North Dakota State University
Department of Public Health
Master of Public Health Program
Self-Study

NDSU’s Aldevron Tower - Department of Public Health - 6th floor
Image Source: https://www.ndsu.edu/alphaindex/buildings/Building::454

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Introduction

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

a. year institution was established and its type (eg, private, public, land-grant, etc.)

North Dakota State University (NDSU) is a public, land-grant, research university and was founded in 1890 as the North Dakota Agricultural College.

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

NDSU consists of eight academic colleges, including the College of Agriculture, Food Systems, and Natural Resources; College of Arts, Humanities and Social Sciences; College of Business; College of Engineering; College of Health Professions; College of Human Sciences and Education; College of Science and Mathematics; and the College of Graduate and Interdisciplinary Studies. Several academic programs are housed within schools, including the School of Nursing and School of Pharmacy in the College of Health Professions; the School of Education in the College of Human Sciences and Education; the Challey School of Music and the School of Design, Architecture and Art in the College of Arts, Humanities and Social Sciences; and the School of Natural Resource Sciences in the College of Agriculture, Food Systems, and Natural Resources.

NDSU offers 146 bachelor’s degree programs, 87 master’s degree programs, 50 doctoral programs, and 2 professional preparation degrees (Pharm.D. and D.N.P.).

c. number of university faculty, staff and students

In Fall 2020, NDSU enrolled 12,499 students, including 10,312 undergraduate students, 344 professional students, and 1,842 graduate students.

As of Fall 2020, NDSU employed 6,175 individuals, including 692 ranked faculty and lecturers; 152 part-time academic staff; 927 graduate assistants and fellows; 60 program administrators and coaches, 228 extension educators, experiment station and other researchers; 1,362 professional, technical, office, trades, and service staff; and 2,679 temporary workers (including students).

d. brief statement of distinguishing university facts and characteristics

NDSU is listed at 94 among 404 public universities based on the university’s research expenditures reported to the National Science Foundation and is North Dakota’s only top-100 public research university. In addition, NDSU is listed in the National Science Foundation’s top 100 in several areas, including: agricultural sciences; business management and business; communications; materials science; natural resources and conservation science; social sciences; sociology, demography, and population studies; and visual and performing arts.

NDSU enrolls the largest number of fulltime students and full-time undergraduate in the state and the largest number of full-time undergraduates from out-of-state and has elevated retention to a state-leading 78.9% and graduation rate to a state-leading 41.2%. In addition, NDSU has achieved post-graduation success rates (employment and graduate study) of 93% for undergraduate students and 94% for graduate students.

As the state’s land-grant university, NDSU maintains the largest physical foot print in the state, almost 20,000 acres, including the main campus, seven major research and extension offices, and extension offices in every county in North Dakota.
e. names of all accrediting bodies (other than CEPH) to which the institution responds. The list must include the regional accreditor for the university as well as all specialized accreditors to which any school, college or other organizational unit at the university responds

Regional accreditor: Higher Learning Commission

Specialized accreditors:

- Accreditation Commission for Programs in Hospitality Administration
- Accreditation Council for Pharmacy Education
- Accrediting Council for Education in Nutrition and Dietetics
- American Council for Construction Education
- American Society of Health-System Pharmacists
- American Veterinary Medical Association Committee on Veterinary Technician Education and Activities
- Association to Advance Collegiate Schools of Business
- Certified Financial Planner Board of Standards
- Commission on Accreditation for Respiratory Care
- Commission on Accreditation of Allied Health Education Programs
- Commission on Accreditation of Athletic Training Education
- Commission on Collegiate Nursing Education
- Council for Interior Design Accreditation
- Council for the Accreditation of Counseling and Related Educational Programs
- Council for the Accreditation of Educator Preparation
- Engineering Accreditation Commission of ABET
- Joint Review Committee for Education in Radiologic Technology
- Landscape Architecture Accreditation Board
- National Accrediting Agency for Clinical Laboratory Science
- National Architectural Accrediting Board
- National Association of Schools of Art and Design
- National Association of Schools of Music
- National Association of Schools of Theatre

f. brief history and evolution of the public health program (PHP) and related organizational elements, if applicable (eg, date founded, educational focus, other degrees offered, rationale for offering public health education in unit, etc.)

NDSU and University of North Dakota (UND) sought North Dakota State Board of Higher Education (SBHE) approval for independent MPH programs. Both were approved by the SBHE on November 4, 2010. An MOU was signed in 2014 that laid out the responsibilities and activities for both institutions in working cooperatively to deliver the two MPH programs and seek separate CEPH accreditation. A Coordinating Council was established to provide administrative oversight for areas of cooperation.

The NDSU MPH program is housed in the Department of Public Health in the College of Health Professions. The College of Health Professions is also the academic home for the School of Pharmacy, School of Nursing, and Department of Allied Sciences. At the time of original program approval, the College of Health Professions led the initiative to create the public health curriculum. It also had other academic programs that underwent professional accreditation and so it was decided to house the MPH within the College of Health Professions. NDSU enrolled its first class of MPH students in the fall of 2012. The MPH program received initial accreditation in October 2016 for the full five-year term. Since this date, program concentration areas have undergone changes in response to the needs of the public health workforce in terms of skill-set. Currently, the program offers MPH concentrations in Community Health Sciences and Epidemiology with subplans (emphasis areas) in infectious diseases and American Indian Public Health. Additionally, within the department, there are public health certificates offered as well as
an undergraduate public health minor. The minor was added in 2019 in response to growing interest expressed by other undergraduate program majors and from the popularity of the general education course, PH 101 Introduction to Public Health. NDSU joined ASPPH in January 2020 with full participation in SOPHAS beginning with the fall 2021 cohort. The program is led by the Department of Public Health Chair, uses faculty governance, and is advised by an external board.
2) Organizational charts that clearly depict the following related to the program:

a. the program’s internal organization, including the reporting lines to the dean/director

This organizational chart can also be found in the self-study and other required documents folder, Organizational Charts folder, titled ‘NDSU DPH org chart 2A.’
b. the relationship between program and other academic units within the institution. Ensure that the chart depicts all other academic offerings housed in the same organizational unit as the program. Organizational charts may include committee structure organization and reporting lines.

This organizational chart can also be found in the self-study and other required documents folder, Organizational Charts folder, titled ‘NDSU org chart 2B.’
c. the lines of authority from the program’s leader to the institution’s chief executive officer (president, chancellor, etc.), including intermediate levels (eg, reporting to the president through the provost).

This organizational chart can also be found in the self-study and other required documents folder, Organizational Charts folder, titled ‘NDSU org chart 2C.’

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

Not applicable

3) An instructional matrix presenting all of the program’s degree programs and concentrations including bachelor’s, master’s and doctoral degrees, as appropriate. Present data in the format of Template Intro-1.

<table>
<thead>
<tr>
<th>Instructional Matrix - Degrees and Concentrations</th>
<th>Campus Based</th>
<th>Distance Based</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Master’s Degrees</strong></td>
<td>Professional</td>
<td></td>
</tr>
<tr>
<td>Community Health Sciences</td>
<td>MPH</td>
<td>MPH</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>MPH</td>
<td></td>
</tr>
<tr>
<td><strong>Joint Degrees (Dual, Combined, Concurrent, Accelerated Degrees)</strong></td>
<td>Professional</td>
<td></td>
</tr>
<tr>
<td><strong>2nd Degree Area</strong></td>
<td>Public Health Concentration</td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>MPH/PharmD</td>
<td>MPH</td>
</tr>
<tr>
<td>4+1 Accelerated</td>
<td>BS in Dietetics; MPH Community Health Sciences</td>
<td>BS/MPH</td>
</tr>
<tr>
<td>4+1 Accelerated</td>
<td>BS or BA; Any concentration</td>
<td>BS or BA/MMPH</td>
</tr>
</tbody>
</table>
4) Enrollment data for all of the program’s degree programs, including bachelor’s, master’s and doctoral degrees, in the format of Template Intro-2.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Current Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s</td>
<td></td>
</tr>
<tr>
<td>MPH</td>
<td>61</td>
</tr>
<tr>
<td>American Indian Public Health(^1)</td>
<td>5</td>
</tr>
<tr>
<td>Community Health Sciences</td>
<td>24</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>32</td>
</tr>
</tbody>
</table>

\(^1\) No longer enrolling students
A1. Organization and Administrative Processes

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

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

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

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

All faculty in the Department of Public Health are engaged in the decision-making processes in the NDSU Master of Public Health program. Decisions primarily originate in faculty-driven committees and are ultimately made by the full DPH faculty.

The MPH program has three standing committees, Curriculum, Admissions & Scholarship, and Promotion, Tenure, & Evaluation (PTE). Significant ad hoc committees include Assessment and Accreditation, Recruitment, and Seminar Series.

All committees are governed by DPH by-laws which include the structure for committee membership, purpose, and voting. Faculty volunteer for standing committee membership in the spring of each year. If needed, the Chair may appoint a Faculty member to a committee if specialized expertise is needed. The Chair is an ex-officio member of all committees and holds all rights and privileges, including voting rights, with the exception of the PTE committee. Committee members rotate off every three years using a staggered rotation. New committee members start their service at the beginning of the next academic year.

Curriculum committee membership includes the Director of Accreditation, at least one faculty representative from each specialization, and one current student.

Current membership on the curriculum committee includes:

- Mary Larson (Chair)
- Bong-Jin Choi
- Stefanie Meyer
- Pamela Jo Johnson
- Ramona Danielson
- Kiranpreet Gill – student

MPH Admissions and Scholarship committee membership includes at least one faculty representative from each specialization.

Current membership on the admissions & scholarship committee includes:

- Rick Jansen (Chair)
- Paul Carson
- Stefanie Meyer
- Andrea Huseth-Zosel

PTE committee membership includes at least three tenured members of the DPH who do not hold administrative roles in the DPH.
Current membership on the PTE committee includes:
- Mary Larson (Chair)
- Andrea Huseth-Zosel
- Mark Strand

Ad hoc committees are formed as needed to meet a need or perform a specific task. Members are assigned as needed to accomplish the purpose of the committee and can include faculty and staff. The ad hoc committee ceases to exist when its task is completed or the needs for which it was instituted are met.

Current membership of the Recruitment Committee includes:
- Andrea Huseth-Zosel (Chair)
- Mark Strand
- Vanessa Tibbitts
- Emily Vieweg
- Murphy Anderson
- Kylie Hall
- Angela Skaff
- Khalaf Ismail-Abderrezaq – student

Current membership of the Assessment and Accreditation Committee includes:
- Stefanie Meyer (Chair)
- Pamela Jo Johnson
- Ramona Danielson
- Angela Skaff
- Jeremy Penn – alum
- Allison Goldenstein – alum
- Doreen Odera - student

Current membership of the Public Health Seminar Series includes:
- Andrea Huseth-Zosel (Chair)
- Ramona Danielson
- Angela Skaff

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

a. degree requirements

Our accrediting body (i.e., CEPH) sets requirements that guide our degree development. All degree requirements are developed or revised according to current CEPH practices. The NDSU College of Graduate Studies also maintains degree requirement standards that are followed. Proposals for revisions to our MPH degree requirements can be put forward by any faculty member. The curriculum committee reviews, approves, and brings forward any recommendations on MPH degree requirements including required courses, credit load, concentration areas, and electives. The committee recommendations are presented to the DPH faculty for discussion, review, and decision. Additions, deletions, and revisions can be introduced by the DPH faculty during the DPH faculty discussion and review. Once approved by the Department, the curriculum changes are reviewed by the University-level graduate council, which is a governing committee of the College of Graduate Studies to ensure that all graduate school requirements are also met. The university curriculum committee reviews and makes a recommendation to the faculty senate for final vote.
b. curriculum design

Proposals for curricular changes can be put forward by any faculty member. The curriculum committee reviews proposed changes, the overall design such as course delivery method (distance/on-campus), expectations for the practicum and integrative learning experience, and which experiences are graded and which are S/U. Decisions are reviewed and aligned with DPH competency matrices for CEPH and for concentration specific requirements. Recommendations are then brought to the DPH faculty for discussion, review, and decision. Additions, deletions, and revisions can be introduced by the DPH faculty during the faculty discussion and review. Once approved by the Department, the curriculum changes are reviewed by the University-level graduate council, which is a governing committee of the College of Graduate Studies to ensure that all graduate school requirements are also met. The university curriculum committee reviews and makes a recommendation to the faculty senate for final vote.

c. student assessment policies and processes

The Graduate School has policies related to sufficient grades earned in order to confer a degree, including a minimum GPA of 3.0 and no more than two C’s throughout the graduate program. Complete policies and processes of the Graduate School are outlined in their guidebook. While the Graduate School policies are followed, the Graduate School defers to the Department to make exceptions. This Graduate Student Guidebook can also be found in ERF Criterion A1. The MPH program follows a 10-point grading scale for graded courses (90, 80, 70, 60) and uses A, B, C, D, F grades (no + or -). Course instructors determine the specific student assessments for their respective courses, including at minimum, the learning objectives and competencies required by CEPH.

Outcomes assessment for MPH students is led by the Director of Accreditation and an assessment and accreditation committee has been called upon for development assistance and feedback as needed. Student assessment processes will be made a more regular objective of the Curriculum committee moving forward.

d. admissions policies and/or decisions

The admissions criteria are established by the DPH Admissions & Scholarship committee and brought to the DPH faculty for review, discussion, and approval. This committee works with the Graduate School to ensure policies are in-line with or of higher expectation (e.g., MPH TOEFL score is higher than the Graduate School requires). Admissions decisions are made by the DPH Admissions & Scholarship committee. Two faculty members from the committee review each application that meets basic requirements. Materials evaluated include GPA, TOEFL, if applicable, transcripts, letters of recommendation, and a personal statement. Applicants are scored following a rubric that evaluates academic, public health, research, and leadership experience, which was developed by the DPH Admissions Committee. If there are any areas of concern, the student may be called to interview with the committee faculty members before a decision is made. The final decision is made by the full admissions committee. Admissions criteria can be found on the public health website at: https://www.ndsu.edu/publichealth.degrees_and_programs/admission/

e. faculty recruitment and promotion

The Department Chair must request approval from the Provost in order to initiate any faculty search. Once approved, DPH faculty search committees are created to recruit new/open faculty lines. The search committee includes a faculty member to chair the search, at least two additional faculty, and one student. The search committee determines the minimum and preferred qualifications and drafts a job posting describing the position. A recruitment plan is created that identifies the specific places the job announcement will be posted. Applicants are
reviewed by the DPH search committee using an NDSU rubric that is adapted by the search committee for each specific position’s qualifications and pre-determined interview questions. Feedback is obtained from all DPH faculty, staff, and students that attend the job talk and Q & A or meet with the candidate in some other forum. The DPH search committee deliberates and provides a recommendation to the Department Chair on all faculty candidates from the pool that are deemed acceptable. The Department Chair makes the final decision.

Faculty promotion and tenure guidelines are developed at the University, College, and Department levels. Requirements and supporting documentation for teaching, scholarship, and service are outlined for tenure track and for non-tenure track faculty. Promotion decisions start with review of the faculty member’s portfolio and vote by the department PTE committee. A letter of recommendation, for or against promotion and/or tenure, is submitted. The portfolio is reviewed by the Department Chair, the College PTE committee, and the College Dean, each of which provides a recommendation. The portfolio and letters of recommendation are then submitted to the Provost’s office for review and recommendation. Final decisions are made by the State Board of Higher Education.

f. research and service activities

Decisions regarding faculty research and service (to the community and the profession) activities are made by each individual faculty member in line with their own specialties and interests. Service to the department, college, or university may be voluntary or assigned by the DPH Chair. Faculty research and service cover a wide range of activities but are developed and engaged in as requirements of promotion and tenure. Faculty goals for research and service are set and reviewed annually with the DPH Chair.

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


The policy manual document is also saved in ERF A1.3 Bylaws-Policy documents.

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

NDSU institutional decision-making is guided by faculty governance. There are a wide array of committees and task forces that are responsible for various decisions. The NDSU faculty senate alone has 18 standing committees (e.g., budget, curriculum, faculty affairs). Faculty are elected to these committees, typically by the faculty of their College. The College of Health Professions also has nine standing committees, which are primarily made up of volunteers representing each discipline in the College. Faculty in the Department of Public Health (DPH) are very engaged in the college and across campus in standing committees, serving on important search committees, formal senate roles, and ad hoc special committees.

Select faculty service to the College of Health Professions include:

- Interprofessional education committee member – Stefanie Meyer
- Inclusivity committee member – Ramona Danielson
- Academic Affairs committee member – Andrea Huseth-Zosel
- Scholarship Recognition/Awards committee member – Paul Carson
- Student Affairs and PTE committee member – Rick Jansen
- Faculty Development Committee member – Pamela Jo Johnson
Select examples of DPH faculty services across the University include:
- President’s Council for Campus Well-Being: Executive committee – Mary Larson
- Provost’s committee for graduate enrollment & tuition waiver review – Rick Jansen
- Faculty Senate committee on equity, diversity, and inclusion – Mary Larson
- Faculty Senate committee on Technology and Instructional Services – Stefanie Meyer
- Faculty Senator and Executive Committee member – Andrea Huseth-Zosel
- Graduate Council appointment – Pamela Jo Johnson
- COVID-19 Response Team – Paul Carson
- Vice President for Research and Creative Activity search committee member – Pamela Jo Johnson

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

Full-time and part-time faculty are all invited to regular department meetings and retreats. Retreats are held in August prior to the start of the academic year. Full-time faculty are required, and part-time faculty are invited with attendance being voluntary. Department meetings are held monthly during the academic year. For the part-time faculty who are geographically located in other areas, virtual connection options are available and were used by our department prior to COVID. Retreat minutes and monthly meeting minutes can be found in ERF A1.5 Faculty Interaction folder. Monthly meeting minutes are organized by academic year in the ‘DPH Meeting minutes’ folder of ERF A1.5 Faculty Interaction.

The Department hosts a graduation celebration in December and May (provided we have graduates each term), which faculty attend. The Chair welcomes students and their families, and advisors say a few words to honor their individual graduates. This event has been a great way to interact with colleagues through celebration and not always through task-oriented meetings.

Full-time faculty are also expected to attend the all-college faculty meetings of the College of Health Professions, which occur in the fall and the spring, with special sessions called as needed. Meeting minutes of the college faculty can be found in the ‘College Meeting minutes’ folder of ERF A1.5 Faculty Interaction. Minutes are from 2018-2019 and 2021; no college faculty meetings were held in 2020.

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

Strengths
- Faculty members are service-oriented and involvement on committees in the department, in the college, and across campus is high and public health is well-represented.
- As a smaller department, faculty members are able to interact regularly through overlap on committees, during meetings, and in informal hallway conversations.

Weaknesses
- As a smaller department, faculty members often serve on higher numbers of committees or serve for longer periods of time.

Plans for improvement
- Increasing faculty membership and right-sizing staff support to allow greater distribution of faculty committee assignments, as well as more high-level committee work and day-to-day operations to be supported by staff.
• Development of informal faculty and staff gatherings is underway. These include research meetings to share collaboration opportunities as well as get peer feedback on current projects and coffee with the chair to allow for informal questions and discussion about anything related to the department.

A2. Multi-Partner Programs

Not applicable
A3. Student Engagement

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

1) Describe student participation in policy making and decision making at the program level, including identification of all student members of program committees over the last three years, and student organizations involved in program governance.

Student voice is important in both formal and informal ways. Formally, the MPH program calls for a second-year student to serve on the Curriculum committee. The student representative on this committee serves to provide student perspective and voice to curricular improvements and processes. During the years when the program had a graduate assistant position for recruitment, that public health student also served on the Recruitment committee. The student’s role was to engage in planning and development of materials and lead social media platforms for the MPH program. An external student was hired in 2020 due to no MPH students being available for the position (MPH students were hired as COVID-19 contact tracers). The graduate student position was able to be filled again in 2021 by an MPH student. Other ad hoc committees also call for student involvement, such as the assessment & accreditation committee and the strategic planning work groups that were formed in 2020.

MPH students also organize a formal student organization within the University, the student public health association. This organization is open to student from all fields at NDSU and to undergraduate and graduate students. MPH students are officers and are advised by public health staff or faculty. This student organization is the informal voice for public health students. Student leaders have brought forward ideas and questions about the program to administration. They also lead national public health week events on campus which requires their members to interact with program leadership, faculty, staff, and external stakeholders to plan and execute the activities.

The college also has formal opportunities for student decision making. MPH students have been involved in the Dean’s Liaison committee as well as served as College of Health Professions student ambassadors over the years.

2018-2019
- DPH Chair search committee – Carissa Brownnotter
- Curriculum committee – Natalyn Begay
- College student ambassadors – Evan Kottsick and Janel Hodge
- Recruitment committee – Weston Perkins
- Student public health association:
  - President – Levi Schlosser
  - Vice President – Carissa Brownnotter
  - Secretary – Weston Perkins
  - Adviser – Danni Pinnick

2019-2020
- Assistant Professor faculty search committee – Sargam Ghimire
- Director of Accreditation/Assistant Professor of Practice faculty search committee – Sarah Schwartz
- Curriculum committee – Marlinda Haudley
- Dean’s Liaison committee – Levi Schlosser
- Recruitment committee – Christina Nelson
- Student public health association:
  - President – Christina Nelson
Vice President – Marlinda Haudley
Secretary – Tia Schmitz
Treasurer – Sargam Ghimire
Adviser – Mark Strand

2020-2021
- Assistant/Associate Professor faculty search – Omobosinuola Shyllon
- Curriculum committee – Murphy Anderson
- Assessment and accreditation committee – Doreen Odera
- Student public health association:
  - President – Amelia Metcalf
  - Vice President – Omobosinuola Shyllon
  - Secretary – Madison Marion
  - Treasurer – David Adeyeye
  - Adviser – Mark Strand

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

Strengths
- The student public health association has been established for 10 years
- Student representation is included on many DPH committees and student voice is valued.

Weaknesses
- Public health student representation on college-level committees has not been consistent.

Plans for improvement
- Academic Coordinator/Lecturer will serve as point person to elicit student recommendations for college committees, college service groups, and other opportunities (currently reviewing applications).

A4. Autonomy for Schools of Public Health

Not applicable.

A5. Degree Offerings in Schools of Public Health

Not applicable.
B1. Guiding Statements

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

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

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

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

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

Throughout the 2019-2020 and 2020-2021 academic years (interrupted by COVID), the Department underwent a strategic planning process. It included all faculty in initial discussion groups. The department identified its vision, mission, and values, then developed subgroups to work on individual goals. The full faculty provided input on the final version. It was reviewed and commented on by our College Dean and our MPH Advisory Board. As NDSU was going through its own strategic planning, we ensured that our strategic plan was aligned with that. Our faculty voted and adopted the current plan in spring 2021.

Our collective mission is focused on developing and empowering public health leaders that will advance the field of public health regardless of the professional path they take. As our world is ever changing, the needs for public health are also rapidly changing. Our strategic plan has set us up to be responsive to these changes and to our students’ needs. Advancements in public health will be based on public health science, rigorous research skills, and the ability to develop collaborative relationships. Our instructional, research, and service goals guide us to equip our students with knowledge and skills that are attained inside the classroom and out. We are focused on strengthening our faculty research productivity, which in turn creates rigorous research opportunities for students. We aim to promote the development of collaborative relationships that prepare our students to draw on and value the expertise and skills of others to address the complex challenges facing public health today. We are on a strategic path for enhancing and growing our program so that we can effectively develop and empower the next generation of public health professionals.

Our strategic plan is a road map to lead us forward in growth and sustainability that will increasingly support student success in applied public health and research. We value equity and social justice as a core principal upon which public health is based. We additionally value the development of public health leaders that will represent the field with the utmost professionalism and conduct themselves in a principled manner in everything they do. Fostering student success by equipping our graduates with knowledge and skills that reflect the science of public health, we aim to undergird this with emphasis on evidence that is science-based and is inclusive of cultural and community-based knowledge and practices. The future of public health is increasingly interprofessional, and we value the opportunities to participate and collaborate with cross-sector professions that promote public health and collaborations that are inclusive of community and tribal collaboration in education, research, and practice.

Vision
Healthy people, thriving communities, equitable world
Mission
To develop and empower public health leaders through interprofessional education, practice, and research

Goals
- **Instruction Goal**: The MPH program will develop public health professionals through instruction which equips them with knowledge and skills reflective of public health science.
- **Research Goal**: The MPH program will engage in research that leads to advances in public health.
- **Service Goal**: The MPH program will foster collaborative relationships to provide expertise and skills to address the complex challenges facing public health.
- **Strategic Growth Goal 1**: Establish strategic revenue streams for departmental financial sustainability
- **Strategic Growth Goal 2**: Establish departmental infrastructure to support the department’s mission
- **Strategic Growth Goal 3**: Position the NDSU DPH as a Public Health graduate education program of choice

Values
- **Professionalism & Ethics**: Foster an environment exemplifying honesty, integrity, and collegiality and uphold public health standards of professionalism and ethics
- **Social Justice**: Advance equitable systems that empower diverse individuals and communities through inclusivity and advocacy to achieve optimal health and well-being
- **Evidence-Informed Public Health**: Develop and use evidence to advance public health programs and policies that are inclusive of cultural and community-based knowledge and practices
- **Collaborative Approach**: Advance the field of public health through interprofessional, cross-sector, community, and tribal collaboration in education, research, and practice

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

The department developed a strategic plan over the years 2019-2020 and approved the plan in the spring of 2021. This plan can be found online as well as in the ERF B1.2 DPH Strategic Plan 2021.

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

**Strengths**
- Creation of the strategic plan was an inclusive, iterative process that built upon current mission, goals, and values.
- The revision of these items and the development of a vision statement have helped to provide more clear purpose and direction of the MPH program.
- The strategic plan is aligned with the University strategic plan.

**Weaknesses**
- None identified
B2. Graduation Rates

The program collects and analyzes graduation rate data for each degree offered (eg, BS, MPH, MS, PhD, DrPH).

