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REVIEW FOR ACCREDITATION

OF THE

PUBLIC HEALTH PROGRAM

AT THE

GEISEL SCHOOL OF MEDICINE AT DARTMOUTH

COUNCIL ON EDUCATION FOR PUBLIC HEALTH

SITE VISIT DATES: May 19-20, 2016

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Table of Contents

Introduction	1
Characteristics of a Public Health Program	2
1.0 THE PUBLIC HEALTH PROGRAM	3
1.1 Mission.	3
1.2 Evaluation and Planning	3
1.3 Institutional Environment	6
1.4 Organization and Administration	7
1.5 Governance	8
1.6 Fiscal Resources	10
1.7 Faculty and Other Resources	12
1.8 Diversity.	13
2.0 INSTRUCTIONAL PROGRAMS	15
2.1 Degree Offerings	15
2.2 Program Length	16
2.3 Public Health Core Knowledge	16
2.4 Practical Skills	17
2.5 Culminating Experience	19
2.6 Required Competencies	20
2.7 Assessment Procedures.	21
2.8 Bachelor's Degrees in Public Health	23
2.9 Academic Degrees	23
2.10 Doctoral Degrees	24
2.11 Joint Degrees	24
2.12 Distance Education or Executive Degree Programs	24
3.0 CREATION, APPLICATION AND ADVANCEMENT OF KNOWLEDGE	25
3.1 Research.	25
3.2 Service	27
3.3 Workforce Development	28
4.0 FACULTY, STAFF AND STUDENTS	29
4.1 Faculty Qualifications	29
4.2 Faculty Policies and Procedures	30
4.3 Student Recruitment and Admissions	31
4.4 Advising and Career Counseling	33
Agenda	36

Introduction

This report presents the findings of the Council on Education for Public Health (CEPH) regarding the Public Health Program at the Geisel School of Medicine at Dartmouth. 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 May 2016 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.

Founded in 1769, Dartmouth College is a private, liberal arts institution in New Hampshire. As of fall 2014, Dartmouth enrolled about 4,200 undergraduate and 2,000 graduate students. The college includes 40 departments and interdisciplinary programs in the Faculty of Arts and Sciences—including 11 master's and 20 doctoral degrees—as well as the Geisel School of Medicine, the Thayer School of Engineering and the Tuck School of Business.

The Dartmouth Institute for Health Policy & Clinical Practice (TDI) is a unit of the Geisel School of Medicine and it houses the MPH program. Prior to 2007, TDI was called the Center for the Evaluative Clinical Sciences. TDI also offers an MS and a PhD degree as part of its educational programs. The MPH program's teaching faculty are active researchers at TDI who bring current methodologies and research findings into the classroom. More than 450 students have graduated from the MPH program in the last 10 years.

Dartmouth's MPH program has been accredited since 2003. Its last review in 2009 resulted in a seven-year accreditation term. The program addressed issues related to the mission, goals, objectives and values; workforce development; and faculty diversity in an interim report. The Council accepted this interim report in 2011 as evidence of compliance with these criteria.

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 MPH program at Dartmouth. The program is located in a regionally accredited university and has the same rights and privileges as other professional programs on campus. The program has a planning and evaluation process that is inclusive, timely and focused on public health research, instruction and service.

Faculty are trained in a variety of disciplines, and the program's environment supports interdisciplinary collaboration. Faculty and student connections with public health practitioners and local community members ensure that the program fosters the development of professional public health concepts and values. The program has a clearly defined mission, with supporting goals and objectives, and adequate resources to offer the MPH degree as well as joint degrees with the MPH.

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 with commentary. The program has developed a mission statement with supporting goals and objectives to guide its efforts in the areas of instruction, research and service. The program reviewed and updated its mission, values, goals and objectives after the last accreditation site visit in 2008. In 2014-2015, the program conducted a program evaluation and commissioned a market research assessment. Subsequently, the program's education leadership team revised the mission statement. The changes were also reviewed and adopted by the Management and Curriculum Committees and by the full faculty and staff at a town hall meeting. The program's mission is as follows:

The mission is to produce health care leaders who are grounded in the skills to measure, organize and improve health and health care in a rapidly changing health care environment.

The program has adopted Dartmouth College's core values as the statement of values that guide the program. The six core values focus on academic excellence; faculty who are passionate about teaching and at the forefront of their scholarly endeavors; diversity; recruitment of outstanding students; a culture of integrity, self-reliance and collegiality and a sense of responsibility; and vigorous and open debate of ideas. The program seeks to fulfill its mission by achieving goals in three areas: education, research and service. Each goal has between two and six objectives, and each objective has at least one metric. In total, 11 objectives and 32 metrics are associated with the program's goals. The MPH program's mission, values and goals are presented on TDI's education webpage.

The commentary relates to the limited public visibility of the program's mission, values and goals throughout the program's communications to applicants, students and faculty. The MPH and MS programs' webpage and the embedded video on the page do not clearly identify the MPH program's mission and values. The TDI Student Handbook for MPH and MS students does not mention the program's mission, values, goals and objectives. The information about the new online MPH program similarly does not mention the program's mission and values. Some recruitment materials (eg, the TDI brochure) imply values (eg, patients above all, healthy skepticism, bold ideas and academic rigor) that vary from the formally stated values.

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 partially met. The director of education is responsible for the oversight of routine monitoring of activities pertaining to curriculum, student recruitment and admissions, financial and human resources, academic standards, faculty development and marketing. Data are collected throughout the year through surveys, evaluations, interviews, informal feedback and official meetings with various stakeholders (students, faculty, alumni, staff, employers, internship preceptors, etc.). Data from those sources are reviewed by the education leadership team, and recommendations are brought forward to the appropriate committees (Management, Education, Curriculum and/or Admissions). Major program changes resulting from evaluation activities are reviewed by the Management Committee, Education Committee and Curriculum Committee and, when appropriate, committees at the Geisel School of Medicine and the Council on Graduate Programs.

Specific evaluation activities include the following: course evaluations, student town halls, program evaluations and alumni surveys. Students' course evaluations of faculty teaching and course content are summarized by the director of student learning and shared with faculty members. During a meeting after the end of the term, the course director(s), director of education and director of student learning use course evaluations and other input to plan for the next year's course offering. The director of education holds student town halls approximately monthly during the academic year for informal discussion and to seek feedback from students. Program evaluations are distributed at the end of each academic year or shortly after graduation to all graduating students. Alumni surveys are distributed approximately every three years and measure the overall performance of the program against goals of the program and overall needs within the field of work.

The program conducted an in-depth program evaluation during summer and fall 2014. A two-person team collected data over a 90-day period from interviews with alumni, faculty, partners, employers, current students and accepted applicants who chose not to enroll. The team also reviewed surveys of recent program graduates. Based on these data, the team documented findings and developed recommendations with regular input from a faculty advisory group and other key stakeholders. In November 2014, TDI conducted a market research analysis to gain an understanding of how to market to individuals interested in graduate education. The decision to offer an online MPH program was a major outcome of these evaluation activities.

The results of the above evaluation and planning activities are used by TDI's Management Committee, Education Committee and Curriculum Committee to identify, recommend and implement long-term strategic plans, policy changes, recruitment strategies, course improvements and additions and overall program improvements. The Management Committee meets weekly: its agenda includes an education programs update and, as needed, specific decision or action items. For example, the Management Committee was crucial in providing input and approving the next step in developing an online MPH

program based on the feedback from the 2014 program evaluation, alumni survey results and market research. The Education Committee meets monthly to discuss strategic planning and priorities for all educational programs (graduate programs, certificate programs, workforce development and undergraduate program outreach). These discussions are informed by feedback from the various evaluation methods above. The Curriculum Committee meets monthly to discuss the MPH and MS programs and to ensure that core competencies are met through the curriculum. Each quarter, course evaluations from the previous term are collated, summarized and presented to the committee. Feedback from the monthly student town hall lunches related to courses and curriculum is shared with the Curriculum Committee. In addition to moving forward with the online MPH program, the program developed and piloted a one-credit course (Dealing with Differences: Communication, Negotiation, and Teamwork) as a result of student feedback and the evaluation process.

