2018 Program Review Report

Department of Health Services
School of Public Health
University of Washington
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Submitted by:

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Overview

The Department of Health Services is one of six departments in the highly rated UW School of Public Health. The department is unique among schools of public health in that it combines social and behavioral sciences and health management and policy, two areas which are often constituted as separate departments in other schools of public health. The Department's broad mission— "to work with partners in public health and healthcare to prepare leaders, design solutions, and conduct innovative research that is translated in practice and policy"—is reflected in close ties to other programs in the School of Public Health and many external partners in Seattle and King County. Some of the 53 core faculty members of the Department are supported in whole or in part by other agencies as well as by research and training programs lodged in other units of the University.

It addition to its board mandate and deep web of external ties, the Department is also notable for its complex internal organization with seven research centers, nine recognized degree programs and a couple of dozen support staff members who assist in a variety of administrative and management roles. These varied programs are not completely self-contained with many faculty members affiliated with multiple programs and some courses drawing students from different degree programs. In spite of a very well prepared self-study document as well as hundreds of pages of appendices, the complexity of the departmental organization and how students, staff, and faculty work together on the independent and shared objectives became much more evident when the review committee members were able to meet with departmental faculty, staff and students.

Overall Assessment

The major conclusion of the review committee is that the Department of Health Services is in good standing with no major concerns. The department is strong, performing important, valuable and relevant work. The department fulfills its teaching mission with innovative practices, including incorporation of evidence-based teaching strategies. Almost all students spoke highly of the classes and how their coursework has served them well in their graduate training and careers and that faculty are responsive to their concerns. Our committee was impressed with the leadership of Professor Jeff Harris and his administrative team (faculty and staff) in creating a sense of community and undertaking several new initiatives to increase research, encourage efficiencies, ensure a climate of diversity and inclusion, and support new/junior faculty in developing their research career. It is clear that staff are valued and are included in developing and implementing the vision for the future.

The department is handling the complexity of its research, teaching and service missions quite well and has implemented several initiatives to address the challenges of the future. We recommend that the department be approved for a period of ten years until the next review will take place. In the following paragraphs, we elaborate on these areas of strengths; identify some areas of minor concern, and provide recommendations for the future.

Progress in Academic Unit Diversity

The department has undertaken several efforts to increase the diversity of faculty staff and students and ensure a climate that is inclusive of diverse constituents, and utilizes existing university resources, such as the Graduate Opportunities and Minority Achievement Program (GO-MAP), Office of Minority Affairs and Diversity (OMA&D), and the Office of the Associate Vice Provost for Faculty Advancement. The department has an active diversity committee with 26 members, including 11 students, and has a specific diversity plan with objectives focused on recruiting diverse faculty, staff and students, monitoring the climate and inclusivity of the department and ensuring regular communications about diversity-related resources and opportunities. The department has active educational workshops, such as Undoing Institutionalized Racism trainings, for faculty, staff and students around issues related to race and racism. Scholarship funding has also been made available to students with outstanding academic merit and diversity of experiences and backgrounds through the department chair. The department is also participating in the RWJ Summer Health Professions Education pipeline program to increase preparation of URM students for graduate work in Public Health, Medicine and Dentistry. Not as much description was included for initiatives

supporting academic success of students with disabilities and LGBTQ students, which might be due to space limitations in the report. Currently, 11% of the faculty come from Under Represented Minority (URM) groups as do 18% of staff. The diversity of the applicant pool and student body have increased in recent years, with an average enrollment of URM up from 16% in 2013 to 19% in 2017.

Recommendations

1. Continue efforts to ensure an inclusive climate for diversity, such as training for faculty and staff on unconscious bias and institutional racism and monitoring of the climate.
2. Continue to work with institutional resources in recruitment and retention of faculty from diverse backgrounds.

