

Council on Education for Public Health (CEPH) Accreditation Self-Study

Submitted March 27, 2017

Accreditation Self-Study Committee
Tony Ward, PhD, MS – Chair
Patrick Dye, MBA
Carolyn Hester, BS
Desirae Ware, MPH
Staff and Faculty of the SPCHS



Table of Contents

List o	of Tables and Figures	3
List o	of Items in the Electronic Resource File	4
List o	of Acronyms	6
Introd	luction	7
Criter	rion 1: The Public Health Program	8
1.1.	Mission	8
1.2.	Evaluation	12
1.3.	Institutional Environment	20
1.4.	Organization and Administration	27
1.5.	Governance	29
1.6.	Fiscal Resources	37
1.7.	Faculty and Other Resources	43
1.8.	Diversity	50
Criter	rion 2: Instructional Programs	59
2.1.	Degree Offerings	
2.2.	Program Length	61
2.3.	Public Health Core Knowledge	62
2.4.	Practical Skills	64
2.5.	Culminating Experience	71
2.6.	Required Competencies	74
2.7.	Assessment Procedures	103
2.8.	Bachelor's Degrees in Public Health	108
2.9.	Academic Degrees	110
2.10.	Doctoral Degrees	112
2.11.	Joint Degrees	115
2.12.	Distance Education or Executive Degree Programs	116
Criter	rion 3: Creation, Application, and Advancement of Knowledge	122
3.1.	Research.	
3.2.	Service	138
3.3.	Workforce Development	
Criter	rion 4: Faculty, Staff and Students	153
4.1.	Faculty Qualifications	
4.2.	Faculty Policies and Procedures	
4.3.	Student Recruitment and Admissions.	
4.4.	Advising and Career Counseling.	

List of Tables and Figures

Table 1.2.a. Evaluation information for each goal and objective	
Table 1.2.c. Performance on objectives and outcome measures	.14
Table 1.5.d. Core and program faculty serving on University committees	34
Table 1.6.b. SPCHS sources of funds and expenditures 2011 to 2016	39
Table 1.6.d. Outcome measures for adequacy of fiscal resources	41
Table 1.7.a. Head count of core (primary) faculty by core knowledge area	.43
Table 1.7.b. Faculty, students and student/faculty ratios by specialty/concentration area	44
Table 1.7.c. Administrative and staff support	
Table 1.7.i. Outcome measures for adequacy of resources	48
Table 1.8.e. Diversity outcomes - summary data for faculty, students and staff	57
Table 2.1.a. Instructional matrix - degree and specializations	
Table 2.3.a. Required courses addressing public health core knowledge areas for MPH degree	.62
Table 2.4.b. Practicum experiences for 2014-2015 and 2015-2016	
Table 2.6.b(1). Competencies and sub-competencies related to the MPH program	
Table 2.6.b(2). Competencies and sub-competencies related to the PhD program	
Table 2.6.c(1). MPH courses and other learning experiences by which the competencies are met	
Table 2.6.c(2). PhD courses and other learning experiences by which the competencies are met	
Table 2.7.b(1). Students in MPH, by cohorts entering between 2010-2011 and 2016-2017	
Table 2.7.b(2). Destination of graduates by employment type	
Table 2.10. Doctoral student data for 2017	
Table 3.1.c. Research activity from 2014 to 2016.	
Table 3.1.d. Faculty research outcome measures and results (Core and Program faculty)	
Table 3.2.c(1). Service activity of faculty for the last 3 years (2014-2016)	
Table 3.2.c(2). Extramurally funded service projects from 2014 to 2016	
Table 3.2.d. Faculty service outcome measures and results (Core and Program faculty)	
Table 3.3.b. Funded training/continuing education activity from 2014 to 2016	
Table 4.1.a. Primary (Core) faculty who support degree offerings of the program	
Table 4.1.b. Other faculty used to support teaching programs	
Table 4.1.c. Faculty affiliates (including practitioners) in the SPCHS	
Table 4.1.d. Outcome measures for judging qualifications of SPCHS faculty	
Table 4.3.d(1). Quantitative information on the MPH program	
Table 4.3.d(2). Quantitative information on the PhD program	
Table 4.3.e(1). Student enrollment data for the MPH program 2014 through 2017	
Table 4.3.e(2). Student enrollment data for the PhD program 2014 through 2017	
Table 4.3.f. Outcome measures for enrolling a qualified student body	167
Figure 1. Organizational chart for the University of Montana.	22
Figure 2. Organizational chart for the CHPBS	23
Figure 3. Organizational chart for the SPCHS	
Figure 4. Current SPCHS committees and membership	
Figure 5. Research budget flow diagram	

List of Items in the Electronic Resource File

Criterion 1:	The Public Health Program
Section 1.1.b.	UM strategic plan
Section 1.1.f.	SPCHS student handbook
Section 1.3.c.	SPCHS unit standards
Section 1.3.c.	UM CBA
Section 1.4.c.	SPCHS_DPHHS MOU
Section 1.5.a.	Meeting minutes from the Curriculum Committee
Section 1.5.a.	Meeting minutes from the Research Committee
Section 1.5.a.	Admissions Committee review forms from past meetings
Section 1.5.a.	Meeting minutes from the Steering Committee
Section 1.5.a.	Meeting minutes from the External Advisory Committee
Section 1.5.a.	Meeting minutes from the CEPH Self-Study Committee
Section 1.5.b.	SPCHS assessment 120916
Section 1.5.b.	2016 commencement convocation
Section 1.5.e.	Meeting minutes from the PHSAA
Section 1.8.	Campus diversity plan
Section 1.8.b.	Syllabi of all courses
Section 1.8.c.	2010-2011 diversity report
Criterion 2:	Instructional Program
Section 2.1.b.	Schedule of courses_instructors the last 3 years
Section 2.4.a.	Practicum guidelines
Section 2.4.a.	Practicum proposal form
Section 2.4.a.	Practicum site mentor evaluation form
Section 2.4.a.	Practicum grading rubric form
Section 2.4.a.	Student practicum site assessment form
Section 2.4.e.	Examples of practicum reports and presentations
Section 2.4.e.	Griz eRecruiting protocol
Section 2.5.a.	Professional paper guidelines
Section 2.5.a.	Professional paper proposal form
Section 2.5.a.	Examples of professional papers
Section 2.5.a.	Portfolio guidelines
Section 2.5.a.	Portfolio approval form
Section 2.5.a.	Portfolio review committee form
Section 2.5.a.	Portfolio defense grading rubric
Section 2.5.a.	Examples of portfolio reports and presentations
Section 2.5.a.	PhD defense grading rubric
Section 2.6.e.	Pre-assessment for students
Section 2.6.e.	Post-assessment of students
Section 2.7.c.	2017 Qualtrics alumni survey
Section 2.7.c.	2017 alumni survey results
Section 2.7.e.	Employer survey
Section 2.7.e.	2012 employer survey results
Section 2.7.e.	2014 employer survey results
Section 2.12.b.	•
Section 2.12.b.	2016 course evaluations

<u>Criterion 3: Creation, Application, and Advancement of Knowledge</u> Section 3.2.e. Fall 2016 orientation agenda

Criterion 4: Faculty, Staff and Students

Section 4.1.a.	CVs of primary faculty
Section 4.1.b.	CVs of other faculty
Section 4.1.c.	Faculty affiliate form
Section 4.3.a.	Spring 2016 newsletter
Section 4.3.b.	Admissions committee rubric
Section 4.3.c.	Recruiting handout
Section 4.4.a.	2017 PhD orientation agenda
Section 4.4.a.	MPH advising sheet 2016-2017

List of Acronyms

ADA	Americans with Disabilities Act
AI-AN CTRP	American Indian-Alaska Native Clinical and Translational
	Research Program
ASUM	Associated Students of the University of Montana
AWMA	Air and Waste Management Association
AY	Academic Year
CBA	Collective Bargaining Agreement
СЕРН	Council on Education for Public Health
CHPBS	College of Health Professions & Biomedical Sciences
СРН	Certificate of Public Health
CTR-IN	Clinical Translational Research Infrastructure Network
CV	Curriculum Vitae
DPHHS	Department of Public Health and Human Services
EAC	External Advisory Committee
ЕСНО	Environmental Influences on Child Health Outcomes
EEOC	Equal Employment Opportunity Commission
F&A	Facilities and Administrative Costs
FEC	Faculty Evaluation Committee
FTE	Full-Time Equivalent
GPA	Grade Point Average
GPSA	Graduate and Professional Student Association
GRE	Graduate Record Examinations
HC	Head Count
ННР	Health and Human Performance
HRSA	Health Resources and Services Administration
IDCs	Indirect Costs
IPR	Individual Performance Record
IRB	Institutional Review Board
MCCHD	Missoula City-County Health Department
MOU	Memorandum of Understanding
MPCTS	Montana Pediatric Clinical Trial Site
MPH	Master of Public Health
MUS	Montana University System
NIH	National Institute of Health
NIWA	National Institute of Water and Atmospheric Research
PHSAA	Public Health Student and Alumni Association
PHSI	Public Health System Improvement
PT	Physical Therapy
SEC	Student Evaluation Committee
SFR	Student-Faculty Ratios
SPABA	Sponsored Program Asset Based Allocation
SPCHS	School of Public and Community Health Sciences
UM	University of Montana
UMHM	University of Montana Health & Medicine

Introduction

Located in Missoula, Montana, the University of Montana (UM), School of Public and Community Health Sciences (SPCHS) is housed within the College of Health Professions and Biomedical Sciences (CHPBS). The Montana Board of Regents approved the SPCHS administrative unit in March 2005, with its first class of students enrolled during the Fall 2006 semester.

The SPCHS affords students three program opportunities: an online Master of Public Health (MPH), an online Certificate of Public Health (CPH), and a new PhD in Public Health. As of Spring 2017, we have 76 students in the SPCHS, including 51 MPH students, 21 CPH students, and four students that started the PhD program in January 2017.

The Council on Education for Public Health (CEPH) Board of Councilors approved the University of Montana's original application for accreditation on June 20, 2009. The CEPH Board of Councilors acted at its June 21-23, 2012 meeting to accredit our MPH Program for a five-year term, extending to July 1, 2017. Our PhD program became CEPH-accredited in December 2016. In this self-study evaluation, we are seeking re-accreditation for both our online MPH program and our PhD program for the maximum seven-year period (through July 1, 2024).

Criterion 1: The Public Health Program.

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

1.1.a. A clear and concise mission statement for the program as a whole.

The mission of the SPCHS is to provide distance-based (MPH) and on-campus (PhD) learning opportunities, supported by scholarship and service activities, to prepare public health practitioners and researchers who will use global insight to improve the health of the people of Montana and other rural areas.

1.1.b. A statement of values that guides the program.

The SPCHS has adopted UM's statement of values for growth and prosperity summarized in UM's Strategic Plan "UM2020: Building a University for the Global Century" (see 1.1.b. UM strategic plan in the Electronic Resource File, ERF). This document sets forth the major directions for UM, and was developed from intensive strategic planning involving people from across campus and beyond. It serves as the foundation for our decision-making and as the vehicle through which we assess our progress and success.

The statement of values that guides our program is as follows: "The University of Montana's School of Public and Community Health Sciences has the underlying values of leadership, engagement, diversity and sustainability. These essential values underpin our preparation of graduates and our contributions to society in the 21st century through high-impact teaching, research, creative scholarship and service. We will realize our mission and vision through continuous, intentional integration of planning, budgeting, implementation and assessment."

1.1.c. One or more goal statements for each major function through which the program intends to attain its mission, including at a minimum, instruction, research and service.

Goal 1, Instruction: The SPCHS will prepare public health practitioners with a sound knowledge and skills base in the core disciplines of public health.

Goal 2, Research: The SPCHS will conduct research relevant to faculty expertise that will foster an atmosphere of scholarship as our students learn public health science and practice and will contribute to the enhancement of health in human populations.

Goal 3, Service: The SPCHS will provide service to help meet the public health needs of Montana, the intermountain west and rural areas beyond through consultation, collaboration, and continuing education.

1.1.d. A set of measurable objectives with quantifiable indicators related to each goal statement as provided in Criterion 1.1.c. In some cases, qualitative indicators may be used as appropriate.

Objectives for Achieving Goal 1, Instruction:

<u>Objective 1.1</u>: We will provide, using distance-based learning, a curriculum that addresses the core public health disciplines of biostatistics, epidemiology, environmental health, the social and behavioral sciences, and public health administration.

Objective 1.2: We will provide linkages with at least three academic programs at UM by streamlining admissions processes and facilitating dual advising based on the needs of the students and program capacity.

Objective 1.3: We will enroll at least 12 qualified new MPH student applicants each year. Fifty percent (50%) or more will be mid-career professionals or multicultural individuals.

<u>Objective 1.4</u>: All MPH students will engage in learning activities that allow them to apply public health theory and practice and to demonstrate public health citizenship by satisfactorily completing the practicum.

<u>Objective 1.5</u>: All admitted MPH students will demonstrate proficiency in the five core areas of public health by graduating with a GPA of at least 3.0 and satisfactorily defending their portfolios and completing the professional paper requirement.

Objective 1.6: Admitted students will complete the MPH degree in a timely manner, achieving 70% or higher degree completion for degree-seeking students within six years of initial enrollment.

<u>Objective 1.7:</u> Employer satisfaction surveys will show a 60% or greater favorable (satisfactory or very satisfactory) response to the MPH graduates in preparedness, potential, leadership and all areas of the survey.

Objectives for Achieving Goal 2, Research:

Objective 2.1: SPCHS core faculty will maintain productive research and scholarly activities in the public health sciences as defined by Unit Standards of the various academic units to which they belong.

Objective 2.2: SPCHS core faculty will teach students to appreciate the value of public health research, scholarship and quantitative skills, and to use public health data effectively; faculty will also provide students with opportunities to conduct research.

<u>Objective 2.3</u>: SPCHS core faculty will communicate the results of their research and scholarly activities both locally and nationally / internationally.

Objectives for Achieving Goal 3, Service:

<u>Objective 3.1</u>: Each year, all SPCHS core faculty members will provide leadership, education, or technical service to organizations and individuals devoted to health and public health in our community.

<u>Objective 3.2:</u> SPCHS core faculty will provide students with opportunities to be involved in service.

1.1.e. Description of the manner through which the mission, values, goals and objectives were developed, including a description of how various specific stakeholder groups were involved in their development.

The SPCHS mission, values, goals, and objectives were originally prepared in 2009 (prior to our initial accreditation self-study) by consensus through a series of retreats, meetings, and standing committees involving faculty, administrators, and students from the UM campus. In addition, a series of meetings were held with faculty affiliates and public health practitioners distributed across Montana and nationally. The most recent review of the program mission statement, values, goals, and objectives was conducted by faculty and staff during the early Fall 2016. The consensus was that our current mission statement, values, goals, and objectives (as listed above) were still current, and did not require any updates or revisions.

1.1.f. Description of how the mission, values, goals and objectives are made available to the program's constituent groups, including the general public, and how they are routinely reviewed and revised to ensure relevance.

Our mission, values, goals and objectives are posted on the SPCHS web page: http://health.umt.edu/publichealth/1about-us/Mission,%20Vision,%20Goals,%20and%20Objectives/default.php

They are also published in the SPCHS student handbook (see 1.1.f. SPCHS student handbook in the ERF), and have been provided to the Public Health Student and Alumni Association (PHSAA).

The MPH Program Chair and faculty review the mission statement, values, goals and objectives every two years. Since the last self-study, there have been no requests to change our mission, values, goals or objectives.

1.1.g. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

Strengths

The SPCHS has a clear and concise mission statement for the program, supported by three overarching goals focused on instruction, research, and service. Each goal has a set of measurable objectives that are intended to be reviewed every two years so that they meet the needs of the program.

Weaknesses

Although our mission statement, values, goals, and objectives are periodically reviewed by our Chair and faculty, we have not recently provided opportunity for review/input from our university or community partners outside the SPCHS. To address this issue, the mission statement, values, goals, and objectives have been made available for review by multiple entities during the Fall 2016 and Spring 2017 semesters, including the External Advisory Committee, Curriculum Committee, Steering Committee, Research Committee, and the Public Health Student and Alumni Association. Each of these committees is composed of university and/or community partners. To further address this weakness, information on our mission, values, goals, and objectives is now predominantly featured on our website:

http://health.umt.edu/publichealth/1about-

us/Mission,%20Vision,%20Goals,%20and%20Objectives/default.php.

- 1.2. Evaluation. The program shall have an explicit process for monitoring and evaluating its overall efforts against its mission, goals and objectives; for assessing the program's effectiveness in serving its various constituencies; and for using evaluation results in ongoing planning and decision making to achieve its mission. As part of the evaluation process, the program must conduct an analytical self-study that analyzes performance against the accreditation criteria defined in this document.
- 1.2.a. Description of the evaluation processes used to monitor progress against objectives defined in Criterion 1.1.d, including identification of the data systems and responsible parties associated with each objective and with the evaluation process as a whole. If these are common across all objectives, they need be described only once. If systems and responsible parties vary by objective or topic area, sufficient information must be provided to identify the systems and responsible party for each.

The SPCHS is committed to a systematic, broad-based, and integrated performance assessment to promote and maintain program success. Planning and evaluation are key components of our program, based on qualitative and quantitative input from internal and external stakeholders using evaluation data. The frequency with which the program evaluates the accomplishment of each objective is typically conducted on an annual basis. One exception is for course evaluations, which have been historically reviewed each semester by the Chair. Program evaluation is the responsibility of the SPCHS Chair, in consultation with the Steering Committee and working in conjunction with the other SPCHS standing committees.

The evaluation information for each goal and objective, including the multiple sources of data available to the program for monitoring and planning, are detailed below in **Table 1.2.a.** The SPCHS Program Coordinator is responsible for compiling and maintaining the evaluation data from all sources listed below.

Table 1.2.a. Evaluation information for each goal and objective.

	Who is Responsible	Data Source	How Often Collected
Goal 1, Instruction			
Objective 1.1	Curriculum Committee	Courses, faculty, students, alumni	As needed
Objective 1.2	Admissions and Steering Committees	SPCHS Administrative Office	Annually
Objective 1.3	Admissions Committee	SPCHS Administrative Office	Annually
Objective 1.4	Curriculum Committee	Courses	As needed
Objective 1.5	Program Coordinator and Steering Committee	Graduate School Office	Annually
Objective 1.6	Program Coordinator and Steering Committee	Graduate School Office	Annually
Objective 1.7	Program Coordinator and Steering Committee	Employer surveys	Annually
Goal 2, Research			
Objective 2.1	Steering and Research Committees	Internal tracking, faculty	Annually

	Who is Responsible	Data Source	How Often Collected
Objective 2.2	Steering and Research	Internal tracking, faculty,	Annually
	Committees	students	
Objective 2.3	Steering and Research	Internal tracking, faculty	Annually
	Committees		
Goal 3, Service			
Objective 3.1	Steering and Research	Internal tracking, faculty	Annually
	Committees		
Objective 3.2	Steering and Research	Internal tracking, faculty,	Annually
	Committees	students	

1.2.b. Description of how the results of the evaluation processes described in Criterion 1.2.a. are monitored, analyzed, communicated and regularly used by managers responsible for enhancing the quality of programs and activities.

The SPCHS Chair has the responsibility for making sure that the data in **Table 1.2.a.** are collected, analyzed, and communicated to stakeholders in support of each of our stated objectives. Regarding data collection and monitoring, the Program Coordinator and standing committees are tasked with gathering specific data sets for the respective objectives. These data results are typically reviewed by the Chair prior to dissemination to the Steering Committee for their review and comment during the late Spring or early Summer. As needed, the Steering Committee will develop and suggest changes for the Chair to implement related to Committees, faculty, students, etc. for implementation in the Fall semester. Note that course evaluations are provided to the Chair (and individual instructors) following each semester. After review of the course evaluations by the Chair, any changes that need to be made to respective classes will be implemented before that class is taught again.

1.2.c. Data regarding the program's performance on each measurable objective described in Criterion 1.1.d must be provided for each of the last three years. To the extent that these data duplicate those required under other criteria (e.g., 1.6, 2.7, 3.1, 3.2, 3.3, 4.1, 4.3, or 4.4), the program should parenthetically identify the criteria where the data also appear.

The performance on objectives and outcome measures for Goals 1 (Instruction), 2 (Research), and 3 (Service), respectively, are listed in **Table 1.2.c**. Results are provided for the following time periods: AY 2013-2014, AY 2014-2015, and AY 2015-2016.

Table 1.2.c. Performance on objectives and outcome measures.

Goal 1, Instruction	Outcome Measure	Target	2013-2014	2014-2015	2015-2016
Objective 1.1. We will provide, using distance-based learning, a curriculum that addresses the core public health disciplines of biostatistics, epidemiology, environmental health, the social and behavioral sciences, and public health administration.	1.1. 42-credit curriculum	42-credit curriculum measure maintained	Target met	Target met	Target met
Objective 1.2. We will provide linkages with at least three academic programs at UM by streamlining admissions processes and facilitating dual advising based on the needs of the students and program capacity.	1.2. Number of students enrolled in MPH or CPH from other UM departments: -Physical Therapy (PT) -Health and Human Performance (HHP) -Pharmacy	Admit and enroll >1 student from these programs per academic year	Target met 1 - PT 1 - HHP 1 – Pharm	Target met 1 - PT 1 - HHP	Target met 2 - HHP 1 - Pharm
Objective 1.3. We will enroll at least 12 qualified new MPH student applicants each year. Fifty percent (50%) or more will be midcareer professionals or multicultural individuals.	1.3.a. (Table 4.3.f.) Enrollment of new students	≥12 new students enrolled per year	Target met 21	Target not met 11	Target met
	1.3.b. (Table 4.3.f.) Enrolled students will enter the program with a GPA reflecting academic success	≥70% of incoming students will meet or exceed GPA of 3.0	Target met 89.1%	Target met 85.7%	Target met 87.3%
	1.3.c. (Table 4.3.f.) Enrolled students will enter the program with GRE scores reflecting potential for academic success in graduate study	≥80% or more students will score competitively (greater than 140) on verbal (V) and quantitative (Q) components of the GRE test	Target met V: 100.0% Q: 100.0%	Target met V: 100.0% Q: 100.0%	Target met V: 100.0% Q: 83.0%
	1.3.d. (Table 1.8.e., 4.3.f.) Enrollment of American Indian MPH students	≥6% American Indian to match ethnic profile of Montana	Target met 10.5%	Target met 11.5%	Target met 14.6%

Goal 1, Instruction	Outcome Measure	Target	2013-2014	2014-2015	2015-2016
	1.3.e. (Table 1.8.e., 4.3.f.) Enrollment of mid-career professionals	≥50% or more enrolled students	Target not met 48.0%	Target not met 46.2%	Target not met 49.4%
	1.3.f. (Table 1.8.e.) Enrollment of students of color and/or Hispanic (not including American Indian)	≥3% students of color and/or Hispanic to match profile of Montana	Target met 4.2%	Target met 3.4%	Target met 5.8%
Objective 1.4. All MPH students will engage in learning activities that allow them to apply public health theory and practice and to demonstrate public health citizenship by satisfactorily completing the practicum.	1.4. Satisfactory completion of practicum	100% of graduated students	Target met 100%	Target met 100%	Target met 100%
Objective 1.5. All admitted MPH students will demonstrate proficiency in the five core areas of public health by GPA of at least 3.0 and satisfactorily defending their portfolios and completing the professional paper requirement.	1.5.a. Core course grades accomplished satisfactorily	100% of students will complete courses with GPA of at least 3.0	Target met 100%	Target met 100%	Target met 100%
	1.5.b. Portfolio defense and professional paper accomplished satisfactorily	100% of graduating students will complete satisfactory portfolios and professional papers	Target met 100%	Target met 100%	Target met 100%
Objective 1.6. Admitted students will complete the MPH degree in a timely manner, achieving 70% or higher degree completion for degree-seeking students within six years of initial enrollment.	1.6. Compare date of enrollment to graduation, allowing for approved leaves of absence	≥70% degree completion within six years	Target met 83%	Target met 100%	Target met 95%
Objective 1.7. Employer satisfaction surveys will show a 60% or greater favorable (satisfactory or very satisfactory) response to the MPH graduates in preparedness, potential, leadership and all areas of the survey.	1.7. Dissemination of MPH employer survey	Annual response to employer survey will show a 60% or greater favorable response	Target met 100%	Target not met No Data	Target not met No Data
Goal 2, Research					
Objective 2.1. SPCHS core faculty will maintain productive research and scholarly activities in the public health sciences as defined by Unit Standards of the various academic units to which they belong.	2.1.a. (Table 3.1.d.) Annual Faculty Research Survey monitors faculty research productivity in publishing	≥75% faculty will publish at least one refereed journal article, book chapter, or book per year	Target met 100%	Target met 100%	Target met 100%

Goal 2, Research	Outcome Measure	Target	2013-2014	2014-2015	2015-2016
	Annual Faculty Research Survey monitors faculty research productivity in funding	≥75% faculty will submit at least one grant or contract per year or will report working under a grant or contract funding	Target met 100%	Target met 100%	Target met 100%
Objective 2.2. SPCHS core faculty will teach students to appreciate the value of public health research, scholarship and quantitative skills, and to use public health data effectively; faculty will also provide students with opportunities to conduct research.	2.2. (Table 3.1.d.) Students will produce a successful Professional Paper	100% of students who graduate	Target met 100%	Target met 100%	Target met 100%
Objective 2.3. SPCHS core faculty will communicate the results of their research and scholarly activities both locally and nationally / internationally.	2.3. (Table 3.1.d.) Annual Faculty Research Survey monitors faculty research productivity in giving posters or presentations	≥75% faculty with at least one conference research poster or presentation per year	Target met 100%	Target met 100%	Target met 100%
Goal 3, Service					
Objective 3.1. Each year, all SPCHS core faculty members will provide leadership, education, or technical service to organizations and individuals devoted to health and public health in our community.	3.1. (Table 3.2.d.) Annual Faculty Service Survey monitors faculty service productivity	100% of core faculty reporting at least one service activity per year	Target met 100%	Target met 100%	Target met 100%
Objective 3.2. SPCHS core faculty will provide students with opportunities to be involved in service.	3.2. (Table 3.2.d.) Students' CV will include a section for reporting service	100% of students will report engaging in service during their tenure in the UM MPH program	Target not met 20%	Target not met 22%	Target not met 39%

1.2.d. Description of the manner in which the self-study document was developed, including effective opportunities for input by important program constituents, including institutional officers, administrative staff, faculty, students, alumni and representatives of the public health community.

Prior to the CEPH accreditation orientation workshop that was held in Washington D.C. July 30, 2015, we formed a Self-Study Committee composed of Dr. Tony Ward (Chair), Dr. Craig Molgaard (former Chair), and additional SPCHS administrative staff (Mr. Patrick Dye, Ms. Tracy Jones, Ms. Carolyn Hester and Ms. Desirae Ware). This core group met frequently, and was responsible for writing the first version of the self-study. As sections were finalized, they were disseminated so that other key stakeholders (including SPCHS core faculty and affiliated faculty) could provide careful review and critical feedback.

Once a final draft of the self-study document was available, it was posted on the SPCHS website so that students, alumni and other stakeholders could provide final review and comment. In addition to the Public Health Student and Alumni Association, the final draft was sent to the Steering and Research Committees for review and comment. The final draft was also sent to the Dean of the CHPBS for review and comment. Once feedback was received from all entities, updates were made, and the final version of the preliminary self-study was submitted to CEPH on November 21, 2016.

On January 17, 2017, we received comments on our preliminary self-study report. Once all of the critiques were addressed, a final draft was circulated for review and comment by our student and alumni association, staff, External Advisory Committee, Dean, Provost, and Steering Committee. The final self-study was submitted to CEPH on March 27, 2017.

1.2.e. Assessment of the extent to which this criterion is met, and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

We have prepared an analytic self-study document that provides both a qualitative and quantitative assessment of how the program achieves its mission, goals and objectives, as well as meets CEPH accreditation criteria. In putting this self-study report together, we sought input from our university administration, faculty, staff, students, and alumni, as well as local and regional public health professionals. This has resulted in an introspective document that has identified many of our strengths and weaknesses.

Strengths

The SPCHS utilizes experienced core and program faculty with public health expertise from a variety of programs on and off the University of Montana campus. This is a strength in terms of providing students with an understanding of the five core disciplines of public health. The SPCHS is also starting to be recognized nationally for the quality of our offerings. Specifically, we were ranked number 16 by *Affordable Colleges Online* for the "Best Online Master's in Public Health Degrees" in 2016. In 2015, we were ranked by *Top Master's in Healthcare Administration* as the 15th "Most Affordable MPH Program". The number of graduates from

our program since the last self-study submission (2011) has grown dramatically, creating a network of public health professionals throughout rural Montana and our region.

Weaknesses

Results of our assessments have shown that target outcome measures for some of our objectives have not been routinely met. Deficiencies were identified in the following objectives:

Objective 1.3: We will enroll at least 12 qualified new MPH student applicants each year. Fifty percent (50%) or more will be mid-career professionals or multicultural individuals.

- 1.3.a. Only 11 new students were enrolled during AY 2014-2015.
- **1.3.e.** Enrollment of mid-career professionals was below 50% during each of the three time periods (48.0%, 46.2%, and 49.4%, respectively).

Objective 1.7: Employer satisfaction surveys will show a 60% or greater favorable (satisfactory or very satisfactory) response to the MPH graduates in preparedness, potential, leadership and all areas of the survey.

• **1.7.** These data were collected during 2013-2014, but had a poor response rate (n=6). The employer survey was not actively collected during 2014-2015 or 2015-2016.

