhD: The program has a number of formal mechanisms for student professional preparedness and growth. For instance, for the past two academic years, the program has held once-per-semester career panels, engaging students with professionals in public health. These career panels have allowed students to explore career paths that are both within and outside of academia. The program has also implemented a fund for students to use in their final year, the "Dissertation Travel Fund." The intent is specifically to allow students to present at a conference, providing an opportunity to network and expand their professional connections. The i-BSHS seminar series provides additional networking opportunities, when speakers meet with students for lunch and discussion about research and career paths. Finally, the Program repeatedly encourages students to connect with the Sheridan Center for Teaching and Learning, which is a resource for assisting students with updating their teaching statements and CVs, as well as preparing them for teaching assistantship positions. Three-year career outcomes (see programs below) will be collated in Summer 2021 because the first doctoral cohort graduated in 2019.

Biostatistics PhD: Career advising begins as soon as doctoral students arrive at Brown. During the departmental orientation, students are given information about general career options as well as the career paths of alumni. Students are advised to develop an Individual Development Plan (IDP), in consultation with their advisor, which includes their career goal. This is shared with the Graduate Program Director and the departmental staff to assist in targeted dissemination of external opportunities. The IDP is revised every semester when the students meet with their advisors to discuss the plan for the next semester. Students are also advised to develop a LinkedIn profile and connect with the departmental group to learn from tangible career development information, including what career opportunities are emerging, skills that are valued on the job market, and resources that complement educational opportunities. The department also uses the LinkedIn group to share employment opportunities with current students and alumni. The department also maintains an internal Google Site that records all opportunities identified by the faculty, staff, and alumni, including internship, fellowship, postdoctoral training, and permanent positions. When students begin research, they are encouraged to attend national conferences to present their work and start professional networking. Just before commencement, the Department organizes a roundtable meeting for the graduating students to share their experience in job searching, interviewing, and decision making with current students. See Biostatistics career outcomes from 2005-2018 [here](#).

Epidemiology PhD: The program has a number of mechanisms for career advising. For instance, all students are required to submit a grant proposal by the end of the third semester or beginning of their fourth semester. Writing a grant helps to prepare students in their future written communications whether or not they pursue a career in academia. The program also sponsors career panels for students including TED talks in which faculty and alumni discuss their careers. In addition, the department has also instituted monthly brief presentations by faculty members that are attended by students and outline faculty members' research interests and career trajectories. Finally, the program has peer mentoring where upper-level doctoral students mentor incoming doctoral students. See Epidemiology career outcomes from 2005-2018 [here](#).

Health Services Research PhD: As of 2015, all HSR students are required to complete, in consultation with their advisor and at the recommendation of the NIH notice [NOT-OD-13-093](#), an Individual Development Plan (IDP). The IDP is a valuable tool that gives students the opportunity to address their short- and long-term goals. Based on the needs identified by students, the program sponsors a series of career development sessions with students and postdoctoral fellows that cover strategies to successfully navigate the job search process. See HSR career outcomes from 2012-2018 [here](#).

Master's Students

Biostatistics AM/ScM: Career advising has been developed into a required component of the degree program as the Master's Career Information Series, a critical component of the Master's Journal Club. Through this series, master's students are introduced to University resources such as the CareerLAB, the Writing Center, and the Sheridan Center for Teaching and Learning. Most effective is the introduction and access to local and regional industry professionals from organizations such as Johnson & Johnson, Blue Cross & Blue Shield, Pfizer, and the RAND Corporation. The Biostatistics Master's Career Information Series has had significant success in bringing back alumni to share with current students their employment experiences and providing recommendations on advancement for graduating students. In addition, students can find job postings and other career-related resources on the [program's website](#). See Biostatistics career outcomes from 2013-2018 [here](#).

Clinical and Translational Research ScM: The program has only a few students. Participants are concurrently employed physicians or medical/doctoral students and typically do not

request or attend career-focused programming.

Master of Public Health (MPH): There are a number of opportunities for students in the program to learn about career options. All MPH students are introduced to the Brown University CareerLAB (Life After Brown) during orientation week. The Associate Director of Career Counseling for Graduate Programs gives an overview of the services offered to the MPH students, including individual career advising, networking with Brown alumni, on-campus employer recruitment, Graduate Program career fairs, mock interviews, and a series of workshops focused on master's students' employment preparation and job search strategies. Students are encouraged to go to the CareerLAB early and often throughout their time in the MPH Program for individual counseling. The program also sponsors two to three MPH Alumni Career Panels each year. In Spring semesters 2017-2019, the panels featured MPH alumni representatives from an array of different career paths presenting information about each of their respective jobs, the everyday tasks and activities involved, and the skill sets that were required of each type of job. The panel presentations were interactive, with a question and answer period. The two MPH Alumni Career Panels scheduled for Spring 2020 were canceled due to the COVID-19 pandemic.

To better meet the career planning needs of students and to address the range of career interests, the program also redesigned the Public Health/Community Service Internship course into two half-credit courses beginning academic year 2018-2019. The courses are PHP 2071: Applied Public Health: Systems and Practice and PHP 2072: Applied Public Health: Policy, Leadership and Communication. The PHP 2071 course now includes seminars/workshops focused on topics related to career planning, writing professional resumes/CVs and cover letters, preparing for internship and job interviews, and application tips and strategies for applying to medical education programs. See MPH career outcomes from 2017-2019 here

Undergraduate Students

In consultation with the Departmental Undergraduate Group (DUG), annual panels have been held at the School of Public Health to provide insight into research and internship opportunities for undergraduate concentrators. The Fall 2019 Student Research & Internship panel attracted 15 student participants. This annual event is in early stages of planning for Fall 2020, and a new undergraduate-focused event will be held in Spring 2021 in consultation with the Departmental Undergraduate Group.

2) Explain how individuals providing career advising are selected and oriented to their roles and responsibilities.

At the University level, career advising staff at CareerLAB embrace industry best practices. CareerLAB is a central career office for all Brown students. As such, they provide confidential career counseling, skills development, and career exploration programs. All career counselors see all undergraduates and master's students, including public health students. Most public health students connect with Bev Ehrlich, as she has an MPH degree in addition to a master's in counseling psychology. Therefore, she has specific expertise in both career counseling and the field of public health. Historically, she has partnered with program administrators and faculty members to provide skills-based workshops for master's and doctoral students. She has also worked with the MPH program to develop alumni career development programs.

To expand individualized career advising at the School level, and to provide more public health-focused support to students and alumni related to internships and employment opportunities, an Assistant Director of Career Advising was hired in May 2020. Major responsibilities of the position include implementation and deployment of an overall career services plan for the School's graduate students and alumni, and management and facilitation of internship opportunities for the School. Qualifications for the position include experience in career advising and academic

programming and analytical and administrative experience in an executive-level office. Given that this is a new position, policies and procedures for the role are still being developed. However, policies for ongoing orientation and professional development for the position will include at a minimum participation in regional/national networking opportunities, including the Career Assembly Network and ASPPH/APHA annual meetings as Student Services Section representative; completion of annual benchmarking research of peer/aspirant schools; partnership with CareerLAB to amplify existing resources without duplication and to develop co-sponsored programming/activities; and collaboration with the School's new Director of Community Engagement to formalize local opportunities for students.

3) Provide three examples from the last three years of career advising services provided to students and one example of career advising provided to an alumnus/a. For each category, indicate the number of individuals participating.