The State of Research and Research Centers
A fundamental priority of the department is ensuring a strong research agenda to maintain their reputation as a national leader in health services and social and behavioral sciences research. A vibrant research agenda will be crucial for recruitment of quality students and future success at funding, recruitment of faculty etc. We note that extramural funding is less than one would expect from a department with this prominence and number of faculty, and is less than peer institutions ($10,414,756 in FY 2017). Some of this maybe due to the pressures of the budget model, in which there is an inherent tension between teaching and research as fundraising options. For example, the point system, though positive in the transparency it provides concerning how faculty bring in their salary for teaching and service, could be a disincentive for research because it does not currently allow for "points" for submission of grant proposals. This serves as a disincentive by limiting salary support for uncommitted time to pursue development of research ideas and proposals, though the department has begun to address this. Additionally, the listed faculty number of 53-54, might be deceptive in evaluating research, as 17 are senior lecturers; many others are joint appointments, so the number of faculty in the department who are full-time in HSE and not dedicated solely to teaching are closer to 20-25 faculty. It appears that the PIs of Centers and NIH funded grants appear to be disproportionately from the Associate Professor rank, with less active funded research from Full Professor rank than would be expected.

The department has a number of vibrant and productive centers that contribute to the research enterprise of the department. In addition, the centers serve to connect the department to its wider constituent audiences, including local and state public health and community groups in Seattle and other UW researchers, and serve as sources of mentoring and funding for departmental students. Most centers appear to have

sufficient faculty and staff involvement. The department's current efforts to re-organize and consolidate staffing among the Centers is a strategic move and should enhance the Centers' ability to achieve their research and service missions while eliminating redundancies and perhaps generate cost savings.

The department has recognized the need to enhance its research productivity and has instituted several activities to address this issue. These include creation of a research council to focus on issues related to research, including reviewing and offering feedback to investigators on their specific aims for grant proposals; dedicating 2.5% of FTE (or funding for a RA) for faculty release time to those faculty submitting larger grant proposals (> 200k); provision of release time for new faculty through bridge funding as they begin their research activities; and creation of the Professional Development Group for assistant professors and the Associate Professor Group for associate professors to foster support and generate ideas that will be helpful for the professional development of these faculty groups. Since the department started their program for encouraging faculty in writing larger grants in 2016, they have had 17 awarded.

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Recommendations in the area of research

1. As part of the current review and re-organization/co-location of the research centers, the department should review Centers to ensure a critical mass of faculty investigators in each center, with the possibility of consolidating Centers for operational efficiencies.

2. The department should explore possible reasons why Full Professors maybe less active in leading funded research and develop strategies to ensure productivity continues from the Associate to the Full Professor rank.

3. Continue to identify and implement strategies to enhance and support research, such as the center re-organization initiative, salary offset incentives for submission of larger grants, and protected research time for junior faculty.

Teaching and Degree Programs

Training the next generation of researchers and practitioners is a fundamental mission of the Department of Health Services and the University of Washington. By and large, the Department is fulfilling this mission across a broad variety of degree programs with well-trained graduates who find productive employment and rewarding careers. The

graduates and students with whom we met were generally very positive about their education experiences.

Our only major concern is that the Department may be overly dependent on its teaching mission, which may have inadvertently lowered its investment in raising its research profile. For example, fee-based degree programs provide almost as much funding for the department as does research support. These funds provide core support for 17 senior lecturers as well as partial support for many research faculty members. The much discussed "point-system" creates incentives for teaching, including large enrolment classes. We would have fewer concerns if there were comparable incentives for preparing large research grants that would be competitive in the current climate of reduced federal support for research.

The Ph.D. program is very successful with a 100% five-year completion rate and an excellent record of placing its graduates in universities and research organizations. Students noted that the Associate Professors were very available to them; Professors less so. Students perceived that faculty were very committed to helping them obtain placements and jobs that they wanted. Some Ph.D. students expressed a desire for a more standard approach to advising Ph.D. students in the first year, as students had varying experiences based on their advisor.

