

**Council on Education for Public Health  
Adopted on June 16, 2018**

REVIEW FOR ACCREDITATION  
OF THE  
PUBLIC HEALTH PROGRAM  
AT  
NORTHWESTERN UNIVERSITY

COUNCIL ON EDUCATION FOR PUBLIC HEALTH

SITE VISIT DATES:

October 30-31, 2017

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## Introduction

This report presents the findings of the Council on Education for Public Health (CEPH) regarding the Public Health Program at Northwestern University. The report assesses the program's compliance with the *Accreditation Criteria for Public Health Programs, amended June 2011*. This accreditation review included the conduct of a self-study process by program constituents, the preparation of a document describing the program and its features in relation to the criteria for accreditation and a visit in October 2017 by a team of external peer reviewers. During the visit, the team had an opportunity to interview program and university officials, administrators, teaching faculty, students, alumni and community representatives and to verify information in the self-study document by reviewing materials provided in a resource file. The team was afforded full cooperation in its efforts to assess the program and verify the self-study document.

Established in 1851, Northwestern University began as an institution with the purpose of educating the citizens of the Northwest Territory. It started on a 379 acre plot of land on the shore of Lake Michigan and the following year enrolled ten students with two faculty leading instruction. Northwestern University now spans three campuses in Chicago, Illinois; Evanston, Illinois; and Doha, Qatar. The university is home to 12 schools and colleges and enrolls nearly 21,000 students.

The Northwestern Program of Public Health is located within the Feinberg School of Medicine. It began in 1996 and has experienced growth and a change of administrative home. The program refers to its efforts as "population health" to encompass the traditional core functions of public health while acknowledging the increasing importance of cross-sectoral partnerships to promote positive population-level health outcomes. The program offers an MPH degree in three concentrations: community health research, epidemiology and generalist. The program also offers an MS in biostatistics with concentrations in population health analytics, statistical bioinformatics and statistical methods and practice. Four joint degrees are offered, including an MD/MPH, a PhD/MPH, a DPT/MPH and an accelerated bachelor's-master's program in public health. Most of the program's students enroll full-time and complete the program in one year consisting of four academic quarters.

The program is located in the Institute of Public Health and Medicine (IPHAM) within the Feinberg School of Medicine. IPHAM is home to 14 centers that house faculty from all departments of the School of Medicine and one of those is the Center for Education in Health Sciences, which serves as the home for the Program of Public Health.

The Program of Public Health at Northwestern was initially accredited by CEPH in 2003. The program was reaccredited in 2010 for a seven-year term.

## Characteristics of a Public Health Program

To be considered eligible for accreditation review by CEPH, a public health program shall demonstrate the following characteristics:

- a. The program shall be a part of an institution of higher education that is accredited by a regional accrediting body recognized by the US Department of Education or its equivalent in other countries.
- b. The program and its faculty and students shall have the same rights, privileges and status as other professional preparation programs that are components of its parent institution.
- c. The program shall function as a collaboration of disciplines, addressing the health of populations and the community through instruction, research and service. Using an ecological perspective, the public health program should provide a special learning environment that supports interdisciplinary communication, promotes a broad intellectual framework for problem solving and fosters the development of professional public health values.
- d. The public health program shall maintain an organizational culture that embraces the vision, goals and values common to public health. The program shall maintain this organizational culture through leadership, institutional rewards and dedication of resources in order to infuse public health values and goals into all aspects of the program's activities.
- e. The program shall have faculty and other human, physical, financial and learning resources to provide both breadth and depth of educational opportunity in the areas of knowledge basic to public health. At a minimum, the program shall offer the Master of Public Health (MPH) degree, or an equivalent professional degree.
- f. The program shall plan, develop and evaluate its instructional, research and service activities in ways that assure sensitivity to the perceptions and needs of its students and that combines educational excellence with applicability to the world of public health practice.

These characteristics are evident in the public health program at Northwestern University. Northwestern University is accredited by the Higher Learning Commission, and the Feinberg School of Medicine is accredited by the Liaison Committee on Medical Education. The program provides the same rights to its students and faculty as other professional preparation programs. The program facilitates collaboration between faculty and students of many departments within the School of Medicine and promotes interdisciplinary communication and learning. Northwestern has a complement of faculty and staff who are qualified and represent a diverse array of backgrounds and disciplines. The program has a system of planning and evaluation that involves faculty, staff and outside stakeholders and is responsive to current and emerging public health practice needs.

## 1.0 THE PUBLIC HEALTH PROGRAM.

### 1.1 Mission.

**The program shall have a clearly formulated and publicly stated mission with supporting goals, objectives and values.**

This criterion is met. The development of the program's mission, values and goals was an iterative process consisting of meetings with faculty, staff, students and community members. In 2016, the Accreditation Task Force (ATF) undertook an extensive review of the mission, values, goals and objectives. The mission, values, goals and objectives were enhanced to better reflect the program's more recent transition from a unit that primarily trains clinicians to a program that serves a broad student body with multiple backgrounds, in order to better serve the program's focus on population health.

The stated mission of the program is "to improve the health of the people of Chicago, the United States and the world by engaging students, faculty and community partners in innovative and replicable education, research and service programs in population health." The four values guiding the program are (1) Professional integrity in education, research and service; (2) Compassion, equity, and social justice in defining and addressing health; (3) Multidisciplinary collaborative approaches to problems; and (4) Respect for and inclusion of diversity and community. The program has clear supporting goal statements regarding instruction, research, service and workforce development. The objectives set forth are measurable.

The program's mission, values, goals and objectives follow the program's transition from the Department of Preventive Medicine to the Center for Health Education within the Institute of Public Health and Medicine. The transition was purposeful in enhancing the program's ability to collaborate with clinicians and other health related degree programs to address and improve population health. During the 2016 review by the ATF, a more formal review process was established, which will continue yearly and will be led by the ATF and the program's Executive Committee.

The mission, values, goals and objectives were made available to internal stakeholders through the semi-annual faculty retreat and through committee and stakeholder specific meetings. The general public has access to the statements on the program's website.

## 1.2 Evaluation and Planning.

**The program shall have an explicit process for monitoring and evaluating its overall efforts against its mission, goals and objectives; for assessing the program's effectiveness in serving its various constituencies; and for using evaluation results in ongoing planning and decision making to achieve its mission. As part of the evaluation process, the program must conduct an analytical self-study that analyzes performance against the accreditation criteria.**

This criterion is met with commentary. The program employs a variety of mechanisms to ensure that program evaluation and planning takes place on a continual basis, involves all stakeholders and directly addresses the mission, goals and objectives. The ATF acts as the central organizing body for analyzing and communicating evaluation of program-level data, and the Evaluation Committee is the central organizing body for analyzing and communicating student and alumni-related data.

Data collected by the ATF and the Evaluation Committee are shared, discussed and addressed routinely in all committee meetings. The regularity of the discussions varies based on the committee meeting schedules. The Administrative Committee meets weekly, the Curriculum Committee meets monthly, as do the Executive and Evaluation Committees, and the Community Engagement Committee meets annually. The program and its constituents also host an annual Town Hall meeting that provides a forum to receive student feedback and address how the MPH program has been responsive to student concerns in the last year.

The program is responsive to community partners as evidenced by the creation of the Cultural Sensitivity Task force. The creation of the task force was in response to community partners inquiring about what was happening within the program in terms of diversity. The program also used feedback from alumni to transform the MS program from a focus on biostatistics and epidemiology to focusing more intensely on biostatistics, with more programming and methodology courses and a new course on clinical databases.

The ATF was tasked with writing the self-study and did so in conjunction with input from stakeholders and from past accreditation reports. The ATF began the process by reviewing the last self-study document and the accreditation report from 2010. They paid special attention to criteria that rendered a partially met finding on the 2010 report and spoke with faculty who were involved in the last accreditation review. The ATF also engaged in formal and informal conversations with faculty, staff, students, preceptors and community members to receive feedback on draft sections in the current self-study.

The commentary relates to the outcome measures reported by the program. Several are process measures, such as the number of enrolled students, the target that all courses contain learning objectives, the target that all PPH courses syllabi demonstrate alignment with MPH/MS program

competencies, the target that all instructors will be reviewed following each course they teach, or that all faculty retreats include an instruction-oriented professional development activity. The outcome measures and targets do not relate well to and do not truly evaluate efforts to achieve the programs mission, goals and objectives. The objectives do not provide a clear sense of what the program wishes to achieve. There is opportunity for revising or replacing objectives and for establishing outcome measures that will chart the course to continuous program improvement.

### **1.3 Institutional Environment.**

**The program shall be an integral part of an accredited institution of higher education.**

This criterion is met. Established in 1851 to educate the constituents of the Northwest Territory, Northwestern University is home to 12 colleges and schools that span three different campuses. The university has a 240-acre campus in Evanston, Illinois, a 25-acre campus in Chicago, Illinois and a third campus in Doha, Qatar. Northwestern is a research university with more than 90 school-based centers and more than 50 university research centers.

Northwestern University is accredited by the Higher Learning Commission, and the Feinberg School of Medicine is accredited by the Liaison Committee on Medical Education. Along with regional accreditation, Northwestern University holds accreditation from specialized accreditors in fields such as psychology, audiology, genetic counseling, physical therapy and physician assistant studies.

The twelve schools and colleges housed at Northwestern are arts and sciences; communication; education and social policy; engineering and applied science; journalism, media and integrated marketing communications; graduate school; law; management; medicine; music; professional studies; and Northwestern Qatar. The Feinberg School of Medicine (FSM) is home to the Program of Public Health (PPH). Since the program's last CEPH accreditation, the program has moved to a new administrative home within the School of Medicine. The program was previously housed in the Department of Preventive Medicine and is now housed in the Institute of Public Health and Medicine (IPHAM). The IPHAM was created in 2012 to advance collaborative research and education to improve the health and well-being of individuals and their communities. Officials from the medical school reiterated the thought that was put into creating the IPHAM and positioning it strategically in a center that can draw from expertise in both clinical practice and community public health practice.

The IPHAM is home to 14 centers that house faculty from across the FSM and from departments and divisions at other schools to focus their research, education and service efforts at the interface of public health and medicine. Within the IPHAM, the Center for Education in Health Sciences (CEHS) is the home for the program of public health. This organizational structure is designed to ensure the alignment of public health educational programs with other clinical and health-related programs.

Aside from administrative structure, there is also academic administrative structure that is provided by the Graduate School. The Graduate School works closely with the program to guide and sustain an institutional culture that facilitates excellence in teaching, innovation and rigor in research and the personal and intellectual growth of its students.

The program has clear reporting lines through which the program director reports to the director of the CEHS. The director of the CEHS reports to the senior associate dean of the IPHAM, who then reports to the dean of the FSM. The dean reports to the provost of the university, who then reports to the university president.

Budgeting and resource allocation aligns with the processes used in the CEHS. The center runs on a self- supporting budget model through which the revenue comes directly from student tuition. The center's administrative leaders meet annually to develop an operational budget for the following fiscal year. The budget is made in collaboration with input from other center faculty and staff, and the draft budget is sent to the office of the dean of the FSM. Once approved, the IPHAM receives a budget letter stating the approved levels of expenditures and expected revenues.

Personnel recruitment, selection and advancement is guided by the FSM's hiring process. New positions must be planned for during the school's annual budgeting process. As faculty positions must be held within a department, the program must work with a corresponding department, such as the department of preventive medicine, if any new hire requests are made. Once new positions are approved, administrators enter the hire information into an online business plan to create the new position. This position then moves for approval from the school's finance and/or research office and finally the provost. Following all approvals, a national search is initiated and a search committee is formed. Each candidate is reviewed according to a standard rubric, which accounts for unconscious bias, qualifications and underrepresented populations. Following the interview process, the candidate must be approved by the provost, and once approval is complete, an offer letter is sent to the candidate.

Academic standards and policies originate within the program's committees and are approved by the program's Executive Committee. The program must adhere to the academic standards and policies set forth by the FSM and the Graduate School. The program's Curriculum Committee is responsible for the establishment and oversight of the curricula, and any new courses must be approved by the program's Executive Committee and then passed along to the Graduate School's Administrative Board.

#### 1.4 Organization and Administration.

**The program shall provide an organizational setting conducive to public health learning, research and service. The organizational setting shall facilitate interdisciplinary communication, cooperation and collaboration that contribute to achieving the program's public health mission. The organizational structure shall effectively support the work of the program's constituents.**

This criterion is met. Although complex, the internal organization of the program lends itself to being inherently interdisciplinary and collaborative. The program director leads the program administratively with the associate director. Beneath the director are two equal structures: the degree leadership and the program's committee structure.

Within the degree leadership there is a director of the program in public health, a director of the MPH program, a director of the MS program and a program administrative team. The MPH program also designates directors for operational items such as admissions, accreditation and graduate affairs, as well as directors of degrees and concentrations who are all held as equals under the MPH program director. The MS program designates directors of admissions, graduate affairs, and exam leaders, all of whom have equivalent reporting lines to the director. Two program coordinators report to the program administrator.

The program has committees that engage in governance and decision making, and each committee has membership made up of faculty, staff and students, where appropriate.

The program operates at the nexus of a rich web of academic disciplines, and faculty represent multiple departments, schools and institutes across the school of medicine and the university. This lends itself well to interdisciplinary collaboration through instruction, research and service. Many faculty members are also involved in public health work within the community, and the program often serves as a connecting point between the community and the university as a whole.

#### 1.5 Governance.

**The program administration and faculty shall have clearly defined rights and responsibilities concerning program governance and academic policies. Students shall, where appropriate, have participatory roles in the conduct of program evaluation procedures, policy setting and decision making.**

This criterion is met. The program has a well-defined governance structure made up of committees, task forces and workgroups that all operate under the program's stated mission and goals. The program has 10 committees, task forces and workgroups that help to govern the program according to identified values. Faculty and staff make up the bulk of the governance structure with student representatives where appropriate.

The committees, task force and workgroup that govern and guide the program are as follows:

- Accreditation Task Force
- Admissions Committee
- Community Engagement Committee
- Curriculum Committee
- Cultural Sensitivity Workgroup
- Evaluation Committee
- Executive Committee
- PPH Program Administrative Committee
- Professional Experience Committee
- Student Senate

The ATF is the primary administrative body responsible for the development of the self-study document and alignment with accreditation criteria. This task force was assembled in spring of 2016 after the hiring of the program's director of accreditation and includes both faculty and staff.

The Admissions Committee is responsible for screening applicants, helping with interviews and recruiting new students. This committee is made up of faculty and staff. There is a focus on recruiting diverse students across all degree programs, as evidenced by conversations with medical school officials. Program and school officials noted that there is a conscious effort to recruit diverse students so that a diverse workforce is serving the diverse population Chicago.

The Community Engagement Committee is responsible for ensuring that the program always measures its success in work and strategic planning by what it contributes to improving the health of the population of Chicago and beyond. This committee includes faculty, staff, students, community partners and preceptors.

The Curriculum Committee is comprised of faculty, staff and students, and leadership is shared between one faculty member from the MPH program and one faculty member from the MS program. The charge of the committee is to review the course syllabi and post-course evaluations to assess instructional content and quality for all required MPH and MS courses.