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

1) Graduation rate data for each degree in unit of accreditation.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-16</td>
<td># Students entered</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td># Students withdrew, dropped, etc.</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td># Students graduated</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cumulative graduation rate</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016-17</td>
<td># Students continuing at beginning of this school year (or # entering for newest cohort)</td>
<td>24 23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td># Students withdrew, dropped, etc.</td>
<td>0 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td># Students graduated</td>
<td>14 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cumulative graduation rate</td>
<td>58% -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td># Students continuing at beginning of this school year (or # entering for newest cohort)</td>
<td># Students withdrew, dropped, etc.</td>
<td># Students graduated</td>
<td>Cumulative graduation rate</td>
<td></td>
<td></td>
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<tr>
<td>2017-18</td>
<td>10</td>
<td>0</td>
<td>7</td>
<td>88%</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>26%</td>
<td></td>
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<td></td>
<td></td>
<td>-</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>2018-19</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>92%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>4</td>
<td>61%</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td>8</td>
<td>0</td>
<td>35%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2019-20</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>92%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>0</td>
<td>61%</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>13</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24
### Graduation Data for MPH Program

<table>
<thead>
<tr>
<th>Year</th>
<th># Students continuing at beginning of this school year (or # entering for newest cohort)</th>
<th># Students withdrew, dropped, etc.</th>
<th># Students graduated</th>
<th>Cumulative graduation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020-21</td>
<td>1 1 5 6 21 23</td>
<td>0 0 0 1 2 2</td>
<td>0 0 3 2 8 0</td>
<td>96% 83% 65% 57% -</td>
</tr>
<tr>
<td>2021-22</td>
<td>1 1 2 3 11 21 27</td>
<td>0 0 1 1 0</td>
<td>3</td>
<td>96% 83% 82% 68% 36% -</td>
</tr>
</tbody>
</table>

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

   Not applicable

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

   Graduation data for the MPH program has met or is trending to meet the required 70% graduation rate. In fact, our rates have been above the 80% mark. Program administration, faculty advisors, and the Graduate School support staff are key in the success of our graduation rates as they form relationships with students and provide the necessary supports along the way which sometimes
include students taking a leave of absence or extending their program plan from full-time to part-time to allow for successful completion of their MPH.

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

**Strengths**
- MPH graduation rates exceed the minimum requirement.
- Program administration, faculty, and staff support the admission of quality students and engage with students along their way through the program.
- Very few students withdraw or drop-out, indicating the high quality and good fit of our admitted students.

**Weakness**
- None identified.
B3. Post-Graduation Outcomes

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

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

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

<table>
<thead>
<tr>
<th>Post-Graduation Outcomes</th>
<th>2019 Number and percentage</th>
<th>2020 Number and percentage</th>
<th>2021 Number and percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>11 (79%)</td>
<td>14 (93%)</td>
<td>23 (80%)</td>
</tr>
<tr>
<td>Continuing education/training (not employed)</td>
<td>1 (7%)</td>
<td>1 (7%)</td>
<td>3 (11%)</td>
</tr>
<tr>
<td>Not seeking employment or not seeking additional education by choice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actively seeking employment or enrollment in further education</td>
<td>1 (7%)</td>
<td>1 (3%)</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>1 (7%)</td>
<td>1 (3%)</td>
<td></td>
</tr>
<tr>
<td>Total graduates (known + unknown)</td>
<td>14 (100%)</td>
<td>15 (100%)</td>
<td>29 (100%)</td>
</tr>
</tbody>
</table>

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

The MPH program is meeting post-graduation expectations of 80% or more graduates being employed or enrolled in further education. The program faculty and administration have strategic connections with public health, healthcare, and non-profit organizations, which have built trusting relationships between the quality of MPH graduates from our program and their ability to meet the hiring needs of the organization.

The NDSU Career and Advising Center conducts an annual career outcomes survey for the University. Two years ago, public health began embedding the university survey link into the MPH student survey for post-competency outcomes. This connection has helped the University survey to get in front of more students before they graduate and reduce students’ time investment in completing surveys. We are unsure of response rates to the university survey but the data from those who did respond can be found in the 2019 and 2020 career outcome reports found in ERF B3.

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

**Strengths:**
- Program administration and faculty create strong, professional relationships with MPH students during their time in the program. Because faculty invest in knowing the students’ abilities and have strong relationships with potential employers, students are able to secure jobs or continuing education.
- The program is able to track the majority of graduates’ current status through continuing relationships rather than solely relying on impersonal career placement surveys.
Weaknesses
- None identified.
B4. Alumni Perceptions of Curricular Effectiveness

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

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

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

In the summers of 2019 and 2021, the program conducted an alumni survey of graduates. In 2019, all alumni to-date were surveyed as we had met a critical mass number to assess. In 2021, graduates from fall 2019-summer 2021 were included and the schedule will be to assess alumni every two years moving forward. The 2021 assessment included graduates that would have most likely completed the MPH program using CEPH’s updated competencies. A Likert-type item with response options of 1=not at all competent to 5=competent was used for all assessments.

Results of alumni perceptions of foundational competency attainment are listed in table format. Numbers correspond to foundational competencies:
https://www.ndsu.edu/publichealth/about/mph_competencies/

<table>
<thead>
<tr>
<th>Foundational Competency</th>
<th>Alumni (summer ‘19-summer ‘21) N=16</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>3.94</td>
</tr>
<tr>
<td>2.</td>
<td>4.19</td>
</tr>
<tr>
<td>3.</td>
<td>3.50</td>
</tr>
<tr>
<td>4.</td>
<td>4.00</td>
</tr>
<tr>
<td>5.</td>
<td>3.81</td>
</tr>
<tr>
<td>6.</td>
<td>4.50</td>
</tr>
<tr>
<td>7.</td>
<td>4.50</td>
</tr>
<tr>
<td>8.</td>
<td>4.50</td>
</tr>
<tr>
<td>9.</td>
<td>3.94</td>
</tr>
<tr>
<td>10.</td>
<td>3.13</td>
</tr>
<tr>
<td>11.</td>
<td>3.75</td>
</tr>
<tr>
<td>12.</td>
<td>3.81</td>
</tr>
<tr>
<td>13.</td>
<td>4.13</td>
</tr>
<tr>
<td>14.</td>
<td>4.06</td>
</tr>
<tr>
<td>15.</td>
<td>3.88</td>
</tr>
<tr>
<td>16.</td>
<td>4.13</td>
</tr>
<tr>
<td>17.</td>
<td>3.69</td>
</tr>
<tr>
<td>18.</td>
<td>4.31</td>
</tr>
<tr>
<td>19.</td>
<td>4.63</td>
</tr>
<tr>
<td>20.</td>
<td>4.56</td>
</tr>
<tr>
<td>21.</td>
<td>4.75</td>
</tr>
<tr>
<td>22.</td>
<td>4.56</td>
</tr>
</tbody>
</table>

Post-graduation competence in the 22 foundational competencies showed that graduates self-identified as most competent in #6-8 and #19-22. Competencies #3 and #10 had the lowest scores.
Because our MPH program has structured the practicum to reinforce competencies related to student education and career goals, feedback as to how the practicum helped them prepare is important to assess. Select qualitative responses from alumni as to how the practicum helped prepare them for the workforce include:

2019
- “Helped me understand research, data collection, analysis, and cultural competence.”
- “It exposed me to surveillance methods essential to tracking and studying disease at a population level.”
- “It provided an opportunity to use real world public health skills in the workforce and improved my ability to work in multidisciplinary team.”

2021
- “I now work at the public health consulting company that I conducted my practicum at. My practicum experience exposed me to consulting as a job option that I aimed for upon completion of my MPH.”
- “My practicum provided me with real world experience where I was able to apply what I learned in the classroom to real life. I completed my practicum at Sanford in their Quality Improvement department which is where I am currently employed.”
- “Was able to do a real evaluation for a project and shadowed a seasoned evaluator to conduct both qualitative and quantitative analysis.”

Perceptions of competency attainment in the concentration areas were also gathered. Findings from 2021 for Community Health Sciences showed high perceived competence for #1, 3-5 at greater than 4 out of 5. Competency #2 was rated at 3.86 which was the lowest score. The Management of Infectious Diseases concentration was recently revised into a subplan and the Epidemiology concentration was developed. Competency responses for both Management of Infectious Diseases and Epidemiology were collected to account for this change. Results showed high competence across both areas being in the high 4 range out of 5.

Observations, anecdotes, and stories of MPH graduate competence are also important to note. Many of our graduates are being called to provide expert legislative testimony, serve on state boards, and recruited to lead healthcare system divisions. Our graduates are being sought out for high-profile and influential public health positions due to their competence in effective public health communication, cultural approaches, and systems leadership.

Topics that graduates were not exposed to during the MPH but that were perceived as areas that would have been useful in the workforce were identified in the 2019 assessment. Top responses from graduates included: Budget and financial management, working with legislative bodies, and grant writing. Topic areas of highest perceived need in 2021 included: program planning and evaluation, professionalism, developing cross-sector partners, and the quality improvement process.

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

Qualtrics was used to create the alumni survey and the tool asked questions about self-assessment of competence across all competency areas, foundation and concentration. In addition, the survey asked for feedback related to how the program helped them meet their goals and open-ended questions related to how the program could improve and what the program is doing well. Content areas that graduates were not exposed to during the MPH but that were perceived as areas that would have been useful in the workforce were also identified. The survey was sent via email by the DPH Director of Accreditation to the email addresses students provided as the best address to use post-MPH graduation. Responses were collected anonymously. Response rate in 2019 was 72.5% (58/80). Response rate in 2021 was 49% (16/33).
The MPH alumni surveys from 2019 and 2021 can be found in ERF B4.2 Data collection methodology. Files included are: Alumni Survey Results 2019, Alumni survey raw data spring 2019, MPH Alumni Survey Summer 19-Summer 21 graduates, Alumni survey results August 2021, and raw Alumni survey raw data results 2021.

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

Strengths:
- The program has an effective process and methods to gather relevant feedback from MPH alumni on their perception of ability to apply what they learned.
- Responses from alumni provide important feedback on the areas that are covered well and the competency areas that are perceived to be not as strong when needed to be applied in the workforce.

Weaknesses
- None identified.
B5. Defining Evaluation Practices

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

1) Present an evaluation plan that, at a minimum, lists the program’s evaluation measures, methods and parties responsible for review.

<table>
<thead>
<tr>
<th>Evaluation measures</th>
<th>Identify data source(s) and describe how raw data are analyzed and presented for decision making</th>
<th>Responsibility for review</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Instruction Goal: The MPH program will develop public health professionals through instruction which equips them with knowledge and skills reflective of public health science.</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Evaluation Measure 1a. Deliver courses/content that are responsive to current needs of public health**
- Develop new high-interest/high-demand courses with input from stakeholder survey, advisory board, alumni survey.
- Curriculum Committee; Director of Accreditation

**Evaluation Measure 1b. Curriculum mapping to ensure coverage and even distribution of all competencies**
- Course reviews on a 3-year rotation; Foundation Y1, specialization Y2, electives Y3.
- Curriculum Committee; Director of Accreditation

**Evaluation Measure 1c. Ensure the program is informed by current and former students**
- Director of Accreditation administers student assessments and alumni survey.
- Full faculty annual review

**Evaluation Measure 1d. Expand public health academic options across interdisciplinary specialty areas (e.g. engineering, psychology, business)**
- Director of Accreditation will pull institutional data reports for # certificates awarded, # of accelerated students graduated, # of dual students graduated, # students graduated with minor.
- Full faculty annual review

**Evaluation Measure 1e. Examine innovative ways to deliver content (e.g. Coursera; GPIDea; ND Train; asynchronous online offerings,)**
- Analysis of time of day, synchronous & asynchronous, summer, suspend or switch to every other year for ones with low attendance. Explore alternative time and course delivery format options. Explore/develop service learning experiences.
- Curriculum Committee; Full faculty review

**Evaluation Measure 1f. Explore Plan A Thesis and Plan B Paper Options as curricular options**
- Review current models in other programs at NDSU/other MPH programs.
- Curriculum Committee; Director of Accreditation
<table>
<thead>
<tr>
<th>Evaluation measures</th>
<th>Identify data source(s) and describe how raw data are analyzed and presented for decision making</th>
<th>Responsibility for review</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Research Goal: The MPH program will engage in research that leads to advances in public health.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation Measure 2a. Create a reporting system for collecting department data on public health research and scholarship.</td>
<td>Annual reviews</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Evaluation Measure 2b. Disseminate public health research findings</td>
<td>Submission of 2 peer-reviewed manuscripts, 2 national/regional presentations to professional organizations per faculty member; collected through annual reports</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Evaluation Measure 2c. Deliver high impact research and scholarship publications and presentations</td>
<td>Baseline: 5 peer-reviewed publications in journals with impact factor &gt;2 (baseline) as aggregate for the department; annual increase in faculty member H-index/ResearchGate scores - collected through annual reports</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Evaluation Measure 2d. Students participate in public health research activities</td>
<td>Five faculty manuscripts submitted to include student authors annually (aggregate for DPH). Three funded student Research Assistants (RAs). 50% of active students are engaged in public health research activities. Collected through OneNote tool</td>
<td>Director of Accreditation</td>
</tr>
<tr>
<td><strong>3. Service Goal: The MPH program will foster collaborative relationships to provide expertise and skills to address the complex challenges facing public health.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation Measure 3a. Develop a department anti-racism action plan (ARAP)</td>
<td>Department committee administers self-assessments on race and inclusivity and uses aggregate results to move action items forward (topics, trainings, etc.). Work with other departments and committees on campus that serve underrepresented/priority groups.</td>
<td>Committee Chair; DPH faculty and staff</td>
</tr>
<tr>
<td>Evaluation Measure 3b. Department service is focused around priority populations defined through the anti-racism action plan.</td>
<td># of grants/projects, # of engaged partners (agencies, communities, NDSU departments) - collected through annual reporting</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Evaluation measures</td>
<td>Identify data source(s) and describe how raw data are analyzed and presented for decision making</td>
<td>Responsibility for review</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>3. Service Goal: The MPH program will foster collaborative relationships to provide expertise and skills to address the complex challenges facing public health.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation Measure 3c. Gather department faculty, staff, and student service projects and actions</strong></td>
<td>Faculty/staff annual reports and OneNote student reporting tool</td>
<td>Director of Accreditation; Department Chair</td>
</tr>
<tr>
<td><strong>Evaluation Measure 3d. Improve public health practice and outcomes</strong></td>
<td># community-engaged projects/grants, # reports, # presentations/seminars at regional, state and tribal levels, # and locations of seminar registrants - collected through annual reviews Determine ways to measure impact on our regional, state and tribal communities. Engage alumni to serve as practicum preceptors</td>
<td>Director of Accreditation; Department Chair; MPH Advisory Board</td>
</tr>
<tr>
<td>4. Strategic Growth Goal 1: Establish strategic revenue streams for departmental financial sustainability</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation Measure 4a. Prepare faculty and staff to secure moderate-large research grants.</strong></td>
<td>75% of faculty will attend Federal grant writing workshop annually; # research/scholarship professional development activities attended Faculty/staff will develop research agendas to include: Pilot studies (small grants, pilot funding, or as part of appropriated % research); Publications to support targeted areas of federal funding proposal; Mentorship and collaborations with successful federal grantees on campus</td>
<td>Department Chair</td>
</tr>
<tr>
<td><strong>Evaluation Measure 4b. External research grant funding exceeds department benchmark (X)</strong></td>
<td>NDSU Peoplesoft Finance &amp; Novelution grants/contracts reporting systems: # proposals submitted, # of grants awarded, $$ of grants awarded, XX increase in DPH indirect/local funds; Use ASPPH data to establish benchmark: achieve $$ per capita comparable to peer institutions Faculty will submit 2 grants/yr unless already active on a grant. Aim for XX% of salary funded by external research $$. Grant type and dollars submitted and awarded reviewed during Annual review. Grants include funds to hire graduate students</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Evaluation measures</td>
<td>Identify data source(s) and describe how raw data are analyzed and presented for decision making</td>
<td>Responsibility for review</td>
</tr>
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<tr>
<td><strong>4. Strategic Growth Goal 1: Establish strategic revenue streams for departmental financial sustainability</strong></td>
<td></td>
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<tr>
<td>Evaluation Measure 4c. Formalize relationships with contracting entities and community-based grant-funded programs to build a sustainable contract-work base</td>
<td># Contracts with tribal nations, health departments, other public health entities; $ from contracts Establish relationships and identify challenges they are facing and how we can be part of solution # of community-based grants</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Evaluation Measure 4d. Tuition generation through increased enrollment</td>
<td>SOPHAS: # applicants, quality of applicants scored by admissions committee, #/% applicants offers, #/% applicants accept, #/% matriculants; # of certificate to MPH conversions Tuition-sharing agreements/programs for dual degree; # faculty and staff recruitment events; conferences Explore DPH recruitment resources Increased GA funding $$ for recruitment tool # faculty and staff recruitment events; conferences</td>
<td>Admissions Committee; Recruitment Committee</td>
</tr>
<tr>
<td>Evaluation Measure 4e. Increase appropriated funds to the department</td>
<td>appropriated $$ received annually Monitor legislation for public health comment. Reports to legislature (e.g., annual reports, research projects). Identify opportunities to get in front of legislators (e.g., host legislative committee). Public Health day at Capitol (e.g., faculty/staff/students attend, posters in the great hall). Establish relationships with legislators</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Evaluation Measure 4f. Develop fundraising plans/initiatives to increase DPH gifts by X%</td>
<td>$$ in DPH donor funding account; # new donor relationships; # new gifts Work with CHP development office to develop fundraising plan; Advisory board develop and lead giving events (e.g., giving day, homecoming, scholarships) Engage alumni in fundraising initiatives</td>
<td>Department Chair; Advisory Board</td>
</tr>
<tr>
<td><strong>5. Strategic Growth Goal 2: Establish departmental infrastructure to support the department’s mission</strong></td>
<td></td>
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<tr>
<td>Evaluation Measure 5a. Establish office culture that utilizes University and department policies and procedures.</td>
<td>grant proposals submitted following procedures; student academic procedures followed Annual review of department policy and procedure manuals Annual review of student handbook/advising expectations</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Evaluation measures</td>
<td>Identify data source(s) and describe how raw data are analyzed and presented for decision making</td>
<td>Responsibility for review</td>
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<tr>
<td><strong>5. Strategic Growth Goal 2: Establish departmental infrastructure to support the department’s mission</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation Measure 5b. Support student enrollment with sufficient departmental human resources</strong></td>
<td>Hire administrative support, academic coordinator. Use MPH staff (eventually also PhD students) to teach undergrad students to free faculty to teach new grad courses</td>
<td>Department Chair</td>
</tr>
<tr>
<td><strong>Evaluation Measure 5c. Provide funding to MPH students</strong></td>
<td>% of MPH students funded with an assistantship; % of MPH students funded with scholarships or fellowships. Increase sources for student funding. Increase GA funding $$ to cover differential tuition costs in addition to base waiver. Develop funded practicum opportunities.</td>
<td>Faculty; Department Chair</td>
</tr>
<tr>
<td><strong>6. Strategic Growth Goal 3: Position the NDSU DPH as a Public Health graduate education program of choice</strong></td>
<td></td>
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<tr>
<td><strong>Evaluation Measure 6a. Build capacity in high-demand education &amp; research areas</strong></td>
<td># faculty/staff with knowledge/experience in high demand areas, # faculty/staff in infectious disease, # faculty/staff in epidemiologic methods, # faculty/staff in MCH; # electives in key content areas (e.g., health equity, OneHealth, chronic disease). # of core summer course offerings; # of successful elective courses; # of North Dakota working public health professionals enrolling in our courses.</td>
<td>Curriculum Committee</td>
</tr>
<tr>
<td><strong>Evaluation Measure 6b. Develop and implement a PhD program in epidemiology</strong></td>
<td># full-time, primary faculty in epidemiology specialization. Develop business case for PhD program; draft stage I proposal; hire additional faculty to meet/exceed CEPH requirements for PhD program in epidemiology.</td>
<td>Curriculum Committee</td>
</tr>
<tr>
<td><strong>Evaluation Measure 6c. Attract top talent faculty and staff</strong></td>
<td>X new positions approved and posted; X% of new faculty positions filled; X% of new positions filled with faculty who have established research programs (e.g., existing or recent federal grant funding); X% of new positions filled with staff having 5 or more years of experience. Obtain adequate funding to increase recruitment options for faculty positions.</td>
<td>Department Chair; Faculty search committees</td>
</tr>
<tr>
<td><strong>Evaluation Measure 6d. Increase diversity of faculty and staff from priority populations</strong></td>
<td>X% of faculty that identify as xxx; X% of staff that identify as underrepresented minority; (e.g. Al/AN, women, BIPOC). Diversify advertising strategies for new position postings to have additional focus toward resources for underrepresented minority faculty/staff. Utilize ASPPH resources to build department capacity. Engage alumni to promote job opportunities.</td>
<td>Faculty; Director of Accreditation</td>
</tr>
</tbody>
</table>
Evaluation measures | Identify data source(s) and describe how raw data are analyzed and presented for decision making | Responsibility for review
--- | --- | ---
6. Strategic Growth Goal 3: Position the NDSU DPH as a Public Health graduate education program of choice | **Evaluation Measure 6e. Enhance visibility through increased public attention to productivity and activity** | CHP Communications Coordinator; Recruitment Committee
# Press releases, # social media followers, # social media engagements, # hits on website Increase use of DHP communications for national, regional, state and tribal reach Develop dynamic social media engagement plan with daily content Develop dynamic DPH website with new content weekly Engage alumni to enhance DPH visibility Engage alumni to promote job opportunities

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

Evaluation measures are identified for instruction, scholarship/research, and service. The instruction measures focus on curricular content and approaches that are responsive to public health. These include being informed by stakeholders and assessing the need for service learning and types of capstone or culminating project options. As a growing program, these instructional measures help track the need for curriculum growth in both content and method of delivery to ensure graduates are prepared for the public health workforce.

Measures identified for research were developed to help increase the quality and quantity of scholarship from the MPH program. By identifying research scores (e.g. H-index) for faculty, we will be able to better assess the scholarship contribution of our faculty to the field of public health. In addition, inclusion of students in research has been identified as an important metric to our scholarship approach. By systematically including students in research opportunities, our program will advance the field by graduating students who both appreciate the value and can practically contribute to public health research in the workforce.

Service measures identified have stretched our department to think more about how to effectively measure service projects and community engagement. Evaluation methods for the service component are still being refined. Alumni engagement through surveys and the organized use of the Advisory Board have been utilized most effectively to-date to gather feedback on current public health practice. The collection of student, faculty, and staff service engagements is a process under-development. The creation of a OneNote tool to systematically collect service, research, and other goals and interests of MPH students is a major step toward gathering baseline data on public health service reach.

The three strategic growth goals were developed to guide the DPH into a diversified financial position, efficient infrastructure, and holding national recognition as a public health program of choice. For revenue streams, our evaluation methods and measures include all the various revenue sources in our control with plans to increase funding across all areas. The infrastructure methods and measures include immediate needs such as support staff, as well as inclusion of support for graduate students. The third strategic growth area as being a graduate public health program of choice has methods and measures to guide the visibility of the program as well as ensure relevant public health academic content is included.
3) Provide evidence of implementation of the plan described in Template B5-1. Evidence may include reports or data summaries prepared for review, minutes of meetings at which results were discussed, etc. Evidence must document examination of progress and impact on both public health as a field and student success.

Evidence of plan implementation can be found in ERF B5.3 Evidence for evaluation plan folder. Specific evidence includes:
- Measure 1a. – MCH academic DoH collaboration
- Measure 1b. – MPH curriculum mapping final 2021 spreadsheet
- Measure 1c. – Alumni survey results 2019 and Alumni survey results August 2021
- Measure 1d. – Public health program review data 2021-22
- Measure 2b. – MPH faculty article, presentations, grants table
- Measure 4f. – NDSU DPH Advisory Board minutes

Areas that are in progress include:
- Measure 2d. – Fall 2021 graduate research assistants
- Measure 3a. – Anti-racism committee meeting minutes
- Measure 3c. – OneNote student examples
- Measure 4c. – Community and Tribal contracts
- Measure 4d. – Recruitment committee meeting minutes
- Measure 5a. – DPH Procedure Manual
- Measure 5b. – Program Assistant and Academic Coordinator/Lecture position descriptions
- Measure 6c. – Epi faculty and Professor of Practice position descriptions
- Measure 6e. – Facebook data and DPH website views. 1913 Facebook page followers and 234 Linkedin followers.

Areas that are in development include:
- Measure 1e.
- Measure 1f.
- Measure 2a.
- Measure 2c.
- Measure 3b.
- Measure 3d.
- Measure 4a.
- Measure 4b.
- Measure 4e.
- Measure 5c.
- Measure 6a.
- Measure 6b.
- Measure 6d.

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

**Strengths**
- The evaluation plan is well-developed and tracks the program's progress in advancing the field of public health in all three areas of instruction, research, and service and in promoting student success.
- Measurable outcomes are built in and responsible groups are identified.

**Weaknesses**
- The evaluation plan was finalized Spring 2021 and so not all measures have been fully implemented in such a way as to gather complete information.
Plans for improvement

- Implementation of a revised annual faculty report beginning with calendar year 2022 to ensure we are regularly gathering and assessing outcomes data as well as revising measures as needed based on annual evaluations.
- Finalize implementation of evaluation measures and development of systematic methods to assess and collect data.
B6. Use of Evaluation Data

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

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

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

The accreditation criteria went through a major change just as our MPH program was receiving initial accredited status in 2016, the evaluation methods went through changes as well to align with updated criteria. The following examples of programmatic changes were based on on-going evaluations from students, graduates, and the regional workforce.

From both workforce/stakeholder feedback in 2018 and alumni feedback from 2019, gaps were identified in budget and financial management skills and working with legislative bodies. To address these gaps, as well as the new foundational competencies that had been developed, MPH faculty engaged in numerous exercises to competency map. Specific programmatic changes that were undertaken included:

- Change of course name, objectives, and content from "Leading and Managing Public Health Systems" to “Public Health Management and Policy”
- Re-alignment of competency coverage by moving competency 10 (budget management) from the course PH 704 Public Health Management and Policy to the course PH 745 Community Health Leadership

With the hiring of a new Department Chair in 2019, her evaluation of the MPH curriculum also led to review of curricular offerings. From her external assessment of current curriculum offerings, the competency mapping exercises that were taking place, and alumni feedback on competency attainment from 2019, it was found that students were weak in research methods. Additionally, the new Chair had informal discussions with numerous students in the infectious disease specialization about their career goals. She learned from most of them that they were interested in research and data skills, and many had goals of working in epidemiology. She also had conversations with several employees in the ND DoH about data methods skills needs. Epidemiologic and methodologic skills were identified repeatedly. Specific programmatic changes that were undertaken to address this gap included:

- Development of PH 712 Public Health Research Methods as a required course for all MPH students to specifically address competency 3 related to methods.
- Management of Infectious Diseases and Food Safety faculty explored a new concentration encompassing both topics. Development of a concentration in Epidemiology was a response to both student demand and workforce demand.

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

**Strengths**

- Ongoing assessment of students, alumni, and stakeholders has provided invaluable evaluation feedback on the MPH curriculum and graduates’ ability to engage in and enhance the public health workforce.

**Weaknesses**

- Minimal structure for formal evaluation up until the formation of the strategic plan.
Plans for improvement

• Implementation of the new DPH strategic plan with additional evaluation metrics.
C1. Fiscal Resources

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

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

a) Briefly describe how the program pays for faculty salaries. If this varies by individual or appointment type, indicate this and provide examples. If faculty salaries are paid by an entity other than the program (such as a department or college), explain.

Faculty salaries in the Department of Public Health are paid from several sources of funds including state appropriations, differential tuition, grants/contracts, gifts, and Sanford Health appointment contracts. Allocations are adjusted based on faculty having external grants and contracts.