The MPH degree includes three very successful programs:
- the traditional in-residence program with 74 currently enrolled students (both first and second year) and an 85% five-year graduation rate,
- the executive MPH program designed for working professionals with 50 enrolled students and a 76% five-year graduation rate, and
- the pedagogically intensive Community-Oriented MPH program with 51 students and a 96% five-year graduation rate.

The Master of Health Administration (MHA) includes both a
- traditional in-residence program with 59 students and a 96% five-year graduation rate
- the executive MHA program is designed for working professionals with 59 enrolled students and a 92% five-year graduation rate.

Based on discussions with faculty, current students, and graduates, both the MPH and MHA programs appear to be very high quality with a strong academic program and high demand for graduates from the healthcare institutions, public health agencies, and health policy programs.

Two issues were raised by students regarding the MPH program and instruction. The first was that sometimes courses were less targeted towards those at the MPH level, with some instruction perceived to be more similar to what was covered in undergraduate courses and less challenging than they expected for Masters level courses. Students reported liking the courses with PhD students. The second concern

raised was around practicum placements. Most students expressed some concerns about finding practicum placements (it seems there was a practicum coordinator who is no longer with the department), understanding the goals of the practicum experience (research and field experience or only field experience?), and some misalignment between the types of experiences students get on the practicums and the assignments associated with the practicum placement.

One substantial barrier to teaching effectiveness in the fee-based and certificate programs was Professional and Continuing Education (PCE). In numerous meetings across programs, program directors, faculty, and staff noted challenges with PCE support. Specifically mentioned were challenges with finding and scheduling classrooms for teaching and limited or no marketing and recruitment support. Faculty and staff noted that PCE is paid to provide recruitment and marketing services, but that either the services were not provided, or were not matched/appropriate for the program, and programs were doing their own recruitment and marketing. This resulted in duplication such that Health Services was essentially paying twice (paying PCE and paying their own staff/faculty) for the same service.

Biomedical Informatics Degrees

The field of biomedical informatics is at cross-roads. There is no universally agreed upon definition of what constitutes this rapidly evolving socio-technical field of study that deals with the collection, analysis, management, and use of data, information, and knowledge for the study of numerous aspects of biomedical science, often with a particular emphasis on the study of the healthcare system and the delivery of healthcare. More recently the study and use of "Data Science" which purports to provide solutions to many of mankind's long-standing, unsolved problems has become a hot topic with many academic organizations creating research centers (e.g., New York University - https://cds.nyu.edu/ ; University of Chicago - https://dsapp.uchicago.edu/ ; University of Washington, Tacoma - http://dscience.uw.edu/) , institutes (University of Michigan - http://midas.umich.edu/ ; Columbia University - http://datascience.columbia.edu/ ; or University of California, Berkeley - https://bids.berkeley.edu/), or even full-fledge departments (e.g., University of Mississippi - https://www.umc.edu/SoPH/Departments-and-Faculty/Data-Science/Department-of-Data-Science-Home.html ; University of Southern California - https://www.marshall.usc.edu/departments/data-sciences-and-operations ; or Maastricht University - https://www.maastrichtuniversity.nl/research/department-data-science-and-knowledge-engineering). Even the University of Washington, itself, recently began offering a Master's degree in Data Science (https://www.datasciencemasters.uw.edu/).

Only time will tell whether all these individual data science programs are necessary or whether these methods and techniques will be absorbed into existing academic programs as just another tool that can be used to explore problems in their specific field of interest. We agree with the recent recommendation of the CAHIIM accreditors to add courses on "data science" and analytics to the existing programs. In addition, the directors of the health informatics programs should keep an eye on the other biomedical

informatics programs within the university (e.g., http://bime.uw.edu/) and look for opportunities to collaborate on research, share courses or course materials where appropriate, and help their students find internships, research opportunities, and eventually jobs.

Figure 1 (below) provides an illustration of the various core competencies of the field of Applied Health Informatics as defined by the American Medical Informatics Association (AMIA) Accreditation Committee. These competencies form the basis for the accreditation programs that are currently under review by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). We would strongly encourage the faculty responsible for overseeing both the Bachelor's and Master's Biomedical Informatics degree programs to keep these core competencies in mind as they review existing and new course content. In addition, we were heartened to see that the Master's program received accreditation in 2016 and we would strongly encourage them to maintain this accreditation going forward.
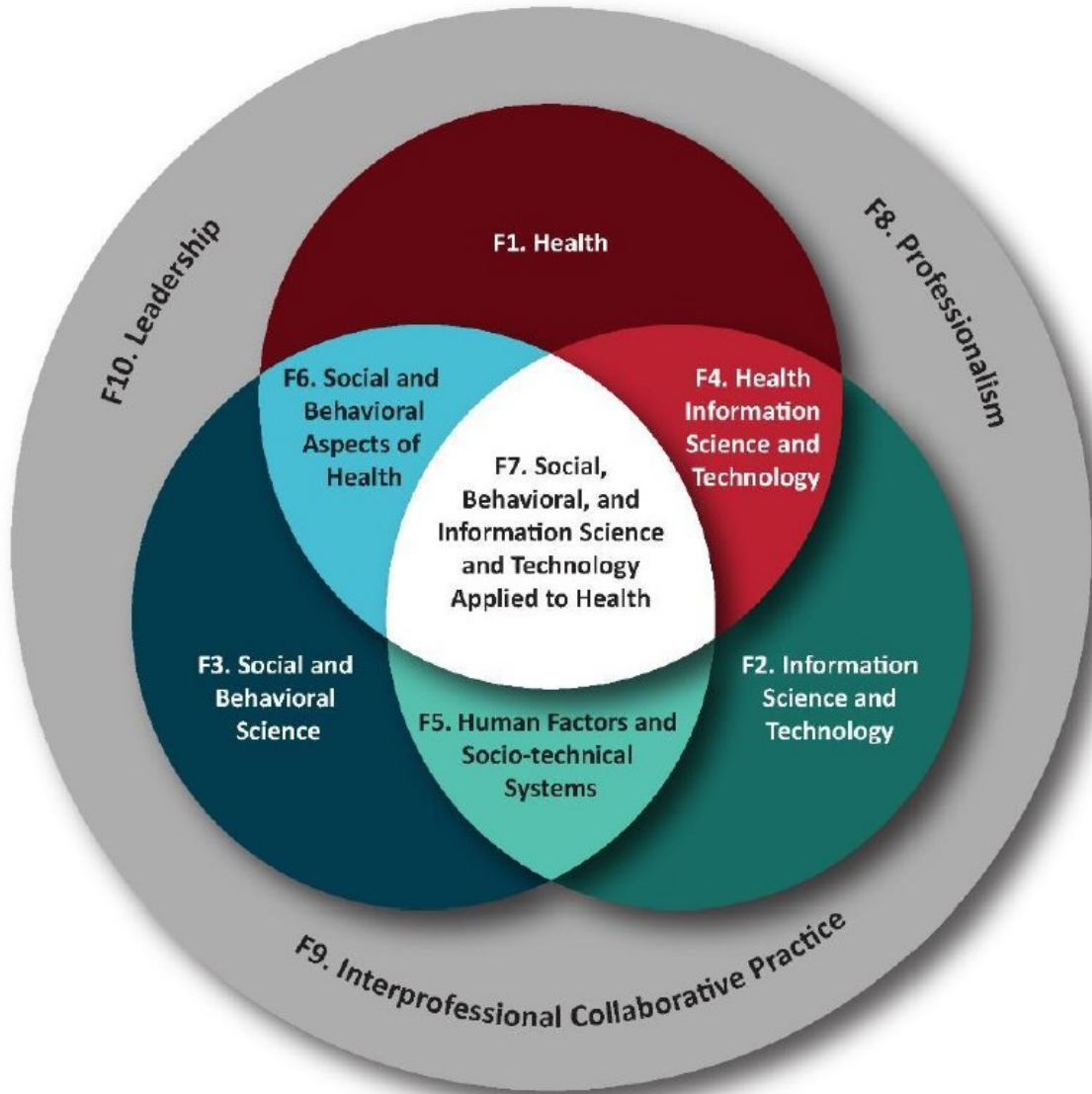
Domain	Name	Brief description
F1	Health	The background knowledge of the history, goals, methods, and current challenges of the major health sciences including human biology, genomics, clinical and translational science, healthcare delivery, personal health, and public health.
F2	Information Science and Technology	The background knowledge of the concepts, terminology, methods, and tools of information science and technology for managing data, information, and knowledge.