Objective 3.2: SPCHS core faculty will provide students with opportunities to be involved in service.

• 3.2. A small percentage of students (20%, 22%, and 39%, respectively) reported service in their Portfolios / curriculum vitaes (CV)s. It should also be noted that several students didn't submit CVs when they graduated, therefore contributing to our low numbers.

Identifying our deficient target outcome measures has provided us with information regarding areas in which we need to improve. This especially includes reaching out to employers following student graduations. We also need to do a better job of engaging our constituents in the assessment process, including community stakeholders, alumni, employers and the university. Finally, having a more standardized and timely process to collecting and evaluating the **Table 1.2.c.** monitoring data could have identified our deficiencies sooner (especially as it relates to **Objectives 1.7 and 3.2**).

To address these weaknesses, we have been proactive in improving our data-gathering and evaluation activities, including the following steps since the preliminary self-study was submitted in November 2016:

Objective 1.3. We are committed to improving our recruiting efforts. Through more deliberate interactions with our students, alumni, tribal colleges, and the general public (emails, PHSAA events, marketing at conferences, etc.), we have advertised our MPH program more broadly. In addition, we will actively recruit the cohort of ~45 local and state health department professionals entering our CPH program in Fall 2017 (further described in **Criterion 3.1.b.**) into our MPH program following completion of their CPH. Many of these incoming CPH students are mid-career professionals.

Objective 1.7. As described in **Criterion 2.7**, we have developed a plan to improve our employer survey process. Utilizing focus groups (including student and employer feedback) and key informant interviews to update and improve our employer survey will enable us to achieve a much higher response rate, as well as much more informative data that can be used to improve our overall program. We intend to launch this new employer survey in late Spring 2017.

Objective 3.2. We have been actively working towards increasing the number of community service opportunities for our students. As part of the Environmental and Rural Health class (PUBH 560), community service is now a required component of our MPH program. As PUBH 560 is a required core class, this will provide opportunities for all MPH students to engage in a service requirement. Additional opportunities are being explored with instructors in other classes and through the alumni and student association. We will also enforce the requirement for students to document their service activities in their Portfolios and CVs. To address this weakness, these requirements have been updated in the revised Portfolio Guidelines (see Criterion 2.5).

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

1.3.a. A brief description of the institution in which the program is located, and the names of accrediting bodies (other than CEPH) to which the institution responds.

UM was originally chartered as an institution of postsecondary education in 1893, and is affiliated as a public unit of the Montana University System (MUS). The University is classified as a co-educational, doctoral university and is fully accredited by the Northwest Association of Schools and Colleges. The MUS is governed by the Montana Board of Regents of Higher Education (Board of Regents), appointed by the Governor of Montana. As of Spring 2017, the enrollment of the UM-Missoula campus was 11,615. The University is assigned the exclusive responsibility within the MUS for the instructional professional programs in Public Health. The programs are housed in the School of Public and Community Health Sciences (SPCHS), located within the College of Health Professions and Biomedical Sciences (CHPBS).

In addition to CEPH accreditation, many of the professional schools and departments at UM have specific accreditations. Following is a list of the accredited departments, along with the accrediting institution.

- Chemistry, American Chemical Society (ACS)
- Computer Science, Computing Accreditation Commission of ABET
- Clinical Psychology, American Psychological Association
- School of Psychology, National Association of School Psychologists and American Psychological Association
- Accounting, Association to Advance Collegiate Schools of Business (AACSB-International)
- Business, Association to Advance Collegiate Schools of Business (AACSB-International)
- Food Service Management, American Culinary Federation Educational Institute (ACFEI)
- Nursing, Accreditation Commission for Education in Nursing (ACEN)
- Paralegal Studies, American Bar Association (ABA)
- Pharmacy Technology, American Society of Health System Pharmacists (ASHSP)
- Respiratory Care, Committee for Accreditation of Respiratory Care (CoARC w/CAAHEP)
- Surgical Technology, Commission on Accreditation of Allied Health Education Programs (CAAHEP)
- Athletic Training, Commission on Accreditation of Allied Health Education (CAATE)
- Counselor Education, Council for Accreditation of Counseling and Related Educational Programs (CACREP)
- Communication Science and Disorders, American Speech Language Association-Council on Academic Accreditation (ASHA)
- Education, National Council for Accreditation of Teacher Education (NCATE); Montana Board of Public Education
- Co-Teach Preschool, Institute for Educational Research and Service, National Association for the Education of Young Children (NAEYC)
- Art & Media Arts, National Association of Schools of Art and Design (NASAD)
- Theater & Dance, National Association of Schools of Theater (NAST)
- Music, National Association of Schools of Music (NASM)

- Forest Resources Management, Society of American Foresters (SAF)
- Recreation Management, National Recreation and Park Association/American Association for Leisure and Recreation (NRPA/AALR)
- Journalism, Accrediting Council on Education in Journalism and Mass Communications (ACEJMC)
- Law, American Bar Association (ABA), American Association of Law Schools (AALS)
- Pharmacy, Accreditation Council for Pharmacy Education (ACPE)
- Physical Therapy, Commission on Accreditation in Physical Therapy Education (CAPTE)
- Social Work, Council on Social Work Education (CSWE)
- Department of Laboratory Animal Resources, Association for the Assessment and Accreditation of Laboratory Animal Care International (AAALAC)

1.3.b. One or more organizational charts of the university indicating the program's relationship to the other components of the institution, including reporting lines and clearly depicting how the program reports to or is supervised by other components of the institution.

Figure 1. Organizational chart for the University of Montana.

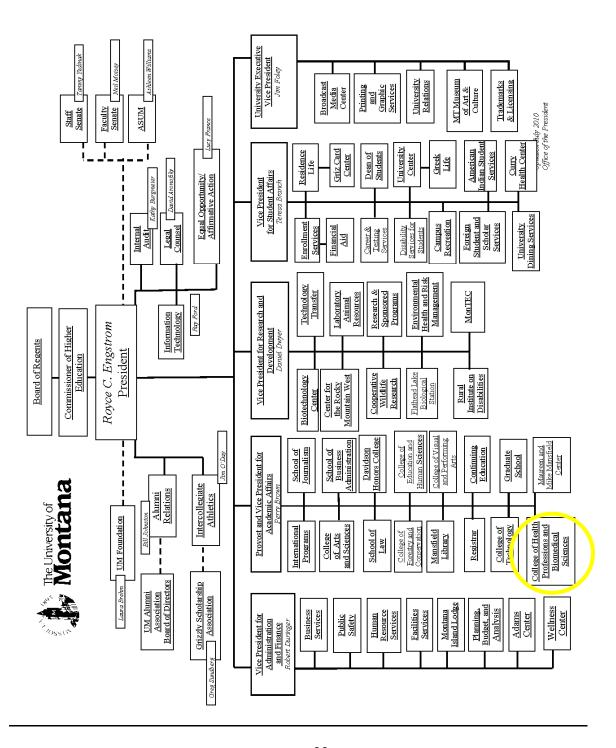


Figure 2. Organizational chart for the CHPBS.

College of Health Professions & Biomedical Sciences Director for Structural & Function Director Chair Curry Health Center of Public & Cor Center for Children, Families & Workforce Development Budgets & Finance Information Tech Director

Working Group

1.3.c. Description of the program's involvement and role in the following:

- budgeting and resource allocation, including budget negotiations, indirect cost recoveries, distribution of tuition and fees and support for fund-raising.

The Chair carries out budgeting and resource allocation within the SPCHS that pertains to the MPH and PhD programs. Budget negotiations are carried out annually between the Chair and the Dean of the CHPBS. Indirect cost (IDC) recovery on grants is distributed by the Office of Research and Creative Scholarship (per Dr. Scott Whittenburg, Vice President for Research and Creative Scholarship and Dean of the Graduate School), based on a full indirect rate of 45% and a distribution that sees 27% of IDCs going back to CHPBS, where it is distributed one-third to the Principal Investigator, one-third to the Chair of SPCHS, and one third to the Dean of CHPBS. Basic tuition and fees stay with the Office of the Vice President for Administration and Finance. A tuition surcharge of \$150 per credit for professional training programs is returned directly to the Chair of SPCHS to provide programmatic support. At the University level, the University of Montana Foundation is engaged with fund-raising, with Mr. Mark Schleicher appointed as the Director of Development and Alumni Relations for our College, including support for the SPCHS.

- personnel recruitment, selection and advancement, including faculty and staff.

Personnel recruitment for staff and faculty at UM follows the processes and procedures of the Office of Human Resource Services. Selection and advancement processes and procedures are regulated and reviewed on an individual case basis and in accordance with the Montana Public Employees Association (staff) and the Montana Education Association-American Federation of Teachers (faculty). Selection (new hires) is under the overall direction of the Office of Human Resource Services.

Regarding advancement, UM is a unionized campus, with both faculty and staff unionized. Specifically, each academic unit operates in terms of its own individualistic and specific "Unit Standards" when it comes to hiring, promotion and tenure. These Unit Standards differ for academic units within a College as well as across Colleges. Therefore, each academic unit that contributes faculty to the SPCHS has a different set of Unit Standards. The Unit Standards for the SPCHS are recognized as legally binding by the university and the faculty union, but not binding on academic units outside of the SPCHS. A copy of the SPCHS Unit Standards is provided in the **ERF** (see 1.3.c. SPCHS unit standards).

Faculty roles and workload expectations are guided by the UM Collective Bargaining Agreement (CBA, see 1.3.c. UM CBA in the ERF). All faculty are expected to be a (1) teacher, (2) member of the faculty and University (service) and (3) scholar (CBA 6.200; Appendix B, p. 11). The CHPBS Dean in consultation with the SPCHS Chair assigns instruction loads. For full-time SPCHS faculty, the distribution of time spent by a faculty member in each of the three above areas is unique and determined by the faculty member in consultation with the SPCHS Chair and CHPBS Dean. Administrative responsibilities of full-time SPCHS faculty are considered part of the service component. However, the CBA (13.500; Appendix B -CBA, p. 53) provides for additional time/financial commitments for the administrative duties of the Chair. A Faculty

Evaluation Committee (FEC) of SPCHS faculty peers engage in an evaluation of the faculty member (up for evaluation, promotion, and/or tenure) and Chair (administrative ability in addition to his or her role as a faculty member) based on the submission of an Individual Performance Record (IPR). The FEC's report is subject to review and amendment or written addendum and is forwarded to the Dean of the CHPBS for review, and then to the Provost for review. Through annual performance reviews, staff are evaluated by the Chair, with the performance reviews forwarded to the Office of Human Resource Services. Depending on job proficiency and years of service, staff can be promoted within the SPCHS, pending final approval of our Human Resources Department. The latest example of this is Ms. Emily Weiler, who was promoted from a Research Specialist III to Laboratory Manager in Spring 2016.

- academic standards and policies, including establishment and oversight of curricula.

Professional expectations for SPCHS students are set forth by the student handbook (see 1.1.f. SPCHS student handbook in the ERF) and SPCHS website. The enforcement and interpretation of the academic regulations and professional expectations of students in the program are the responsibility of the Steering Committee. Curriculum design, content, and subsequent alterations are determined with input from the overall program faculty, with considerable student input. Faculty input comes from the Curriculum Committee, on which both SPCHS core and other program faculty are represented. Student input comes from course evaluations and the student representatives on the Research, Curriculum, and Admissions Committees, respectively. Initial course proposals are submitted to the Curriculum Committee for approval, and then go to the Steering Committee and SPCHS Chair for approval. Significant curricular alterations undergo the following review path in the institution: review and approval by the Dean of CHPBS, review and approval by the University Graduate Council, and review and approval by the Faculty Senate. Major programmatic changes are also reviewed and approved by the Provost and the Montana Board of Regents.

1.3.d. If a collaborative program, descriptions of all participating institutions and delineation of their relationships to the program.

Not applicable.

1.3.e. If a collaborative program, a copy of the formal written agreement that establishes the rights and obligations of the participating universities in regard to the program's operation.

Not applicable.

1.3.f. Assessment of the extent to which this criterion is met and an analysis of t	he
program's strengths, weaknesses and plans relating to this criterion.	

This criterion is met.

Strengths

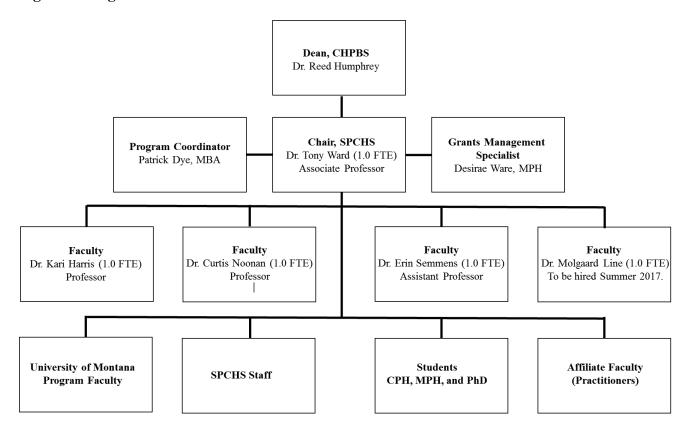
UM has a well-established reporting structure and the communication channels operate effectively among levels. The SPCHS is well-served by its position within the CHPBS and within UM, with all levels contributing to the overall success and integrity of the program.

Weaknesses

None noted.

- 1.4. Organization and Administration. The program shall provide an organizational setting conducive to public health learning, research and service. The organizational setting shall facilitate interdisciplinary communication, cooperation and collaboration that contribute to achieving the program's public health mission. The organizational structure shall effectively support the work of the program's constituents.
- 1.4.a. One or more organizational charts delineating the administrative organization of the program, indicating relationships among its internal components.

Figure 3. Organizational chart for the SPCHS.



1.4.b. Description of the manner in which interdisciplinary coordination, cooperation and collaboration occur and support public health learning, research and service.

Teaching: Because the SPCHS is housed within the CHBPS, many of our teaching faculty are faculty members from other units, including Pharmacy Practice, Psychology, and the Department of Biological and Pharmaceutical Sciences. The full-time, core (primary) faculty members are part of the SPCHS, while additional faculty from other units within and outside CHPBS teach subject matter in their areas of expertise. The SPCHS Chair makes adjunct faculty appointments for the program, with input from other SPCHS core faculty. The pool of adjunct faculty provide support for the professional nature of our program, drawing on the services of personnel from other disciplines within and outside of UM.

Research: The SPCHS supports interdisciplinary coordination, cooperation, and collaboration through the research activities of its diverse faculty. Faculty members have differing academic and research backgrounds, experience, and expertise related to the five core disciplines of public health.

Service: The SPCHS calls upon the strengths of its diverse faculty to successfully implement service activities at the department, College, and University levels. At the University level, the SPCHS faculty have the opportunity for interdisciplinary interactions on the University Diversity Committees, Faculty Evaluation Committees, Faculty Senate, and Graduate Councils (and several other Committees across campus). At the College level, our faculty serve on Committees such as the following: Diversity and Cultural Competence, Curriculum and Inter-professional, Education, Research and Creative Scholarship Work Group, Student Affairs, Communications, Instruction, and Research. At the SPCHS level, interdisciplinary activities include serving on Standing Committees (Steering, Research, Curriculum, Admissions) which are staffed by individuals from across campus, and in some instances, off campus. Another level includes the Practicum and Portfolio defense committees, where interdisciplinary membership constantly occurs. In addition, interdisciplinary presentations, conferences and seminars are widely available on campus to SPCHS faculty and students.

1.4.c. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

The SPCHS exists in an environment where an interdisciplinary public health approach facilitates learning, research, and service. The SPCHS works collaboratively and cooperatively with other units within its host college (CHPBS), and engages active participation from public health practitioners of diverse backgrounds within our University and throughout the state of Montana. This is evidenced by the variety of outside expertise that guest lecturers contribute to our classes, and the participation of interdisciplinary experts serving on students' capstone committees.

Weaknesses

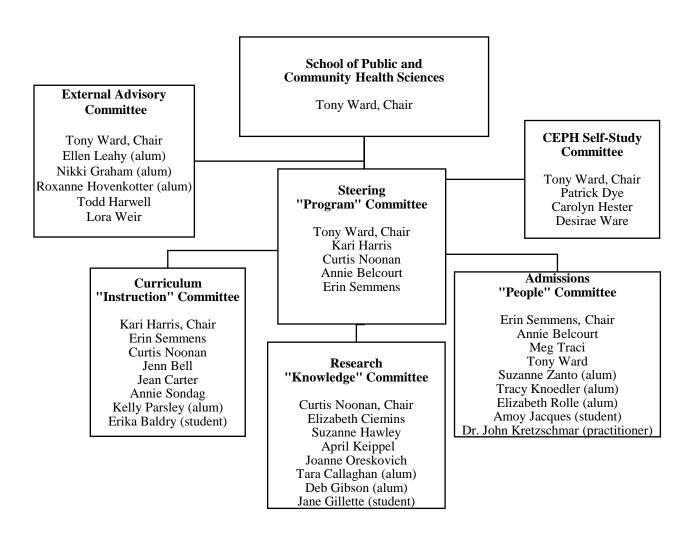
We have not identified any major weaknesses, but we do acknowledge that we can always continue to improve in this area. For example, some of our new collaborations are in early stages and are not fully established at this point, including new formalized relationships with the Montana Department of Public Health and Human Services, DPHHS (see 1.4.c. SPCHS_DPHHS MOU in the ERF). We will actively pursue networking opportunities with our alumni, providing for new experiences for our current/future students.

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

1.5.a. A list of standing and important ad hoc committees, with a statement of charge, composition and current membership for each.

Within the SPCHS, we have four standing committees, including the 1) Curriculum "Instruction", 2) Research "Knowledge", 3) Admissions "People", and 4) Steering "Program" Committees. In addition, we maintain an External Advisory Committee (EAC) that provides advice and guidance to the Steering Committee and SPCHS Chair, as well as a CEPH Self-Study Committee responsible for accreditation activities. **Figure 4** below shows the current membership and composition of the standing committees for the SPCHS.

Figure 4. Current SPCHS committees and membership.



1) Curriculum "Instruction" Committee

The mission of the Curriculum Committee is to develop and maintain a curriculum that is rigorous, current, and capable of producing graduates who will be prepared to contribute positively to public health institutions and efforts. The Committee provides ongoing oversight of the curriculum by reviewing requests to add new courses, to add new electives, to make major revisions to existing courses, and to delete courses. The Committee also reviews proposals for new degree options (e.g., dual degree programs, new certificates, etc.). The Curriculum Committee meeting minutes from the last year are presented in the **ERF** (1.5.a. Committee minutes).

2) Research "Knowledge" Committee

The mission of the Research Committee is fourfold: 1) to document the productivity of students and faculty by compiling records of scholarship, service, and related activities (including the annual research report); 2) to promote research and service opportunities by such activities as disseminating information to public health constituencies; 3) to encourage students to present at the University of Montana Graduate Research Conference; and 4) to support SPCHS activities related to CEPH accreditation criteria having to do with the creation, application, and advancement of knowledge. The Research Committee also took an active role in conducting a review of the CEPH preliminary self-study document. The Research Committee meeting minutes from the last year are presented in the **ERF** (1.5.a. Committee minutes).

3) Admissions "People" Committee

The mission of the Admissions Committee is to recruit, review and admit qualified applicants to the MPH and CPH program who can successfully carry out public health activities and practices for the population of Montana and beyond. The Admissions Committee Review Forms from the last year are presented in the **ERF** (1.5.a. Committee minutes).

4) Steering "Program" Committee

Consisting of Chairs of the other Standing Committees and Core program faculty, the mission of the Steering Committee is to provide strategic planning and program evaluation and assessment for the SPCHS. The Steering Committee is responsible for program integrity, guidance and oversight for all aspects of the program. Note that over the past year, the biweekly faculty meetings have served as Steering Committee meetings, especially since they include the same group of people (Drs. Harris, Noonan, Semmens, and Ward). Additional members attending the faculty biweekly meetings include Dr. Annie Belcourt and Mr. Patrick Dye. Note that the Steering Committee has also served as application reviewers for the first two cohorts of the PhD program. The Steering Committee meeting minutes (formerly the PhD Committee) from the last year are presented in the **ERF** (1.5.a. Committee minutes).

5) External Advisory Committee (EAC)

The mission of the EAC is to provide programmatic guidance, workforce development, and accreditation advice to the SPCHS through its Chair and Steering Committee. Specific responsibilities include assistance in determining the training needs of different constituencies in Montana and the establishment of consistent field placement opportunities for MPH students. Current membership represents interests from local health departments in Montana (Leahy), tribal colleges/Native American populations (Graham), public school systems and non-profits in Montana (Hovenkotter), the Montana Department of Public Health and Human Services (Harwell), and the Montana Public Health Association (Executive Director Weir). EAC meeting minutes from the last few years are found in the **ERF** (1.5.a. Committee minutes).

6) CEPH Self-Study Committee

The Self-Study Committee was formed to assist with the CEPH reaccreditation efforts, as well as help plan the April 2017 site visit. Following the CEPH site visit, this Committee will also help support the other Standing Committees on program self-assessment activities related to CEPH accreditation, as well as University of Montana accreditation efforts. The CEPH self-study meeting minutes from the last year are found in the **ERF** (1.5.a. Committee minutes).

Overall committee structures

Committee Chairs and their members are appointed by the SPCHS Chair prior to the start of the new school year (late summer) based upon the needs of the committee and the strengths and interests of those chosen to serve. Student and alumni representatives may volunteer for committee appointments, or they may be nominated by faculty members. All committee appointments are for an academic year (July through the following June), with shorter appointments made to fill vacancies as needed. The standing committees can meet every two weeks (Steering), monthly (Curriculum), or once per semester (Admissions, Research, and EAC).

1.5.b. Identification of how the following functions are addressed within the program's committees and organizational structure:

- general program policy development
- planning and evaluation
- budget and resource allocation
- student recruitment, admission and award of degrees
- faculty recruitment, retention, promotion and tenure
- academic standards and policies, including curriculum development
- research and service expectations and policies

General program policy development. General program policy is developed by the SPCHS Chair in consultation with SPCHS faculty and Steering Committee. If needed, policies are discussed by the EAC, who provide advice and input prior to implementation.

Planning and evaluation. Responsibility for strategic planning in the SPCHS starts with biweekly faculty / Steering Committee meetings. Planning initiatives can then be brought to the EAC for further review and feedback, and can involve the CHPBS Dean for consultation. At the University level, academic assessment is an ongoing process, with each department on the University of Montana campus responsible for a biannual assessment report as mandated by the Provost's Office. The goal of this assessment report is to demonstrate how SPCHS translates data into action plans in our curricula, pedagogy, policies, and assessments to improve overall program quality. The CEPH Self-Study Committee (Ward and Dye) was responsible for putting together the University of Montana academic assessment report which was submitted in December 2016 (see 1.5.b. SPCHS assessment 120916 in the ERF).

Budget and resource allocation. Prior to the start of the fiscal year, the SPCHS Chair develops a program budget with the CHPBS Dean (Dr. Reed Humphrey) and the CHPBS Accountant (Mr. Tim Edwards). The budget is then communicated to the SPCHS faculty when it becomes available. Should the need arise, the Steering Committee and the External Advisory Committee can be used to provide guidance on budgetary issues.

Student recruitment, admission and award of degrees. All faculty in the SPCHS engage in recruitment activities at the university, within the community, and at regional and national public health events including presentations to groups in public health and health care, and displays at conferences and meetings of professional organizations. Brochures, websites, flyers, posters, mailings, face-to-face and telephone interviews with prospective students and social media are used to recruit for the MPH and PhD programs. Review of applications and admissions to the MPH Program is accomplished by the Admissions Committee for fall, spring, and summer semesters. The Admissions Committee decides on conditional, provisional, full admission or rejection of applicants to the program. The Steering Committee serves as the PhD applicant reviewers for Fall admissions. The student is informed of the admission decision via both an email and an official letter mailed to the applicant from the UM Graduate School Office. The University awards degrees once per year (end of spring semester), where one or more MPH faculty attend the main University of Montana ceremony. The SPCHS hosts a smaller ceremony focused on SPCHS students graduating with MPH and CPH degrees (and someday, PhD students). Please see the May 2016 Commencement Convocation in the ERF (1.5.b. 2016 commencement convocation).

Faculty recruitment, retention, promotion and tenure. As a faculty position becomes available, the SPCHS Chair requests permission from the CHPBS Dean to open a search for the position. A Role Description is prepared and forwarded to the UM Human Resources Department to ensure it is consistent with other position statements and adheres to Equal Employment Opportunity Commission (EEOC) and Americans with Disabilities Act (ADA) provisions. The SPCHS Chair will receive all applications and will appoint a search committee of full-time faculty members (consisting of both in-unit and at least one out of unit faculty member, as well as a student representative) to review applications. At least one faculty member must belong to a minority group. This committee will conduct interviews, and makes a recommendation to the SPCHS Chair and the CHPBS Dean. The Dean subsequently approves or denies approval for the recommended candidate and extends any offer of employment.

Faculty retention is accomplished in part by a strong commitment to mentoring within the SPCHS program. The SPCHS Chair is dedicated to promoting the professional development and goals in research, service and teaching of each member of the program and provides support for these activities for faculty through the application of the program budget. In addition, program faculty are engaged in all aspects of the SPCHS as we strive towards shared governance. Processes for promotion and tenure of faculty are fully detailed in the SPCHS Unit Standards (1.3.c. SPCHS unit standards) and the UM Collective Bargaining Agreement (1.3.c. UM CBA), both of which are found in the ERF.

Academic standards and policies, including curriculum development. Academic standards and policies specific to the SPCHS program are periodically reviewed by the SPCHS faculty and the Curriculum Committee, and are published in the SPCHS student handbook (see 1.1.f. SPCHS student handbook in the ERF). The SPCHS Curriculum Committee has oversight for curriculum development, with a standardized approval process for any curriculum changes. The curriculum development process moves from the Curriculum Committee to the Steering Committee for review and discussion. The SPCHS Chair and CHPBS Dean then provide approval before moving to the Provost and then to the Faculty Senate Office for review and approval by the Graduate Council and Faculty Senate. In general, most small curricular changes (adding or deleting a course, changing a course title or description, changing prerequisites or small modifications to a program) can be approved internally by the Faculty Senate. Larger changes (Level II changes) must also be approved by the Montana Board of Regents.

Research and service expectations and policies. Research and service are primary faculty duties, along with teaching. Research and service expectations of the faculty are established by University of Montana Administration, and evaluated during regular reviews by the FEC, the Chair, and Dean. Research and service expectations and policies are fully detailed in the SPCHS Unit Standards (1.3.c. SPCHS unit standards) and the UM Collective Bargaining Agreement (1.3.c. UM CBA), both of which are found in the ERF.

1.5.c. A copy of the bylaws or other policy document that determines the rights and obligations of administrators, faculty and students in governance of the program, if applicable.

The following are provided in the **ERF**: SPCHS student handbook (**see 1.1.f. SPCHS student handbook**), SPCHS Unit Standards (**1.3.c. SPCHS unit standards**), and the UM Collective Bargaining Agreement (**1.3.c. UM CBA**).

1.5.d. Identification of program faculty who hold membership on university committees, through which faculty contribute to the activities of the university.

Faculty placement on University committees is the responsibility of individual faculty members, but can also involve recommendations by the SPCHS Chair and CHPBS Dean. All appointments are typically for an academic year. **Table 1.5.d.** lists the University Committees that our core and program faculty currently and have recently served on.

Table 1.5.d. Core and program faculty serving on University committees.

Core Faculty Name	University Committee
Annie Belcourt, Ph.D.	Scholarship review committees: Native American Studies & Skaggs
	School of Pharmacy
	Faculty Senate
	Provost Search Committee
	University Athletic Committee (Chair)
	Diversity Advisory Committee
Kari Harris, Ph.D.	Individualized Interdisciplinary Doctoral Program Admissions
	Committee (Chair)
	University Research and Creativity Committee (Chair)
	Graduate Council
	Search Committee, Executive Director of the Rural Institute
	Faculty Senator
	Institutional Review Board (IRB) member
Curtis Noonan, Ph.D.	UM American Native/Rural Health Equity Initiative (Co-Chair)
Tony Ward, Ph.D.	Library Committee
	UM Health and Medicine, Board Member
Jean Carter, Ph.D.	Assessment Advisory Committee
	Faculty Senate
	University Student Grants Reviewer
	Integrated Communications Team

1.5.e. Description of student roles in governance, including any formal student organizations.

University Level

Graduate and Professional Student Association (GPSA). The GPSA

(http://www.umt.edu/umgpsa/) is a student group that advocates on behalf of graduate and professional students, working to address the needs, concerns, and interests of the graduate student body in collaboration with undergraduate and graduate student groups and associations, state and local community members and leadership, and UM faculty, staff, and administration. All UM graduate students enrolled in a degree-seeking program and registered for at least one credit per semester are automatically members of the GPSA. As of Spring 2017, there are no MPH or PhD students involved in the leadership of the GPSA.

The Graduate Council. Consisting of 12 University of Montana faculty and four graduate students, the Graduate Council is tasked with governing graduate curricula and policies and reviewing graduate programs. The Council convenes weekly, and is a standing committee of the Faculty Senate. Through Spring 2017, the GPSA has yet to appoint a public health student to the Council, although we do have one SPCHS core faculty member serving on the committee (Harris).

SPCHS Level

Student Evaluation Committee (SEC). Students have a role in program and faculty assessments through student course evaluations, as well as through the SEC, which is part of the formal, annual Faculty Evaluation Process. The Chair of SPCHS selects the student members of

the SEC, typically made up of three students enrolled in the program. Student participation on the SEC occurs in person, or by telephone. One faculty member (who is either tenured or tenure track) is appointed as a faculty observer to the SEC, but may not vote. Each SEC elects a Chair who is responsible for the formal faculty evaluation summary report.