The DPH had three shared faculty appointments; two in the Department of Nursing and one in the Department of Pharmacy Practice. Both disciplines are within the College of Health Professions. The portion of those faculty salaries that are charged to DPH are primarily on state appropriations, one is a mix of state appropriations and tuition, and grants/contracts when applicable. As of FY22, DPH has one shared faculty appointment with the Department of Pharmacy Practice in the College of Health Professions. This faculty salary is charged to DPH on state appropriations and grants/contracts when applicable.

One Public Health faculty member previously had a shared appointment with Sanford Health for 50% of his salary, in FY18 this was renegotiated to 25% Sanford and 75% NDSU; 50% of that being tuition and state appropriation, the other 25% being grants/contracts, primarily with the ND Department of Health. In FY21, this shared appointment with Sanford Health ended and the faculty member is 100% NDSU DPH funded, the additional funds are carried by tuition and grants/contracts. The Department Chair, hired in FY20 with their credentials has a variable amount offset of their salary gifted through the Mary J. Berg Distinguished Professorship in Women’s Health.

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

The need for hires is determined through the Department Chair, who works with the College Business Manager and Dean to determine the Department needs and financial availability. A request to hire, with justification, is submitted by the College, on behalf of the Chair, to the Provost office who makes the final determination. The Provost decides whether the faculty and/or staff line will be approved and if the proposed source of funding is acceptable.

Additional faculty lines may be requested from the legislature that would be funded by state appropriated funds. Through the Chair’s appointment to a Governor’s Task Force, a request was put forward for two additional faculty lines. The lines were approved by the legislature pending the development of some matching funds. Non-tenure track faculty may be hired fully on grants and contracts and retained based on continuing availability of funds. The department previously had a Research Assistant Professor that was fully grant and contract funded, primarily by contracts from the CDC and HRSA. An increase in the differential tuition rate can also be requested for additional funding that may partially support faculty contingent on approval from the university and the State Board of Higher Education.
Research staff are hired by grant-funding as needed for specific grant or contract activities. These are requested by the faculty member who has the grant-funding available. Program or department staff are requested with justification by the Chair through consultation with the College Business Manager and the Dean.

c) Describe how the program funds the following:

a. operational costs (programs define “operational” in their own contexts; definition must be included in response)

Operational costs in the DPH are anything other than personnel salaries and associated fringe benefits. Operating costs were previously offset with tuition remission and are now by tuition and indirect funds based on the type of cost. Tuition Remission was a program NDSU Grants and Contracts had for grants that covered full tuition, base and differential tuition, for students. NDSU reallocated about 70% of those funds back to the department the following fiscal year to be used in that fiscal year or they were swept. This source of funds ended in FY20 with the last of the grants in the tuition remission program. Grant specific operating costs are charged to grants directly as allowed by the funding source, other operating costs are covered through the indirects of the grant (i.e., telecommunications, general copy/print). The NDSU Alumni Foundation in cooperation with the College of Health Professions is involved in all aspects of development and fundraising that can be used for events and other support as requested and approved.

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

All student support that is not covered by graduate assistantships is funded through Department indirect funds based on availability. Students have access to travel support during their academic career in DPH, up to $2,000, based upon availability of funds. Fundraising dollars and gifts are also available for student support, conference registrations, travel, and student activities (e.g., National Public Health Week). The Student Public Health Association conducts its own fundraising campaigns but can request department support, which comes from indirect funds as well. Eight scholarships for public health students are awarded each year. These are funded by donor gifts that establish named scholarships that meet the donor’s specified criteria.

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

Faculty are returned a portion of the indirect cost recovery that comes from external grants and contracts. These funds are used for faculty development, individual supplies, registrations, dues, and travel. Faculty can request professional development funds from the Department that are supported by indirect funds as available. DPH has a travel fund request for faculty to apply for if they do not have grants/contracts with travel support or do not have their own indirect fund sources to use. It is based on the availability of funds, up to $2,000 per fiscal year.

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

If the program needs additional funds for operations, it would use its portion of the indirect funds, work to increase research dollars or seek University driven funding opportunities (i.e., Office of Research and Creative Activity Research Development Travel and Conference Support Awards or Graduate Student Recruitment Awards). The department can make a request for additional appropriated dollars through the North Dakota University System and legislative action. The program can also request an increase in differential tuition, but have not used this approach. The department is currently establishing a fundraising development
plan through the NDSU foundation and our Advisory Board. Any funds raised can be used for student support and faculty development expenses.

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

The MPH program follows a tuition model that has a base tuition and a differential tuition cost to the student. The base tuition is the cost of graduate school credits at NDSU. Differential tuition is an additional tuition cost per credit specifically for Public Health students. The base tuition is kept within Central Administration. Differential tuition is returned to the MPH program. The differential tuition rate represents 55% of the total tuition charged. The tuition rates for students vary based on their location: In-state/Western Regional Graduate Program (WRGP) states, MN residency, US non-resident Midwest Student Exchange Program (MSEP) states, Out-of-state, and International. WRPG and MSEP are tuition agreement/reciprocity programs. Tuition funds serve as the source for all operating and administration needs of the program. These dollars also contribute to salaries and fringe benefits of faculty and staff that are remaining after appropriation dollars are applied.

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

The allocation of indirect funds is dispersed annually in August from the College for the previous fiscal year. The indirect funds from grants and contracts are allocated as follows: 42% to the Office of the NDSU President, 16% are allocated to the Office of the Vice President for Research and Creative Activity, and 42% are allocated to the generating colleges or units. Of the portion returned to the college, 85% is returned to the Department of Public Health. Allocation exceptions must be approved by the President. The policy regarding indirects can be found at: https://www.ndsu.edu/fileadmin/policy/813.pdf.

The DPH disperses indirect funds received from grants and contracts to faculty in their individual local fund as they are received by the Department in a 60/40 split. The Department will retain 40% for operational expenses. Sixty percent of indirect funds received by the Department will be divided among the personnel listed on the submitted NDSU proposal otherwise known as “departmental investigators.” Funds will be allocated between departmental investigators based on percent of effort (FTE) outlined in the budget proposal for the grant or contract. Only those personnel listed on the proposal as investigators will receive an allocation to their local fund. Indirect funds for the American Indian Public Health Resource (AIPHRC) Center staff listed as departmental investigators on their proposals go into a fund once they reach the Department level specific for the AIPHRC to use at 100% for sustainability; the DPH does not retain any of their funds.

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

Not applicable
2) A clearly formulated program budget statement in the format of Template C1-1, showing sources of all available funds and expenditures by major categories, for the last five years.

DPH/MPH is supported through three primary mechanisms: (1) state appropriated dollars are used to cover costs of salaries and benefits for varying faculty and staff, (2) program tuition differential monies cover facility and administration costs, salaries of faculty and staff, and the operating budget of the program, (3) indirect funds from grants provide some support for faculty and staff, facility, and administration costs for supported grants and for student travel opportunities. These three sources are coordinated through Central Administration and the Business Manager of the College of Health Professions and managed in day-to-day operations by the Research and Finance Manager of the DPH.

- **Tuition & Fees:** Tuition and fees are a projected amount for the year as the academic and fiscal year are not congruent. It is adjusted after the fall semester and reviewed periodically by Central Administration. At the end of the fiscal year, Central Administration then adjusts for the actual tuition revenue and puts the difference into the following fiscal year. For the completed fiscal years of MPH tuition the revenue/deficit adjustments which are added into the correlating FY’s in Tuition & Fees on C1-1 are as follows:
  - FY17 = ($14,582.37) into FY18; Decrease in spring and fall is due to change in residency rates charged. There is a new WRGP tuition group which dropped the tuition rates for a few students
  - FY18 = $9,353.60 into FY19; Increase is primarily due to tuition paid by international students. In prior years, international MPH students were billed at the same rate
  - FY19 = $748.41 into FY20
  - FY20 = ($35,649.00) into FY21; Decrease because of decrease in enrollment, partially due to the pandemic, students having to take a leave of absence, and the varying rates of students’ tuition based on residency.

- **State Appropriation & University Funds:** In FY19, the Provost allocated $67,800 for MPH faculty support.

- **Grants/Contracts:** Grant and contract revenue is reflective of the amount of grant dollars received by issued date, and not of the start and end date. The revenues account for the total amounts that are to be used over the life of the grant, which is usually beyond the FY in which it is received. The grant and contract expenses may include expenses from grant and contract revenue not accounted for in the current FY. The grant and contract expenses include: Faculty & Staff Salary Offsets, Grant-funded Staff, Graduate Assistantships, Tuition Waivers, Travel, Operational Supplies, and Facilities and Administration Costs.
1 Fiscal year runs from July 1 to June 30.
2 Fringe benefits are covered by Central Administration state funds. The State appropriation funds for FY16-FY21 include the Fringe Benefits covered by Central Administration.
3 Dr. Warne was the Mary J. Berg Distinguished Professor of Women’s Health for FY17 & 18 until he left NDSU. For this award, he received an annual gift which offset his salary and fringe benefits. Dr. Pamela Jo Johnson, when hired as the DPH Chair in FY 20, has been awarded with the Mary J. Berg Distinguished Professor of Women’s Health.
4 Sanford Health Contract is the contract as referenced in C1.1a, which is an offset of salary and fringe benefits for Dr. Paul Carson’s annual salary at 50%/25% and has now ended. The contract began December 16, 2013 and was run through the Dean’s office of the College of Health Professions.
5 Expenditures include Grant/Contracts expenses in salary, fringe and operation categories.
6 With COVID-19 there was a decrease in operating expenses due to no travel, cancelled conferences, and remote working. There was a series of grants that ended, decreasing our grant revenue and expenditures in staff, GAs, and operations.
7 FY21 had a large increase in grant and contract dollars due to the pandemic and increased funds from the ND Department of Health. These funds led to a significant increase in grant funded positions at full-time and part-time levels.

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<tbody>
<tr>
<td><strong>Source of Funds</strong></td>
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<tr>
<td>Tuition &amp; Fees</td>
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<td>$339,524</td>
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<td>State Appropriation &amp; University Funds</td>
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<td>Grants/Contracts</td>
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<td>Indirect Cost Recovery</td>
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<td>Gifts; Mary J. Berg</td>
<td>$31,231</td>
<td>$27,057</td>
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<td>Sanford Contract</td>
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<td>Grant Tuition Remission</td>
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<td>Carryforward Tuition</td>
<td>$251,830</td>
<td>$225,558</td>
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<td>$302,191</td>
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<td><strong>Total</strong></td>
<td>$3,080,872</td>
<td>$3,338,897</td>
<td>$3,163,369</td>
<td>$2,782,380</td>
<td>$3,652,764</td>
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<table>
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<tbody>
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<td>Faculty Salaries</td>
<td>$1,070,760</td>
<td>$1,118,781</td>
<td>$857,309</td>
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<td>Staff Salaries</td>
<td>$585,365</td>
<td>$627,543</td>
<td>$616,947</td>
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<td>GA/PTA/ Temp Salaries</td>
<td>$122,406</td>
<td>$137,039</td>
<td>$181,123</td>
<td>$104,640</td>
<td>$814,142</td>
</tr>
<tr>
<td>Fringe Benefits &amp; Taxes</td>
<td>$574,781</td>
<td>$652,445</td>
<td>$589,094</td>
<td>$417,771</td>
<td>$540,091</td>
</tr>
<tr>
<td>Operations</td>
<td>$342,242</td>
<td>$491,335</td>
<td>$428,237</td>
<td>$109,826</td>
<td>$198,368</td>
</tr>
<tr>
<td>Travel</td>
<td>$95,176</td>
<td>$135,261</td>
<td>$106,898</td>
<td>$37,803</td>
<td></td>
</tr>
<tr>
<td>Gifts; Mary J. Berg</td>
<td>$31,231</td>
<td>$27,057</td>
<td></td>
<td>$29,993</td>
<td>$24,350</td>
</tr>
<tr>
<td>Sanford Contract</td>
<td>$100,594</td>
<td>$67,874</td>
<td>$67,951</td>
<td>$87,365</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$2,922,555</td>
<td>$3,257,334</td>
<td>$2,847,559</td>
<td>$2,065,239</td>
<td>$2,919,609</td>
</tr>
</tbody>
</table>
If the program is a multi-partner unit sponsored by two or more universities (as defined in Criterion A2), the budget statement must make clear the financial contributions of each sponsoring university to the overall program budget.

Not applicable

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

Strengths
- The program experienced leadership turnover from 2018-2020, and current leadership is in a position to take DPH in a growth direction. Her leadership has helped bring stability back to the department.
- The strengths of the department, especially with the pandemic, have been securing greater relationships with the ND Department of Health. This has led to numerous grants/contracts as well as student opportunities for field experience.

Weaknesses
- The program is tied to the state of the University as a whole, and we have been subject to cuts for three consecutive fiscal years despite our enrollment increases.

Plans for improvement
- Broaden recruitment strategies to increase enrollment and tuition dollars
- Strengthen infrastructure for faculty to secure external funding through grants and contracts.
C2. Faculty Resources

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

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

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

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

<table>
<thead>
<tr>
<th>CONCENTRATION</th>
<th>FIRST DEGREE LEVEL</th>
<th>SECOND DEGREE LEVEL</th>
<th>THIRD DEGREE LEVEL</th>
<th>ADDITIONAL FACULTY*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Health Sciences</td>
<td>Mary Larson</td>
<td>Mark Strand</td>
<td>Leslie Laam</td>
<td>PIF: 3, Non-PIF: 0</td>
</tr>
<tr>
<td>MPH</td>
<td>1.0</td>
<td>0.5</td>
<td>0.25</td>
<td>NA</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>Pamela Jo Johnson</td>
<td>Rick Jansen</td>
<td>Leslie Laam</td>
<td>PIF: 1, Non-PIF: 2</td>
</tr>
<tr>
<td>MPH</td>
<td>1.0</td>
<td>1.0</td>
<td>0.25</td>
<td>NA</td>
</tr>
</tbody>
</table>

**TOTALS:**
- Named PIF: 5
- Total PIF: 9
- Non-PIF: 2

2) Explain the method for calculating FTE for faculty in the templates and evidence of the calculation method’s implementation. Programs must present calculation methods for primary instructional and non-primary instructional faculty.

Faculty time is calculated first by full-time and part-time status within the University, then by workload allocated to a department/ if a faculty line is shared with any departments. For a 1.0 FTE, the faculty member must be a full-time employee in the Department of Public Health (DPH); 9-month faculty are considered full-time. Time allocation of responsibilities for a 1.0 FTE generally follows 40% teaching (including advising), 40% research, and 20% service of which the teaching responsibilities are to the DPH. For a 0.5 FTE, the faculty member must teach at least one class in the MPH program for 10-20% time, serve on public health committees for 10% time, advise for 5% time, and conduct public health research for 15-25% time. Both 1.0 and 0.5 FTE’s are primary instructional faculty in the MPH program.
Calculating non-primary instructional faculty, includes total time spent toward the MPH program at less than 0.5 FTE. The program currently has four non-PIF faculty and those FTE’s are calculated using 10% time for instruction of one class, 5% time for advising, 10% time for service, and any remaining percentage up to 0.5 for research. The program has three non-PIF at 10% FTE as they only teach a course for the program and one faculty member at 40% FTE who teaches, advises, serves on committees, and conducts research in public health but is shared with another department which is his home department.

The College workload document can be found in ERF C2.2 Faculty FTE calculation.

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

Not applicable

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

<p>| General advising &amp; career counseling: PIF |</p>
<table>
<thead>
<tr>
<th>Degree level</th>
<th>Average</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s</td>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
</tbody>
</table>

<p>| Advising in MPH integrative experience: PIF |</p>
<table>
<thead>
<tr>
<th>Average</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>

Eight full-time faculty members are included in the advising and career counseling: PIF table. We hired an additional full-time faculty member late fall, 2021 who is not included in this calculation as she has no current advisees for the 2021-2022 academic year. The average for advising in the ILE is the same as faculty advise their students throughout the program which includes the ILE.

<p>| General advising &amp; career counseling: non-PIF |</p>
<table>
<thead>
<tr>
<th>Degree level</th>
<th>Average</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

<p>| Advising in MPH integrative experience: non-PIF |</p>
<table>
<thead>
<tr>
<th>Average</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

One non-PIF faculty member is included in advising and career counseling. This one faculty member has 40% time in public health which includes advising. Advising also includes the ILE.
5) **Quantitative data on student perceptions of the following for the most recent year:**

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

   From the most recent graduating cohort, Spring 2021, mean response equaled 4.125 with 5 being strongly agree that public health class size was conducive to learning. 62.5% strongly agreed that class size was conducive to learning with another 25% who agreed. 12.5% responded as neither agreeing or disagreeing and there were no responses that disagreed.

   The question on our course evaluations asks students to rate the statement “The physical environment was conducive to learning” using a 5-point Likert item with response options: Strongly disagree, Disagree, Neutral, Agree, Strongly agree. Responses collected for all MPH courses housed within the DPH for fall semester 2020 had a mean score of 4.342 out of 5 with 68.4% of respondents who strongly agreed that the physical environment was conducive to learning, 14.5% agreed, 6.6% were neutral, 3% disagreed, and 6.6% strongly disagreed. Spring 2021 had a mean score of 4.185 with 47.7% of respondents strongly agreeing, 32.3% who agreed, 13.8% were neutral, 3.1% disagreed, and 3.1% strongly disagreed.

   Full student ratings of instruction reports for this past academic year can be found in ERF C2.5 Faculty resources quant data folder, MPH Semester Courses Student Report fall 2020 and MPH Semester Courses Student Report spring 2021.

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

   From the most recent graduating cohort, Spring 2021, mean response was 4.5 with 5 being very satisfied with the availability of public health faculty. 100% of respondents either agreed or strongly agreed that they were satisfied with the availability of their public health faculty.

   Included on the annual advising survey that is conducted each spring, is a question that asks, ‘Given the opportunity, would you have liked to have had more contact with your assigned advisor?’ Students this past year were fairly split in their desire to have wanted more time with their advisor. Of the respondents, 11 would have liked more contact with their advisor and 13 did not need more contact with their advisor.

   The question on our course evaluations asks students to rate the statement “The instructor was available to assist students outside of class” using a 5-point Likert item with response options: Strongly disagree, Disagree, Neutral, Agree, Strongly agree. Responses collected for all MPH courses housed within the DPH for fall semester 2020 had a mean score 4.421. Distribution of responses across categories included 65.8% strongly agreed that instructors were available to assist outside of class, 18.4% agreed, 11.8% were neutral, none disagreed, and 3.9% strongly disagreed. Responses from Spring 2021 had a mean of 4.4 with 60% who strongly agreed, 29.2% agreed, 6.2% were neutral, none disagreed, and 4.6% strongly disagreed.

   Full student ratings of instruction reports for this past academic year can be found in ERF C2.5 Faculty resources quant data folder, MPH Semester Courses Student Report fall 2020 and MPH Semester Courses Student Report spring 2021.

6) **Qualitative data on student perceptions of class size and availability of faculty.**

   Qualitative student feedback related to class size and availability of faculty was collected through a variety of ways. Each year we administer an advising survey which collects student open-ended comments related to advising. Also each year, we assess graduating students on their
competency attainment throughout the MPH program and ask open-ended questions related to class size and satisfaction and availability of program faculty. Each semester, students are also asked to assess their instruction of each class and instructor and are provided the opportunity to include comments.

Some comments related to student perceptions of class size gathered from graduating students Spring 2021 include:

• “Class size was perfect. Gave enough opportunities to get to know and interact with fellow classmates.”

• “When I was first an Interactive Video Network (IVN) student, I didn't really like the set up. It was hard to navigate group work. I didn't know any of the in-class students. My relationships and learning definitely improved when we were all on Zoom. It felt more personal and I was able to make connections that I wasn't prior.”

Comments from students on our annual advising survey sent to all active students in the Spring 2021 include the following:

• “I somehow fell through the cracks and only got to have an advisor on the second semester.”

• “I had to switch advisors after my first year in the MPH program because my previous advisor left, and I had been with her since my undergrad so I was a little worried about that going into my second year but I believe the transition was rather smooth. I was very appreciative of Dr. xxxx setting a meeting each semester for all of his advisees to get together and ask questions, I thought it was a nice way to get together and share insights and speak with other students. I was also immensely appreciative of how invested Dr. xxx was, and still is, with the final master's paper. The last semester goes by so quickly, it was nice to have a weekly meeting set up to get any answers and suggestions, while also making sure I was on track for turning in the final paper. He was able to answer all of my questions and gave me great feedback throughout.’

• “Dr. xxxx has been extremely helpful, attentive, and influential as my advisor. She has pushed and guided me throughout my ILE experience, where I feel I have worked hard and turned in a meaningful paper. She took initiative to answer questions that I had throughout this past year, even when she did not know the answer, she went out of her way to get accurate information and answers. She took interest in the classes I was taking, how I was doing throughout the semester, and always made time to meet with me when needed. She has been the best advisor I have had thus far in my college education; she exemplifies what an advisor is.”

• “I haven't discussed much at all about career specific advising, just coursework, but everything so far has been positive and timely.”

• “Originally my advisor was Dr. xxxx. I was significantly unsatisfied with her communication and lack of preparation when she did initiate discussions. Not knowing when I was planning to graduate, what classes I had taken, etc. Due to this I have officially transitioned to Dr. xxx as my advisor with whom I am very, very satisfied and pleased with. She is always prepared, available providing me with rapid and insightful responses as I move forward in my academic career.”

• “With COVID, it is difficult to reflect on the experience of being in the program related to previous years. I am very satisfied with my time in the MPH program and feel I was given every opportunity to develop academically and professionally.”
• “I have enjoyed my experience so far. I feel supported.”

Faculty names have been removed from the comments to respect the students who provided honest responses. Full data can be found in the ERF C2.6 Faculty resources qual data in the ‘MPH advising survey data spring 2021’ file.

In addition, the MPH advising survey spring 2021, MPH student post assessment faculty resources survey 2021, and MPH student post assessment responses 2021 files can be found in ERF 2.6 Faculty resources qual data folder.

Foundational public health course student ratings of instruction are also reviewed by the instructor and the DPH Chair. All foundational course student ratings of instruction for Fall 2020 and Spring 2021 can be found in ERF 2.6 Faculty resources qual data folder.

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

Strengths
• The program has a sufficient number of faculty to deliver required coursework and advise MPH students.
• Most class sizes are small, and there is a low student-faculty ratio for courses and advising; Feedback from students is strong for perceived availability of faculty and for appropriate class size. An additional full-time faculty member was hired in November, 2021 who is split between community health sciences and epidemiology.
• The faculty have a diversity of disciplinary backgrounds and skills providing access to a range of public health perspectives

Weaknesses
• As the epidemiology concentration area is still in a growth phase, we have fewer faculty available with advanced epidemiologic knowledge and skills to best advise students in this concentration.

Plans for improvement
• Currently interviewing candidates for an epidemiology faculty member to start July 1, 2022.
C3. Staff and Other Personnel Resources

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

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

<table>
<thead>
<tr>
<th>Role/function</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and Finance Manager</td>
<td>1.0</td>
</tr>
<tr>
<td>Program Assistant</td>
<td>1.0</td>
</tr>
<tr>
<td>College Marketing/Communication Lead</td>
<td>0.15</td>
</tr>
</tbody>
</table>

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

The MPH program is currently in a state of growth. After a leadership change in 2019, staff position changes occurred which allowed for some revision of work duties. The Department has a Research and Finance Manager (1.0) that has been with the department for six years. She manages the department budget, finances, grants and contracts, and is the first point of contact with SPA, IRB, and grants and contracts. She also provides departmental research administration support such as assisting faculty with budget development, grant proposal submissions, and pre-award/post-award grants management. She ensures that budgets meet projected spending targets and conform to University policies and ensures the preparation of grant proposals fall within imposed requirements and deadlines.

Our Program Assistant (1.0) was hired summer 2021 and is responsible for administrative and operational support of the department of public health, which includes the MPH program. Duties include reception, operations, communications, event and meeting coordination, and academic assistance such as course permissions, bookstore contact, and student evaluations of instruction. She also supports the Research and Finance Manager with HR, payroll, and reimbursement paperwork.

We are actively reviewing applications for an Academic Coordinator/Lecturer (1.0) who will assist with managing, marketing, and evaluating public health programs; assist in coordinating curriculum and providing direct student services for the program; and assist in the development of new MPH projects. This staff position will serve as lead for academic recruitment and relationship building from prospective students through alumni. This person will also serve as a lecturer for applicable courses in the undergraduate public health minor or related fields including teaching PH 101 Introduction to Public Health.

The program also receives support from the college Marketing and Communications lead (0.15) who has been supporting the department since 2016. She is an expert in media relations, press releases, social media campaigns, and various other communication methods to promote the program as well as highlight faculty work.

There are also two departmental GA positions that can be hired to support the work of the department and its faculty. One is to serve as a teaching assistant and one as a service assistant. Faculty also hire staff and GAs to support their research using their own grant funding.
3) Provide narrative and/or data that support the assertion that the program’s staff and other personnel support is sufficient or not sufficient.

The Department is still relatively small, but is on a growth trajectory. With the hiring of a program assistant and the active search for an academic coordinator/lecturer, the program staff resources are sufficient to meet our needs at this time. Additional support for recruitment activities, prospective and current student assistance, and undergraduate course management will free up faculty to focus more on MPH course development, mentoring, research, and service.

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

**Strengths**
- Staff and departmental graduate assistants provide sufficient programmatic support to the department.

**Weaknesses**
- There is limited academic coordination support.

**Plans for improvement**
- Candidates are currently under review for an Academic Coordinator/Lecturer to start Spring 2022.
C4. Physical Resources

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

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

- **Faculty office space**

  The 6th floor of the brand new Aldevron Tower (AT) became the home of the Department of Public Health in January 2020. AT is located on the main campus, which brings the department back into close proximity with the other College of Health Professions departments as well as the rest of the campus. There is an emphasis on team-based and interprofessional education, working in conjunction with all healthcare disciplines; this location supports that endeavor. The entire 6th floor is dedicated to the Department of Public Health and includes 20 office spaces, two huddle rooms, and a graduate student workspace. All faculty have a designated office space on the 6th floor and are sufficient for faculty needs.

- **Staff office space**

  The 6th floor AT provides office spaces and shared work spaces for DPH staff in addition to faculty. There is a reception area with an open workspace for the Program Assistant and an adjacent open workspace for future administrative support staff. Other staff either have private offices or shared offices depending on their role. Office spaces are sufficient for staff needs.

- **Classrooms**

  There are five classroom-type spaces in the AT that are equipped with distance technology and are available for public health classes and meetings. In addition to the AT, classrooms equipped with the technology needed for MPH course delivery can be found across campus in buildings such as Quentin Burdick Building, E. Morrow Lebedeff Hall, and A. Glenn Hill Center. Due to the COVID-19 pandemic, other classrooms were outfitted with distance learning technology and so an even greater number of classrooms exist as options for the MPH program.