F3	Social and Behavioral Science	The background knowledge of the effects of social, behavioral, legal, psychological, management, cognitive, and economic theories, methods, and models applicable to health informatics from multiple levels including individual, social group, and society.
F4	Health Information Science and Technology	The knowledge, skills, and attitudes to use concepts and tools for managing biomedical and health data, information, and knowledge. Key foci include systems design and development, standards, integration, interoperability, and protection of biomedical and health information.
F5	Human Factors and Sociotechnical Systems	The knowledge, skills, and attitudes to apply social behavioral theories and human factors engineering to better understand the interaction between users and information technologies within the organizational, social, and physical contexts of their lives, and apply this understanding in information system design.
F6	Social and Behavioral Aspects of Health	The knowledge, skills, and attitudes to use social determinants of health and patient-generated data to analyze problems arising from health or disease, to recognize the implications of these problems on daily activities, and to recognize and/or develop practical solutions to managing these problems.
F7	Social, Behavioral, and Information Science and Technology Applied to Health	The knowledge, skills, and attitudes to apply the diverse foundational concepts and facets in order to develop integrative approaches to the design, implementation, and evaluation of health informatics solutions.
F8	Professionalism	The conduct that reflects the aims or qualities that characterize a professional person, encompassing especially a defined body of knowledge and skills and their lifelong maintenance as well as adherence to an ethical code.
F9	Interprofessional Collaborative Practice	Behavior that reflects the foundations of values/ethics, roles/responsibilities, interprofessional communication practices, and interprofessional teamwork for team-based practice.

F10	Leadership	Behavior that demonstrates the following characteristics: credibility, honesty, competence, ability to inspire, and ability to formulate and communicate a vision.

Based on the Department of Health Services 10-year Review Self Study, it appears that both the bachelors and master's academic programs are providing their students with the required knowledge and skills to allow them to gain meaningful employment in the field. This is one of the most important indicators of an academic program's success. The department should continue to survey students that graduate from the program to both understand how well they performed in the past as well as to seek their alumni's input on future directions of the field and modifications needed in course work for future students.

Recommendations in the area of teaching

Biomedical Informatics
1. Directors of the health informatics programs should keep an eye on the other biomedical informatics programs within the university (e.g., http://bime.uw.edu/) and look for opportunities to collaborate on research, share courses or course materials where appropriate, and help their students find internships, research opportunities, and eventually jobs.
2. Faculty responsible for overseeing both the Bachelor's and Master's Biomedical Informatics degree programs should keep these Health Informatics core competencies in mind as they review existing and new course content.
3. We would strongly encourage the department to maintain their CAHIIM health informatics accreditation going forward.
4. The department should survey MPH students about their practicum experiences and ways that the practicum experience can be better organized and structured for optimal student training and student experience.
5. The department should continue to survey students that graduate from the informatics programs to both understand how well they performed in the past as well as to seek their alumni's input on future directions of the field and modifications needed in course work for future students.

Other
1. The department and school should work with the graduate college and central administration to address the weaknesses identified with the PCE support. The lack of support of PCE for the certificate programs is extremely concerning, particularly given that the department is paying for services from PCE that they are not receiving.
2. The Department should consider revising the point system to include more incentives for the preparation of large and innovative research projects.