Standing Committees. MPH students engage in SPCHS governance in general by sitting on standing committees, such as the Curriculum, Admissions, and Research committees. With input from SPCHS faculty, the Chair identifies potential students from the program who are in good standing academically and who will be a student for the coming academic year. The Chair then works with the Chairs of the standing committees to informally ask the student if he/she is willing to serve. Each student typically serves a 1-year term. The students currently serving on our Committees include Amoy Jacques (Admissions), Erika Baldry (Curriculum), and Jane Gillette (Research).

Public Health Student and Alumni Association (PHSAA). The PHSAA is the student and alumni organization within the SPCHS for public health students and graduates and is officially registered with and recognized by the Associated Students of the University of Montana (ASUM) Board. The PHSAA focuses on engaging public health students in community service. Dr. Tony Ward serves as the faculty advisor for the student/alumni chapter. Importantly, the PHSAA became an official Chapter of the Montana Public Health Association in Spring 2017 one of only two Chapters in the entire state (the other being the Montana Nurses Association). Meeting minutes from the past year are found in the **ERF (Section 1.5.e. PHSAA minutes)**.

1.5.f. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

The faculty, staff and students in the SPCHS are part of a well-defined organizational structure to accomplish the mission and goals of the program. Due to the composition of our standing committees, our faculty have formal opportunities for input in decisions affecting admissions, resource allocation, faculty recruitment and promotion, curriculum design and evaluation, and research and service activities.

The SPCHS is committed to recruiting, training and retaining the most qualified public health professionals for our program. The governance structure of the SPCHS has fully supported and helped to retain teaching professionals, as well as encouraged participation from additional public health professionals. Student participation in the governance of the SPCHS has been fully supported and the program has benefited greatly from their perspective, particularly through interaction with the Admissions and Curriculum Committees. We also feel that the SPCHS is well represented throughout our College and University, primarily from the committee service of our faculty members.

Weaknesses

The Core Faculty complement for the SPCHS is fairly small. Therefore, full-time faculty members normally serve on several committees simultaneously. This time commitment, if not managed efficiently, can reduce the amount of time faculty members can devote to teaching and research. To alleviate this weakness, we have reached out to additional alumni, program faculty, and practitioners affiliated with our program in an effort to recruit members for our standing committees. Having new members on our committees has brought in some energy and new ideas to our program, and is a strategy that we will continue to utilize annually as we make committee assignments.

We also feel that our MPH student population has been underrepresented on the University-level GPSA. Although we have encouraged our students to be involved with GPSA, to date we have not placed a student on the association. Perhaps this is a function of our online MPH program, with many students living away from Missoula. Since the new PhD program is housed on campus, the PhD students may be better able to participate in the University-level committees. We will periodically advertise these positions (as well as events hosted by GPSA) to our students as they become available, and encourage them to get involved with the GPSA.

Finally, our PHSAA occasionally has low numbers of active members. The PHSAA continues to have monthly meetings, and has been encouraged to engage in events that have the potential to recruit future members. This includes the following recent events: 1) a public health movie night / food drive at a local movie theater in collaboration with the Missoula City-County Health Department (MCCHD) and Missoula Food Bank, 2) monthly meeting at the MCCHD, and 3) a bowling social meeting attended by other faculty, staff, students, and alumni. Becoming a Chapter of the MPHA has brought in several new members (alumni) to the PHSAA. In addition, having the MPHA annual conference in Missoula this September (2017) will be a good opportunity to recruit new student and alumni members, as the PHSAA is involved with event planning.

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

1.6.a. Description of the budgetary and allocation processes, including all sources of funding supportive of the instruction, research and service activities. This description should include, as appropriate, discussion about legislative appropriations, formula for funds distribution, tuition generation and retention, gifts, grants and contracts, indirect cost recovery, taxes or levies imposed by the university or other entity within the university, and other policies that impact the fiscal resources available to the program.

Legislative Appropriation. Various sources of funds support the instruction, research and service activities of the SPCHS. Legislative appropriations currently support 5.0 FTE full-time Core Faculty (Drs. Harris, Molgaard (since relocated, but the tenure-track line is retained within SPCHS), Semmens, and Ward). As of Spring 2017, this also includes Dr. Curtis Noonan's line (1.0 FTE), moved from the Department of Biomedical and Pharmaceutical Sciences to the SPCHS to provide adequate faculty support for the launch of the new PhD program. In addition, part (0.25% FTE) of another faculty (Dr. Belcourt from Pharmacy Practice) is supported by legislative funding. Therefore, a total of 5.25 FTE are directly provided by legislative appropriation to support the School. The process of receiving faculty support from legislative appropriations for the SPCHS is one of negotiation between the Chair of the SPCHS, the Dean of CHPBS, and the Provost of the university.

Formula for funds distribution. The university's funding formula is a lump sum appropriation, which began with the FY 1996 budget. It is a biennial appropriation, with programs in the Lump including the Board of Regents, Office of the Commission of Higher Education, MUS Educational Units, Student Assistance, Guaranteed Student Loan Program, and other Office of Commissioner of Higher Education state level programs. Montana allocates funding/articulates funding adequacy using a base plus increment approach. Sources of general fund revenues at the University of Montana are 41.3% legislative appropriations, 56.4% tuition, and 2.3% other (2016). For FY 2016, the CHBPS had a total budget of \$6,871,678 supporting 58.83 FTE faculty. Of this, the SPCHS received \$584,807, which supported 4.25 core faculty. To date, the funding formula has not had a negative impact on the SPCHS, as faculty growth has been supported in a steady fashion within the College, and the base plus approach is not based on student enrollment in the SPCHS, the College, or the University.

Tuition generation and retention. The SPCHS generates tuition surcharge, or program tuition, as it is a professional school, and it is considered state funding. Program tuition is in addition to the normal tuition and fees at the University of Montana, and is charged at the rate of \$150 per credit or \$450 per three-credit course. All program tuition is returned to the Chair of the SPCHS as a matter of College policy to be used at his discretion for the support of the program.

Program tuition is treated just like the state general funds. The tuition surcharge is deposited into the MPHI06 account, with specific parameters for spending related only to instruction related activities. A few examples of the use of this support includes salaries and benefits for faculty who are instruction, salary and benefits for support staff and student work studies, office supplies related to instruction, communication costs that are related to instruction, travel related to

instruction or to improve the knowledge base of the school's faculty and staff (professional organizations), copying costs, dues, subscription, and accreditation expenses.

For the 2015-2016 fiscal year, the program generated approximately \$81,000 in program tuition. This was used to provide the program with financial support for an Assistant Administrative Associate (Carolyn Hester), office operating expenses, and to hire additional part-time teaching faculty for the program (Kay Fox, Julie Fife, Annie Glover, Ann Cook, and Dr. Justin Price).

Gifts. Gifts are occasionally provided to the SPCHS. For example, a small amount of funding was provided to Dr. Amanda Golbeck to edit her book entitled "Women in Statistics".

Grants and Contracts. Grants and contracts are actively pursued at the University of Montana. Funding has been received by the SPCHS core and program faculty from a variety of funding agencies (see Criterion 3.1, Research).

Indirect Cost Recovery. Indirect cost recovery provides support for the SPCHS, especially in terms of providing faculty professional development and travel support. The University of Montana (full IDCs are set at 45%) operates with a specific formula for distribution of indirect costs. Seventy-three percent (73%) goes to the Vice President's Office of Research, and 27% of IDCs goes to the College. The 27% that goes to the College is divided as follows: one-third for the Dean of the College, one-third for the Principal Investigator, and one-third for the Chair of SPCHS to be used at his discretion. Such resources provide, for example, travel support to the annual conferences and other national and international meetings where research products are disseminated to a wider audience.

Taxes or levies imposed by the university or other entity within the university. None.

Other policies that impact the fiscal resources available to the program. None.

1.6.b. A clearly formulated program budget statement, showing sources of all available funds and expenditures by major categories, since the last accreditation visit or for the last five years, whichever is longer. If the program does not have a separate budget, it must present an estimate of available funds and expenditures by major category and explain the basis of the estimate. This information must be presented in a table format as appropriate to the program.

Table 1.6.b. SPCHS sources of funds and expenditures by major category, fiscal years 2011-2016.

Sources of Funds	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Tuition & fees	\$74,400	\$71,700	\$81,600	\$87,000	\$81,000
State appropriation	\$383,057	\$383,392	\$426,983	\$428,885	\$503,807
College/University funds	\$16,365	\$8,502	\$26,089	\$26,388	\$23,813
Grants/contracts	\$151,424	\$76,511	\$47,901	\$94,350	\$262,225
Indirect cost recovery	\$25,875	\$2,516	\$2,869	\$1,956	\$116,460
Endowment	-	-	-	-	-
Gifts	\$11,727	\$49,919	-	\$4,151	\$14,337
Other- disadvantaged student scholarship	\$12,969	-	-	-	-
Other- application account	\$1,400	\$1,400	\$1,500	-	-
TOTAL	\$677,217	\$593,940	\$586,942	\$642,730	\$1,001,642
Expenditures					
Faculty salaries & benefits	\$407,154	\$463,754	\$481,764	\$532,500	\$611,973
Staff salaries & benefits	\$86,763	\$53,884	\$54,792	\$52,952	\$185,424
Operations	\$92,333	\$20,713	\$20,604	\$16,469	\$53,044
Travel	\$31,220	\$16,799	\$13,962	\$21,019	\$27,721
Student support	\$12,969	\$9,816	\$5,089	\$5,700	\$5,340
Administrative assessment	\$2,034	\$4,403	\$350	\$154	\$1,680
Other-F&A	\$44,744	\$24,571	\$10,381	\$13,936	\$116,460
TOTAL	\$677,217	\$593,940	\$586,942	\$642,730	\$1,001,642

Sources of Funds

Tuition and fees. Determined by the Montana Board of Regents, distance students pay registration fees (applied to cover the costs associated with registering a student), tuition fees (program tuition applied to instructional costs), computer fees (used to purchase and/or lease computer equipment, software, maintenance or related items which will benefit instructional programs), equipment fees (for the purchase, lease, and maintenance of equipment which provide a primary benefit to educational programs, including the library), and online fees. Fees are scheduled according to the number of credit hours taken. Nonresident students pay an additional nonresident tuition fee.

State appropriation. The UM Academic Affairs Office determines the share of the general state appropriation that is allocated to the SPCHS.

College/University funds. These funds are from other sources that the University and the CHPBS provide to the SPCHS.

Grants and contracts. These funds include grants and contract funds that are brought in to the university where a full-time faculty member in the SPCHS is the Principal Investigator. Specific funded grants and contracts are listed in the **Research section (Criterion 3.1)** of this self-study.

Indirect cost recovery. This category includes the 45% IDC rate charged against grants.

Endowment and gifts. A small amount of funding was provided to Dr. Amanda Golbeck to edit her book entitled "Women in Statistics".

Other - disadvantaged student scholarship. These funds are received as a grant from the Health Resources and Services Administration (HRSA) to the CHPBS. The SPCHS selects scholarship recipients from among the pool of full-time, financial needy MPH students from disadvantaged backgrounds.

Other application account. These are funds collected from students applying for admission to the PhD, MPH, or CPH programs. The fee was \$60 per application. It should be noted that for the past two years, the UM Graduate School is now processing all SPCHS applications.

Expenditures

Faculty Salaries and Benefits. These expenses include salaries of instructional faculty in the following four categories: (1) full time core faculty members (Drs. Harris, Molgaard (line), Semmens, and Ward); (2) faculty members who are paid for part time instruction (Fox and Fife); (3) faculty who teach in the summer session (Dr. Cook, Fife, and Fox); and (4) summer research faculty who have been employed on research grants.

Staff salaries and benefits. This includes the full-time Administrative Assistant / Program Coordinator (currently Mr. Patrick Dye, and formerly Ms. Tracy Jones). They also include a fraction of the Network–Computer Systems Administrator (currently Mr. Jonathan Neff), various temporary part-time staff members employed on research grants, and various temporary part-time work-study students.

Operations. This includes expenditures such as contracts, office supplies, computers, office furniture, paper, toner, mailing, phones, network port charges, dues, subscriptions, and meeting expenses. They also include other expenses related specifically to grants, such as subject participant costs.

Travel. This includes expenditures such as in-state, out-of-state, and foreign travel. Also included is non-employee travel (e.g., bringing in a guest speaker).

Student support. These expenditures are for graduate assistants.

Administrative assessment. These expenditures are for assessments that the campus charges on expenditures from designated auxiliary accounts. This includes the SPCHS application account,

and Sponsored Program Asset Based Allocation (SPABA) account where grant-related indirect recovery costs are returned to the SPCHS. The assessment is 8%, and used to fund the workings of the campus, Business Services, Human Resource Services, Facility Services, power/heating, etc.

Other - F&A. These expenditures ("Facilities and Administrative Costs") are the indirect cost recovery grant monies that by university policy go to research administration, a portion of which is returned to the SPCHS SPABA account. These expenditure amounts are matched by revenue funds (see the Grants and Contracts funds section above).

1.6.c. If the program is a collaborative one sponsored by two or more universities, the budget statement must make clear the financial contributions of each sponsoring university to the overall program budget. This should be accompanied by a description of how tuition and other income is shared, including indirect cost returns for research generated by public health program faculty who may have their primary appointment elsewhere.

Not applicable. The SPCHS is not a collaborative program.

1.6.d. Identification of measurable objectives by which the program assesses the adequacy of its fiscal resources, along with data regarding the program's performance against those measures for each of the last three years.

Table 1.6.d. Outcome measures for adequacy of fiscal resources.

Outcome Measure	Target	2013-2014	2014-2015	2015-2016
Total amount of program tuition generated.	\$62,000	Target met \$81,600	Target met \$87,000	Target met \$81,000
Total amount provided to faculty to support travel to professional conferences, etc.	≥\$2500/year	Target met \$11,323	Target met \$12,999	Target met \$9,651
Extramural research dollars/academic year.	≥\$10,000/year	Target met \$47,901	Target met \$94,350	Target met \$262,225

1.6.e. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

Overall, the SPCHS is financially strong. As our MPH student population has remained stable, the resulting program tuition that is generated by the students taking our SPCHS classes (\$150/credit hour) has provided a constant and reliable source of income for our program (\$81,600, \$87,000, and \$81,000 in the last three years, respectively). However, if the program grows in student population, which it will with the addition of the DPHHS cohorts entering our program starting in Fall 2017, it may require new faculty lines to teach the additional classes, as well as new staff to meet the administrative support needs of the growing department. Our goal is to not rely on teaching adjuncts to teach our classes. We feel strongly about having a tenure-track line professor support this effort, providing for strong and impactful professional development / training opportunities for the state health department staff, as well as our CPH, MPH, and PhD students.

Extramural research dollars are also on the rise within SPCHS, with \$47,901 in 2013-2014, compared to \$262,225 in 2015-2016. This is a result of multiple grants that are now being submitted and received through SPCHS. Along with this increase in research dollars a corresponding increase in the amount of IDCs is coming into our program (\$116,460 in 2015-2016). As a result of this new grant funding, we have hired Ms. Desirae Ware as our Grants Management Specialist (supported, in part, by the SPCHS IDCs), assisting investigators with pre- and post-award activities. Having a strong commitment and focus on developing our research capacity, as well as supporting investigators with existing research funding, will be priorities for our program as we continue to grow.

Weaknesses

One of the issues we have historically faced is that students outside of SPCHS that take our classes do not pay the program tuition that our "PUBH-designated" students pay. This resulted in a missed opportunity to collect additional resources for our program. To address this weakness, we met with representatives from UM Business Services during the Fall 2016 semester regarding this issue. We are happy to report that this problem has been resolved, and we are now recovering program tuition on <u>all</u> students taking our classes.

Since our primary sources of income consist of program tuition (based on students), state appropriations to fund faculty lines, and grant funding, we are interested in generating additional sources of revenue to support our program. This includes seeking out donors or foundations in an effort to increase the endowments, gifts, and disadvantaged scholarships coming to our program. Although we have met with our UM Foundation representative (Mr. Mark Schleicher) several times over the past year, we have not yet been successful in securing funding from these alternative sources. We will continue to actively engage our UM Foundation to explore new funding opportunities.

- 1.7. Faculty and Other Resources. The program shall have personnel and other resources adequate to fulfill its stated mission and goals, and its instructional, research and service objectives.
- 1.7.a. A concise statement or chart defining the number (headcount) of primary faculty employed by the program for each of the last three years, organized by concentration.

Table 1.7a shows the headcount of primary faculty in the SPCHS. The total number of primary faculty has been stable during the review period (n=5). Note that we added Dr. Semmens in Fall 2015 as a Research Assistant Professor (1.0 FTE), but then lost Dr. Golbeck in Summer 2016, and then Dr. Molgaard in the Fall of 2016 (please note that the Molgaard line will be filled in early Summer 2017). Dr. Curtis Noonan previously had a joint appointment in the School of Pharmacy / Department of Biomedical and Pharmaceutical Sciences, but was transferred into the SPCHS during the Spring of 2017 at 1.0 FTE. Our current primary faculty (as of Spring 2017) consists of Drs. Harris, Noonan, Molgaard line, Semmens, and Ward (5.0 FTE). Please note that Dr. Belcourt is 0.25 FTE (including teaching, service, and research responsibilities within the SPCHS), but does not meet the definition of primary faculty. Therefore, she is not included in **Table 1.7.a**, although we do consider her one of our core faculty.

Table 1.7.a. Head count of Core (primary) Faculty by core knowledge area.

	2015	2016	Spring 2017
Totals:	5	5	5

1.7.b. A table delineating the number of faculty, students and SFRs, organized by concentration, for each of the last three years (calendar years or academic years) prior to the site visit. Data must be presented in a table format (see CEPH Data Template 1.7.2) and include at least the following information: a) headcount of primary faculty, b) FTE conversion of faculty based on % time devoted to public health instruction, research and service, c) headcount of other faculty involved in the program (adjunct, part-time, secondary appointments, etc.), d) FTE conversion of other faculty based on estimate of % time commitment, e) total headcount of primary faculty plus other (non-primary) faculty, f) total FTE of primary and other (non-primary) faculty, g) headcount of students by department or program area, h) FTE conversion of students, based on definition of full-time as nine or more credits per semester, i) student FTE divided by primary faculty FTE and j) student FTE divided by total faculty FTE, including other faculty. All programs must provide data for a), b) and i) and may provide data for c), d) and j) depending on whether the program intends to include the contributions of other faculty in its FTE calculations.

Table 1.7.b. Faculty, students and student/faculty ratios by specialty/concentration area.

	HC Primary Faculty	FTE Primary Faculty	HC Other Faculty	FTE Other Faculty	HC Total Faculty	FTE Total Faculty	HC Total Students	FTE Students	SFR by Primary Faculty FTE	SFR by Total Faculty FTE
2014-2015										
Master of Public	Health									
Total:	4	4.0	6	0.95	10	4.95	48	80.0	20.0	16.2
2015-2016										
Master of Public	Health									
Total:	5	5.0	6	0.95	11	5.95	40	66.7	13.3	11.2
2016-2017										
Master of Public	Master of Public Health (51) and PhD (4)									
Total:	5	5.0	5	0.80	10	5.8	55	91.7	18.3	15.8

HC Primary Faculty = Head Count Primary Faculty, full-time faculty who support teaching in the SPCHS.

FTE Primary Faculty = FT -equivalent for primary faculty, % time spent teaching in the SPCHS.

HC Other Faculty = Head Count Other Faculty, includes adjunct, part-time and secondary faculty teaching in the SPCHS.

FTE Other Faculty = FT -equivalent for other faculty, % time spent teaching in the SPCHS.

HC Total Faculty = Primary + Other faculty.

FTE Total Faculty = FTE Primary + FTE Other faculty.

HC Total Student = Total number of students taking classes in each core. This number is estimated for spring 2017.

FTE Student = Based on total credit units divided by 9. For students, 1 FTE = 1 student taking 15 semester-credits per year.

SFR by Primary Faculty FTE = Student FTE divided by primary faculty FTE.

SFR by Total Faculty FTE = Student FTE divided by total faculty FTE, including other faculty.

1.7.c. A concise statement or chart concerning the headcount and FTE of non-faculty, non-student personnel (administration and staff) who support the program.

The SPCHS employs four administrative and support staff members dedicated to departmental activities, primarily in support of department administration, instructional, and research programs.

Table 1.7.c. Administrative and staff support.

Name	Responsibility	FTE
Patrick Dye	Program Coordinator / Administrative Assistant	1.0
Carolyn Hester	Assistant Administrative Associate	0.25
Desirae Ware	Grants management (all budget, pre and post-awards for grants)	0.15
Emily Weiler	Web design	In-kind

Other staff working within the SPCHS include Ms. Bernadette Bannister, Ms. Kathrene Conway, Ms. Sara Cox, Ms. Niki Graham (a MPH graduate from our program), and Ms. Chelsea Niewald. Each of these staff members is supported by research grants. Please note that our Information Technology needs are supported by the College.

1.7.d. Description of the space available to the program for various purposes (offices, classrooms, common space for student use, etc.), by location.

Even though our program is an online program, we maintain adequate space within the Skaggs Building, where all of the SPCHS is located. Common space for Administrative staff and students is provided in our newly renovated Administrative Office (Room 177), with additional space for students and staff located in the recently renovated Room 166. For the first four PhD students that entered the program in the Spring 2017 semester (January), one of the students has an assigned desk in the Ward/Noonan lab, while the other three have dedicated desk spaces within Room 166.

It should be noted that our SPCHS Administrative Office was recently expanded from a small, one room office to a large multi-office space during the Fall 2016. This speaks to the CHPBS Dean's commitment and investment into our growing program. Each Core Faculty member (Belcourt, Harris, Molgaard (line), Noonan, Semmens, and Ward) has their own office space. As the Montana program is a digital program, classroom space is minimally utilized but readily available when needed. This includes Rooms 114 and 174 in the Skaggs Building. The SPCHS also has access to various meeting rooms for our biweekly faculty meetings as well as Practicum and Portfolio defenses (Rooms 174, 270, and 337). Finally, larger meeting rooms are readily available at the University Center should they be needed.

1.7.e. A concise description of the laboratory space and description of the kind, quantity and special features or special equipment.

Although our program is primarily a distance-based program, opportunities exist for students to conduct laboratory experiments within the CHPBS located in the Skaggs Building, which provides education and training in pharmacology, toxicology, neurobiology, neurochemistry, medicinal chemistry, and molecular genetics. Core Faculty members Noonan, Semmens, and Ward all maintain laboratory spaces where wet-chemistry experiments can be conducted if needed. Each of their laboratories has bench-top space, as well as fume hoods. Thus far, none of the four students entering the PhD program have expressed an interest in lab-based work. However, should a student in a future cohort be interested in laboratory work or needing special equipment, we will do our best to arrange for the working environment required to meet the student's needs.

1.7.f. A concise statement concerning the amount, location and types of computer facilities and resources for students, faculty, administration and staff.

Our online MPH generalist program possesses the equipment and technology necessary to meet the curricular goals and expected student outcomes of a strong program. The SPCHS, although distance-based, utilizes a variety of well-equipped rooms to supplement its activities (Rooms 114, 174, 270, and 337) with extensive presentation technology. These rooms are equipped with ceiling mounted projectors and a variety of information transmission devices including desktop computers, internet and local network access, DVD players, and document projectors. CHPBS

also possesses portable computers and projectors that can be borrowed for use in rooms lacking adequate presentation technology. Under the direction of Mr. Jonathan Neff, CHPBS has an Information Technology staff that maintains this equipment and provides routine service to faculty/staff/students to meet their computing and information technology needs.

While on campus, students share a 30+ station computer laboratory (Skaggs Building Room 214) with the other students of the CHPBS. Off campus, students are expected to own computers, or have frequent, regular access to a computer, and a reliable internet connection. As the PhD program is an on-campus program, PhD students will have access to existing computer labs within the Skaggs building, including IT support through our College IT department. In addition, we have laptops that can be loaned out from our office. Students may be provided with laptops depending on if they are funded from a research project (note that one student is working on a funded project and has been loaned a project laptop), though students typically already have their own laptop or personal computer. If students need office supplies, they will be supplied through the SPCHS office. The University provides each student with an email address and electronic mailbox, and provides them with access to many of the University and CHPBS information resources through web-based communication from their homes, such as cloud-based storage on an enterprise version of Box. The University Presentation and Technology Services provides a full range of media equipment, including high-resolution cameras and portable recording equipment, for students or faculty to use at no cost for research or instruction. The University has an innovative "One Button" studio to practice presentations and create high-end video content. The University provides Moodle as the online learning platform for student distance instruction. This platform is the standard instructional mode for the delivery of the MPH curriculum, and is supported by the Office of Continuing Education. A large variety of analytic and textual software, such as SPSS, SAS, R, NVivo, and STATA, is readily available on campus through site licenses.

All instructors can store presentations on the College server to be brought up in classroom computers for lectures. Access to the Internet is also available for classroom use. Instructors can also print documents within the SPCHS main office, or more frequently to their own printers. All students and faculty members of the SPCHS program have library access to numerous electronic journals, electronic bibliographic search engines, and other resources along with the use of Moodle for instructional efficiency. Administrative staff have individual offices and contemporary hardware and software computer work stations connected to the University computer network with dedicated fax, copying and communication technology sufficient to meet the current needs of the program.

1.7.g. A concise description of library/information resources available for program use, including a description of library capacity to provide digital (electronic) content, access mechanisms, training opportunities and document-delivery services.

The resources of the institutional library system and associated learning resources are adequate to support the educational and scholarship goals of the SPCHS education program, including both program faculty and student activities. The Maureen and Mike Mansfield Library at the University of Montana provides an array of information resources and services in support of

the curricular and research programs of the University. These resources include traditional library collections and electronic access to networked research databases, e-journal packages, electronic journal subscriptions, media materials, and a web-based integrated library catalog. Library services include in-depth research and reference assistance.

Open seven days a week, library collections exceed 1.75 million bound volumes, more than 218,000 electronic books, access to over 67,000 print and electronic journals, an expanding array of electronic databases, over 73,000 media, a federal government depository collection and an Archives and Special Collections. These collections are supplemented by an active interlibrary loan service through which the resources of other libraries are made available to students and faculty. UM students and faculty have access to many databases from a distance (http://libguides.lib.umt.edu/az.php), including but not limited to: Alternative Health, CINAHL Plus with Fulltext, Health Reference Center, Ovid Journals, PsycInfo, PubMed, Sage Health Journals, Science Direct, Sociological Abstracts, SportDiscus, Web of Science, and WorldCat. Core library services available to faculty, students, and staff associated with the University of Montana are summarized on the library's webpages: http://www.lib.umt.edu/services/.

Both the faculty librarian liaison and the Library's Information Center personnel provide reference assistance in-person, by phone, by email, and via a virtual instant messaging service. Contact information is available at the Library's main website at http://www.lib.umt.edu/. Individual research consultations are promoted and provided to students and faculty by the faculty librarian liaison during designated office hours and by appointment. The Mansfield Library collaborates with other campus services including the Writing Center and the Math Tutor Center to provide students with a comprehensive learning environment within the library.

1.7.h. A concise statement of any other resources not mentioned above, if applicable.

Community resources to support instruction, research and service for the SPCHS are readily available through the auspices of the various outreach programs of the University of Montana. Local agencies, local health departments, and the various components of the state health department serve as practicum, as well as research sites, for a variety of programmatic activities.

1.7.i. Identification of measurable objectives through which the program assesses the adequacy of its resources, along with data regarding the program's performance against those measures for each of the last three years.

The outcome measures by which the program judges the adequacy of its resources includes the following:

Space. Office space, meeting rooms, and instructional space have been adequate and stable for the last several years. However, because our program is growing, we have dramatically expanded our space during the Fall of 2016, facilitated by the CHPBS Dean (Reed Humphrey). This includes the addition of a large office space for students and staff (Skaggs 166), and a new Administrative Office for the SPCHS (Skaggs 177).

Faculty support. The program has state dollar support for 5.25 faculty (as of Spring 2017). To date, the program has had adequate faculty support. However, our program is growing, and we will be requesting additional faculty support from our CHPBS Dean to meet future teaching and research needs.

Staff support. The program is supported by one full time Coordinator / Administrative Assistant (Patrick Dye), a part-time grants management specialist (Desirae Ware), and assistance from two part-time staff (Carolyn Hester and Emily Weiler). This support is currently adequate.

Financial resources. Program tuition supports day-to-day office operations, and can also be used to pay for part-time instructional faculty. Program tuition support for these aspects of the program is adequate, and is expected to continue to improve as enrollment increases in the program. As described in **Criterion 3.1**, grant funding has been increasing in the past three years, with \$262,225 in 2015-2016. Along with this increase in research dollars is a corresponding increase in the amount of IDCs coming into our program (\$116,460 in 2015-2016).

Table 1.7.i presents the outcome measures used to assess the adequacy of resources of the SPCHS.

Table 1.7.i. Outcome measures for adequacy of resources.

Outcome Measure	Target	2013-2014	2014-2015	2015-2016
FTE administrative support.	≥1.0 FTE	Target met 1.0	Target met 1.0	Target met 1.4
FTE total faculty.	≥5.00	Target not met 4.95	Target not met 4.95	Target met 5.95
Total amount of program tuition generated.	≥\$70,000	Target met \$81,600	Target met \$87,000	Target met \$81,000
Funding from grants/contracts.	≥\$100,000	Target not met \$47,901	Target not met \$94,350	Target met \$262,225
IDCs from grants/contracts.	≥\$50,000	Target not met \$2,869	Target not met \$1,956	Target met \$116,460

1.7.j. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

The SPCHS currently has adequate faculty resources to support the development and sustainability of our public health program. Although we have a small number of full-time core faculty (5.0 FTE as of Spring 2017), we have a strong contingent of faculty outside the SPCHS that regularly teach within our core and elective classes (including Belcourt, Carter, Cook, McKay, and Putnam). We also have a pool of exceptionally well qualified and dedicated adjuncts to draw from for specific teaching needs, many of whom are public health practitioners and graduates of our program (including Parsley, Fife, Fox, Glover, and Price).