- **Shared student space**

  The AT was designed to be an interprofessional learning space for interdisciplinary education. This building provides more hands-on learning spaces for students in pharmacy, nursing, respiratory care, medical lab sciences, radiologic sciences, and public health. The AT also includes more student-friendly spaces such as open study spaces, huddle rooms, and conference rooms. There are huddle spaces and open study spaces throughout the building. The 2nd floor was designed specifically for students as it allows for more collaboration areas, increased access to interprofessional labs, and additional student study huddle rooms. This floor also has a small kitchen setup to allow for food to be stored or prepared for lunches. Six computers and a printing station are available on first and second floors. Another great addition to the AT is the addition of two lactation rooms, a family restroom room, and a gender-neutral restroom.

  Students have access to a new interprofessional student lounge that allows for students to interact with one another and showcase their current research and awards. The lounge is located in a prime location on the first floor of the AT.
• Laboratories, if applicable to public health degree program offerings

Not applicable

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

Physical space in the AT for faculty, staff, and students is sufficient. All faculty and staff have private offices, and there is room for the addition of more faculty. Open space has been constructed at a size to convert to additional office space if it should be needed. A virtual tour of the AT can be viewed at: https://tours.bemorecolorful.com/v/NYojXxP9j8e, which is a visual data point that shows sufficient work and class room spaces available. All faculty, staff, and students have work space and study space available as well as distance-education classrooms and conference spaces.

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

Strengths
• Aldevron Tower (AT) met a need for the MPH program and department in having a permanent physical space for all public health employees and students.
• AT provides faculty and staff with adequate departmental office space and close proximity to all colleagues within the College.
• Students have shared areas in which they can find quiet study or collaboration spaces.
• Additional distance-education outfitted rooms were included with the AT construction.

Weaknesses
• None identified
C5. Information and Technology Resources

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

1) Briefly describe, with data if applicable, the following:
   - library resources and support available for students and faculty

   NDSU Libraries provide safe and well-maintained spaces for students to collaborate, study, and engage with up-to-date technology.
   - The Main Library has multiple options for space use, with 842 total seats that include single study carrels as well as modular group seating with moveable white boards for collaboration.
   - In addition to open seating, there are 10 single student rooms and 10 group study rooms, many with access to screen sharing technology and whiteboards.
   - The Main Library has 44 PC and Mac computers for student use throughout the day, as well as a computer lab of 60 computers available outside of scheduled classroom hours. Additionally, scanning and printing options are available.
   - The Main Library has also recently opened a Presentation Studio to allow students to practice and record presentations.
   - 3D Printers, CNC Mini-Mills, and basic hand tools are available in the Main Libraries Digital Fabrication Lab, a space dedicated to exploring technology, innovation, and interdepartmental collaboration.
   - The Main Library also is home to the new Digital Visualization Lab, which includes computers and training for GIS software and data management plans. Virtual Reality rooms will be included in the Digital Visualization Lab in the near future.
   - NDSU Libraries house over 1,000,000 physical items, including books, government documents and audio-visual items.
   - Approximately 6,000 print books are part of the Health Sciences Library Collection.

   In addition to physical library resources, over 260 online databases are available, including Web of Sciences, Scopus, CINAHL and Cochrane Library, among many others. Additionally, the library has subscriptions to full-text journal packages such as ScienceDirect and SpringerLink. Online tutorials and research guides to aid students and faculty in accessing and using online resources are also available through the Libraries’ website. Specific health sciences online tutorials and research guides are available at the Health Sciences resource page of the main Library. The NDSU Institutional Repository has been recently upgraded in order to better preserve and make accessible student and faculty research.

   For online or print items not available through the NDSU Libraries, users may request them through the interlibrary loan service. Additionally, the ILL staff also help make sure distance or off-campus users can access NDSU materials in a timely manner by shipping library material to them upon request, free of charge.

   The Health Sciences Librarian and Health Sciences Associate are available to students, staff and faculty through a number of different channels. The Associate is available on-site in the College of Health Professions building for half days, and the Librarian is available full-time at the Main Library. Students and faculty can also email, call or use the chat option on the Libraries’ website to get in contact; use of the chat option has been popular with distance
users. The Health Sciences Librarian is available for classroom instruction at faculty request and has presented in a number of MPH courses, often using Zoom to accommodate distance students. Additionally, the Libraries offer workshops on citation management, author’s rights, and more library-related topics. One-on-one consultations are also available online or in-person for students and faculty. Literature searches to aid faculty research and help with impact metrics are also offered as a library service to the Department of Public Health.

Other student support services in the library space include the Center for Writers and Disability Services.

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

There are computers in a dedicated graduate assistant space within the 6th floor DPH suite as well as work stations throughout the Aldevron Tower. These computers are available to any public health student. The Information Technology (IT) Division at NDSU provides multiple physical spaces with hardware and software for students to access across campus. Computer labs are outfitted with software requested by faculty instructors needed for specific classes. Some examples for public health include R for statistical analysis and PowerBi. In addition to providing access in physical spaces, software access is available to distance students either by providing a personal account (some free, some with reduced student costs) or by allowing students remote access into a computer lab during a class session.

A full list of computing equipment, software, and support can be found at the IT Knowledge Base website.

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

The Department provides all faculty a laptop computer, dual monitors, and a docking station with standard Microsoft Office, Adobe, and other software as requested (e.g. statistical packages). Access to many specific software applications are available through IT via download. Other special software can be provided by the department and sometimes purchased via faculty indirect funds or grant funds. Faculty have access to a collection of NDSU-licensed software for free download or for purchase. This includes access to things like Adobe products, Microsoft Office products, ESRI ArcGIS, statistical software such as SAS or SPSS, and Zoom. Other software can be purchased with educational discounts, such as Stata statistical software.

NDSU uses Blackboard as their course management system. All courses are run through Blackboard, which allows for posting course-specific materials, syllabus, readings, etc. for student access. Within Blackboard, there are additional IT tools, such as Yuja, VoiceThread, Zoom, and a plagiarism checker.

Because the MPH program has both on-campus and distance students, technical support and assistance for distance education technology is of great importance. NDSU provides the hardware and software for faculty to teach to both types of student synchronously.

A full list of teaching and classroom technology resources can be found at this IT website.

- technical assistance available for students and faculty

NDSU provides IT help and support across a wide-range of topics. From account access, to collaboration tools, to classroom support, IT assistance on campus is robust. Services and help are available to all students and faculty on campus as well as virtually and by phone.
With the option to remote-in to computers and various platforms, IT can assist in real-time with students and faculty nearly wherever they are located.

Staff support is also readily available by the IT Division to both students and faculty for any and all distance education technology-related technical assistance. Even after regular business hours, there is staff available to help with connection issues, hardware set-up issues, and software challenges that may arise.

The link to the IT Help Desk has all the ways to ask for support and assistance: https://www.ndsu.edu/it/help/.

NDSU has a Learning and Applied Innovation Center (LAIC) as part of the IT Division as well. The LAIC works to integrate instruction with technology with the goal of finding the best strategies for teaching and learning. Various trainings, tools, and resources are available for both faculty and students from the LAIC.

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

The NDSU information and technology resources are sufficient to support public health students and faculty. We have access to adequate hardware options, software tools for teaching and training, and help-desk assistance. Students have the resources available to be supported both on-campus or as a distance student related to technology and other information resources.

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

Strengths
- NDSU’s information and technology resources provide exceptional support and a variety of ways to engage students and faculty with instructional information.
- The MPH program is able to deliver high-quality instruction with the IT support available and students are able to access resources from nearly anywhere they might choose to engage with the program.

Weaknesses
- None identified.
D1. MPH & DrPH Foundational Public Health Knowledge

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

The program validates MPH and DrPH students’ foundational public health knowledge through appropriate methods.

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

<table>
<thead>
<tr>
<th>Content</th>
<th>Course number(s) &amp; name(s) or other educational requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain public health history, philosophy and values</td>
<td>PH 704 Public Health Management and Policy</td>
</tr>
<tr>
<td>2. Identify the core functions of public health and the 10 Essential Services*</td>
<td>PH 704 Public Health Management and Policy</td>
</tr>
<tr>
<td>3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population’s health</td>
<td>PH 731 Biostatistics; PH 712 Research Methods</td>
</tr>
<tr>
<td>4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program</td>
<td>PH 706 Epidemiology</td>
</tr>
<tr>
<td>5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.</td>
<td>PH 741 Social and Behavioral Sciences</td>
</tr>
<tr>
<td>6. Explain the critical importance of evidence in advancing public health knowledge</td>
<td>PH 706 Epidemiology</td>
</tr>
<tr>
<td>7. Explain effects of environmental factors on a population’s health</td>
<td>PH 720 Environmental Health</td>
</tr>
<tr>
<td>8. Explain biological and genetic factors that affect a population’s health</td>
<td>PH 720 Environmental Health</td>
</tr>
<tr>
<td>9. Explain behavioral and psychological factors that affect a population’s health</td>
<td>PH 741 Social and Behavioral Sciences</td>
</tr>
<tr>
<td>10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities</td>
<td>PH 741 Social and Behavioral Sciences</td>
</tr>
<tr>
<td>11. Explain how globalization affects global burdens of disease</td>
<td>PH 720 Environmental Health</td>
</tr>
<tr>
<td>12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)</td>
<td>PH 720 Environmental Health</td>
</tr>
</tbody>
</table>
2) Document the methods described above. This documentation must include all referenced syllabi, samples of tests or other assessments and web links or handbook excerpts that describe admissions prerequisites, as applicable.

All students in the MPH program are grounded in the public health learning objectives through foundational course materials as outlined in template D1-1. Syllabi and supporting documents are found in ERF D1.2 Supporting documentation. In addition, an internal curriculum mapping spreadsheet is included to show more detail of how the faculty have ensured all objectives are being covered.

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

Strengths
- The curriculum is clearly mapped to cover all learning objectives and the faculty members have been engaged in the review process to ensure understanding of where material is being covered.

Weaknesses
- For those students who have an undergraduate education formally in public health, some of the material can be too introductory.

Plans for improvement
- As more trained undergraduate students join our MPH program, the faculty will re-assess the use of foundational courses to meet all the learning objectives and possibly consider other methods of grounding particularly for those with substantial public health training.
D2. MPH Foundational Competencies

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

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

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

<table>
<thead>
<tr>
<th>Course number</th>
<th>Course name</th>
<th>Credits (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundational Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PH 704</td>
<td>Public Health Management and Policy</td>
<td>3</td>
</tr>
<tr>
<td>PH 706</td>
<td>Essentials in Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PH 712</td>
<td>Public Health Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PH 720</td>
<td>Environmental Health for Public Health Professionals</td>
<td>2</td>
</tr>
<tr>
<td>PH 731</td>
<td>Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>PH 741</td>
<td>Social and Behavioral Sciences in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PH 745</td>
<td>Community Health Leadership</td>
<td>3</td>
</tr>
<tr>
<td>PH 794</td>
<td>Practicum</td>
<td>3</td>
</tr>
<tr>
<td>PH 789</td>
<td>Integrative Learning Experience</td>
<td>1</td>
</tr>
<tr>
<td>Specialization Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PH 711</td>
<td>Integrating Primary Care and Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PH 725</td>
<td>Promoting Health through Policy, Systems, and Environment</td>
<td>3</td>
</tr>
<tr>
<td>PH 700</td>
<td>Preventing and Managing Chronic Illness</td>
<td>3</td>
</tr>
<tr>
<td>PH 722</td>
<td>Applied Community Health</td>
<td>3</td>
</tr>
<tr>
<td>Electives (see optional subplans below)</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Curriculum information for the Community Health Sciences concentration can also be found online at the following links:

- [https://www.ndsu.edu/publichealth/degrees_and_programs/curriculum/](https://www.ndsu.edu/publichealth/degrees_and_programs/curriculum/)
- [https://www.ndsu.edu/publichealth/degrees_and_programs/degree_specializations/community_health_sciences/](https://www.ndsu.edu/publichealth/degrees_and_programs/degree_specializations/community_health_sciences/)
**Requirements for MPH degree, Epidemiology Concentration**

<table>
<thead>
<tr>
<th>Course number</th>
<th>Course name</th>
<th>Credits (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foundational Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PH 704</td>
<td>Public Health Management and Policy</td>
<td>3</td>
</tr>
<tr>
<td>PH 706</td>
<td>Essentials in Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PH 712</td>
<td>Public Health Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PH 720</td>
<td>Environmental Health for Public Health Professionals</td>
<td>2</td>
</tr>
<tr>
<td>PH 731</td>
<td>Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>PH 741</td>
<td>Social and Behavioral Sciences in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PH 745</td>
<td>Community Health Leadership</td>
<td>3</td>
</tr>
<tr>
<td>PH 794</td>
<td>Practicum</td>
<td>3</td>
</tr>
<tr>
<td>PH 789</td>
<td>Integrative Learning Experience</td>
<td>1</td>
</tr>
<tr>
<td><strong>Specialization Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PH 750</td>
<td>Epidemiologic Methods 1</td>
<td>2</td>
</tr>
<tr>
<td>PH 752</td>
<td>Epidemiologic Methods 2</td>
<td>2</td>
</tr>
<tr>
<td>PH 753</td>
<td>Public Health Surveillance</td>
<td>2</td>
</tr>
<tr>
<td>PH 754</td>
<td>Health Survey Research</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Electives (see optional subplans below)</td>
<td>10</td>
</tr>
</tbody>
</table>

Curriculum information for the Epidemiology concentration can be found online at the following links:
- [https://www.ndsu.edu/publichealth/degrees_and_programs/curriculum/](https://www.ndsu.edu/publichealth/degrees_and_programs/curriculum/)
- [https://www.ndsu.edu/publichealth/degrees_and_programs/degree_specializations/epidemiology](https://www.ndsu.edu/publichealth/degrees_and_programs/degree_specializations/epidemiology)

Electives for the Epidemiology concentration includes 10 credits in addition to the required curriculum. For students that choose a subplan, six credits are subplan specific coursework, and four additional credits are an elective or directed research. For those who choose the generalist epidemiology option, electives are selected by students with their advisor to support their educational goals.

**Optional Subplans**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Management of Infectious Disease (Epidemiology concentration)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PH 735</td>
<td>Principles of Infectious Disease I</td>
<td>3</td>
</tr>
<tr>
<td>PH 736</td>
<td>Principles of Infectious Disease I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives*</td>
<td>4</td>
</tr>
</tbody>
</table>

| **American Indian Public Health (Epidemiology concentration)** |                   |         |
| PH 772        | American Indian Health Equity                                    | 3       |
| PH 774        | Research and Evaluation in Tribal Communities                    | 3       |
|               | Electives*                                                      | 4       |
Subplans are an organized group of electives for MPH students. A subplan is not required of students, but they are groups of classes around a topic area that students and advisors find helpful when discussing course options that will meet student educational and professional goals. A full list of program electives can be found here: https://www.ndsu.edu/publichealth/degrees_and_programs/curriculum/electives/

The accelerated and dual degree options that are offered use the above curricula. For accelerated programs, graduate courses are used in place of undergraduate courses and double counted toward the bachelor’s and master’s degrees. For the dual degree with Pharmacy, graduate courses are used toward the pharmacy degree and dual counted for both programs. The specific courses used in place of MPH electives and dual counted toward the Doctor of Pharmacy degree are PHRM 620 Special Populations and PHRM 632 Infectious Disease. In addition, one of the Pharmacy experiential rotations is replaced with PH 794 Applied Practice Experience and dual counted.

The Pharmacy handbook includes the full dual degree curriculum for the PharmD/MPH. The Pharmacy handbook file can also be found in ERF D2.1 Combined degree documentation.

2) Provide a matrix, in the format of Template D2-2, that indicates the assessment activity for each of the foundational competencies. If the program addresses all of the listed foundational competencies in a single, common core curriculum, the program need only present a single matrix. If combined degree students do not complete the same core curriculum as students in the standalone MPH program, the program must present a separate matrix for each combined degree. If the program relies on concentration-specific courses to assess some of the foundational competencies listed above, the program must present a separate matrix for each concentration.
<table>
<thead>
<tr>
<th>Competency</th>
<th>Course number(s) and name(s)*</th>
<th>Describe specific assessment opportunityⁿ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence-based Approaches to Public Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Apply epidemiological methods to the breadth of settings and situations in public health practice</td>
<td>PH 706 Epidemiology</td>
<td>Each week students complete 1-3 case studies which require them to successfully apply epidemiological methods taught that week. Performance is assessed through peer and faculty feedback. [see PH 706 Case study of disease frequency and PH 706 In class practice]</td>
</tr>
<tr>
<td>2. Select quantitative and qualitative data collection methods appropriate for a given public health context</td>
<td>PH 712 Public Health Research Methods</td>
<td>Given three public health topics, students will choose one and write an essay explaining their research question and a mixed-methods (i.e., using qualitative and quantitative methods) approach to answering their question. Students will describe the importance of their research question to public health, target population, modes of quantitative and qualitative data collection, and explain why they designed the research as they did.</td>
</tr>
<tr>
<td>3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate</td>
<td>PH 731 Biostatistics, PH 712 Public Health Research Methods</td>
<td>PH 731 - In-class activities are for practicing data analysis using R software for both quantitative and qualitative data. Homework and exams are designed to assess student learning of how to analyze quantitative and qualitative data using statistical software. [See PH 731 R coursework 1 and 2]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PH 712 -Lab time will be used to learn data management and applied statistical analysis skills using SPSS software. These skills will be applied throughout the semester with praxis assignments. The skills will also be applied to create results tables for the public health data brief. Lab time will be used to learn how to do thematic coding, with a praxis assignment. [See PH 712 Praxis Lab]</td>
</tr>
<tr>
<td>4. Interpret results of data analysis for public health research, policy or practice</td>
<td>PH 731 Biostatistics</td>
<td>Class lecture and in-class examples are used to teach students how to interpret results. The final project for the course includes interpretation of results related to research, policy or practice [See PH 731 project part 1 and project part 2 files]</td>
</tr>
<tr>
<td>Public Health &amp; Health Care Systems</td>
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</tr>
<tr>
<td><strong>5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings</strong></td>
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<tr>
<td>PH 704 Public Health Management and Policy</td>
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</tr>
<tr>
<td><strong>Book club 1:</strong> Students are required to read a book that compares the organization, structure, and function of health care systems around the globe. Students are assigned to lead a 25-minute discussion about the assigned reading. Each student must develop a plan to discuss the content of the assigned reading. This plan is turned in prior to the meeting and evaluated on preparation for leading the group discussion on the comparison of health systems across nations. Additionally, each student is evaluated on a written reflection on the content of the discussion and meeting facilitation.</td>
<td></td>
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</tr>
</tbody>
</table>

<p>| <strong>6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels</strong> |
| PH 741 Social and Behavioral Sciences |
| Students are assigned a weekly discussion article related to the weeks' class topic, many of which are focused on social inequities and racism. They must do the following: read the assigned discussion article, analyze the reading to gain a deeper understanding of the topic, criticize the reading, including articulating and defending personal opinions about the adequacy of the author's presentation and arguments, and connect the issues to course material and previous assignments/discussions. They must also provide a minimum of two discussion questions for each article. Student questions are analyzed and summarized by themes by the selected discussion facilitators for a given week. The discussion facilitators then lead the class in a discussion of the week's article/topic. [See PH 741 discussion article information] |</p>
<table>
<thead>
<tr>
<th>Planning &amp; Management to Promote Health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7. Assess population needs, assets and capacities that affect communities’ health</strong></td>
</tr>
<tr>
<td><strong>8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs</strong></td>
</tr>
<tr>
<td>9. Design a population-based policy, program, project or intervention</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>10. Explain basic principles and tools of budget and resource management</td>
</tr>
<tr>
<td>11. Select methods to evaluate public health programs</td>
</tr>
<tr>
<td><strong>Policy in Public Health</strong></td>
</tr>
<tr>
<td>12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence</td>
</tr>
<tr>
<td>13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>14. Advocate for political, social or economic policies and programs that will improve health in diverse populations</td>
</tr>
<tr>
<td>15. Evaluate policies for their impact on public health and health equity</td>
</tr>
</tbody>
</table>
### Leadership

| 16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making | PH 704 Public Health Management and Policy | Students are required to plan and lead a book club meeting twice during the semester. Students are assigned to work in groups of 5-6 and each week one student leads a 25-minute discussion. Each student must develop written goals, create an agenda, and describe a plan for how they will lead the meeting. Students are observed for part of their book club. Additionally, each student provides a written reflection of how the meeting went and what they learned through the exercise. Students are required to work in groups on a semester long project. Groups must collaborate to identify a topic area for the project and they must design the management of the project's scope and aims. |

| 17. Apply negotiation and mediation skills to address organizational or community challenges | PH 745 Community Health Leadership | Teams of 3-4 students will engage in a recorded “real play” of a scenario that is provided by the instructor. Each member of the team will have an opportunity to “real play” each specific role—1) concerned person, 2) public health professional, and 3) observer. The observer’s role is to document the behaviors exhibited by the public health professional and the corresponding responses of the concerned person. Each scenario is developed to provide students opportunities to utilize and apply knowledge and skills learned in class that are critical in negotiating and mediating challenges (e.g. deep reflective listening, communicating accurate empathy, honoring autonomy). The instructor will debrief the activity with the students in class. The instructor will review each team’s recording and grade based on the negotiation and mediation skills used. |

### Communication

| 18. Select communication strategies for different audiences and sectors | PH 745 Community Health Leadership; PH 712 Public Health Research Methods | PH 745 - Using an art of hosting strategy, each student or small teams will be in charge of facilitating a powerful, participatory conversation based on your assigned article. Each team has 30-40 minutes to host a powerful and productive conversation.  
PH 712 - Lecture, readings, and online resources about how to best visualize data for different audiences, and the best format for disseminating information for a specific audience, will be included. A praxis assignment will emphasize the best methods for conveying information to different audiences. Students will select data |
<table>
<thead>
<tr>
<th>19. Communicate audience-appropriate public health content, both in writing and through oral presentation</th>
<th>PH 712 Public Health Research Methods</th>
<th>Lecture, readings, and discussion throughout the semester will emphasize the value and appropriateness of different communication strategies. The final course project will require students to produce three different communication strategies for reaching different audiences: a data brief, infographic, and oral presentation.</th>
</tr>
</thead>
</table>
| 20. Describe the importance of cultural competence in communicating public health content | PH 745 Community Health Leadership | Read - Dancing Lovingly with Communities; Culture Competency and CEOD Process: Immigrant Populations, Health Care, Public Health, and Community; and Cross Cultural Communication with a critical eye, then follow the What? So What? Now What? framework for reflective writing. What? Write a paragraph about what you learned for each article or chapter (4 articles/chapters=4 paragraphs). So What? It's kind of like the person asking you in maybe an inquisitive tone--“So what?” “Who cares?” “Why is that important?” Synthesize a paragraph for “So What?” (4 articles/chapters=1 paragraph). Now What? Basically, now what are you going to do with the information? How will this information influence your work in public health? Synthesize a paragraph for "Now What?"

**Interprofessional Practice**

<p>| 21. Perform effectively on interprofessional teams | PH 745 Community Health Leadership | Student from public health, nursing, and athletic training engage in an interprofessional case study. Students from all three programs will meet and form interprofessional teams to develop effective solutions to address the problem presented in the case study. A debrief report is submitted including questions such as: From each of your disciplinary perspectives, what is your work to address in this scenario? and Given this brief experience in this specific scenario, what might be potential opportunities in working collaboratively interprofessionally? (not pertaining to your group, but collaboration in this scenario) |</p>
<table>
<thead>
<tr>
<th>Systems Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. Apply systems thinking tools to a public health issue</td>
</tr>
</tbody>
</table>

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

Course syllabi that cover all the required competencies for the MPH program can be found in ERF D2.3 Syllabi and supporting documentation. In addition, any supplemental assessment files for courses can be found in this same ERF. An internal curriculum mapping spreadsheet is included to show more detail of how the faculty have ensured all competencies are being covered.

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

**Strengths**
- Faculty members have engaged in numerous discussions and revisions of course materials during the process of moving from the pre-2016 criteria and our original foundational competencies, to these prescribed foundational competencies. Through an iterative process over three years, faculty worked together to revise course names, credit load, materials, and additions in courses to best deliver curricula that ensured delivery of MPH foundational competencies.

**Weaknesses**
- None identified

**D3. DrPH Foundational Competencies**

Not applicable
D4. MPH & DrPH Concentration Competencies

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

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

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

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

<table>
<thead>
<tr>
<th>Assessment of Competencies for MPH in Community Health Sciences Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competency</strong></td>
</tr>
<tr>
<td>1. Use primary and secondary data to identify and describe the health status of communities and prioritize needs.</td>
</tr>
<tr>
<td>2. Choose culturally appropriate intervention strategies</td>
</tr>
</tbody>
</table>
### 3. Design methods to evaluate the effectiveness of interventions.

**PH 700 Preventing and Managing Chronic Illness; PH 722 Applied Community Health**

PH 700: The RE-AIM model is taught in the course as a model for evaluating the effectiveness of a public health intervention. [See PH 700 Assessing population health RE-AIM and PH 700 Design an Intervention]

PH 722: Three assignments in which students design a comprehensive evaluation plan that includes a logic model, process, formative, and outcome evaluations. [See PH 722 Logic Model and Timeline, PH 722 Formative Evaluation, and PH 722 Summative Evaluation]

### 4. Practice advocacy through strategic communication.

**PH 725 Promoting Health through Policies, Systems and Environment; PH 711 Integrating Primary Care and Public Health**

PH 725 - Write an advocacy letter to a legislator using framing; [See PH 725 Advocacy letter]

PH 711 - Students develop an advocacy plan for a specified audience pertaining to the integration of public health and community practice.

### 5. Inform public health practice through analysis of policy, systems, and environmental strategies.

**PH 725 Promoting Health through Policies, Systems and Environment; PH 711 Integrating Primary Care and Public Health**

PH 725 - Students advocate for policy, systems and environmental change strategies through the development of a policy blueprint [See PH 725 PSE brief]

PH 711 - Students choose a community practice site to perform a systems analysis with a focus on how the practice site implements health policy.

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### Assessment of Competencies for MPH in Epidemiology Concentration

| Competency | Course number(s) and name(s) | Describe specific assessment opportunity
<table>
<thead>
<tr>
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</tbody>
</table>
| 1. Analyze and interpret epidemiologic data using regression-based methods. | PH 750 Epidemiologic Methods 1; PH 752 Epidemiologic Methods 2 | PH 750 - Students will be instructed in lab on common epidemiologic analytic techniques. Each lab will have homework to be completed independently. The homework will assess application of statistical test and regression modeling techniques and appropriate interpretation of results. [See PH 750 Lab]

PH 752- R coding worksheet - students code the multiple regression analysis of a sample dataset and interpret the results. [See PH 752 regression program] |
2. Design an observational study that includes key components of an epidemiologic research proposal

| PH 750 Epidemiologic Methods 1 | Students will write an observational epidemiologic study proposal. Components will include specific aims, background and significance, research questions, target population, measures, data collection, analysis plan, and an assessment of problems/sources of bias and potential impact. |

3. Evaluate and apply evidence from scientific research to generate public health recommendations

| PH 752 Epidemiologic Methods 2 | SEIR model R programming: students code and interpret an infectious disease model and assess impact of public health recommendations [See PH 752 code program] |

4. Transform public health surveillance data to appropriately summarize and interpret for target audience(s)

| PH 753 Public Health Surveillance | Each student will be required to use a Business Intelligence tool to visualize surveillance data, using real world data. This dashboard will target the public and public health audiences to report findings from chronic/infectious diseases risk assessment questions stratified by various demographic variables to identify possible areas of public health concerns. |

5. Design a survey protocol for an epidemiologic field investigation

| PH 754 Survey Research Methods | Students will create a survey instrument, propose a sampling plan, and propose methods to minimize survey error when implementing a health survey. [See PH 754 Survey assignments] |

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

Not applicable

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

Concentration syllabi and supporting assessment documents are found in ERF D4.3 Syllabi and supporting documentation folder.

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

**Strengths**
- Concentration competencies were revised in 2020 to be more advanced and build upon foundational competencies; Community Health Science competencies were further revised in early 2022.
- Faculty were engaged as working groups in each concentration and, by working together, there is a more cohesive delivery of material across courses.

**Weaknesses**
- None identified
D5. MPH Applied Practice Experiences

MPH students demonstrate competency attainment through applied practice experiences.

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

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

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

Concepts and competencies learned from MPH coursework are integrated through a minimum of 240 hours practicum that provides an opportunity to apply knowledge in a practice setting. A wide range of settings and opportunities are available and are individually tailored to assure competence in foundational and concentration-specific skills. The practicum is designed to meet student goals and the needs of the agencies or institutions involved. Most full-time students complete the practicum in the summer between the first and second academic years. However, students are eligible to register for the practicum after they have successfully completed 18 credits. Information about requirements can be found in the student handbook and website for details such as eligibility, timeline, and proposal requirements.

Students work with the practicum instructor to identify competencies they are most interested in reinforcing in an area of focus that meets their professional goals. Each student proposal is unique but all must include at least five competencies to be reinforced. Of the five competencies, three must be from the foundation and two could be from the specialization. However, all five competencies could be selected from the foundation. Competency selection must be from courses that the student has taken as part of the initial 18 credits as well; students are not able to reinforce a competency that they haven’t first learned from coursework. The practicum instructor works with each student to connect identified competencies with practicum objectives and deliverables/work products. Throughout the practicum experience, progress updates are requested and a timeline for work products is provided to help students work through all the items included. Students are required to have two work products submitted to the organization that reinforce their identified competencies. Students complete an assessment of their competency attainment and submit to the instructor with their work products. Often more clarity and revisions are needed but by having the student complete a self-assessment first, the instructor is better able to provide feedback on what might be missing. Students also complete a poster of the work they completed during the practicum. This poster can be a traditional, academic style or more of an infographic style. The student decides which format is best based on their project and intended audience. Successful completion of the practicum is assessed by the instructor through the competency assessment tool, student completion of the didactic portion, and inclusion of preceptor feedback.
2) Provide documentation, including syllabi and handbooks, of the official requirements through which students complete the applied practice experience.

The PH 794 practicum syllabus, MPH student practicum proposal form, and practicum assessment tool can be found in ERF D5.2 APE requirements folder. The student handbook is also saved in this same ERF folder as details about practicum requirements are listed in the main student handbook as well.

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

Student APE practicum proposals, deliverables, and competency assessments are found in ERF D5.3 Student samples folder, then by either CHS concentration or EPI concentration folders and individual student folders within; five student examples from Community Health Sciences (CHS) and five from Epidemiology (EPI). Template D5-1 is also saved as a stand-alone file in ERF D5.3 Student samples folder and there is a copy in each student sample folder as well.

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

**Strengths**
- A wide range of practicum settings and opportunities are available and are individually tailored to meet educational and professional goals.
- Student experiences are regularly evaluated with high positive remarks from both the student and the preceptor.
- While the poster assignment is not part of the two required deliverables/work products, it has been an important requirement to provide training on poster creation and communication skills and so has continued to be an expectation of the APE.

**Weaknesses**
- The process of finding a practicum site and working through the proposal has been cumbersome.

**Plans for improvement**
- Development of a OneNote tool to capture student goals and interests will be used by advisors and practicum instructor so that student goals and program competencies are both used to guide students to meaningful practice experiences.
- OneNote tool was developed by the Curriculum Committee and implemented with the fall 2021 incoming students.

**D6. DrPH Applied Practice Experience**

Not applicable
D7. MPH Integrative Learning Experience

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

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

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

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

<table>
<thead>
<tr>
<th>MPH Integrative Learning Experience for all Concentrations</th>
<th>How competencies are synthesized</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrative learning experience (list all options)</strong></td>
<td>Students self-identify competencies, selected based on each students’ educational and professional goals, in the proposal stage; an advisor approves the proposal and identified competencies; the advisor uses a rubric that is populated with the competencies to assess the student's ability to appropriately integrate and synthesize.</td>
</tr>
<tr>
<td><em>Potential options for the written product of the culminating experience include, but are not limited to, the following:</em></td>
<td></td>
</tr>
<tr>
<td>• Research paper</td>
<td></td>
</tr>
<tr>
<td>• Literature review</td>
<td></td>
</tr>
<tr>
<td>• Evaluation (e.g. program, policy)</td>
<td></td>
</tr>
<tr>
<td>• Grant proposal</td>
<td></td>
</tr>
<tr>
<td>• Policy recommendation (e.g. researching and drafting a bill)</td>
<td></td>
</tr>
<tr>
<td><em>Potential options for the oral product of the culminating experience include, but are not limited to, the following:</em></td>
<td></td>
</tr>
<tr>
<td>• Digital storytelling</td>
<td></td>
</tr>
<tr>
<td>• Research presentation</td>
<td></td>
</tr>
<tr>
<td>• Presentation of an infographic(s)</td>
<td></td>
</tr>
<tr>
<td>• Video</td>
<td></td>
</tr>
<tr>
<td>• Public Service Announcement</td>
<td></td>
</tr>
<tr>
<td>• Legislative Testimony</td>
<td></td>
</tr>
</tbody>
</table>

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

Students must complete the ILE in their last semester in the program which demonstrates synthesis of foundation and specialization competencies selected based on the student’s educational and professional goals. Prior to obtaining approval to register for the ILE, students must work with their advisors to complete the request to register approval form which is a DocuSign electronic form. The ILE is the culminating experience for the MPH program and serves as the final exam. Each student must complete a high-quality written and oral product, in addition to ensuring that identified competencies are addressed for successful completion and passing of the ILE. The advisor will complete an assessment of the products to ensure the student has addressed the identified competencies.
3) Provide documentation, including syllabi and/or handbooks that communicates integrative learning experience policies and procedures to students.

All MPH students follow the same requirements for the ILE. Prior to being given access to register for the ILE course, PH 789, students must complete the ‘PH 789 Request to Register form’ which is found in ERF D7.3 ILE requirements folder. The PH 789 syllabus provides the outline and guidance for competency selection, written and oral products required, and how the student will be assessed. The ‘PH 789 syllabus’ can also be found in ERF D7.3 ILE requirements folder.

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

Student work products are assessed for competency attainment, written content, and oral communication using the ‘ILE Assessment Tool’ that can be found in ERF D7.4 Methods of competency assessment folder. The faculty advisor provides the assessment and final decision for the Satisfactory or Unsatisfactory completion of the ILE.

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

Graded student samples of ILE deliverables from 10% of the students over the past three years are found in ERF D7.5 Student samples folder. Within this folder there are three concentration folders, CHS concentration, EPI concentration, and Previous AIPH concentration. Within each folder are student example folders that include the student work, grades, and competency assessments. Student examples numbers 1-6 are from spring and summer 2021 which reflect grading and assessment changes that were made within the program. As an additional example, student example 7 is from fall 2020 which shows the previous protocol and student grading process.

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

Strengths
- Curriculum committee and program faculty worked diligently to improve the ILE process and outcomes over the past three years. By moving away from prescriptive expectations, we have allowed students to better align their written product and oral presentation format with their interests and competencies.

Weaknesses
- None identified
D8. DrPH Integrative Learning Experience
Not applicable

D9. Public Health Bachelor's Degree General Curriculum
Not applicable

D10. Public Health Bachelor's Degree Foundational Domains
Not applicable

D11. Public Health Bachelor's Degree Foundational Competencies
Not applicable

D12. Public Health Bachelor's Degree Cumulative and Experiential Activities
Not applicable

D13. Public Health Bachelor's Degree Cross-Cutting Concepts and Experiences
Not applicable
D14. MPH Program Length

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

Programs use university definitions for credit hours.

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

The MPH requires a minimum of 42 credits for all concentrations as well as the dual degree option. All students complete a common core of 20 credits, 3 credits of practicum, 1 credit of ILE and then 18 credits within their concentration area.

Pharmacy students completing a dual degree with the MPH must take all MPH courses, just as any other student, but their MPH electives may be pharmacy courses related to public health content. Efficiencies are obtained on the pharmacy side of the dual degree curriculum. Students can skip 4 credits of pharmacy electives, 3 credits from Public Health in Pharmacy and 3 credits of Pharmacotherapy (10 credits total). In addition, the MPH practicum may (if taken after the third pharmacy year) count as an Advanced Practice rotation worth 5 credits.

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

The MPH program follows the university definition of a credit. The definition of academic credit can be found here: https://catalog.ndsu.edu/academic-policies/academic-credit/. One academic hour of credit is equivalent to 50 minutes of contact per week over a 15-week semester. Shortened academic sessions, such as summer sessions, are expected to maintain an equivalent amount of contact time as classes in a regular semester.

D15. DrPH Program Length

Not applicable

D16. Bachelor’s Degree Program Length

Not applicable

D17. Academic Public Health Master’s Degrees

Not applicable

D18. Academic Public Health Doctoral Degrees

Not applicable

D19. All Remaining Degrees

Not applicable.
D20. Distance Education

The university provides needed support for the program, including administrative, communication, information technology and student services.

There is an ongoing effort to evaluate the academic effectiveness of the format, to assess learning methods and to systematically use this information to stimulate program improvements. Evaluation of student outcomes and of the learning model are especially important in institutions that offer distance learning but do not offer a comparable in-residence program.

1) Identify all public health distance education degree programs and/or concentrations that offer a curriculum or course of study that can be obtained via distance education. Template Intro-1 may be referenced for this purpose.

All concentrations within the NDSU MPH program are available via distance education as well as on-campus. The majority of courses are offered through synchronous learning.

2) Describe the public health distance education programs, including

   a) an explanation of the model or methods used,

   The MPH program is available both on-site and through distance education through the use of the Interactive Video Network (IVN) and via Zoom. Prior to the COVID-19 pandemic, the MPH program used IVN as the platform to deliver our live, video distance education. After the NDSU campus moved temporarily to distance education in March 2020, the University invested in the Zoom platform. Since then, MPH faculty and students have preferred to use Zoom as the video platform for distance education.

   Zoom has similar functionality of IVN, but with more ease of use and options in regards to breakout rooms and white board tools. With the use of Zoom, any student can videoconference in “live” and participate via video and audio in every class. Additionally, Zoom technology records each lecture, so that students also have access to the recorded lectures.

   b) the program’s rationale for offering these programs,

   The use of IVN and, more recently Zoom, allows the program to recruit students from across the state to meet the public health education needs of mid-career professionals. It also allows students from across the nation to complete the MPH, even if they are not able to move to North Dakota. For example, we have had students successfully complete the program from Washington, Navajo Nation, Montana, and Alaska as just a few examples of locations where students identified our program as the best fit for their interests and could stay in their home communities and complete their education. Many of these students are working professionals, and our program allows them to complete the MPH without moving away from their current work and community.

   In addition to the student recruitment benefit of offering a distance education option, faculty are able to teach from a distance as well. While our full-time faculty are all in-person, on-site hires, having the option to hire a content expert to teach a specific class from outside the community has been of great benefit. The most recent example of this is the North Dakota State Epidemiologist who was hired to teach the Surveillance course; she is able to serve in her role at the state capitol and teach our students as well.
c) the manner in which it provides necessary administrative, information technology and student support services,

Distance students have the same access to student academic support services as on-campus students. The library resources and librarians are available through instant chat, email, and phone. The Center for Writers also is available to students electronically. Since email is the official means of communication for NDSU, distance and on-campus students have comparable access to their instructors as well. Information technology, including the IT help desk is available online and by phone as well.

d) the manner in which it monitors the academic rigor of the programs and their equivalence (or comparability) to other degree programs offered by the university, and

Distance learning classes carry the same course numbers and credits as their traditional counterparts and appear on the student's transcript just like any other course; there is no designator identifying class attendance through distance education. Credits earned through distance learning are transferable and are applicable to graduation requirements in the same manner as traditional classes.

Whether the student is on-site or at a distance, all course content is the equivalent. Most courses are delivered in a synchronous manner, and the IVN system and Zoom allows for live streaming of students into the classroom in real-time. The program has begun offering a few courses asynchronously within this past year. With asynchronous delivery, course objectives and outcome expectations are the same as the in-person equivalent. Courses are evaluated individually for their effectiveness in teaching and learning and the MPH program currently has more asynchronous delivery methods as an area of exploration in the strategic plan.

e) the manner in which it evaluates the educational outcomes, as well as the format and methods.

Course expectations and experiences are the same for students that participate on campus or from a distance. Students that are at a distance are expected to spend the same amount of time in class and on outside work as they would if they were on campus. Student review of courses are provided to all students in which students have the opportunity to provide feedback on the learning atmosphere, availability of instructor outside of class, and physical space among other items. Student feedback is gathered by individual course and instructor as well as aggregated by program each semester. There are opportunities for both quantitative and qualitative feedback at the specific course level. Program results of student feedback on course delivery from 2019-2021 can be found in ERF D20

3) Describe the processes that the university uses to verify that the student who registers in a distance education course (as part of a distance-based degree) or a fully distance-based degree is the same student who participates in and completes the course or degree and receives the academic credit.

Distance students have a secured video connection so faculty can see them in real-time. All students also use the online Blackboard system for courses which is NDSU-account specific and password protected to ensure only enrolled students have access to course materials.
4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

**Strengths**
- The MPH program has a well-established synchronous, distance education option since the beginning of the program in 2012.
- Distance students have the same support, expectations, and experiences as on-campus students.
- The University provides support in terms of physical space and technology in the classroom as well as IT staff support for students and faculty. With the COVID-19 pandemic, distance technology services greatly increased and physical resources as well as online tools also improved.

**Weaknesses**
- None identified.

**Plans for improvement**
- Development of a more systematic process for assessment and evaluation of distance-education delivery methods. This is included in the DPH strategic plan.
E1. Faculty Alignment with Degrees Offered

Faculty teach and supervise students in areas of knowledge with which they are thoroughly familiar and qualified by the totality of their education and experience.

Faculty education and experience is appropriate for the degree level (bachelor’s, master’s, doctoral) and the nature of the degree (research, professional practice, etc.) with which they are associated.

1) Provide a table showing the program’s primary instructional faculty in the format of Template E1-1. The template presents data effective at the beginning of the academic year in which the final self-study is submitted to CEPH and must be updated at the beginning of the site visit if any changes have occurred since final self-study submission. The identification of instructional areas must correspond to the data presented in Template C2-1.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Academic Rank</th>
<th>Tenure Status or Classification</th>
<th>Graduate Degrees Earned</th>
<th>Institution(s) from which degree(s) were earned</th>
<th>Discipline in which degrees were earned</th>
<th>Concentration affiliated with in Template C2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carson, Paul</td>
<td>Professor of Practice</td>
<td>Non-tenure track</td>
<td>MD</td>
<td>University of North Dakota School of Medicine and Health Sciences</td>
<td>Medicine</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>Danielson, Ramona</td>
<td>Assistant Professor</td>
<td>Tenure-track</td>
<td>PhD, MS</td>
<td>North Dakota State University</td>
<td>Gerontology, Sociology, Social Sciences</td>
<td>Community Health Sciences</td>
</tr>
<tr>
<td>Husetth-Zosel, Andrea</td>
<td>Associate Professor</td>
<td>Tenured</td>
<td>PhD, MS</td>
<td>North Dakota State University</td>
<td>Gerontology, Sociology</td>
<td>Community Health Sciences</td>
</tr>
<tr>
<td>Jansen, Rick</td>
<td>Associate Professor</td>
<td>Tenured</td>
<td>PhD, MS</td>
<td>University of Minnesota</td>
<td>Environmental Health, Minors in Biostatistics and Epidemiology</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>Johnson, Pamela Jo</td>
<td>Associate Professor, Chair</td>
<td>Tenure-track</td>
<td>PhD, MPH</td>
<td>University of Minnesota</td>
<td>Epidemiology, Community Health Education</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>Laam, Leslie</td>
<td>Assistant Professor of Practice</td>
<td>Non-tenure track</td>
<td>PhD, MS</td>
<td>University of Rochester School of Medicine and Dentistry, Dartmouth College</td>
<td>Health Services Research and Policy, Evaluative Clinical Sciences</td>
<td>Community Health Sciences and Epidemiology</td>
</tr>
</tbody>
</table>
Larson, Mary | Associate Professor | Tenured | PhD, MPH | University of North Dakota, University of Minnesota | Teaching & Learning: Higher Education/ Research Methodologies, Public Health Nutrition | Community Health Sciences

Meyer, Stefanie | Assistant Professor of Practice, Director of Accreditation | Non-tenure track | PhD, MS | North Dakota State University, University of North Dakota | Exercise Science and Nutrition, Kinesiology | Community Health Sciences

Strand, Mark | Professor | Tenured | PhD, MS | University of Colorado at Denver, University of Minnesota | Health and Behavioral Science, Cell and Developmental Biology | Community Health Sciences

### Non-Primary Instructional Faculty Regularly Involved in Instruction

<table>
<thead>
<tr>
<th>Name</th>
<th>Academic Rank</th>
<th>Title and Current Employment</th>
<th>FTE or % Time Allocated</th>
<th>Graduate Degrees Earned</th>
<th>Institution(s) from which degree(s) were earned</th>
<th>Discipline in which degrees were earned</th>
<th>Concentration affiliated with in Template C2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choi, Bong-Jin</td>
<td>Tenure-track</td>
<td>Assistant Professor, NDSU Department of Statistics</td>
<td>40%</td>
<td>PhD, MA</td>
<td>University of South Florida</td>
<td>Statistics</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>Miller, Tracy</td>
<td>Affiliate Graduate Faculty</td>
<td>State Epidemiologist with North Dakota Department of Health</td>
<td>10%</td>
<td>PhD, MPH</td>
<td>Walden, University of Minnesota</td>
<td>Epidemiology, Public Health</td>
<td>Epidemiology</td>
</tr>
</tbody>
</table>

3) Include CVs for all individuals listed in the templates above.

Faculty CVs for PIF can be found in ERF E1.3 PIF folder and CVs for non-PIF can be found in ERF E1.3 Non-PIF folder.
NDSU requires that all graduate faculty have a terminal degree above the level at which they are teaching (e.g., PhD to teach Masters level courses). For department hires, the Department of Public Health recruits faculty to fill needs within our specialization. For adjunct faculty, both the department faculty and the graduate school must approve the faculty member to teach MPH courses, typically based on experience with teaching, mentoring, and scholarship. Additionally, content-specific background and expertise are targeted to complement one another in the department. All faculty in our department hold a doctoral level degree.

- **Paul Carson, MD** is an infectious disease physician that has medical training in internal medicine and infectious diseases, over 30 years of clinical experience in the diagnosis and management of infectious diseases, and experience in laboratory methods, clinical research, and epidemiologic research. His substantial experience in applied infectious disease epidemiology qualifies him to guide students in the Epidemiology specialization.

- **Ramona Danielson, PhD** has a PhD in Human Development and an emphasis on gerontology. She has worked in the field as a research analyst and research assistant professor prior to becoming faculty in the department. Dr. Danielson's work has emphasized community health and is primarily community-based. Her experience with applied health-related work in communities and emphasis on frameworks for community health qualify her to work with students in the Community Health Sciences specialization.

- **Andrea Huseth-Zosel, PhD, MS, CPH** has her PhD in Gerontology and her Certified Public Health (CPH) credential. Her work has focused on the health of older adults and more recently reproductive health among adolescent girls. Dr. Huseth-Zosel has situated her work in a variety of community settings including rural health, school health, and transportation safety. She has taught behavioral and social sciences for nine years, and cultural competence for health professionals for seven years. These experiences qualify her to guide students in the Community Health Sciences specialization.

- **Rick Jansen, MS, PhD** has his PhD in Environmental Health. His PhD coursework had a strong emphasis on epidemiologic methods and he did a post-doc in cancer genetic epidemiology at the Mayo Clinic and a post-doc in genomic and molecular epidemiology. Dr. Jansen is a methodologist and his areas of research revolve around cancer epidemiology, genetic epidemiology, bioinformatics, and genomics. His wealth of epidemiologic training and years of research in the epidemiologic field qualify him to work with students in the Epidemiology specialization.

- **Pamela Jo Johnson, MPH, PhD, FACE** has a PhD in Epidemiology and has been promoted to fellow of the American College of Epidemiology (ACE) in recognition of substantial and sustained contributions to the field of epidemiology. She has worked as an epidemiologist in a variety of settings (e.g., academia, healthcare delivery settings, and state health department) for nearly 20 years. Dr. Johnson’s epidemiologic training and recognition as a fellow by ACE supports her qualifications to provide guidance to students in the Epidemiology specialization.

- **Leslie Laam, PhD, MS** has a PhD in Health Services Research and an MS in Evaluative Clinical Sciences. She has worked for 15 years in a healthcare delivery setting focused on systems thinking and organizational policy. Her training and background qualify her to teach and advise in both the Community Health Sciences and Epidemiology specializations.
• **Mary Larson, PhD, MPH, RD, CHES** has her PhD in Foundations of Education and Research and Research Methodologies and focused on nutrition and gerontology during her MPH. She is also trained as a dietitian, a certified diabetes educator, and has her CHES credential. Dr. Larson focuses her work on disease prevention and health promotion, lifestyle medicine, and community health leadership skills, and she developed and teaches a course on promoting health through policy, systems, and environment. She brings years of applied experience working in community health settings. This breadth of community health knowledge and experience qualify her to work with students in the Community Health Sciences specialization.

• **Stefanie Meyer, PhD, CSCS** has her PhD in Exercise Science and Nutrition, an MS in Kinesiology, and has her Certified Strength and Conditioning Specialist credential. Her work focuses on physical activity and obesity, lifestyle approaches to chronic disease prevention, and community development. Dr. Meyer is a Fellow at the Challey Institute for Global Innovation and Growth where she is working on social entrepreneurship in public health. Together, her training, expertise, and experience qualify her to provide guidance to students in the Community Health Sciences specialization.

• **Mark Strand, PhD, MS, CPH** has a PhD in Health and Behavioral Science and has his CPH credential. His areas of expertise include prevention and management of chronic disease at the population level and public health impact of health interventions (e.g. RE-AIM). His work takes a population health approach, and he impresses this perspective on his public health and pharmacy practice students. He developed and teaches courses on chronic disease prevention and on global health. His training and experience qualify him to work with students in the Community Health Sciences specialization.

**Non-Primary Instructional Faculty and Adjuncts**

• **Bong-Jin Choi, PhD** is a statistician with a focus on biostatistics. His expertise in biostatistics and experience with statistical application in epidemiologic studies qualifies him to work with students in our Epidemiology specialization.

• **Tracy Miller, PhD, MPH** has her PhD and MPH in Epidemiology. She is the State Epidemiologist for the state of North Dakota. Her training in epidemiology and public health as well as her years of experience in the Office of the State Epidemiologist qualify her to teach in the Epidemiology specialization.

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

**Strengths**

- MPH faculty are well-qualified to teach and advise students in their specializations
- Both PIF and non-PIF faculty are highly trained in their respective fields, which include public health.
- We have a variety of faculty rank and tenure status as well as a number of faculty who worked in public health practice prior to their faculty appointment.
- Our non-PIF bring specialized applied public health experience to the courses they teach.

**Weaknesses**

- None identified.
E2. Integration of Faculty with Practice Experience

To assure a broad public health perspective, the program employs faculty who have professional experience in settings outside of academia and have demonstrated competence in public health practice. Programs encourage faculty to maintain ongoing practice links with public health agencies, especially at state and local levels.

To assure the relevance of curricula and individual learning experiences to current and future practice needs and opportunities, programs regularly involve public health practitioners and other individuals involved in public health work through arrangements that may include adjunct and part-time faculty appointments, guest lectures, involvement in committee work, mentoring students, etc.

1) Describe the manner in which the public health faculty complement integrates perspectives from the field of practice, including information on appointment tracks for practitioners, if applicable. Faculty with significant practice experience outside of that which is typically associated with an academic career should also be identified.

Public health faculty frequently complement their expertise with guest lecturers that bring in practical experiences to the classroom. State and local public health practitioners are called upon to engage with students in the Environmental Health course related to air and water quality as well as conducting health assessments for regulated services such as restaurants. In the Management and Policy course, local legislators are brought in to work with students on local policy activities and the student activities that are conducted have made their way to the state legislature in past sessions. In addition, multiple other courses bring in guests to work with students on diversity and cultural competence. They may work on group projects around this topic or be asked to engage with a community to explore a program or initiative in a real-world situation. In Public Health Research Methods, qualitative research experts are invited as guests and in Research and Evaluation in Tribal Communities, Native researchers share their experiences and work with students to engage in culturally appropriate research and evaluation methods.

In addition to guest lecturers and community engagement with public health practitioners, many current faculty bring with them professional experience prior to academia.

Paul Carson, MD brings direct knowledge of disease pathology and understanding of risk for infectious diseases for public health practice into the classroom from his medical training. Dr. Carson's previous roles of Director of Clinical Research, Director of Hospital Epidemiology, and Director of Quality Improvement in a health system have applicability into the courses he teaches and provides connections to student practicums and research opportunities.

Pamela Jo Johnson, MPH, PhD, FACE worked in state and local public health settings prior to her arrival at NDSU. Her experience working at the Minnesota Department of Health brings applied examples into classroom lectures and advising discussions. Her strong valuing of the state health department led her to immediately connect with the North Dakota Department of Health when she arrived at NDSU. Her vision for and work toward a formal academic health department relationship has been informed by her intimate knowledge of the inner workings of a state health department and knowledge of the skills that public health graduates will need.

Mary Larson, PhD, MPH, RD, CHES worked in clinical, higher education, and public health settings prior to her appointment at NDSU. Dr. Larson's clinical experiences in a federally-qualified primary care clinic serving a diverse patient population as a Lifestyle Medicine Provider and coordinator of the lifestyle medicine programs and services using a policy, systems, and environmental approaches have applicability in the courses she teaches. In addition, Dr. Larson's work with the nation's largest public health nutrition program, WIC, and her health promotion/education work in many different settings provides intimate knowledge of the needed skills and abilities that graduates in public health will need to be successful.
Stefanie Meyer, PhD, CSCS brings her experience working with and leading the North Dakota Cancer Coalition as well as her service work as a School Board member to her mentorship of public health students. She pulls experiences from her previous work as the Director of Health and Wellness for a local YMCA when helping students explore practicum opportunities and in discussions around career interests related to community health.