Current Students

1. Master of Public Health (MPH): In addition to the MPH Alumni Career Panel presentations, we host regular recruitment and informational career seminars, representing private industry and nonprofit agencies, to which all public health graduate students are invited to attend. Spring 2020 events were canceled due to COVID-19. Recent annual events:
    - In Spring 2019, alumni representatives from Blue Cross & Blue Shield of Rhode Island, Rhode Island Department of Health, Veterans Affairs Medical Center, Willis Towers Watson Consulting, CDC Foundation, and Boston Medical Center participated, and approximately 25 students attended.
    - In Spring 2018, alumni representatives from Management Sciences for Health; Harvard Pilgrim Health Care Institute; Lifespan; Rhode Island Department of Health; Coastal Medical; Mayor's Office, City of Providence; Massachusetts General Hospital; and Dimock Center participated, and approximately 35 students attended the two presentations that were held.
    - In Spring 2017, alumni representatives from Women's Resource Center; Veterans Affairs Medical Center; Rhode Island Department of Behavioral Health, Developmental Disabilities and Hospitals; Dartmouth College; Harvard Medical School; Rhode Island Department of Health; Hospital Association of Rhode Island; Lifespan; Mayor's Office, City of Providence; Cytrellis Biosystems; Coastal Medical; and Partners eCare participated, and approximately 40 students attended the three panel presentations that were held.

2. Behavioral and Social Health Sciences (PhD): The i-BSHS Seminar Series, held annually since the 2013-2014 academic year, connects PhD students with prominent researchers in the field. As a part of their Journal Club requirement, the entire PhD cohort meets with approximately six speakers per year after the official talk has been presented in order to ask more in-depth questions about the visitor's work, but also about professional advice and career trajectory. These events are open to the community, have an average attendance of 50, and are comprised of students/alumni from diverse academic disciplines due to the range of topics covered (approximately 50% of attendees are students).

3. Biostatistics (ScM & PhD): The Biostatistics Department and Center for Statistical Sciences host 10-12 seminars annually (archived here). These visits and seminar presentations by nationally and internationally-recognized statisticians include dedicated meeting time between the students and guests to allow and encourage discussions concerning not only the presented research, but also an opportunity to share experiences and career advice for industry, academia, and government. These seminars are required for all PhD students, consistently attended by master's students, and attended by approximately 20-25 students total. Examples of seminars from the last three academic years:
    - Spring 2018: Rafa Irizarry, PhD – Harvard T.H. Chan School of Public Health
    - Fall 2018: Nicolo Fusi, PhD – Microsoft Research

- Spring 2019: Susan Athey, PhD – Stanford Graduate School of Business
- Fall 2019: Fan Li, PhD – Duke University
- Spring 2020: Sumithra Mandrekar, PhD – Mayo Clinic

In addition, Career advising has been developed into a required component of the degree program as the Master's Career Information Series, a critical component of the Master's Journal Club. Through this series, Master's students are introduced to local and regional industry professionals from organizations such as Johnson & Johnson, Blue Cross & Blue Shield, Pfizer, and the RAND Corporation. Biostatistics Master's Career Information Series has also had significant success in bringing back alumni to share with current students their employment experiences and providing recommendations on advancement for graduating students. Examples of Biostatistics Master's Career Information Series from the last two academic years:

- Fall 2019: Kelly Zou, PhD – Upjohn/Pfizer
- Fall 2019: Shirley Wang, PhD, Harvard, and Ruiting Guo, ScM, Bluebird Bio (ScM Biostats alumni)
- Fall 2019: Naitee Ting, PhD, Boehringer Ingelheim Pharmaceuticals Inc.
- Spring 2020: Joe Cappelleri, PhD, Pfizer (Zoom meeting)
- Spring 2020: Bonnie Ghosh-Dastidar, PhD, RAND (Zoom meeting)

Alumni

In order to provide consistent alumni programming, all events (beginning in Fall 2020) include alumni-majority panels with content appropriate for our diverse alumni population and targeted to them via web, newsletter, and LinkedIn promotion. For example, a webinar titled, "PhD Career Options Outside of Academia" was held in October 2020, attracting 50 registrants, and was comprised of current students and alumni.

In addition to events, alumni benefit from permanent access to our new opportunities database, with at least one third of posted opportunities (250+ alumni-specific opportunities in Fall 2020 alone) requiring postgraduate work experience.

4) Provide data reflecting the level of student satisfaction with career advising during each of the last three years. Include survey response rates, if applicable.

Over the last three years, data about student satisfaction with career advising has been captured by the Enrolled Student Survey administered and analyzed by the University's Office of Institutional Research, the undergraduate Senior Survey administered by the University's Office of Institutional Research, and the Satisfaction Survey administered by the School of Public Health. New Alumni and Employer Surveys were administered in September 2020 by the School of Public Health Survey Research Center. Each survey, its methodology, response rates, and major findings related to career advising are presented below.

Enrolled Student Survey

All enrolled graduate students are surveyed annually about their experiences within their program. The survey is confidential; results are shared with departments and the graduate school only in the aggregate, and only in ways that make it impossible to identify individuals. The survey content is specific to the program (i.e., Doctoral Education Survey, Master's Education Survey). After an initial email to request participation, 3 or 4 reminders are sent. The email communication emphasizes the importance of the survey and directs students to the Office of Institutional Research website where survey results from past years can be seen. Students are further encouraged to participate by communications from the Graduate School. Incentives to complete the survey have varied over the years; for instance, the Graduate Student Council has been given $1 per completed survey for their events budget, or all respondents have been eligible for a random drawing of a gift card. The exact number and

value offered changes from year to year, but has ranged from 5 to 15 gift cards, each worth $100. Please note that the survey questions changed after 2018 to provide more comprehensive data. Therefore, responses shown below for 2018 are those for which students generally or strongly agreed and are labeled as positive responses. The responses shown for 2019 are those for which students answered good, very good, or excellent and are labeled as positive responses. The 2020 Enrolled Student Surveys (sent in March 2020) are not available due to low response rates attributed to COVID-19.

Student Satisfaction Related to Career Advising as Reported in the Enrolled Student Survey by Program and Year			
	2017	2018	2019
Doctoral Programs			
Response Rates			
Behavioral and Social Health Sciences	90%	93%	88%
Biostatistics	54%	53%	55%
Epidemiology	55%	75%	47%
Health Services Research	82%	56%	70%
Item			
My program is preparing me adequately for my current career goals (1=poor, 5 =excellent)			
Behavioral and Social Health Sciences	3.9	4.2	3.9
Biostatistics	4.7	3.8	3.9
Epidemiology	3.2	4.2	4.3
Health Services Research	4.1	4.3	4.0
Respondents admitted to candidacy who received helpful advice this year on consideration of academic career options			
Behavioral and Social Health Sciences	86%	67%	86%
Biostatistics	100%	100%	60%
Epidemiology	50%	75%	80%
Health Services Research	92%	100%	100%
Respondents admitted to candidacy who received helpful advice this year on consideration of non-academic or other professional career options			
Behavioral and Social Health Sciences	29%	42%	31%
Biostatistics	100%	75%	50%
Epidemiology	50%	75%	80%
Health Services Research	82%	75%	100%
Received assistance and support on academic career planning			
Behavioral and Social Health Sciences	78%	69%	87%
Biostatistics	86%	57%	64%
Epidemiology	64%	67%	86%
Health Services Research	71%	90%	93%
Receiving assistance and support on non-academic career planning			
Behavioral and Social Health Sciences	56%	62%	60%
Biostatistics	86%	57%	64%
Epidemiology	64%	83%	71%
Health Services Research	64%	90%	71%

Student Satisfaction Related to Career Advising as Reported in the Enrolled Student Survey by Program and Year			
	2017	2018	2019
Master's Programs*			
Response Rates			
Biostatistics	45%	67%	46%
MPH	66%	72%	74%
Item			
My program is preparing me adequately for my current career goals			
Biostatistics	NA	70%	59%
MPH	NA	56%	76%
Career advising by faculty (positive response)			
Biostatistics	NA	61%	65%
MPH	NA	33%	65%
Professional development or career preparation (positive response)			
Biostatistics	NA	69%	83%
MPH	NA	51%	76%
Attended a networking event			
Biostatistics	NA	52%	71%
MPH	NA	48%	51%
Participated in an internship, consultancy, or co-op			
Biostatistics	NA	35%	47%
MPH	NA	73%	74%
Received assistance or support for postgraduate career planning			
Biostatistics	NA	95%	88%
MPH	NA	77%	68%
Confident in ability to identify future graduate school options or fellowship opportunities			
Biostatistics	NA	78%	76%
MPH	NA	69%	65%
Confident in ability to network effectively			
Biostatistics	NA	72%	65%
MPH	NA	63%	58%
Note: *Data are not shown for the Clinical and Translation ScM because of fewer than 5 students in all years; --- = no results shown, fewer than 5 students; NA = not asked			