Financially, the program is adequately supported from program tuition, relying on our stable MPH (and CPH) student population, and growing PhD program. Research dollars (and IDCs) are also on the increase, as evidenced by **Table 1.7.i**. To date, our CHPBS administration has consistently provided adequate resources to the SPCHS. This support and commitment to our growing program is evidenced by the reassigning of new office space for SPCHS staff, faculty, and students within the Skaggs Building (Rooms 166 and 177) during the Fall 2016, dramatically increasing our capacity to accommodate our expanding number of research staff and students entering SPCHS as part of the new PhD in Public Health program and other research initiatives.

Weaknesses

As our program grows, we will face an instruction personnel shortfall which we intend to fill with adjuncts until funding is identified for state-line positions. The problem of additional students entering our program is somewhat negated by the program tuition generated (\$150/credit hour) from these students. These extra resources will go towards paying adjuncts as our teaching loads increase. A good example of addressing this need is our contract with Adjunct Professor Dr. Trish Miller in the Political Science / Master of Public Administration program here at the University of Montana. She will be teaching Program Evaluation and Research Methods (PUBH 550) and Ethical Issues in Public Health (PUBH 570) this Summer 2017, and is interested in teaching additional classes within our program (PUBH 530 Public Health Administration and Management and PUBH 535 Health Policy) in future semesters.

We have also had to deal with faculty turnover, as two of our primary faculty (Drs. Golbeck and Molgaard) have left our program in the past year. However, we have replaced Dr. Golbeck with Dr. Erin Semmens (hired as a 1.0 FTE Assistant Professor within the SPCHS) in Spring 2017, and we will be launching a search for Dr. Molgaard's position starting in Spring 2017 (to be filled in Summer 2017). We have also added Dr. Curtis Noonan (1.0 FTE Professor) to the SPCHS, transitioning him into the SPCHS from his dual appointment with the School of Pharmacy and the Department of Biomedical and Pharmaceutical Sciences. Dr. Noonan has been involved with our public health program since its inception, but will now be an official SPCHS core member. With Drs. Harris, Molgaard (line), Noonan, Semmens, and Ward, we have an FTE of 5.0 – allowing us to meet the minimum faculty requirements for a CEPH-accredited MPH and PhD generalist degree program.

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

Per the campus Diversity Plan (see http://www.umt.edu/eo/diversity/diversityplan.php, and 1.8. Campus diversity plan in the ERF), the University of Montana seeks to enhance diversity by recognizing and embracing the differences of its faculty, administrative professionals, staff, and students. In its effort to enhance diversity, the University of Montana recognizes that particular focused effort must be placed on including members of groups who have historically been subject to discrimination and are still underrepresented in the campus community.

1.8.a. A written plan and/or policies demonstrating systematic incorporation of diversity within the program. Required elements include the following:

i. Description of the program's under-represented populations, including a rationale for the designation

The population of Montana (an estimated 1.024 million) is predominantly white (close to 90%). The underrepresented population our program has designated (Native Americans) is the second largest racial group in Montana, composing 6-7% of our population. Montana is home to seven Indian reservations, including the Blackfeet Tribe of the Blackfeet Reservation, the Chippewa Cree Tribe of the Rocky Boy's Reservation, the Confederated Salish & Kootenai Tribes of the Flathead Reservation, the Crow Tribe of the Crow Reservation, the Fort Belknap Tribes of the Fort Belknap Reservation, the Fort Peck Tribes of the Fort Peck Reservation, and the Northern Cheyenne Tribe of the Northern Cheyenne Reservation. Also included is the state-recognized Little Shell Tribe of Chippewa Indians. Many of these communities have lower health status and significant health disparities compared to non-Native populations as a result of economic adversities, poor social conditions, and lack of educational opportunities.

ii. A list of goals for achieving diversity and cultural competence within the program, and a description of how diversity-related goals are consistent with the university's mission, strategic plan and other initiatives on diversity, as applicable.

The University of Montana understands that success as an excellent institution of higher education requires a culture that encourages and supports diversity. The University also recognizes that, as citizens in the global community, we must foster a greater understanding of cultures and perspectives different from our own. As a living document, the Diversity Plan (see 1.8. Campus diversity plan in the ERF) created by the University of Montana provides ongoing guidance to the University and SPCHS as it continues to embrace and enhance diversity in the student population; among faculty, staff, and administrators; in educational and cultural programming; and in every activity on campus.

The University of Montana seeks to enhance diversity by recognizing and embracing the differences in age, ideas and perspectives, disabilities, creed, ethnicity, gender identity, gender expression, veteran status, national origin, race, religious and spiritual beliefs, sex, sexual

orientation, and the socioeconomic and geographic composition of its faculty, administrative professionals, staff, and students. In its effort to enhance diversity, the University of Montana recognizes that particular focused effort must be placed on members of groups who have historically been subject to discrimination and are still underrepresented in the campus community.

The SPCHS has adopted the University of Montana's Strategic Choices/Goals to ensure diversity within our program.

Strategic Choice 1: Enhance the campus culture of understanding, respect, support, and advancement of diversity.

- Goal 1.1: Provide leadership and support for continuous improvement of diversity.
- Goal 1.2: Increase visibility of diversity at the University of Montana.
- Goal 1.3: Implement a strategy for every new student and new employee at the University of Montana to begin their university experience with an understanding of the richness and importance of a diverse learning and working environment.
- Goal 1.4: Engage in the national dialogue regarding higher education diversity initiatives.
- Goal 1.5: Provide resources and opportunities for staff, students, and faculty to safely report on diversity-related issues.

Strategic Choice 2: Create avenues for access to the academy and for success within the academy for all individuals, and particularly populations historically underrepresented in the academy.

- Goal 2.1: Increase recruitment and enrollment of students from historically underrepresented populations.
- Goal 2.2: Enable seamless transfer of historically underrepresented students to the University.
- Goal 2.3: Increase retention and graduation rates of cohorts of new first-year students from historically underrepresented populations.
- Goal 2.4: Increase the percentage of graduate and professional degrees awarded to students from historically underrepresented populations.
- Goal 2.5: Recruit and hire faculty and staff from historically underrepresented populations to achieve meaningful representation.
- Goal 2.6: Ensure retention of faculty and staff from historically underrepresented populations.
- Goal 2.7: Ensure accessible teaching, learning, and work environments.
- Goal 2.8: Ensure supportive teaching, learning, and work environments for all identified diversity groups.

Strategic Choice 3: Educate and prepare students to contribute and thrive in a multicultural society.

- Goal 3.1: Define multicultural competencies for students and mechanisms to achieve such competencies.
- Goal 3.2: Develop and implement a comprehensive system of diversity education and training for faculty.
- Goal 3.3: Ensure a teaching and learning environment that teaches tolerance and respect for diversity.

Goal 3.4: Increase awareness of the value of diversity through residential, campus, and co-curricular activities.

Strategic Choice 4: Develop an organizational structure to ensure implementation, evaluation, and periodic renewal of strategic choices 1-3.

Goal 4.1: Develop a line of responsibility for assessing and implementing annual diversity activities and reports.

Goal 4.2: Conduct periodic climate surveys of students, faculty, and staff to assess progress on maintaining a teaching, learning, and working environment that welcomes and respects diversity. Goal 4.3: Develop a timeline and strategy for regular review and revision of the strategic choices 1-3 and implementation of strategies and goals.

iii. Policies that support a climate free of harassment and discrimination and that value the contributions of all forms of diversity; the program should also document its commitment to maintaining/using these policies.

The University of Montana is committed to providing an environment that emphasizes the dignity and worth of every member of its community and that is free from harassment and discrimination based upon race, color, religion, national origin, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, age, political ideas, marital or family status, pregnancy, physical or mental disability, genetic information, gender identity, gender expression, or sexual orientation. Such an environment is necessary to a healthy learning, working, and living atmosphere because discrimination and harassment undermine human dignity and the positive connection among all people at our University. The University of Montana will take appropriate action to eliminate, prevent and address the effects of discrimination, harassment, sexual misconduct, stalking and retaliation.

The official University of Montana policy which addresses Discrimination, Harassment, Sexual Misconduct, Stalking, and Retaliation (Policy Number 707) was adopted in August 2013, and can be found at the following website:

 $\underline{http://www.umt.edu/policies/Personnel/DiscriminationHarassmentSexualMisconductStalkingRet\ aliation.php.}$

Establishing and maintaining an environment that supports diversity among the faculty, especially faculty research and service, is an important part of the SPCHS mission, particularly around rural issues. The SPCHS is closely aligned with this University policy regarding harassment and discrimination, and will report any such cases to the Equal Opportunity/Affirmative Action/Title IX Coordinator should the need arise. To date, we have not had any such instances.

iv. Policies that support a climate for working and learning in a diverse setting.

The University of Montana values leadership, engagement, and diversity. As members of the campus community, we aspire to:

- Respect the dignity and rights of all persons.
- Practice honesty, trustworthiness, and academic integrity.

- Promote justice, learning, individual success, and service.
- Act as good stewards of institutional resources.
- Respect the natural environment

The University's commitment to supporting a climate for working and learning in a diverse setting is evidenced by the Diversity Advisory Council, who's charge is to encourage, advocate, and facilitate communication, education, and relations among persons of various races, physical conditions, religions, national origins, citizenship, genders, ages, socio-economic backgrounds, and sexual orientation. The University of Montana Diversity Plan is the backbone of our commitment to diversity, and can be found at the following website:

http://www.umt.edu/eo/diversity/diversityplan.php. It should also be noted that Dr. Annie Belcourt serves on the UM Diversity Advisory Committee, and is Chair of our College's Diversity Work group. In these roles, Dr. Belcourt helps ensure the SPCHS has diversity policies in line with both our College and University.

v. Policies and plans to develop, review and maintain curricula and other opportunities including service learning that address and build competency in diversity and cultural considerations.

The SPCHS Curriculum Committee (and ultimately SPCHS Chair) is responsible for providing opportunities that introduce curriculum into our course offerings that address and build competency in diversity and cultural considerations. Currently, many of the SPCHS courses enable students to learn about diversity, including the following: PUBH 525: Multicultural and Native American Public Health and PUBH 580: Rural Health Issues in a Global Context. We are also offering a new course during the Spring 2017 semester called Indigenous Research Methods (PUBH 595), taught by Dr. Lori Lambert, former faculty member at the Salish Kootenai Tribal College (see the syllabi in 1.8.b. Course syllabi in the ERF). Additionally, diversity and cultural considerations may be addressed by faculty members supervising practicum students when developing the practicum proposal and during the practicum project. These courses and practicum opportunities foster an environment supportive of diversity - both for the faculty teaching these courses and students taking them.

vi. Policies and plans to recruit, develop, promote and retain a diverse faculty.

Following the guidelines in the Diversity Plan (1.8. Campus diversity plan in the ERF) and the University of Montana's Collective Bargaining Agreement (1.3.c. UM CBA in the ERF), we are committed to recruiting, developing, and promoting a diverse faculty. As we will soon start a job search for an Assistant Professor to replace Dr. Molgaard, we will actively seek a public health professional with a diverse educational and experiential background to complement our current diverse faculty.

vii. Policies and plans to recruit, develop, promote and retain a diverse staff.

Currently, our administrative staff is made up of both Caucasian male and female staff members. As openings occur, every effort will be made to hire qualified individuals who will complement the diversity desired by the SPCHS and the University. We did, however, recently hire two

Native American female staff in Spring 2017 to work on a research project focused on health disparities in Native American and Alaska Native populations. Although this grant is only funded for five years (through 2021), we will actively pursue funding opportunities to keep these two staff members employed at the SPCHS once the grant concludes.

viii. Policies and plans to recruit, admit, retain and graduate a diverse student body.

The University of Montana SPCHS program applies, in an equitable fashion, application, admission, and degree-granting requirements to individual applicants and students regardless of age, gender, race, disability, sexual orientation, religion or national origin. Our faculty, staff, students, and alumni are well versed in diversity issues and needs at the student level. The recruitment, retention and degree completion of minority graduate students focuses mainly on American Indian students, our largest minority in Montana. We will continue recruiting diverse student candidates at national meetings, regional public health entities such as the annual Montana Public Health Association meeting, and through constant contact and networking with our local, state and tribal health departments throughout the state of Montana. Once in the program, a commitment to effective advising and mentoring will help retain and graduate these diverse student populations.

ix. Regular evaluation of the effectiveness of the above-listed measures.

The evaluation of the processes listed in **Criterion 1.8a.i-viii** are ongoing, since diversity is an integral part within all levels of our program. These evaluations are primarily carried out by our standing Committees. For example, the Curriculum Committee maintains quality in the teaching of diversity/cultural issues through our course offerings. The Admissions Committee ensures cultural diversity of student candidates entering our program. Finally, the Chair and Steering Committee are responsible for ensuring cultural diversity among our overall faculty, staff, and students. The Chair also communicates to the CHPBS Dean about any diversity issues/concerns within our College, ensuring linkages with our College and University.

1.8.b. Evidence that shows that the plan or policies are being implemented. Examples may include mission/goals/objectives that reference diversity or cultural competence, syllabi and other course materials, lists of student experiences demonstrating diverse settings, records and statistics on faculty, staff and student recruitment, admission and retention.

Faculty/staff/student composition

- We currently have nine Core and Teaching faculty in the SPCHS, composed of seven women and two men (including one American Indian female). This current makeup of our faculty speaks to our commitment of recruiting, developing, and promoting a diverse faculty.
- Currently, our staff is composed of a Caucasian male and Caucasian female staff members.
 As openings occur, every effort will be made to hire qualified individuals who will
 complement the diversity desired by the SPCHS and the University.

• Our student population is equally diverse. About 20% of our students are male, while 80% are female. Approximately 15% are non-Caucasian, while ~80% are Caucasian. The majority of the non-Caucasian students are American Indian.

Course materials

The SPCHS Curriculum Committee (and ultimately SPCHS Chair) is responsible for providing opportunities that introduce curriculum into our course offerings that address and build competency in diversity and cultural considerations. Currently, many of the SPCHS program courses enable students to learn about diversity, including PUBH 525 (Multicultural and Native American Public Health) and PUBH 580 (Rural Health Issues in a Global Context). We are offering a new course during the Spring 2017 semester called Indigenous Research Methods (PUBH 595), taught by Dr. Lori Lambert, former faculty member at Salish Kootenai Tribal College. Examples of the syllabi from these courses are provided in the **ERF** (1.8.b. Course syllabi).

Practicum projects/sites focused on underserved or culturally diverse populations

The SPCHS supports students in working on practicum projects that engage rural and culturally diverse populations. There have been numerous student practicum projects throughout the past 10 years that have met this objective. Just in the last few years, the following projects have been conducted:

- Malnutrition in Ethiopia (Strehl).
- The impact of the Bakken oil field development on women's safety (Parsley).
- Breastfeeding coalition of the Mission Valley (Stiffarm).
- mSpray enumeration in Zambia (Tysk).
- Primary village sanitation in Zambia (Glover).
- Holistic maternal and newborn health (Jacques).
- Gaps in sexual assault forensic exams (Harper).

These practicum projects have provided our students with opportunities to interact with diverse populations, supporting them in developing their cultural competence skills.

Faculty research

The majority of our faculty currently have active research projects that focus on Native American, Alaska Native, and/or rural populations. As further described in **Criterion 3.1**, this includes the following Core and Program faculty: Belcourt, Fife, Harris, Noonan, Semmens, and Ward. Before Dr. Golbeck left the University of Montana in August 2016, a major focus of her research was leadership and women in statistics, as well as health disparities and gender roles, especially among females in Yellowstone County. Dr. Molgaard carried out research on the history and theory of epidemiology and history of medicine, with a particular emphasis on underserved populations such as that of the Faeroe Islands.

Standing committee composition

Our SPCHS standing committees are composed of diverse members. Specifically, each of our standing committees are primarily composed of women. Importantly, two of our committees have Native American women as members (EAC, Ms. Niki Graham; and the Admissions Committee, Dr. Annie Belcourt).

1.8.c. Description of how the diversity plan or policies were developed, including an explanation of the constituent groups involved.

The University first established an institutional diversity plan focused on cultural and ethnic diversity in 1991. Under its guidance, the campus made significant strides in cultural and ethnic diversity. As an update to this plan, then-President George M. Dennison established a Task Force in 2009 to propose revisions to the Diversity Plan, with the final product called the "2010-2011 Diversity Report" (see the 1.8.c. 2010-2011 diversity report in the ERF). Forty units at UM contributed information for this report by responding to the diversity survey. Twelve of the thirteen academic units and one particularly large department within an academic unit provided information. In addition, information was provided by the Office of Student Affairs and the units within the Student Affairs Division, Intercollegiate Athletics, Information Technology, Office of Institutional Research, Facilities Services, University Relations, Printing & Graphic Services, the Montana Museum of Art & Culture, Human Resource Services, Alumni Relations, Business Services, Office of Public Safety, Office of the Provost, Associated Students of the University of Montana, Diversity Advisory Council, ADA/504 Team, as well as the University of Montana Foundation. The Office of Planning, Budget and Analysis provided the demographic data. Data related to student enrollment, retention, and graduation was also drawn from a report compiled by the Office of Commissioner of Higher Education for the system-wide "Access to Success" initiative.

1.8.d. Description of how the plan or policies are monitored, how the plan is used by the program and how often the plan is reviewed.

When new students enter our MPH and PhD programs, demographics data (age, sex, race, etc.) are entered into our SPCHS database. Once the data are finalized, the SPCHS Chair reviews the student data annually. These data are shared with the EAC, as well as the Steering Committee. Should our student numbers change so that they reflect a less diverse student body, the SPCHS Chair will consult with the CHPBS Dean to discuss marketing and advertising strategies in an effort to recruit a more diverse student population. At the University of Montana level, the Diversity Advisory Council (http://www.umt.edu/dac/) meets every second Tuesday of the month to ensure that the diversity plans and policies are met by the units throughout campus.

1.8.e. Identification of measurable objectives by which the program may evaluate its success in achieving a diverse complement of faculty, staff and students, along with data regarding the performance of the program against those measures for each of the last three years. See CEPH Data Template 1.8.1. At a minimum, the program must include four objectives, at least two of which relate to race/ethnicity. For non-US-based institutions of higher education, matters regarding the feasibility of race/ethnicity reporting will be handled on a case-by-case basis. Measurable objectives must align with the program's definition of under-represented populations in Criterion 1.8.a.

Within the state of Montana, Caucasians make up 89% of the population, while American Indians make up the largest minority group (6% of the total population). The data in **Table 1.8.e** present our efforts in meeting our diversity target outcomes.

Table 1.8.e. Diversity outcomes - summary data for faculty, students and staff.

Outcome Measure	Target	2013-2014	2014-2015	2015-2016
Objective 1.3.d. Enrollment of students who are American Indian.	≥6% to match ethnic profile of Montana	Target met 10.5%	Target met 11.5%	Target met 14.6%
Objective 1.3.e. Enrollment of mid-career professionals.	≥50% enrolled students	Target not met 48.0%	Target not met 46.2%	Target not met 49.4%
Objective 1.3.f. Enrollment of students of color and/or Hispanic (not including American Indian).	≥3% students of color and/or Hispanic to match profile of Montana	Target met 4.2%	Target met 3.4%	Target met 5.8%
Enrollment of students who are female.	≥60%	Target met 81.8%	Target met 85.8%	Target met 86.7%
% of faculty who are female.	≥50%	Target met 70.0%	Target met 72.7%	Target met 72.7%
% of faculty with race other than Caucasian.	>30%	Target not met 10.0%	Target not met 9.1%	Target not met 9.1%
% of staff who are female.	≥75%	Target met 100%	Target met 100%	Target met 75%
% of staff with race other than Caucasian.	≥15%	Target not met 0%	Target not met 0%	Target not met 0%

1.8.f. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths

The SPCHS adheres to all diversity policies and programs established by the University of Montana. We offer classes and support practicum opportunities in our MPH program that expose students to diversity and cultural competence. Notably, a significant amount of health disparities research is currently being conducted within the SPCHS focused on American Indian / Alaska Natives populations.

The SPCHS Program has a good balance of gender in our faculty and student populations, including impactful representation on our standing committees. Our student population meets the targeted enrollment numbers for non-Caucasian students, especially for American Indian students. This is important as American Indians make up the largest minority group in the state of Montana (~6%).

Weaknesses

We fall a little short of our target of ≥50% enrolled students that are mid-career professionals. To address this issue, we will continue to advertise our program to working public health professionals within the DPHSS (state health department) and local health departments across the state. We have already started having more deliberate interactions with our students, alumni, tribal colleges, and the general public (emails, PHSAA events, marketing at conferences, etc.) to help advertise and market our program. In addition, we will continue to advertise our program at the annual conference of the Montana Public Health Association each year, which we recently did in Billings, Montana in late September, 2016. Finally, we believe that the cohort of ~45 local and state health department mid-career professionals entering our CPH program in Fall 2017 (described in **Criterion 3.1.b.**) will result in more mid-career professionals entering our MPH program in the future.

The SPCHS has a deficiency in the number of non-Caucasians in our faculty and staff. For future hires, especially faculty hires, we will make every effort to recruit and hire a minority faculty member. As we look to hire an Assistant Professor to replace Dr. Molgaard, we intend to advertise the open faculty position in national publications that reach a culturally diverse public health professional audience. We will also rely on our current Native American faculty member (Dr. Belcourt) to promote the position within her professional networks. Though not office administrative support staff, it should be noted that we did hire two Native American research staff for the Clinical and Translational Project described in **Criterion 3.2.c.** Additionally, one of our new Adjunct teaching faculty members (Dr. Lori Lambert) is Native American. While we have not specifically met our targets for diversity, we have a growing critical mass of Native Americans among our colleagues in the SPCHS. We expect this growing diversity will continue to nurture a culture that is welcoming and supports the success of all our students, faculty, and staff.

Criterion 2: Instructional Programs.

- 2.1. Degree Offerings. The program shall offer instructional programs reflecting its stated mission and goals, leading to the Master of Public Health (MPH) or equivalent professional master's degree. The program may offer a generalist MPH degree and/or an MPH with areas of specialization. The program, depending on how it defines the unit of accreditation, may offer other degrees, if consistent with its mission and resources.
- 2.1.a. An instructional matrix presenting all of the program's degree programs and areas of specialization, including bachelor's, master's and doctoral degrees, as appropriate. If multiple areas of specialization are available, these should be included. The matrix should distinguish between professional and academic degrees for all graduate degrees offered and should identify any programs that are offered in distance learning or other formats. Non-degree programs, such as certificates or continuing education, should not be included in the matrix.

The UM MPH degree is an online generalist master's degree. We also offer a new PhD in Public Health degree that started in Spring 2017. The PhD program is an on-campus program, with a strong focus on research.

Table 2.1.a. Instructional matrix - degree and specializations.

	Academic	Professional
MPH, generalist and distance-based		X
PhD, research focused and on campus	X	

2.1.b. The bulletin or other official publication, which describes all degree programs listed in the instructional matrix, including a list of required courses and their course descriptions. The bulletin or other official publication may be online, with appropriate links noted.

The 2015-2016 UM catalog that describes the MPH degree can be found at: http://www.umt.edu/catalog//2015-2016%20all%20catalog%20PDF.pdf. These web pages list all courses required for the MPH program as well as course descriptions.

In addition, the required courses for our MPH program are listed on our SPCHS website at the following link:

http://health.umt.edu/publichealth/3current-students/mph-cph-curriculum/corecourses.php.

The required courses for the PhD program are listed on our SPCHS website at the following link: http://health.umt.edu/publichealth/3current-students/phd-program-curriculum.php.

The schedule of course / instructors for the last three years (2014-2015, 2015-2016, and 2016-2017) is presented in the **ERF** (see 2.1.b. Schedule of courses_instructors the last 3 years).

We have already made arrangements so that the PhD program materials will be included in the 2017-2018 UM catalog.

2.1.c. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

Our MPH and PhD programs focus on training public health professionals to make a positive impact on rural and underserved areas in Montana, our region, and globally. Through our core classes, electives, and capstones, we provide students with a broad base of knowledge that will support them in a variety of fields related to public health practice (MPH) and research (PhD).

Weaknesses

Regarding our MPH program, we have not identified any weaknesses in this area. As our PhD in Public Health program is new, the courses we will offer in our inaugural semester (Spring 2017) will evolve and improve over time as the program matures. We have already ensured that a description of the PhD program, along with a listing of classes, is included in the UM catalog for Fall 2017.

- 2.2. Program Length. An MPH degree program or equivalent professional master's degree must be at least 42 semester-credit units in length.
- 2.2a. Definition of a credit with regard to classroom/contact hours.

A credit at UM is defined in terms of semester hours. The UM MPH Program is 42 credit hours, with courses generally consisting of three credit hours. Students are expected to put in at least three hours of "learning activity" per week for every semester hour of credit.

2.2.b. Information about the minimum degree requirements for all professional public health master's degree curricula shown in the instructional matrix. If the program or university uses a unit of academic credit or an academic term different from the standard semester or quarter, this difference should be explained and an equivalency presented in a table or narrative.

Minimum degree requirements for the UM MPH degree are 42 standard semester credit hours. Of these, 27 are required core didactic digital credit hours, nine are supervised study Capstones (Practicum, Professional Paper, Portfolio), and six credits (two classes) are electives which may or may not be online.

2.2.c. Information about the number of professional public health master's degrees awarded for fewer than 42 semester credit units, or equivalent, over each of the last three years. A summary of the reasons should be included.

No MPH degrees were awarded for fewer than 42 credits in each of the last three years.

2.2.d. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

Our MPH program offers a course of study that meets our mission and goals of training future public health practitioners.

Weaknesses

No weaknesses have been identified in this area.

- 2.3. Public Health Core Knowledge. All graduate professional public health degree students must complete sufficient coursework to attain depth and breadth in the five core areas of public health knowledge.
- 2.3.a. Identification of the means by which the program assures that all graduate professional public health degree students have fundamental competence in the areas of knowledge basic to public health. If this means is common across the program, it need be described only once. If it varies by degree or specialty area, sufficient information must be provided to assess compliance by each.

As presented in **Table 2.3.a.**, all MPH students complete six required courses (18 credits total) that are specifically devoted to the five core areas of public health, as well as six credits of electives. All students complete additional required courses (nine credits total) in ethics, program evaluation and research methods, and rural and global health. Students apply their public health knowledge and skills through the required practicum and professional paper courses. Students demonstrate their understanding of the core areas by completing the required portfolio, which includes both a written narrative and oral defense. Syllabi for each course are available in the ERF (**1.8.b. Course syllabi**).

Table 2.3.a. Required courses addressing public health core knowledge areas for the MPH degree.

Core Knowledge Area	Course Number & Title	Credits				
Epidemiology	PUBH 510: Introduction to Epidemiology	3				
Biostatistics	PUBH 520: Fundamentals of Biostatistics	3				
Biostatistics	OR					
	STAT 451 – Statistical Methods I and					
	STAT 457 – Computer Data Analysis I					
	(4 Credits, Autumn, at UM-Msla)					
	AND					
	STAT 452 – Statistical Methods II and					
	STAT 457 – Computer Data Analysis II					
	(4 Credits, Spring, at UM-Msla)					
Health services administration	PUBH 530: Public Health Administration and Management	3				
	PUBH 535: Health Policy	3				
Social and behavioral sciences	PUBH 540: Social and Behavioral Sciences in Public Health	3				
Environmental health sciences	PUBH 560: Environmental and Rural Health	3				
	Subtotal:	18				
Multiple areas	PUBH 550: Program Evaluation and Research Methods	3				
•	PUBH 570: Ethical Issues in Public Health	3				
	PUBH 580: Rural Health Issues in a Global Context	3				
	Subtotal:	9				
Electives	Subtotal:	6				
Practicum	PUBH 591: Practicum	3				
	PUBH 599: Professional Paper	3				
Culminating Experience	PUBH 593: Professional Portfolio	3				
	Subtotal:	9				
	Total Credits	42				

If needed, our core public health classes are available for our PhD students to take in an effort to achieve fundamental competence in the five core areas of public health. PhD students are also allowed to take additional courses in departments throughout the University of Montana when they begin to focus on a specific discipline to support their research. A list of approved electives for the MPH and PhD program is found on our website:

http://health.umt.edu/publichealth/3current-students/mph-cph-curriculum/electives.php.

2.3.b. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

Students acquire knowledge and demonstrate understanding in the five core knowledge areas in both the MPH and PhD plans of study. For the MPH program, students apply knowledge in the Practicum and Professional Paper experiences, and demonstrate the integration of their understanding through the Portfolio written document and oral presentation.

Weaknesses

A concern we have is that our courses will, over time, drift from our stated program competencies. Starting in Fall 2016, the SPCHS began a cycle for regular review of the MPH courses through the Curriculum Committee, including review of the course content and alignment with the program competencies. During the Fall 2016, the Curriculum Committee, in consultation with units both within and outside of CHPBS, identified electives as appropriate for both our MPH and PhD students. During the Spring 2017 semester, the Steering Committee will commence a systematic review of our MPH Core classes and how they align with the 2016 CEPH standards.