Tracy K. Miller, MPH, PhD, has worked for state health departments since graduating with her masters in epidemiology. She currently works for the North Dakota Department of Health (DOH), as the ND State Epidemiologist. Her experiences working at the MN and ND Departments of Health contributes to her surveillance lectures and topic discussions. She utilizes her DOH relationships to bring in guest speakers from a variety of programs and divisions to her classroom to offer a well-rounded view of public health surveillance. Her current position with the state health department has provided opportunities to collaborate with instructors at NDSU, even prior to her teaching. Her vision for this collaboration is to find ways to improve the academic/health department relationship through graduate assistantships, using DOH for mentorship opportunities, and provide real world practicums and internships to students.

Mark Strand, PhD, MS, CPH, has a strong connection with state and local public health leaders from prior evaluation work done in collaboration with them. Thus, he is able to introduce students to practicum, volunteer, and job opportunities in public health in the state. Dr. Strand is also on the planning committee of the Dakota Conference on Rural and Public Health and has consistently brought students with him to present at and attend the conference. He serves as Governing Councilor for the North Dakota Public Health Association and is advisor to the NDSU Public Health Association, which he uses to create service and learning opportunities for students.

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

Strengths
- The program has faculty with professional experiences in settings outside of academia
- Faculty members have strong collaborations with practice-based individuals and organizations.
- Many faculty are able to incorporate previous practice experiences into current teaching and student experiences.

Weaknesses
- None identified.
E3. Faculty Instructional Effectiveness
The program ensures that systems, policies and procedures are in place to document that all faculty (full-time and part-time) are current in their areas of instructional responsibility and in pedagogical methods.

The program establishes and consistently applies procedures for evaluating faculty competence and performance in instruction.

The program supports professional development and advancement in instructional effectiveness.

1) Describe the means through which the program ensures that faculty are informed and maintain currency in their areas of instructional responsibility. The description must address both primary instructional and non-primary instructional faculty and should provide examples as relevant.

Maintaining currency in areas of instructional responsibility are an expectation of faculty that is outlined in position descriptions and reviewed annually with the DPH Chair. Active membership in professional organizations is an expectation. Professional development activities related to teaching are an expectation for annual review as well as for promotion and tenure. Workshops related to course design and pedagogy are provided through NDSU from the Office of Teaching and Learning in areas such as using technology in the classroom as well as trainings from the Office of the Provost including pedagogical luncheons. These opportunities are available to both full-time and part-time faculty members at NDSU.

Examples of primary instructional faculty who maintain credentials and instructional currency include:

- **Dr. Larson** maintains her registered dietitian status which is important for her course content in the Community Health Sciences concentration as well as for the accelerated program with dietetics. She also maintains her membership in the Motivational Interviewing Network of Trainers and holds the CHES credential. These specialized areas are used in her courses and MPH students benefit from the content. Graduates have taken the CHES exam and successfully passed from the content learned in Dr. Larson’s classes.

- **Dr. Huset-Zosel and Dr. Strand** both have the CPH credential. By earning this credential, both instructors maintain their status through continuing education and ensure that their instructional content stays current in foundational public health areas.

- **Dr. Meyer** maintains her certification in strength and conditioning from the National Strength and Conditioning Association, of which she is a review member on the special committee for accreditation. She maintains current knowledge in this area to inform instructional content around physical activity and assessment practices.

- **Dr. Johnson** is a Fellow of the American College of Epidemiology (FACE). This reflects her substantial and sustained contributions to the field of epidemiology. Promotion to fellowship is assessed and awarded by the membership committee of the American College of Epidemiology. Dr. Johnson also participates in workshops related to survey research to maintain currency in survey methods and questionnaire design.

Non-PIF are supported in their teaching through program administration, peer support, and they have access to the university trainings and workshops. The Director of Accreditation onboards part-time faculty including teaching resources for using distance-education technology, getting started with our learning management system – Blackboard, and connecting them with peers who can help with course design as well as cover any program expectations of instruction. One specific example from how a non-PIF has maintained currency for teaching includes the Coach-the-Coach training course. Dr. Laam completed this course and subsequently has taught
coaching seminars and supervised projects for other coaches in the training program; specific to health care improvement. More recently, Dr. Laam, has been mentored by a senior-level faculty member at NDSU who is an expert in pedagogy. Dr. Laam has since been hired by the DPH as a full-time, Assistant Professor of Practice.

2) Describe the program’s procedures for evaluating faculty instructional effectiveness. Include a description of the processes used for student course evaluations and peer evaluations, if applicable.

Student course evaluations
At the end of each semester, students are asked to voluntarily complete a course evaluation for each course. The Student Course Experience (SCE) is administered at the University level through a link to a standard set of questions about the instructional ability as well as the environment for learning. The evaluation comprises nine Likert-type items that ask students to rate how much they agree or disagree with each statement. There is also an open-ended opportunity for students to provide their thoughts about the course or the instructor.

Peer teaching evaluations
Peer teaching evaluations are required every three years, at a minimum, for tenure-track faculty. Peer teaching can be arranged individually by asking a senior faculty member or the Department Chair to attend a classroom experience. The teaching review is documented by a letter of support to include in the PTE portfolio.

The Office of Teaching and Learning also offers a Peer Teaching Program. There are two tracks, a formal peer teaching review or an informal peer teaching partnership. The formal review matches a faculty member with a senior faculty member that is trained in formal pedagogy review. They work through a semester on syllabus development, teaching methods, multiple classroom observations with pre/post observation analyses, and discussions on best-practices of assessing student learning. At the end of this review experience the faculty member receives a formal Peer Teaching Review report for the PTE portfolio. Alternatively, the informal peer teaching partnership partners faculty with other teaching faculty members and instructional staff to evaluate each other’s teaching. At completion, the partners can write teaching support letters for each other’s PTE portfolios.

3) Describe available university and programmatic support for continuous improvement in faculty’s instructional roles. Provide three to five examples of program involvement in or use of these resources. The description must address both primary instructional faculty and non-primary instructional faculty.

NDSU hosts a variety of instructional development programming throughout the year. The Provost’s office hosts a Faculty and Academic Staff conference each year in August prior to the start of the academic year. This office also sponsors faculty professional development luncheons throughout the academic year. NDSU also has an Office of Teaching and Learning that offers programs for instruction including Peer Teaching Partnerships.

Specific examples of how MPH program faculty have engaged with these resources include:
• Participation in ‘Inclusive Teaching Practices and the Syllabus Challenge’ session at the annual conference
• Attendance at the ‘Holistic Teaching Evaluation’ luncheon
• Book club involvement – ‘Ungrading: Why rating students undermines learning (and what to do instead)’
• HyFlex and Hybrid Course Design Discussion featuring Dr. Brian Beatty training
• Attendance at ‘Supporting Students with Disabilities’ webinar
4) Describe the role of evaluations of instructional effectiveness in decisions about faculty advancement.

The Department of Public Health values effective interaction with students to create professionalism and higher-level thinking. A faculty member who excels in teaching is a person who engages students to learn; guides students to think purposefully, independently, and critically; keeps informed about new developments in his or her specialty and related fields; strives continuously to broaden and deepen his or her knowledge and understanding; and continually contributes to improving the methods of teaching his or her subject matter. Both classroom and experiential instruction are valued. Peer evaluations of classroom teaching content and methods are required.

Annually, faculty course evaluations, advising evaluations, and SCE results are reviewed by the Chair (and with the faculty member) as part of the annual evaluation. The Chair indicates the faculty member’s progress toward promotion. Professional development goals and teaching goals are set for the coming year. Annual reviews, collectively, are submitted as part of the PTE portfolio. Tenure track faculty have a 3-year review at which time the PTE committee reviews the portfolio and provides recommendations toward promotion and tenure. This review includes a full review of teaching activity and teaching evaluations to date.

Principal criteria for the PTE assessment of teaching quality are: a. Evidence of positive impact on student learning, including effective mentoring and advising of students, as revealed by annual supervisor evaluations, SCE (six of the nine items that pertain directly to faculty performance) and peer evaluations. b. Degree of responsibility; scope of teaching; importance of teaching duties with regard to the mission of the College; exceptional responsibilities undertaken, assigned or voluntary; size and level of teaching load; and participation in continuing education and/or distance education programs of the College.

5) Select at least three indicators, with one from each of the listed categories that are meaningful to the program and relate to instructional quality. Describe the program’s approach and progress over the last three years for each of the chosen indicators. In addition to at least three from the lists that follow, the program may add indicators that are significant to its own mission and context.

A previous goal for faculty instructional quality was that students would report, on average, ≥ 4 out of 5 on their “understanding of course content” as indicated through MPH course evaluations/student ratings of instruction. In 2020, the program updated metrics for service indicators as part of the strategic planning process. These indicators include:

1. Annual or other regular reviews of faculty productivity, relation of scholarship to instruction
2. Student satisfaction with quality instruction
3. Courses that integrate technology in innovative ways to enhance learning

A future indicator the program faculty are considering is the inclusion of service learning. Service learning is being explored as an objective within the strategic plan.

Each semester, student feedback is gathered by course for both PIF and non-PIF faculty members. Results are shared directly with each instructor and the DPH Chair. Upon review, the Chair will address any issues identified on the SCE by class. The peer teaching program has been used both as a proactive measure and as means to help faculty address an area of weakness in their teaching. In addition, College and University awards are available for teaching effectiveness and MPH faculty have been nominated and received awards in the past.
2018-2019
Fall 2018 SROI
Department mean of 4.323
Lowest score of graduate public health courses = 3.222 (Biostatistics)
Highest score of graduate public health courses = 5.0 (multiple concentration courses)

Spring 2019 SROI
Department mean of 4.467
Lowest score of graduate public health courses = 2.0 (Advanced Skills in Epidemiology)
Highest score of graduate public health courses = 5.0 (multiple concentration courses)

2019-2020
Fall 2019 SROI
Department mean of 4.430

Spring 2020 SROI
Department mean of 4.425

2020-2021
Annual or other regular reviews of faculty productivity, relation of scholarship to instruction
- Paul Carson – Recipient of the Dean’s Award for Excellence in Teaching – 2021
- Mark Strand – Nominated for NDSU Innovation in HyFlex teaching award - 2021

Student satisfaction with quality instruction
Student ratings of instruction questions changed starting Fall 2020. Questions related to instruction now include the following: 1) ‘This instructor provided well-defined course objectives’; 2) ‘This instructor provided content and materials that were clear and well organized’; and 3) ‘The instructor provided feedback that helped me learn.’ Mean results for these questions from department graduate courses are as follows (referenced from the class mean on the report):
- Fall 2020
  1. 4.395
  2. 4.105
  3. 4.408
- Spring 2021
  1. 4.323
  2. 4.231
  3. 4.262

Courses that integrate technology in innovative ways to enhance learning
- PH 706 Essentials in Epidemiology, uses multiple technologies in instruction. Turning Technologies student ResponseWare (formerly called clickers) is used in Epidemiology in every class period. This allows students to individually answer questions that apply the skills they have acquired while working on cases studies. It also helps students get immediate feedback on their performance, and they are able to identify which areas they need to spend more time mastering.
- Dr. Danielson uses Mentimeter as a tool for real-time feedback from students, including word clouds and anonymous reflections/feedback in her public health classes.
- The didactic portion of the practicum, PH 794, uses VoiceThread to engage students who are all at different locations and completing unique experiences around common topics. VoiceThread allows the instructor to post an image and video recording of a question set for student to reflect upon and then post a video response so all students can view responses.
6) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

**Strengths**
- The program provides clear expectations and has procedures to assess faculty instructional effectiveness.
- Student reviews of faculty instructional effectiveness provide individual class, department, college, and university-wide feedback. Data are used in annual reviews to reward, as well as identify areas for improvement.
- Support is available to ensure faculty receive instructional help they need as well as to continuously improve their teaching.

**Weaknesses**
- Over the past few years, major changes in the student course evaluation questions and the change in metrics used for MPH program assessment of quality instruction have made it difficult to summarize student feedback on instructional effectiveness.

**Plans for improvement**
- A new faculty evaluation tool will be implemented starting calendar year 2022. The tool will collect faculty instructional effectiveness information.
E4. Faculty Scholarship

The program has policies and practices in place to support faculty involvement in scholarly activities. As many faculty as possible are involved in research and scholarly activity in some form, whether funded or unfunded. Ongoing participation in research and scholarly activity ensures that faculty are relevant and current in their field of expertise, that their work is peer reviewed and that they are content experts.

The types and extent of faculty research align with university and program missions and relate to the types of degrees offered.

Faculty integrate research and scholarship with their instructional activities. Research allows faculty to bring real-world examples into the classroom to update and inspire teaching and provides opportunities for students to engage in research activities, if desired or appropriate for the degree program.

1) Describe the program’s definition of and expectations regarding faculty research and scholarly activity.

   Our department values the scholarship of discovery, teaching, application, and integration equally. Scholarship that improves the practice of public health has equal value with discovery. Excellence in scholarship is shown by continuity, focus, and quality of work. All faculty are required to engage in scholarship, a minimum of 25% for tenure track and 10% for non-tenure track. Scholarship can take a variety of forms. PTE guidelines indicate minimum requirements for supporting evidence of scholarship to include: publications (at least 1 per year), presentations at professional meetings (average of 1 per year), and grants/contracts (3 as PI or co-PI during probationary period). Although the PTE guidelines indicate these benchmarks, they are minimum guidelines and do not ensure promotion or tenure. The Chair has set expectations for two per year in each of the three categories, with the exception of reduced grant proposal submissions if the faculty member is already on substantial grants or as necessary to align with workload assignment.

2) Describe available university and program support for research and scholarly activities.

   University-level support for research and creative activity (RCA) is housed in the Office of RCA, which is led by the Vice President of RCA. Offices within this division include SPA, IRB, research development, and research compliance, among others. NDSU also has an office of grant and contract accounting which manages all monies awarded from pre-award to post-award. The Research Development unit assists faculty with proposal development writing and will review draft proposals. The Office of RCA makes available seed grants and travel awards. NDSU also has on-campus the Center for Social Research, Group Decision Center, Statistical Consulting, and the Libraries. Libraries include a health sciences library, a dedicated health sciences librarian, and a public health collection. There are also ongoing professional development activities: including access to rotating subscriptions to NIH proposal writing workshop series, NSF writing series, and research workshops for faculty and staff. The DPH has a full-time staff person dedicated to help facilitate the grants and contracts process from submission to award. The College also has a Budget Manager available to assist with the research and scholarship funding process and who manages all indirect funds for the department and faculty.

3) Describe and provide three to five examples of faculty research activities and how faculty integrate research and scholarly activities and experience into their instruction of students.

   Program faculty research activities include topics such as COVID-19, older adults, menstruation-related experiences among adolescents, infectious diseases, and visual mapping. Faculty also engage in research related to seroprevalence and epidemiologic methods, chronic disease prevention, and health equity.
Select examples of faculty research activities integrated into instruction include:

- **Dr. Andrea Huseth-Zosel** incorporates her research on the well-being of older adults and mental and physical health of K12 and higher education instructors into the foundational course PH 741 Social and Behavioral Sciences in Public Health. Additionally, Dr. Huseth-Zosel brings in examples specific to program evaluation from her work with evaluating programs designed to assist older adults with aging in place across North Dakota and Minnesota to the PH 741 course.

- **Dr. Paul Carson** teaches public health courses on preventing and managing infectious diseases. In his courses, he has dedicated lectures on the hierarch of evidence as it pertains to research design and strength of evidence. More specifically, he includes content used to support public health policy and assess the strength of the evidence. Students then must prepare and debate contentious infectious disease-related questions based on the strength of the evidence and research design.

- **Dr. Rick Jansen** includes R statistical software in his public health class, PH 752 Epidemiological Methods II, to experience data visualization at the state and national level for diseases and demographics.

- **Dr. Ramona Danielson** incorporates maternal and child health, adverse childhood experiences, and trauma-informed approaches to PH 712 Public Health Research Methods and PH 774 Research and Evaluation in Tribal Communities. Dr. Danielson uses examples from her work with tribal nations in the Upper Midwest to engage students in the importance of coming alongside communities and authentic community engagement, as well as specific skills in analyzing data and disseminating information for different audiences.

- **Dr. Pamela Jo Johnson** is a survey methodologist and teaches PH 754 Health Survey Research. She has years of experience conducting health surveys with local and state public health, healthcare delivery systems, and academics. She uses examples from her applied experiences, as well as actual survey instruments and other materials developed for individual research projects.

- **Dr. Mary Larson** incorporates her work in policy, systems, and environmental approaches to building lifestyle medicine into primary care settings in her PH 725 Promoting Health through Policy, Systems, and Environment. In addition, she incorporates her research in Motivational Interviewing into PH 745 Community Health Leadership. Dr. Larson also uses her applied experiences with health promotion programs in PH 722 Applied Community Health with examples of social norms marketing and the use of the PRECEDE PROCEED model.

- **Dr. Mark Strand** is a chronic disease epidemiologist, and incorporates his research in diabetes epidemiology and opioid use disorder in his PH 700 Preventing and Managing Chronic Illness course. He also supports graduate students on his opioid prevention research grants, providing research and publications opportunities for students.

4) Describe and provide three to five examples of student opportunities for involvement in faculty research and scholarly activities.

Inclusion of students in scholarly activities is an expectation in the Department of Public Health. Faculty make substantial efforts to include students both as graduate assistants and as part of their advising. Students have been part of data collection, data analysis, and publication and presentation of results. Numerous students have been co-authors or lead authors on research abstracts submitted to professional conferences and subsequent presentation. Students have also had the opportunity to co-author manuscripts and some have been lead author.

Select examples of student involvement in faculty research and scholarly activities include:
• NIH COBRE project (Dr. Rick Jansen)– public health students assist with multi-omics data analysis to identify genomic features associated with pancreatic cancer. Students are involved in writing manuscripts and presenting at conferences related to this research.

• Public health students collected data for a large randomized trial of educational and feedback intervention to medical providers on their individual performance with using antibiotics per guideline protocols in the outpatient setting. Students also prepared the research poster and will be 1st, 2nd, and 3rd authors on the manuscript being prepared (Dr. Paul Carson).

• In a study led by two public health faculty members on North Dakota resident immunity status and experiences related to COVID-19, students are assisting with pilot testing survey instruments, data collection, and data analysis (Dr. Pamela Jo Johnson; Dr. Paul Carson).

• Student involvement in data collection and manuscript preparation on a study to assess if the CDC’s AFIX program (assessment/feedback/incentives/change) could improve HPV vaccines rates in intervention clinics in North Dakota (Dr. Paul Carson).

• Graduate student assistants worked on an evaluation project with faculty for the North Dakota Department of Health Maternal and Child Health programs. Students experienced survey development and dissemination, data collection, cleaning, analysis and presentation, and manuscript writing (Dr. Andrea Huset-Zosel and Dr. Mark Strand).

• Public health students assisted in research with the CDC High Obesity Project working on a conceptual model for partnering with Tribal communities to implement health promotion activities. Students are also engaged in writing a manuscript with this project (Dr. Ramona Danielson).

• As part of the New Beginnings project, a student conducted interviews with faculty and stakeholders regarding how to improve NDSU’s environment for recruiting, retaining, and graduating American Indian students. Two students assisted with analysis and compilation of results from a survey of American Indian students, faculty, and staff on this same topic (Dr. Ramona Danielson).

• The COVID-19 Incubation project was requested by Dr. Deborah Birx from the federal COVID task force through the ND Governor’s office. Three graduate students were involved in the data collection, analysis, and reporting. Two abstracts were accepted and presented at APHA 2021 and a manuscript is currently under review in the Open Forum Infectious Diseases (Dr. Mary Larson).

5) Describe the role of research and scholarly activity in decisions about faculty advancement.

Annually, faculty must report research and scholarly activity from the previous year. This includes publications, presentations, grant proposal submissions and awards, and students involved with faculty research. This report is reviewed by the Chair (with the faculty member) as part of the annual evaluation. The Chair indicates the faculty member’s progress toward promotion. Professional development goals and scholarship goals are set for the coming year. Annual reviews, collectively, are submitted as part of the PTE portfolio. Tenure track faculty have a 3-year review at which time the PTE committee reviews the portfolio and provides recommendation for next steps toward promotion and tenure.

6) Select at least three of the measures that are meaningful to the program and demonstrate its success in research and scholarly activities. Provide a target for each measure and data from the last three years in the format of Template E4-1. In addition to at least three from the list that follows, the program may add measures that are significant to its own mission and context.
<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Target</th>
<th>2018-2019</th>
<th>2019-2020</th>
<th>2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of published articles in peer-reviewed journals per year.</td>
<td>2 per faculty member</td>
<td>6/8 faculty met the target</td>
<td>4/9 faculty met the target</td>
<td>5/10 faculty met the target</td>
</tr>
<tr>
<td>Number of presentations at professional meetings per year.</td>
<td>2 per faculty member</td>
<td>6/8 faculty met the target</td>
<td>5/9 faculty met the target</td>
<td>5/10 faculty met the target</td>
</tr>
<tr>
<td>Number of grant submissions per year.</td>
<td>2 per faculty member (unless already on a grant)</td>
<td>2/8 faculty met the target</td>
<td>7/9 faculty met the target</td>
<td>6/10 faculty met the target</td>
</tr>
</tbody>
</table>

Further details of faculty research and scholarly activity are included in ERF Criterion E4 folder.

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

**Strengths**
- Faculty members provide a variety of opportunities to involve students in their research.
- Students can gain experiences in research conference presentation and co-authoring research publications.

**Weaknesses**
- Limited departmental research administration staff support for scholarship activities (e.g., proposal preparation, manuscript submission processes).

**Plans for improvement**
- A new faculty evaluation tool will be implemented starting calendar year 2022. The tool will collect faculty research and scholarly activity metrics.
- New VP for Research and Creative Activities started fall 2021 and is strengthening the NDSU research support infrastructure.
E5. Faculty Extramural Service

The program defines expectations regarding faculty extramural service activity. Participation in internal university committees is not within the definition of this section. Service as described here refers to contributions of professional expertise to the community, including professional practice. It is an explicit activity undertaken for the benefit of the greater society, over and beyond what is accomplished through instruction and research.

As many faculty as possible are actively engaged with the community through communication, collaboration, consultation, provision of technical assistance and other means of sharing the program’s professional knowledge and skills. While these activities may generate revenue, the value of faculty service is not measured in financial terms.

1) Describe the program’s definition and expectations regarding faculty extramural service activity. Explain how these relate/compare to university definitions and expectations.

NDSU defines service as “public service, service to the University, college, and department, and service to the profession.” Service should demonstrate “contributions to the welfare of the department, college, university, or profession, and/or contributions to the public that make use of the faculty member’s academic or professional expertise.” Similarly, the DPH defines service as consisting of “three parts: to the profession; to the department, college, and university; and to the community.” Evidence of professional, university, and community service may include: leadership positions in professional organizations or university committees, appointments to external advisory boards, invited editorials, Fellow status in professional societies, or contributions to the public that make use of faculty member’s academic or professional expertise. Requirements for supporting evidence include documentation of: Committee/University involvement, other committee or organization involvement, service to the public, and awards and honors for service.

2) Describe available university and program support for extramural service activities.

The College supports service activities through inclusion of service in PTE as well as supports an award for service. Previous MPH faculty member, Molly Secor-Turner, was the recipient of the Deans Award for Exemplary Service in 2020. Current MPH faculty member Mary Larson was the recipient of the Dean’s Award for Exemplary in Service in 2021. Service activities are submitted and reviewed annually with the DPH Chair.

NDSU also supports service activities through faculty awards and recognition. The Office of the Provost supports these nominations and awards.

3) Describe and provide three to five examples of faculty extramural service activities and how faculty integrate service experiences into their instruction of students.

Public health faculty engage in extramural service in a variety of ways including serving on statewide advisory committees, coalitions, and boards.

Select examples of faculty extramural service and inclusion into instruction include:

- **Dr. Huset-Zosel** incorporates topic-specific examples from the Injury Prevention Coalition, Child Passenger Safety Advisory Committee, and Statewide Occupant Protection Task Force within the foundational course, PH 741. Additionally, injury prevention/traffic safety is the focus of at least one classroom activity within this class.

- **Dr. Larson** pulls from her service work on the President’s Council for Campus Well-Being and provides practical activities to students in her course, PH 725. Students developed a Health in All Policies project that aims to embed health and well-being into all policies across the NDSU campus.
• **Dr. Danielson** engages students in her service work with North Dakota BRFSS, Health Equity Office, and the North Dakota Pregnancy Risk Assessment Monitoring System (PRAMS) in PH 712 by incorporating performance measurement and continuous quality improvement into praxis assignments.

• **Dr. Mark Strand** is founding member and former chair of the FM Advisory Council designed to build collaborations between clinical medicine and community-based chronic disease prevention opportunities. This experience is incorporated into PH 700 Preventing and Managing Chronic Illness. It also created an opportunity for a student practicum experience.

4) Describe and provide three to five examples of student opportunities for involvement in faculty extramural service.

Select examples of student involvement in faculty extramural service include:

• **Dr. Carson’s** service to the state of North Dakota at the beginning of the COVID-19 pandemic included critical help from public health students. Guidance to the state health department and Governor were provided by Dr. Carson and his students through the development of science briefs using rapidly developing, real-time literature.

• **Dr. Danielson** has a strong relationship with NDDOH Health Equity Office which has provided students with experiences to intern and serve as graduate assistants engaged in extending the reach and impact across the state. Examples of students’ activities include designing and conducting a community health needs assessment for HIV, designing a training on maternal hypertension for doctors, and convening coalitions with LGBTQ2S+, youth, American Indian, and New Americans-Foreign Born-Immigrant communities.

• **Dr. Larson** provides service to the local community through the establishment of a community garden, implementation of SNAP EBT at the local farmers market, and implementation of the PoP (Power of Produce) programs for kids and seniors at the local farmers market. These food justice programs are available to MPH students as a community-based practicum.

5) Select at least three of the indicators that are meaningful to the program and relate to service. Describe the program’s approach and progress over the last three years for each of the chosen indicators. In addition to at least three from the list that follows, the program may add indicators that are significant to its own mission and context.

A previous goal for faculty service was that PIF would provide a minimum of 50 service activities to community, public health, and other health-related organizations each academic year. In addition, PIF faculty would provide students with a minimum of five opportunities to be involved in these service activities. In 2020, the program updated metrics for service indicators as part of the strategic planning process. These indicators include:

- % of PIF faculty participating in extramural service
- # of faculty-student service collaborations
- # of community-based service projects

Program faculty identified the goals of 50 service activities and five opportunities with students during faculty meetings. These numbers were established after review of current service output; we wanted to set a realistic number yet stretched ourselves, specifically in terms of student involvement. The new indicators were established through review of the past goals and with input from the assessment and accreditation committee. Participation and inclusion of program faculty in service activities is an indicator that stayed as well as involvement of students in faculty service
activities. The new service indicator of community-based service projects was added to align with our strategic plan.