The program began work on the self-study document during spring 2014. The director of student learning and a curriculum specialist coordinated the effort. They worked with a variety of faculty and staff members within the MPH program, at the Geisel School of Medicine and at Dartmouth College to collect and collate the appropriate data and content. The 2014 program evaluation team served in an advisory role given that its evaluative work and subsequent recommendations for improvements were directly linked to the self-study. The director of education, the academic director and the executive director reviewed early drafts. The Education Committee and Curriculum Committee, which both include alumni members, received updates during their regular meetings. Subsequent drafts were also shared with leadership at the School of Medicine. After receiving the feedback from CEPH reviewers on the initial self-study, the program engaged appropriate stakeholders to provide additional information to address reviewers' comments. MPH program leaders reviewed revised drafts of the final self-study. Electronic copies of the final self-study report were distributed to the Curriculum Committee, Education Committee, TDI leadership, School of Medicine leadership, Office of Graduate Programs leadership, faculty, staff and students approximately one month before the site visit. A PDF of the final self-study document was posted to the TDI website. During the site visit, students noted that they were informed of the reaccreditation process during their new student orientation but had no active role during the year.

The concern relates to the outcome measures and targets reported by the program. Some measures appear to have outlived their usefulness in defining a desired outcome and establishing a framework for actions to achieve that outcome. At the same time, objectives and/or outcome measures are absent for challenges facing the program. For example, the program has acknowledged that recruiting a diverse faculty and ensuring that cultural competency is embedded throughout the curriculum are challenges, but does not identify diversity or cultural competency specifically within any of the program's goals, objectives and associated metrics. Another example is the absence of any objectives or metrics related to the major undertaking of launching a successful online MPH program. As the program continues to mature, it will

need a more formal process for revising or replacing objectives and for establishing outcome measures that will chart the course to continuous program improvement.

The program is in the process of strengthening its ability to track community service and engagement by both faculty and students. For the self-study, the program conducted a one-time survey of the MPH teaching faculty to determine the number and variety of community service organizations for which faculty volunteered or were paid. Full implementation of the student's Individual Development Plan, which began in AY 2015-2016, may be a tool for tracking community service activities by students.

In the self-study, the program noted that TDI has contracted with the Dartmouth Center for Program Design and Evaluation (CPDE) to help develop a more robust set of evaluation processes for the educational programs, including the MPH program. CPDE will assist with developing a set of tools specific to the program's goals and will help to strengthen the measurement and tracking. The effort, which will begin with AY 2016-2017, will include a review of existing processes and measures; revision and development of new measures as needed; and creation of an updated evaluation process and infrastructure to systematically collect, analyze and report data related to competencies, program progress and needed program improvements or changes.

1.3 Institutional Environment.

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

This criterion is met. The program is part of a regionally accredited institution. Dartmouth College is accredited by the New England Association of Schools and Colleges, and it received a 10-year accreditation term during its last review in 2010. Dartmouth's three professional schools also report to specialized accreditors for business, engineering and medicine.

As of fall 2014, Dartmouth enrolled about 4,200 undergraduate and 2,000 graduate students. The college includes 40 departments and interdisciplinary programs in the Faculty of Arts and Sciences—including 11 master's and 20 doctoral degrees—as well as the Geisel School of Medicine, the Thayer School of Engineering and the Tuck School of Business.

The Geisel School of Medicine is part of the Dartmouth-Hitchcock Medical Center and comprises the Mary Hitchcock Memorial Hospital, the Dartmouth-Hitchcock Clinic and the White River Junction Veterans Affairs Medical Center (in Vermont). The school has about 350 faculty members, 350 medical students and 350 graduate students. The school includes 11 clinical and five basic science departments housed in interdisciplinary centers and institutes and is designated as an Area Health Education Center for New Hampshire.

Established in 1988, TDI is a unit within the Geisel School of Medicine, and it houses the MPH program. TDI seeks to address issues such as health care outcomes; treatment variations; and how medical resources are distributed, decisions made and health care systems improved. TDI offers the MPH, an MS in healthcare research and a PhD degree. In addition, it jointly supports a master of health care delivery science (MHCDS) with the Tuck School of Business. In 2015-2016, the three degree programs housed at TDI had the following enrollment: 63 (MPH), 17 (MS) and five (PhD).

TDI's education director reports to the director of TDI, who in turn is accountable to the dean of the Geisel School of Medicine. The dean is also the vice president of health affairs for Dartmouth College and reports to the provost and president. The president reports to the college's Board of Trustees.

Within TDI's education programs, three leadership positions (executive director, academic director and director of student learning) are responsible for the day-to-day operations of the MPH program and the other degrees and certificate programs. These individuals oversee program planning, evaluation and management, and all report to the education director.

The MPH program falls under the purview of the Office of Graduate Studies for academic and student conduct issues, and the degree is conferred by the Geisel School of Medicine through Dartmouth College. The program is self-supporting with funding based on tuition and fees. The executive director of education and the finance director oversee budget and resource allocation for the MPH program. TDI's Curriculum Committee, which includes MPH faculty, establishes and oversees the MPH curriculum. Personnel recruitment, selection and advancement are managed at the department level; MPH faculty members serve on appropriate committees to provide feedback on these processes.

School and college leaders who met with the site visit team expressed strong support for the program and praised its leaders for positioning public health as a central part of many school and college activities.

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. The program's organizational setting is conducive to public health learning, research and service. TDI's director of student learning oversees the residential MPH program as well as the MS and PhD programs. The academic director oversees the online MPH program, and the executive director oversees the institute's professional education efforts. Administrative functions such as student recruitment and admissions, student services, career services, alumni relations and budgeting cover the MPH, MS and PhD degree programs together.

The MPH program's position within TDI facilitates interdisciplinary collaboration through a variety of activities. The program is closely integrated with the institute, the school and the college as a whole. Research teams at TDI often include faculty from multiple disciplines and with various departmental appointments. Faculty from across the college teach MPH students and participate in public health research. Some of these contributors come from business, economics, medicine, psychology, biology and political science. MPH students may take up to two relevant courses offered by other departments or schools as part of the degree, and a few medical school enrichment electives (eg, global health) are open to MPH students. Students and faculty discussed the benefits of taking courses with individuals from varied professional and educational backgrounds and said it greatly enhanced their learning.

The Tuck School of Business has a Healthcare Initiative Club that is open to MBA and MPH students. In addition, MPH and MD students jointly run a chapter of the Institute for Healthcare Improvement's Open School. The chapter brings students from different health professions together to learn about their unique contributions to quality improvement and improving health care.

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 partially met. Program administrators, faculty, students and other stakeholders have clearly defined rights and responsibilities regarding program governance. The program has active roles on seven standing committees within TDI.

The Education Committee meets monthly to make recommendations to the leadership group of TDI Education about strategic decisions concerning educational programming; ways to promote a culture of student-centered teaching; creative ways to fund TDI Education; promoting TDI Education internally at Dartmouth and externally; and identifying needs for faculty and staff development. The 12 members include TDI faculty and staff, TDI administrators and Geisel School of Medicine faculty.

The Curriculum Committee meets monthly and works with TDI's director of education to oversee the MPH program to ensure that the curriculum achieves TDI's educational competencies. The Curriculum Committee coordinates its efforts to align with the Education Committee, which oversees all educational programs within TDI. The committee's membership is composed primarily of TDI faculty who teach in the MPH and/or MS programs; however, it may also engage other Dartmouth faculty, students, alumni and educators. Guests are invited to attend when their expertise contributes to the discussion and decision making of the committee.

The 21-member Admissions Committee is responsible for recruiting and admitting an academically well-prepared and diverse student body. The committee (through small subgroups of three members each) reviews applications and provides recommendations for admission based on guidelines established by the Office of Graduate Studies and TDI's Center for Education. The committee includes faculty and staff as well as alumni.

The Management Committee, the Research Committee, the TDI Council and the TDI Student Advisory Council Program also contribute to program and institute governance. The Management Committee meets weekly, and each agenda includes an update on the institute's education programs. The TDI Council was formed in 2014 to enhance communication between TDI leadership and the TDI community.

The concern relates to the program's need to engage community representatives and other external stakeholders as partners across the program's varied activities. The program has successfully developed relationships with the community for student internship placements and for service learning projects within courses, but community contributions would be beneficial to the program's evaluation and planning processes, review and revision of competencies and recruitment strategies, as some examples. The program noted its plans to develop a Community Advisory Board in the self-study. This committee could provide useful perspectives as the program seeks to enhance both its residential and online formats as well as its research and service activities.

Most of the program's primary and secondary faculty members hold membership on school and college committees through which they contribute to the activities of the institution. Examples of this service include roles on the following committees: CME Advisory Committee, Dartmouth College Benefits Council, Registry Shared Resource Workgroup, Dartmouth Committee for the Protection of Human Subjects and the Geisel Health Equity Steering Committee. The program seeks to have at least 60% of MPH teaching faculty serving on a committee above the program level and achieved a rate of 73% in 2015-2016.

MPH students are formally involved in governance through the TDI Council and the Student Advisory Council, which also has student representatives on the Geisel School of Medicine's Student Government and Dartmouth College's Graduate Student Council. Students are involved in program planning and evaluation, student recruitment and admissions, communications and recommendations for program improvement. In addition, the director of education holds monthly student town halls during the academic year. These meetings are informal discussions where students can provide feedback; all enrolled students are invited to attend. During the site visit, students spoke highly of their opportunities to contribute to program governance. They said that they greatly appreciated the town hall meetings with the director of education and the focus groups held recently.

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 fiscal resources to fulfill its stated mission, goals and objectives. Table 1 presents the TDI educational budget for 2009-2010 through 2015-2016. The budget represents the MPH, MS and PhD programs. No specific MPH budget was provided; however, as the largest educational program within TDI, it represents approximately two-thirds of the TDI educational budget and enrolled students. The program's budget is self-supported through tuition revenue. Tuition funding supports the administrative staff, recruitment efforts, instructional efforts, facilities and other line items from the operating budget. Tuition also supports student and alumni activities. Development activities generate some minimal scholarship support. The largest expenses are for faculty salaries and benefits, student support, staff salaries and benefits and the university tax.

Budget and resource allocation for the MPH program is overseen by TDI's executive director and the finance director. After the institute has developed a proposed budget, program leaders submit the request to the Geisel School of Medicine's Fiscal Office, where it is evaluated along with the budgets from other Geisel departments. Next, it is submitted to the Dartmouth College vice president for fiscal affairs.

The program has identified two outcome measures to assess the adequacy of its fiscal resources:

1) that tuition and other fees generate sufficient revenue to support expenses and 2) that the program will receive external funding for competitive proposals that address public health challenges. The program has met all of its targets in the last three years.

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Source of Funds	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	pending
Tuition & Fees	\$4,764,914	\$5,374,533	\$3,781,673	\$4,497,411	\$4,306,708	\$3,678,985	\$3,860,000
University Funds	\$0	\$0	\$300,496	\$0	\$0	\$0	\$0
Endowment	\$105,082	\$85,282	\$11,130	\$0	\$0	\$0	\$0
Gifts	\$0	\$0	\$0	\$0	\$0	3,684	\$0
Application Fees	\$6,680	\$10,645	\$11,165	\$3,837	\$0	\$0	\$0
Student Activity Fees	\$5,950	\$5,700	\$4,900	\$0	\$0	\$0	\$0
Course Materials Fees	\$37,800	\$38,133	\$30,100	\$0	\$0	\$0	\$0
Total	\$4,920,426	\$5,514,293	\$4,139,464	\$4,501,248	\$4,306,708	\$3,682,669	\$3,860,000
Expenditures							
Faculty Salaries & Benefits	\$999,346	\$1,892,227	\$1,146,381	\$1,427,779	\$1,303,469	\$1,020,887	\$1,150,000
Staff Salaries & Benefits	\$628,451	\$363,779	\$971,238	\$898,299	\$1,005,654	\$857,396	\$950,000
Operations	\$202,622	\$422,345	\$339,002	\$215,295	\$341,420	\$313,360	\$437,000
Travel	\$122,700	\$85,184	\$104,097	\$103,681	\$100,531	\$34,237	\$40,000
Student Support	\$1,269,998	\$1,515,739	\$1,263,163	\$1,238,435	\$993,185	\$869,289	\$765,000
University Tax	\$1,609,370	\$1,202,882	\$315,583	\$0	\$562,449	\$587,500	\$518,000
Total	\$4,832,487	\$5,482,156	\$4,139,464	\$3,883,489	\$4,306,708	\$3,682,669	\$3,860,000

Notes: This budget represents all of TDI Education; the MPH program represents approximately two-thirds of these funds and expenditures. In 2011-2012, University Funds was a transfer of internal TDI funds to cover scholarships.

Grants/Contracts and Indirect Cost Recovery are linked to the overall department account and not the education account.

In 2014-2015, the travel line item includes only domestic travel. In other years, this line item includes conference registration fees, catering, meals and lodging. In 2014-2015, a similar amount of travel and expenses occurred for recruitment, student travel support and alumni relations.

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 the faculty, staff and other resources needed to maintain its educational, research and service activities. As of AY 2015-2016 the program had a total of 12 primary faculty members (11.25 FTE) and 29 other faculty. In fall 2016, a total of 63 students (43.27 FTE) were enrolled in the MPH program. The student-faculty ratio (SFR) was 2.31:1 based on the total faculty complement.

The main building that houses most TDI faculty members and TDI's research programs is located in the Williamson Translational Research Building (WTRB) at Dartmouth-Hitchcock Medical Center. Office space is easily accessible for students and provides adequate support for the academic and research needs of the faculty members. Dartmouth offers a variety of facilities, ranging from computing clusters and instructional centers for students and faculty. These facilities are constantly evolving and being upgraded. Public computers are available to students and faculty in the Baker, Berry and Kresge libraries on the main Dartmouth campus. These clusters usually offer easy access to Macintosh- or Windowsbased personal computers or UNIX-based workstations, plus printing services. Public computers are located in the following buildings: Alumni Gym, Brace Commons, Collis, Dartmouth Hall, Fairchild, Hopkins Center, Moore, Robinson, Rocky, Silsby and Thayer Lobby. GreenPrint is Dartmouth's distributed printing system; it has more than a dozen printer release stations located around campus. TDI has an Office of Computing that supports faculty, staff and students. This office provides assistance during new student orientation for laptop set-up and troubleshoots any problems students may have during the academic year. The office also provides support for faculty and staff, from ordering computers to installing software to troubleshooting.

The resources of the Dartmouth College library system, an extensive and well-balanced collection, are made easily accessible to all members of the Dartmouth community through the library's open stack policy. Baker/Berry Library, the nucleus of the system, houses the main collection, as well as an outstanding reference collection, microtext, a government documents section, a large periodical collection and many special collections. Dartmouth offers collections in art, biomedical sciences, business and engineering, English, mathematics and physical sciences in specialized branches on campus. All libraries provide computerized literature searching services, including access to 8,000+ electronic journals and more than 180 databases. In addition, Dartmouth's library system participates in automated borrowing programs in cooperation with other research libraries.

TDI students most frequently access library services through the Dana Biomedical Library on the Geisel School of Medicine campus or the Matthews-Fuller Health Sciences Library, located at the Dartmouth-

Hitchcock Medical Center. The Biomedical Library serves primarily the research, education and patient-care needs of the four components of the Dartmouth-Hitchcock Medical Center (ie, Geisel School of Medicine, Mary Hitchcock Memorial Hospital, Dartmouth-Hitchcock Clinic/Northern Region and the Veterans Administration Hospital at White River Junction in Vermont) and the research and information needs of the Department of Biological Sciences at Dartmouth College. The Matthews-Fuller collection contains recent clinical materials, the complete nursing collection and other materials. Many databases, clinical decision support tools, full-text information resources and digital books are also available.

The program has identified three outcome measures through which it assesses the adequacy of its personnel and other resources. These measures include maintaining a low SFR; competing successfully for external funding that addresses public health challenges; and providing educational support to faculty and students through quality staff, resources and infrastructure. The program has met or exceeded its targets in each of the last three years.

The program has identified that its location separate from the main campus has limited its ability to collaborate and participate in a variety of activities. The program is expected to move into renovated space on the main campus in summer 2016. During the site visit, students enthusiastically welcomed the program's move to the main Dartmouth College campus. They said that they were specifically looking forward to better integration into the Dartmouth community and to being able to benefit from various cross-departmental lectures, workshops and other events taking place on the main campus. The students also expect the move to expose them to more diversity in terms of other students and faculty.

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 with commentary. The program adheres to Geisel School of Medicine's and TDI's diversity statements. The school has a diversity plan with respect to faculty recruitment and retention, student recruitment and retention and commitment to an environment that fosters an inclusive, diverse community that "reflects our world and addresses the most challenging issues in health care." The school's Council on Diversity, whose members represent a broad range of stakeholders in the School of Medicine and the community, recently reviewed and worked on the specific recommendations to achieve the goals.

Dartmouth College has an Office of Institutional Diversity and Equity under the leadership of a vice president. The office's focus is on supporting, assisting and enhancing Dartmouth's commitment to learning and pluralism, which is not limited to diversity by race and sex but also includes other aspects of individual and social identity (eg, age, class, disability, ethnicity, gender, gender identity, language, marital status, national origin, religion, sexual orientation and veteran's status). In 2014, Dartmouth

created a new position, vice provost for academic initiatives, to focus on recruiting, training and retaining faculty, looking particularly at diversity. In January 2016, Dartmouth College's Office of the Vice Provost for Academic Initiatives released its first annual report on faculty diversity. The goal is to increase underrepresented minority faculty from the current 16% to 25% of tenure-track faculty by 2020.

The self-study documented that the program embraces the commitment of Dartmouth College, the School of Medicine and TDI to incorporate diversity into its recruitment and admission policies, through its teaching and learning practices, into its faculty and staff recruitment policies and throughout its MPH curriculum. One of the program's values is that "Dartmouth embraces diversity with the knowledge that it significantly enhances the quality of a Dartmouth education."

Specific to minority student recruitment, the program has also exhibited at graduate fairs and conferences, the annual conference of the Society for Advancement of Chicanos and Native Americans in Science, the Annual Biomedical Research Conference for Minority Students, the Latino Medical Student Association's national and regional conference and the Student National Medical Association's Annual Medical Education Conference. TDI also works in concert with the director of minority recruitment and diversity in the Office of Graduate Programs at Dartmouth College and with the director of multicultural affairs at Geisel School of Medicine on student recruitment trips to various locations across the country.

The program has identified the following as under-represented minority populations: African Americans, American Indians or Alaska Natives, Hispanics/Latinos, Asians and Pacific Islanders. These populations were selected because they are under-represented in the state of New Hampshire; minority populations represent 9% of the state's total population. From 2013-2014 to 2015-2016, the MPH program's incoming student population comprised 32%, 46% and 34% minority students, respectively. The MPH program exceeds the minority student proportions in other graduate programs at Dartmouth.

The program has one faculty member and zero staff who represent an underrepresented minority group. The School of Medicine's associate dean for diversity and inclusion and the director of TDI both stressed to the site visit team the high-level commitment to recruiting and retaining a diverse faculty. The school recently had a major compensation assessment and readjustment for faculty and staff to address historic inequities for women and underrepresented minority groups. All recruitments start with implicit bias training for members of the search committee. There is increased effort to recruit individuals from the current population of Dartmouth postdocs, residents and fellows, which are more diverse cohorts, into faculty positions and to devote specific funding to provide salary support and other incentives to attract faculty who are members of underrepresented minority populations.

During the site visit, students expressed extensive knowledge of TDI and the program's efforts with respect to diversity. One student observed that some courses regularly have guest speakers, many of whom are members of underrepresented populations. Another student noted that the current course director of ECS 154: Social and Behavioral Determinants of Health was very effective in incorporating issues related to diversity and cultural competency into coursework and especially into class discussions. Several students expected that the program's move onto the main campus next year will expand opportunities for students to take part in relevant seminars at the School of Medicine and elsewhere on campus.

The commentary relates to the program's self-identified lack of attention to ensuring that opportunities for addressing diversity and cultural inclusion are incorporated into and highlighted in the curriculum and with service learning opportunities. To provide focused attention on this issue, the program's Curriculum Committee has formed a sub-committee, which consists of three members of the Curriculum Committee, two staff members and two students. This sub-committee plans to review the curriculum with a focus on opportunities to address issues of 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 with commentary. The program offers a generalist MPH—in residential and online formats—as well as two joint degrees with the MPH, as shown in Table 2. In addition to basic coursework in the five core public health knowledge areas, an internship and a capstone, students take additional coursework in biostatistics, epidemiology and health services administration and complete nine quarter credits of elective coursework on topics such as geographies of health and disease; current issues in health policy: understanding health reform; patient-centered health communications; international perspectives on health care systems; and medical care and the corporation.

Table 2. Instructional Matrix – Degrees & Specializations				
	Academic	Professional		
Master's Degree				
Generalist*		MPH		
Joint Degrees				
Business		MBA-MPH		
Medicine		MD-MPH		

^{*} Offered in residential and online formats

Site visitors reviewed sample syllabi for coursework beyond the core and found them to contain an appropriate breadth and depth of content for MPH students. Students who met with site visitors said that the curriculum is rigorous and proceeds at a brisk pace, but they felt aware of and prepared for the intense workload when they enrolled.

The commentary relates to the opportunity for better articulation of TDI's educational offerings. Although the program considers the residential MPH to be a generalist program, it has a strong focus on health care delivery that is distinct among MPH programs. In addition, the online MPH is also considered a generalist program; however, its curriculum differs from the residential program and is designed to meet the needs of working professionals. Given that the program is seeking ways to differentiate itself and has noted that the generalist name has been a deterrent for some prospective students, more explicit alignment with TDI's strengths may be helpful.

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. All MPH students must complete at least 56 quarter-credits of public health coursework to earn the MPH degree. The program has not granted any MPH degrees for fewer than 56 credits in the last three years.

The program defines one credit as the equivalent of 10 hours of classroom time. Most courses are four credits, and the MPH program operates four terms of 10 weeks each in an academic year. The residential MPH degree is designed to be completed in one year for full-time students while the online program is designed to be completed in two years.

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 MPH students take required coursework that addresses the five core areas of public health knowledge. Dartmouth's MPH students receive a broad understanding of the areas of knowledge basic to public health through 37 credits of required coursework. Some of the required courses cover more than one public health core area. Table 3 summarizes the required courses addressing public health core knowledge areas. Site visitors reviewed the core course syllabi and found them to address an appropriate breadth and depth of knowledge in the core areas.

Table 3. Required Courses Addressing Public Health Core Knowledge Areas for MPH Degree					
Core Knowledge Area	Course Number & Title				
Epidemiology	ECS 140A: Epidemiology/Biostatistics Part 1	4			
	ECS 140B: Epidemiology/Biostatistics Part 2	4			
	ECS 144: Current Status of Practice Variation Research	1			
Biostatistics	ECS 100: Inferential Methods and Systematic Review Part 1	4			
	ECS 102: Inferential Methods and Systematic Review Part 2	4			
Environmental Health Sciences	ECS 151: Environmental Health Science and Policy	4			
Social & Behavioral Sciences	ECS 154: Social and Behavioral Determinants of Health	4			
Health Services Administration	ECS 111: Critical Issues in Health and Health Care	4			
	ECS 115: Strategic and Financial Management of Health Care Institutions	4			
	ECS 117: Continual Improvement of Health Care	4			
	Total Credits	37			

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. As part of their degree requirements, all MPH students must complete a minimum of a 120-hour practice placement for the required course ECS 161: MPH Internship. The goal of the internship is for the student to participate in, learn from and contribute to ongoing efforts related to public health in a work setting. It is typically completed in the final term (spring quarter). The MPH Internship Handbook provides details on identifying an internship location and preceptor, developing and contracting to complete a specific project as part of the internship, meeting and documenting internship requirements and evaluating the internship experience and student performance. Students may select from a list of available sites and internship projects or develop their own internships.

The internship is overseen by the co-directors of the internship course and a team of internship advisors who work with students and preceptors. Many preceptors have worked with the MPH program or students in the past. New preceptors are recruited through identification of research or program projects appropriate for students, connections with community organizations and/or student identification of potential preceptors and internship sites. New preceptors receive preceptor materials and have an inperson or telephone meeting with an internship course director to discuss the process, the roles and responsibilities of a preceptor and the support provided to the preceptor and student by the internship team. An internship course director or an internship advisor follows up as needed based on evaluations and other communications.

A cadre of curriculum specialists and teaching assistants work closely with students and sites throughout the internship process. Students are assigned to small advisory groups with one member of the internship team assigned as the primary advisor, which brings the student-advisor ratio to approximately one advisor per 12 students. The internship team communicates and meets regularly with students to monitor the students' work and resolve any issues. During the site visit, students expressed a great deal of satisfaction with the support they received in selecting internship sites and in establishing clear objectives and expectations for the experience.

Student performance is monitored by the internship team and by preceptors throughout the internship experience. Students are required to complete interim deliverables throughout the academic year and a final deliverable upon completion of the internship. The deliverables are graded by the student's internship advisor. Internship advisors check in with preceptors at the midpoint of the internship and at the end of the internship, when the preceptor completes a final student evaluation. Students report on their performance through two progress reports and a final evaluation of the internship experience. The internship course directors and the internship advisor review a student's grades, progress reports, final site-specific deliverables and evaluations by the student and the preceptor and assign the final grade.

Practice experience or internship waivers are not allowed, and no waivers have been requested or granted in the last three years. Physicians in the leadership preventive medicine residency are required to complete a public health governmental field placement as part of their residency. Two courses (Governmental Public Health Experience for Leadership Preventive Medicine Residents: Part 1 (four credits) and Part 2 (six credits)) fulfill both the MPH internship experience and the preventive medicine residency requirement.

During the past two academic years, the program reported 70 internship experiences completed by MPH students. Many students completed internships and related projects at Dartmouth-Hitchcock Medical Center but did so in varied settings, including the Aging Resource Center, the Center for Population Health, the Rivermill Addiction Treatment Program, the Wound Center and the Community Benefits Office. Students also worked in departments related to child psychiatry, pathology, employee wellness, infectious diseases, cardiology and community health. Students also completed internships with other health care organizations regionally and across the United States. Internship locations in public health and other governmental settings included New Hampshire and Vermont Departments of Health, the Marin County (California) Health Department, the Kent County (Michigan) Health Department, the US Centers for Disease Control and Prevention, the Veterans Health Administration Office of Emergency Management, Veterans Affairs Outcomes Group and the Office of the Vermont Attorney General. Community organization internship sites included Upper Valley Haven, ReThink Health, GunSenseVT, Hunger Free Vermont, Women's Information Services, Mount Ascutney Prevention Partnership, Claremont Soup Kitchen and Food Pantry and Outdoor Mindset. A few internships included international experiences including Help Kids India, Kenya Project, Fundacion Runa (Peru) and Qatar Supreme

Council of Health/Center for Disease Control. Students present brief summaries of their internship projects at an annual luncheon session and prepare abstracts, which are published in a booklet for the session.

During the site visit, preceptors at one local community organization noted that the quality and capacity of MPH students have increased exponentially in recent years. They were especially impressed by the students' commitment to understanding their program's activities and the populations that they served before engaging in specific work related to their internship placement.

For the online MPH, the program plans to pilot a practicum that will combine the current capstone and internship experiences. The practicum experience will be integrated with coursework and with career planning across the two-year period of the online program. The program expects many students in the online MPH program to complete their practicum experience and projects within their place of full-time employment. The required work, however, must be above and beyond what they would normally do in the course of their jobs. The month of June between the first and second years of the online MPH program will be dedicated to the practicum. Students will have assignments and will consult with their mentors but will have no additional class responsibilities during this time so that they can be immersed in their projects.

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 MPH capstone project provides students with an opportunity to apply principles and skills learned in the classroom and in the field through the measurement, organization and improvement of public health and health care.

The capstone project spans three terms and includes a written component with an abstract/summary, a full paper and an oral presentation. The capstone product must be of sufficient quality to meet standards required for submission of a peer-reviewed manuscript, a presentation at a professional meeting and/or a grant proposal ready for submission.

Site visitors' review of sample capstone projects suggests that strengths include their high academic quality and the fact that some projects move forward for implementation or publication after graduation. Each represents a thorough integration of skills and concepts developed throughout the curriculum.

The focus is on the student to engage with the project and develop their capstone in conjunction with a team of faculty and peers. This, in turn, develops further skills in project team development and professional development opportunities for providing feedback to peers. On a weekly basis for each of the

three terms, students build, revise and enhance their projects in a step-wise fashion as the academic year progresses. Students must engage in both written communication and weekly verbal descriptions of their projects' goals. In the third term, the projects culminate in a professional oral presentation to faculty, peers and the community.

A weakness is that there is limited time for full-time students to fully explore all potential interests prior to selecting and developing their topics and projects. Some potential projects are limited by time constraints that make certain frameworks (eg, primary data collection) impossible to complete in such a short period of time. In addition, students indicated the need for a smaller student-faculty advisor ratio so that the weekly small-group meetings are more effective, with more time devoted to each student for faculty and peer feedback.

The program has responded to this student feedback. For 2015-2016, the number of capstone faculty advisors was increased to allow for smaller groups of students in the capstone course. This has reduced the advisor-student ratio to four students (from six students) per advisor.

The culminating experience for the online MPH is more challenging for site visitors to evaluate because it was still in the planning phase at the time of the site visit. More information is provided in Criterion 2.12. The two-year online program should allow for a longer lead time in which students can consider their options and interests before deciding on their projects.

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 met with commentary. The program has a set of 13 competencies that guide its curriculum. These competencies address the core public health knowledge areas as well as problem solving, change implementation, communication, critical appraisal, professionalism and leadership.

The program's Curriculum Committee developed these competencies in 2011-2012, and the program faculty approved them in February 2012. These competencies are made available to students and other stakeholders on the program's website, in the student handbook and during new student orientation. The self-study notes that course instructors have been adding applicable competencies to their course syllabiduring 2015-2016.

The first point of commentary relates to the opportunity to develop more rigorous, specific competencies that better align with the program's focus on quantitative analysis and health care delivery. Although the competency set includes important soft skills such as "exercise the skill of listening," "convey respect for others" and "incorporate ethics in decision making," the competency set as a whole does not convey the dynamic, rigorous curriculum that MPH students complete or help to distinguish the skill sets that graduates of the program acquire.

The second point of commentary relates to the inconsistent linkages between competencies and learning objectives on course syllabi. On-site discussions indicated that some faculty list learning objectives on the Canvas learning management system rather than on traditional syllabi to reduce the length. The program became aware of this inconsistency during the self-study process, and the curriculum specialists have developed a syllabus template for all faculty to use. Faculty will transition their courses to the new syllabus the next time the course is offered.

In 2013, the Curriculum Committee formed a sub-group of committee members and other faculty to assess the links between courses and the competencies. The group's goals were to 1) identify any gaps or significant overlap and 2) assess student workload and use of specific requirements (eg, papers, presentations, quizzes, tests, etc.) each term based on course assignments.

To assess changing practice needs, the program collects information from alumni, internship preceptors and employers. In addition, the program has conducted market research, a program meta-evaluation and an in-depth program evaluation in the last few years. The program is a member of ASPPH and APTR and uses reports from these organizations to keep abreast of students' educational preparation needs. The 2014 program evaluators suggested wording changes and additions to the competencies; the Curriculum Committee considered and approved these changes in September 2015.

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 partially met. The program assesses student achievement of competencies through coursework, the field experience and the capstone project. In addition, student progress is tracked through internship surveys, post-graduation surveys, graduation rates and employment/continuing education rates.

In addition to satisfactory completion of courses, students are assessed through classroom observations, discussion boards, examinations, papers, presentations and group projects.

The internship requires students to address at least one of the 10 Essential Services of Public Health. Faculty who met with the site visitors explained that this requirement helps to ensure that students are completing appropriate public health experiences that are not too clinically or administratively focused.

In the fall and winter terms, students are assessed on the following pieces of the capstone: written portfolio, oral presentation and participation (ie, attendance, feedback to peers, weekly assignments). In the spring term, students are assessed on the final written capstone, oral presentation and participation throughout the term. Faculty use presentation evaluation forms and framework-specific rubrics to evaluate students' work.

The first concern relates to the inability of site visitors to validate that students are assessed on their ability to demonstrate the program's competencies through the internship experience and capstone project. Although faculty told site visitors that competencies are used to plan and evaluate the experiences, site visitors found no reference to competencies on the available documents or grading rubrics. Furthermore, students who met with site visitors were not aware of the purpose or use of competencies in these experiences.

The program administers a post-graduation survey every three years. The survey asks alumni to rate how well their instructors assessed their level of competence in each of the program's five competency domains. The most recent survey was administered in 2014 to 141 MPH graduates from 2011, 2012 and 2013; the 68 respondents generally felt that faculty had accurately rated their competence in each area. In the domains of solving problems/implementing change and professionalism/leadership, 11.8% and 13.2% of respondents, respectively, reported that their instructors had underrated their level of competence. Conversely, 7.9% of respondents reported that their competence related to foundational knowledge was overrated by instructors.

In 2014, the program conducted an evaluation that involved the collection of data over a 90-day period from alumni, faculty, program partners, employers, current students and accepted students who declined to enroll in the program. The interviews with employers of MPH graduates indicated that they are looking for graduates who can 1) combine many data sources, 2) normalize the data, 3) perform an analysis and 4) make recommendations for action. The program received feedback from these interviewees that although MPH graduates may have the skills needed for specific public health roles, they do not always have a working knowledge of public health language.

The second concern relates to the lack of an ongoing process to collect information from employers about graduates' abilities to perform competencies in an employment setting. The program engaged in a comprehensive data collection effort in 2014; however, there is no process to continue these efforts in an

ongoing, systematic way. This is an area that could likely be supported by the Center for Program Design and Evaluation as it begins to work with the MPH program.

The self-study provides graduation rates for the last five years, and the program has high rates close to 100% each year. Full-time students complete the program in one year; part-time students have up to five years, but most complete the program within three years. The program has similarly high job placement rates. In the last three years, 69%, 70% and 78% of graduates reported being employed within 12 months of graduation. An additional 22%, 26% and 22% reported enrollment in continuing education or additional training.

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 not applicable.

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. TDI offers two joint degrees: an MD-MPH in conjunction with the Geisel School of Medicine and an MBA-MPH in conjunction with the Tuck School of Business. Students in both joint programs complete the same requirements as all other MPH students.

For students in the MD-MPH joint program, no School of Medicine courses are counted toward the MPH degree. The MD-MPH program is usually completed over five years, with students taking a one-year leave of absence from medical school after their third year to complete the MPH requirements.

For students in the MBA-MPH joint program, one course (ECS 115: Strategic and Financial Management of Health Care Institutions) is cross-listed with the Tuck School of Business and the MPH program and counts toward both degrees. The MBA-MPH is usually completed over two years, and students add the MPH requirements to their second year of the MBA degree.

While the MD-MPH continues to have a very low enrollment, the MBA-MPH has benefited from a more focused recruitment effort and is enrolling a record number of nine students in fall 2016. Students described the MBA-MPH joint degree program as "very ambitious but doable" and "difficult," but at the same time acknowledged that the MPH program was very straightforward with prospective students about what to expect. Enrolled students stated that they appreciated the challenge and voiced overall high satisfaction with the joint degree program.

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 partially met. The program will enroll its first online MPH cohort in August 2016. At the time of the site visit, 21 students had confirmed enrollment in the online program, and the program anticipated a total of 25 students for the first cohort. The two-year program will include six residential periods of one week or less each (three per year). As a cohort-based program, the residential periods are designed to encourage networks among the students and faculty. In addition, the online students will overlap with the campus-based MPH students, and the program plans to develop ties across the cohorts. Students will enroll in one course at a time and will work in study groups throughout the program. The first year will consist only of required courses, while there will be opportunities for electives in the second year.

The program provided site visitors with the list of required coursework as well as the sequence of courses throughout the two-year curriculum. At the time of the site visit, specific syllabi had not yet been developed and/or finalized.

The program has designed the online format to achieve the same depth of learning and rigor as the campus-based program. Dartmouth's Center for Program Evaluation and Design will evaluate the program after students matriculate and complete some coursework and will help to objectively identify the strengths and weaknesses. The program began developing the online MPH after the 2014 program evaluation; subsequent market research and inquiries from prospective students all indicated demand for this option.

The concern relates to the in-development status of the online MPH format. At the time of the site visit, the program was still developing courses and determining the requirements for the practicum. Therefore, the site visit team could not confirm that the curricular expectations meet the standards for accreditation.

The program is following TDI's master of health care delivery science (MHCDS) degree as a model for the online MPH program. It has been offered for a number of years and is considered to incorporate best practices in the online learning environment.

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. The program pursues an active research agenda. The program has policies to support faculty development in research, and faculty participation is an important consideration for promotion and tenure. Grant funding and publications are key indicators on the academic track.

Program faculty members conduct scholarly investigation that advances the principles of measurement, organization and improvement of health care. The program's four thematic areas of research inquiry are 1) evaluating health care - health systems research, 2) evaluating health care - comparative effectiveness research, 3) implementation and improvement research and 4) patient engagement research. Each area is directed by a senior faculty member who is charged with expanding the current knowledge within the field of expertise, while seeking out new areas of research that are complementary to their activities and that offer development opportunities for junior faculty. Within each area, senior faculty mentor junior faculty and provide critical appraisal and analysis of proposed research activities that will support development of their research careers. When submitting grant proposals, senior faculty routinely include junior faculty as research team participants, providing funding support and publication opportunities.

The appointments and promotions process recognizes excellence achieved in academic research, as well as other contributions essential to the academic medical center mission, such as leadership roles within the School of Medicine, within Dartmouth-Hitchcock Medical Center and related academic and professional societies and organizations. Scholarly investigation is one of three areas of endeavor upon which faculty of the Geisel School of Medicine, including the primary faculty for the MPH program, are evaluated for promotion and tenure. To help guide faculty in all schools and departments, Dartmouth College has prepared a Sponsored Research Manual.

Students are involved in meaningful research activities in a number of ways. Many of the MPH courses require research-based assignments through projects and poster sessions, all requiring a final presentation to students and faculty and, in some cases, the Dartmouth community.

The program has identified two outcomes to assess its level of success in research. The research outcome measures are to compete successfully for external funding that addresses public health challenges and to disseminate research findings through publications, presentations and other communicative opportunities. The program has met or exceeded the targets for all of the outcome measures in each of the last three years.

During the site visit, students reported great satisfaction with their research opportunities. They reflected on the tremendous job that faculty and staff do to provide guidance and described a very supportive research environment overall. Students stated the outstanding research reputation of the program as the main reason to choose it over other programs. They stated that their research experiences met and often

surpassed their expectations. One student who was about to graduate at the time of the site visit compared his research skills at the beginning and end of the program as night and day and said that he never would have expected to gain such deep research skills in only one year.

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. Although the School of Medicine does not specifically require community service for faculty promotion and tenure, it was clear to site visitors that faculty are engaged in a variety of professional and community service activities. In summer 2015, the program surveyed the MPH teaching faculty to determine the number and variety of community service organizations for which faculty volunteered or were paid. The program identified four outcome measures to assess faculty involvement in service; however, only one is specific to the service activities required of this criterion. The program's measure is that at least 60% of all teaching faculty will participate in local, regional, national or international health- and health care-related organizations. For AY 2014-2015, the program achieved a 70% participation rate.

The self-study provides an extensive list of faculty involvement in professional and community service activities. Program faculty serve as board members, committee chairs, volunteer advocates, consultants and project leaders for organizations in the community.

The objective for student service is to "advance the population health of communities through course projects, internships, and student-led offerings." The program seeks to achieve 1) at least 30 community-based projects embedded in courses; 2) at least 30 community organizations involved in courses; and 3) students plan various activities during Public Health Week each year. The program met or exceeded the targets for all measures in AY 2014-2015. Sixteen community organizations are engaged through ECS 115: Strategic and Financial Management; four through ECS 124: Design & Improvement of Clinical Microsystems; and 12 through ECS 154: Social Behavioral Determinants of Health. Community organizations that provide opportunities for student service or research include the New Hampshire-Dartmouth Psychiatric Research Center, the Norris Cotton Cancer Center, the Dartmouth-Hitchcock Medical Center, the Center for Continuing Education in the Health Sciences, the Good Neighbor Health Clinic, the Red Logan Dental Clinic, the New Hampshire Area Health Education Center and the National Center for Post-Traumatic Stress Disorder at the White River Junction VA Medical Center.

The program's Student Advisory Council planned community events during National Public Health Week in 2015 and 2016. The events engaged alumni, medical students, TDI students, other graduate and undergraduate students at Dartmouth, faculty members and hospital employees in social, educational and community service activities. In 2015, the events included a community seminar, a public health

poster session and a community service day. During the service day, 29 MPH students worked with five community organizations.

In addition, MPH students regularly participate in community service activities sponsored by the Geisel Community Service Committee, which is a School of Medicine student-run organization, and the Dartmouth Center for Service, which helps students find opportunities to enrich their education through volunteerism, intensive service, immersive experiences and exposure to social entrepreneurship. During the site visit, one student said that the program was supportive when he took time to volunteer for the Ebola response in West Africa. Another student, however, noted that the intensity of the one-year program prompted her to manage her time very carefully, which resulted in less commitment to non-curricular community service activities.

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 MPH program has an active role in TDI's workforce development efforts that support the existing public health workforce. TDI's director of education oversees all education programs of the institute, including academic programs such as the MPH degree, professional development programs and other workforce development initiatives. TDI's Office of Professional Education and Outreach responds to market needs by creating timely education programs that meet broad health care system needs and also creates customized programs that meet the needs of specific organizations.

The Health Resources and Services Administration funds TDI to support the New Hampshire Area Health Education Center, which offers numerous opportunities for practicing health professionals to stay current in their field, learn about emerging health and health care issues and connect with their peers. The Area Health Education Center also established a network of community-based training sites to provide educational services to students, faculty and practitioners in underserved areas and improve the delivery of health care in the service area. The program's goal is to increase the number of health professions graduates. TDI and its MPH program are partners in the New England Public Health Training Center, and TDI houses the New Hampshire local implementation site. In 2012, the center coordinated a training assessment survey that identified areas of training need for the New Hampshire public health workforce. During the site visit, specific workforce development examples were described, including the current work of the local Public Health Training Center team with the New Hampshire Department of Health and Human Services to develop online training to build core competencies in the public health workforce. In addition, the Public Health Training Center facilitated the work of faculty in the MPH program who developed a basic curriculum on environmental contamination for local public health workers and training materials on the social inclusion model for use with parents and teachers.

The MPH program has a 'special student' enrollment category in which a professional can choose to take up to three courses in the MPH program as a non-matriculating student. Special students are charged the same tuition as matriculating students, receive course credit and have those courses appear on Dartmouth transcripts. Over the past three years, special students have taken seven to eight courses each year.

Ensuring that clinicians have a strong public health orientation is a priority for the MPH program. The program provides the academic program for physicians in the Dartmouth-Hitchcock Leadership Preventive Medicine Residency. The two-year program, which is completed in conjunction with an approved Dartmouth-Hitchcock clinical residency or fellowship, provides physicians with knowledge and skills in the measurement of outcomes and in the leadership of change and improvement in healthcare systems.

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 program has a qualified faculty complement to carry out its teaching, research and service efforts. Faculty members are individually well qualified and collectively offer a wealth of experience in relevant sub-disciplines of the field. The program's teaching faculty includes physicians, epidemiologists, psychologists, sociologists, economists, statisticians and other specialists. Their primary concerns are studying and improving health and health care delivery and training the next generation of leaders in those fields. TDI facilitates their collaborative research, and that interdisciplinary approach is reflected in the courses they teach. The program faculty comprises clinical and academic scholars from various disciplines who have recognized expertise in areas of public health, health policy and clinical practice. While research interests vary, there is an emphasis on an interdisciplinary approach to teaching and research. For 2015-2016, 59% of all teaching faculty had significant practice experience.

Teaching faculty members are generally identified by TDI from the various departments within the Geisel School of Medicine and from across Dartmouth College. Dartmouth uses the professor, associate professor and assistant professor designations for faculty in the tenure track.

The program has identified three performance measures to assess faculty qualifications: 1) recruit and retain highly qualified, multidisciplinary faculty; 2) submit competitive proposals for external funding that address public health challenges; and 3) disseminate research findings through publications, presentations and other communicative opportunities. These measures are used in other criteria as well, and all were met or exceeded in the last three years.

Students who met with the site visit team praised the faculty. They said that the coursework and faculty mentorship provide a rich learning environment. Faculty members commented on how exciting it is that the MPH program brings faculty from across the School of Medicine and the entire college together.

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 both school-wide and program-specific faculty policies. The school-wide faculty handbook is available online and is an important resource for faculty members of every rank. The Dartmouth Center for the Advancement of Learning facilitates professional development for Dartmouth's teachers and cultivates a community of conversation about how people learn. Professional development opportunities are open to all faculty members, regardless of faculty category or appointment. The Center for the Advancement of Learning advances undergraduate and graduate learning by providing and coordinating services that promote and support effective teaching. The center encourages and supports research about teaching and learning and offers workshops and seminars for faculty and doctoral students. Departments may also ask center staff to offer workshops specific to the needs of the departments. The Dartmouth Biomedical Libraries, consisting of Dana Biomedical Library at the Geisel School of Medicine and the Matthews-Fuller Health Sciences Library at Dartmouth-Hitchcock Medical Center, offer information technology workshops for the faculty. Workshops range from an introduction to the library to finding information using specific databases and resources to managing and presenting information.

Educational Technologies (Ed Tech) staff partner with faculty to promote more active student engagement and learning through the use of technology. The Ed Tech team supports the Faculty of Arts & Sciences with a wide range of services, from course design consultations to general technology support for academic departments, collaborating closely with the Center for the Advancement of Learning and the library to support teaching and learning activities at Dartmouth. The Ed Tech team specializes in instructional design, academic technology consultation and education technology tools.

TDI offers three faculty development seminar series each year for junior faculty and post-doctoral fellows who are pursuing academic careers. The three-seminar series is also required for TDI's PhD students. These seminars have been offered for the past three years with positive feedback from participants. To encourage interdisciplinary collaboration, these seminars are open to all Geisel School of Medicine departments and any Dartmouth College departments with post-doctoral fellows. The purpose of these seminars is to support junior faculty and post-doctoral fellows in their efforts to secure more publications, presentations, grant funding and research opportunities to advance their careers.

Faculty competence is evaluated on two levels: through the promotion and tenure process at the Geisel School of Medicine and through students' course evaluations. Through the promotion and tenure process, faculty are evaluated on criteria-based excellence in research, teaching and service. Course evaluations play an important role in assessing excellence in teaching and are summarized and reviewed by the director of education and the director of student learning. The evaluation summaries are then shared with the individual course faculty for review, and the director of education and/or the director of student learning holds a meeting with each faculty member shortly after the end of each term.

The MPH program also administers a program evaluation to further assess courses and overall program satisfaction. These online surveys are distributed to students at the end of the academic year. These evaluations provide a macro look at the courses and the MPH program. Surveys of alumni are conducted at least every three years.

Overall, the program has clearly defined policies and procedures in place to evaluate faculty performance. Meetings with faculty and program leaders are held regularly to discuss strengths and areas for improvement for courses. The Curriculum Committee provides oversight for continual quality improvement. In an effort to increase response rates, the program instituted a policy in 2015-2016 to release grades to students when the course evaluation completion rate reaches 80%. After students expressed some concerns with this approach, the program agreed to release grades to individual students as soon as the evaluation is completed; when the course receives an 80% completion rate, all students can access their grades.

During the site visit, faculty members emphasized how privileged they feel to teach in the MPH program. They described teaching and mentoring students as a highlight of their faculty role, and said that it is appreciated in the promotion and tenure process.

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 program engages in active recruitment efforts through TDI. Recruitment is focused on three student populations: physicians, mid-career professionals and recent college graduates. Recruitment of physicians and mid-career professionals is achieved by word of mouth through alumni and faculty, attendance at national and regional professional association meetings and conferences, nurses' week fairs, individual sessions and the TDI and program's websites.

Recruitment of recent college graduates is managed through a variety of activities, including college visits at graduate fairs and individual sessions, virtual fairs, mailings, direct contact with college health professional advisors and Career Office staff members and the websites. The program advertises with the Association of Schools and Programs of Public Health, the SOPHAS application system, GradSchools.com, the Association of American Medical Colleges pre-medical post-baccalaureate database and various other websites that direct applicants to TDI's Office of Graduate Programs' website. TDI has exhibition materials, including a large display and four small pop-up displays, for use at conferences such as APHA's annual meeting, Student National Medical Association's Annual Conference, National Association of Advisors for the Health Professions National Meeting, Association of American Medical Colleges, Institute for Healthcare Improvement National Forum and the UC Davis Pre-Health Medical Alliance. TDI participates in various Graduate School and other fairs, such as the National Institutes of Health Graduate and Professional School Fair, McNair Scholars fairs, Idealist fairs, ASPPH's This is Public Health graduate fairs and various online Graduate School fairs. TDI works in concert with the assistant dean of graduate recruiting and diversity at Dartmouth College and with the director of multicultural affairs at the Geisel School of Medicine on student recruitment trips to various locations across the country.