- 2.4. Practical Skills. All graduate professional public health degree students must develop skills in basic public health concepts and demonstrate the application of these concepts through a practice experience that is relevant to students' areas of specialization.
- 2.4.a. Description of the program's policies and procedures regarding practice placements, including the following:
- selection of sites
- methods for approving preceptors
- opportunities for orientation and support for preceptors
- approaches for faculty supervision of students
- means of evaluating student performance
- means of evaluating practice placement sites and preceptor qualifications
- criteria for waiving, altering or reducing the experience, if applicable

The practicum experience is an important part of the process of obtaining an MPH and occurs under the supervision of a MPH faculty mentor (Faculty Advisor) and the on-site public health practice mentor (Site Mentor). MPH students are required to complete a three credit Practicum course (PUBH 591) to apply public health academic theory and acquired skills in a public health practice setting, with a minimum of 200 contact hours of activity (160 hours of direct practicum work, 40 hours of preparing the practicum report/presentation). The practicum provides opportunities for a range of public health experiences, but must include a project that serves as the focus for the final written report and presentation. A three-member committee (selected by the student) evaluates the student's practicum experience based on a 15-page written report and oral presentation.

Overall instructions for the practicum are provided in the guidelines (see 2.4.a. Practicum guidelines in the ERF) and on the website: http://health.umt.edu/publichealth/3current-students/mphcapstones/default.php. Prior to the Practicum, students prepare a Practicum Proposal Form (see 2.4.a. Practicum proposal form in the ERF), which includes the site organization, Site Mentor name and qualifications, proposed title of the practicum, committee members and a description of the project with goals specific to the individual student. Faculty approvals, as well as agreements of responsibilities and timelines are noted in the agreement signed by the Faculty Advisor, Site Mentor, and student. Evaluation of the practicum experience is based on fulfilling the agreements and timelines.

Selection of sites. Students may develop their own practicum or they may select from the opportunities identified by their Faculty Advisor or through other resources. Other resources include practicum opportunities at local and regional health departments identified by the Montana Public Health Association (MPHA), and listed on our website: http://health.umt.edu/publichealth/3current-students/Practicum%20Opportunities.php. The Faculty Advisor must approve potential practicum sites and public health practice mentors. Faculty approvals, as well as agreements of responsibilities and timelines are noted in the agreement signed by the Faculty Advisor, Site Mentor, and student.

Students may perform a practicum in their regular place of employment if the practicum is above and beyond their normal work duties, e.g., if the practicum is in another section or division of

their agency or if the practicum is a new project being developed in their section or division unrelated to the student's normal work duties. Permission to do so must be negotiated with the practicum Faculty Advisor at UM.

Methods for approving preceptors. Preceptors (or Site Mentors) are approved by the student's Faculty Advisor based on their qualifications, including current position, work history, educational background, and appropriateness for a student's practicum proposal. Approved Site Mentors must possess at minimum a Master's degree in public health or health related field, or substantial and sufficient academic and professional experience. All Site Mentors must have qualifications that are appropriate for the proposed goals and competencies addressed in the practicum. All Site Mentors must be available to work with students and be interested in doing so.

Opportunities for orientation and support for preceptors. Prior to the student's practicum being established, the Faculty Advisor may speak directly to the Site Mentor about responsibilities, duties, and expectations. Site Mentors are provided contact information for the Faculty Advisor, and are encouraged to reach out at any time with questions or information requests. Throughout the practicum project, the Site Mentor and Faculty Advisor can be in constant contact, and assist the student in successfully carrying out the practicum. At the conclusion of the project, Site Mentors are asked to provide feedback on their experience by completing a Practicum Site Mentor Evaluation form (see 2.4.a. Practicum site mentor evaluation form in the ERF).

Approaches for faculty supervision of students. Faculty members supervise students in a variety of ways, and are involved in all aspects of the practicum project. This includes helping the students identify practicum projects and sites/preceptors, input on the practicum project, development of timelines, and consultation on the final report and presentation. If Institutional Review Board (IRB) approval is required, Faculty Advisors assist with development of the application and must sign to indicate their approval. Faculty members also have the opportunity to discuss any issues related to student supervision during the biweekly SPCHS faculty meetings.

Means of evaluating student performance. Upon completion of the Practicum, the Program Coordinator sends the Site Mentor an evaluation form (2.4.a. Practicum site mentor evaluation form in the ERF) for evaluation of the student's performance on practicum objectives and overall practicum performance. The completed form is submitted to the Program Coordinator and then SPCHS Chair for review. Evaluation of the student's practicum is separate from evaluation of the written report and 30-minute defense presentation (including Power-Point) summarizing the practicum project to the student's Practicum committee. The content of the practicum report follows the agreements made at the beginning of the practicum and can be individualized to the project. The three-member committee ensures the individualized project also conforms to public health practice, theory, and skills development. The student's Practicum Committee evaluates the student's performance based on a standardized grading rubric (see 2.4.a practicum grading rubric form in the ERF), with the following designations: "Pass with Honors, Pass, Pass with Requirements, Remediation, and Fail".

Means of evaluating practice placement sites and preceptor qualifications. Upon completion of the practicum, each student completes an assessment form (see 2.4.a Student practicum site assessment form in the ERF). This form provides students with an opportunity to relay important information about the challenges, strengths, and concerns of the Practicum site and site mentor to the SPCHS. Practicum sites and Site Mentors are informally evaluated through student feedback to the Faculty Advisor, as well as through the interactions that the Faculty Advisor has with the practicum site and Site Mentor during the practicum. The SPCHS maintains a list of all previous practicum sites and Site Mentors that are available to students once enrolled in PUBH 591 (Practicum). If there are concerns about a previous placement site or Site Mentor, that information is not published but is addressed, as necessary, with any student that seeks to use that practicum site or Site Mentor.

During the Fall 2016, we did have one student that experienced difficulties with a Site Mentor as part of her practicum project. Halfway through her practicum, the student requested to switch site mentors, and a physician from our UM Family Medical Residency program agreed to serve as her replacement Site Mentor. We have determined that the original Site Mentor is probably not suited to effectively serve as a Site Mentor for our future MPH students, and will not be used for future practicum. To disseminate this decision, an announcement was made in one of our biweekly faculty meetings, with notes formally recorded in our internal notes/files regarding the practicum program.

Criteria for waiving, altering or reducing the experience, if applicable. The Program does not permit waiving, altering, or reducing the practicum requirement.

2.4.b. Identification of agencies and preceptors used for practice experiences for students, by specialty area, for the last two academic years.

Table 2.4.b. Practicum experiences for 2014-2015 and 2015-2016.

Student	Site, Location	Site Mentor	Title or Topic	Specialty Area(s)
Academic Year 201				
Edward Amberg	DPHHS EMS and Trauma Services, Anaconda, Montana	Shari Graham, EMS Systems Manager	Survey on the state of Montana Emergency Medical Services in Montana from a providers perspective	Epidemiology, Health services admin
Megan Broekemeier	Missoula City-County Health Dept. Suicide Prevention Network, Missoula, Montana	Kristie Scheel, Suicide Prevention Coordinator	Suicide Prevention	Social behavioral sci
Cicily Bull Calf	Missoula City-County Health Dept., Missoula, Montana	Rebecca Morley, Senior Community Health Specialist Eat Smart Coordinator	Community obesity prevention with emphasis of Hit the Tap	Social behavioral sci

Student	Site, Location	Site Mentor	Title or Topic	Specialty Area(s)
Tovah Foss	UM, Missoula, Montana	Craig Molgaard, PhD. Faculty, SPCHS	From grant to graduate certificate: the process, collaboration, and implementation of the CREMCaD, CTR-IN, NIH grant to create a graduate certificate	Health services admin
Annie Glover	Akros, Lusaka, Zambia	Anna Winters, CEO	Building community-health capabilities - integrating community case management into existing health systems	Social behavioral sci, Health services admin
Rebecca Goe	MT DPHHS Helena, Montana	Anne Barnhill, Cessation Specialist	Strategies for outreach to and engagement of smokers with diverse disabilities with the Montana Quit Line	Social behavioral sci, Health services admin
Roxanne Hovenkotter	American Heart Association, Seattle, Washington	Cherish Heart, Senior Community Health Director	Heart Health amongst our youth and adolescents by focusing on nutritional and educational programs as well as community events	Social behavioral sci Health services admin
Emilee Kottcamp- Allen	South Valley Child and Family Center, Hamilton, Montana	Dr. Blaise Favara, President	Lyme Borreliosis in Ravalli County, Montana	Epidemiology
Vann Lovett	University of Gondar, Gondar, Ethiopia	Molla Mesele, Head of Human Nutrition Department	The double burden of malnutrition in Ethiopia: a case of Gondar	Epidemiology, Social behavioral sci
John Palacio	Ravalli County Public Health Dept, Hamilton, Montana	Neoma Greenfield, Emergency Preparedness Grant Emergency Preparedness Coordinator	Evaluation of Ravalli County's Incident Command System (ICS) in conjunction with Rocky Mountain Laboratories ICS in an emergency event	Health services admin
Kelly Parsley	MT DPHHS, Helena, Montana	Stacy Russell, HIV, Rape & Sexual Assault Prevention Program Manager	The price women pay for domestic energy: the Bakken oil field and women's safety	Epidemiology, Social behavioral sci, Environ health sci
Justin Price	UM Missoula, Montana	Craig Molgaard, PhD. Faculty, SPCHS	Teaching practicum: rural health in a global perspective	Health services admin
Amy Stiffarm	Lake County Public Health Polson, Montana	Emily Colomeda, Health Services Director	Breastfeeding coalition of the Mission Valley	Health services admin, Biostatistics
Sonja Tysk	Akros, Lusaka, Zambia	Dan Bridges, Director of Research	mSpray enumeration	Social behavioral sci, Environ health sci

Student	Site, Location	Site Mentor	Title or Topic	Specialty Area(s)
Academic Year 201	5-2016			
Molly Hale	Valley County Health Dept. Glasgow, Montana	Connie Boreson, Director	Community needs assessment in Valley County	Health services admin
Cindy Hotchkiss	Missoula City-County Health Dept. Missoula, Montana	Ellen Leahy, Director and Health Officer	Climate change and public health	Social behavioral sci, Environ health sci
Amoy Jacques	Holistic Maternal & Newborn Health, Los Angeles, California	Cordelia Hanna- Cheruiyot	Graduate internship for the Association of Holistic Maternal & Newborn Health (AWMNH)	Health services admin
Jeanna Miller	Missoula City-County Health Dept. Environmental Health Division, Missoula, Montana	Shannon Therriault, Environmental Health Supervisor	Going Upstream: investing in outreach, education, and quality improvement in environmental health programs	Health services admin, Environ health sci
Lindsey Shankle	URLEND - UM Rural Institute, Missoula, Montana	Kyle Colling, URLEND Coordinator	Developing an in-service training curriculum to improve interactions between UM campus law enforcement and individuals with intellectual disabilities	Health services admin, Social behavioral sci

2.4.c. Data on the number of students receiving a waiver of the practice experience for each of the last three years.

Waivers for the practicum experience are not allowed. Therefore, no students have received a waiver in the past three years.

2.4.d. Data on the number of preventive medicine, occupational medicine, aerospace medicine and general preventive medicine and public health residents completing the academic program for each of the last three years, along with information on their practicum rotations.

This is not applicable to our program.

2.4.e. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths

Examples of student practicum reports and presentations are provided in the **ERF** (2.4.e. **Examples of practicum reports and presentations**). SPCHS has established protocols to support students with their practicum requirements. As the MPH program has continued to develop, our network of practicum sites and Site Mentors has also increased. Notably, we entered into a new relationship with the Montana Public Health Association (MPHA) in Fall 2016 to identify practicum opportunities at local and regional health departments that can be used for our MPH students:

http://health.umt.edu/publichealth/3current-students/Practicum% 20Opportunities.php. With funding from the Montana State Health Department (DPHHS), each of these practicum opportunities offer \$1,000 stipends. Importantly, these practicum projects can be conducted remotely – ideal for our online program. This new platform where students can be matched up with practicum opportunities was the final product of a practicum project conducted by one of our MPH students through the MPHA (Ms. Gini Kay). As of Spring 2017, we have two students that have started working on these new practicum opportunities.

Weaknesses

Because our program is online, many of our practicum sites are located throughout Montana and even outside our state. Therefore, it is difficult for Faculty Advisors to physically visit each and every practicum site, and engage with the Site Mentors in person. It can also be difficult to have good communication with students at these remote sites if regular check-ins with the students are not scheduled. Therefore, we encourage Faculty Advisors to have frequently scheduled meetings with the students when they are actively participating in the practicum project.

Evaluation of our practicum sites and Site Mentors is also something that can be improved upon. To address this weakness, we investigated what other internship programs were doing regrading evaluations in other departments across our campus. We ultimately invited staff from the UM Career Services to our October 4, 2016 Curriculum Committee meeting where we talked about the Griz eRecruiting internship support services, and reviewed online assessments that are available to internship students for evaluating site mentors. Griz eRecruiting (http://www.umt.edu/career/GrizeRecruiting/) offers a variety of services, including helping students with career preparation and job/internship searches. They also list in their database many other internship opportunities that have a public health component appropriate for our students.

We are currently piloting this new practicum support process with two MPH students during the Spring 2017 semester. Instructions on how to set up the practicum experience in Griz eRecruiting are provided in the ERF (2.4.e. Griz eRecruiting protocol).

The standardized format of the Griz eRecruiting platform will help us evaluate the student/Site Mentor results in a more efficient way, as well as standardize our evaluation procedures with other departments / internship opportunities on campus. One of the new responsibilities of the Program Coordinator will be to review the student and Site Mentor practicum evaluations as they become available. If problems are identified, the Chair will be informed and corrective action will be taken. Additionally, the Griz eRecruting staff will automatically summarize all the assessment data annually and provide a report for the Chair and faculty. Our plan starting next academic year is to review the reports systematically at the first faculty meeting in the Fall. The intent is to ensure the overall quality of the practicum experience for students, Site Mentors, and for the SPCHS in general – especially as we engage local and regional health departments through the newly formed MPHA practicum platform.

- 2.5. Culminating Experience. All graduate professional degree programs identified in the instructional matrix shall assure that each student demonstrates skills and integration of knowledge through a culminating experience.
- 2.5.a. Identification of the culminating experience required for each professional public health degree program. If this is common across the program's professional degree programs, it need be described only once. If it varies by degree or specialty area, sufficient information must be provided to assess compliance by each.

All MPH students complete a three-course sequence that fulfills the requirement of a culminating experience. The courses include the Practicum (PUBH 591), Professional Paper (PUBH 599), and Professional Portfolio (PUBH593).

Practicum (PUBH 591): The Practicum experience (which includes a report and presentation) is described previously in **Criterion 2.4**.

Professional Paper (PUBH 599): The Professional Paper represents another capstone opportunity for MPH students to work closely with one of the public health faculty members to plan and execute a project that communicates or disseminates public health knowledge by applying public health theory or principles to a real situation. The project can be based on a variety of research or practice-based experiences. As outlined in the professional paper guidelines (2.5.a. Professional paper guidelines in the ERF), and the website: http://health.umt.edu/publichealth/3current-students/mphcapstones/default.php, the planning process starts with the proposal form (2.5.a. Professional paper proposal form in the ERF), where the student identifies the learning objectives and MPH competencies that will be addressed, while also outlining the tasks, deliverables, and timeline. After the student completes the project, the Faculty Advisor evaluates the products of the experience, which must include the professional paper document, as well as a report of the communication format, intended audience, citation, and structured abstract. A successful professional paper is determined by the professional standards of the individual faculty member who is mentoring the student (note that there is no committee for the professional paper). Examples of recently completed Professional Papers are provided in the ERF (2.5.a. Examples of Professional Papers).

Portfolio (PUBH 593): Students initiate the final capstone Portfolio (PUBH 593) after the completion of the Practicum (PUBH 591) and the Professional Paper (PUBH 599). The Portfolio requires students to synthesize and integrate knowledge gained through their MPH coursework and professional experiences. As outlined in the Guidelines (2.5.a. Portfolio guidelines in the ERF), the required report and oral presentation serves as the culminating opportunity for students to demonstrate their understanding and professional readiness to execute the ten UM MPH program competencies. The Portfolio also requires students to reflect on their overall MPH experience, clarify their future goals in public health, and helps prepare them for seeking employment. In the required 20-page written narrative, students include evidence of mastery drawn from coursework and practice-based public health experience. As described in the guidelines, a three-member Committee (note that this a separate student-selected committee than what is described for the Practicum in Criterion 2.4) evaluates the written document and oral defense to assure that students demonstrate proficiency in the UM MPH competencies. In

the ERF, the following documents related to the Portfolio are presented: 2.5.a. Portfolio approval form, 2.5.a. Portfolio review committee form, and the 2.5.a. Portfolio defense grading rubric.

The oral defense for the Portfolio (separate from the Practicum oral defense) involves a 45-minute presentation by the student, followed by questions from a three-person faculty Committee that takes up to an additional hour. One alumni member may also serve in lieu of a faculty member. Required competencies are discussed as appropriate in the defense. Examples of the Portfolio (both reports and presentations) are provided in the **ERF** (2.5.a. Examples of portfolio reports and papers).

For the PhD degree, the student will submit both a final dissertation report as well as give a dissertation oral defense. A public presentation of the results of dissertation work will occur as the culminating experience. Following the public presentation, the student-selected five-member Advisory Committee will meet with the student to discuss the dissertation. A committee member other than the Chair of the Advisory Committee will be nominated by the Committee to direct the examination/defense. A student will pass with only one negative vote with the remaining Committee members judging the performance to be satisfactory. An example of the grading rubric to evaluate PhD students on their dissertation defense is included in the ERF (2.5.a. PhD defense grading rubric).

2.5.b. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths

All MPH students complete a three-course sequence that fulfills the requirement of a culminating experience. The courses include the Practicum (PUBH 591), Professional Paper (PUBH 599), and Professional Portfolio (PUBH593). Through this three-course sequence, the MPH program provides a capstone experience for all students that includes both written and oral components. In most cases, students work closely with their Faculty Advisors to ensure overall technical quality in their final products. For the PhD program, a dissertation report and oral presentation will serve as the culminating experience. This will be conducted with guidance from the student's Research Advisor, as well as the student's five-person Advisory Committee.

Weaknesses

As noted in **Criterion 2.4a**, there are infrequent opportunities for Faculty Advisors to visit some of the Practicum sites outside of Missoula where the University of Montana is located. However, this is not unexpected given the online nature of our program, with students physically located throughout Montana and beyond. We will also be proactive in improving our overall process for Practicum evaluations. As described in **Criterion 2.4.e.**, utilizing the Griz eRecruiting platform to support our practicum projects will add structure and uniformity to the overall practicum process, as well as strengthen and standardize our evaluation procedures.

We also occasionally see students that exhibit weak writing skills. In an effort to encourage the improvement of writing skills throughout our program, we have recommended that students use the Writing Center at the University of Montana. At our recent new student Orientation on August 26, 2016, we brought in a speaker from the Writing Center who advertised their services to our students. The SPCHS faculty will recommend the Writing Center to any student in need of their services. For the PhD program, as our first cohort of four students entered the program in Spring 2017, we have not yet had students go through the culminating dissertation report / oral presentation process. We look forward to supporting this first cohort of students when the time comes for their respective dissertation defenses.

- 2.6. Required Competencies. For each degree program and area of specialization within each program identified in the instructional matrix, there shall be clearly stated competencies that guide the development of degree programs. The program must identify competencies for graduate professional, academic and baccalaureate public health degree programs. Additionally, the program must identify competencies for specializations within the degree programs at all levels (bachelor's, master's and doctoral).
- 2.6.a. Identification of a set of competencies that all graduate professional public health degree students and baccalaureate public health degree students, regardless of concentration, major or specialty area, must attain. There should be one set for each graduate professional public health degree and baccalaureate public health degree offered by the program (e.g., one set each for BSPH, MPH and DrPH).

The UM MPH program emphasizes active, student-directed learning, problem solving, and the acquisition of skills essential to the practice of public health. The Ten Essential Services for Public Health (i.e. monitor, diagnose, inform, mobilize, develop policy, enforce, link, assure, evaluate, research) are referenced in our ten competencies as they provide the most basic definition of public health and guide the responsibilities that the students will bear as professionals in the local public health systems. Following are the ten competencies that guide our MPH program:

Competency 1. Prepare community data for public health analyses and assessments.

Competency 2. Contribute to public health program and policy development.

Competency 3. Communicate in public health settings.

Competency 4. Practice public health with people from diverse populations.

Competency 5. Collaborate with the community in the practice of public health.

Competency 6. Base public health practice on scientific evidence.

Competency 7. Participate in financial planning and management of public health units.

Competency 8. Exercise public health leadership and systems thinking.

Competency 9. Respond to public health issues in rural settings.

Competency 10. Use global insight in responding to local public health issues.

With the start of the new PhD program (Spring 2017), we also developed specific competencies related to the training of doctoral students. These additional PhD competencies were developed using a blend of the Association of Schools and Programs of Public Health five discipline competency domains (i.e. biostatistics, environmental health sciences, epidemiology, health policy and management, social and behavioral sciences) and seven interdisciplinary competency domains (i.e. communication and informatics, diversity and culture, leadership, public health biology, professionalism, program planning, systems thinking). Following are the three additional competencies that guide our new PhD program.

Competency 1. Develop and exhibit a strong background in the five core areas of public health (biostatistics, environmental health sciences, epidemiology, health policy and management, social and behavioral sciences).

Competency 2. Apply public health research skills to complex problems.

Competency 3. Develop and practice strong leadership and communication skills in the research setting.

2.6.b. Identification of a set of competencies for each concentration, major or specialization (depending on the terminology used by the program) identified in the instructional matrix, including professional and academic graduate degree curricula and baccalaureate public health degree curricula.

Because we do not have specific concentrations or specializations in our generalist MPH and PhD programs, we only have a set of general competencies that guide the respective programs. However, for each of the ten competencies related to the MPH program, as well as the three additional competencies related to our PhD program, the Research Committee, Steering Committee, and Chair identified sub-competencies that are viewed as critical to the skill and practice requirements for public health professionals in a generalist program. **Table 2.6.b(1)** lists these cross-cutting sub-competencies for our MPH program.

Table 2.6.b(1). Competencies and sub-competencies related to the MPH program.

~	.		
Competency 1. Pr	enare community data	for public health	analyses and assessments.

- 1.1. Identify the health status of populations and their related determinants of health and disease.
- 1.2. Describe the characteristics of a population-based problem.
- 1.3. Use variables that measure public health conditions.
- 1.4. Use methods and instruments for collecting valid and reliable quantitative and qualitative data.
- 1.5. Identify sources of public health data and information.
- 1.6. Recognize the integrity and comparability of data.
- 1.7. Identify gaps in data sources.
- 1.8. Adhere to ethical principles in the collection, maintenance, use and dissemination of data and information.
- 1.9. Describe the public health applications of quantitative and qualitative data.
- 1.10. Collect quantitative and qualitative community data.
- 1.11. Use information technology to collect, store and retrieve data.
- 1.12. Describe how data are used to address scientific, political, ethical and social public health issues.

Competency 2. Contribute to public health program and policy development.

- 2.1. Gather information relevant to specific public health policy issues.
- 2.2. Describe how policy options can influence public health programs.
- 2.3. Explain the expected outcomes of policy options.
- 2.4. Gather information that will inform policy decisions.
- 2.5. Describe the public health laws and regulations governing public health programs.
- 2.6. Participate in program planning processes.
- 2.7. Incorporate policies and procedures into program plans and structures.
- 2.8. Identify mechanisms to monitor and evaluate programs for their effectiveness and quality.
- 2.9. Demonstrate the use of public health informatics practices and procedures.
- 2.10. Apply strategies for new and continuous quality improvement.

Competency 3. Communicate in public health settings.

- 3.1. Identify the health literacy of populations served.
- 3.2. Communicate in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency.
- 3.3. Solicit community-based input from individuals and organizations.
- 3.4. Convey public health information using a variety of approaches.
- 3.5. Participate in the development of demographic, statistical, programmatic and scientific presentations.
- 3.6. Apply communication and group dynamic strategies in interactions with individuals and groups.

Competency 4. Practice public health with people from diverse populations.

- 4.1. Incorporate strategies for interacting with people from diverse backgrounds.
- 4.2. Recognize the role of cultural, social, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services.
- 4.3. Respond to diverse needs that are the result of cultural differences.
- 4.4. Describe the dynamic forces that contribute to cultural diversity.
- 4.5. Describe the need for a diverse public health workforce.
- 4.6. Participate in the assessment of the cultural competence of the public health organization.

Competency 5. Collaborate with the community in the practice of public health.

- 5.1. Recognize community linkages and relationships among multiple factors (or determinants) affecting health.
- 5.2. Demonstrate the capacity to work in community-based participatory research efforts.
- 5.3. Identify stakeholders.
- 5.4. Collaborate with community partners to promote the health of the population.
- 5.5. Maintain partnerships with key stakeholders.
- 5.6. Use group processes to advance community involvement.
- 5.7. Describe the role of governmental and non-governmental organizations in the delivery of community health services.
- 5.8. Identify community assets and resources.
- 5.9. Gather input from the community to inform the development of public health policy and programs.
- 5.10. Inform the public about policies, programs and resources.

Competency 6. Base public health practice on scientific evidence.

- 6.1. Describe the scientific foundations of the field of public health.
- 6.2. Identify prominent events in the history of the public health profession.
- 6.3. Relate public health science skills to the Core Public Health Functions and Ten Essential Services of Public Health.
- 6.4. Identify the basic public health science (including, but not limited to biostatistics, epidemiology, environmental health science, health services administration, and social and behavioral health sciences).
- 6.5. Describe how the scientific evidence relates to a public health issue, concern, or intervention.
- 6.6. Describe the scientific evidence from a variety of text and electronic sources.
- 6.7. Discuss the limitations of research findings.
- 6.8. Describe the laws, regulations, policies and procedures for the ethical conduct of research.
- 6.9. Partner with other public health professionals in building the scientific base of public health.

Competency 7. Participate in financial planning and management of public health.

- 7.1. Describe the local, state, and federal public health and health care systems.
- 7.2. Describe the organizational structures, functions, and authorities of local, state, and federal public health agencies.

- 7.3. Adhere to the organization's policies and procedures.
- 7.4. Participate in the development of a programmatic budget.
- 7.5. Operate programs within current and forecasted budget constraints.
- 7.6. Identify strategies for determining budget priorities based on federal, state, and local financial contributions.
- 7.7. Report program performance.
- 7.8. Translate evaluation report information into program performance improvement action steps.
- 7.9. Contribute to the preparation of proposals for funding from external sources.
- 7.10. Apply basic human relations skills to internal collaborations, motivation of colleagues, and resolution of conflicts.
- 7.11. Demonstrate public health informatics skills to improve program and business operations.
- 7.12. Participate in the development of contracts and other agreements for the provision of services.
- 7.13. Describe how cost-effectiveness, cost-benefit, and cost-utility analyses affect programmatic prioritization and decision making.

Competency 8. Exercise public health leadership and systems thinking.

- 8.1. Incorporate ethical standards of practice as the basis of all interactions with organizations, communities, and individuals.
- 8.2. Describe how public health operates within a larger system.
- 8.3. Participate with stakeholders in identifying the public health values and a shared public health vision as guiding principle for community action.
- 8.4. Identify internal and external problems that may affect the delivery of Essential Public Health Services.
- 8.5. Use individual, team and organizational learning opportunities for personal and professional development.
- 8.6. Participate in mentoring and peer review or coaching opportunities.
- 8.7. Participate in the measuring, reporting and continuous improvement of organizational performance.
- 8.8. Describe the impact of changes in the public health system, and larger social, political, economic environments, on organizational practices.

Competency 9. Respond to public health issues in rural settings.

- 9.1. Define and distinguish between urban, rural and frontier areas.
- 9.2. Identify the common demographic characteristics or rural and frontier areas and their implications for provisions of public health services.
- 9.3. Identify the common social and economic characteristics of rural and frontier areas and their implications for provisions of public health services.
- 9.4. Describe the common ethical considerations of rural and frontier areas and their effect on the relationships between consumers, healthcare providers, the population of the area, and the provisions of public health services.
- 9.5. Identify the common political attributes of rural and frontier areas and their implications for provisions of public health services.
- 9.6. Describe common public health workforce issues associated with rural and frontier areas and their implications for provisions of public health services.
- 9.7. Explain the challenges of public health planning and preparedness for rural and frontier areas, including the need for and role of mutual aid agreements, and the implications of such challenges for provisions of public health services.
- 9.8. Explain the common characteristics of healthcare delivery systems in rural and frontier areas and their implications for provisions of public health services.
- 9.9. Describe the common communication challenges associated with living in rural and frontier areas and their implication for provision of public health services.
- 9.10. Utilize basic statistical skills to reason effectively about problems associated with the populations of low density and widespread geographic dispersion.

Competency 10. Use global insight in responding to local public health issues.

- 10.1. Gather, integrate and analyze rural and global evidence.
- 10.2. Demonstrate sensitivity and genuine respect for a multiplicity of values, beliefs, traditions, experiences and feelings of satisfaction or distress stemming from social circumstances in global and rural settings.
- 10.3. Bring together diverse and global ideas to solve local rural problems in innovative ways.
- 10.4. Understand how to work with language differences, sometimes through interpreters, while appreciating broader communication differences.
- 10.5. Work on multifunctional, diverse teams to accomplish tasks in rural settings.
- 10.6. Understand global public health issues and practices.
- 10.7. Use an understanding of global public health issues and practices to inform local public health practices in rural settings.