The following are metrics for service indicators:

2018-2019
- 15 service activities
- 4 service activities involving students

2019-2020
- 15 service activities
- 0 service activities involving students

2020-2021
- 28 service activities
- 90% (9/10) of PIF faculty participated in extramural service
- 6 faculty-student service collaborations occurred (13 students participating)

The number of community-based service projects from 2020-2021 was not collected. The faculty need to further define what will count as community-based service projects and then will also identify a target.

Some examples of faculty-student service collaborations to highlight from this most recent academic year include:
- COVID-19 immunization event at Fargo Mosque
- Science briefs for NDDoH and Governor’s office at beginning of COVID pandemic
- Food drive
- Hosted racism panel webinar
- Delivered COVID Around the World webinar
- Introduced COVID Epidemiology to Fargo South High School ELI students

Details of MPH Faculty Service activities can be found in ERF Criterion E5.

6) Describe the role of service in decisions about faculty advancement.

Annually, faculty must report their service to the university, the community, and the profession from the previous year. This is reviewed by the Chair (and with the faculty member) as part of the annual evaluation. The Chair indicates the faculty member’s progress toward promotion. Professional development goals and service goals are set for the coming year. Annual reviews, collectively, are submitted as part of the PTE portfolio. Tenure track faculty have a 3-year review at which time the PTE committee reviews the portfolio and provides recommendations toward promotion and tenure. This review includes a full review of service activity to date.

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

**Strengths**
- Service activities are acknowledged through college and university awards and recognition programs.

**Weaknesses**
- Our MPH program has not yet implemented a systematic method to collect service data/metrics.
Plans for improvement

- Full implementation of the new strategic plan and annual collection and review of new evaluation metrics for service activities.
- Definition and expectations of faculty service will be made clearer and will prioritize engaging MPH students.
- A new faculty evaluation tool will be implemented starting calendar year 2022. The tool will collect faculty extramural service activities.
F1. Community Involvement in Program Evaluation and Assessment

The program engages constituents, including community stakeholders, alumni, employers and other relevant community partners. Stakeholders may include professionals in sectors other than health (e.g., attorneys, architects, parks and recreation personnel).

Specifically, the program ensures that constituents provide regular feedback on its student outcomes, curriculum and overall planning processes, including the self-study process.

1) Describe any formal structures for constituent input (e.g., community advisory board, alumni association, etc.). List members and/or officers as applicable, with their credentials and professional affiliations.

The MPH program utilizes a community public health advisory board. This board was established to provide support to the mission, vision, and core values of the University, College of Health Professions, and Department of Public Health. More specifically, this board serves to assist the DPH in addressing issues which are vital to the future success and quality of the MPH program and field of public health. The board is made up of public health members representing various sectors such as state, local, tribal, or other health agencies. Two non-public health individuals may also be appointed to the board if they have demonstrated an interest in being of service to the DPH.

Current advisory board leadership and membership are as follows and can be found online: https://www.ndsu.edu/publichealth/about/advisory_board/

- Mallory Koshiol, MPH (Chair) – Director of System Safety & Quality - Allina Health System
- Heather Kroeker, MPH, CHES (Vice Chair) – Employee Safety Program Manager - Allina Health System
- Tansy Wells, MPH, CPH (Secretary) – Improvement Advisor, Quality & Safety – Sanford Health
- Kayla Carlson, MPH – Health Services Director - Richland County Health Department
- Jacob Davis, MPH – Tribal Programming Director - Prevent Child Abuse North Dakota
- Tracy Miller, PhD, MPH – Director, Office of the State Epidemiologist – North Dakota Department of Health
- Kelly Nagel, MS, RD, LD – Director, Systems and Performance - North Dakota Department of Health
- Lance Presser, PhD – Scientist, RIVM National Institute for Public Health and the Environment

2) Describe how the program engages external constituents in regular assessment of the content and currency of public health curricula and their relevance to current practice and future directions.

Advisory Board: The advisory board meets at least twice per year, typically in the fall during Homecoming week and again later spring semester. While the board has an over-arching purpose to support the program, they also are called to provide input on the strategic planning process, assist with external support including fundraising, and provide practicum opportunities for current MPH students.
Alumni: In addition to a formal advisory board, the program stays engaged with alumni by sending periodic updates through the alumni listserv and engaging alumni in feedback opportunities including post-graduation competency assessment, career readiness, and practical experiences. Alumni were asked to serve on the accreditation and assessment ad hoc committee as well as the ad hoc strategic planning committee.

Practicum preceptors: Feedback from practicum preceptors is also important to inform the program about the ability of the students in the field and what skills are showing through during their experience as well as skills that may be lacking. Some recent feedback from 2020-2021 preceptors include suggestions for the MPH program to teach marketing/communication lessons; to teach communication strategies to students; and ways to encourage or promote knowledge of vaccination resources in the community.

3) Describe how the program’s external partners contribute to the ongoing operations of the program. At a minimum, this discussion should include community engagement in the following:

a) Development of the vision, mission, values, goals and evaluation measures

The advisory board engaged in review of the vision, mission, values during the strategic planning process of the DPH. After internal department workgroups had developed options for these items, the board met to discuss and provide external feedback. The board also engaged with the goals and evaluation measures through the strategic planning process through a special meeting to review all items and provide input as to how external stakeholder can support the goals as well as feedback related to current public health practice and priority areas.

b) Development of the self-study document

The advisory board reviewed the self-study narrative at the fall meeting. In addition, two alumni serve as members of the ad hoc accreditation and assessment committee and were most helpful in selecting outcome measures and how best to collect data for the self-study assessment process.

c) Assessment of changing practice and research needs

The advisory board engaged in conversation around this topic of changing practice and research needs. The board was provided the results from the most recent alumni survey as well as the workforce assessment and were asked to expand upon those quantitative results as well as to discuss what they experience in their respective workplaces. Discussion yielded a variety of needs including outbreak investigation process changes, framing of communication (health behavior change), the need for purposeful integration of health equity, policy development, public health and healthcare collaborations, the involvement of local public health in acute care, data-driven and the need for proactive decision-making, use of data management skills and software, and meeting facilitation skills specifically related to the integration of diverse perspectives.

d) Assessment of program graduates’ ability to perform competencies in an employment setting

Organizations recruit employees directly from our program which is a subjective assessment of the quality of our graduates. The fact that organizations want to hire our
graduates speaks to the caliber of graduate from our MPH program. To more formally assess our graduates’ ability in their place of employment, the MPH program piloted an employer survey in the spring 2022. This initial survey consisted of asking employers how they would assess graduates’ ability in each of the 22 foundational competencies. This survey also asked about skills our graduates are both most and least prepared for in the workforce, post-graduation. This pilot survey was sent to employers of MPH graduates from 2019-2021 and included organizations such local healthcare systems, research centers, Universities, local public health, and state public health. Initial results showed that graduates are weakest in data analysis skills and strongest in communication skills. In addition, workforce feedback showed that the area of ‘principles and tools of budget and resource management’ was mostly not applicable in their current position.

4) Provide documentation (eg, minutes, notes, committee reports, etc.) of external contribution in at least two of the areas noted in documentation request 3.

The advisory board involvement in the mission, vision, values, goals, and evaluation measures can be found in the meeting minutes from July 2020 in the ERF F1.4 Evidence of community input. These items were all part of the development of a strategic plan and the advisory board contributed to that plan as well. Meeting minutes from March 2021 can be referenced for the board’s contributions and found in ERF F1.4 Evidence of community input.

The advisory board also provided specific feedback related to changing practice and research needs at the October, 2021 meeting and were provided with the self-study draft to review. Minutes from October 2021 are found in ERF F1.4 Evidence of community input.

The MPH graduate competence in employment pilot survey was sent to nine contacts in organizations that have hired and are working with recent MPH graduates. Response rate was about 50%. The MPH graduate competence in employment survey, raw data, and report can be found in ERF F1.4 Evidence of community input.

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

Strengths
- Advisory board structure and by-laws were revised in 2020, and the updated structure and membership allow for more purposeful engagement.
- Advisory board members are highly engaged and have a strong commitment to our success.

Weaknesses
- The formal advisory board is a fairly small group which can put a burden on those who serve.

Plans for improvement
- Advisory Board bylaws allow for the expansion of the Board, and discussion has begun about expanding the number of members and diversifying the membership in terms of background and skill set.
- Formal assessment of graduates’ ability to perform competencies in an employment setting will be further developed and scheduled as part of regular stakeholder feedback gathering. Pilot data will be used to inform this process.
Community and professional service opportunities, in addition to those used to satisfy Criterion D4, are available to all students. Experiences should help students to gain an understanding of the contexts in which public health work is performed outside of an academic setting and the importance of learning and contributing to professional advancement in the field.

1) Describe how students are introduced to service, community engagement and professional development activities and how they are encouraged to participate.

The student organization, Public Health Association (PHA), is an official student government recognized organization. Public health students lead PHA and are advised by a public health faculty or staff member. The purpose of PHA is ‘to strive to meet the public health needs of the community through the multidisciplinary collaboration of NDSU students, faculty and staff with the goals of promoting health, preventing disease, and improving the quality of life.’ This student organization holds regular membership meetings, allows for student leadership opportunities, and provides students with experiences in planning and participating in community gatherings be it for social functions or professional events. The regional conference, Dakota Conference on Rural and Public Health, and national conference hosted by the American Public Health Association are both encouraged for students to attend and present. Financial assistance is provided by PHA for members who are engaged in these conferences.

In addition to PHA, faculty and staff in the department as well as the college often provide opportunities for students to engage in service projects, such as working with community gardens, or community engagement including opportunities to engage with state legislators during session by providing education on relevant public health topics. Faculty members also often include service and community projects as part of their courses. For example, PH 704 Public Health Management and Policy, includes real-world projects such as policy research and development for upcoming legislative sessions. Professional development activities such as presenting research and attending conferences are encouraged by faculty as well, most specifically based on course work products that faculty deem as exceptional and should be published/shared with the public health community.

2) Provide examples of professional and community service opportunities in which public health students have participated in the last three years.

2018-2019

- The Rural Collaborative Opportunities for Occupational Learning in Health (R-COOL-Health) Scrubs Academy I encourages junior high students to pursue a career in healthcare by participating in hands-on activities. Public health’s activity was an outbreak investigation using chemical reactions to investigate the infectious agent starting point, with and without using a vaccine.
- Educational information related to public health topics under policy consideration for the North Dakota legislative session.

2019-2020

- R-COOL- Health Scrubs Academy I outbreak investigation.
- Field trip to City-County Health District in Valley City. Professional opportunity to meet and network with public health professionals.
- Avenues of Scientific Discovery event. PHA members conducted the disease outbreak investigation with high school students.
- PHA members hosted an educational event for Boy Scouts to earn their merit badge in public health.
- PHA planned public health events open to the whole campus community and local community members. While many events were disrupted by the pandemic, two were held via zoom; 1) Dr. DeCoteau’s presentation on trauma informed care and 2) International public health students presented on COVID-19 global response across countries.

2020-2021

- Juneteenth event, “Finding our Voices: A Discussion on Race and Racism”, was presented by a panel of MPH alumni for department students, faculty, staff, and program alumni
- Food drive organization for the Emergency Food Pantry in Fargo. Over 300 pounds of food and personal care items collected and donated. Student organizers won the Service Project of the Year Award.
- Public health week events:
  - Mary J. Berg distinguished speaker Dr. Jaime Slaughter-Acey presented “Ignoring the Cost of Color in the Fight Against Racial Health Inequalities: Implications for Women's Health”
  - Public health BINGO event offered in person and via Zoom
  - Information booth on COVID myths and provided vaccine information in the Memorial Union

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

Strengths

- PHA is an established organization with a clear purpose.
- PHA has been leading public health week events for a number of years now and has proven invaluable to the student leaders in their professional development.

Weaknesses

- None identified.
F3. Assessment of the Community’s Professional Development Needs

The program periodically assesses the professional development needs of individuals currently serving public health functions in its self-defined priority community or communities.

1) Define the program’s professional community or communities of interest and the rationale for this choice.

Communities of interest for the MPH program include the regional area of North Dakota, South Dakota, Minnesota, and the tribal nations within this geography. In addition, professional communities include regional, state, local, and tribal health agencies as well as the healthcare systems in the same area. We chose these communities of interest because our region has one of the highest American Indian populations in the United States and as a land-grant University, our mission is grounded in serving the people of the state.

2) Describe how the program periodically assesses the professional development needs of its priority community or communities, and provide summary results of these assessments. Describe how often assessment occurs.

The NDSU MPH program works cooperatively with the MPH program at the University of North Dakota (UND) to conduct regional assessments. The goal is to work together for items related to community input as well as program requests of the community so we don’t over-burden the workforce and stakeholders in our small, rural and tribal area. In 2018, the programs worked together to conduct key informant interviews. Interviews were conducted using random selection from a list of stakeholders. Faculty, staff, and graduate students from both programs who were part of recruitment and assessment committees developed the question set and methods for conducting the interviews. Responses were collected and made into summary infographics. Summary of the responses included the top challenges public health professionals would face: substance/opioid abuse; building and maintaining the workforce; community partnerships; and a focus on prevention. In addition, responses include a need for skills in communication and working with legislative and policy processes. Interview questions and results can be found in ERF F3.2. File names for the 2018 interviews are ‘NDSU UND-key-informant-interviews final 2018’ and ‘Key Informant interview results 2018-19’.

Most recently in 2021, the programs conducted a continuing education workforce survey of our priority communities. Respondents were mostly from Eastern North Dakota (66%) with a few from Minnesota and Tribal Nations and a majority worked for a government agency (80%) with the next highest response coming from healthcare (11%). The summary of this survey, focused around the education and skills needs of the public health workforce, indicated a high level of need for continuing education in the areas of:

- Budget and financial management
- Program planning and evaluation
- Grant writing and requests for proposals
- Leading change efforts (e.g., strategic planning)
- Working with government and legislative bodies
- Using systems thinking approaches
- Data collection, management, and analysis
- Health equity
Survey questions and results can be found in ERF F3.2. File names for the 2021 survey are 'Public_Health_Workforce_Assessment_final_2021' and 'NDSU UND workforce survey results 2021'.

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

**Strengths**

- Assessment tools and cooperation with the UND MPH program work well to gather community input related to continuing education and professional development needs.
- There is a concerted effort between the two programs to continue to work together and conduct the survey and interview or focus groups on regular schedule.

**Weaknesses**

- None identified.
F4. Delivery of Professional Development Opportunities for the Workforce

The program advances public health by addressing the professional development needs of the current public health workforce, broadly defined, based on assessment activities described in Criterion F3. Professional development offerings can be for-credit or not-for-credit and can be one-time or sustained offerings.

1) Describe the program’s process for developing and implementing professional development activities for the workforce and ensuring that these activities align with needs identified in Criterion F3.

Prior to the COVID-19 pandemic, professional development activities were informed by the joint assessment work with the UND MPH program through surveys and stakeholder interviews. Faculty research is often connected with professional development opportunities for the workforce and locally, the Dakota Conference is the platform for much professional development of the regional public health workforce. MPH program faculty frequently present at the Dakota Conference and past topics have included using lifestyle approaches as clinical treatment, data visualization, opioid use disorder screening programming, resiliency, and immunization-related topics.

The MPH program has formed a strong relationship with the North Dakota Department of Health, specifically with the Division of Disease Control and Forensic Pathology and the Division of Healthy and Safe Communities. Our faculty have been contracted to work with these divisions to develop educational materials, provide continuing education presentations, and fill an unmet need for staffing.

The COVID-19 pandemic demanded a drastic change in providing professional development as well as greatly reducing the ability to deliver professional development opportunities between spring 2020-present. However, faculty and staff in our Center for Immunization Research and Education (CIRE) have been called upon to deliver evidence-based guidance to the state health department as well as multiple community presentations and question and answer sessions on COVID-19.

2) Provide two to three examples of education/training activities offered by the program in the last three years in response to community-identified needs. For each activity, include the number of external participants served (ie, individuals who are not faculty or students at the institution that houses the program).

The MPH program offers training through credit-bearing Graduate certificates. There are three unique offerings, 1) general public health 2) American Indian Public Health and 3) infection prevention. Enrollment in the certificate training program overall was:

- 3 in 2018-2019
- 0 in 2019-2020
- 5 in 2020-2021

Each year during National Public Health week the DPH hosts the Mary J. Berg distinguished speaker on women’s health. This event is open to the public and highlights a national expert on women’s health issues. We have not yet been able to build a system to gather external participants.

The Public Health Seminar Series began in 2019 as an internal program to share research and information with our students, staff, and faculty. In 2020, an ad hoc committee was formed and organized topics relevant to community need but still serving internal students, staff, and faculty. One event co-hosted with the Sheila and Robert Challey Institute for Global Innovation and Growth in 2020 served 137 external participants of the 216 total participants. This seminar was a
panel around the topic, “How Does Society Reclaim Human Flourishing When Faced with a Pandemic?” Panelists included Ali Mokdad, Stefanie Haefele, and Lynn Blewett. The panel was co-developed and co-moderated by the DPH Chair, Dr. Pamela Jo Johnson.

In the spring of 2021, the seminar series offered a seminar, “The Role of Trauma-informed Principles in Advancing Healthy and Safe Communities,” on adverse childhood experiences and community thriving and CEU’s were offered. The seminar was specifically requested by the Division of Healthy and Safe Communities. Participants (including internal and external participants) totaled 81. The CEU opportunity was for social work and was equivalent to 0.15 CEU’s.

Within our MPH faculty, we have a Motivational Interviewing (MI) trainer. Dr. Larson has provided numerous trainings in MI including the following over the past two years:

2020
- Provided MI training at Minnesota State University and Fergus Falls – 15 participants at each event
- Provided MI training for Supplemental Nutrition Assistance Program (SNAP) Educators – 30 participants

2021
- Provided MI training for NDSU Extension staff – 30 participants
- Provided MI training for tobacco cessation specialists – 30 participants
- Provided MI training for Tribes in Montana – 28 participants

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

**Strengths**
- We have a strong assessment process to gather workforce development needs.
- Program faculty have been able to deliver graduate certificates and seminars in response to workforce development needs.

**Weaknesses**
- We do not have a comprehensive data collection mechanism to gather all workforce development activities that are provided.

**Plans for improvement**
- NDSU and UND programs are engaged in how best to respond to results by offering some professional development opportunities together as well as supporting each other’s’ unique skill sets to deliver professional development opportunities to the community.
- A new faculty evaluation tool will be implemented starting calendar year 2022. The tool will collect faculty workforce development activities, which will be collated and be available each summer. Using these initial data as a baseline, we will develop a system to proactively capture both department-sponsored and individual faculty training activities that support workforce development.
G1. Diversity and Cultural Competence

Aspects of diversity may include age, country of birth, disability, ethnicity, gender, gender identity, language, national origin, race, historical under-representation, refugee status, religion, culture, sexual orientation, health status, community affiliation and socioeconomic status. This list is not intended to be exhaustive.

Cultural competence, in this criterion's context, refers to competencies for working with diverse individuals and communities in ways that are appropriate and responsive to relevant cultural factors. Requisite competencies include self-awareness, open-minded inquiry and assessment and the ability to recognize and adapt to cultural differences, especially as these differences may vary from the program’s dominant culture. Reflecting on the public health context, recognizing that cultural differences affect all aspects of health and health systems, cultural competence refers to the competencies for recognizing and adapting to cultural differences and being conscious of these differences in the program’s scholarship and/or community engagement.

1) List the program’s self-defined, priority under-represented populations; explain why these groups are of particular interest and importance to the program; and describe the process used to define the priority population(s). These populations must include both faculty and students and may include staff, if appropriate. Populations may differ among these groups.

**Students**
The program’s priority under-represented population is the American Indian/Alaska Native (AI/AN) population. NDSU is built upon the traditional lands of the Oceti Sakowin and the Anishinaabe people. North Dakota also has one of the higher proportions of its state population that is American Indian. Health disparities in the American Indian populations of North Dakota and the entire Midwest area are dramatic. Thus, the NDSU Public Health program was founded with an emphasis on American Indian Public Health.

**Faculty/Staff**
Faculty/staff priority populations are BIPOC with a particular emphasis on American Indian/Alaska Native. We offer a graduate certificate in American Indian Public Health and a specialization subplan in American Indian Public Health. As such, it is important for our American Indian students to have contact with faculty and staff that have a shared lived experience.

2) List the program’s specific goals for increasing the representation and supporting the persistence (if applicable) and ongoing success of the specific populations defined in documentation request 1.

**Students**
At least 20% of new students admitted each fall will identify as American Indian/Alaska Native.

**Faculty/Staff**
Increase racial/ethnic diversity in the hiring of new faculty and staff (goal established in our new strategic plan, but did not yet have a specific target).

3) List the actions and strategies identified to advance the goals defined in documentation request 2, and describe the process used to define the actions and strategies. The process may include collection and/or analysis of program-specific data; convening stakeholder discussions and documenting their results; and other appropriate tools and strategies.

**Students**
- Maintaining an emphasis on American Indian Public Health in the Curriculum – We have implemented an American Indian Public Health subplan as options for both of our MPH
concentration and we have maintained our graduate certificate program in American Indian Public Health.

- We secured the continuation of four substantial American Indian student scholarships specifically for American Indian MPH students.
- We make available many opportunities for American Indian students to work with tribal populations for graduate assistantships or as practicum sites through our Department’s American Indian Public Health Resource Center.
- AIPH programming, scholarships, and opportunities are being advertised at NDSU Indigenous Student events, through the relationships of our American Indian Public Health Resource Center, and our Money Follows the Person - Tribal Initiative that works with elder programs in the ND tribal communities.
- MPH faculty member is co-PI on the *New Beginnings for Tribal Students* grant (USDA), focused on enhancing the environment at NDSU to better recruit, retain, and graduate Native students, 2020-2022.

**Faculty/Staff**

- Our one American Indian faculty member retired this past summer, so our short-term strategy is connecting with American Indian scholars and professionals as adjunct faculty to teach MPH AIPH courses.
- All search committee participants are required to take search committee training, which includes research-based information addressing the ways that bias can influence the recruitment and screening of applicants in a search and strategies for overcoming bias.
- All faculty job postings advertise that American Indian Public Health is an emphasis in our program.
- In early fall, MPH admissions committee members and the Department Chair participated in workshops offered by *Inclusive Graduate Education Network (IGEN)* that covered the Fundamentals of Equity in Graduate Admissions and Strategies for Equity-based Holistic Admissions.

4) **List the actions and strategies identified that create and maintain a culturally competent environment and describe the process used to develop them. The description addresses curricular requirements; assurance that students are exposed to faculty, staff, preceptors, guest lecturers and community agencies reflective of the diversity in their communities; and faculty and student scholarship and/or community engagement activities.**

Our MPH program was developed with a focus on AI/AN. As a land-grant university, NDSU has a responsibility to serve the people of the region. North Dakota and the surrounding regions have a high American Indian population and this population suffers from great health disparities. Curriculum development around AI/AN culture, health equity, and research issues was an initiative of previous program leadership and faculty governance. As we have reviewed and revised our mission and developed our first strategic plan, keeping AI/AN a priority was maintained by students, staff, faculty, and the alumni who were engaged in the planning process. As our program has grown and matured, formal connections with the AI community have strengthened. The following are select examples from curriculum, student exposures, and community engagement that our MPH program has related to our culturally competent environment.

**Curricular requirements**

- American Indian Public Health courses are required for the AIPH subplan and AIPH graduate certificate and are also available as electives to all students.
- Our PH 765 Cultural Competence for Health Professions course includes American Indian content as well as cultural competence related to other diverse groups.
- Emphasis on integrating diversity throughout the curriculum including course offerings, lectures, course readings, case studies, or applied examples.

**Student exposure to diversity**
- The American Indian Public Health Resource Center is physically located in our Department, and the staff participate in most departmental events including those with students (e.g., graduation celebration, Public Health Seminar Series).
- Our relationship with the ND Department of Health Office of Health Equity ensures students have access to state agencies working with diverse populations and opportunities to participate through practicum, internship, or graduate assistantships.
- The Public Health Seminar Series provides exposure to topics and speakers from a variety of perspectives and experiences.
- National Public Health Week activities are student driven, with logistical and financial support from the department, and often bring in diverse and unique experiences.
- Students are exposed to a variety of perspectives through guest lecturers including AI/AN and LGBTQ2S+ researchers and public health professionals.

**Community engagement activities**
- We have a goal that at least 50% of our students will complete practicums involving underserved populations. Data from 2020-2021 showed that 74% (17/23) of MPH practicum experiences included working with underserved populations. Preceptor evaluation data including which experiences involved underserved populations can be found in ERF G1 folder, titled 'Practicum evaluations.'
- We maintain an extensive network of relationships with community-serving and tribal organizations for practicum sites, community service, and scholarly activities. For example, we work with tribal initiatives through Prevent Child Abuse North Dakota, the Office of Health Equity through practicum projects, and the regional tribal nations specifically through our AIPHRC.

5) **Provide quantitative and qualitative data that document the program’s approaches, successes and/or challenges in increasing representation and supporting persistence and ongoing success of the priority population(s) defined in documentation request 1.**

The table below is institutional data for actively enrolled students by race/ethnicity and academic year. The data show our high number of American Indian students as well as the racial and ethnic diversity of the MPH student body over time. The recent decline in American Indian students is due, in part, to the suspension of admissions into the American Indian Public Health specialization. Our goal is 20%, and our rate is around 15% for the last two years. Reintroducing the AIPH subplan and graduate certificate is suggesting that this will be right-sizing in the future.
Enrollment in the MPH by Race/Ethnicity and Academic Year

<table>
<thead>
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<th>Program by Race/Ethnicity</th>
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<th>2018-19</th>
<th>2019-20</th>
<th>2020-21</th>
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The table below shows institutional data of our MPH faculty by rank and underrepresented minority status. Most of the faculty numbers listed in this table were AI/AN faculty and it shows that in 2019 we had a loss of minority faculty members, all of which were AI/AN.

<table>
<thead>
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<th>Academic Year</th>
<th>Number of Professors</th>
<th>Number of Associate Professors</th>
<th>Number of Assistant Professors</th>
<th>Number of Adjunct Personnel</th>
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</tr>
</tbody>
</table>

6) Provide student and faculty (and staff, if applicable) perceptions of the program’s climate regarding diversity and cultural competence.

Student perceptions about the program’s climate with respect to diversity and cultural competence tend to be shared individually between students and their advisors or within classroom discussions. These perceptions are sometimes discussed anonymously among faculty as a starting point for identifying opportunities to address challenges perceived by our students. Discussions began this summer about developing specific items to include on our student surveys related to diversity climate perceptions; however, these have not yet been implemented.