Undergraduate Senior Survey

Undergraduate graduating seniors are surveyed by the Office of Institutional Research every other Spring as part of a joint effort with similarly competitive colleges and universities. The survey is confidential, and results are shared only in the aggregate (no identifiable information is provided). An introductory email is sent to graduating seniors from a senior administrator (President, Dean of the College, and/or Vice President for Campus Life and Student Services), followed by an invitation email from the Director of Institutional Research and three reminder emails from the Associate Director of Institutional Research. In recent years, the incentive has been a random drawing of $100 gift cards to the Brown Bookstore. The Senior Survey has

been administered since 1996, and response rates have ranged from 25% to 69%. The overall response rates for the most recent surveys conducted are: 68% in 2014, 63% in 2016, and 54% in 2018. Due to COVID-19, the Office of Institutional Research did not administer the survey in Spring 2020.

In the section of the survey related to "Brown's Contribution to Knowledge, Skills & Personal Development" and "Breadth of Study" sub-section, there is one item related to career advising. Results for the undergraduate public health concentration are as follows:

Student Satisfaction Related to Career Advising as Reported in the Undergraduate Senior Survey by Year (2014-2018)			
Item	2014	2016	2018
Satisfaction with career- or work-related knowledge and skills (1=very dissatisfied and 4=very satisfied)			
Public Health	2.91	3.11	2.85
Statistics	---	---	---
--- = The Office of Institutional Research does not publish results with fewer than 5 responses			

School Satisfaction Survey

Since 2018, an anonymous School-wide satisfaction survey has been sent to both current and graduating students (undergraduate, master's, and PhD) in mid-May to measure the quality of School resources provided. In a continuous effort to improve response rates to the goal of >80%, an initial email from the Associate Dean for Academic Affairs was sent to all current and graduating students detailing the surveys they would receive, what they measured, and why there were important. As a follow-up, and again to maximize response rates, survey invitations were emailed directly to current and graduating students from departmental administrators/ program directors with whom they have the most consistent contact during their programs. As an anonymous survey, follow-up posed a challenge, so administrators were charged with using their most successful communications channels to maximize response rates. Results for students in each of the programs are as follows:

Level of Satisfaction with Career Advising Resources at the Brown School of Public Health by Program and Year			
	2018	2019	2020
Response Rates			
Doctoral Programs			
Behavioral and Social Health Sciences PhD	NA	NA	5%
Biostatistics PhD	NA	NA	38%
Epidemiology PhD	88%	67%	56%
Health Services Research PhD	100%	NA	42%
Master's Programs			
Biostatistics AM/ScM	NA	NA	49%
Clinical and Translational Research ScM	50%	19%	0%
Master of Public Health	60%	19%	26%
Undergraduate Program			
Public Health AB	52%	21%	15%
Statistics ScB	NA	NA	43%
Item			

Level of Satisfaction with Career Advising Resources at the Brown School of Public Health by Program and Year			
	2018	2019	2020
Satisfaction with community internships (% somewhat or extremely satisfied)			
Reported as not applicable by most doctoral students			
Master's Programs			
Biostatistics AM/ScM	NA	57%	47%
Clinical and Translational Research ScM	---	---	---
Master of Public Health	67%	42%	75%
Undergraduate Program			
Public Health AB	73%	55%	48%
Statistics ScB	---	---	---
Satisfaction with professional development opportunities (% somewhat or extremely satisfied)			
Doctoral Programs			
Behavioral and Social Health Sciences PhD	---	---	---
Biostatistics PhD	NA	83%	89%
Epidemiology PhD	100%	---	40%
Health Services Research PhD	---	---	---
Master's Programs			
Biostatistics AM/ScM	NA	87%	82%
Clinical and Translational Research ScM	---	---	---
Master of Public Health	58%	54%	52%
Undergraduate Program			
Public Health AB	78%	50%	38%
Statistics ScB	---	---	---
Satisfaction with networking opportunities with public health professionals and/or leaders in your field (% somewhat or extremely satisfied)			
Doctoral Programs			
Behavioral and Social Health Sciences PhD	---	---	---
Biostatistics PhD	NA	100%	
Epidemiology PhD	86%	---	50%
Health Services Research PhD		---	---
Master's Programs			
Biostatistics AM/ScM	NA	87%	88%
Clinical and Translational Research ScM	---	---	---
Master of Public Health	54%	62%	64%
Undergraduate Program			
Public Health AB	55%	58%	46%
Statistics ScB	---	---	---
Satisfaction with career advising (% somewhat or extremely satisfied)			
Doctoral Programs			
Behavioral and Social Health Sciences PhD	NA	NA	---
Biostatistics PhD	NA	NA	67%
Epidemiology PhD	NA	NA	13%
Health Services Research PhD	NA	NA	---

Level of Satisfaction with Career Advising Resources at the Brown School of Public Health by Program and Year			
	2018	2019	2020
Master's Programs			
Biostatistics AM/ScM	NA	NA	44%
Clinical and Translational Research ScM	NA	NA	---
Master of Public Health	NA	NA	70%
Undergraduate Program			
Public Health AB	NA	NA	38%
Statistics ScB	NA	NA	---
Note: --- = no results shown, fewer than 5 students; NA=question not asked			

Fall 2020 Alumni Survey

Starting in August 2020, the School, under the direction of Dr. Kim Gans and Sean Kelley, conducted a survey of public health graduates regarding their opinions on the competencies and their importance in the work place, suggestions about the curriculum, and changing practice and research needs. Moving forward, these surveys will be conducted of alumni that graduated 2 years ago, 4 years ago and 8 years ago so that we do not overlap with the alumni surveys administered by the University's Office of Institutional Research. Respondents were offered a Brown School of Public Health face mask for completing this survey. In tandem with the alumni survey in August 2020, the school also conducted an inaugural employer survey asking for supervisor opinions about the adequacy of our curriculum and competencies for their worksite. As part of the alumni survey, we asked for assistance in facilitating the employer's participation (asking for optional name and email), and we also attempted to identify supervisors through social media (the School's LinkedIn, Twitter, and Facebook pages specifically). Data collection for the employer survey is ongoing.