Table 2.6.b(2) lists the three additional competencies and sub-competencies related to the PhD program that guide our doctoral students.

Table 2.6.b(2). Competencies and sub-competencies related to the PhD program.

Competency 1. Develop and exhibit a strong background in the five core areas of public health (biostatistics, environmental health sciences, epidemiology, health policy and management, social and behavioral sciences).

- 1.1. Gain knowledge of the methods used to address the direct and indirect human, ecological and safety effects of major environmental and occupational agents.
- 1.2. Demonstrate ability to apply epidemiologic methods and principles of study design to address questions of public health importance.
- 1.3. Identify the main components and issues of the organization, financing and delivery of health services and public health systems in the U.S.
- 1.4. Develop skills to apply biostatistical methods to public health research, interpret results, and communicate findings.
- 1.5. Describe how the public health information infrastructure is used to collect, process, maintain, and disseminate data.
- 1.6. Apply knowledge of theories, concepts and models from a range of social and behavioral disciplines that are used in public health research.
- 1.7 Achieve mastery of specific content areas related to dissertation research.

Competency 2. Apply public health research skills to complex problems.

- 2.1. Utilize rigorous and advanced quantitative and qualitative methods in addressing research questions.
- 2.2. Develop novel research questions with public health impact.
- 2.3. Explain how the specific content areas of the dissertation research is related to a multidisciplinary approach to achieving public health goals.
- 2.4. Advance the field of public health through original research.

Competency 3. Develop and practice strong leadership and communication skills in the research setting.

- 3.1. Describe and demonstrate the attributes of leadership in public health.
- 3.2. Engage in dialogue and learning from diverse stakeholders to advance public health goals.
- 3.3. Teach effectively in courses as well as in informal settings.
- 3.4. Communicate well both orally and in writing.
- 3.5. Take initiative and achieve objectives with a high degree of independence.
- 3.6. Demonstrate transparency, integrity, and honesty in all actions.
- 3.7. Ensure the ethical and responsible conduct of research.

2.6.c. A matrix that identifies the learning experiences (e.g., specific course or activity within a course, practicum, culminating experience or other degree requirement) by which the competencies defined in Criteria 2.6.a and 2.6.b are met. If these are common across the program, a single matrix for each degree will suffice. If they vary, sufficient information must be provided to assess compliance by each degree or specialty area.

Table 2.6.c(1). identifies the courses (core, capstones, and most common electives) in the MPH program that address each of the ten, program-wide MPH core competencies and sub-competencies. **Table 2.6.c(2).** identifies the required classes in the PhD program that address each of the three, program-wide PhD core competencies and sub-competencies.

Table 2.6.c(1). MPH courses and other learning experiences by which the competencies are met.

Core Competencies P=Primary, R=Reinforcing	PUBH 510: Intro to Epi	PUBH 520: Fund. of Biostats	STAT 451: Stat Methods I	STAT 452: Stat Methods II	STAT 457: Computer Data Analysis (I and II)	PUBH 530: PH Admin & Mngt	PUBH 535: Health Policy	PUBH 540: Soc and Behav Sci in PH	PUBH 550: Program Evaluation and Research Methods	PUBH 560: Env and Rural Health
Competency 1. Prepare community data for public health analyses and assessments.	P	P	P	P	P	R	R	P	R	R
1A1. Identify the health status of populations and their related determinants of health and disease	P	P	P	P	R	R	R	P		P
1A2. Describe the characteristics of a population-based problem	P	P	P	P	R	R	P	P		R
1A3. Use variables that measure public health conditions	P	P	P	Р	P	R	R		R	R
1A4. Use methods and instruments for collecting valid and reliable quantitative and qualitative data	P	P	P	P	R	R	R		R	
1A5. Identify sources of public health data and information	R	P	P	P	R		P	R	R	P
1A6. Recognize the integrity and comparability of data	R	P	P	Р	P		R			
1A7. Identify gaps in data sources	R	P	P	P	R	R	R		R	P
1A8. Adhere to ethical principles in the collection, maintenance, use and dissemination of data and information	R	P	P	P	R			R	R	R

Core Competencies P=Primary, R=Reinforcing	PUBH 510: Intro to Epi	PUBH 520: Fund. of Biostats	STAT 451: Stat Methods I	STAT 452: Stat Methods II	STAT 457: Computer Data Analysis (I and II)	PUBH 530: PH Admin & Mngt	PUBH 535: Health Policy	PUBH 540: Soc and Behav Sci in PH	PUBH 550: Program Evaluation and Research Methods	PUBH 560: Env and Rural Health
1A9. Describe the public health applications of quantitative and qualitative data	R	P	P	P	R	P		R	R	
1A10. Collect quantitative and qualitative community data		R	R	R	R					
1A11. Use information technology to collect, store and retrieve data		P	P	P	R					R
1A12. Describe how data are used to address scientific, political, ethical and social public health issues	R	P	P	P	R	R		R	R	P
Competency 2. Contribute to public health program and policy development.		R	R	R	R	P	P	P	R	R
2A1. Gather information relevant to specific public health policy issues		R	R	R	R	P	P	P		
2A2. Describe how policy options can influence public health programs						P	P			
2A3. Explain the expected outcomes of policy options						P	P			
2A4. Gather information that will inform policy decisions		R	R	R	R	R	P			
2A5. Describe the public health laws and regulations governing public health programs						R	P			R
2A6. Participate in program planning processes						P	P	P		
2A7. Incorporate policies and procedures into program plans and structures						P	P			
2A8. Identify mechanisms to monitor and evaluate programs for their effectiveness and quality						P		P	Р	
2A9. Demonstrate the use of public health informatics practices and procedures		R	R	R	R	R				
2A10. Apply strategies for new and continuous quality improvement						P		R	R	

Core Competencies P=Primary, R=Reinforcing	PUBH 510: Intro to Epi	PUBH 520: Fund. of Biostats	STAT 451: Stat Methods I	STAT 452: Stat Methods II	STAT 457: Computer Data Analysis (I and II)	PUBH 530: PH Admin & Mngt	PUBH 535: Health Policy	PUBH 540: Soc and Behav Sci in PH	PUBH 550: Program Evaluation and Research Methods	PUBH 560: Env and Rural Health
Competency 3.Communicate in public health settings.	R	P	P	P	R	R	R	P		P
3A1. Identify the health literacy of populations served						R				
3A2. Communicate in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	R	Р	P	P	R	R	R	P		Р
3A3. Solicit community-based input from individuals and organizations	R					R	R	R		P
3A4. Convey public health information using a variety of approaches		P	P	P	R	P		P		P
3A5. Participate in the development of demographic, statistical, programmatic and scientific presentations	Р	Р	P	P	R	R		P		Р
3A6. Apply communication and group dynamic strategies in interactions with individuals and groups						R		P		P
Competency 4. Practice public health with people from diverse populations.								Р		P
4A1. Incorporate strategies for interacting with people from diverse backgrounds								P		R
4A2. Recognize the role of cultural, social, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services								P		R
4A3. Respond to diverse needs that are the result of cultural differences								R		
4A4. Describe the dynamic forces that contribute to cultural diversity								R		P
4A5. Describe the need for a diverse public health workforce										R

Core Competencies P=Primary, R=Reinforcing	PUBH 510: Intro to Epi	PUBH 520: Fund. of Biostats	STAT 451: Stat Methods I	STAT 452: Stat Methods II	STAT 457: Computer Data Analysis (I and II)	PUBH 530: PH Admin & Mngt	PUBH 535: Health Policy	PUBH 540: Soc and Behav Sci in PH	PUBH 550: Program Evaluation and Research Methods	PUBH 560: Env and Rural Health
4A6. Participate in the assessment of the cultural competence of the public health organization										
Competency 5. Collaborate with the community in the practice of public health.		R	R	R	R	R	P	P		R
5A1. Recognize community linkages and relationships among multiple factors (or determinants) affecting health		R	R	R	R	R		P		R
5A2. Demonstrate the capacity to work in community-based participatory research efforts						R		P		
5A3. Identify stakeholders						P	P	P		R
5A4. Collaborate with community partners to promote the health of the population								P		P
5A5. Maintain partnerships with key stakeholders										P
5A6. Use group processes to advance community involvement								R		R
5A7. Describe the role of governmental and non- governmental organizations in the delivery of community health services						P	P			P
5A8. Identify community assets and resources						P	R	R		R
5A9. Gather input from the community to inform the development of public health policy and programs								R		
5A10. Inform the public about policies, programs and resources								R		
Competency 6. Base public health practice on scientific evidence.	R	R	R	R	R	R	R	R		P
6A1. Describe the scientific foundations of the field of public health						R	R			R
6A2. Identify prominent events in the history of the public health profession	R					R				P

Core Competencies P=Primary, R=Reinforcing	PUBH 510: Intro to Epi	PUBH 520: Fund. of Biostats	STAT 451: Stat Methods I	STAT 452: Stat Methods II	STAT 457: Computer Data Analysis (I and II)	PUBH 530: PH Admin & Mngt	PUBH 535: Health Policy	PUBH 540: Soc and Behav Sci in PH	PUBH 550: Program Evaluation and Research Methods	PUBH 560: Env and Rural Health
6A3. Relate public health science skills to the Core Public Health Functions and Ten Essential Services of Public Health							R			R
6A4. Identify the basic public health science (including, but not limited to biostatistics, epidemiology, environmental health science, health services administration, and social and behavioral health sciences)		R	R	R	R		R	Р		Р
6A5. Describe how the scientific evidence relates to a public health issue, concern, or intervention	R	R	R	R	R		R	P		P
6A6. Describe the scientific evidence from a variety of text and electronic sources	R	R	R	R	R			P		P
6A7. Discuss the limitations of research findings	R	R	R	R	R					P
6A8. Describe the laws, regulations, policies and procedures for the ethical conduct of research	R						R	R		R
6A9. Partner with other public health professionals in building the scientific base of public health							R	Р		R
Competency 7. Participate in financial planning and management of public health units.		R	R	R	R	Р	R		P	
7A1. Describe the local, state, and federal public health and health care systems						P	R			
7A2. Describe the organizational structures, functions, and authorities of local, state, and federal public health agencies						P	R			
7A3. Adhere to the organization's policies and procedures						P	P			
7A4. Participate in the development of a programmatic budget						P				

Core Competencies P=Primary, R=Reinforcing	PUBH 510: Intro to Epi	PUBH 520: Fund. of Biostats	STAT 451: Stat Methods I	STAT 452: Stat Methods II	STAT 457: Computer Data Analysis (I and II)	PUBH 530: PH Admin & Mngt	PUBH 535: Health Policy	PUBH 540: Soc and Behav Sci in PH	PUBH 550: Program Evaluation and Research Methods	PUBH 560: Env and Rural Health
7A5. Operate programs within current and						P				
forecasted budget constraints						1				
7A6. Identify strategies for determining budget priorities based on federal, state, and local financial contributions						P				
7A7. Report program performance						P			P	
7A8. Translate evaluation report information into program performance improvement action steps						P			P	
7A9. Contribute to the preparation of proposals for funding from external sources						P				
7A10. Apply basic human relations skills to internal collaborations, motivation of colleagues, and resolution of conflicts						P		R		
7A11. Demonstrate public health informatics skills to improve program and business operations		R	R	R	R	P				
7A12. Participate in the development of contracts and other agreements for the provision of services										
7A13. Describe how cost-effectiveness, cost- benefit, and cost-utility analyses affect programmatic prioritization and decision making						Р			P	
Competency 8. Exercise public health leadership and systems thinking.		R	R	R	R	P	R	P		R
8A1. Incorporate ethical standards of practice as the basis of all interactions with organizations, communities and individuals		R	R	R	R	R		R		R
8A2. Describe how public health operates within a larger system						R		P		R
8A3. Participate with stakeholders in identifying the public health values and a shared public								R		R

Core Competencies P=Primary, R=Reinforcing	PUBH 510: Intro to Epi	PUBH 520: Fund. of Biostats	STAT 451: Stat Methods I	STAT 452: Stat Methods II	STAT 457: Computer Data Analysis (I and II)	PUBH 530: PH Admin & Mngt	PUBH 535: Health Policy	PUBH 540: Soc and Behav Sci in PH	PUBH 550: Program Evaluation and Research Methods	PUBH 560: Env and Rural Health
health vision as guiding principles for community action										
8A4. Identify internal and external problems that may affect the delivery of Essential Public Health Services						R				R
8A5. Use individual, team and organizational learning opportunities for personal and professional development							R	P		R
8A6. Participate in mentoring and peer review or coaching opportunities						R		P		R
8A7. Participate in the measuring, reporting and continuous improvement of organizational performance						R				
8A8. Describe the impact of changes in the public health system, and larger social, political, economic environments, or organizational practices.						R				
Competency 9. Respond to public health issues in rural settings.		R	R	R	R	R	R	R		Р
9A1. Define and distinguish between urban, rural and frontier areas										R
9A2. Identify the common demographic characteristics or rural and frontier areas and their implications for provisions of public health services						R	R			R
9A3. Identify the common social and economic characteristics of rural and frontier areas and their implications for provisions of public health services								R		P
9A4. Describe the common ethical considerations of rural and frontier areas and their effect on the										

Core Competencies P=Primary, R=Reinforcing	PUBH 510: Intro to Epi	PUBH 520: Fund. of Biostats	STAT 451: Stat Methods I	STAT 452: Stat Methods II	STAT 457: Computer Data Analysis (I and II)	PUBH 530: PH Admin & Mngt	PUBH 535: Health Policy	PUBH 540: Soc and Behav Sci in PH	PUBH 550: Program Evaluation and Research Methods	PUBH 560: Env and Rural Health
relationships between consumers, healthcare providers, the population of the area, and the provisions of public health services										
9A5. Identify the common political attributes of rural and frontier areas and their implications for provisions of public							R			
9A6. Describe common public health workforce issues associated with rural and frontier areas and their implications for provisions of public health services						R				Р
9A7. Explain the challenges of public health planning and preparedness for rural and frontier areas, including the need for and role of mutual aid agreements, and the implications of such challenges for provisions of public health services										P
9A8. Explain the common characteristics of healthcare delivery systems in rural and frontier areas and their implications for provisions of public health services										
9A9. Describe the common communication challenges associated with living in rural and frontier areas and their implication for provision of public health services										
9A10. Utilize basic statistical skills to reason effectively about problems associated with the populations of low density and widespread geographic dispersion	P	R	R	R	R			R		
Competency 10. Use global insight in responding to local public health issues.	R	R	R	R	R	R		R		R
10A1. Gather, integrate and analyze rural and global evidence		R	R	R	R					

Core Competencies P=Primary, R=Reinforcing	PUBH 510: Intro to Epi	PUBH 520: Fund. of Biostats	STAT 451: Stat Methods I	STAT 452: Stat Methods II	STAT 457: Computer Data Analysis (I and II)	PUBH 530: PH Admin & Mngt	PUBH 535: Health Policy	PUBH 540: Soc and Behav Sci in PH	PUBH 550: Program Evaluation and Research Methods	PUBH 560: Env and Rural Health
10A2. Demonstrate sensitivity and genuine respect for a multiplicity of values, beliefs, traditions, experiences and feelings of satisfaction or distress stemming from social circumstances in global and rural settings	R									R
10A3. Bring together diverse and global ideas to solve local rural problems in innovative ways	R					R		R		
10A4. Understand how to work with language differences, sometimes through interpreters, while appreciating broader communication differences										
10A5. Work on multifunctional, diverse teams to accomplish tasks in rural settings								R		
10A6. Understand global public health issues and practices	R							R		
10A7. Use an understanding of global public health issues and practices to inform local public health practices in rural settings										R

 $Table \ 2.6.c(1).\ cont.\ MPH\ courses\ and\ other\ learning\ experiences\ by\ which\ the\ competencies\ are\ met.$

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
Competency 1. Prepare community data for public health analyses and assessments.	R	R	R	R	R	R		P	R
1A1. Identify the health status of populations and their related determinants of health and disease		Р	R	R	R	R		P	P
1A2. Describe the characteristics of a population-based problem	R	P	R	R	R	R		P	P
1A3. Use variables that measure public health conditions			R	R	R			R	R
1A4. Use methods and instruments for collecting valid and reliable quantitative and qualitative data			R	R	R			R	R
1A5. Identify sources of public health data and information		R	R	R	R	P		R	R
1A6. Recognize the integrity and comparability of data	P		R	R	R	R			R
1A7. Identify gaps in data sources		R	R	R	R	P		R	R
1A8. Adhere to ethical principles in the collection, maintenance, use and dissemination of data and information	P		R	R	R			P	R
1A9. Describe the public health applications of quantitative and qualitative data			R	R	R	R		R	R
1A10. Collect quantitative and qualitative community data			R	R	R				R
1A11. Use information technology to collect, store and retrieve data			R	R	R			R	R

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
1A12. Describe how data are used to address scientific, political, ethical and social public health issues			R	R	R	P		Р	R
Competency 2. Contribute to public health program and policy development.	R	R	R	R	R			R	R
2A1. Gather information relevant to specific public health policy issues			R	R	R			R	Р
2A2. Describe how policy options can influence public health programs	R	R	R	R	R			Р	Р
2A3. Explain the expected outcomes of policy options		R	R	R	R			R	P
2A4. Gather information that will inform policy decisions			R	R	R				P
2A5. Describe the public health laws and regulations governing public health programs		R	R	R	R				Р
2A6. Participate in program planning processes			R	R	R				R
2A7. Incorporate policies and procedures into program plans and structures			R	R	R				R
2A8. Identify mechanisms to monitor and evaluate programs for their effectiveness and quality			R	R	R			R	R
2A9. Demonstrate the use of public health informatics practices and procedures			R	R	R				R
2A10. Apply strategies for new and continuous quality improvement			R	R	R			R	R

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
Competency 3.Communicate in public health settings.	R	P	R	R	R			P	R
3A1. Identify the health literacy of populations served	R	P	R	R	R			R	R
3A2. Communicate in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency	P		R	R	R			Р	R
3A3. Solicit community-based input from individuals and organizations			R	R	R			P	R
3A4. Convey public health information using a variety of approaches	R		R	R	R			P	P
3A5. Participate in the development of demographic, statistical, programmatic and scientific presentations			R	R	R				P
3A6. Apply communication and group dynamic strategies in interactions with individuals and groups	R		R	R	R			R	R
Competency 4. Practice public health with people from diverse populations.	R	Р	R	R	R		R	P	R
4A1. Incorporate strategies for interacting with people from diverse backgrounds	R	Р	R	R	R		R	P	R
4A2. Recognize the role of cultural, social, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services	Р	Р	R	R	R		R	Р	P

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
4A3. Respond to diverse needs that are the result of cultural differences		P	R	R	R			P	P
4A4. Describe the dynamic forces that contribute to cultural diversity	R	P	R	R	R			P	R
4A5. Describe the need for a diverse public health workforce	P	Р	R	R	R			P	R
4A6. Participate in the assessment of the cultural competence of the public health organization	R	P	R	R	R			R	
Competency 5. Collaborate with the community in the practice of public health.	R	R	R	R	R	R	P	P	R
5A1. Recognize community linkages and relationships among multiple factors (or determinants) affecting health	R	R	R	R	R	R	R	R	P
5A2. Demonstrate the capacity to work in community-based participatory research efforts			R	R	R		R	P	R
5A3. Identify stakeholders	R	R	R	R	R		R	R	R
5A4. Collaborate with community partners to promote the health of the population	R		R	R	R			P	
5A5. Maintain partnerships with key stakeholders			R	R	R			R	
5A6. Use group processes to advance community involvement			R	R	R			R	
5A7. Describe the role of governmental and non-governmental organizations in the delivery of community health services			R	R	R			R	Р

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
5A8. Identify community assets and resources			R	R	R			R	Р
5A9. Gather input from the community to inform the development of public health policy and programs			R	R	R			R	R
5A10. Inform the public about policies, programs and resources			R	R	R			R	P
Competency 6. Base public health practice on scientific evidence.	R	R	R	R	R	P	P	R	Р
6A1. Describe the scientific foundations of the field of public health			R	R	R	R	P	R	Р
6A2. Identify prominent events in the history of the public health profession		R	R	R	R	P			P
6A3. Relate public health science skills to the Core Public Health Functions and Ten Essential Services of Public Health	R	R	R	R	R	R			R
6A4. Identify the basic public health science (including, but not limited to biostatistics, epidemiology, environmental health science, health services administration, and social and behavioral health sciences)		R	R	R	R		P	R	P
6A5. Describe how the scientific evidence relates to a public health issue, concern, or intervention		R	R	R	R		R		P
6A6. Describe the scientific evidence from a variety of text and electronic sources		R	R	R	R		R		R

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
6A7. Discuss the limitations of research findings	R		R	R	R		R	P	R
6A8. Describe the laws, regulations, policies and procedures for the ethical conduct of research			R	R	R			R	R
6A9. Partner with other public health professionals in building the scientific base of public health			R	R	R			R	
Competency 7. Participate in financial planning and management of public health units.			R	R	R			R	R
7A1. Describe the local, state, and federal public health and health care systems			R	R	R			R	P
7A2. Describe the organizational structures, functions, and authorities of local, state, and federal public health agencies			R	R	R			R	P
7A3. Adhere to the organization's policies and procedures			R	R	R				R
7A4. Participate in the development of a programmatic budget			R	R	R				
7A5. Operate programs within current and forecasted budget constraints			R	R	R				
7A6. Identify strategies for determining budget priorities based on federal, state, and local financial contributions			R	R	R			R	R
7A7. Report program performance			R	R	R				R
7A8. Translate evaluation report information into program			R	R	R				R

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
performance improvement action steps									
7A9. Contribute to the preparation of proposals for funding from external sources			R	R	R				
7A10. Apply basic human relations skills to internal collaborations, motivation of colleagues, and resolution of conflicts			R	R	R				R
7A11. Demonstrate public health informatics skills to improve program and business operations			R	R	R				R
7A12. Participate in the development of contracts and other agreements for the provision of services			R	R	R				
7A13. Describe how cost- effectiveness, cost-benefit, and cost-utility analyses affect programmatic prioritization and decision making			R	R	R				R
Competency 8. Exercise public health leadership and systems thinking.	R		R	R	R	R		P	R
8A1. Incorporate ethical standards of practice as the basis of all interactions with organizations, communities and individuals	P		R	R	R			P	R
8A2. Describe how public health operates within a larger system			R	R	R			R	R
8A3. Participate with stakeholders in identifying the public health values and a shared public health	R		R	R	R			R	

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
vision as guiding principles for community action									
8A4. Identify internal and external problems that may affect the delivery of Essential Public Health Services	R		R	R	R			R	P
8A5. Use individual, team and organizational learning opportunities for personal and professional development			R	R	R				
8A6. Participate in mentoring and peer review or coaching opportunities			R	R	R				
8A7. Participate in the measuring, reporting and continuous improvement of organizational performance			R	R	R				R
8A8. Describe the impact of changes in the public health system, and larger social, political, economic environments, or organizational practices			R	R	R			R	P
Competency 9. Respond to public health issues in rural settings.	P	P	R	R	R			P	R
9A1. Define and distinguish between urban, rural and frontier areas	R	R	R	R	R			R	
9A2. Identify the common demographic characteristics or rural and frontier areas and their implications for provisions of public health services	R	R	R	R	R			P	R

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
9A3. Identify the common social and economic characteristics of rural and frontier areas and their implications for provisions of public health services	R	P	R	R	R			P	R
9A4. Describe the common ethical considerations of rural and frontier areas and their effect on the relationships between consumers, healthcare providers, the population of the area, and the provisions of public health services	Р	R	R	R	R			P	
9A5. Identify the common political attributes of rural and frontier areas and their implications for provisions of public		P	R	R	R			R	R
9A6. Describe common public health workforce issues associated with rural and frontier areas and their implications for provisions of public health services	R	P	R	R	R			R	
9A7. Explain the challenges of public health planning and preparedness for rural and frontier areas, including the need for and role of mutual aid agreements, and the implications of such challenges for provisions of public health services	Р	Р	R	R	R			R	R
9A8. Explain the common characteristics of healthcare delivery systems in rural and frontier areas and their implications	R	Р	R	R	R			R	R

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
for provisions of public health									
9A9. Describe the common communication challenges associated with living in rural and frontier areas and their implication for provision of public health services	R	P	R	R	R			P	
9A10. Utilize basic statistical skills to reason effectively about problems associated with the populations of low density and widespread geographic dispersion		Р	R	R	R				
Competency 10. Use global insight in responding to local public health issues.	R	Р	R	R	R	R	P	R	R
10A1. Gather, integrate and analyze rural and global evidence		P	R	R	R		R	R	
10A2. Demonstrate sensitivity and genuine respect for a multiplicity of values, beliefs, traditions, experiences and feelings of satisfaction or distress stemming from social circumstances in global and rural settings		Р	R	R	R			P	
10A3. Bring together diverse and global ideas to solve local rural problems in innovative ways	R	Р	R	R	R			P	R
10A4. Understand how to work with language differences, sometimes through interpreters, while appreciating broader communication differences		P	R	R	R			R	

Core Competencies P=Primary, R=Reinforcing	PUBH 570: Ethical Issues in Public Health	PUBH 580: Rural Health Issues Global Context	PUBH 591: Practicum	PUBH 593: Professional Portfolio	PUBH 599: Professional Paper	PUBH 511: History & Theory of Epi	PUBH 515: PH Genetics	PUBH 525: Multi- Cultural and NA PH	PUBH 595: Issues in Maternal & Child Health
10A5. Work on multifunctional, diverse teams to accomplish tasks in rural settings		P	R	R	R			R	
10A6. Understand global public health issues and practices		P	R	R	R	R		R	R
10A7. Use an understanding of global public health issues and practices to inform local public health practices in rural settings		P	R	R	R			R	R

 $Table \ 2.6.c(2). \ PhD \ courses \ and \ other \ learning \ experiences \ by \ which \ the \ competencies \ are \ met.$

Core Competencies P=Primary, R=Reinforcing	PUBH 595: Research Rotations in PH	PUBH 595: Qualitative Research Methods	PUBH 595: Advanced Quantitative Methods 1	PUBH 595: Advanced Quantitative Methods 2
Competency 1. Develop and exhibit a strong background in the five core areas of public health.	R	P	P	P
1.1. Gain knowledge of the methods used to address the direct and indirect human, ecological and safety effects of major environmental and occupational agents.	R			
1.2. Demonstrate ability to apply epidemiologic methods and principles of study design to address questions of public health importance.	R		P	P
1.3. Identify the main components and issues of the organization, financing and delivery of health services and public health systems in the U.S.	R	R		
1.4. Develop skills to apply biostatistical methods to public health research, interpret results, and communicate findings.	R		P	Р
1.5. Describe how the public health information infrastructure is used to collect, process, maintain, and disseminate data.	R		R	R
1.6. Apply knowledge of theories, concepts and models from a range of social and behavioral disciplines that are used in public health research.	R			
1.7 Achieve mastery of specific content areas related to dissertation research.	R	P		
Competency 2. Apply public health research skills to complex problems.	R	P	P	P
2.2. Develop novel research questions with public health impact.	R	P	P	P
2.3. Explain how the specific content areas of the dissertation research is related to a multidisciplinary approach to achieving public health goals.	R	R		
2.4. Advance the field of public health through original research.	R	P	R	R
Competency 3. Develop and practice strong leadership and communication skills in the research setting.	R	P	R	R
3.1. Describe and demonstrate the attributes of leadership in public health.	R			
3.2. Engage in dialogue and learning from diverse stakeholders to advance public health goals.	R	P		
3.3. Teach effectively in courses as well as in informal settings.	R	P		
3.4. Communicate well both orally and in writing.	R	P	P	P
3.5. Take initiative and achieve objectives with a high degree of independence.	R	P	R	R
3.6. Demonstrate transparency, integrity, and honesty in all actions.	R	P	R	R
3.7. Ensure the ethical and responsible conduct of research.	R	P	R	R

2.6.d. Analysis of the completed matrix included in Criterion 2.6.c. If changes have been made in the curricula as a result of the observations and analysis, such changes should be described.

Since our MPH competencies are met through the current curriculum (as illustrated in **Table 2.6.c(1)**, no curricula changes have been recently made. Regarding **Table 2.6.c(2)**, since the listed required classes will be taught for the first time in Spring and Fall 2017, respectively, we will ensure that these classes meet the three new PhD competencies. It should also be noted that PhD students will have flexibility in taking many more classes both within and outside of our program as electives. These additional classes will also likely reinforce the three competencies identified in our new PhD program.

2.6.e. Description of the manner in which competencies are developed, used and made available to students.

Prior to our program's 2011 CEPH self-study submission, we originally had seven broad domains (and 72 competencies) that were developed using the core Association of Schools of Public Health (ASPH) competencies. Since then, and under the direction of our Steering and Research Committees, we have identified ten competencies (and multiple sub-competencies) that more accurately reflect the targeted instruction for our students.

Over a two-year period from 2012-2014, and again in Spring 2017, instruction faculty reviewed their courses to ensure that course content addressed the competencies in meeting learning outcomes. Specifically, instructors identified how their course content contributed to the ten competencies, with final results of this exercise presented in **Tables 2.6.c(1). and 2.6.c(2).** For any new classes proposed (MPH or PhD), we also ask that the instructors review our current competencies so they can be integrated into their courses.

Our program competencies are made available to students in a variety of ways, including a listing on the program's website (http://health.umt.edu/publichealth/1about-us/Program%20Competencies/default.php). Identified course competencies can be listed in the syllabus of each course, ensuring clear alignment between each competency and assessment. Students also complete a competency checklist upon both admission and graduation, allowing for a self-evaluation of what (and how well) they have learned. A copy of both the Pre- and Post-Assessments are provided in the **ERF** (2.6. Pre-assessment for students, and 2.6. Post-assessment for students). For the new PhD program, the SPCHS Chair developed the three supplemental core competencies (and sub-competencies) with input from the other program faculty / Steering Committee.