Faculty and staff also have conversations and informal discussions and are aware that there are some significant challenges that need to be addressed with regard to diversity and cultural competence in the department. In an attempt to create an anonymous format for providing input on this topic, members of the department ad hoc anti-racism committee developed a survey to elicit feedback from faculty and staff regarding capacity building and training needs around diversity, equity, and inclusion (DEI). This survey was sent out mid-May, 2021. While there was low response, it is important to value the responses that were submitted. Two questions of particular relevance to this criterion are: 1) ‘What can the Department of Public Health do to increase diversity, equity, and inclusion?’ and 2) ‘What specific diversity, equity, and inclusion training do you personally need or want? What training does the Department of Public Health need to provide for faculty and staff?’ We received responses to the first question where respondents suggested developing a lecture series to highlight diverse voices. Although NDSU has DEI-related trainings, there were also suggestions to implement department-specific DEI hiring and other practices to increase diversity of students, staff, and faculty. With respect to DEI training that is desired, responses to the second question set included training on changing
institutionalized practices, more knowledge on racism as a public health crisis and what we can do about it, and having outside assistance with learning and reflective facilitation.

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

**Strengths**
- From the outset, a focus on American Indian/Alaska Native populations was infused in the curriculum, hiring, and recruiting of students. This expanded to student experiences and formal partnerships with Tribal communities.

**Weaknesses**
- No formalized data collection mechanism for assessing perceptions of the program’s climate regarding diversity and cultural competence.
- Low response to our department query about DEI needs by faculty and staff.

**Plans for improvement**
- Establish goals and action plans for recruitment, support, and retention of students, faculty, and staff in priority populations.
- Develop formal assessment strategies regarding diversity and cultural competence.
H1. Academic Advising

The program provides an accessible and supportive academic advising system for students. Each student has access, from the time of enrollment, to advisors who are actively engaged and knowledgeable about the program’s curricula and about specific courses and programs of study. Qualified faculty and/or staff serve as advisors in monitoring student progress and identifying and supporting those who may experience difficulty in progressing through courses or completing other degree requirements. Orientation, including written guidance, is provided to all entering students.

1) Describe the program’s academic advising services. If services differ by degree and/or concentration, a description should be provided for each public health degree offering.

NDSU has career and advising services for all students across all programs. While the Career and Advising Center on campus provides services for all students, advising for the MPH program is primarily provided by faculty in the program. Even before a student is admitted to the program, the Director of Accreditation serves as an unofficial advisor for all interested students to answer questions about curricular plans and requirements and to help potential students decide if our MPH program and faculty are the right fit. Upon offer of admission, a faculty advisor is assigned to each student and is available immediately to work with students. This has been important to help students who may be deciding among a few different programs chose the best option. Having an advisor available and one that reaching out upon admission offer is frequently a deciding factor for students with multiple program offers. The faculty advisor guides the MPH student from matriculation, through coursework, service and research opportunities, the ILE, and with career exploration and often job searching.

2) Explain how advisors are selected and oriented to their roles and responsibilities.

Advisor are assigned during the admissions process and by the admissions committee chair with feedback from the concentration faculty. Once the admissions committee has approved an admission offer, the student’s resume and statement of purpose is sent to concentration faculty for review and a call for interest in advising is made to said faculty members. Based on best fit recommendation from the faculty as well as review of current and already assigned advising load, the advising assignment is made and the student admission offer is made. All faculty with 40% or greater FTE designated to the MPH program serve as advisors.

Students and faculty advisors have the student handbook as a resource for items related to academic advising. As a program which follows Graduate School academic policies and procedures, we also have a dedicated staff liaison who communicates with MPH students and faculty regarding progress toward graduation, changes in policies or procedures, and conferral of degree.

3) Provide a sample of advising materials and resources, such as student handbooks and plans of study, that provide additional guidance to students.

The MPH student handbook can be found in ERF H1.3 titled NDSU public health handbook 2021-22.

A new tool that was developed by the Curriculum committee is using OneNote as an advising resource to have conversations around educational and career goals, capture any volunteer or research experiences students engage in during their time in the MPH program, and to help advisors and the practicum instructor guide students through course selection, practicum opportunities, and the final culminating experience of the ILE. This tool was introduced in the fall of 2021. A screen shot has been provided of this online tool as a reference:
Welcome to the North Dakota State University (NDSU) Master of Public Health (MPH) program!

The purpose of this tool is for MPH students to discuss and collect their goals, research and volunteer experiences, and educational interests with their advisor and practicum instructor.

Ensuring that MPH courses as well as research and service-learning experiences meet the interests of students is an important and valued component of the NDSU MPH program. This tool is a shared place to document these items so that students will have a personalized guide for curricular interests, practicum placement, and strengths-based guidance for research, practice, and future career interests.

Our website has much of the information students and faculty advisors may need to reference, including our student handbook and links to proposal processes for PH 794 the practicum and PH 789 the integrated learning experience: https://www.ndsu.edu/publichealth/

I encourage you to view the 'Public Health Goals Flow Chart' posted in the Content Library tab as a visual overview of how to best use this tool as you progress through the MPH program. **Student information is not shared with other students, it is only accessible to the student and faculty members.**

Best wishes on your academic journey,

Stefanie Meyer, PhD, CSCS | Director of Accreditation, Assistant Professor of Practice
4) Provide data reflecting the level of student satisfaction with academic advising during each of the last three years. Include survey response rates, if applicable.

Each spring semester, all active MPH students are given the opportunity and asked to provide feedback on academic and career advising. Responses are anonymous but gathered by advisor name. The number of students who responded each year are seven from 2019, 17 from 2020, and 24 students from 2021.

Students are asked specifically about their satisfaction with their academic advising. Combined response over the past three years, was a mean of 3.6 of which 1=strongly disagree and 4=strongly agree that students were satisfied with their current advising experience. Mean responses by year were:

- 3.71 for 2019 (86% strongly agreed; 14% disagreed)
- 3.41 for 2020 (53% strongly agreed; 41% agreed; 6% strongly disagreed)
- 3.71 for 2021 (71% strongly agreed; 29% agreed)

Responses by academic year are provided in their respective spreadsheet tabs in the ERF H1.4 Advising survey materials folder and the file '2018-2021 MPH Advising survey results.' The survey tool, 'Annual_Academic_and_Career_Advising_Survey_Spring_2021' can also be found in ERF H1.4 Advising survey materials.

5) Describe the orientation processes. If these differ by degree and/or concentration, provide a brief overview of each.

Before the fall semester begins, the program hosts student orientation for all incoming students. While orientation used to be held in person, a combination of an increasing number of distance students and COVID-19 challenges has led us to move orientation to a virtual format. Throughout the summer months, a series of emails are sent with important files such as the handbook and college conduct policy to be reviewed and signed as well as videos of important tasks and resources. These resources include how to register for classes, how to access support services from the Center for Writers, and the library:

During the orientation event, students are welcomed by the Dean/Senior Associate Dean to the college, an overview of the department, mission, curriculum takes place, and the student public health association presents and helps incoming students join the organization. A large portion of time is spent up-front with students getting to know one another and program administration. Another large portion of orientation is time for students to engage with their concentration cohort and faculty as well as time to meet with their advisors. Anecdotal student feedback has been that the time to start forming relationships with their peers and the faculty is the most impactful aspect of orientation.

Orientation materials from fall 2021 are provided in ERF H1.5 Orientation Materials folders.

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

**Strengths**

- The program has sufficient academic advising resources between the Career and Advising Center and faculty members.
- Students and advisors have access to various resources to support academic advising including the handbook as well as the Graduate School staff liaison.
- Student orientation has been offered prior to the fall semester every year and the content and format has changed to meet the needs of the student body and faculty advisors.
Weaknesses
• A systematic approach to advising was only recently established and so some advisors previously might not have engaged with students as the program expected.

Plans for improvement
• Use of the OneNote tool to guide students through the program using their educational and career goals.
H2. Career Advising

The program provides accessible and supportive career advising services for students. Each student, including those who may be currently employed, has access to qualified faculty and/or staff who are actively engaged, knowledgeable about the workforce and sensitive to his or her professional development needs and can provide appropriate career placement advice. Career advising services may take a variety of forms, including but not limited to individualized consultations, resume workshops, mock interviews, career fairs, professional panels, networking events, employer presentations and online job databases.

The program provides such resources for both currently enrolled students and alumni. The program may accomplish this through a variety of formal or informal mechanisms including connecting graduates with professional associations, making faculty and other alumni available for networking and advice, etc.

1) Describe the program’s career advising and services. If services differ by degree and/or concentration, a brief description should be provided for each. Include an explanation of efforts to tailor services to meet students’ specific needs.

NDSU has a Career and Advising Center for all students across all programs. They perform career exploration, job search, major exploration, application material development, interview assistance, host job fairs open to all majors, manage an internship program open to all majors, teach in classrooms and present for student organizations to name a few of the services offered.

Faculty, alumni, and practicum preceptors also play a key role in career advising for MPH students. The program asks students who all they use for career advising in the annual advising survey conducted each spring. Common responses have included their MPH faculty advisor, practicum preceptor, and other faculty members. Job openings are frequently sent to faculty and staff in the department and shared with the student and alumni listserv.

Networking opportunities often lead to job opportunities and so the program encourages students to engage in professional associations including APHA and the state public health association. Faculty also encourage and support students to engage in more specialized organizations around topics such as epidemiology, immunizations, cancer, safety, health equity, and American Indian networks.

2) Explain how individuals providing career advising are selected and oriented to their roles and responsibilities.

Employees in the Career and Advising Center are selected through the standard interview process approved by NDSU Human Resources. Some of the key attributes sought are a desire to serve students and seek ways to help them be successful. New employees are given extensive immersion into key aspects of the office depending upon their role. For example, a Career Coach focuses on career development for students and is assigned as the liaison to the College of Health Professions would be encouraged to have meetings with faculty and employers that partner with NDSU to explore needs of the students from both ends of professional growth and expectations upon graduation. They would also shadow an experienced peer to help learn the ropes of their job and conduct supervised sessions with classes or student meetings, then given positive and constructive feedback to improve their skills. They also attend professional conferences when able and conduct industry visits to get a feel for what on-the-job work environments might be like.

Program faculty serve as academic advisors to MPH students. Part of this role includes mentorship for research, community engagement, and career opportunities. MPH program resources and information for advisors are found in the student handbook. Faculty and program
administration are frequently contacted to share job opportunities with students and graduates. Relationships have been formed with the State Health Department, local public health, regional non-profits, and local health systems in a way that these organizations recruit directly from our MPH graduate pool.

3) Provide three examples from the last three years of career advising services provided to students and one example of career advising provided to an alumnus/a. For each category, indicate the number of individuals participating.

Specific career advising service examples from the NDSU Career and Advising Center for MPH students and alumni include consultation visits, JCPenny Suit Up event, and career expo participation. MPH students and alumni who utilized the Career and Advising Center included the following:

- 2019: two drop-in visits for LinkedIn help and expo registration
- 2020: two drop-in visits for Suit Up event and cover letter/resume help
- 2021: one appointment for CV help

Pre-COVID-19 pandemic, the College of Health Professions hosted on-campus career fairs. These took place in September 2018 and September 2019. In the fall of 2020, the Career and Advising Center hosted an online health professions career fair in the place of the college event. The number of MPH students who participated in the career fair included the following:

- 2018: 3 students
- 2019: 1 student
- 2020: unknown

At the MPH program level, faculty advisors provide individualized career advising to their advisees (current students and alumni). Data from our MPH advising survey shows that students engage most with their faculty advisors for career advising (21 responses from the past three years), then MPH staff (18 responses), and next highest was the practicum preceptor (14 responses). Some examples of MPH students and alumni receiving career advising services from faculty include the hiring of MPH graduates in the local healthcare system in quality control and infection prevention (e.g. Dr. Carson and Sanford Health), as well as MPH graduates hired by local public health who have service and research relationships with faculty (e.g. Dr. Larson and Clay County Public Health). An example of MPH alumni receiving career services from the program include the use of an alumni listserv which staff use to share job openings.

4) Provide data reflecting the level of student satisfaction with career advising during each of the last three years. Include survey response rates, if applicable.

Each spring semester, all active MPH students are given the opportunity and asked to provide feedback on academic and career advising. Responses are anonymous but gathered by advisor name. Students are asked to respond with their level of agreement to the following, “Overall, I am satisfied with the experience I have had with career advising.” Strongly agree was coded as a 4 and strongly disagree coded as a 1. This question was added to the annual advising survey in 2020. Mean responses reported were:

- 3.29 in 2020 (35% strongly agree, 59% agree, 6% disagree)
- 3.33 in 2021 (42% strongly agree, 50% agree, 8% disagree)

Advising survey and results can be found in ERF H2.4 Advising survey materials.
5) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

**Strengths**
- The University provides career advising to all students, across all disciplines, and for alumni.
- The program assesses career advising resources and satisfaction annually and MPH students have been very satisfied with the support they receive from both the career and advising center and from program faculty.

**Weaknesses**
- The small size of the Department has made it challenging to provide program level career advising services.

**Plans for improvement**
- We will continue to build our relationship with the Career and Advising Center to gather specific public health student and alumni data on the services engaged.
- We are hiring a new Academic Coordinator/Lecturer [currently reviewing applications], and individual career advising and creating advising programs will be one of the responsibilities.
- A new tool (OneNote) was implemented with the Fall 2021 student cohort to include educational goals, career goals, and student strengths identified through StrengthsFinder in the PH 745 course. The tool is used by faculty advisors and the practicum instructor to better advise students in their academic program as well as into their career. This tool will bring some consistency to career advising across faculty.
H3. Student Complaint Procedures

The program enforces a set of policies and procedures that govern formal student complaints/grievances. Such procedures are clearly articulated and communicated to students. Depending on the nature and level of each complaint, students are encouraged to voice their concerns to program officials or other appropriate personnel. Designated administrators are charged with reviewing and resolving formal complaints. All complaints are processed through appropriate channels.

1) Describe the procedures by which students may communicate any formal complaints and/or grievances to program officials, and about how these procedures are publicized.

A discussion of the formal process and policy related to complaints and grievances occurs at new student orientation. This policy is written out in the public health student handbook, a document that all incoming students sign acknowledging their agreement to abide by all the policies and procedures in the documents and referenced by the document. The handbook is updated each year and available on the public health website under the ‘resources for students’ section.

Students are to discuss any issues with the person(s) who are directly involved first, if the issue is not resolved, the DPH Chair is brought into the conversation. The Senior Associate Dean of the College of Health Professions is the next step if the issue is not successfully resolved within the department. If further, formal action is needed, the student compliant process is then used for formal filing of a grievance or complaint.

2) Briefly summarize the steps for how a complaint or grievance filed through official university processes progresses. Include information on all levels of review/appeal.

Each student complaint will be appropriately documented and investigated. A chronological record of each complaint, including the nature of the complaint, written records of the complaint procedure and the final outcomes of the resolution process shall be maintained in the Office of the Dean, and shall be available for review by CEPH or its representatives upon written request or in the process of an on-site evaluation visit.

Student complaints generally fall within two major categories: complaints about unfair grading, and all other non-grade-related complaints. Student complaints about grades are generally handled at the level of the University, since grades are usually administered through the NDSU Office of Registration and Records. Other student complaints remain under the purview of the individual colleges within NDSU.

University Grade Appeal Policy

NDSU has an established policy regarding complaints about grading, otherwise known as “grade appeals”. The full grade appeal policy (section 337), which includes hearing procedures, is available at www.ndsu.edu/fileadmin/policy/337.pdf. While students actively considering a grade appeal are referred to the aforementioned website for the specific details of the policy, a summary of the policy is outlined below.

With the exception of incomplete grades, a course grade is considered final unless an appropriate appeal is filed by the student. Grade changes are also considered only for those students who have not yet earned a degree for which the course in question was applied.

For a student who has reason to believe that they have been issued an incorrect or inappropriate grade, he/she must initiate a request for a change of a grade with the instructor within fifteen (15) instructional days of the first day of the semester immediately following the semester in which the grade was awarded. For Spring Semester courses, the request may be made within fifteen (15) instructional days of the start of Fall Semester, if the student is not enrolled for a Summer term in the same academic year.
A grade appeal is formally initiated when the student presents the Grade Appeal Form to the instructor. If there is an unsatisfactory decision, the student must consult the Department Head, and the Dean or a designated college committee, proceeding from one level to the next only after an unsatisfactory decision of the conflict at that level. In the event that the instructor is also the Department Head or Dean, he or she need only be consulted in the capacity of instructor. In the event of an unsatisfactory decision within the college, the student may submit a formal written appeal to the Grade Appeals Board Chair. Such an appeal shall be made within fifteen (15) instructional days after conclusion of the college proceedings as stated above.

**Non-Grade Student Complaints**

Public health students who have a non-grade-related complaint can seek resolution of that complaint through the following procedures. It is important to note that these procedures represent the sole avenue for student complaints regarding non-grade-related issues, including (but not limited to) CEPH standards, policies, and procedures. Additionally, because the public health program spans multiple departments, the non-grade complaints are handled through the Dean’s Office in the College of Health Professions, rather than by the departments themselves.

1. The student(s) or, in cases where student anonymity is required, their advocate (also known as the “plaintiff(s)”) will file a formal written complaint (delivered through the postal service or NDSU email) to the Dean’s Office in the NDSU College of Health Professions.

2. The written complaint must include a description of the issue, policy, or procedure in question. It must also summarize the argument of the plaintiff (including the grounds for the appeal or complaint) and provide a reasonable amount of evidence supporting the claim.

3. Upon receipt of the written complaint, the complaint will be assigned to the Senior Associate Dean. The plaintiff(s) will receive email notification (via NDSU email) within forty-eight hours of the receipt of the complaint. In the email, the Senior Associate Dean shall acknowledge receipt of the complaint and assign a specific College of Health Professions committee to review the complaint. The Senior Associate Dean shall also provide a brief rationale for assigning the complaint to a particular committee. The determination of the appropriate committee to review the case rests solely with the Senior Associate Dean. Plaintiff may not appeal the committee assignment, so long as the rationale for the assignment is provided by the Senior Associate Dean.

4. The Senior Associate Dean shall convene a meeting of the College Academic Affairs (if the complaint is primarily “academic” in nature, as defined by College Policy 3.01) or the Student Affairs Committee (if the complaint is “non-academic” in nature, as defined by College Policy 3.01) to review the complaint. The Committee meeting shall occur within thirty days from the time that the Senior Associate Dean receives the written complaint.

5. Once the Committee has met, the Senior Associate Dean shall prepare and submit a formal, written reply to the student(s) based on the recommendation of Committee. The reply shall include an evaluation of the complaint, a description of any violations, and a proposal for any necessary corrective action. The reply will be sent through official NDSU delivery methods (i.e., the postal service, campus mail and/or the NDSU email system) within fifteen business days from the time that the Committee makes a decision.

6. Decisions of the Committee that demonstrate arbitrary and capricious treatment, or that are fundamentally inappropriate in the eyes of the plaintiff(s) may be appealed to the Dean of NDSU College of Health Professions. In such cases, the student(s) file an appeal using steps one through three outlined above, except the written complaint would be addressed directly to the Dean. The written complaint would also identify and provide evidence indicating that the Senior Associate Dean and/or the Committee acted in an arbitrary, capricious or otherwise inappropriate manner.

7. If unsatisfactory resolution occurs after the appeal to the Dean, a final appeal may be made to the Provost. Once again, the student(s) must file an appeal using steps one
through three outlined above, except the written complaint would be addressed directly to
the Provost, rather than the Dean, and would provide evidence substantiating the claim of
unfair treatment at prior procedural levels

3) List any formal complaints and/or student grievances submitted in the last three years. Briefly
describe the general nature or content of each complaint and the current status or progress
toward resolution.

   No formal complaints or grievances were submitted.

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

   Not applicable.
H4. Student Recruitment and Admissions

The program implements 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.

1) Describe the program’s recruitment activities. If these differ by degree (eg, bachelor’s vs. graduate degrees), a description should be provided for each.

Recruitment activities are guided by the recruitment committee. Activities pre-COVID-19 included booths at APHA and the Dakota Conference. In addition, both our AIPHRC and CIRE bring recruitment materials to their technical assistance and professional meetings to reach a broader audience of potential students. Faculty also recruit students into the MPH program through guest lecturing in undergraduate classes at colleges and universities in the region. Program alumni and Advisory Board members are actively engaged in recruiting students through their professional networks.

In January 2020, we joined ASPPH and started using the SOPHAS application system. Almost immediately, we saw an increase in applications and from new geographic regions than we previously would attract. As part of the ASPPH organization, we also engaged in a virtual recruitment fair. The program’s online presence also assists with recruitment. In 2020, the website went through an update to be more mobile-phone friendly to better align with student preferences. Most recently, the epidemiology concentration was assessed as a science, technology, engineering, or mathematics (STEM) degree. This designation qualifies the MPH in epidemiology for the 24-month STEM optional practical training (OPT) extension and is of great benefit to our international students.

Over the past 3-4 years, we have also been collaborating with undergraduate programs on campus to develop accelerated degree paths directly from the undergraduate program into the MPH, double counting graduate courses for both undergraduate and graduate degree requirements. The undergraduate minor and the courses taught by public health faculty in that program have served to recruit students into accelerated program options.

2) Provide a statement of admissions policies and procedures. If these differ by degree (eg, bachelor’s vs. graduate degrees), a description should be provided for each.

Students are reviewed using a standard set of requirements for GPA and English-language ability. In addition, students are asked to write a statement of purpose, submit a resume, and provide three letters of recommendation. For the past two admissions cycles, we have waived the GRE/standardized test requirement. The Admissions and Scholarship committee has assessed the GRE requirement on an annual basis starting in 2020 when the COVID-19 pandemic created multiple admissions challenges including access to testing centers. While there are minimum requirements for some categories, we take a holistic approach to our review of student applicants to the MPH program as creating rigid numerical cutoffs would disproportionally eliminate potential students from resource limited and underserved areas. A full list of admissions requirements can be found on our website; select requirements that are more objective are listed here:

- A baccalaureate degree or equivalent from an accredited college or university
- An undergraduate and graduate (if applicable) cumulative grade point average (GPA) of at least 3.00. Undergraduate coursework in fields related to public health should generally exceed a GPA of 3.00
- Proof of English language proficiency in the form of one of the following:
o A bachelor's degree or higher from a recognized institution in the United States, England, Scotland, Ireland, Wales, Jamaica, Australia, New Zealand, or English Speaking Canada
o An overall minimum band score of 6.5 on the Academic Module IELTS
o A satisfactory score on the Test of English as a Foreign Language (TOEFL). The expected minimum score is 233 for the computer-based test, 90 for the Internet-based test, and 577 for the paper-based test.
o Successful completion of English Language Service (ELS) Language Center's Intensive Level 112.

The admissions committee may invite selected applicants for an interview on the basis of the committee's review of all submitted application materials. The purpose of the interview is to clarify any inconsistencies in the application materials and/or have a conversation about best fit of concentration.

3) Select at least one of the measures that is meaningful to the program and demonstrates its success in enrolling a qualified student body. Provide a target and data from the last three years in the format of Template H4-1. In addition to at least one from the list, the program may add measures that are significant to its own mission and context.

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Target</th>
<th>2018-2019</th>
<th>2019-2020</th>
<th>2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of priority underrepresented students (AI/AN) accepting admission.</td>
<td>70%</td>
<td>100% (2/2)</td>
<td>100% (7/7)</td>
<td>67% (2/3)</td>
</tr>
<tr>
<td>Percentage of designated group accepting offers of admission (NDSU undergrads).</td>
<td>90%</td>
<td>91% (10/11)</td>
<td>100% (7/7)</td>
<td>100% (13/13)</td>
</tr>
<tr>
<td>Percentage of priority underrepresented students (AI/AN) that matriculated into the program.</td>
<td>20%</td>
<td>10.5% (2/19)</td>
<td>32% (7/22)</td>
<td>8.7% (2/23)</td>
</tr>
<tr>
<td>Percentage of NDSU undergrads that matriculated into the program.</td>
<td>10%</td>
<td>52.6% (10/19)</td>
<td>32% (7/22)</td>
<td>56.5% (13/23)</td>
</tr>
</tbody>
</table>

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

Strengths
- The recruitment committee is inclusive of faculty, staff, and students.

Weaknesses
- None identified.
Plans for improvement

- Implementation of the strategic plan and a more structured recruitment effort is being created.
- Development of a more holistic admissions rubric using evidence-based approaches for diversity and inclusion in higher education.
H5. Publication of Educational Offerings

Catalogs and bulletins used by the program to describe its educational offerings must be publicly available and must accurately describe its academic calendar, admissions policies, grading policies, academic integrity standards and degree completion requirements. Advertising, promotional materials, recruitment literature and other supporting material, in whatever medium it is presented, must contain accurate information.

1) Provide direct links to information and descriptions of all degree programs and concentrations in the unit of accreditation. The information must describe all of the following: academic calendar, admissions policies, grading policies, academic integrity standards and degree completion requirements.

The MPH degree and all concentrations follow the same set of academic policies and procedures as the Graduate School.

- Academic calendar - [https://www.ndsu.edu/registrar/dates/](https://www.ndsu.edu/registrar/dates/)
- University catalog- [https://catalog.ndsu.edu/](https://catalog.ndsu.edu/)
- Graduate school policies, grading, academic standards - [https://bulletin.ndsu.edu/graduate/graduate-school-policies/](https://bulletin.ndsu.edu/graduate/graduate-school-policies/)

**MPH policies and procedures**

- Academic integrity standards - College of Health Professions Policy Manual
- MPH admissions page - [https://www.ndsu.edu/publichealth/degrees_and_programs/admission/](https://www.ndsu.edu/publichealth/degrees_and_programs/admission/)
- Degree completion requirements - [https://www.ndsu.edu/publichealth/degrees_and_programs/curriculum/](https://www.ndsu.edu/publichealth/degrees_and_programs/curriculum/)
- Specializations
  - Community Health Sciences (including optional AIPH subplan) [https://www.ndsu.edu/publichealth/degrees_and_programs/degree_specializations/community_health_sciences/](https://www.ndsu.edu/publichealth/degrees_and_programs/degree_specializations/community_health_sciences/)
  - Epidemiology (including optional infectious disease or AIPH subplan) [https://www.ndsu.edu/publichealth/degrees_and_programs/degree_specializations/epidemiology/](https://www.ndsu.edu/publichealth/degrees_and_programs/degree_specializations/epidemiology/)

**MPH Student resources:** [https://www.ndsu.edu/publichealth/students/](https://www.ndsu.edu/publichealth/students/)

- FAQs: [https://www.ndsu.edu/publichealth/students/faq/](https://www.ndsu.edu/publichealth/students/faq/)

**MPH promotional materials**

- [Program overview handout](#)
- Community Health Sciences handout
- Epidemiology handout
- MPH scholarship handout

Facebook - [https://www.facebook.com/NDSUMPH/](https://www.facebook.com/NDSUMPH/)
Linkedin - [https://www.linkedin.com/in/ndsu-department-of-public-health-6b8192151](https://www.linkedin.com/in/ndsu-department-of-public-health-6b8192151)
Twitter - [https://twitter.com/ndsumph](https://twitter.com/ndsumph)
Instagram - [https://www.instagram.com/ndspublichealth/](https://www.instagram.com/ndspublichealth/)