Level of Alumni Satisfaction with Career Advising Resources at the Brown School of Public Health	
Response Rates	
Doctoral Programs	
Behavioral and Social Health Sciences	40%
Biostatistics	45%
Epidemiology	36%
Health Services Research	45%
Master's Programs	
Biostatistics AM/ScM	30%
Clinical and Translational Research ScM	30%
MPH	36%
Undergraduate Programs	
Public Health AB	22%
Statistics ScB	23%
Class Year Representation	
Class of 2017	26%
Class of 2018	20%
Class of 2019	22%
Class of 2020	33%
Satisfaction with preparation received for chosen career (1=not at all satisfied to 5=very satisfied)	Mean (SD)
Doctoral Programs	

Level of Alumni Satisfaction with Career Advising Resources at the Brown School of Public Health	
Behavioral and Social Health Sciences	---
Biostatistics	4.6 (0.5)
Epidemiology	4.6 (0.5)
Health Services Research	5.0 (0.0)
Master's Programs	
Biostatistics AM/ScM	3.6 (1.1)
Clinical and Translational Research ScM	---
MPH	4.3 (0.8)
Undergraduate Programs	
Public Health AB	4.2 (0.8)
Statistics ScB	3.6 (1.2)
Satisfaction with academic advising from *faculty* (1=not at all satisfied to 5=very satisfied)	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	5.0 (0.0)
Epidemiology	4.1 (1.1)
Health Services Research	5.0 (0.0)
Master's Programs	
Biostatistics AM/ScM	4.4 (0.7)
Clinical and Translational Research ScM	---
MPH	4.4 (0.8)
Undergraduate Programs	
Public Health AB	3.6 (1.2)
Statistics ScB	4.0 (1.0)
Satisfaction with academic advising from *staff* (1=not at all satisfied to 5=very satisfied)	
Doctoral Programs	
Behavioral and Social Health Sciences	---
Biostatistics	4.6 (0.5)
Epidemiology	3.7 (1.1)
Health Services Research	4.4 (0.5)
Master's Programs	
Biostatistics AM/ScM	4.3 (0.8)
Clinical and Translational Research ScM	---
MPH	4.4 (0.8)
Undergraduate Programs	
Public Health AB	3.6 (1.1)
Statistics ScB	3.8 (1.3)
Percentage of respondents providing qualitative feedback* regarding *career advising*	44%
Percentage of respondents providing qualitative feedback* regarding *academic advising related to careers*	23%
Percentage of respondents denoting career advising as one major area of improvement related to their experience	11%

Level of Alumni Satisfaction with Career Advising Resources at the Brown School of Public Health
Note: (SD)=standard deviation; --- = no results shown, fewer than 5 students

*Qualitative feedback themes:
- Non-academic career advising
- Early introductions to diversified pathways
- Public health-specific advising resources to complement CareerLAB's general resources
- More frequent alumni panels and/or networking opportunities
- Increased opportunities for internships, jobs, and volunteer opportunities (focused on local organizations as well as expanded geographic opportunities)

5) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: Students benefit from the small size of our academic programs, allowing for close faculty mentorship, program-level alumni events (including panels), and one-to-one referrals.

Challenges: Career advising has been decentralized across programs, and therefore students have not benefited equally from support in this area. There has not been a robust plan to evaluate the career advising programming and services provided.

Plans: As of May 2020, there is a centralized resource for students in the form of an Assistant Director of Career Advising. As the School works to elevate its career advising services and measure their effectiveness, there will be a concerted effort to promote existing services within programs as well as strengthen areas of weaknesses. Many of the efforts to streamline and enhance advising efforts are tactical in nature. Therefore, we will align tactics with goals for improvement. These will include the following:

- Increase engagement and develop more regular alumni-focused programming (current students and alumni)
- Employers/community partners: diversify opportunities/pipeline and provide streamlined recruitment support for employers (employers/community partners)
- Strengthen availability of online tools
- Foster a continuum/feedback loop from prospective students to alumni
- Improve metrics, including response rates, in partnership with the Office of Institutional Research and internal stakeholders for evaluation of services provided

Efforts to Address Areas of Improvement: As of September 2020, a concerted effort has been made to enhance career advising resources for current students and alumni alike. In response to the goals for improvement, actions that have been taken are as follows:

- Increase engagement and develop more regular alumni-focused programming (current students and alumni).
  - As of September 2020, alumni now have a dedicated website with alumni-specific resources, access to the new opportunities portal (Brown login required), and are proactively invited to attend all virtual career events via email and/or the LinkedIn student and alumni group.
  - By Fall 2021, we expect that the Assistant Director position will be able to dedicate an average of one full day per week specifically to alumni networking, outreach, and program development.

- Employers/community partners: diversify opportunities/pipeline and provide streamlined recruitment support for employers (employers/community partners)
  - Administrators and faculty are actively directing employer requests to the new Assistant Director of Career Advising. Employers also now have a dedicated resources website to maximize exposure to Brown students and alumni seeking opportunities, which includes database and LinkedIn group promotion, event and interview coordination, and inclusion on the new careers calendar.
- Strengthen availability of online tools
  - Our new Careers website serves as a much needed resource, aggregating campus-wide resources into easy-to-use steps for students and alumni in all stages of their career journeys.
- Foster a continuum/feedback loop in the full student lifecycle: from prospective students to current students to alumni
  - Surveys (August 2020), alumni panels (three scheduled during Fall 2020), and a Student Advisory Board were established to receive regular feedback. We will consider a mentoring program in future years to more closely connect students with established alumni
- Improve metrics, including response rates, in partnership with the Office of Institutional Research and internal stakeholders for evaluation of services provided
  - Fall alumni and employer surveys were delivered by the School of Public Health Survey Research Center in an effort to formalize delivery methods and improve response rates.

H3. Student Complaint Procedures

The school enforces a set of policies and procedures that govern formal student complaints/grievances. Such procedures are clearly articulated and communicated to students. Depending on the nature and level of each complaint, students are encouraged to voice their concerns to school officials or other appropriate personnel. Designated administrators are charged with reviewing and resolving formal complaints. All complaints are processed through appropriate channels.

1) Describe the procedures by which students may communicate any formal complaints and/or grievances to school officials, and about how these procedures are publicized.

<u>Graduate Students</u>

The grievance procedures for Graduate students can be found in the [Graduate School Handbook](#). They can also be found in the Faculty Rules and Regulations ([see ERF](#)), Part 4, Section 11, IIA.

The Graduate Student Grievance procedure is one of several processes available to graduate students alleging inappropriate treatment. Normally, if another process exists to address the specific issue in question, that process should be used. Other processes include: the Title IX process, the Student Conduct process, and the Discrimination and Harassment Policy Incident Reporting process. This Graduate Student Grievance procedure is used when none of the more specialized processes are appropriate. Within this context, the process can be used by graduate students pursuing concerns with other graduate students, faculty, programs, or departments. In cases involving a staff member, the student may need to contact University Human Resources. In cases where it is unclear which process applies, the student consults with the Associate Dean of Academic Affairs in the Graduate School.

Students are encouraged, when possible and appropriate, to attempt to resolve the difficulty through discussion with the other person or persons involved. The student is also encouraged to consult with the program's Director of Graduate Study or, particularly if the Director of Graduate Study is an involved party, with the relevant Department Chair. Other senior faculty may also serve as sources of clarification and advice. Graduate students may also confer with the Ombudsperson, a dean from the relevant academic unit, and other campus resources.

All individuals involved in committees reviewing grievances are expected to maintain the privacy of a student's education record in accordance with the University's FERPA Policy. Committee members and parties must conduct themselves in an even-handed and constructive manner, without intimidation or retaliation.

The remedies and sanctions available through the grievance process are determined by the authority of the relevant level of review, specifically the graduate program, the academic department, or the Graduate School. The body hearing the grievance may, as it judges appropriate, consult with relevant other offices at the University, such as the Office of the Dean of the Faculty or University Human Resources. The steps for how a complaint or grievance filed through official University processes progresses is detailed in point #2 below.

<u>Undergraduate Students</u>

Brown has such a robust undergraduate college advising and support structure that undergraduate students generally utilize resources provided within that structure as their "go-to" mechanisms for dealing with whatever issues they might be experiencing.

The most common procedure for undergraduate academic grievances is the [grade appeal policy](#) (whereby concerns about grading may be escalated to the Department Chair or Associate Dean

for Academic Affairs in the School of Public Health, or to the Dean of the College if the instructor is the Department Chair or Associate Dean for Academic Affairs). This information is publicly available on the [Registrar's website](#), a general resource to which students are directed during Orientation and through communication by the College and Registrar's Offices. Students are also specifically directed to the grade appeal policy when they request information about grading challenges. All academic advising deans in the College are made aware of this resource and process during onboarding and training and are prepared to counsel students who have concerns about their grades. If a student is impacted by a bias incident, there is a reporting mechanism through the Office of Institutional Equity and Diversity.

2) Briefly summarize the steps for how a complaint or grievance filed through official university processes progresses. Include information on all levels of review/appeal.

Graduate Students: Program Level

I. If no satisfactory resolution is achieved through direct discussion (if any), the student has the option of pursuing a formal grievance. If the matter falls under a single graduate program and the student wishes to file a formal grievance, the student shall file a written complaint, via email or hard copy, with the Director of Graduate Study, with a copy sent by the complainant to the Dean of the Graduate School.

II. The complaint must include a clear statement of the grievance, evidence in support of the claim, indication of any previous efforts to address the problem, and the proposed resolution.

III. The recipient of the written complaint, whether the Director of Graduate Study or the Chair, must (1) forward a copy of the compliant to the respondent and (2) within 10 business days, provide to the student a written, preliminary response that outlines the process going forward.

IV. The Director of Graduate Study or Department Chair, within 15 business days after receiving a complaint, must refer it to a committee of review. The committee of review is named by the Director of Graduate Study or Chair and must include the Chair (unless he or she is an involved party), at least two other faculty members, and at least one graduate student member; when evaluation of the quality of academic work is required, the student member or members shall be non-voting.

V. As expeditiously as possible (and in no more than 30 business days), the committee of review must hear the student and respondent, consider the relevant evidence, confer with other persons concerned in the discretion of the committee of review, and prepare a report of findings. This report must include a summary of the process as well as the determination regarding the grievance and must be shared with the complainant and respondent(s). Thus, within 45 business days of the initial filing of the complaint, the student receives a written response to the complaint. In exceptional circumstances, the student may be notified that more time is required to reach a determination; but the expectation is that the program should arrive at an outcome within the 45 business day period. This finding, along with relevant documentation, must be forwarded to the Graduate School.

VI. A student who believes that any procedure has not been carried out within a reasonable period of time may appeal to the Dean of the Graduate School for a determination of this allegation.

Graduate Students: Graduate School Level

I. If a complainant or respondent (1) seeks to appeal the finding at the program level or (2) contends that the process at the program level was not being followed, he or she must, within 20 business days of issuance of the finding, file a written appeal with the Dean of the Graduate School. This appeal must include the materials from the program-level process as well as an explanation of the basis for the appeal. If (a) the Director of Graduate Study and Chair are involved parties, (b) the Director of Graduate Study is an involved party and the graduate program does not reside in a single department, or (c) the matter does not fall

under a single graduate program, then the complaint can be submitted to the Graduate School without having previously gone through the program-level process.

II. Upon receipt of the complaint, the Dean of the Graduate School must establish an ad hoc committee to review the grievance. This ad hoc committee must consist of one faculty member from the same academic division as the student filing the compliant (who shall serve as chair), one student from the same division, one faculty member from another division, one student from another division, and one associate dean from the Graduate School.

III. Once the ad hoc committee is established, the Dean of the Graduate School must inform the student and other involved parties of the membership of the committee. This notification must be sent within 25 business days of the receipt of the complaint.

IV. The ad hoc committee is expected to review all submitted materials and to consult with relevant parties. The ad hoc committee must issue its finding within 45 business days of the student's being notified of the formation of the committee. In exceptional circumstances, the student may be notified that more time is required; but the expectation is that the program should arrive at an outcome finding within the 45 business day period.

V. If a complainant or respondent seeks to appeal the decision of the ad hoc committee, he or she may appeal this decision to the Dean of the Graduate School. That appeal must be submitted in writing within 10 business days of the ad hoc committee's decision. The Dean of the Graduate School notifies the parties of the outcome of the appeal within 45 business days of its receipt.

VI. If a complainant or respondent seeks to appeal the decision of the Dean of the Graduate School, he or she may appeal this decision to the Provost of the University. That appeal must be submitted in writing within 10 business days of the decision by the Dean of the Graduate School.

Undergraduate Students

Brown's Open Curriculum is defined by an individualized framework that provides considerable agency and flexibility to students. For example, the first paragraph of the section on Baccalaureate Degree Requirements in Faculty Rules and Regulations (see ERF) begins:

"At Brown University, the purpose of education for the undergraduate is to foster the intellectual and personal growth of the individual student. The student, ultimately responsible for their own development in both of these areas, must be an active participant in framing his or her own education. A central aspect of this development is the relationship of the student with professors and fellow students and with the material they approach together. Structures, rules, and regulations of the University should facilitate these relationships and should provide the student with the maximum opportunity to formulate and achieve their educational objectives."

The School has a strong commitment to the Brown approach to undergraduate education and the undergraduate students. Thus, any complaints or issues brought to the School's attention through any mechanism are addressed immediately. The Associate Dean for Academic Affairs works with Chairs and others as needed to review and resolve the situation.

Academic Grievance

i. Students who have questions about a grade should contact the instructor as soon as possible after the grade was received.
   a. Concerns about grades received on assignments or midterm exams should be raised with the instructor during the semester in which the grade is received.
   b. Questions about final grades should be communicated early in the following semester. (Note: Most concerns about grading are resolved in this way).

    ii.   When consulting with the instructor does not resolve the concern, students may appeal to the Chair of the department and/or the Associate Dean for Academic Affairs.
        a.   Such appeals must be made before the midterm date of the semester after which the grade was received.
        b.   Students should be prepared to submit their appeal in writing, along with the course syllabus and graded work.
        c.   Chairs/Associate Dean for Academic Affairs consult with the course instructor about the student's assessment and review relevant course materials.
        d.   If the Chair/Associate Dean for Academic Affairs determines that a grade change may be warranted, he or she consults with the Dean of the College before making a final decision.
    iii.   Students are encouraged to consult with one of the academic deans at the University if they have questions about this or any other course-related issues.
    iv.   If a grievance involves a student's academic standing, the Committee on Academic Standing reviews the student's petition.
        a.   Students may appeal the decision of the Committee on Academic Standing to the Dean of the College.
        b.   In addition, students experiencing academic difficulties are supported by the Committee on Academic Standing, which reviews the degree progress of students at least three times each year, and assigns a specific academic advising dean (in addition to existing advisors) for all students who are not in good standing.

Bias Incident

    i.   Students experiencing a bias incident may make a report online to the Office of Institutional Equity and Diversity (see Incident Reporting).
    ii.   An email confirmation is sent to those reporting the incident, including written notice of available campus resources.
    iii.   The Brown Response Team, consisting of campus community members, reviews the incident, and individual invitations are sent to discuss the incident and connect the affected student with appropriate procedures or services, which may be provided through any number of relevant campus entities including those within the Division of Campus Life and the Division of Residential Life (see Reporting Process).

3) List any formal complaints and/or student grievances submitted in the last three years. Briefly describe the general nature or content of each complaint and the current status or progress toward resolution.

During the past three years, we have had no formal complaints or student grievances.

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: The University has well-specified processes for graduate student grievances. These multi-step procedures allow for resolution of an issue at the lowest level possible. The procedures provide mechanisms for students to appeal the decision made at a lower level to the next highest level, all the way up to the level of the Provost. The University has a team of undergraduate academic advising deans that are trained and prepared to counsel students with regards to grade concerns. The Office of the Dean of the College provides many resources for students with regard to whom to contact with concerns related to academics or bias incidents.

Challenges: Although the graduate student grievance procedures are well-documented, there is concern that students may not be fully aware of the processes, particularly as they relate to other processes associated with inappropriate treatment, including the Title IX process, the Student Conduct process, and the Discrimination and Harassment Policy Incident Reporting process.

Plans: We will include more information about the University processes related to students' concerns about inappropriate treatment during student orientation, in Program Handbooks, and on our website under Student Resources and the Undergraduate pages.

H4. Student Recruitment and Admissions

The school implements student recruitment and admissions policies and procedures designed to locate and select qualified individuals capable of taking advantage of the school's various learning activities, which will enable each of them to develop competence for a career in public health.

1) Describe the school's recruitment activities. If these differ by degree (e.g., bachelor's vs. graduate degrees), a description should be provided for each.

Graduate Degrees

The Brown University School of Public Health and the Graduate School collaborate in developing competitive scholars who will graduate from Brown to play leading roles in the future, both domestically and internationally in the field of public health. The recruitment goals are:

- Attract high-quality prospective students with a deep passion for social justice
- Align outreach efforts with the Brown University ethos
- Diversify recruitment pipelines (local/feeder schools, national events and conferences)

There are several different recruitment strategies targeting students for our graduate degrees.

Inbound recruitment events: These events include the annual Open House, program-specific information sessions, Recruitment Day, Super Monday, the MPH Open House, and Diversity Preview Day. The School host's "This is Public Health" virtual fairs (which include a presentation, Q&A, and a student panel), and one-on-one meetings where prospective students are paired with faculty, staff, Student Ambassadors, and Graduate Program Directors to take a tour of our campus, ask questions, and get acquainted with the academic culture.

- Open House: At least once a year, the School hosts a face-to-face Open House. The event is open to the external and internal prospective students and is publicized through Today@Brown as well as the School of Public Health Calendar. Invitations are sent to Brown undergraduate students as well as the contacts in Mailchimp. Students are shown a PowerPoint presentation about the School of Public Health, followed by a faculty panel and a student panel. Both panels incorporate a Q&A session where prospective students can ask questions.

- MPH Open House: The MPH Open House invites all students that have been accepted into the MPH Program to meet the MPH faculty, staff, and administrators. Admitted students are given an overview of the Brown School of Public Health and the MPH Program and are presented with a Faculty Panel, MPH Student Panel, and MPH Alumni Panel. Lunch is provided. At the end, there is an optional walk around the main campus with MPH staff.

- Recruitment Day (PhD): Invitations are sent to PhD program applicants who are rated highly by the respective admissions committees. Hotel arrangements and travel airfare are provided by the School. Students arrive the day before the event, have an informal evening social event, and attend the structured program, which includes an introduction by the Dean of the School of Public Health, the Associate Dean for Academic Affairs, and the Dean of the Graduate School. Students are oriented to the School, and they engage in interviews with their prospective department's faculty and administration. Lunch is provided as well as a poster session. Students are given a tote bag of materials including the School's view book of graduate programs, career outcomes for their prospective degree, promotional gifts, maps, and contact information.

- Super Monday: Every Spring, the Brown University Graduate School invites newly admitted underrepresented minority students to attend a one-day campus visit called "Super Monday." Throughout the day, students are exposed to various aspects of graduate student life at Brown through interaction with faculty, staff, and students from their prospective departments, deans of the Graduate School, and representatives from various centers and offices on campus. The day ends with a reception and dinner, which is attended by matriculating graduate students, faculty, and staff of color from across the campus. The Graduate School covers the costs associated with prospective students' transportation to and from Providence and overnight accommodations for this event.

- "This is Public Health (TIPH)" virtual fairs: The TIPH virtual fairs are presented through the CareerEco platform provided by the ASPPH. A pre-recorded overview of the School of Public Health in PowerPoint begins the session. Virtual attendees are able to type in questions for staff and administrators to answer throughout the fair. Staff and administrators from all of the departments attend. After the presentation, a live-webcast student panel is hosted where a moderator asks questions to the panel and also fields questions from the virtual prospective student attendees.

- Diversity Preview Day: Prospective graduate students from diverse backgrounds with an interest in pursuing a PhD are invited to visit campus in the fall to explore academic, social, and professional opportunities at Brown. There will be opportunities to meet faculty, deans and, current doctoral candidates, as well as tour campus and learn about Graduate School diversity initiatives.

Outbound recruitment events: The Assistant Director of Student Recruitment and Marketing and others participate in live and virtual recruitment fairs at Connecticut College, Ithaca College, Cornell University, Morehouse College, Roger Williams University, Providence College, University of Southern California, Manhattan College, St. Augustine's University, and many more. The School collaborates with the Brown CareerLAB, and attends career fairs such as the DC STEM and Health Fair; Idealist (in Boston, NYC, and LA); This Is Public Health (TIPH) fairs in Philadelphia, Boston, DC, LA, Portland, and San Diego; and ASPPH (Philadelphia). Other fairs include the NIH fair, Leadership Alliance, Annual Biomedical Research Conference for Minority Students (ABRCMS), Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), and the UMASS Boston and the Initiative for Maximizing Student Development (IMSD) fairs.

Digital tactics are also executed through social media, email, and digital recruiting campaigns via Mailchimp, Facebook, Instagram, Twitter, CareerEco, and Zoom. One campaign in Spring 2020 entitled "Just Ask" encouraged prospective students to reach out to the School's Student and Alumni Ambassadors. This campaign was launched through Facebook, Instagram, and Mailchimp.

Data from 2020 "Just Ask" Campaign	
Reach	140,352
Impressions	900,128
Amount spent	$350
Cost per result	$0.07
Frequency	6.4
Link clicks	4,925
Unique link clicks	4,550

Prospective student contact information is uploaded into the Mailchimp platform in two automated campaigns: "Consider Brown" or "Graduate Students" audiences. Students who request information fill out a form to join our mailing list and are placed in the "Graduate Students" audience. Contact information that is not directly given to us from prospective students (e.g., purchased through GRE or attained through a list of fair registrants) is uploaded into our "Consider Brown" Mailchimp audience, and those prospective students are sent an email where they are provided the opportunity to opt-in to further communication.

The School of Public Health Admissions website is the primary source of information for the prospective graduate student population. It includes admissions FAQs, program information, program curriculum, program requirements, tuition and funding, class profiles, and career outcomes. Our admissions email (SPH-Admissions@brown.edu) is available for prospective students to ask questions and become connected to faculty, staff, departments, and administration. Recruitment events are published on the School of Public Health calendar. The School purchases GRE contacts through Educational Testing Service (ETS). The Recruitment office mails pennants and postcards to accepted students and provides them with an informative website called the "Admitted student's page" to help with yield. The office also mails postcards and materials to college advisors of the top 100 schools in the nation to begin building the pipeline of students for graduate programs in public health.

Students submit their applications through SOPHAS and SOPHAS Express and are provided with links, support, and deadline reminders via WebAdmit. Brown undergraduate students are recruited into our graduate programs through internal listservs and made aware of events through Today@Brown. The recruitment strategy is in line with the School's strategic plan, mission statement, vision, and values.

<u>Undergraduate Degrees</u>

Recruitment strategies for students into the undergraduate concentrations differ from those used for the graduate programs.

The University Admissions Office notifies all University concentrations about admitted students (Early Decision and Regular Admission) who list that concentration as an area of interest. Prior to the deadline date for applicants to make a choice of acceptance, the Associate Dean for Academic Affairs sends a welcoming letter acknowledging their interest and encouraging them to contact us, even before making a decision on acceptance. Students "declare" their intended concentrations by submitting reflective writing and proposed course plans for approval by the end of their fourth semester. Concentration advisors review the submitted declarations, requesting clarification or edits as needed. Concentrations are not able to exclude students from declaring concentrations based simply on grades-to-date, although pre-declaration conversations between students and concentration advisors can address possible difficulties with concentration requirements based on previous course grades. Proposed course plans that meet the published requirements are then approved. The following events and activities provide students with information about the undergraduate concentrations.

- Undergraduate "Academic Expo": The Academic Expo is a unique opportunity for first-year students to learn about the wide variety of courses and concentrations available to them at Brown. Professors and concentration advisors from a full range of departments and programs are on hand to answer questions and discuss various aspects of Brown's curricular offerings. Academic deans are also available to discuss course selection, grading options, concentration choices, study abroad opportunities, and independent studies.