2.6.f. Description of the manner in which the program periodically assesses changing practice or research needs and uses this information to establish the competencies for its educational programs.

By staying engaged with the major organizations that support public health both locally and nationally, our program strives to be proactive in assessing the changing needs of public health practice, and reflecting that in our program offerings. As the evolving needs of public health practice become evident (such as those related to global health, climate change, emerging infectious diseases, etc.), they are integrated into the competency list of the program following review and input from faculty. For example, as mentioned above in **Criterion 2.6.e**, course instructors recently conducted a comprehensive review of their classes to ensure that current and relevant program competencies were adequately addressed in their classes.

The composition of our EAC is a good example of our commitment to periodically assessing the changing practice of public health. Our EAC is composed of members representing local health departments (Leahy), state health departments (Harwell), tribal college and Native American interests (Graham), public schools/non-profits (Hovenkotter), and Executive Director Weir of the MPHA. All are active public health practitioners in our state, and three are alumni of our program. We actively solicit feedback from this group in an effort to ensure our program competencies are up to date. Also, working professionals compose a large part of our student cohort. As such, they provide us feedback on workforce needs that are incorporated into program offerings.

2.6.g. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths

Using the core ASPH competencies, we originally had seven broad domains (and 72 competencies) prior to our program's 2011 CEPH self-study submission. Since then, and under the direction of our Steering and Curriculum Committees, we have updated our original domains by identifying ten competencies (and multiple sub-competencies) that more accurately reflect the targeted instruction for our students. As demonstrated in **Tables 2.6.c(1). and 2.6.c(2).**, course instructors also completed a comprehensive review to ensure that course content addressed these ten competencies in meeting learning outcomes across our program.

Weaknesses

Although we recently reviewed our competencies, the program needs a more systematic process for overall review and evaluation. We have encouraged instructors to review the program competencies each time they teach a course to ensure they meet student needs in mastering the program competencies. Specifically, instructors will review the list of competencies/sub-competencies (both MPH and PhD if applicable) to determine how they map to their courses and

assessment data to ensure that the competencies are being met. The program's move towards adopting the 2016 accreditation standards will be another occasion to conduct a complete review of the mapping of the course content to the new competencies. This will be an excellent opportunity for our faculty to re-align their courses and assessment practices to the new competencies.

Our standing Committees will also serve a role in ensuring the effectiveness of our overall course offerings. For example, during Fall 2016, the Curriculum Committee finalized a comprehensive review of the approved electives for our program, identifying classes across our campus (both online and in-person) that align with the SPCHS goals, objectives, and competencies. Following the conclusion of our current re-accreditation efforts, the Steering Committee will be taking a lead role in bringing our program up to date with the 2016 CEPH standards. Faculty members have already attended two webinars on the 2016 standards in preparation. Finally, the Chair (in consultation with the Chair of the Curriculum Committee) will review course offerings prior to being taught each semester to ensure they meet the needs of the program. If needs or problems are identified by the Chair, they will be addressed at the Steering and Curriculum Committee levels. Implementing a more systematic review of our course offerings (and ensuring they meet our competencies) will identify any deficits so that courses or assessments within courses can be marked for redevelopment or revision in a timely fashion.

- 2.7. Assessment Procedures. There shall be procedures for assessing and documenting the extent to which each student has demonstrated achievement of the competencies defined for his or her degree program and area of concentration.
- 2.7.a. Description of the procedures used for monitoring and evaluating student progress in achieving the expected competencies, including procedures for identifying competency attainment in practice and culminating experiences.

The following evaluation processes are utilized throughout the MPH curriculum to assess student performance of the stated competencies in the program:

- Oral presentations.
- Written reports and discussion board postings.
- Written examinations.
- Professional paper.
- Practicum activity and defense.
- Professional portfolio and defense.
- Faculty observation of performance.
- Review of students with academic problems by the Chair.

For the PhD program, the following evaluation processes are utilized to assess student performance of the stated program competencies:

- Oral presentations.
- Written reports.
- Written examinations.
- Faculty observation of performance.
- Successful completion of comprehensive qualifying exams (both written and oral).
- Impact and quality of research.

When students enter the MPH program, they complete a pre-program self-assessment of program competencies. To evaluate student progress in achieving competency attainment, a post-program assessment of program competencies is completed when they graduate. Please see 2.6.e. Preassessment for students and 2.6.e, Post-assessment for students in the ERF. During the program, student performance is evaluated in each course as articulated in individual course syllabi. Individual faculty members determine the timing of these evaluation processes as described in course syllabi. Beyond the courses, various procedures are used for monitoring and evaluating student progress in achieving expected competencies. For the MPH program, these include evaluation of performance by the field placement supervisors in Practicum placements and by the Practicum committees, the formal written reports and defenses, evaluation by the supervising faculty member of the written Professional Paper product, and Portfolio assessments in terms of the formal written reports and oral defenses. The most important summary assessment is in the presentation and defense of the Portfolio and the review/evaluation of the Portfolio from the three-person committee. Here the emphasis is on how well the student can identify and articulate the ten essential services and the core and interdisciplinary competencies of public health, based on both academic and personal experiences while in the program, and

future career goals. For the PhD students, the five-person Advisory Committee (led by the Research Advisor) will support and monitor progress of the student throughout the PhD program. The dissertation defense will serve as the final assessment.

2.7.b. Identification of outcomes that serve as measures by which the program will evaluate student achievement in each program, and presentation of data assessing the program's performance against those measures for each of the last three years. Outcome measures must include degree completion and job placement rates for all degrees included in the unit of accreditation (including bachelor's, master's and doctoral degrees) for each of the last three years. See CEPH Data Templates 2.7.1 and 2.7.2. If degree completion rates in the maximum time period allowed for degree completion are less than the thresholds defined in this criterion's interpretive language, an explanation must be provided. If job placement (including pursuit of additional education), within 12 months following award of the degree, includes fewer than 80% of graduates at any level who can be located, an explanation must be provided.

Table 2.7.b(1) presents the number of students entering and graduating from our MPH program for the years 2010-2011 through 2016-2017, while **Table 2.7.b(2)** presents the job placement rates for our MPH program between 2012-2013 and 2014-2015.

Table 2.7.b(1). Students in MPH program, by cohorts entering between 2010-2011 and 2016-2017.

	Cohort of Students	2010-	2011-	2012-	2013-	2014-	2015-	2016-
		2011	2012	2013	2014	2015	2016	2017
2010- 2011	# Students entered	11						
	# Students withdrew, dropped, etc.	1						
	# Students graduated	0						
	Cumulative graduation rate	0.0%						
2011- 2012	# Students continuing at beginning of this school year	10	9					
	# Students withdrew, dropped, etc.	0	0					
	# Students graduated	0	0					
	Cumulative graduation rate	0.0%	0.0%					
2012- 2013	# Students continuing at beginning of this school year	10	9	20				
	# Students withdrew, dropped, etc.	0	0	2				
	# Students graduated	2	2	0				
	Cumulative graduation rate	18.2%	22.2%	0.0%				
2013- 2014	# Students continuing at beginning of this school year	8	7	18	13			
	# Students withdrew, dropped, etc.	0	0	2	1			
	# Students graduated	3	3	0	0			
	Cumulative graduation rate	45.5%	55.5%	0.0%	0.0%			

	Cohort of Students	2010-	2011-	2012-	2013-	2014-	2015-	2016-
		2011	2012	2013	2014	2015	2016	2017
2014- 2015	# Students continuing at beginning of this school year	5	4	16	12	11		
	# Students withdrew, dropped, etc.	0	0	0	0	2		
	# Students graduated	2	0	3	2	0		
	Cumulative graduation rate	63.6%	55.5%	15.0%	15.4%	0.0%		
2015- 2016	# Students continuing at beginning of this school year	3	4	13	10	9	12	
	# Students withdrew, dropped, etc.	0	0	0	1	1	0	
	# Students graduated	2	2	7	1	1	0	
	Cumulative graduation rate	81.8%	77.7%	50.0%	23.1%	9.1%	0.0%	
2016- 2017	# Students continuing at beginning of this school year	1	2	6	9	8	12	9
	# Students withdrew, dropped, etc.	0	0	0	0	0	0	0
	# Students graduated	1	1	2	0	0	0	0
	Cumulative graduation rate	90.1%	88.9%	60.0%	23.1%	9.1%	0.0%	0.0%

Table 2.7.b(2). Destination of graduates by employment type.

		2012- 2013	2013- 2014	2014- 2015
Employed		8	10	7
Continuing education/training (not employed)		0	0	0
Actively seeking employment		0	1	0
Not seeking employment (not employed and not continuing education/training, by choice)		0	0	0
Unknown		2	0	0
T	otal	10	11	7

Please note that our first group of four PhD students entered the program in Spring 2017. Therefore, withdraw and/or graduation data (**Table 2.7.b(1**)) as well as job placement rates (**Table 2.7.b(2**)) are not yet available for this cohort. In addition, it should be noted that the maximum time to graduation for MPH and PhD students is six years.

2.7.c. An explanation of the methods used to collect job placement data and of graduates' response rates to these data collection efforts. The program must list the number of graduates from each degree program and the number of respondents to the graduate survey or other means of collecting employment data.

To date, we have primarily utilized two different methods of collecting information on the job placements of our graduates. The first method includes a survey that has been sent to our alumni annually. In the last five years, we have emailed this survey to approximately 30 of our MPH alumni, resulting in a poor response rate (<10%). To address this weakness, we have overhauled our alumni survey to make the process easier for the alumni and more informative for our program. Now, instead of an emailed survey, we send our alumni a link to a Qualtrics online

survey (see 2.7.c. 2017 Qualtrics alumni survey in the ERF). Our most recent alumni survey campaign, which was carried out in February/March 2017, has resulted in an 89.7% response rate, and has generated some useful feedback for our program. Alumni survey results from the Spring 2017 campaign are included in the ERF (2.7.c. 2017 alumni survey results).

Secondly we carry out an exit interview during the defense of the MPH Portfolio capstone. This method has been successful in tracking the future employment plans of our graduating students. Informally, many of our faculty and staff keep in touch with alumni after they graduate. Oftentimes, they are our colleagues on research and/or professional development projects throughout Montana and in our region.

2.7.d. In fields for which there is certification of professional competence and data are available from the certifying agency, data on the performance of the program's graduates on these national examinations for each of the last three years.

This section is not applicable.

2.7.e. Data and analysis regarding the ability of the program's graduates to perform competencies in an employment setting, including information from periodic assessments of alumni, employers and other relevant stakeholders. Methods for such assessment may include key informant interviews, surveys, focus groups and documented discussions.

During the summer of 2012, we began to collect information from our students' employers through an annual employer survey (see 2.7.e. Employer survey in the ERF) which was emailed to them. Response rates to these surveys have historically been poor, but we did receive a small response in both 2012 (n=2) and 2014 (n=6). Both of these reports are found in the ERF (see 2.7.e. 2012 Employer survey results and 2.7.e. 2014 Employer survey results).

In addition to the alumni survey described in **Criterion 2.7.c.**, we also assess the ability of our graduates to perform competencies in an employment setting through their Practicum experience. As described in **Criterion 2.4.a.**, upon completion of the Practicum, Site Mentors complete an evaluation form (see the 2.4.a. Practicum site mentor evaluation form in the ERF) to evaluate the student's performance on Practicum objectives and overall Practicum performance. Practicum are typically conducted at the end of the student's MPH program, so we believe their performance in this setting is an indicator of long term performance of competencies in an employment setting. To date, the site mentors have been uniformly positive about the ability of the MPH students to effectively perform the public health competencies in a practice setting.

2.7.f. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

Strengths

As evidenced by **Table 2.7.b(1).**, cumulative graduation rates are high for the earlier years in which data was collected and tracked (2010-2011, 90.1% and 2011-2012, 88.9%), but as expected begins to drop off as we get closer to the present: 2012-2013 (60.0%), 2013-2014 (23.1%), 2014-2015 (9.1%), 2015-2016 (0.0%), and 2016-2017 (0.0%). These data suggest that students entering our program have a high success rate of graduating with their MPH. As evidenced by **Table 2.7.b(2).**, it is also important to note that our graduates are successfully employed following graduation with their MPH.

Once students leave our program, we have utilized surveys sent to their personal email account on file to keep track of where they go following graduation. As Montana is a large state with a fairly small public health network of professionals, informal procedures such as "word-of-mouth" also helps in tracking the students once they graduate. Once located, we utilize Alumni and Employer Surveys as a way of assessing the ability of our program's graduates to perform competencies in an employment setting.

Weaknesses

Although we have attempted to disseminate surveys to our alumni and employers in past years, we have typically received a very poor response rate on these evaluation surveys. Perhaps the low response rate was due to the cumbersome survey methods, inconsistent frequency in which we sent these out, and limited follow-up strategies. We intended to have annual mailings, but have not been successful in keeping to this timeline.

In an effort to gather useful feedback from our alumni, we have revised the alumni survey into a Qualtrics online format (see 2.7.c. 2017 Qualtrics alumni survey in the ERF). We disseminated this updated survey in early Spring 2017, and received responses from 35 out of 39 MPH students that graduated within the last five years (89.7% response rate). The survey responses have generated some useful feedback for our program. Our next assessment goal will be to improve our methods to collect information from employers by updating our employer survey. During our February 28, 2017 faculty meeting, we developed a plan to utilize a broader array of data collection methods such as focus groups and key informant interviews. This process will include meeting with UM's Career Services to explore resources that are already utilized at the University level. We are targeting late Spring 2017 for launching this information gathering process with employers, and will repeat the process every two years thereafter.

We will also continue to actively reach out to our graduates and their employers via other mechanisms, including social media strategies such as LinkedIn, Facebook, and Twitter. To date, our SPCHS Facebook page (https://www.facebook.com/umtpublichealth/) has been a great way of engaging with our alumni, and we are getting excellent feedback from our constituents.

2.8. Bachelor's Degrees in Public Health. If the program offers baccalaureate public health degrees, they shall include the following elements:

Required Coursework in Public Health Core Knowledge: students must complete courses that provide a basic understanding of the five core public health knowledge areas defined in Criterion 2.1, including one course that focuses on epidemiology. Collectively, this coursework should be at least the equivalent of 12 semester-credit hours. Elective Public Health Coursework: in addition to the required public health core knowledge courses, students must complete additional public health-related courses. Public health-related courses may include those addressing social, economic, quantitative, geographic, educational and other issues that impact the health of populations and health disparities within and across populations.

Capstone Experience: students must complete an experience that provides opportunities to apply public health principles outside of a typical classroom setting and builds on public health coursework. This experience should be at least equivalent to three semester-credit hours or sufficient to satisfy the typical capstone requirement for a bachelor's degree at the parent university. The experience may be tailored to students' expected post-baccalaureate goals (e.g., graduate and/or professional school, entry-level employment), and a variety of experiences that meet university requirements may be appropriate. Acceptable capstone experiences might include one or more of the following: internship, service-learning project, senior seminar, portfolio project, research paper or honors thesis. The required public health core coursework and capstone experience must be taught (in the case of coursework) and supervised (in the case of capstone experiences) by faculty documented in Criteria 4.1.a and 4.1.b.

Please note that the University of Montana SPCHS does not currently offer a Bachelor's Degree in Public Health.

2.8.a. Identification of all bachelor's-level majors offered by the program. The instructional matrix in Criterion 2.1.a. may be referenced for this purpose.

Not applicable.

2.8.b. Description of specific support and resources available in the program for the bachelor's degree programs.

Not applicable.

2.8.c. Identification of required and elective public health courses for the bachelor's degree(s).

Not applicable.

401 A 1		1		1	4
z.x.a. A descri	ntion of progran	i policies and	procedures reg	arding the ca	pstone experience.
	prom or program	- policies alla	procedures reg	ar aring one ca	potome emperiemee.

Not applicable.

2.8.e. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

Not applicable.

- 2.9. Academic Degrees. If the program also offers curricula for graduate academic degrees, students pursuing them shall obtain a broad introduction to public health, as well as an understanding about how their discipline-based specialization contributes to achieving the goals of public health.
- 2.9.a. Identification of all academic degree programs, by degree and area of specialization. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

As noted in **Criterion 2.1.a**, our MPH program is a professional degree program. However, in Spring 2017 we launched a PhD in Public Health academic degree program.

2.9.b. Identification of the means by which the program assures that students in academic curricula acquire a public health orientation. If this means is common across the program, it need be described only once. If it varies by degree or specialty area, sufficient information must be provided to assess compliance by each.

Students in the PhD in Public Health program will be expected to take a total of 90 credit hours, consisting of 52 total didactic credits and 38 total research/dissertation credits. The proposed PhD program course sequence can be found on our website: http://health.umt.edu/publichealth/3current-students/phd-program-curriculum.php.

With guidance from the student-selected Research (faculty) Advisor, students will gain knowledge in the five core areas of Public Health (biostatistics, epidemiology, environmental health sciences, health services administration, and social and behavioral sciences). As part of their research training, students will also be able to take specific electives in support of their research interests. A listing of the suggested electives for the PhD in Public Health program is provided at the aforementioned website, and includes classes from the SPCHS as well as classes offered in other departments across campus. It is the responsibility of the student's Advisor and the (student-selected) five-member Advisory Committee to ensure that the student gets a broad introduction to public health (especially classes in epidemiology) as part of their training through coursework.

2.9.c. Identification of the culminating experience required for each academic degree program. If this is common across the program's academic degree programs, it need be described only once. If it varies by degree or specialty area, sufficient information must be provided to assess compliance by each.

PhD students will conduct a dissertation as the culminating experience, with a public presentation of the results of dissertation work occurring as the final experience for the doctoral degree. Following the public presentation, the student's five-member Advisory Committee will meet with the student to discuss the dissertation. A committee member other than the Research (faculty) Advisor will be nominated by the Committee to direct the examination/defense. A student will pass with only one negative vote with the remaining Committee members judging

the performance to be satisfactory. In case of failure, one repeat examination is permitted. The examination/defense relates to both the dissertation and to the content of the discipline.

2.9.d. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths

The SPCHS offers the only PhD in Public Health program in the state of Montana. We successfully launched the PhD program in January 2017 with our first cohort of four PhD candidates. Importantly, we received CEPH accreditation for our doctoral program in December 2016. Under the guidance of the student-selected Research (faculty) Advisor and five-member Advisory Committee, each student will receive a strong foundation in the five core disciplines of public health through their coursework. Through required courses in their first year, students will also receive a strong foundation in both Quantitative and Qualitative Research Methods, as well as statistics. Students will be encouraged to take PUBH 510 (Epidemiology) and our other Epidemiology offerings when appropriate.

Research opportunities for the students will depend on which research group they are mentored by. As highlighted in **Criterion 3.1**, there are several active research projects within SPCHS. Importantly, we have also engaged the state health department (DPHHS) through a Memorandum of Understanding to identify research projects of interest that improve the health of Montanans. We look forward to exploring potential projects with DPHHS when our students are ready to begin their research activities.

Weaknesses

As our inaugural cohort of students go through the program, we will learn more about how to ensure that they acquire a comprehensive public health education through their supporting coursework.

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

The University of Montana's SPCHS is offering a new PhD in Public Health program which began in Spring 2017. This generalist degree launched with its first class of four students in Spring 2017. An additional (up to) five students will be accepted into the program in Fall 2017.

2.10.a. Identification of all doctoral programs offered by the program, by degree and area of specialization. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

As presented in **Table 2.1.a**, the PhD in Public Health is a generalist on-campus degree, with a strong academic (research-based) focus.

2.10.b. Description of specific support and resources available to doctoral students including traineeships, mentorship opportunities, etc.

PhD students entering the program will not have guaranteed support (annual stipends), though we do intend to pay their tuition and fees as needed (please note that one of our current PhD students has a tuition waiver as she is an employee of the University of Montana, while a second PhD student has a tuition waiver through her GI Bill). Some students will reside in research groups that have grant funding, while others will not. However, each student will have a strong traineeship program under the direction of a Research Advisor and a five-person Advisory Committee. This structure will provide for a comprehensive mentorship program throughout the duration of their stay at the University of Montana until they graduate with their PhD in Public Health.

2.10.c. Data on student progression through each of the program's doctoral programs, to include the total number of students enrolled, number of students completing coursework and number of students in candidacy for each doctoral program.

Table 2.10. Doctoral student data for 2017.

	Doctoral degree
# newly admitted in 2017	4
# currently enrolled (total) in 2017	4
# completed coursework during 2016	
# advanced to candidacy (cumulative) during 2016	
# graduated in 2016	

Since the PhD in Public Health program started in January (Spring semester) 2017, we have not yet graduated any PhD students. Our first cohort included four students, and will be followed by an additional (up to) five students in Fall 2017.

2.10.d. Identification of specific coursework, for each degree, that is aimed at doctoral-level education.

A comprehensive description of our PhD in Public Health program is summarized on our website and within the student handbook (see 1.1.f. SPCHS student handbook in the ERF), including the proposed PhD Plan of Study:

http://health.umt.edu/publichealth/3current-students/phd-program-curriculum.php. Students in the PhD in Public Health program will be expected to take a total of 90 credit hours, consisting of 52 total didactic credits and 38 total research/dissertation credits. A listing of the approved electives for the PhD program is also provided on the website, and includes classes from the SPCHS as well as classes offered in other departments that focus on the five core disciplines in public health.

2.10.e. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths

SPCHS will be offering the only PhD in Public Health in the state of Montana. We are currently working with our first group of four students that began the program in January 2017. As noted in **Criterion 2.9**, each student will receive a strong foundation in the five core disciplines of public health through their coursework under the guidance of their Advisor and five-member Advisory Committee. Our coursework will not rely extensively on our master's-level offerings. New courses have been developed for our PhD students that they are taking in the Spring 2017 semester (Qualitative Research Methods class (PUBH 595) and Research Rotations (PUBH 595)), while additional classes are being developed for Fall 2017/Spring 2018 (Quantitative Methods I and II). Syllabi for the Qualitative Research Methods and the Research Rotations classes are included in the ERF (**1.8.b. Course syllabi**). We have also identified multiple graduate-level classes in other departments at UM that can be used for students' electives. Importantly, these classes were identified by the Curriculum Committee during the Fall 2016 semester, and are listed on the SPCHS website:

http://health.umt.edu/publichealth/3current-students/mph-cph-curriculum/electives.php.

Research opportunities for the students will depend on which research group they are mentored by. As highlighted in **Criterion 3.1**, there are several active research projects within SPCHS. Importantly, we have also engaged the state health department (DPHHS) through a Memorandum of Understanding to identify research projects of interest that improve the health of Montanans.

Weaknesses

As our PhD in Public Health program is just starting out, there are several weaknesses we need to address. One weakness is that we currently do not have funding to support a large number of graduate students. Thus far, some students in our first cohort have entered research groups that have grant funding. We are encouraged in that we have been approached by other research groups on campus that are interested in funding a PhD Public Health graduate student, including researchers from the University of Montana Rural Institute as well as our Dean's Office in the College of Health Professions and Biomedical Sciences. It is also important to note that two students in our first cohort have their tuition paid for: one through a University of Montana employee tuition waiver and the other with a GI Bill. There will also likely be opportunities for PhD students to receive Teaching Assistant stipends to teach in MPH/CPH courses in the next couple of years, while Native American students will be covered through an Endowment grant in the CHPBS Dean's Office. We will also be seeking opportunities to submit training grants through the National Institute of Health, with the Centers for Biomedical Research Excellence (CoBRE) a specific mechanism we are targeting. For our first (Spring 2017) and proposed second (Fall 2017) student cohorts, it is important to note that we will have funding to support these students. We will make every effort to ensure that students accepted into the PhD program will have their tuition and fees covered, with options available to the student for covering their annual stipends.

Another weakness is the overall lack of in-person classes we have dedicated to the PhD students. For the Spring 2017 semester, we have developed a Qualitative Research Methods class (PUBH 595) and a Research Rotations (PUBH 595) class. For Fall 2017/Spring 2018, we will develop and deliver Quantitative Methods I and II classes. PhD students will also have the opportunity to take some of our existing online MPH classes, as well as other classes on campus identified by the SPCHS that enhance the training of public health students. As more PhD students enter our program and generate more program tuition, this will allow us to hire teaching faculty that will in turn offer new, in-person classes (within SPCHS) for our PhD students to complement our current offerings.

Another weakness is that because our program is brand new, we will likely not attract the higher caliber public health students compared to other well-known universities offering similar doctoral degrees. We expect that as our program matures, we will begin to attract higher caliber, more competitive students. We will actively market our new PhD program where/when opportunities present themselves, including the annual MPHA meeting (like we did at the MPHA annual conference in Helena, MT (September 26-28, 2016)) as well as at relevant national and international meetings.

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

Not applicable. The UM MPH program does not offer joint degree programs at this time.

2.11.a. Identification of joint degree programs offered by the program. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

Not applicable.

2.11.b. A list and description of how each joint degree program differs from the standard degree program. The program must explain the rationale for any credit-sharing or substitution as well as the process for validating that the joint degree curriculum is equivalent.

Not applicable.

2.11.c. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

Not applicable.

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

2.12.a. Identification of all degree programs that are offered in a format other than regular, on-site course sessions spread over a standard term, including those offered in full or in part through distance education in which the instructor and student are separated in time or place or both. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

The UM MPH program is a generalist program with all core courses offered fully online in a standard semester format. There are some options for students to take on-campus electives. In addition, students complete a face-to-face practicum under the guidance of an approved site mentor at an approved practicum site.

2.12.b. Description of the distance education or executive degree programs, including an explanation of the model or methods used, the program's rationale for offering these programs, the manner in which it provides necessary administrative and student support services, the manner in which it monitors the academic rigor of the programs and their equivalence (or comparability) to other degree programs offered by the program, and the manner in which it evaluates the educational outcomes, as well as the format and methods.

Description of the distance education or executive degree programs. Currently our campus-wide learning management system for distance instruction is the internet-based Moodle system. Moodle supports student-content, student-student, and student-instructor interactions through a suite of communication and learning tools including email, asynchronous threaded discussions, synchronous chat rooms, virtual office hours, and learning units. Another tool, used with some frequency for synchronous communication components of our online MPH program, is the web conferencing system Blackboard Collaborate. We regularly use Blackboard Collaborate for Practicum and Portfolio defenses and for real-time sharing of students' final class projects or reports, group activities (meetings or conferences), virtual office hours, advising sessions, and tutoring sessions.

Various technologies – especially computer, but also audio and video - are regularly employed to deliver the MPH distance education. In our program, the majority of distance education is asynchronous. This provides for a flexible structure within the standard fixed academic term that is particularly suited to meet the needs of working professionals. When synchronous distance education is used, it is used strategically.

For a "typical" online class, the students are provided with a syllabus at the beginning of the semester. Most of our classes use weekly discussion questions that prompt interactions with each other for discussion of posted responses. Deadlines for posting to each discussion board are typically implemented by the end of the week to encourage frequent interaction.

Some faculty members use video technology to record announcements and lectures into the classroom using Blackboard Collaborate. These learning sessions are recorded so students unable to attend live sessions may view them at their convenience. Other materials such as PowerPoints, news articles, and journal articles are frequently added to the learning activities to reinforce and enhance content from the required written materials, which include textbooks, upto-date peer-reviewed journal articles, and website materials. Several methods of asynchronous and synchronous methods are used for communication between the student and instructor and between students, including course messaging, institutional email, video chat, and telephone. Instructors are asked to respond to all messages within 24 hours.

Explanation of the model or methods used. Although our MPH program is a distance education program, it makes use of the standard semester-based (16 weeks) and summer school academic calendar at UM. That is, our distance education courses commence at the beginning of the week that face-to-face courses commence, course interactions and activities are spread over the standard term, and final exams are given over the same days as face-to-face course final exams (in the 16th week). Public health students are expected to devote the same amount of time and effort to our distance courses as they do to face-to-face courses.

The program's rationale for offering these programs. As a regional comprehensive university, one of UM's prime directives is to address the workforce needs of our rural region (Northern Rocky Mountains). As many of our students are working public health professionals with full time jobs, our distance-based learning program has been a successful platform to reach these regional students. The mission, values, and evaluation approaches of the program focus on online delivery. Because the program is online, it allows for greater flexibility for students and thus attracts a diverse student body.

The manner in which it provides necessary administrative and student support services.

The UMOnline Technical Support Team provides support for students and faculty working with Moodle. SPCHS faculty have available to them an extensive array of services provided by UMOnline to support our online course design, development, and implementation. Individual public health faculty members, supported by UMOnline, have developed strong expertise in computer-assisted learning and continue to upgrade their skills. As public health faculty teach courses, UMOnline provides assistance and information about Moodle through their website "Learning Guide for Instructors". The Guide allows our SPCHS faculty to access targeted

information at the moment of need by navigating from a launch page to the performance support content. UMOnline also provides ongoing technical support via telephone and e-mail. Our SPCHS faculty also benefit from UMOnline consulting, workshops and events (face-to-face, synchronous and asynchronous) on design and development of new courses or redesign of existing online courses. Topics typically include policies and procedures, barrier-free learning, online pedagogy, technology-enhanced learning, and Moodle instruction tools. It should be noted that our faculty recently engaged UMOnline to create a standardized Moodle shell for all of our online classes, which were fully implemented prior to the start of the Spring 2017 semester.

UMOnline provides help for new MPH students. MPH students have access to Moodle orientation sessions offered by UMOnline at the beginning of each semester that are open to students across the university. After logging in to Moodle using their NetID and password at http://umonline.umt.edu/ students may follow the link "Moodle 101 for Students." Information about how to contact the HelpDesk is included in every MPH course syllabus. If our MPH students are having trouble with technology, they can get help from the UMOnline Support Desk. Our students can access the Desk by calling a toll free number from 8:00 a.m. to 5:00 p.m. Monday through Friday. They can also access the Desk through e-mail. They can even use instant messaging, available on the Student tab of the UMOnline website.

If our MPH students need assistance with their writing, they can get help from the Writing Center at the University of Montana (http://www.umt.edu/writingcenter/). The Writing Center helps graduate students in all disciplines become more independent, versatile, and effective writers, readers, and thinkers. The Writing Center provides a distance-based environment where students can engage in supportive conversations about their writing and receive feedback on their works in progress. Their professional tutors help students at any point during a writing process and with any writing task. Finally, MPH faculty members preparing for online courses are encouraged to arrange for a virtual orientation session with the Distance Education Coordinator of the Mansfield Library regarding access to the Library's electronic research databases as appropriate for their courses. The Coordinator provides expertise on copyright issues and provides assistance to our faculty in using the electronic course review to make core and supplementary reading materials available to online students. If our MPH students need library assistance, they can get help from the university's "Chat with a Librarian" instant messaging service, via email, and via a toll free number during library hours. If our students need guidance and time management strategies for research papers and projects, they may visit the Research Planner. Distance Education Reference Services are also available to our students.

The manner in which it monitors the academic rigor of the programs and their equivalence (or comparability) to other degree programs offered by the program. Academic rigor in the MPH Program is monitored by the standing committees, including the Curriculum and Admission Committees and through feedback from the Steering Committee. High academic rigor and competency assessment is accomplished through assessment of student performance in the Capstone classes (Professional Paper, Practicum, and Portfolio), by input from regional employers of our graduates, and through evaluation of the academic credentials of students entering the program, as well as student academic performance within the program.

The Curriculum Committee takes an active role in assessing the design and content of the courses in the MPH program. With a goal of at least once every three years, the core courses in the MPH program are reviewed by the Curriculum Committee to ensure that they are academically rigorous, that content is current and relevant to the public health field, and that multiple learning modalities are incorporated to reach students with a wide variety of learning styles. The Curriculum Committee meets monthly each semester and can review courses (if that is the charge) and any proposed changes to the courses.

The manner in which it evaluates the educational outcomes, as well as the format and methods. Educational outcomes in our online MPH Program are monitored and evaluated as described above in which student acquisition of core competencies are used to measure programmatic success using curriculum, comprehensive examination, and culminating experience. Program faculty, appropriate committees and the Steering Committee routinely monitor these results which provide data on programmatic success in achieving the outcomes established for the program and each course.

At the end of each semester, the Chair routinely reviews the progress of each student. If a student is struggling with the program, the Chair will work with that student's advisor to engage that student, and put into a place a plan to bring that student back up to speed. We also work closely with UMOnline to ensure that our course deliverables meet the needs of our students. For example, our Faculty attended a training on best-teaching practices on two separate occasions during the Spring 2016 semester, working with their staff to learn the latest teaching methods regarding online and distance learning.

Our online MPH program follows established and rigorous UM policies and guidelines for academic oversight that are based on guidelines set up by the Board of Regents. Courses are evaluated by students each term through student evaluations (see the 2.12.b. Class evaluation survey instrument in the ERF), with the data collected anonymously. UMOnline staff compile the electronic results and sends the evaluations to the course instructor as well as the Chair. If problems are identified, the Chair determines the best course of action, including revising learning activities and/or assessment strategies for courses. Please note that student evaluations for our courses during the Spring, Summer, and Fall of 2016 are provided in the ERF (2.12.b. 2016 course evaluations).

The SPCHS Chair and the Curriculum and Steering Committees have the primary responsibility of identifying the courses that are taught (and who teaches them) each semester, making sure that they are at a level commensurate with on campus courses, and ensuring the currency of our program, courses and course materials. SPCHS ensures that instructor credentials are appropriate and that the subject matter and outcomes are equivalent.

2.12.c. Description of the processes that the program uses to verify that the student who registers in a distance education or correspondence education course or degree is the same student who participates in and completes the course or degree and receives the academic credit.

Our program has taken several measures to verify student identity for our distance-based programs. The University further recognizes that the United States Federal Higher Education Opportunity Act, Public Law 110-315, requires accrediting agencies to ensure institutions have processes through which the institution establishes that the student who registers in a distance education or correspondence education course or program is the same student who participates in and completes the program and receives the academic credit. To ensure the identity of our students, our program utilizes the following strategies:

A secure UserID login and password: Students must authenticate themselves by entering their unique UserID and password combination in order to access University information systems such as email, library databases, and related academic services. Students are responsible for maintaining the security of their usernames, passwords, and any other access credentials assigned to them. These may not be shared or given to anyone other than the user to whom they were assigned.

Administrative Procedures: As a student progresses through the admissions, registration, and payment processes of the University, personally identifiable information may be used to verify the identity of the student.

Photographs: We request each student to provide a recent photograph at the time of enrollment. The student's photograph is kept in their file and used to identify the student when an interactive visual telecommunication technology such as video conferencing is employed.

2.12.d. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

We believe that online learning is a strength for our program and for the University. It allows us to engage students in areas outside of Missoula, providing them with opportunities to continue their education from afar. As many of our students are working professionals, this gives our program a unique character and technical quality. As online and distance learning is becoming more and more popular at the University of Montana, our Administration has invested resources into our UMOnline program. This has enabled UMOnline to have the outstanding technical staff and training programs needed to fully support online programs such as our MPH program. Our SPCHS faculty have engaged with UMOnline on several professional development trainings in the last year, bringing new teaching techniques and strategies to our online classes in an effort to improve the overall learning experience for the students.

Weaknesses

Likely similar to other online programs throughout the United States, there is sometimes a disconnect when students are not in the same classroom. However, we strive to engage students through live presentations (where students can log on at the same time or attend the seminar in person), group projects, and field trips in communities where more than one student resides. For example, the PUBH 560 Environmental and Rural Health class has an annual field trip to the wastewater treatment plant that typically brings 10+ students together each spring. We will actively seek ways of engaging our students in meaningful ways that eliminate the disconnects of online learning.

Criterion 3: Creation, Application, and Advancement of Knowledge.

- 3.1 Research. The program shall pursue an active research program, consistent with its mission, through which its faculty and students contribute to the knowledge base of the public health disciplines, including research directed at improving the practice of public health.
- 3.1.a. Description of the program's research activities, including policies, procedures and practices that support research and scholarly activities.

Research is at the core of faculty at the University of Montana, with expectations for faculty to engage in research and creative activity that results in published works and presentations. A deeply rooted belief within the SPCHS is that strong, active faculty scholarship is integral to a high quality educational program in public health. Faculty members are encouraged to include students in the research activities whenever possible. Much of the research within SPCHS involves health disparities and population health, and is more comprehensively described in **Criterion 3.1.b.**

The University of Montana encourages and supports research through their strategic plans, mission and value statements. The UM Collective Bargaining Agreement (CBA) specifies the role of being "a scholar" as an aspect of academic responsibility. The CBA also outlines University-wide expectations for scholarly and creative accomplishment that are to be reflected in all Unit Standards. Specifically, the CBA indicates that general activities that "shall be given consideration in any evaluation for purposes of promotion, award of tenure, determination of salary increment, or recommendation for retention" should include: a) scholarly publication or creative works; b) participation in professional organizations or societies, receipt of awards in recognition of professional accomplishments, or speaking engagements related to one's professional field; and c) research efforts related to grants, contracts, direction of student research, or professional research efforts incident to publication. For promotion to Full Professor, a faculty member must have the necessary level of performance as defined in the CBA and Unit Standards in teaching competence, scholarship, creative activity, and service. However, no faculty member may be promoted to Full Professor on the basis of teaching and service alone.

At the University level, there are several policies/guidelines that support research activities, including those that relate to the following topics:

- Alleged Misconduct in Research and Creative Activities.
- Economic Development.
- Health Insurance Portability and Accountability Act (HIPAA).
- Indigenous People.
- Institutional Review Board for the Protection of Human Subjects.
- Receipt and Administration of External Funding.
- Research Base Policies.

These policies can be found at the following website: http://www.umt.edu/policies/Research%20Public%20Service/default.php

Several members within the SPCHS are currently involved with funded research, thus creating the need to develop a research support network within SPCHS to help facilitate both pre- and post-award activities. When submitting a grant through SPCHS, the faculty member will usually identify the research / funding opportunity. The faculty member will then meet with our SPCHS grants management specialist, Ms. Desirae Ware (please note that Ms. Ware is also a UM MPH alumni). Ms. Ware will support the faculty member with understanding what forms are needed for the submission, and help set up a timeline. She will also make contact with Mr. Tim Edwards (Budget Analyst, College of Health Professions and Biomedical Sciences) and Ms. Catherine Redfern (Sponsored Programs Specialist, Office of Research & Sponsored Programs) to communicate the timeline and help facilitate the budget discussions. Prior to submitting the grant, the faculty member will work closely with Ms. Ware and Ms. Redfern in developing the budget and then ultimately submitting the proposal (sometimes through an online submittal such as Grants.gov for the National Institute of Health, or paper submittals such as to Foundations). When grants are funded, the faculty member will work with Ms. Ware, Mr. Edwards, and Ms. Redfern to set up a working budget and timeline for submittal of progress reports and annual reports. The faculty member will also work closely with this support network to monitor expenditures throughout the duration of the grant.

The ability to recover a portion of research funding through indirect cost (IDC) recovery is an important part of increasing research capacity at the University of Montana. State-based departmental and collegiate budgets typically contain only modest state funds to support faculty research and creativity. **Figure 5** shows the breakdown of these funds once a grant is received at the University of Montana.

SPCHS Funding Indirect Funds Supertuition (from grant Foundation and State Funds awards) Department 73% to the (Unrestricted Operating Costs Vice Funds - none including faculty 27% to CHPBS Specific Gift Presidents obtained to salaries, staff Office of wages, supplies, date) Research 1/3 to SPCHS -1/3 to CHPBS budgeted at 1/3 to Principal Investigator Dean the discretion of the Chair

Figure 5. Research budget flow diagram.

University policy is to return 27% of IDCs to the CHPBS when a SPCHS faculty member receives a grant. This is then split between the CHPBS (1/3), SPCHS (1/3), and the Principal Investigator of the grant (1/3), each getting 9%. The funds allocated to the individual faculty member can be used to support research needs (equipment or other equipment that are not allocable to a specific project, etc.). The funds allocated to the SPCHS are typically used to support a variety of departmental research needs or enhancements including equipment acquisition, repair, service contracts, support for grant-related personnel, etc.

3.1.b. Description of current research activities undertaken in collaboration with local, state, national or international health agencies and community-based organizations. Formal research agreements with such agencies should be identified.

The SPCHS recently entered into a formal MOU with the state health department (DPHHS) which allows for the development of research activities, technical support of their staff, as well as Practicum and job networking opportunities for our students. Specifically, the following items are listed in the MOU:

- DPHHS and SPCHS will collaborate on developing public health research projects and practicum research opportunities for students enrolled in UM's MPH program.
- DPHHS, in collaboration with UM will assign DPHHS staff mentorship responsibilities for specific State public health projects and/or Practicum research projects involving UM MPH students.
- DPHHS staff with approval by their supervisor, will contribute to the MPH program as mentors, student research advisors, guest lecturers or through other mechanisms as the UM MPH program sees fit.
- Through a new UM PhD in Public Health program beginning in Spring 2017, PhD students will seek to engage DPHHS on research projects of interest to DPHHS by asking DPHHS staff to serve on research committees or to serve as research mentors on these projects.

SPCHS faculty members pursue community-based research activities consistent with the program mission and that fit their individual expertise and interests within public health. Examples of research activities of our core and program faculty members conducted under formal research agreements with health agencies and community-based organizations are briefly described below.

Dr. Annie Belcourt. Dr. Belcourt is funded through multiple grants including an Endowment grant intended to increase Native American faculty and research capacity at the University of Montana. With funding from the NIH (along with Noonan, Semmens, and Ward), she is engaged with population based research with tribes located in Montana, Idaho, and Arizona. These relationships are also supported through the Native American Center of Excellence in Pharmacy Practice funded by the Health Resources and Services Administration, the Montana Geriatric Education Center, and the JPB Foundation directed by the TH Chan Harvard School of Public Health. Her areas of expertise include mental health, posttraumatic stress, behavioral interventions, clinical psychology, qualitative and quantitative research methods with American

Indian communities, public health education development, environmental health, ethics, and psychotherapy.

Dr. Jean Carter. Dr. Carter has recently begun working with large claims databases that could lead to community-based interventions or further research related to healthcare and medication use or access in the future.

Dr. Ann Cook. At the National level, Dr. Cook was a Principal Investigator on the Research Participant Protection in Rural America 1R01HG005843-01 National Human Genome Research Institute (\$744,625). This study (completed 6/30/2015) explored the ethical conduct of clinical research by examining how physicians, nurses, research coordinators, and hospital administrators who conduct or engage in clinical research in rural healthcare settings address research ethics issues, especially the adequate protection of research participants. At the state level, Dr. Cook served as an Investigator/mentor with the Montana State University INBRE/COBRE grant projects from 2012-2016. On the regional level, Dr. Cook serves as Adjunct Professor, Department of Neuroscience/Internal Medicine, Sanford School of Medicine, Sioux Falls, SD. In this capacity, she serves as an ethics consultant and faculty for the ethics courses provided to the USD medical students.

Dr. Kari Harris. Much of Dr. Harris' research is focused on addressing health concerns of Montana residents, especially in Native American and rural communities. For example, Dr. Harris collaborates with Dr. Blakely Brown (UM Department of Health and Human Performance) to develop, implement and test community-based approaches to address childhood obesity. This research is funded by the United States Department of Agriculture and NIH—including a unique "conference series" grant (R13HD080904) that supports community and researcher collaboration to enhance youth fitness and healthy eating on the Flathead reservation. Dr. Harris' research includes agreements with Tribal Health and Salish Kootenai College. Nationally Dr. Harris' research is focused on tobacco cessation (R01 CA133068) and includes a secondary analysis (R15 CA186247) of data from Dr. Harris' completed major research award (R01 CA107191). Internationally Dr. Harris provides teaching and research assistance to schools of public health located in two communities in Ethiopia. Dr. Harris successfully negotiated two University-level Memorandum of Agreements. These efforts led to three MPH students completing their practicum projects in Ethiopia.

Dr. Curtis Noonan. At the national level, Dr. Noonan is funded through the NIH on multiple research projects with Native American and rural communities. At the international level, Dr. Noonan has contributed to the World Health Organization Indoor Air Quality Guidelines and participated in two international expert panel workshops on household air pollution and health (March 2014 in Brussels, Belgium and May 2015 in Denver, CO). Dr. Noonan also participated in a University of Montana delegation to Tohoku University in Sendai, Japan to develop collaborative opportunities for health research.

Dr. Tony Ward. At the local levels Dr. Ward recently completed a project working with Flathead County (Montana) Health Department to determine sources of air pollution in the Whitefish, MT valley airshed. At the state level, he is currently working with the Idaho Department of Environmental Quality on determining sources of air pollution in Pinehurst and other Idaho communities. At the national level, Dr. Ward works with NIH-funded projects, including working directly with several Native American/Alaska Native communities. At the international level, Dr. Ward works with the National Institute of Water and Atmospheric Research (NIWA) in New Zealand, supporting them in developing research capacity related to residential wood smoke health studies throughout New Zealand. In addition, he has participated on international expert panels focused on air pollution in Germany, China, and on household air pollution and health (with Noonan) in May 2015 in Denver, CO. Finally, Dr. Ward works closely with the American Lung Association on education/outreach projects that educate students about air quality and respiratory health issues in both Montana and Alaska.

3.1.c. A list of current research activity of all primary and secondary faculty identified in Criteria 4.1.a and 4.1.b., including amount and source of funds, for each of the last three years. These data must be presented in table format and include at least the following: a) principal investigator and faculty member's role (if not PI), b) project name, c) period of funding, d) source of funding, e) amount of total award, f) amount of current year's award, g) whether research is community based and h) whether research provides for student involvement. Distinguish projects attributed to primary faculty from those attributed to other faculty by using bold text, color or shading. Only research funding should be reported here; extramural funding for service or training grants should be reported in Template 3.2.2 (funded service) and Template 3.3.1 (funded training/workforce development).

Table 3.1.c. Research activity from 2014 to 2016.

Project Name	Principal Investigator & Department	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014	Amount 2015	Amount 2016	Community- Based Y/N	Student Participation Y/N
	Primary (Core) Faculty								
Using cognitive complexity to improve smoking interventions	Kari Harris, Co-I, SPCHS (PI: Conway)	NIH 1 R15 DA035428-01A1	2014 - 2017	\$426,297	\$142,099	\$142,099	\$142,099	N	Y
Expanding the role of family in culturally appropriate childhood obesity prevention strategies	Kari Harris, Co-I, SPCHS (PI: Brown)	NIH P20GM103474 (Brown)	2013 - 2015	\$168,497	\$84,248	\$84,248		Y	Y
Growing strong generations	Kari Harris, Co-I, SPCHS (PI: Brown)	USDA AFRI	2016 - 2018	\$150,000			\$50,000	Y	Y
Partnerships to prevent childhood obesity on the	Kari Harris, Co-I, SPCHS (PI: Brown)	NIH R13HD080904	2014 - 2017	\$90,000	\$30,000	\$30,000	\$30,000	Y	Y

Project Name	Principal Investigator & Department	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014	Amount 2015	Amount 2016	Community- Based Y/N	Student Participation Y/N
Flathead Indian Reservation									
Continuation project: generations health	Kari Harris, Co-I, SPCHS (PI: Brown)	NIH 1U54GM104944-01	2016 - 2017	\$46,400		\$23,200	\$23,200	Y	Y
Rural health care services outreach grant program	Kari Harris, external evaluator, SPCHS (PI: White / Kenfield)	HRSA D04RH23594	2012 - 2015	\$447,089	\$149,029	\$149,029		Y	N
Can motivational interviewing be effective for smoking cessation?	Kari Harris, Co- Director Pilot Core, SPCHS (PI: Catley)	NIH 1 R01 CA133068	2009 - 2014	\$1,552,110	No cost extension			N	N
Forest Service long term cohort	Curtis Noonan, PI, BMED	USDA Forest Service Missoula Technology and Development Center	2011 - 2015	\$50,000	\$12,500	\$12,500		N	N
Libby epidemiology research program	Curtis Noonan, PI, BMED	Centers for Disease Control and Prevention, via Mt Sinai	2009 - 2015	\$479,340	\$75,000	\$75,000		N	N
Indoor woodsmoke PM and asthma: a randomized trial	Curtis Noonan, Co-PI, BMED (Co-PI Ward)	NIEHS 1R01ES016336	2008 - 2014	\$1,736,964	No cost extension			Y	N

Project Name	Principal Investigator & Department	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014	Amount 2015	Amount 2016	Community- Based Y/N	Student Participation Y/N
Residential wood smoke interventions improving health in Native American populations	Curtis Noonan, Co-PI, BMED (Co-PIs: Noonan, Ward, and Belcourt)	NIEHS R56ES022583	2013 - 2014	\$172,389	\$172,389			Y	N
Residential wood smoke interventions improving health in Native American populations	Curtis Noonan, Co-PI, BMED (Co-PIs Noonan, Ward, and Belcourt)	NIEHS 1R01ES022583	2014 - 2019	\$2,443,947	\$452,847	\$515,748	\$0	Y	N
Wood stove interventions and child respiratory infections in rural communities	Curtis Noonan, Co-PI, BMED (Co-PIs Ward and Noonan)	NIEHS 1R01ES022649	2014 - 2019	\$2,660,292	\$580,203	\$547,691	\$545,603	Y	N
Montana pediatric clinical trials site	Erin Semmens, Data Manager, SPCHS (PI: Smith)	NICHD 1UG1HD090902-01	2016 - 2020	\$1,749,013			\$114,188	Y	Y
WLFF health and safety phase II	Erin Semmens, Biostatistical Consultant, SPCHS (PI: Palmer)	USFS MTDC 16- CR-11138200-001	2015 - 2017	\$55,880		\$6,574	\$39,445	N	Y
Forest Service long term cohort	Erin Semmens, Co-I, SPCHS (PI: Noonan)	USFS MTDC 11-CR-11138200- 009	2011 - 2015	\$25,000	\$6,522	\$2,717		N	N

Project Name	Principal Investigator & Department	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014	Amount 2015	Amount 2016	Community- Based Y/N	Student Participation Y/N
GE/NFL head health challenge II	Erin Semmens, Biostatistical Consultant, SPCHS (Co-PIs: Rau and Patel)	GE-NFL	2015 - 2018	\$125,000		\$19,097	\$41,667	N	Y
Evaluation of executive function and markers of pulmonary and oxidative stress following exposure to wood smoke	Erin Semmens, Co-I, SPCHS (Co-PIs: Ward and Dumke)	NIGMS CEHS COBRE III Pilot Project P30GM103338	2014 - 2015	\$72,803	\$54,602	\$18,201		N	Y
Indoor woodsmoke PM and asthma: a randomized trial	Erin Semmens, Postdoctoral Fellow, SPCHS (Co-PIs: Ward and Noonan)	NIEHS 1R01ES016336	2008 - 2014	\$1,736,964	No cost extension			Y	N
Residential wood smoke interventions improving health in Native American populations	Erin Semmens, Co-I, SPCHS, (Co-PIs: Noonan, Ward, and Belcourt)	NIEHS 1R01ES022583	2014 – 2019	\$2,443,947	\$452,847	\$515,748	\$0	Y	N
Wood stove interventions and child respiratory infections in rural communities	Erin Semmens, Co-I, SPCHS, (Co-PIs: Ward and Noonan)	NIEHS 1R01ES022649	2014 - 2019	\$2,660,292	\$580,203	\$547,691	\$545,603	Y	N

Project Name	Principal Investigator & Department	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014	Amount 2015	Amount 2016	Community- Based Y/N	Student Participation Y/N
Indoor woodsmoke PM and asthma: a randomized trial	Tony Ward, Co- PI, SPCHS (Co-PI Noonan)	NIEHS 1R01ES016336	2008 - 2014	\$1,736,964	No cost extension			Y	N
Fairbanks chemical mass balance PM _{2.5} source apportionment project	Tony Ward, PI, SPCHS	Alaska Dept of Environmental Conservation	2009 - 2014	\$547,068	\$112,846			N	N
Investigation of dust mites in indoor residential environments	Tony Ward, PI, SPCHS	Allergy, Asthma, & Immunology Education and Research Org	2013 - 2014	\$6,100	\$6,100			Y	N
Site investigation in Tubb Gulch	Tony Ward, PI, SPCHS	Portage Inc.	2014 - 2015	\$25,405		\$24,405		Y	N
Evaluation of executive function and markers of pulmonary and oxidative stress following exposure to wood smoke	Tony Ward, Co- PI, SPCHS (Co-PIs: Ward and Dumke)	NIGMS CEHS COBRE III Pilot Project P30GM103338	2014 - 2015	\$72,803	\$54,602	\$18,201		N	Y
Training rural/underserved youth to understand and pursue scientific careers	Tony Ward, Co- PI, SPCHS (Co-PI Holian)	NIH 1R25OD010511	2012 - 2017	\$1,288,942	\$258,035	\$251,314	\$246,171	Y	N

Project Name	Principal Investigator & Department	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014	Amount 2015	Amount 2016	Community- Based Y/N	Student Participation Y/N
Residential wood smoke interventions improving health in Native American populations	Tony Ward, Co- PI, SPCHS (Co-PIs: Noonan, Ward, and Belcourt)	NIEHS R56ES022583	2013 - 2014	\$172,389	\$172,389			Y	N
Residential wood smoke interventions improving health in Native American populations	Tony Ward, Co- PI, SPCHS (Co-PIs Noonan, Ward, and Belcourt)	NIEHS 1R01ES022583	2014 - 2019	\$2,443,947	\$452,847	\$515,748	\$0	Y	N
Wood stove interventions and child respiratory infections in rural communities	Tony Ward, Co- PI, SPCHS (Co-PIs Ward and Noonan)	NIEHS 1R01ES022649	2014 - 2019	\$2,660,292	\$580,203	\$547,691	\$545,603	Y	N
The Whitefish, MT PM _{2.5} source apportionment study winter 2015/2016	Tony Ward, PI, SPCHS	Flathead County	2015 - 2016	\$30,000			\$30,000	N	N
Pinehurst, ID PM _{2.5} source apportionment project	Tony Ward, PI, SPCHS	State of Idaho	2016 - 2016	\$15,032			\$15,032	N	N

Project Name	Principal Investigator & Department	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014	Amount 2015	Amount 2016	Community- Based Y/N	Student Participation Y/N
	Program Faculty								
Residential wood smoke interventions improving health in Native American populations	Annie Belcourt, Co-PI, Pharmacy/SPCHS, (Co-PIs: Noonan, Ward, and Belcourt)	NIEHS 1R01ES022583	2014 - 2019	\$2,443,947	\$452,847	\$515,748	\$0	Y	N
Indigenous environmental health science: Examining resiliency, risk, and engaging vulnerable communities in an examination of indoor air quality, cardiopulmonary, and metabolic functioning	Annie Belcourt, PI, Pharmacy/SPCHS	Harvard University JPB Environmental Health Fellow	2014 - 2017	\$350,000	\$150,000	\$100,000	\$100,000	Y	N
Residential wood smoke interventions improving health in Native American populations	Annie Belcourt, Co-PI, Pharmacy/SPCHS (Co-PIs: Noonan, Ward, and Belcourt)	NIEHS R56ES022583	2013 - 2014	\$172,389	\$172,389			Y	N
Mental and sexual health in Native American communities: understanding	Annie Belcourt, PI, Pharmacy/SPCHS	IHART	2013 - 2014	\$21,600	\$21,600			Y	N

Project Name	Principal Investigator & Department	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014	Amount 2015	Amount 2016	Community- Based Y/N	Student Participation Y/N
adaptive recovery following trauma among a sample of American Indian women									
Research participant protection in rural America	Ann Cook, PI, Psychology	NIH/NHGRI	2010 - 2015	\$744,625	\$125,000			N	N
Mentorship and training activities	Ann Cook, PI, Psychology	MSU INBRE Grant	2014 - 2015	\$29,041	\$20,524			N	N
Totals				\$15,508,834	\$2,453,544	\$2,001,823	\$1,377,405		

3.1.d. Identification of measures by which the program may evaluate the success of its research activities, along with data regarding the program's performance against those measures for each of the last three years. For example, programs may track dollar amounts of research funding, significance of findings (e.g., citation references), extent of research translation (e.g., adoption by policy or statute), dissemination (e.g., publications in peer-reviewed publications, presentations at professional meetings) and other indicators.

Table 3.1.d presents the measures by which the program evaluates the success of research activities.

Table 3.1.d. Faculty research outcome measures and results (Core and Program faculty).

Outcome Measure	Target	2013-2014	2014-2015	2015-2016
Objective 2.1. Faculty will maintain productive research and scholarly activities in the public health sciences as defined by Unit Standards of the various academic units to which they belong.	≥75% faculty will publish at least one manuscript per year ≥75% faculty will submit at least one grant or contract or will report working under grant/contract funding	Target met Published = 100% Submitted or funded = 100%	Target met Published = 100% Submitted or funded = 100%	Target met Published = 100% Submitted or funded = 100%
Objective 2.2. Faculty will teach students public health research, scholarship and quantitative skills, and to use public health data effectively; faculty will also provide students with opportunities to conduct research.	100% of students who graduate will produce a successful professional paper.	Target met 100% of graduated students	Target met 100% of graduated students	Target met 100% of graduated students
Objective 2.3. Faculty will communicate the results of their research and scholarly activities both locally and nationally or internationally.	≥75% faculty with at least one conference research poster or presentation per year.	Target met	Target met	Target met
Funding from grants/contracts.	≥\$100,000	Target not met \$47,901	Target not met \$94,350	Target met \$262,225
IDCs from grants/contracts.	≥\$50,000	Target not met \$2,869	Target not met \$1,956	Target met \$116,460

3.1.e. Description of student involvement in research.

Throughout the years, several of our MPH students have been actively involved in research within a variety of curricular mechanisms, including student practicum, professional papers, and independent studies. We also frequently encourage our students to get involved with research

projects that go beyond their capstone projects. This provides first-hand experience to those students interested in pursuing careers in research, and/or provides additional background information for our students who also work as public health professionals throughout Montana and our region. Data for student involvement in faculty research projects are tracked in the faculty members' annual evaluation reports to the Research Committee.

Most student involvement with research occurs through their practicum opportunities, with examples included in **Table 2.4.b**. Four recent examples of students getting involved in research include the following:

- Jenny Schuberg: Ms. Schuberg worked on a NIH-funded project (Residential wood smoke interventions improving health in Native American populations) during the summer of 2014 under the guidance of Drs. Belcourt, Noonan, and Ward.
- Lindsey Shankle: Ms. Shankle assisted the team in conducting a community readiness assessment as part of the grant titled "Partnerships to prevent childhood obesity on the Flathead Indian Reservation". Ms. Shankle presented the findings from this project at the UM Graduate Student Conference and submitted a manuscript that is currently under review for publication. Faculty supervisor: Dr. Harris.
- Emily Kottcamp-Allen: In response to community concerns, Ms. Kottcamp-Allen worked with a Ravalli County physician to conduct a prevalence study of Lyme disease. Faculty supervisor: Dr. Noonan.
- Matt Mattes: During the Fall 2016 and Spring 2017 semesters, Mr. