

Department of Health Services

10-Year Review Self-Study

A1 Overview of Organization

A1A Mission and Organizational Structure

A1A.1 Describe the overall mission of the unit.

The Department of Health Services (HSERV) at the University of Washington (UW) may be the only department of its kind within a research-oriented school of public health in the United States. We are uniquely broad in our teaching, research, and service. We train undergraduate, masters, and doctoral students in health administration, health informatics, and public health. Our research portfolio covers the same topics and is led by faculty with backgrounds that include biostatistics, communications, dentistry, economics, epidemiology, health services research, informatics, medicine, nursing, pharmacy, psychology, sociology, and social work. Our many service partners include community-based and healthcare organizations, as well as governmental public health agencies.

Our vision is “a future where systems effectively, efficiently, and equitably promote the health of all populations.” Our mission is “to work with partners in public health and healthcare to prepare leaders, design solutions, and conduct innovative research that is translated into practice and policy.” Our core values are collaboration, excellence, health equity, justice, and service to the public good.

The Department’s vision, mission, and values align well with the School of Public Health (SPH) and the broader UW. Health Services is one of five departments in the SPH (the others are Biostatistics, Environmental and Occupational Health Sciences, Epidemiology, and Global Health), and the School’s Interdisciplinary Program in Health Administration has its administrative home in Health Services.

In 2016, UW launched the Population Health Initiative with three pillars: environmental resilience, human health, and social and economic equity. Three of our faculty serve on the executive committee, and the only student representative is from our MPH Program. The Initiative also includes funding for a new building (opening Fall 2020) that will house our entire Department and facilitate collaboration with the other departments in the School.

A1A.2 List: (1) undergraduate and graduate degrees offered in the unit, including program options, or majors/minors, and fee-based programs within these degrees; and (2) certificate programs offered, if any. In addition, provide detailed information on enrollment and graduation patterns for each degree program (these data should appear in aggregate form, i.e. no student names).

The Department has a broad array of programs serving diverse student audiences.

	Bachelor of Health Informatics and Health Information Management (HIHIM)	Master of Health Informatics and Health Information Management (MHIHIM)	Master of Health Administration (MHA)	MHA Executive Program (EMHA)	Master of Public Health (MPH) – In Residence	Master of Science (MS)	MPH – Community Oriented Public Health Practice (COPHP)	MPH – Executive Program (EMPH)	PhD in Health Services (PhD)
Degree	BS	MHIHIM	MHA	MHA	MPH	MS	MPH	MPH	PhD
Educational format	In-person	Hybrid in-person/on-line	In-person	Hybrid in-person/on-line	In-person	In-person	In-person, Problem Based Learning (PBL)	Hybrid in-person/on-line	In-person
Audience	Early-career	Mid-career	Early-career	Mid-career	Early-career	Early-career	Early-career	Mid-career	Researchers with master's degrees
Duration of program	21 months (6 quarters)	18 months (6 quarters)	21 months (6 quarters)	23 months (8 quarters)	21 months (6 quarters)	21 months (6 quarters)	21 months (6 quarters)	21 months (7 quarters)	Average of 4 years to completion
Credits required	76 w/in major	54	76	69	63	63	63	63	100
Field experience	Site Visits	NA	Internship	NA	Practicum	Practicum	Practicum	Practicum	NA
Culminating project	Mock RHIA exam and Capstone	Capstone	Capstone	Capstone	Thesis or Capstone	Thesis	Capstone	Thesis or Capstone	Dissertation
Funding	Fee-based, Continuum College	Fee-based, Continuum College	Fee-based, Continuum College	Fee-based, Continuum College	State-funded	State-funded	Fee-based, Continuum College	Fee-based, Continuum College	State-funded
Cost of degree ("tuition" only, based on 2017-18 rates)	\$31,312	\$45,630	\$57,760 (resident); \$63,350 (non-resident)	\$62,790	\$39,918 (resident); \$69,498 (non-resident)	\$35,520 (resident); \$61,512 (non-resident)	\$53,994	\$54,140	\$71,040 (resident); \$123,024 (non-resident) ^
Enrollment*	73	37	59	59	74	12	51	50	33
Graduation rates (5-year ave)	89%	75% (first three years of program)	96%	92%	85%	89%	96%	76%	100%
Year established	2001	2010	1970	1998	1969	1969	2000	1977	2000
Accrediting body	CAHIIM	CAHIIM	CAHME	CAHME	CEPH	CEPH	CEPH	CEPH	CEPH

* Includes all active enrollments within 2017-18. See Appendix D for more detailed applicant, enrollment, and diversity data.

^ Amount shown represents four academic years at full cost. Most PhD students receive funding and/or nonresident differential waivers which significantly reduce cost.

The in residence MPH program has concentrations in: 1) health systems and policy, 2) maternal and child health, 3) social and behavioral science, or 4) generalist track. The PhD program has concentrations in: 1) evaluative sciences and statistics, 2) health behavior and social determinants of health, 3) health economics, 4) health systems research, 5) occupational health.

The Department also offers the following certificates:

- Certificate Program in Medical Management
- Graduate Certificate in Comparative Effectiveness Research
- Graduate Certificate in Health Management

- Graduate Certificate in Health Economics and Outcomes Research
- Graduate Certificate in Public Health Practice
- Post-baccalaureate Certificate in Health Informatics and Health Information Management

The SPH has Bachelor of Arts and Bachelor of Science Public Health majors which graduate 250 students per year. The Department's undergraduate courses support these degree programs by providing electives in areas including Health Communication, Health Systems and Administration, Personal Health, Racism and Public Health, and War and Health. We support concurrent MHA and/or MPH degrees with the Schools and Colleges of Built Environment, Business, Dentistry, Law, Medicine, Public Policy, and Social Work.

Our degree programs are highly sought after; we receive approximately 600 applications per year across the nine degree programs. Over the past 5 years, our collective incoming enrollment has increased slightly (from 197 in 2013 to 207 in 2017). Overall, about 60% of our admission offers are accepted, and attrition rates are <5% for all programs. Total enrollment with incoming and continuing students for 2017-18 is 432. Enrollment trends are illustrated in Appendix D.

Graduation rates for the past several years reflect stability and a high degree of student success. We are now graduating approximately 200 students per year, up from 177 in 2013 (13% increase), with completion rates at 90% or higher for most programs. The MHIHIM and EMPH programs have lower completion rates, at about 75%. Students generally complete their degrees on-time (2 years or less for master's students and 4 years for doctoral students).

A1A.3 Describe how the unit supports academic services (e.g. advising) and non-academic faculty and student services (e.g. technology support, fiscal services).

Operations are organized around nine teaching programs and five internal research centers. We employ 71 staff members and 53 core faculty. Core administration (Finance, HR, IT) is comprised of 14 staff and faculty supporting the entire Department. See organizational charts in Appendix A.

Teaching programs are supported by 18 staff, with some sharing of services across multiple programs, 39% serve the MHA-EMHA, 43% the remaining masters (including MHIHIM), 6% the PhD, and 11% the undergraduate program. Daily operations and student services, including academic advising, for all programs are provided by HSERV staff and faculty. Six of the teaching programs are fee-based (self-sustaining) programs, and also receive some support via the UW Continuum College (UWC2) for classroom scheduling, registration and tuition-payment processes, as well as some marketing and fiscal-management functions. The remaining (state-funded) programs (MPH, MS, and PhD) receive this support through a combination of HSERV and central UW services.

The two largest internal research centers, the Health Promotion Research Center and the Northwest Center for Public Health Practice, each employ 15-18 staff. The three smaller centers each have 2-3 staff. Core finance staff support the remaining researchers. Over the next 18 months, we are reorganizing our research entities to more fully share staffing among all centers. All staff report directly or indirectly to the Department's Director for Business and Management Strategy.

In addition, several of our core faculty are based at three large external research institutions: six at the Seattle-Denver VA Health Services Research and Development Center of Innovation (hereafter referred to as the VA Center of Innovation), and three at the Fred Hutchinson Cancer Research Center (FHCRC), and one at the Kaiser Permanente Washington Health Research Institute (KPWHRI). These faculty are actively engaged in the teaching mission of the Department, and while most of their research is based at the VA, the FHCRC, or KPWHRI, their research aligns with our mission, and their collaborators include students and other Department faculty.

A1A.4 Describe the manner in which shared governance works in the unit, along with how the unit solicits the advice of stakeholders such as students, advisory boards and faculty from other academic units.

Shared governance in the Department operates through multiple means. First, there are monthly meetings of faculty and staff, with faculty-only sessions when needed to cover shared-governance issues such as promotions, opening of faculty searches, and broader UW policy matters. Second, there are three standing committees governing promotion, curriculum, and overall operations, respectively the Awards, Appointments, and Promotions Committee; the Curriculum Committee; and the Program Directors and Center Directors Committee. Third, the faculty elect our representatives to the UW Faculty Senate and SPH Faculty Council, as well as the chair of the Curriculum Committee (who also serves as our representative to the SPH Curriculum and Education Policy Committee). Fourth, the Department annually conducts strategic planning with input requested from all faculty and staff. Fifth, the Department's faculty review the teaching, scholarship, and service of their peers in accordance with the schedule established in the UW Faculty Code.

Students serve on some admissions committees, our curriculum committee, our diversity committee, faculty search committees, and the academic-advisory committees for our MHA and PhD programs. The teaching programs cultivate and maintain connections with alumni, and many alumni are actively involved on advisory boards, as well as in fundraising, mentoring, service activities, and recruitment and admissions.

We seek advice from external constituents through advisory committees to both the bachelor's and master's programs in IHIM, the MHA programs, the Health Promotion Research Center, the Northwest Center for Public Health Practice, and the VA Center of Innovation. The PhD program conducts an annual planning retreat with external constituents.

Core faculty (53) hold joint (15) and adjunct (19) appointments, and the Department has offered appointments to adjunct (90), affiliate (58) and clinical (154) faculty (See Appendix R for CVs for all Faculty). In addition, there are 28 emeritus faculty. Adjunct, affiliate, clinical, and emeritus faculty teach courses, serve on admissions and program committees, collaborate on research projects and supervise students through capstone projects and thesis and dissertation committees.

A1B Budget and Resources

A1B.1 Provide an outline of the unit's budget including all sources of funding. Please refer to the budget summary in Appendix B.

Over the past 3 years, the overall Departmental operating budget has averaged ~\$24M.

Revenue streams are split into four categories (FY17 as follows):

- Gifts and Endowments = \$1.1M
- State-funded, including teaching (MPH, PhD, Undergraduate) = \$2.1M
- Fee-based Teaching (Masters Programs through Continuum College) = \$8.2M
- Grants and Contracts = \$10.4M

The Department typically holds an additional ~\$2M in reserves, with most designated for specific purposes. Core expenses (departmental overhead) totaled \$1.5M in FY17 and are allocated to centers and programs based on program size, determined by FTE. While the overall budget has remained fairly constant, we have reduced core administrative expenses 15% each year since FY14.

Because UW and SPH funds not tied to tuition provide only \$0.3M per year, our ability to hire new faculty relies on net income generated by our teaching programs and research. Most Health Services fee-based teaching programs realize net income each year; state-funded teaching programs break even with the help of UW and SPH supplements and allocations, and departmental reserves. Each teaching program is responsible for developing a budget to include tuition revenue, direct and indirect expenses, and a net income of 5%. For research centers, principal investigators are responsible for completing a budget for each project. Budgeting overall administrative support for research is done at the department level. Currently, the indirect cost recovery (ICR) we receive from UW does not cover our administrative costs for research. Our research reorganization, to be completed in July 2019, aims to address this deficit.

A1B.2 Indicate how the unit evaluates whether it is making the best use of its current funding, human capital and other resources.

Major decisions impacting resources are made with input from two advisory groups: 1) Program Directors and Center Directors, comprised of leadership from teaching programs and research centers and led by our Chair; and 2) our Research Council, comprised of senior researchers and led by our Associate Chair for Research. Data used to gauge the health of our teaching programs include: enrollment, graduation rates, graduate employment, and annual net income. The health of research centers is determined by their contribution to population health, number of publications, the number and size of grant proposals submitted, number of awards and total dollars awarded, and administrative costs compared to indirect cost recovery (ICR).

A1B.3 Describe any advancement plans as well as strategies used to pursue additional funds through grants and contracts.

Working closely with the Advancement team in the SPH Dean's Office, the Department has been moderately successful of late in seeking and receiving endowment and gift funding. First, there are three endowed professorships (Greenawalt, Ross, and Scott) in the Department, all associated with the MHA Program. Together, these three funds provide \$75,000 of support per year, much less than the cost of even one faculty salary. At present, only the Ross Professorship has an incumbent (Stillman). A fourth endowed professorship (Dowling), associated with the MHA Program, is recruiting donors. The School and the Department also competed successfully last year for the University-wide Mifflin Endowed Professorship, which provides \$25,000 per year for 5 years to one of our faculty (Hannon). Second, the School worked with the Gates Foundation to establish six "Strategic Hires." Two of those are in the

Department: obesity (Jones-Smith) and health policy and health systems (Garrison). Each receives start-up support of \$95,000 to \$135,000 per year for 5 years, followed by more limited support in perpetuity. Third, the Tobacco Studies Program receives \$160,000 of gift support annually. Fourth, endowments for student support provide about \$40,000 per year. Our main strategy for increasing gifts and endowments is to deepen our relationships with alumni, at both program and department levels. The COPHP program has held an annual alumni event for several years, and the HIHIM and MHA programs have done so recently. The Department held its first alumni event in January 2018, with more than 200 in attendance.

A1C Academic Unit Diversity

A1C.1 Describe the academic unit's diversity plan.

The Department's diversity plan aligns with the School and University Diversity plans, and a Diversity Committee, consisting of students, staff and faculty, is charged with making recommendations for implementation and assessment. The key goal, increasing the diversity of the Department's students, faculty, and staff by implementing and assessing measures to recruit, build and retain a diverse community, will be met via the following proposed objectives:

- Faculty and staff search committees will use School and University diversity toolkits to increase applicant pool diversity and ensure use of best practices for diversity in recruitment.
- The Diversity Committee will select and implement a method of monitoring the Department's climate and inclusivity, and collect baseline data.
- The Diversity Committee will collect and summarize diversity and retention data for faculty and staff to assess our current state and establish measurable goals to increase diversity.
- The Diversity Committee will establish regular communications to alert students, faculty, and staff to diversity-related resources and opportunities; these should be at least quarterly and include both in-person and electronic communication.

Additional efforts include addition of classroom-climate measures to student course evaluations (see section A2A.3, page10), as well as our annual Learning Lab for all faculty and staff (2015 and 2016 topics included fostering trust, respectful communication and developing cohesion across intergenerational, cultural and racial divides; 2017 topics included diversity, discomfort and resilience, intersectionality, culture and implicit bias). We are working to develop on-going follow-up activities and trainings.

A1C.2 Provide an overview of representation on the unit's diversity committee.

The Department established its Diversity Committee in 2016; it is co-chaired by one faculty and one staff member. All Department teaching programs and research centers provide a faculty or staff member to serve on the committee. Students also volunteer to serve on the committee. Standing members include the Department Chair, the manager of faculty HR and the manager of staff HR. Total committee membership has fluctuated over time, and currently stands at 26 and includes 11 students. Some members also serve on the School's Diversity Committee, and one member serves on the University's Diversity Council.

A1C.2.5 Describe the diversity of the unit's faculty and staff.

To provide a supportive and inclusive environment, the Department actively seeks to hire faculty and staff from diverse backgrounds when new or replacement positions are available, utilizing guidelines

provided by the University and the SPH Diversity Committee. Using data from the January 2016 UW Affirmative Action Plan Workforce Analysis, our current core faculty and staff statistics are as follows:

- Faculty: 20% Minority (defined as Black, Asian, Hispanic, Native American, Pacific Islander, or Bi-Racial); 11% under-represented minority (URM, defined as Black, Hispanic, Native American, Pacific Islander, Bi-Racial); 62% female, 38% male
- Staff: 29% Minority, 18% URM

A1C.3 - Describe how the unit utilizes institutional resources or partners with organizations such as the Office of Minority Affairs and Diversity (OMA&D) or the Graduate Opportunities and Minority Achievement Program (GO-MAP) to recruit and retain traditionally underrepresented minority undergraduate and graduate students.

The Department is a highly engaged partner with UW diversity organizations and resources, most prominently with the Graduate Opportunities and Minority Achievement Program (GO-MAP). GO-MAP is integrated into our student-recruitment visit days and orientation programming, with GO-MAP representatives participating in on-campus outreach and onboarding activities. This year we also organized efforts to connect GO-MAP with SPH students, faculty and staff by hosting GO-MAP programming in the Health Sciences Center on a quarterly basis, dramatically increasing access to diversity resources and creating a more inclusive climate to recruit and retain a diverse student body. With guidance from GO-MAP, all programs in the Department are conducting holistic admissions processes that look beyond test scores and grades. Several programs have specifically trained their admissions committees in the holistic approach.

Additionally, in 2016, the Department Chair created the Health Services Excellence, Equity and Distinction (HSEED) Awards to increase the number of health professionals from diverse communities in the field of public health. Eight \$5K HSEED Awards are presented annually to applicants from each of our degree programs (bachelor's, master's and doctoral). Recipients are honored for outstanding academic merit, diversity of experiences and backgrounds, and potential for leadership in public health. The HSEED Awards were also endowed last year with a \$150,000 gift (student scholarship funds are considered to be endowed if gifts to them exceed \$25,000). The current principal is \$155,200, and we have initiated an annual HSEED-giving appeal to our 3,500 departmental alumni. The HSEED Award and other supplemental funding through the Department and the Graduate School (Graduate School's Top Scholar Award, GO-MAP, Graduate School's Fund for Excellence and Innovation) often qualify out-of-state students for in-state tuition (saving each student approximately \$15,000 per year).

Since, 2016, faculty from the Department serve as lead on the Summer Health Professions Education Program, an RWJ funded pipeline program to increase preparation of URM students for graduate work in Public Health, Medicine and Dentistry.

This year, the Department is also offering Chair's Scholar Awards to the top out-of-state URM applicants to our MPH Program. These awards are stipends of \$4,500 per year for 2 years. Stipends at this level qualify students for in-state tuition, saving them ~\$15,000 per year.

Perhaps as a result of these efforts, the diversity of our applicant pool and student body have increased over time, from an applicant average of 14% URM in 2013 to 17% in 2017, and an enrollment average of 16% in 2013 to 19% in 2017.

A1C.4 - Describe outreach strategies the unit employs with underrepresented students of color, women, students with disabilities, and LGBTQ students to diversify its student body.

The Department maintains its commitment to recruiting and retaining a diverse group of students by providing a supportive and inclusive environment that includes academic, financial, and social support. We recently expanded recruitment efforts at local and national conferences, including the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) conference, the Black Doctoral Network (BDN) conference, and the Annual Biomedical Research Conference for Minority Students (ABRCMS). The Department also participates in the National Name Exchange (a consortium of 55 universities which collect and exchange the names of their talented URM undergraduates). We continue to focus on improving URM recruitment outreach efforts through pipeline cultivation, partnerships with other departments and public health organizations, emphasis on a more holistic admissions review process, and strong mentorship from faculty of color and the LGBTQ community.

A1C.5 - Describe initiatives the unit has employed to create an environment that supports the academic success of underrepresented students of color, women, students with disabilities, and LGBTQ students.

In addition to initiatives employed by programs within the Department (including financial) that have focused on recruitment, as outlined in A1C.4, we seek to create and maintain an environment that supports a diverse student population. Faculty and staff are encouraged to participate in workshops that increase awareness and provide directly applicable skills that enable them to better support and appropriately engage around issues of diversity, equity and inclusion. Faculty, staff and students have also attended Undoing Institutionalized Racism trainings. Department leadership is actively engaged in soliciting student representation on its committees (curriculum committee, diversity committee, program admissions committees, etc). Additionally, the Department is now working closely with GO-MAP, the SPH Diversity Committee and the SPH Office of Student Services to offer regular student trainings (located within the Health Sciences complex) on diversity-related topics, as well as access to workshops on mentoring, resume writing, interview skills, etc. Our academic programs also partner with representatives of diverse communities to support internships and practica, capstone projects, research and other course fieldwork opportunities (such as homeless inter-urban, rural and Native American communities). (See Appendix E) Some programs, like the COPHP program, have made a commitment to work towards becoming an anti-racist educational program. The program supports a student group, Committee on Oppression and Racism in Education, which advances the interests of students of color and was recently awarded the SPH 2018 Martin Luther King Jr. Community Service Award.

A1C.6 - Describe how the unit utilizes institutional resources such as the Office of the Associate Vice Provost for Faculty Advancement to recruit and retain faculty from underrepresented minority groups.

The Department recently successfully petitioned the Office of the Vice Provost for Faculty Advancement to assist with funding a retention package for a Latina Associate Professor. Beginning in 2017, we are using the Office's "Handbook of Best Practices for Faculty Search" and the associated tool kit for all faculty searches. We have benefited from the trainings offered by the Vice Provost and are incorporating trainings on minimizing the impact of bias in the assessment process.

A1C.7 – Describe strategies the unit employed to support the career success of faculty members from underrepresented identities, and where applicable, female faculty, and the extent to which the unit has been successful in diversifying its faculty ranks.

In recent years, the Department has concentrated on increasing female faculty ranks and elevating women into leadership positions. Of the core faculty, more than 60% are women, as are six of our ten faculty program and center directors, and four of our six faculty associate directors.

To provide a supportive environment, new faculty hires receive three years of bridge funding at 100% FTE. In addition, assistant professors are eligible for diminishing bridge funding for their second 3 years, at 90% for the 4th year, 70% for the 5th, and 50% for the 6th. In spite of this funding, five assistant or associate professors (three female, two male) chose to leave in 2017 (within their first 6 years). We employed a senior faculty member to conduct exit interviews with those individuals. Reasons for leaving included faculty morale, soft-money funding challenges, and promotion and salary considerations. To mitigate these issues, we are working to modify our compensation model to create a more supportive structure, particularly for research development. We are examining our recruitment process to ensure we are selecting candidates who are suited for a soft-money environment.

To address gender-based and URM pay inequities, for the past 8 years, the Department (and later the School) has employed a regression analysis to assess pay equity. The analysis identified pay inequities for women. Since 2009, to address the inequities, we have increased pay 3-15% for up to six female and URM faculty each year. The inequities for women have been eliminated.

A2 Teaching and Learning

A2A Student Learning Goals and Outcomes – answer the following questions for each undergraduate and graduate major, degree program and graduate certificate program.

A2A.1 Describe student learning goals and outcomes (i.e., what are the students expected to learn; what are the students expected to be able to do as a result of the education provided?).

The programs set student learning goals based on the accreditation requirements of the discipline and school-wide competencies set by the SPH. In all programs, learning goals include: 1) distinguishing between individual and population health; 2) applying evidence-based decision-making and critical thinking to public health problems; 3) communicating effectively and persuasively, both orally and in writing; and 4) recognizing the means by which social inequities, racism and other forms of discrimination, generated by power and privilege, undermine health. Program-specific learning goals can be found in Appendix F.

A2A.2 Provide an overview of the ways in which the unit evaluates student learning (e.g., classroom- and/or performance-based assessment, capstone experiences, portfolios, etc.).

Appendix G includes qualitative guidelines for the assessment of student learning. All programs grade student learning through course examinations and quizzes, classroom discussions, online discussion fora, writing assignments, and individual and team project work and presentations. Additionally, all

programs require a culminating experience (see page 2). Select additional other program-specific forms of student learning are below.

HIHIM: Students submit a professional portfolio highlighting curriculum-driven work products.

COPHP: An intensive first-year practice experience, most of them through our city-county health Department.

PhD: A preliminary examination at the end of the first year, a written general examination, a defense of the dissertation proposal through an oral general examination, a written final dissertation, and an associated oral defense of the completed dissertation.

A2A.3 Describe methods used to assess student satisfaction. Additionally, articulate efforts to gauge the satisfaction of students from underrepresented groups.

The Department uses the electronically administered IASystem student-course-evaluation forms from the UW Office of Educational Assessment. We have amended the tool to assess classroom climate through three items:

- Instructors' respectful response to students' diverse experiences, perspectives, and abilities
- a class environment welcoming to diversity of race, ethnicity, gender, sexual orientation, and religion
- the ability of the course to improve student capacity to interact with diverse groups of people

The data from these additional questions have been presented to the faculty for discussion and sharing of issues and best practices. Select additional methods of assessing student satisfaction are below.

MHIHIM: Individual student feedback is shared with the program director, program staff, and individual faculty/mentors. An exit survey is conducted with graduating cohort.

MHA/EMHA: Feedback is collected via internship check-ins; exit interviews of graduating students; student association representation at MHA faculty meetings; and monitoring of student issues with student services and professional development staff. Students also advise the program on the development of diversity initiatives. The program director conducts a structured exit interview with EMHA students as a group.

COPHP: The program conducts an annual survey of alumni with questions about program satisfaction. The program director conducts listening sessions with graduating students. Most faculty conduct one-on-one meetings with students half way through a course.

EMPH: Within the past two years, the program conducted large-scale alumni surveys and convened smaller student and alumni focus groups on program satisfaction to help guide ongoing curriculum revitalization. Exit interviews are conducted with graduating students.

PhD: Annually, the program conducts a 5-year follow up survey of alumni with questions about program satisfaction. A student representative is also included on the governing body for the PhD program (the Academic Affairs Committee). The program routinely solicits feedback from current students regarding curriculum and policy issues. The Academic Affairs Committee reviews student evaluations for all core PhD courses and makes recommendations for course revisions.

A2A.4 Describe how the unit has used these findings to bring about improvements in the programs, effect curricular changes, and/or make decisions about resource allocation. If applicable, in what ways and were the intended improvements realized?

HIHIM: In addition to surveying current students, the program monitors changes required by the accrediting body. In 2017, the program added separate courses on health data analysis; research and statistics; and data governance per student feedback and additional Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) requirements. In other courses, content was augmented to include clinical-documentation improvement, cultural diversity, and healthcare quality. In recruiting two new faculty in spring 2017, data analysis and healthcare quality experience were key in hiring decisions.

MHIHIM: Alumni surveys of 2015 and 2016 graduates reported 5 of 7 responses were satisfied with program curriculum; 2 of 7 responses indicated need for more informatics and technology content. CAHIIM accreditation reviewers recommended increased data analytics in the curriculum, a finding reinforced by exit and alumni surveys and faculty curriculum review. Curriculum additions are underway to address these needs. Exit surveys conducted in 2016 and 2017 indicated overall satisfaction with curriculum. In recruiting 1 new full-time faculty and 1 clinical faculty in spring 2017, data-analytics experience was key in the hiring decisions.

MHA/EMHA: Within the past year, the program surveyed alumni 3-5 years out and conducted a content area focus group with recent alumni to help guide ongoing curriculum revitalization. Feedback from these graduates indicated an over-balance on quantitative analyses within the curriculum. A reduction by one course of that sequence has resulted. Discussions for a new course in current topics in health administration are underway.

MPH/MS: A faculty advisory committee oversees student needs. A required seminar for first year students meets in fall and spring quarter and solicits feedback from students. Students also meet with assigned advisors.

COPHP: Monthly faculty meetings and annual retreats focus on improving teaching; peer reviews of each faculty member are conducted every other year. The program has published a book on its approach to problem-based learning, available at <http://ebooks.benthamsience.com/book/9781681083872/>

EMPH: Annual exit interviews and regular (every two years) alumni surveys indicate a high degree of satisfaction with the program overall. Recommendations for adjustments and improvements in specific courses are considered and implemented as feasible. See A2B.3 on page 13 for additional information.

PhD: At graduation, students rate their attainment of 20 doctoral competencies on a 1 (not competent) -to-5 (competent) scale; ratings are usually 4.5-5.0. Long-term outcomes are assessed by an alumni survey conducted 5 years post-graduation. The survey asks alumni to rate the quality of the program and its contributions to their careers. In response to the 2015 survey, the program has added a writing course requirement and individual development plans for career planning and professional development.

A2A.5 - Note the courses typically taken by undergraduates who will not be majors in any of the unit's programs, if applicable. Are there specific learning goals in those courses designed to accommodate such "non-major" students? If so, how is student achievement in reaching these goals assessed?

Undergraduate courses in the Department are designed and accessible to students from a range of majors across the university. All undergraduate courses have learning objectives specific to the content or goals of the course. Assessment methods include: exams, group projects, quizzes, participation in activities, and writing assignments.

A2B Instructional Effectiveness

A2B.1 Describe and discuss the method(s) used within the unit to evaluate the quality of instruction, including the use of standardized teaching evaluation forms.

As described above, all courses are evaluated using IASystem forms from the Office of Educational Assessment. The Curriculum Committee is charged with establishing and maintaining Department procedures for evaluating teaching effectiveness in coordination with the Department Chair and program directors. Faculty are formally peer-reviewed on a regular schedule as mandated by the Faculty Code. The peer review is conducted, and feedback is conveyed, via the Department's internally developed teaching-effectiveness review form (see Appendix H). Additionally, if a course receives a combined median score of less than 3.0 (on a scale of 1 to 5), on global items from the student evaluation form, the program director reviews the student feedback and works with the instructor(s) to create a plan for improvement. This plan is reviewed by the Chair and submitted to the Dean. Peer reviews (or internal program reviews) may also be conducted at the second offering of a new course and by program request for a given course or instructor.

A2B.2 - Note all opportunities for training in instructional methods that are made available to any individuals teaching within the unit (including graduate students). For example, these may be opportunities that support teaching improvement, innovation, and/or best practices.

Teaching occurs in several modalities: on-site instruction, hybrid on-site/online instruction, and through fully online instruction. We are developing communities of expertise in each of these modalities. As recommended by our strategic-planning processes, Department faculty have created an "evidence-based teaching" group which meets every other week to explore and share effective, evidence-based strategies. Notably, the COPHP and MHA programs are leaders in problem-based learning and team-based pedagogy. Where logistically possible, classes are taught in active-learning classrooms.

Faculty and teaching assistants:

- utilize the UW Center for Teaching and Learning,
- attend the quarterly SPH Teaching, Learning, Sharing faculty development series,
- lead teaching-moment discussions in monthly faculty/staff meetings, and
- participate in one-to-one faculty teaching mentoring, including pairing first-time instructors with experienced faculty in co-teaching appointments

In addition, TAs can attend an annual conference hosted in the summer by the UW Center for Teaching and Learning. Informally, they connect with peers and experienced faculty to develop expertise in

learning-technology tools and strategies and facilitation of classroom experiences through active-learning designs.

A2B.3 - Describe specific instructional changes you have seen made by instructors in response to evaluation of teaching within the unit.

The Department and programs continuously monitor courses for instructional quality. Three examples follow:

1. The EMPH program conducted a curriculum-revitalization process in 2015-2016. The curriculum-revitalization team, comprised of faculty and staff, utilized diverse, comprehensive and complementary methods, including:
 - a review of the literature and UW SPH curriculum documents
 - a competitor analysis to identify existing approaches to curriculum revitalization and competency-based public health education
 - blended learning approaches to public health graduate education for working professionals

The team mapped EMPH courses across this framework to identify gaps and redundancies and assessed themes that emerged from student course-evaluation comments. The team also carried out a series of surveys, focus groups, and key-informant interviews with EMPH alumni, students, staff, and required-course faculty, as well as curriculum leaders within SPH. The resulting curriculum rebalanced credit distribution to strengthen student learning in the areas of qualitative and quantitative public health research and practice-oriented administrative leadership skills.

2. The COPHP program undertook in 2017 an external review of all its problem-based-learning cases to align competencies, look for overlap, and remove micro-aggressions.
3. The MHA program in 2017 reviewed its first-year curriculum for overlap, synergies, and gaps. As a result, a series of one-credit cross-cutting skills courses has been added to the curriculum. The faculty teaching courses each quarter also meet monthly to reduce overlap and distribute the burden of assignments and exams.

A2C Teaching and Mentoring Outside the Classroom

A2C.1 - Describe and discuss how faculty members are involved in undergraduate and graduate student learning and development other than through classroom teaching (i.e., informal learning, independent studies, research involvement, specialized seminars or workshops, etc.).

The Department employs both practice- and research-oriented experiential learning. All students in the Department complete a faculty-advised culminating experience. HIHIM, MHIHIM, MHA, EMHA, COPHP, and a few EMPH and MPH students complete a capstone, which is practice-oriented and involves field experience with partner organizations. In addition, MPH students must also complete a 10-week practicum with a partner organization, and in-residence MHA students complete a paid internship with a healthcare organization between their first and second years. COPHP's student practicum is a 20-week experience, largely conducted at Public Health – Seattle & King County. To get research experience, most MPH and all MS students complete a thesis, with a goal of producing a publishable manuscript.

The PhD program aims its experiential learning at externally funded research. The program enrolls 4-9 students per year, most of whom are supported by trainee and research assistantships from four funding sources. First, the AHRQ-funded T32 grant supports 6 students per year with almost full tuition and a stipend in the first and second years of doctoral studies. The T32 program is jointly offered by the Department and the School of Pharmacy and prepares research leaders to improve health in diverse populations by conducting interdisciplinary studies and implementing the results in a rapidly changing healthcare and social-political environment. Second, the Occupational Health Services Research training program supports 2-3 students per year. The program is part of the Northwest Center for Occupational Health and Safety (NWCOHS), a NIOSH-funded Education and Research Center (ERC) housed in the University of Washington Schools of Public Health, Nursing, and Medicine. Third, the VA Center of Innovation supports an additional 2 RA-ships per year, laying the foundation for a successful pipeline into VA health services research for dissertations. Fourth, faculty across our research partners often support students by writing RA-ships into their grants, and we currently have RA-funded students participating in research projects with faculty focused on access to mental healthcare, healthcare payment models, healthcare policy, and women's health and health disparities.

A2C.2 - Describe how the unit works with undergraduate and graduate students to ensure steady academic progress and overall success in the program.

Student progress is monitored by the program directors, faculty, and various practitioner mentors and advisory boards. Some programs have quarterly student-progress meetings. For example, the MHA program has quarterly meetings to discuss students who may be encountering academic challenges and strategize about appropriate interventions. The MHA advisors meet monthly to coordinate advising activities and share resources. In the COPHP program, first-year faculty advisors monitor progress, as do student services counselors. COPHP faculty meetings include an executive session for discussing student progress. In the PhD program, faculty mentors assess student progress as part of their review of the Individual Development Plans. Tutoring is also available, funded by the SPH.

A2C.3 - Describe how the unit works with undergraduate and graduate students to prepare them for the next phases of their academic or professional lives.

In the diverse professions served by the Department, professional development takes many shapes. All master's programs are focused on professional competencies for working health programs and healthcare organizations. Within the public health degrees, CEPH revised the standards for accreditation with a sharpened focus on professional and managerial skills. Many degrees develop managerial skills in addition to the public health disciplines. As a result we have a strong focus on professional development services: monthly professional development contact with speakers, alumni, and mentors; resume-writing workshops; fellowship-application support; mock interviews; social and professional etiquette training; and experiential-learning opportunities provided by regular coursework, internships, practicum-application reviews, and grant-funded research support.

We also check in with the practice community on their needs. For example, in 2016, the Northwest Center for Public Health Practice (NWCPHP) published the Regional 2016 Training Needs Assessment Report, which describes the overall training needs and interests of 3,500 public health practitioners surveyed in Washington, Oregon, Idaho and Alaska. In addition to shaping future programming provided by the NWCPHP, the assessment results have been shared with our program directors to provide the latest information on essential content for our graduates.

Students in the PhD program are required to complete and review with their mentors an Individual Development Plan (IDP) annually. The IDP includes information on the student's dissertation timeline, coursework choices, funding plans, career goals, professional development, and more, and is designed to prepare students for their future careers.

A3 Scholarly Impact

A3.1 - Describe the broad impact of faculty members' research and/or creative work. Feel free to note specific individuals and how their work embodies the unit's mission, or distinguishes the unit from those at peer institutions.

The Department has many examples of research with high impact (See Appendix P for a list of active grants and contracts). Because most of our faculty are aligned with one of five research centers, we describe our research center-by-center:

The **Center for Health Innovation and Policy Science (CHIPS)** seeks to influence health policy, improve health, and reduce health disparities across communities and across the lifespan through increasing vertical integration of research, service to decision makers, and training in health policy and health systems science. The center brings together evaluation, dissemination, and implementation methods that balance rigor, innovation, and pragmatic feasibility to drive the future of research at the translational intersection of health policy and health systems, while providing a centralized point of connection with health policy and health systems stakeholders.

The **Center for Public Health Nutrition (CPHN)** focuses on research and practice to inform evidence-based approaches for environmental and policy change to promote the nutrition-related health of populations. Our main activities include: 1) evaluating policies and programs in order to advance the evidence-base on effective solutions to improve nutrition-related health; 2) designing public health approaches to improve nutrition and physical activity through environmental and policy change; 3) building partnerships and collaborations with practitioners, government agencies and communities; 4) providing technical assistance in the translation of research into policy and practice; 5) using evidence to shape obesity and chronic disease prevention and reduction efforts; 6) investigating food system solutions for improving the food supply.

The **Health Promotion Research Center (HPRC)** is one of 26 Prevention Research Centers funded by the Centers for Disease Control and Prevention. HPRC's mission is to partner with communities to conduct prevention research that promotes healthy aging, and their research focuses on cancer prevention and control, older adult depression management and physical activity, and workplace health promotion. Flagship programs include EnhanceFitness (an evidence-based physical activity program), PEARLS (Program to Encourage Active, Rewarding Lives – an evidence-based depression management program) and the American Cancer Society's workplace health promotion programs. HPRC's flagship programs are delivered in more than 40 states across the U.S.

The **Latino Center for Health (LCH)** was launched in April 2014. It is the only research center in Washington State whose singular focus is Latino health. The Center's primary goal is to promote the health and well-being of Latinx communities through 1) innovative, interdisciplinary research in partnership with community-based organizations, researchers, and government agencies; and 2)

promotion and dissemination of evidence-based practices and health policy to advance sustainable and culturally responsive improvements in health. Priority areas are: Physical and Mental Health, Environmental and Occupational Health, and Violence and Injury Prevention.

The **Northwest Center for Public Health Practice (NWCPHP)** provides training, research, evaluation, and communications services bridging the academia and practice communities locally, regionally, and nationally with a focus on the needs of public health practitioners in Alaska, Idaho, Montana, Oregon, Washington, and Wyoming. Established in 1990, NWCPHP has conducted research on topics such as disease reporting and investigation, machine translation, emergency communication, and health impacts of climate change. NWCPHP also offers a 9-month Leadership Institute; a year-long Public Health Management Certificate program; Pop-Up Institutes to bring training to health departments in Alaska, Idaho and Oregon; and additional training opportunities available via webinar and certificate programs.

A3.2 - Describe undergraduate and graduate students' significant awards, noteworthy presentations, or activities that have had an impact on the field while in the program.

HIHIM: Undergraduate HIHIM students volunteer with or are hired by healthcare organizations into professional roles while attending the program. Graduates and current students are actively engaged in the Seattle Health Information Management Association as officers, committee chairs, and members. A student is Communications Committee Chair for the state Health Information Management Association.

MHIHIM: Graduate HIHIM students are hired by healthcare organizations into informatics roles while attending the program. Current students are actively engaged in the Seattle Health Information Management Association as officers and members, and participate in Health Information Management student activities. An incoming student admitted for AY 2018 was awarded a Master's Fellowship in the amount of \$10,000.

MHA/EMHA: Students have placed in three national case competitions in the last several years, including the Clarion Case Competition (hosted by the University of Minnesota), The Robbins Institute for Health Policy and Leadership (hosted at Baylor University), and the Health Administration Case Competition (hosted by the University of Alabama-Birmingham). In 2016, a MHA student received the Husky 100 award to acknowledge exceptional leadership capacity among all graduate students.

MPH/MS: A current MPH student was selected as one of the Husky 100 in recognition of his commitment, engagement and achievement in the program and UW community. In 2016, a MPH/MSW student was also selected as one of the Husky 100 in recognition of her work to increase equity for students with disabilities and survivors of sexual violence. In recognition of her academic achievement, another MPH student received a Bonderman Travel Fellowship to explore the world for one year.

COPHP: Students have published on how unions affect public health, housing policies, school health clinics and more. COPHP students have influenced policy on safe consumption sites for drug users, Seattle's juvenile jail, and street-crossing times for pedestrian safety. Policy class students have written and passed eight policy statements for APHA.

EMPH: A recent graduate won Seattle Magazine's Top Doctor Award of 2013, and was recruited to direct research and innovation at the Global to Local Health Initiative.

PhD: Doctoral students have received competitive federal grant awards from the Agency for Healthcare Research and Quality and the National Institutes of Health for their dissertation research, as well as competitive local grants from UW's Alcohol and Drug Abuse Institute and the VA Puget Sound. Alumni and students of our doctoral program have produced 578 first-authored publications, of which 154 were published during or within one year of graduation.

A3.3 - Describe post-doctoral fellows' participation in the research and teaching activities of the unit, if applicable.

The NCI-funded Biobehavioral Cancer Prevention Training Grant has trained 10 post-docs in the past 10 years. All post-doctoral students have led quarterly seminars, taken turns at organizing the monthly fellows meeting, and organized our annual symposium in which all trainee research is showcased to the university and invited public. Individual post-docs, such as current faculty member India Ornelas, have co-taught courses while on the post-doctoral fellowship, and all trainees have given individual sessions in courses at the Department and School levels.

Postdoctoral fellows from T32 programs across the School of Medicine and elsewhere in the UW are active participants in our MPH and MS programs, averaging 8-10 entering students per year. While the thesis research for these projects is generally completed in their home clinical departments, each works with at least one faculty mentor in this Department.

The Patient Centered Outcomes Research Partnership is a training program (R25 funded by AHRQ) to prepare scientists, clinicians, and health care managers for conducting research on patient-centered outcomes and the comparative effectiveness of medical treatments. The curriculum design is driven by community partners throughout the Pacific Northwest and includes a focus on community-based health care and reducing health disparities among American Indians, Alaska Natives, and rural populations.

In May 2018, the Department is applying for a five-year T32 Training Grant from the National Institute on Drug Abuse. The grant will support 10 pre-doctoral and 5 postdoctoral trainees (2 pre-doctoral and 1 postdoctoral trainee to enter the program each year with support continuing for 2 years). The mission of the Addictions Health Services Research Training (AHSRT) Program is to address substance use in order to improve health in diverse populations by training pre-doctoral and post-doctoral health services scholars to be independent researchers.

A3.4 - Describe how program graduates have had an impact on the field either academically or professionally.

HIHIM: Graduates work as data and data-integrity analysts, release-of-information specialists, and supervisors and managers in acute care, behavioral-health, outpatient, long-term care, insurance, and consulting organizations. Within 6 months following graduation, 80-90% of graduates are employed.

MHIHM: Graduates have reported improvement in career opportunities. Job titles include: inpatient systems and services director, IT program director, research consultant, data analyst, clinical practice manager, presidential management fellow (federal), and quality improvement adviser. One graduate enrolled in medical school.

MHA/EMHA: Graduates of the MHA In-residence program go on to administrative fellowships and career positions in a broad range of health organizations, including consulting agencies, hospital

systems, community health clinics and state and national government. In a typical EMHA cohort, half of the students find new career opportunities while enrolled in the 2-year program.

MPH/MS: Graduates have gone on to successful careers in public health practice, research, and leadership, with past students now employed at places such as Public Health Seattle/King County, Kaiser Permanente, Washington Health Research Institute, Seattle Children’s Hospital, and Neighborcare Health.

COPHP: Alumni work for state and local health departments, as our program is designed to prepare graduates for public health practice. Other employers include Planned Parenthood, community health centers, global health organizations, non-profit agencies, and advocacy organizations. Our 2016 alumni survey revealed 94% of 172 respondents were in full-time public health work, 60% of them in Washington State.

EMPH: Graduates assume leadership roles and senior positions at various levels in public health organizations, health services provider organizations and executive branches.

PhD: Alumni work as independent health services researchers in universities, research and policy-making organizations, the healthcare industry, and government agencies. Half of alumni have faculty positions, and nearly 40% of alumni faculty hold tenure-track positions.

A3.5 – Describe the ways in which advances in the field or discipline, changing paradigms, changing funding patterns, new technologies and trends, or other changes influenced research, scholarship, or creative activity in the unit?

We highlight here several recent changes:

- In 2015, we increased MPH core-course requirements to include qualitative methods, health policy and health economics.
- The growing field of implementation science has influenced hiring, teaching, grant activity, and NIH study section membership.
- Advances in information technology have led to increased emphasis on patient portals, use of mobile technology, and new techniques for health communication.
- Advances in population health have placed increased emphasis on social determinants of health, such as income inequality, and racial inequality and discrimination. In response, we developed courses on health disparities and the use of social science in health program planning.
- Methods advances include applications of Bayesian theory, propensity scoring, multi-level intervention design and analyses, adaptive trials and stepped wedge designs, and analysis of big data.

A3.6 - List any collaborative and/or interdisciplinary efforts between the unit and other units at the University or at other institutions, and the positive impacts of these efforts.

Primary external partners include governmental public health agencies (e.g., the WA Department of Health, and Public Health—Seattle, King County), healthcare organizations (e.g., UW Medicine, and Seattle Children’s), community organizations (e.g., American Cancer Society, and the YMCA), and research institutions (e.g., the Fred Hutch, VA Center for Innovation, and Kaiser Permanente Washington Health Research Institute). Within the University, our partners include trans-university initiatives such as the President’s Population Health Initiative (two members of the Executive Committee are primarily

appointed in our Department), the Center for Studies in Demography and Ecology, and the Inter-professional Education Group for the Health Sciences. Within the University, our PhD program relies heavily on theory courses taught by departments such as economics and sociology, and we offer several joint degree programs (e.g., MD/MHA and MPH/MSW). Three positive impacts include collaborative research projects, disciplinary grounding for faculty and students, and cost-efficiency for our PhD program.

Overall, collaborative research projects are too numerous to list; collaborative research with others outside the Department is almost universal among our faculty. Disciplinary grounding is essential for a Department that is arguably without a core discipline (health services research is a young discipline and does not begin to encompass the breadth of the work of our faculty).

A3.7 - Describe the unit's established promotion and tenure policies and practices that provide mentoring and support the success of junior faculty. Describe how these policies and practices support the success of other faculty in the unit. Describe the ways in which the expectations are shared with faculty (e.g., orientation meetings, documents on the website, one-on-one meetings).

To provide context for our promotion and tenure policies, we should note here that the Department (and much of the SPH) pays faculty in a way that is different from many universities and the non-health-sciences schools and colleges at UW. Faculty build their salaries from teaching, research, and service activities. Teaching is reimbursed via a "point system" (see Appendix I) that pays more for larger classes and classes with more credit hours. Faculty are also paid for advising on capstones, theses, and dissertations. As discussed elsewhere, the Department financially supports grant-writing, but most research support is drawn directly from grants and contracts. Service is supported for the directors and associate directors of the teaching programs and research centers, and for the Chair, the Associate Chair for Research, and the chairs of the Curriculum Committee and the Appointments, Awards, and Promotions Committee.

For promotion, the Department follows the SPH Faculty Handbook. Assistant professors are considered for promotion in their 6th year; associate professors are reviewed every other year and considered for promotion when their stature merits it. The Department Chair meets with faculty candidates to describe expectations during the final interview process. Once hired, new faculty receive detailed onboarding information, and they meet annually with the Chair to monitor progress towards promotion. All faculty below the rank of professor have an assigned senior faculty mentor, with whom they meet regularly. Mentors prepare an annual assessment for use in the faculty review.

For tenure, the Department has a written policy (see Appendix J). The SPH has awarded 50% tenure since a 1980s faculty vote to allow growth beyond available tenure lines. Typically, faculty are not considered for tenure until promotion to professor.

In 2008, the Department created the Professional Development Group (PDG), a career-development program for assistant professors. This group includes junior faculty from Health Services and other UW units and associated research settings (e.g. VA Center of Innovation and Fred Hutchinson Cancer Research Center). PDG topics have included preparation for promotion to associate professor, iSchool and Population Health Initiative collaborations, strategies for securing research support, and grant management. The PDG also developed a "Junior Faculty Road Map" (see Appendix K to delineate teaching, research and service milestones to be met annually for promotion. Since the PDG's inception,

11 junior faculty have successfully been promoted (including three female assistant professors who went up early) to the rank of associate professor; all had submitted strong research proposals and engaged in collaborative teaching and research endeavors.

In 2017, we formed the Associate Professor Group (APG) to provide peer support for mid-career faculty. The focus is on research; sharing of ideas and opportunities, review of research aims, service on study sections, and re-submission of grants and journal manuscripts. The PDG and APG, in conjunction with the faculty mentoring program, are integral components of our faculty support system.

A4 - Future Directions

A4.1 - Where is the unit headed?

Health Services is a mature Department, with well-defined teaching, research, and service missions supported by both well-established and nascent research centers and one new and eight well-established but ever-evolving degree programs. In addition, UW's activity-based budgeting system strongly rewards the large class sizes often found in undergraduate courses, so our undergraduate teaching (and revenue from that teaching) have grown dramatically in the past 5 years, along with the School's Undergraduate Public Health Program. Because of growth in degree offerings and undergraduate enrollment, along with a cutback in federal research funding, the balance between research and teaching has shifted toward teaching in recent years, and the two are roughly balanced. We hope to grow both, with research likely to grow more than teaching.

We discuss our future directions more specifically in the next three sections. Before we do so, it is worth noting five constraints that we face. First, many senior faculty and staff have retired in the past 5 years, and there was a dearth of hiring between 2000 and 2010, so we are re-building. Second, during the Great Recession, Washington State backed out of half of UW's funding. This has not returned, so direct State support accounts for only 1.5% of the Department's revenue. Third, since the Great Recession, the NIH and CDC have both cut inflation-adjusted funding by more than one quarter. Fourth, UW's activity-based budgeting system disadvantages the small class sizes of graduate courses, as well as off-campus research programs (by cutting indirect-cost returns to the Department by half). Both are in abundance in the Department. Fifth, our teaching programs face new competition from online programs.

A4.2 - What opportunities does the unit wish to pursue and what goals does it wish to reach?

The Department has three major opportunities that cut across our teaching, research, and service missions: 1) improving population health, 2) increasing health equity, and 3) preparing the next generation of leaders.

There is a tremendous opportunity to improve population health, and the Department can lead this improvement. The Affordable Care Act has ushered in the latest wave of prospective, value-based payment for healthcare. Prospective payment puts pressure on healthcare systems to control costs and keep populations healthy. Spurred by rapidly rising healthcare costs, the first wave occurred in the 1990s but ended because of concerns about the balance between efforts to improve the quality of care and those aimed at lowering the cost of care. The Affordable Care Act has brought back prospective payment to control costs, with built-in metrics aiming at ensuring quality. If working alone, healthcare organizations have limited ability to keep populations healthy, so they are working more than ever with governmental public health agencies to address social determinants of health, such as affordable

housing, and with community organizations to implement community health promotion and disease management. The Department serves, trains employees for, and conducts research with, all three of these entities—healthcare organizations, governmental public health agencies, and community organizations--and is thus vital to improving population health. Improving population health is also a campus-wide priority, with direct leadership from UW's President, Ana Mari Cauce.

The Department also focuses strongly on increasing health equity. Our teaching programs emphasize the social determinants of health, and we hear increasingly from PhD students that they have chosen us because of our reputation in this area. Our COPHP program has led in teaching about structural racism in American society and has led school-wide efforts to have required coursework in this area. A forthcoming article in Public Health Reports documents this effort. Our research similarly focuses on health equity. Our oldest center, the Health Promotion Research Center, brings an equity lens to everything it does, from providing depression treatment to low-income, frail, homebound older adults; to decreasing widening colorectal-cancer-screening disparities related to education, race, and ethnicity; to promoting healthy lifestyles in underserved, small, low-wage workplaces. Our newest center, the Latino Center for Health, is dedicated to increasing health equity among WA's largest ethnic minority, a population still plagued by racism and anti-immigrant bias. Our service aims at enhancing large-scale efforts to achieve health equity. For example, the Department leads the evaluation for the State Innovation Model, funded by the federal Centers for Medicare and Medicaid Innovation through the Affordable Care Act. A pillar of this model is integration of behavioral healthcare into primary care, particularly for vulnerable, newly insured populations.

The Department is purposeful about preparing leaders, among our students, but also among our faculty and staff. Our teaching programs all have a leadership component. For example, our executive programs in administration, informatics, and public health all begin with a ropes course, aimed at initiating the teamwork that is a hallmark of these programs. Other leadership skills we address include public speaking, writing, and time management. We believe strong leaders also need strong management skills, a view that is increasingly reinforced by CEPH, the accrediting body for schools of public health. This view is also supported by a recent multi-state survey of workforce-education needs of 3,500 public health workers conducted by the Northwest Center for Public Health Practice. Management topics like finance and budgeting were at the top of the list of desired skills.

For faculty and staff, our leadership and development efforts follow three tracks. First, we led the development of, and are active participants in, a SPH-wide training program in leadership and management. The initial cohort last year included two faculty (the Chair and the incoming director of the PhD Program) and two staff (the Director of Business and Management Strategy, and the director of Human Resources). This year's cohort again includes two faculty and two staff. Second, because we believe strongly in on-the-job development of leadership and management skills, we are in the process of creating and filling associate director positions for all of our teaching programs and research centers. Of the twelve program and center directors, six have an associate director. Third, we hold the above-described Learning Lab retreats (see A1C.1 on page 6) aimed at developing staff and faculty by covering topics like diversity.

A4.3 - How does the unit intend to seize these opportunities and reach these goals?

To seize these opportunities, we operate along both centralized and decentralized paths. The Department has undertaken strategic planning several times in the past 10 years. This past summer,

over four 2.5-hour sessions at faculty-and-staff meetings, we developed a new strategic plan, with six priorities:

- Invest in faculty and staff development
- Strengthen our community partnerships and collaborations
- Leverage the broad array of HSERV research strengths
- Build a diverse academic community of leaders who are focused on health equity and reflect the community we serve
- Lead in educational excellence
- Create a robust and sustainable financial position

We are currently following up with small-group work to tackle these priorities, largely using standing committees within the Department.

On a more decentralized path, the Department's teaching programs and research centers are each setting and pursuing priorities. As discussed above, our teaching programs are mature. Our priorities overall are to maintain and improve the quality of learning in these programs. Our COPHP program continues to look for models that will lower instruction costs for the inherently costly, small-cohort, problem-based-learning approach it uses. Our EMPH program is building enrollment regionally and nationally through a hybrid, largely online curriculum. Our HIHIM program is seeking to serve students throughout the Pacific Northwest by expanding hybrid and online course offerings. Our MHA and EMHA programs are constantly reaching out to the future employers of our students, in healthcare, to make certain that we are providing needed knowledge and skills. Our MHIHIM program is refining its curriculum in applied data analysis to meet the needs of students and their future employers. Our MPH and MS programs are working with others across the SPH to make sure we simultaneously, and separately where necessary, meet the needs of two groups of students--those interested in public health practice, and those interested in research. Our PhD program is seeking to maintain its excellent reputation and selectivity in accepting applicants.

Our research program benefits from our having many associate professors who are just now reaching a career stage of peak productivity. Our general philosophy is that we hire self-directed faculty who are good at choosing research topics that are important to them, to society, and to funders. As discussed in more detail below, we have in the past 2 years undertaken several new efforts to aid that productivity: 1) peer reviews of all major grant and contract applications that are being submitted to funders; 2) the addition of two new research centers, the Latino Center for Health, and the Center for Health Innovation and Policy Science, which brings together our large number of investigators interested in policy and improving implementation of effective and cost-effective healthcare; 3) an effort to align all our research-oriented faculty with at least one of our research centers so that all can work with faculty with similar interests; and 4) reorganization and co-location of our research centers to foster collaboration and innovation.

A4.4 - Describe the unit's current benefit and impact regionally, statewide, nationally, and internationally. Given the unit's envisioned future, describe how reaching this future will augment that benefit and impact.

The Department is well recognized for excellence in teaching, research, and service regionally, statewide, nationally, and internationally. At the level of the region and the state, our master's programs have prepared leaders in both practice and research. For example, Cheryl Scott (MHA 1977)

was the CEO of Group Health Cooperative and then the Chief Operating Officer at the Gates Foundation. Dorothy Teeter (MHA 1979) was, until last summer, Director of the Washington Health Care Authority, which manages healthcare for more than 800,000 state employees and Medicaid beneficiaries. Jurgen Unutzer (MPH 1996) chairs the Department of Psychiatry at UW and is a visionary researcher working to integrate behavioral health services into primary care. David Flum (MPH 2002) is the Deputy Chief Medical Officer for UW Medicine and the PI of multiple grants including the \$19 million care-transformation grant sponsored by the Centers for Medicare and Medicaid Innovation. Our post-doctoral and doctoral programs have produced emerging leaders within the Department. Amy Hagopian (PhD 2003, MHA 1983) is the Director of our COPHP Program. Peggy Hannon (BCPT 2003) directs HPRC. Emily Williams (PhD 2009) is the Associate Director of our PhD Program. Steven Zeliadt (PhD 2004, BCPT 2007) is the Associate Director of the Seattle-Denver VA Center for Innovation.

Also at regional and state levels, our faculty serve on numerous boards for community and public health organizations. Examples include: Amy Hagopian for College Access Now, Betty Bekemeier for the Accountable Community for Health for King County, Stephen Bezruchka for Physicians for Social Responsibility, and Tao Kwan-Gett for the Washington State Public Health Association.

At national and international levels, both our teaching programs and our research are well recognized. The Healthcare Management Degree Guide ranks our undergraduate HIHM Program 1st in the nation. U.S. News and World Reports ranks the UW MPH Program 6th nationally, and the MHA Program 10th. Our faculty are also increasingly involved in teaching in UW's Undergraduate Public Health Program, which College Choice ranks 1st nationally.

The Department largely focuses its research domestically, but the Center for World University Rankings recently examined our publication record and ranked UW 6th worldwide in Health Policy and Services. Individual faculty are also national leaders. Donald Patrick is a member of the National Academy of Medicine. David Grossman chairs the U.S. Preventive Services Task Force. Peggy Hannon serves on the National Advisory Committee for CDC's Breast and Cervical Cancer Early Detection Program.

By focusing on population health, health equity, and the preparation of leaders, we plan to continue this legacy of excellence.

B1 – Unit Defined Questions

B1.1 How can we provide opportunities for faculty and staff development to advance teaching and research excellence?

Teaching faculty have opportunities to participate in teacher training through various avenues. SPH conducts a "Teaching, Learning, and Sharing" faculty development series, providing an opportunity for faculty and TAs to build their instructional toolkit and network with peers. UW Center for Teaching and Learning (CTL) offers training opportunities throughout the year covering various topics, such as using technology in the classroom, teaching large classes, and developing a teaching philosophy. Experts at CTL are also available for one-on-one consultation about course-specific issues and, upon request, can conduct mid-course assessments. For research faculty and staff, we have established a Research Council to advance the grant-writing skills of our investigators, improve the quality of proposals, and increase the likelihood of securing grant funding.

All staff and faculty are encouraged to enroll in position-applicable UW Professional & Organizational Development (POD) courses. For faculty and staff in leadership roles, SPH provides a 10-week leadership effectiveness seminar, designed and delivered by Health Services faculty, Ed Walker and Kurt O'Brien. This goal of this course is to set a solid foundation for individual and team leadership. It is an applied leadership development experience seeking to foster the attitudes, knowledge and skills required for high performing department and school interactions. Using adult learning methods, especially team-based learning and social constructivism, the course helps participants resolve a series of case-based leadership problems common in academic settings.

Faculty in the Department take advantage of numerous federal training opportunities and awards to support their research and personal development:

- K Awards – two faculty have been funded via K12 awards and one via a KL2 award
- National Cancer Institute – two faculty have participated in the mentored training institute on dissemination and implementation research and one in the SPRINT (SPeeding Research-tested INTerventions) Program
- National Institute of Health – four faculty have received NIH Loan Repayment Awards and one has participated in an Advanced Training Institute
- National Center for Faculty Development and Diversity – three faculty have participated in the Faculty Success Program and one will participate in Summer 2018
- VA – two faculty have received Health Services Research & Development Career Development Awards

Faculty and Staff HR Managers consistently work to identify areas in which our faculty and staff could benefit from additional training activities. In the past year, we invited trainers to join our standing Faculty and Staff meetings to provide information on the following topics:

- Team based interviews with community partners
- Informal peer review process in CPHP Program
- First day of class challenge: What can students give back to community?
- URM student support in HIHIM to ensure success
- Shared ideas for active learning
- Giving written feedback to students
- Using Panopto and Canvas for course support
- Writing as a teaching method
- Available UW resources and learning communities

Teacher training is available to our graduate students in the form of teaching assistant (TA) positions. Many of our doctoral students (and some of our master's students) serve as a TA during their graduate training. TA positions are excellent opportunities for students to learn about teaching tools and strategies, course organization, and other aspects of teaching via one-on-one mentoring from the faculty instructor. In addition, graduate students in the Department wishing to serve as a TA class often attend CTL's annual RA/TA conference, providing workshop-like sessions on topics such as "Balancing Graduate School Demands," "Canvas Learning Management System," "Dealing with Challenging Classroom Situations," and "Research and Information Management Tips and Tools."

What else should we be doing?

B1.2 How do we make our research centers profitable, providing us opportunities to invest in creative, new ideas and partnerships?

We are employing multiple strategies to increase the funding of our research centers to provide opportunities for researchers to intensify their impact on population health.

Enhance Collaborations and Partnerships: To foster creativity and cutting-edge research, we support relationship-building among researchers within the Department, UW, and with external partners. To facilitate strong internal linkages, we strive to associate each Health Services researcher with at least one of our research centers.

Develop Grant Writing Skills: To increase our research award success rate, we appointed senior faculty member and distinguished researcher, Donald Patrick, as Associate Chair for Research. One of his initial actions was to create a Research Council, comprised of the research center directors. The Council oversees a process to improve the quality of grant applications through reviews and training. The review process:

- Principal investigators submit a proposal request providing basic project information
- Peer reviewers with subject matter expertise are assigned to evaluate
- Reviewers provide principal investigator with feedback on proposal strengths and weaknesses in five key areas:
 - significance of the topic
 - suitability of the qualifications of research team members
 - potential for innovation
 - research approach
 - research environment

See Appendix L for illustration of grant writing success rates 2015-2017.

Reorganize Research Centers: In January 2018, we kicked off an 18-month reorganization project to share resources (including staff) across all research centers in the following areas: training and outreach, communications and marketing, data management and analysis, fiscal and other administrative operations. See Appendix M for illustration of research reorganization. Goals:

- Allow centers to grow/shrink with fewer periodic recruitments/lay-offs
- Allow for cross-training, career ladders via workgroup model
- Reduce stress for directors/administrators to cover FTE, rent, etc.
- Support sharing of best-practices and stream-lining of processes
- Facilitate collaboration, skill-building, cost reduction by moving to one contiguous on-campus space

Maximize Indirect Cost Recovery (ICR): Much of the research in the Department is conducted at two off-campus centers. Off-campus indirect-cost rates are roughly half of those on-campus. Our high proportion of off-campus grants negatively impacts our ability to cover administrative costs. We have a 2-year plan for moving these centers on campus, in concert with the research reorganization. In addition, we have begun to take a more aggressive approach to ensure we include all appropriate direct costs on grants, and including sub-budgets to share in ICR when working with other entities. See Appendix N.

Fiscal Incentives for Grant Writing: Financial analysis revealed that smaller grants (< \$100K) dominated our research portfolio. The cost to administer a small grant exceeds the revenue from ICR. To provide incentive toward larger grants, we provide 2.5% FTE to faculty (up to 7.5% annually) to write large

proposals (direct costs > \$200K). These efforts have led to an increase in average proposal size and total dollar amount submitted. See Appendix O for detail.

How else might we increase our research success?

B1.3 - How do we establish funded relationships with local organizations, actively serving our communities to improve population health?

The Department has a strong practice orientation and offers practice-oriented degrees in health administration, health informatics, and public health. In our teaching, our service, and our research, we connect strongly with local healthcare and public health organizations, both public and private.

In teaching, for example, our MPH students all complete a practicum experience, some paid, some not, usually in a local organization. Our MHA students all complete a paid summer internship in a local healthcare organization. All our undergraduate and masters students complete a capstone or thesis project, and many or most of these are based on work in conjunction with local healthcare and public health organizations. Faculty supervise these practica and projects and carefully nurture the organizational relationships that make them possible. We have developed a public health planning, advocacy and leadership MPH course where students' primary activity is to produce deliverables for local public health organizations. Affiliate and clinical faculty, most of whom are employed in local healthcare and public health organizations, teach 40% of the courses in the Department.

Most of our faculty also have strong service relationships with a subset of these local organizations. A few faculty are part- or full-time employees of the organizations. A few serve as paid consultants (our MHA program strongly encourages its faculty to serve as paid consultants to healthcare organizations, to maintain awareness of current practice). Many faculty also serve on advisory committees and boards.

Our research relationships are strongest with other local research organizations, including the Fred Hutchinson Cancer Research Center, the Kaiser Permanente Washington Health Research Institute, the Seattle Children's Research Institute, and the VA. Many of our investigators, however, conduct research in partnership with other non-research organizations, such as community-based organizations, federally qualified health centers, local health departments, the state health department, and workplaces.

As federal research funding becomes increasingly harder to get, particularly for applied research, the Department is considering whether we can and should establish more funded part-time positions for our faculty with local organizations. These positions would increase opportunities for teaching, service, and research that will improve population health. What are the pros and cons of this idea? What are the potential pitfalls? Are there good models in other departments and universities? How do we assure that both the local organizations and the Department benefit? How do we ensure that the faculty involved in these joint arrangements are not saddled with too many institutional responsibilities across their multiple worksites?

B1.4 - How can we increase student, staff and faculty diversity?

We have described our diversity efforts throughout the self-study and so have only included references to those sections here.

- Diversity plan: page 6, section A1C.1
- Student support – prospective and current: page 7, section A1C.3

- Pipeline efforts (students and faculty): page 7, A1C.3
- Recruitment: page 6, A1C2.5
- Retention efforts (students and faculty): pages 7-8, A1C.3-7

How can we expand our pipeline for underrepresented students, faculty and staff? What are additional best practices for creating and sustaining a diverse, inclusive climate?

B1.5 - In Autumn 2016, the MHIHIM program received accreditation from CAHIIM by meeting the curriculum requirements for the Master's in Health Informatics degree. In the final report, the review team recommended an expansion of data analytics content. Acting upon this recommendation, MHIHIM identified the data analytics covered in 7 current courses, expanded the epidemiology course to include population health data analysis, and created a business intelligence course. Do the changes in the curriculum for Academic Year 2018 sufficiently cover data analytics at the graduate level? How may the program further improve content in health data analytics?

Data analytics is currently covered in 9 of 18 courses with content related assignments and activities; the courses are (See Appendix Q for syllabi):

- HIHIM 508, Health Information Systems and Leadership, including introductory discussion of data-information-knowledge continuum
- HIHIM 510, Enterprise Systems and EHRs
- HIHIM 524, Healthcare Data Analytics
- HIHIM 525, Healthcare Database and Applications, including SQL and data warehousing
- HIHIM 540, Consumer Health Informatics, including health information exchange and patient portals
- HIHIM 550, Healthcare Information Governance, including discussion of data governance
- HIHIM 552, Healthcare Business Intelligence, including Tableau, Access and Excel
- HIHIM 556, Healthcare Quality and Technology
- HSMGMT 501, Epidemiology with critical evidence appraisal.

Through enhancing the curriculum with use cases, projects encountered in healthcare organizations, hands-on experience with software applications, and capstone projects focused on data analytics and business intelligence, students will experience practical application. Content in data analytics will be accompanied by experience working with publicly available databases from federal and state sources and practice with current software applications such as R. Annual faculty curriculum review will continue to ensure data analytics content is refreshed and keeping pace with industry requirements.

Are there other ways we can enhance our training in data analytics? Are there other important directions our MHIHIM program should be pursuing?