The program accepts applications and required documentation through the WebAdMIT online system through SOPHAS. The MPH program requires that applicants have a baccalaureate (or the equivalent) degree and recommend a minimum GPA of 3.0. Applicants without graduate or professional degrees must submit GRE or MCAT scores, although this requirement may be waived based on an applicant having at least five years of applicable work experience post-graduation (determined by the Admissions Committee). Preferred scores are GRE verbal and quantitative scores in the 64th percentile or higher and an MCAT total score of 29 or higher. Exceptions are occasionally made for lower GRE and MCAT scores when other attributes of an application offset such scores. Applicants whose native language is not English are required to submit scores from the Test of English as a Foreign Language. The minimum required TOEFL score is 103. The program has two application deadlines (December 1 and February 1); however, all applications are reviewed on a rolling basis.

A 21-member Admissions Committee, co-chaired by the director and senior director of recruitment and admissions, includes the academic director, the director of student learning, the manager of career services and professional development, teaching faculty and alumni. The Admissions Committee is divided into seven small groups that review applications on a regular basis. In fall 2015, the program began to require interviews with any applicant who had been deemed eligible for admission by the Admissions Committee. The interview may be completed by phone, Skype or in person. Admissions decisions are typically made approximately two to four weeks after an application is complete with all required materials. The admissions process for the online MPH program is the same as for the residential degree program.

For AY 2013-2014, the program had 184 applicants of whom 123 (67%) were admitted; 51 (41%) of those admitted chose to enroll. For AY 2015-2016, there were 282 applicants of whom 151 (54%) were admitted; 45 (30%) of those admitted chose to enroll. During the past three years, one to three individuals per year applied for and enrolled in the MBA-MPH program, but nine students have enrolled in the MBA-MPH program for fall 2016. Only one person applied for and enrolled in the MD-MPH program in the past three years.

The program has an outcome measure to recruit, retain and graduate high-quality students. For each of the past three academic years, the program has exceeded its targets for entering students' average GRE or MCAT scores and average undergraduate GPA. The program also has a target to have an admissions yield (admitted who choose to enroll) of 40% or higher, which it has not achieved for the past two years. In the self-study, the program also identified the proportion of enrolled students with advanced degrees and the distribution of physicians, mid-career professionals and recent undergraduates as outcome measures. Over the past three academic years, 28% of enrolled students were physicians, 13% were mid-career professionals and 59% were recent college graduates.

During the site visit, faculty expressed satisfaction that the program is recruiting students who are prepared to be successful in a demanding program. The program has invested more time and effort in contacting applicants who are eligible for admission, to help the applicant determine whether the program is the best fit for him or her. Faculty noted that the MBA-MPH students have been driven students who bring significant management experience and skills into the MPH program.

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. The program has done much to enhance its academic advising and career counseling services in the last few years. During new student orientation, students participate in a careers workshop, which helps students understand the career development process and provides a framework for career, academic and professional development. A career map tool is used to help students define a future; inventory present skills and abilities; identify options for co-curricular professional development; and focus their options for graduate school, medical school or employment. The individual development plan is introduced during the careers workshop as a planning tool to help students chart their career plan. Students' individual development plans are used to help them select electives and identify topics and organizations for the internship and capstone experiences.

The program has a core group of academic advisors for students specific to course advising. This group, which was created for AY 2014-2015, includes the director of student learning, two curriculum specialists, and the manager of career and professional development. Academic advisors provide students with

advice on which elective courses to take, particularly in the winter and spring terms when more elective courses are offered. During new student orientation and prior to each pre-registration period, students are encouraged to meet with an academic advisor to map out a curricular plan. Nearly 87% of 2015 graduates who completed the program evaluation after graduation indicated that they were strongly satisfied or satisfied with accessing advising or mentoring help. The capstone teaching team and the capstone advisors provide advising primarily related to the capstone experience.

Career advising is overseen by the manager of career and professional development. The program dedicated resources for a career services manager in 2010 and significantly expanded career advising services in 2014. In addition to the careers workshop during new student orientation, the manager of career and professional development provides individual advising and job search strategies based on customized career goals. Students preparing for medical school or advanced graduate education receive similar support. A careers course in the learning management system provides an organized platform for the career development process, relevant resources, job search support and postings of job, internship and fellowship opportunities. The manager of career and professional development provides one-on-one support throughout the entire job search, including background research on organizations, development of application materials, introductions, interview preparation, interview follow up, offer negotiation and coaching on the fundamentals of joining a new organization.

Student satisfaction with career advising improved significantly with the implementation of the careers course and its related one-on-one support in 2014. The current manager of career services and professional development has extensive experience in health care and management career placement. The additional career planning tools help students and alumni feel more in control of their career development. Nearly 94% of 2015 graduates indicated that they were extremely satisfied with the helpfulness of career services. During the site visit, students reinforced that the manager of career services and professional development has been an important person in their MPH experience. They appreciated that she was present and engaged with them from day one of their orientation. In addition to her counseling and support, she has been active in linking students with career questions to appropriate MPH alumni.

MPH students also have access to Dartmouth's Graduate Career Office. This office provides services and resources for career counseling, resume writing, job searching, job search letter writing, interviewing skills and using social media in job searching.

Students are encouraged to communicate their concerns to the program through the Student Advisory Council or at the regular town halls that the program has with students as a means to receive feedback on the program. Some students seek out individual program staff, such as the director of education,

director of student learning, manager of career and professional development or curriculum specialists. Dartmouth's dean of graduate studies has published Academic and Conduct Regulations, which provide formal procedures for a graduate student to file a grievance and offers the options for resolution or hearing. No grievances have been filed by MPH students in the last three years.

Agenda

COUNCIL ON EDUCATION FOR PUBLIC HEALTH ACCREDITATION SITE VISIT

Geisel School of Medicine at Dartmouth Public Health Program

May 19-20, 2016

Thursday, May 19, 2016

8:30 am Request for Additional Documents

Karen Ashley

8:45 am <u>Executive Session</u>

9:15 am Meeting with Institutional Academic Leadership

Denise Anthony Duane Compton Leslie Henderson

Jon Kull

10:00 am Break

10:15 am Meeting with Program and Institute Leadership

Alice Andrews Karen Ashley Elliott Fisher Tim Lahey Craig Westling

11:15 am Break

11:30 am <u>Meeting with Faculty Related to Curriculum and Degree Programs</u>

Paul Gardent
Daisy Goodman
David Goodman
Tina Foster
Robin Larson
Meghan Longacre
Carolyn Murray
Lisa Purvis
Katie Silvius

12:15 pm Break

12:30 pm <u>Lunch with Students</u>

Jenn Bales Eric Giles Salman Hussain Joelle Jung Lu'aie Kailani Jared Rhoads Renata Yen

1:30 pm <u>Executive Session</u>

2:45 pm <u>Meeting with Alumni, Community Representatives, Preceptors</u>

Leslie Adams Laura Beidler Michael Cacchio Dawn Carey Jennifer Fontaine Wade Harrison Sara Kobylenski Laural Ruggles Pete Thurber

3:45 pm **Break**

4:00 pm

Meeting with Faculty and Staff Related to Research, Service, Workforce Development, Faculty/Student Issues
Marc Aquila
Jeremiah Brown
Kristina Fjeld-Sparks
Barbara Koll
Tracy Onega
Colleen Sullivan
Courtney Theroux
Crain Westling Craig Westling

5:00 pm <u>Adjourn</u>

Thursday, May 19, 2016

9:30 am

Meeting with Faculty Related to Online MPH Program Alice Andrews Dawn Carey Nicky Beaudoin Karen Ashley

10:00 am **Executive Session and Report Preparation**

Exit Interview Alice Andrews 12:30 pm

Karen Ashley Tim Lahey Craig Westling