The Cultural Sensitivity Workgroup is composed of faculty, staff and students, and is organized around short- and long-term curriculum-oriented goals to develop culturally sensitive vignettes for courses, workshops for faculty, a resource portal and program-aligned competencies and evaluation.

The Evaluation Committee is charged with overseeing the assessment and evaluation of the MPH and MS programs admissions, courses and competencies and tracking alumni. Membership currently includes faculty and staff, and the committee is currently in the process of selecting a student representative.

The Executive Committee is made up of program faculty, staff and CEHS staff. The responsibilities of this committee involve general oversight of the program and its policies and budget.

The PPH Administrative Committee is the primary administrative body responsible for the functioning of the program. The committee is charged with assessing program progress, addressing any programmatic and curricular issues, monitoring relationships with internal/external partners and determining immediate and future courses of action for the program. Faculty and staff of the MPH program make up the membership of this committee.

The Professional Experience Committee ensures that students have high-quality practice and culminating experiences. This committee consists of program faculty and staff. As students do not choose their own field and culminating experience sites, this committee is charged with finding and ensuring that all site options are of high quality, safe and relevant.

The Student Senate is composed of five senators and a president. The senate has four goals:

- Represent the desires of the student body
- Facilitate communication between students, faculty and administration
- Solidify the position of students as valued stakeholders
- Support student activities and initiatives.

The senators fill the student seats in the other committees, and if no senator volunteers for a seat, the president may nominate a senator to that seat. The senators are elected from the MD/MPH, MPH, MS and PhD/MPH degree programs.

General policy development can begin organically with any of the committees or the program or degree directors. Discussions typically arise in response to evaluation data, student feedback or new university policies. The appropriate committee or task force initially discusses the changes and brings the changes to the program director and the Executive Committee, who makes the final decisions. Policies are presented to faculty at annual retreats, and the policies are put into effect when the final content is agreed upon by the Executive Committee.

Operational planning and evaluation is primarily performed by the program director, directors of MS and MPH programs as well as the CEHS administrative staff on a monthly basis. Ongoing monitoring and evaluation of educational programs occur in collaboration between the program director, the degree program or concentration director and committee chairs.

Budget and resource allocation proposals are developed by the program and center administrators, with input from concentration directors.

The director of admissions leads student recruitment efforts in conjunction with the Admissions and Administrative Committee members as well as concentration or degree directors. Student recruitment is led by the Admissions Committee.

Faculty Recruitment, retention, promotion and tenure is guided by the chair of the primary appointing department for each faculty member. Program faculty have appointments in the Department of Preventive Medicine, Department of Medical Social Sciences, Department of Medicine and several additional departments. However, decisions about recruitment and retention are always a collaborative effort involving both programmatic and departmental leadership. The program director provides feedback on faculty to their respective department chairs.

Bylaws and policies are presented by the Graduate School Student Policy Handbook, Northwestern University Faculty Handbook and Northwestern University Staff Handbook. The program follows the academic standards and policies set forth by the Graduate School and the university. Research and service expectations are guided by a faculty member's administrative department chair and all research and service is governed by university policies and rules.

#### **1.6 Fiscal Resources.**

**The program shall have financial resources adequate to fulfill its stated mission and goals, and its instructional, research and service objectives.**

This criterion is met. The program has sufficient resources to fulfill its stated mission and goals and objectives. The center runs on a self-supporting budget model, in which program revenue comes from student tuition. Table 1 presents the program's budget. The major program expenditures are faculty salaries, operations and university tax. The PPH transitioned from the Department of Preventive Medicine (DPM) to the Center for Education in Health Sciences (CEHS) during the 2014-15 reporting year. Beginning in 2015-16, program leaders agreed that the PPH would report its budget in a manner that includes total extramural grant and contract funding in IPHAM, because this funding base supports the PPH's capacity to provide opportunities for students. Table 1 shows the program's budget since 2012.

The program has identified two outcome measures to assess the adequacy of its fiscal resources: 1) Tuition and other fees generate sufficient revenue to support expenses and 2) External funding for competitive proposals that address public health challenges. The program has met or was close to meeting its targets in the last three years.

Table 1. Sources of Funds and Expenditures by Major Category, 2012-2017					
	2012-3	2013-4	2014-15	2015-16	2016-7
<b>Source of Funds</b>					
Tuition & Fees	\$ 1,359,239	\$1,869,867	\$2,154,867	\$1,357,907	\$1,674,041
State Appropriation	\$ 2,868,424				
University Funds	\$ 85,525	\$2,782,899		\$208,041	\$24,860
Grants/Contracts	\$ 9,043,200	\$8,932,854		\$64,336,404	\$65,499,519
Operating Income	\$ 317,901				
Education, Leadership Pools	\$ 22,175				
<b>Total</b>	<b>\$13,610,938</b>	<b>\$13,585,620</b>	<b>\$2,154,867</b>	<b>\$65,902,352</b>	<b>\$67,198,420</b>
<b>Expenditures</b>					
Faculty Salaries & Benefits	5,493,391	\$5,436,708	\$1,089,184	\$996,755	\$940,441
Staff Salaries & Benefits	4,701,144	\$5,043,831	\$216,379	\$170,857	\$171,310
Operations	1,390,000	\$1,601,244	\$72,952	\$65,598	\$31,521
Travel			\$8661	\$9332	\$9,718
Student Support	40,882	\$54,175	\$146,432	\$146,743	\$329,454
University Tax	135,924		\$213,545	\$176,528	\$216,455
Other (explain)	1,544,000	\$1,418,709	\$406,865**		
<b>Total</b>	<b>\$13,315,340</b>	<b>\$13,554,667</b>	<b>\$2,154,018</b>	<b>\$1,556,413</b>	<b>\$1,698,901</b>

\*Northwestern University's Program in Public Health transitioned from the Department of Preventive Medicine to the Center for Education in Health Sciences during the 2014-15 reporting year. The table includes only center and program funding as opposed to the total within Institute for Public Health & Medicine (IPHAM) for that reporting year. For 2015-6, on the table includes total IPHAM funding in our which would include grants and contracts. Hence, 2014- 5 is an outlier

\*\*This expense item corresponds to the amount of income from the program which was allocated to support other educational and research-related expenses within the department.

### 1.7 Faculty and Other Resources.

**The program shall have personnel and other resources adequate to fulfill its stated mission and goals, and its instructional, research and service objectives.**

This criterion is met. The program has adequate faculty for its students and instructional offerings. For the academic year 2017-18 the program has a total of 17 primary faculty members. Each concentration has the adequate number of at least three primary faculty members, and the student-to-faculty ratios were compliant with CEPH required ratios at no more than 2.15:1 students per faculty members in all concentrations. There is adequate staffing for the program overall as well as for the MPH program and the MS programs individually.

Classrooms are universally accessible and equipped with technology. The PPH student lounge and workspace has eight computers dedicated to PPH students' use. The Galter Health Science Library on the Chicago campus has 10 group study rooms; each room is equipped with a whiteboard, a chalkboard, digital image and audio projector, projection screen and network connections to the university's IT backbone. The Barnes Learning Resources Center (LRC), located within the library, has

50 computer workstations. All faculty and staff members are connected to the university computer network and have access to the Galter Health Science Library information management services.

During the site visit the faculty, staff, students and community partners praised the resources of the program and the supportive instructional environment. Students noted that they felt as though the instruction and mentoring from faculty was one of the program's best features.