- Undergraduate Concentration Fair: In October, the University sponsors a Concentration Fair, which is directed at sophomores, although first-years can attend. University rules are that undergraduates are not allowed to register for Semester 5 coursework (the first

semester of junior year) until they have formally declared a concentration, which most often occurs in Semester 4 (second semester, sophomore year), though a few students declare in their third semester. Each concentration has a table, and students circulate among them, asking questions and receiving information. At the Concentration Fair, the concentration advisor is accompanied by students from the Public Health DUG (Departmental Undergraduate Group). Interested students can therefore talk with faculty and with fellow students. Again, we distribute materials about the concentrations and the Five-Year Undergraduate-MPH program, field questions about study abroad and possible double-majoring, and talk about career options in public health.

Undergraduate "Service/Feeder" Courses: The undergraduate Public Health concentration has two introductory-level, undergraduate courses that act as "service courses" to the University for public health content, and as "feeder courses" to the undergraduate Public Health concentration. One is PHP 0310: Health Care in the United States, the other is PHP 0320: Introduction to Public Health.

2) Provide a statement of admissions policies and procedures. If these differ by degree (e.g., bachelor's vs. graduate degrees), a description should be provided for each.

Each graduate degree program has a separate Admissions Committee. However, the admission processes are similar for all graduate degree programs. As noted below, the undergraduate degrees do not have a formal admissions committee, but approval by a concentration advisor is required.

Graduate Degree Admissions

Applications are received through SOPHAS or SOPHAS Express. The applications are then accessible to the respective degree program's administrative staff and admissions committees. Each degree program's admissions committee applies standards in the review of all applications and makes changes to those standards as needed. Most programs engage in an initial norming process at the beginning of the cycle to orient faculty around a common set of program standards. The admission review is a holistic process that considers the applicant as a whole. Credentials considered include an applicant's academic achievements, professional experiences, goals, and passion for public health. Faculty members are assigned for initial review of applications before the committee votes at its regular meetings.

Some programs assign an applicant to a pair of reviewers who present the application to the full committee, and other programs function as a committee-of-the-whole for the initial review. Even when a pair of reviewers is employed, all committee members have access to the applications. Rating systems are typically used to rank applicants. Admission decisions are discussed with the appropriate Department Chair, or in the case of the Master of Public Health and Clinical and Translational Research degrees, with the Director of Interdisciplinary Programs.

Each Admissions Committee has access to multiple pieces of information, including:
- The online application
- Official transcripts for all undergraduate and graduate academic work (if applicable)
- GRE scores (not required for 2020-2021 application cycle)
- Three letters of recommendation
- Personal statement
- Resume
- TOEFL or IELTS scores for international applicants. TOEFL/IELTS proficiency exams are not required of those students who have earned a degree from a non-US university where the primary language of instruction is English, or from a college or university in the United States.

After review and approval of the Admissions Committee decision from the Graduate School, the results are then communicated to the applicants via email.

The application portal opens in late August/early September. Graduate program degree application deadlines are shown in the table below.

Graduate Program Degree Application Deadlines	
Behavioral and Social Health Sciences PhD	December 15 (PhD)
Biostatistics PhD	December 15
Epidemiology PhD	December 15
Health Services Research PhD	December 15
Master of Public Health (MPH)	February 1 (priority), April 1 (space-available)
Biostatistics ScM	February 1
MPH/MPA Dual Degree	February 15
Clinical and Translational Research ScM	May 1

Doctoral degrees: All four doctoral degree programs follow the University practice of closing applications on December 15th. Applications are reviewed by the doctoral programs' admissions committees, and invitations are sent to highly-ranked applicants to attend a School-funded "Recruitment Day" at the end of January/early February. Typically, 11-14 students are invited per degree program. Letters of offer are officially sent under the signature of the Dean of the Graduate School. Doctoral programs University-wide inform the Graduate School of their recommendations for admission. The Graduate School sends a generic letter of offer, and the degree programs follow up with program-specific information about the offer.

Doctoral degree programs have the opportunity to nominate applicants for a Presidential Fellowship, which are offered to the most outstanding doctoral applicants. All components of a student's application are considered, including letters of recommendations, publications, GRE scores (not required for 2020-2021 application cycle), past prizes, awards and recognitions, and undergraduate GPAs.

Master's degrees: Applications are received through SOPHAS or SOPHAS Express. The applications are then accessible to the respective degree program's administrative staffs and admissions committees. Each degree program's admissions committee applies standards in the review of all applications and makes changes to those standards as needed. Most programs engage in an initial norming process at the beginning of the cycle to orient faculty around a common set of departmental standards. The admission review is a holistic process that considers the applicant as a whole. Credentials considered include an applicant's academic achievements, professional experiences, goals, and passion for public health. Faculty members are assigned for initial review of applications before the committee votes at its regular meetings.

Some programs assign an applicant to a pair of reviewers who present the application to the full committee, and other programs function as a committee-of-the-whole for the initial review. Even when a pair of reviewers is employed, all committee members have access to the applications. Rating systems are typically used to rank applicants. Admission decisions are discussed with the Director of Interdisciplinary Programs. After approval from the Graduate School, the results are then communicated to the applicants via email.

<u>Undergraduate-MPH Degree Admissions</u>

5-Year Undergraduate-MPH Program: Applications for this program are completed online through SOPHAS Express. In addition to the online application, the following materials are required:
- Transcripts from all undergraduate institutions
- Three letters of recommendation, at least two from Brown University faculty
- A personal statement of understanding of public health and commitment to pursuing a career in public health; statement should explain the relevance of education and/or experience to pursue a career in public health
- A resume or CV
- SOPHAS Express application fee ($50)

At the time of application, students must have completed or be in the process of completing the following courses:
- PHP 0310: Healthcare in the United States
- PHP 0320: Introduction to Public Health
  Note: These course requirements are in place to assure that students have had adequate exposure to public health training to make an informed decision about applying to the program and to help prepare students to be successful in their future public training (students who have successfully completed an equivalent level of public health training that they would like to substitute for these pre/co-requisites, may request approval for this from the MPH Program prior to applying to the program).

Students are strongly encouraged to apply in their fourth semester (i.e., Spring of Sophomore year) to maximize the planning and mentoring for the program. Applications in the fourth semester should be completed by April 1. Applications are reviewed on a rolling basis from January through April. The admissions decision may be postponed until the end of the fourth semester so that the grades from those courses can be reviewed. Applications may also be submitted in the fifth semester; however, students must meet with the Program Director in advance of applying to review their academic plan to be sure that it is feasible to be successful in the program. Fifth semester applications must be completed by December 1.

<u>Undergraduate Degree Admissions</u>

Undergraduate students must designate a primary concentration. The concentrations are not capped in regard to size. There is a well-specified process to enroll in (i.e., "declare") a concentration. Undergraduates across the University are not allowed to register for their fifth semester until a concentration course plan has been approved, thereby enrolling them into the concentration. Concentrations are therefore "declared" most often in March and April of Spring semester. Concentrations are declared in an online system called Advising SideKick (ASK).

For the concentration declaration process, prospective students meet with the Academic Program Manager and/or a concentration advisor and discuss their interests, the concentration's required courses, course selections from among the areas that have elective options, and the semesters when courses would be taken. Study abroad is also often a topic of discussion. Importantly, students are required to provide, in the ASK online system, a complete list of courses that meet the requirements of the concentration. Students do not simply check-off a box that automatically enrolls them in the concentration, so the concentration declaration process is interactive. We have the option of returning a concentration declaration for revision if there are questions about course selection or if the proposed concentration plan is incomplete. Therefore, students do have a screening process before being approved to enter a concentration, but it does not involve a non-interactive "rejection" option as exists for offers of admission to the graduate degrees.

Undergraduates also have the option of designating a second concentration (i.e., "double majoring"). This declaration does not have to happen by the end of the fourth semester, so such declarations can occur as late at the last semester of the student's junior year. However, the procedure to declare a second concentration is identical to that used for declaring a primary concentration.

3) Select at least one of the measures that is meaningful to the school and demonstrates its success in enrolling a qualified student body. Provide a target and data from the last three years in the format of Template H4-1. In addition to at least one from the list, the school may add measures that are significant to its own mission and context.

H4-1: Outcome Measures for Recruitment and Admissions				
Outcome Measure	**Target**	**2017**	**2018**	**2019**
Increased number of completed applications	5% annually	2% (n=761)	56%[TT] (n=1,189)	12% (n=1,334)
Increased number of accepted students	5% annually	-7% (n=274)	31% (n=360)	17% (n=420)
Increased number of matriculated students	5% annually	19% (n=105)	59% (n=167)	-3% (n=162)
Note: [TT] The very large increase in the number of completed applications coincides with the School's transition to SOPHAS, the centralized application process for public health.				

As a marker of programmatic excellence and recognition, we aspire to continuously increase our completed applications, acceptances, and matriculations by 5% annually over the next 5 years. This target also supports our institutional goal to ensure a high quality and diverse student body. The above table reflects our continuous increases. Note that there was a 56% increase in number of completed applications between 2017 and 2018 when the School transitioned to SOPHAS as the platform for student applications.

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths: We have increased avenues for recruitment and have introduced new initiatives to address financial constraints. We have diversified our avenues of recruitment to reach a broader audience. Avenues include the Annual Biomedical Research Conference for Minority Students (ABRCMS), the Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), DC STEM Fair, McNair Scholars Graduate Fair and Conference, Morehouse College, St. Augustine's University, Connecticut College, Ithaca College, Cornell University, Roger Williams University, Providence College, University of Southern California, and Manhattan College. Our digital outreach has expanded, as well, through social media, email, and digital recruiting campaigns via Mailchimp, Facebook, Instagram, Twitter, CareerEco, and Zoom.

We recognize that cost is a major factor in students' decisions to matriculate, so we introduced the new Health Equity Scholars Program, which eliminates that need by providing highly qualified students from historically underrepresented groups a full tuition scholarship for the MPH Program. We also offer merit scholarships to a many of our accepted students.

Challenges: We are always looking to create academic opportunities for all prospective students. To do so, we need to continue to implement innovate ways to diversify our applicant pool, accept top quality students who are passionate about public health, and continue to search for ways to provide financial resources that make our degree programs accessible.

Plans: We plan to take advantage of our development as a School to help expand and diversify our applicant pools and continue to assure that we admit highly qualified students. As we continue to grow, we hope to invest in a centralized tracking software (CRM) to unify customer (i.e., student) relation management and reporting.

H5. Publication of Educational Offerings

Catalogs and bulletins used by the school to describe its educational offerings must be publicly available and must accurately describe its academic calendar, admissions policies, grading policies, academic integrity standards and degree completion requirements. Advertising, promotional materials, recruitment literature and other supporting material, in whatever medium it is presented, must contain accurate information.

1) Provide direct links to information and descriptions of all degree schools and concentrations in the unit of accreditation. The information must describe all of the following: academic calendar, admissions policies, grading policies, academic integrity standards and degree completion requirements.

Academic calendar

The School of Public Health adheres to the University's academic calendar as posted on the website of the Registrar. Fall semester runs from early September to mid-December, Spring semester runs from later January to mid-May, and Summer session runs from June to August. Commencement is held the Sunday before Memorial Day. To date, Public Health courses have been almost exclusively offered in the Fall and Spring semesters.

Admissions policies

Admission to the Brown University School of Public Health is determined at the program level with oversight by the Graduate School. Each program, in consultation with the dean of the Graduate School, sets its own admission criteria. The individual academic programs evaluate applications for admission. Admission decisions are made after a full review of the materials in the application. Programs consider previous records, test scores, and recommendations and look for clear evidence of the ability to do advanced work of the highest quality. The admission decisions are final. There is no appeals process.

Grading policies

The School of Public Health adheres to the University's grading system. Brown assigns letter grades of A/B/C/NC. There are no "pluses" or "minuses." Undergraduate students may, in consultation with their advisor, elect to be graded on the basis of Satisfactory/No Credit. The Satisfactory/No Credit option is not available to graduate students in the School of Public Health except under very special circumstances (e.g., move of the course to remote learning as a result of the Coronavirus pandemic).

Academic integrity standards

Academic integrity standards for graduate students are set through the *Academic Code for Graduate Students*. All graduate students must abide by the academic conduct rules as outlined in the Graduate School's Academic and Student Conduct Codes. Each summer, all incoming graduate students are required to take an online tutorial on the rules of conduct defined in the academic codes. The Graduate School is in communication with new students about the online tutorial, and they track that all students complete the tutorial.

Academic integrity standards for undergraduate students are set through the University's *Academic Code.* All undergraduate students must abide by the academic conduct rules. Each summer, all incoming undergraduate students are required to take an online tutorial on the results of conduct defined in the academic code. The undergraduate college is in communication with new students about the online tutorial, and they track that all students complete the tutorial.

<u>Degree completion requirements</u>

Degree programs have requirements based on the accumulation of "tuition units" rather than "credit hours." For example, undergraduates must successfully pass 30 tuition units, but pay for 32 in a standard four-year, eight-semester program of study. Typically, each course taken counts as 1 tuition unit, but Brown does have .5 tuition unit and 2.0 tuition unit course options. Grades of A/B/C carry academic "tuition unit" credit toward degree requirements; a grade of NC (No Credit) carries no credit. The number of required course credits (i.e., tuition units) for each program are shown below:

Number of Required Course Credits by Program	
Program	Number of Required Course Credits
Undergraduate	
Public Health	13
Statistics	13
Master's	
MPH	13: 12 full, 2 half
Biostatistics AM/ScM	AM: 8, ScM: 10
Clinical and Translational Research ScM	9
Doctoral	
Behavioral and Social Health Sciences	16: 12 beyond Master's
Biostatistics	24: 16 beyond Master's
Epidemiology	13
Health Services Research	24: 16 beyond Master's
Dual Degrees	
MD-MPH	13: 12 full, 2 half
MPA-MPH	21: 13 full, 8 half
Undergraduate-MPH	13: 12 full, 2 half

The Academic Offerings of Brown University, as well as information about degree programs and many other elements of resources at Brown are contained in the University Bulletin. The School of Public Health has a link within this document. Within the Public Health link is a listing of courses. There are also links to the undergraduate and graduate degree programs. Links to degree requirements for undergraduate concentrations can also be found at Focal Point, a service of the Dean of the College that links back to the University Bulletin.

<u>Student recruitment</u>

The School of Public Health website has several locations that provide information for inquiries by potential students:

Links to all degree and certificate programs offered through the school. These sites in turn link to the individual programs and their respective requirements.

Application deadlines

Application portals to the undergraduate college

Application portals to the Graduate School

[Link highlighting Student Ambassadors](#)

[Link highlighting Alumni Ambassadors](#)

[Link highlighting student profiles](#)

[Link highlighting alumni profiles](#)

[Link to the Public Health Graduate Student Council](#)

[Link to Student Resources](#)

The School has increased its outreach to prospective students through a comprehensive recruitment strategy, which includes the following:

[School Website](#) with student features and videos along with **active social media outlets**

[Facebook](#)

[Twitter](#) (URL is https://twitter.com/Brown_SPH; handle is Brown_SPH)

[Instagram](#)

[YouTube](#)

Additional outreach:

- **Video Campaigns**

  ["Community Partnerships"](#)

  ["Public Health in Providence"](#)

  ["Student and Faculty Relationships"](#)

- **Digital campaigns:**

  ["Discover Brown's MPH" Instagram campaign](#)

  [Mailchimp campaigns](#)

  "[Health Equity Scholars" campaign](#)

- **[Viewbook](#)**

- **[Newsletter](#)** (link to archive)

- **[School of Public Health News](#)**

- ***[Continuum](#)* [magazine](#)**

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