### **1.8 Diversity.**

**The program shall demonstrate a commitment to diversity and shall evidence an ongoing practice of cultural competence in learning, research and service practices.**

This criterion is met. The program has established goals for achieving diversity and cultural competence as defined by the FSM. The program has identified underrepresented minorities (Latino/a, African- American and Native-American/Alaskan Natives) and first-generation students as their chosen populations of interest for both faculty and students. Based on conversations with medical school leaders, the program's identified populations reflect its mission to serve the population of Chicago by training practitioners who mirror the city's diversity.

The program has goals related to increasing the number of underrepresented students, faculty and staff, as well as faculty members that were first time college undergraduate and graduate students. The program reports that 32% of students are first-generation graduate students, surpassing the current goal of 30%, and 17% are underrepresented minorities, just short of the goal of 20%. The faculty are 19% underrepresented minorities, with a goal of 15%, and 42% first-generation graduate students, with a goal of 30%.

In order to achieve its goals, the program has solicited feedback from the community, which led to the creation of the Cultural Sensitivity Task Force that then transitioned to the standing Cultural Sensitivity Workgroup. The Community Engagement Committee and the Executive Committee also monitor the program's diversity focused activities. The Cultural Sensitivity Workgroup was developed to lead short and long-term curriculum-oriented goals which will result in collaborative work with faculty, staff, students and community based partners to develop culturally sensitive vignettes for courses, workshops for faculty, a resource portal and program-aligned competencies and evaluation.

Northwestern as a whole offers support to underrepresented minorities through offices such as the Gender and Sexuality Resource Center, Multicultural Student Affairs, Center for Awareness, Response and Education, Women's Center, Office of Religious and Spiritual Life and many others. The university also offers an office of Social Justice Education, which creates co-curricular educational opportunities that foster self-exploration and facilitate conversations across different identities. To support the program's mission of recruiting and cultivating first generation college students, the university offers

Student Enrichment Services, which work with first-generation and low-income students to enhance their academic success, personal development and professional growth. All of these offices provide support to students, and most provide support to faculty and staff as well.

The program has significant outreach to priority populations through its recruitment efforts and recent provision of tuition reductions. The program actively markets its offerings to underrepresented minority populations and seeks to improve diversity in the student body. The medical school leaders who met with site visitors reiterated the importance of preparing diverse practitioners, and Graduate School officials also noted their desires to broaden their reach of recruitment efforts.

The program participates in a university-wide partnership with the Chicago Public schools to provide a path to a college for students in their system and the school officials stated that they do not want lack of financial stability to be a factor in deciding whether or not to attend Northwestern.

The program actively recruits students who are members of priority under-represented populations. Graduate School officials noted that they have prioritized a wide-reaching recruitment process. Officials also noted the barriers to the identified population of interest enrolling in the School of Medicine and the programs it offers and articulated ways in which they are addressing these barriers.

While the program seeks to increase minority underrepresented groups within the student population, program leaders also actively seek increased faculty diversity.

## **2.0 INSTRUCTIONAL PROGRAMS.**

### **2.1 Degree Offerings.**

**The program shall offer instructional programs reflecting its stated mission and goals, leading to the Master of Public Health (MPH) or equivalent professional master's degree. The program may offer a generalist MPH degree and/or an MPH with areas of specialization. The program, depending on how it defines the unit of accreditation, may offer other degrees, if consistent with its mission and resources.**

This criterion is met. Table 2 presents the program's degree offerings. The program offers an MPH with concentrations in community health research, epidemiology, global health and a generalist degree. The program offers an MS in biostatistics with concentrations in population health analytics, statistical bioinformatics and statistical methods and practice. The program also offers four joint degrees: an MD/MPH, a PhD/MPH, a DPT/MPH and an accelerated program in public health, which is a 4+1 degree for highly qualified university undergraduates. The program offers a full-time format, which is a one year, four quarter format, and a part-time format that is typically completed in two years.

The program requires all MPH students to take courses in the five core areas of public health, as well as an additional course concentrated on the foundations of public health. All students also are required to take two courses from a methods domain. Each concentration takes additional concentration-specific required courses that provide specific knowledge and skills. Each concentration has a listing of selective courses. Community health research students take one selective course, while the other concentrations take two selectives. Each student also must take two elective courses and the field and culminating experiences.

Joint degree students take all required MPH or MS coursework in conjunction with required coursework of the other degree being pursued. There are limited exceptions for the MD/MPH track and the PhD/MPH track to substitute two courses for MPH coursework.

<b>Table 2. Instructional Matrix – Degrees &amp; Specializations</b>		
<b>Master’s Degrees</b>	Academic	Professional
Community Health Research		MPH
Epidemiology		MPH
Generalist		MPH
Global Health		MPH
Population Health Analytics	MS	
Statistical Bioinformatics	MS	
Statistical Methods and Practice	MS	
<b>Joint Degrees</b>		
Medicine		MD/MPH
Anthropology		PhD/MPH
Physical Therapy		DPT/MPH
Accelerated Program		APHP

## 2.2 Program Length.

**An MPH degree program or equivalent professional public health master’s degree must be at least 42 semester-credit units in length.**

This criterion is met with commentary. The MPH degree requires 57 quarter credit units. Northwestern University uses quarter credits units and defines a “unit” as 30 contact hours. A unit represents three hours of classroom contact per week over 10 weeks. Each unit is equivalent to three quarter credit units. The MPH program requires 19 units, which is equal to 57 quarter credit units.

No degrees have been awarded for fewer than 42 semester credits.

The commentary relates to the limited opportunities the one-year MPH program provides students in terms of service, research and field experience. Students noted in interviews that research opportunities are not encouraged in the one-year program and that options for field experience sites are inflexible and limited.

### 2.3 Public Health Core Knowledge.

**All graduate professional public health degree students must complete sufficient coursework to attain depth and breadth in the five core areas of public health knowledge.**

This criterion is met. All students are required to take at least one course in each of the five core areas of public health as displayed in Table 3.

<b>Core Knowledge Area</b>	<b>Course Number &amp; Title</b>	<b>Quarter Credits</b>	<b>Units</b>
Biostatistics	PUB HLTH 302 Introduction to Biostatistics	3	1
	EPI BIO 302 Introduction to Biostatistics	3	1
Epidemiology	PUB HLTH 304 Introduction to Epidemiology	3	1
	Medical Decision Making II	3	1
	EPI_BIO 301 Introduction to Epidemiology	3	1
Environmental Health Sciences	PUB HLTH 303 Environmental Health Sciences	3	1
	CIV_ENG 361-1 Environmental Microbiology	3	1
Social & Behavioral Sciences	PUB HLTH 301 Behavior, Health and Society	3	1
Health Services Administration	PUB HLTH 420 Introduction to the US Healthcare System	3	1
	HSR 433 Health Economics and Health Care Financing	3	1
	INTL 442-0 International Health Care Systems	3	1
Public Health Core Knowledge	PUB HLTH 310-311-312 Topics in Public Health	3	1

The learning objectives for all required core courses contribute to the program's core competencies and provide students with a strong foundation of public health core knowledge.

The community representatives and preceptors who met with site visitors commented that students have good knowledge of the core principles of public health and that they were impressed with their depth and breadth of their knowledge.

### 2.4 Practical Skills.

**All graduate professional public health degree students must develop skills in basic public health concepts and demonstrate the application of these concepts through a practice experience that is relevant to students' areas of specialization.**

This criterion is met with commentary. The program requires a field experience (FE) of 200 contact hours, and practicum waivers have not been granted in the last three years. Students receive a pass/fail grade. The goal is to introduce students to the public health field and to provide direct experience in a student's chosen interest area. This process is overseen by the MPH Professional Experience Committee and the director of field experience. Concentration directors also provide support to the FE process. The program has exposed its students to a variety of real life situations and

has allowed them to utilize the skills they have learned in courses as well as gain knowledge and skill sets provided in a real world setting.

Sites are selected on specific criteria, and preceptors are trained by the Professional Experience Committee in the requirements of the program. Preceptors noted that the orientation to the field experience was informal and minimal. Potential preceptors are evaluated on their qualifications as trained and experienced public health workers and on their history of student supervision.

Students are provided with a list of previously established sites. Students have completed their field experiences in agencies such as Health Medicine Policy Research Group, Chicago Public Schools, Illinois Public Health Institute, Department of Healthcare Epidemiology and Infection Prevention and the Governor's Office of Early Childhood Development, among others.

Students in the full-time program are placed in their FE while they are enrolled in their core courses in their second quarter. The students reported that it did not place an undue burden on their experience. Students noted that they enjoyed the complementary learning that this sequence provided. However, students reported that they are discouraged from seeking opportunities outside of already established FE sites, as the administrative processes are long, and, due to the nature of the program, approvals may not be complete before the FE is expected to begin. Students who met with site visitors indicated that this has a dampening effect on the students FE, as they may not be able to acquire a field site that may prove more meaningful to their academic and professional goals. Additionally, there are challenges for part-time students, as many of the established field sites are only open during typical business hours, and students in the part-time program primarily already have full-time jobs. Students noted that experiences outside of the normal workday are not readily available.

The field experience and concentration director, site preceptor and the MPH Professional Experience Committee assess the field placement on time spent, engagement in the precepting relationship, contribution to the site's work, a five-page analytic paper and a poster presentation.

The commentary relates to students' expressed desires for a wider range of available sites for the FE. Students who met with site visitors sought a wider range of sites, both in terms of topics/populations and in terms of opportunities outside of regular business hours.

## 2.5 Culminating Experience.

**All graduate professional degree programs identified in the instructional matrix shall assure that each student demonstrates skills and integration of knowledge through a culminating experience.**

This criterion is met. The culminating experience (CE) is the same for each student and it provides an opportunity to complete a project on a significant public health topic in which the student has an interest.

The required CE product includes a scholarly public health practice or public health-relevant research project. Appropriate projects include original public health research such as an empirical or qualitative study, an innovative systematic review or meta-analysis, a needs assessment, a program evaluation or a public policy analysis. A paper of 20-30 double-spaced pages describing the CE project is also required. The paper must include a literature review, a description of the public health relevance of the project and a discussion of how the results or experience might be used to influence public health programs, policy or planning. Students are also required to give a 20-minute oral presentation.

Students have submitted projects on “Preliminary Analysis of Infant Safe Sleep Data in the Maternal, Infant, and Early Childhood Home Visiting Program of Illinois,” “Factors Associated with Sleep Quality in an Aging Population,” “School Based Sexual Education and STI Screening with Linkage to Reproductive Healthcare,” “Measuring Association Between Change in Cervical Cancer Staging and Incidence Rates with Change in Sociodemographic Factors between 1999-2003 and 2009-2013 with Dasymeric Mapping in the Chicago Metro Area.” Each of these projects demonstrates linkages between clinical work and public health, which serves the purpose of the IPHAM and supports the intentional purpose to house the program of public health in the IPHAM.

The program offers a Culminating Experience Instructions Manual that guides students through the process of choosing and completing a CE project. The culminating experience must meet several goals including 1) providing the student with the opportunity to complete a significant public health project, 2) providing the structure through appropriate mentorship that allows the students to take responsibility for and to succeed in the development, conduct and completion of the project and 3) providing experience in reporting results, including in both written and oral forms. The manual also offers a timeline and checklist for students as they begin and progress through their CE. The students CE should build upon and provide evidence of culminating competency attainment.

## 2.6 Required Competencies.

**For each degree program and area of specialization within each program identified in the instructional matrix, there shall be clearly stated competencies that guide the development of degree programs. The program must identify competencies for graduate professional, academic and baccalaureate public health degree programs. Additionally, the program must identify competencies for specializations within the degree program at all levels (bachelor's, master's and doctoral).**

This criterion is partially met. The program has identified a set of nine core competencies that each MPH student attains through courses and the field experience. The program has also identified a specific set of concentration competencies for three out of its four concentrations. The concentrations with identified competencies are community health research, epidemiology and global health. The MS degree has a set of 10 defined core competencies that each student addresses. Each of the concentrations has an identified list of competencies that show an advanced set of skills and knowledge.

The competencies for both the MPH and MS degree programs are appropriate and provide a sound foundation in basic public health. The competencies were developed by program faculty, students and alumni in relation to the mission, values and goals and in conjunction with emerging public health trends. Program faculty review competencies annually, and faculty meet monthly to discuss curricula, including assessing relevance as needed and identifying emerging areas.

Students noted awareness of competencies and verified that faculty discuss competencies in each class. Students also noted that they felt that the competencies were an accurate depiction of the skills and knowledge they receive.

Site visitors reviewed syllabi and noted that learning objectives identified in courses related to the competencies set forth by the program and reflect skills appropriate for master's level coursework. Students noted on-site that they felt as though they were able to achieve the learning objectives and competencies set forth by the program.

The concern relates to the lack of concentration competencies for the MPH generalist degree. Students pursuing the generalist concentration do not have an identified set of advanced skills or knowledge beyond the core competencies nor does the program work with students to create individualized competencies. The program leaders stated that neither a set of concentration competencies nor individualized competencies for each student does not fit within the structure of their program.

## 2.7 Assessment Procedures.

**There shall be procedures for assessing and documenting the extent to which each student has demonstrated achievement of the competencies defined for his or her degree program and area of concentration.**

This criterion is met with commentary. The program has a robust method for collecting feedback on competency attainment from enrolled students, however feedback loops from community partners and alumni are less formal. Employer feedback has been difficult for the program to gather in the past and continues to pose issues for the program.

Students receive course grades and complete competency attainment surveys at three points during their studies. Continuing students also receive a program evaluation survey and graduating students receive an exit survey. The program evaluation and exit surveys are in addition to the three surveys that address competency attainment.

Competency attainment in the FEs are assessed through the analytic paper and the poster presentation presented by each student. The FE is also a point of evaluation through the competency attainment survey. Competencies in the CE are assessed through the students' work and this is another point of evaluation through the competency attainment survey. These two surveys follow the initial baseline survey given at orientation so as to show the progression of knowledge and competency attainment through all facets of the program.

The program achieves high graduation rates for all degrees except the MPH/PhD degree. For the MPH standalone degree, the program has achieved rates that exceed or are on track to exceed the CEPH specified thresholds. The MPH standalone degree reported rates of 67%, 82% and 78% for the academic years 2012-2013, 2013-2014 and 2014-2015, respectively. Not all of those students have reached their maximum time to graduation, but the low rate of attrition is evidence that the program will successfully graduate the students. The PhD/MPH program has very low graduation rates, only reporting a 20% graduation rate after seven years.

The MS program has produced graduation rates of 71.4%, 90.1% and 100% for academic years 2012-2013, 2013-2014 and 2014-2015, respectively.

For each degree, students have been able to find employment within one year post-graduation and many have continued their education. For all degree types, there are only three unknowns reported out of 84 students and the data indicate that the future cohorts will have graduation rates within the required threshold.

Alumni from the MSEB (currently the MS in Biostatistics) stated that they felt as though their feedback was valued and provided the switch in the MS degree's orientation as evidence. Alumni noted that they expressed to program leaders that they felt as though a deeper focus on biostatistics alone would have prepared them for their career paths. Alumni from the MPH program noted that they were able to provide feedback through the survey, but had not seen any changes to the program in relation to that feedback. Alumni data are gathered through formal survey processes and informal relationships formed with program leadership and faculty.

Employer feedback has consistently been difficult for the program to obtain, in particular from employers of MPH graduates. Site visitors learned that the program has had good success in the past in soliciting feedback from employers of MS graduates but has struggled with employers of MPH graduates. The program cites issues such as not knowing who the appropriate employer is for the significant portion of students who go on to practice as physicians; avoiding the perception that the program is asking employers to evaluate students without their knowledge; and concern that employers do not release information to outside organizations. The program also cites small graduating classes with graduates working across the country. The program has spent time over the years attempting to find more creative ways of gathering employer feedback. Currently, the program is engaging in key informant interviews, which have provided useful data, however only two interviews were performed. Looking towards the future, the program states that it has plans to develop a systematic process of identifying and collecting data from employers.

The first area of commentary relates to the lack of a sustainable employer feedback method. During the site visit, faculty noted that they hope to create a new survey for employers, however it is not evident that this method will be sustainable, as the program has already observed that past survey attempts were not successful nor sustainable. This is evident through the eight-page document presented to reviewers discussing the past struggles and lack of success with the employer survey as well as other attempts to gather feedback from employers. The document stresses the lack of success with surveys in particular.

The second commentary relates to the low graduation rates of the PhD/MPH program. While enrollment in the program was suspended for the 2016-2017 academic year, new students are now being enrolled in the program and based upon data from the cohort that entered in the 2010-2011 academic year, the program has not had graduates complete the degree within the stated maximum allowed timeframe of seven years. Only one out of five students graduated within the seven year maximum time to graduate, with one student withdrawing in the fifth year, which equates to a 20% graduation rate.

## 2.8 Bachelor's Degrees in Public Health.

If the program offers baccalaureate public health degrees, they shall include the following elements:

**Required Coursework in Public Health Core Knowledge:** students must complete courses that provide a basic understanding of the five core public health knowledge areas defined in Criterion 2.1, including one course that focuses on epidemiology. Collectively, this coursework should be at least the equivalent of 12 semester-credit hours.

**Elective Public Health Coursework:** in addition to the required public health core knowledge courses, students must complete additional public health-related courses.

Public health-related courses may include those addressing social, economic, quantitative, geographic, educational and other issues that impact the health of populations and health disparities within and across populations.

**Capstone Experience:** students must complete an experience that provides opportunities to apply public health principles outside of a typical classroom setting and builds on public health coursework. This experience should be at least equivalent to three semester-credit hours or sufficient to satisfy the typical capstone requirement for a bachelor's degree at the parent university. The experience may be tailored to students' expected post-baccalaureate goals (eg, graduate and/or professional school, entry-level employment), and a variety of experiences that meet university requirements may be appropriate. Acceptable capstone experiences might include one or more of the following: internship, service-learning project, senior seminar, portfolio project, research paper or honors thesis.

The required public health core coursework and capstone experience must be taught (in the case of coursework) and supervised (in the case of capstone experiences) by faculty documented in Criteria 4.1.a and 4.1.b.

This criterion is not applicable.

## 2.9 Academic Degrees.

If the program also offers curricula for graduate academic degrees, students pursuing them shall obtain a broad introduction to public health, as well as an understanding about how their discipline-based specialization contributes to achieving the goals of public health.

This criterion is partially met. The university recently realigned the academic degree based on student feedback to offer an MS in biostatistics in lieu of epidemiology and biostatistics.

The three concentrations aim to meet a range of professional needs and interests. Population health analytics is designed for college graduates or students with professional degrees (eg, MD, DPT, allied health professionals) who intend to plan, direct and execute health research. The other two concentrations are designed for college graduates who are interested in working as statistical analysts or programmers on research teams. Statistical bioinformatics emphasizes computation and analysis for genomics and other bioinformatics 'big data,' while statistical methods and practice encompasses a broader range of statistical theory and methods for data from health and medical research settings.

The program requires MS students to take foundational courses in biostatistics and epidemiology

Students are either in a statistical analyst track: statistical bioinformatics or statistical methods and practice, or a thesis track: population health analytics. The two tracks diverge in the degree requirements. In the statistical analyst track students take basic probability, statistical consulting, and select from a list of electives, as well as completing a comprehensive examination. Thesis track students take a course in practical issues in population studies and writing and peer review. The thesis track students also complete a thesis.

The concern relates to the fact that the program does not consistently ensure that students are grounded in public health knowledge. All MS students take two or three courses related to epidemiology. The program asserts that the epidemiology classes and themes in two statistics classes ground students in public health. While students reported on-site that they believe they receive a broad introduction to public health, a thorough review of syllabi does not support that. While students are adequately grounded in epidemiology and biostatistics, reviewers determined that students in the MS program do not receive a sound foundation of public health knowledge.

#### **2.10 Doctoral Degrees.**

**The program may offer doctoral degree programs, if consistent with its mission and resources.**

This criterion is not applicable.

#### **2.11 Joint Degrees.**

**If the program offers joint degree programs, the required curriculum for the professional public health degree shall be equivalent to that required for a separate public health degree.**

This criterion is met. The program has four joint degree programs that allow for a wide array of students to complete a public health degree while pursuing additional academic goals.

Two of the programs, DPT/MPH and the APHP accelerated program, will be implemented in the summer quarter of 2018.

The MD/MPH degree uses five courses from the medical degree curriculum toward the MPH degree requirements. The introduction to epidemiology course is replaced by a medical decision making course for 3 quarter credit units. Four units of credits (12 quarter credit units) are replaced by courses from the health and society portion of the medical school curriculum. Faculty examined the curriculum and checked for alignment with the MPH competencies. For instance, Medical Decision Making covers topics such as randomized controlled trials, risk/harm observational studies, health screenings, meta-analysis and other areas also covered by the introduction to epidemiology course.

The PhD/MPH curriculum allows students to count up to two anthropology courses toward the MPH degree requirements. The PhD/MPH program had a two-year hold on enrollment and has recently

opened enrollment again. Faculty have preapproved three anthropology courses that can be counted as two MPH elective courses. These courses are the anthropology of reproduction, methods in human biology research and methods in global health and anthropology. These courses have been evaluated by faculty to ensure the coverage of MPH competencies.

The DPT/MPH degree involves the following course sharing: behavior and society, injury prevention, and disease prevention. Program faculty went through extensive mapping in collaboration with faculty from the DPT program to identify appropriate courses. Faculty noted that there is a strong line of communication and collaboration between all faculty to ensure that public health competencies are met.

The APHP will also enroll its first students in the summer quarter of 2018. This program is for high-performing Northwestern undergraduate students with public health interests. Students complete the MPH degree in their fifth year at the university. These students have the option of enrolling in the generalist degree or any of the available concentrations, therefore there is no change to the MPH curriculum for these students.

Credit sharing and course equivalency for all degrees go through an extensive process of guaranteeing the appropriate foundation of public health in each program. The director of admissions and graduate student affairs oversees this process and ensures that all competencies are met by meeting with faculty from the MD, DPT and PhD programs and analyzing syllabi of proposed shared or substituted courses. By working with respective faculty and reviewing syllabi, the director of admissions and graduate student affairs is able to make sure that students are receiving sound foundational public health knowledge throughout their terms of study.

Based on interviews with students, many were pleased with the offerings that allowed them to pursue the MPH degree at the same time as their PhD or MD degrees.

### **2.12 Distance Education or Executive Degree Programs.**

**If the program offers degree programs using formats or methods other than students attending regular on-site course sessions spread over a standard term, these degree programs must a) be consistent with the mission of the program and within the program's established areas of expertise; b) be guided by clearly articulated student learning outcomes that are rigorously evaluated; c) be subject to the same quality control processes that other degree programs in the university are; and d) provide planned and evaluated learning experiences that take into consideration and are responsive to the characteristics and needs of adult learners. If the program offers distance education or executive degree programs, it must provide needed support for these programs, including administrative, travel, communication and student services. The program must have an ongoing program to evaluate the academic effectiveness of the format, to assess learning methods and to systematically use this information to stimulate program improvements. The program must have processes in place through which it establishes that the student who registers in a distance education or correspondence education**

**course or degree is the same student who participates in and completes the course and degree and receives academic credit.**

This criterion is not applicable.

### **3.0 CREATION, APPLICATION AND ADVANCEMENT OF KNOWLEDGE.**

#### **3.1 Research.**

**The program shall pursue an active research program, consistent with its mission, through which its faculty and students contribute to the knowledge base of the public health disciplines, including research directed at improving the practice of public health.**

This criterion is met with commentary. The PPH has a long tradition of research in population health and all research by PPH faculty and students is carried out in accordance with NU policies, practices and procedures, as set by the office of the vice president for research.

The PPH's transition from its prior academic home to its current home has greatly increased opportunities for the PPH to engage exceptional faculty from across the university and to engage students in a broader array of mentored research. While opportunities have increased, in practice students are not becoming more involved in research. The self-study reports that 36.7% of students are involved in research. Students and faculty noted on-site that MPH students especially are not involved in research because they are discouraged from seeking research opportunities and faculty find it to be difficult to engage these students. There is the exception of the MS students in the thesis track, who are required to perform research. It was stated on-site that the thesis track students are supported in their research endeavors by faculty.

IPHAM's research base encompasses much of the Department of Preventive Medicine's research faculty into its Center for Population Health Sciences, Center for Behavior and Health and Center for Health Information Partnerships. Moreover, IPHAM incorporates additional research in diverse areas of population health via expanded reach into centers such as the Center for Healthcare Studies, Patient Centered Outcomes, Community Health, Engineering and Health, and Primary Care Innovation. Through IPHAM, this research portfolio cuts across disciplinary boundaries and expands relationships with more than 200 community and other stakeholder partners.

Many PPH faculty members conduct research in community settings. The PPH has strong ties to the Center for Community Health, whose mission it is to catalyze and support meaningful community and academic engagement across the research spectrum to improve health and health equity.

The program has identified three outcomes to assess its level of success in research. The research outcome measures are: 1) amount of public health-focused research funding; 2) dissemination of research

(five separate targets) and 3) student involvement in community-based, population health oriented research. The program has met and exceeded the targets for all of the outcome measures.

The commentary relates to the low levels of student involvement in the plentiful existing research opportunities. Students stated that their advisors “discouraged” them from participating in research, and noted that “when it came to research I was advised to err on the side of caution.” Public health students who were not in the MD/MPH or PhD/MPH dual degree program voiced their disappointment that they simply did not have the time to participate in the school’s extensive research opportunities. The students’ concerns were mirrored by the faculty. Faculty members and advisors talked about the challenges to involving MPH-students in research, stating that, from a faculty viewpoint, MPH students are not able to provide research assistance that was useful or meaningful in the time they spent in the program. The one-year MPH program is too short of a time period to engage students in faculty research projects. Students and faculty independently from each other voiced the common concern that “the curriculum does not leave time for students to be involved in research or service.” When students were asked which possible improvements they would like to see the program to make, they stated “more research opportunities” and “a more structured approach to research.” Faculty did not offer any solutions in terms of increasing research opportunities for MPH students and MS students not engaged in a thesis-driven track. They stated that there was not enough time to engage these students and have it be meaningful for either party.

### **3.2 Service.**

**The program shall pursue active service activities, consistent with its mission, through which faculty and students contribute to the advancement of public health practice.**

This criterion is met with commentary. The PPH is dedicated to supporting the health of its city, state, nation and global community. Community service is a core value of the Northwestern PPH. For most faculty members, community service is a significant part of their professional and extra-professional lives. University promotion and tenure processes address service to the profession.

Faculty are involved with service to the profession and with service the community, including the following organizations: Age Options, Arthritis Foundation, American Heart Association, Association of Clinical and Translational Statisticians, Health and Medicine Policy Research Group, Chicago Physicians for Social Responsibility, Global Drug Resistant TB Initiative, International Conference on Communication in Healthcare, JAMA, Mayor’s Pedestrian Advisory Council, Mayor’s Commission for a Safer Chicago, National Adult Protective Services Association, National Committee for the Prevention of Elder Abuse- Chicago Chapter, American Statistical Association, Chicago Food Policy Action Council, Chicago Public Health GIS Network, Chicago Youth Programs, Community Campus Partnerships for Health, Community Fundraising, King Arts School, Community Injury and Violence Action Team, Education Development Center, Healthy Chicago, National Initiative for the Care of

Elderly, National Kidney Foundation, PCORI Community Engaged Research Academy, Society of St. Vincent DePaul, Women's Interagency HIV Study and the World Health Organization Global TB Programme.

The program has identified three outcome measures: (1) public health focused service to the university (2) voluntary provision of service to community and public health organizations and (3) faculty service to the profession, with two targets each. The program has met and exceeded the targets of all the outcome measures.

The commentary relates to the involvement and expectations of students in service activities. The program's target for student involvement in service is 30%. The self-study then cites a recent survey illustrating that about 10% of students are actively engaged in service outside of their field experiences. Students who met with site visitors stated that the program does not allow enough time to get involved in service, and that students were never asked to engage in service. Students stated that they are not aware of service opportunities and that service opportunities are not promoted by the program. As mentioned earlier, students and faculty independently from each other voiced the common concern that the curriculum does not leave time for students to be involved in research or service. Faculty did not offer any solutions to the lack of service opportunities.

### **3.3 Workforce Development.**

**The program shall engage in activities other than its offering of degree programs that support the professional development of the public health workforce.**

This criterion is met. The program provides several opportunities for workforce development. One initiative is the weekly lecture series put on by IPHAM, where faculty and guest speakers present on a host of public health related topics. The program has regular input into speakers and topics offered through the series. Stakeholders have the opportunity to attend all lectures in the series offered by IPHAM. Given that the program has regular input into speakers and topics covered by these lectures, they are able to provide insight into areas that stakeholders believe will be of use.

The program has also hosted online lectures for outside stakeholders, in response to requests identified by partner agencies. One example is the Public Health Bootcamp, in which program faculty provide intensive training to community HIV/AIDS service providers. The course is an intensive workshop providing 45 contact hours and is held over one week in collaboration with the AIDS Foundation of Chicago (AFC). The Chicago Department of Public Health also sought out faculty support to lead a survey related to child health outcomes.

The program offers a community scholars program where members of the community are allowed to participate in classes without having to pay tuition and are awarded a certificate on completion of the

class. The expectation for community scholars are the same for regular students. The program had previously existed at Northwestern and was recently resumed after feedback from the Community Engagement Committee and other stakeholders. The program enrolled 18 community scholars in the 2016-17 academic year.

#### **4.0 FACULTY, STAFF AND STUDENTS.**

##### **4.1 Faculty Qualifications.**

**The program shall have a clearly defined faculty which, by virtue of its distribution, multidisciplinary nature, educational preparation, practice experience and research and instructional competence, is able to fully support the program's mission, goals and objectives.**

This criterion is met. The primary faculty complement is made up of five tenure-track faculty members and 12 non-tenure track faculty members. The secondary faculty complement is made up of six non-tenure track faculty and two tenure-track faculty. According to the self-study, there are no tenured faculty members within the program's faculty complement at this time. The program also has an additional faculty appointment track for practitioners who teach for the program while being engaged in full-time work outside of the university.

A majority of the faculty complement holds degrees in public health such as MPH and DrPH degrees, as well as doctoral research degrees or medical degrees. The program has a mission to serve and improve the health of the citizens of Chicago, and many faculty, received graduate degrees from institutions in or around the Chicago area.

The program has set forth objectives that relate to 1) instructors achieving a rating of 80% or higher on their quality of instruction as assessed by course evaluations, 2) instructors being reviewed following each course they teach, 3) instructors with sub-optimal indicators of quality instruction being provided with instructional improvement mentoring by the program director and 4) bi-annual faculty retreats including an instruction-oriented professional development activity. The program has not met the targets that they set for themselves, however on-site the faculty members noted that they did not believe that the numbers presented in the self-study were accurate numbers. The program director noted that there has not been an instance where any faculty member has needed instructional improvement mentoring in the last two years. Students also stated that they felt very satisfied with the level of instruction provided. Both on-site discussions and results from alumni surveys revealed that the level of instruction provided was a highlight of the program.

## 4.2 Faculty Policies and Procedures.

**The program shall have well-defined policies and procedures to recruit, appoint and promote qualified faculty, to evaluate competence and performance of faculty, and to support the professional development and advancement of faculty.**

This criterion is met. The program adheres to school-wide faculty policies. The school-wide faculty handbook is available online and is an important resource for faculty members of every rank. Faculty must also adhere to any specific policies and procedures set forth by the home department.

All PPH faculty members have access to faculty development resources. Northwestern's information technology department offers learning sessions on course management (Canvas) software, student response systems and other educational technologies. PPH faculty members are encouraged to attend seminars, educational events, and programming supported through the Searle Center for Advancing Learning and Teaching. Faculty can receive Teaching Assistant (TA) support from the program. The Searle Center has joined PPH Faculty Retreats and consulted PPH Leadership on a variety of issues including: instruction, awards, accreditation and curriculum mapping.

Annual evaluation of faculty competence and performance is done by the chair of the home department. In a parallel process, PPH leaders meet with each faculty member annually to review performance, address concerns and discuss expectations for the coming year. Adjunct PPH faculty are observed annually by the MPH or MS degree program directors. Promotion and tenure of faculty are carried out in the faculty's home department, with input from the program director.

All course evaluation data are reviewed by the Curriculum Committee. Course evaluations with low ratings are addressed by the program director; an improvement plan is developed, and when needed, a Searle Center for Advancing Learning and Teaching consultation is recommended.

## 4.3 Student Recruitment and Admissions.

**The program shall have student recruitment and admissions policies and procedures designed to locate and select qualified individuals capable of taking advantage of the program's various learning activities, which will enable each of them to develop competence for a career in public health.**

This criterion is met. The school uses the SOPHAS system for admissions and medical students apply through the Graduate School. The Admissions Committee screens and evaluates applicants holistically by examining multiple indicators of a prospective student's application and the student's ability to excel in a professional graduate degree program. This includes an applicant's ability to demonstrate personal and professional behaviors consistent with those expected in professional practice: characteristics and skills such as integrity, initiative, sound judgment, teamwork, acceptance of responsibility and interpersonal communication.

Applicant requirements include the following:

- Statement of purpose and objectives
- GRE or MCAT scores (waived for holders of doctoral degrees)
- Three letters of reference (MD/MPH students provide two letters of recommendation)
- CV/Resume
- Official transcripts/mark sheets from all post-secondary institutions (non-US credentials must be evaluated by World Education Services)
- Completed SOPHAS application or Graduate School application (MD/MPH)

The current admissions processes are adequate in recruiting and securing qualified candidates as evidenced by preceptor and employer feedback. The program and school are also actively recruiting more diverse populations to further their mission, goals, values and objectives to serve the people of Chicago.

Recruitment is led by the director of admissions, Admissions Committee members, Administrative Committee members and concentration or degree program directors. Recruitment is focused on two annual application deadlines, and it is achieved through flyers and multiple information sessions throughout the year.

The program has identified six outcome measures related to student enrollment including, student GPA, student time to graduating, student post-graduation outcomes, minority student enrollment into the MD/MPH program and all student enrollment into the MD/MPH program. Over the last three years the program has successfully met or exceeded these targets.

#### **4.4 Advising and Career Counseling.**

**There shall be available a clearly explained and accessible academic advising system for students, as well as readily available career and placement advice.**

This criterion is met. Program students have access to university-wide and program-specific advising and career counseling programs.

Program leaders assign student's advisors based upon interests, expertise and alignment with students' interest and needs. Students noted that their academic advisors are available to them and meet with them regularly. The academic advisors have a responsibility to maintain regular contact with assigned advisees and to discuss and verify the quarterly plan of study with the advisee. For MPH students, they must work with the Professional Experiences Committee Chair and the Program of Public Health Administrator about any issues that arise with the student's FE or CE project or plan.

Career advising also takes shape through different avenues within the program and university. There are university resources available to students, program wide resources and individual program advisors. Feedback from students regarding career advising is solicited at the end of every academic

year and has generated the following events: co-curricular advocacy workshop, Public Health Fellowship event and in the coming year, and a grant-writing workshop. Students noted in interviews that the mentorship and advising was one of the strongest and most admired aspects of the program.

The Graduate School student handbook provides information on advising and communicating concerns to leadership. The program has not received any formal grievances in the last three years.

## Agenda

### COUNCIL ON EDUCATION FOR PUBLIC HEALTH ACCREDITATION SITE VISIT

#### Northwestern University Program of Public Health

October 30-31, 2017

#### Monday, October 30, 2017

- 9:45 am      Meeting with Program Administration  
R. Chang  
M. Fagen  
M. Moran  
L. Neubauer  
D. Scholtens  
V. Bishop  
E. Curran
- 10:45 am      Break
- 11:00 am      Meeting with Faculty Related to Curriculum and Degree Programs  
R. Agrawal  
S. Anderson  
V. Bishop  
K. Cameron  
J. Ciolino  
R. Chang  
M. Danilovich  
M. Fagen  
M. Goel  
E. Hibler  
M. Moran  
L. Neubauer  
D. Scholtens  
D. Tandon
- 12:00 pm      Break
- 12:15 pm      Lunch with Students  
A. Haruna  
H. Hamann  
R. Molsberry  
E. Murray  
E. Novak  
J. Perez  
G. Radar  
S. Rastogi  
E. Richards  
T. Shan  
S. Sonu  
M. Walker  
Y. Wang  
J. Wojtowicz  
M. Zewde
- 1:30 pm      Break
- 1:45 pm      Meeting with Faculty Related to Research, Service, Workforce Development and Faculty Issues  
R. Agrawal  
N. Allen  
A. Baldrige  
V. Bishop

R. Braun  
M. Danilovich  
A. Elster  
J. Feinglass  
M. Kocherginsky  
M. Moran  
L. Rasmussen-Torvik  
L. Sheehan  
L. Zhao

2:45 pm Break

3:15 pm Meeting with Medical School Officials  
R. Ackermann  
D. Jones  
T. Mastin  
E. Nielson  
D. Wayne

3:45 pm Break

4:00 pm Meeting with Alumni, Community Representatives and Preceptors  
K. Atiemo  
S. Baptiste  
M. Elsner  
L. Francis  
B. Henschen  
K. Klein  
S. Montag  
A. Posner  
B. Rae  
C. Tucker

5:00 pm Adjourn

**Tuesday, October 31, 2017**

8:30 am Meeting with Institutional Academic Leadership/ University Officials  
J. Holloway  
B. Goldberg  
W. Leonard  
T. Woodruff  
J. Julia

9:15 am Executive Session

11:30 am Working Lunch

12:30 pm Exit Briefing

1:15 pm Team Departs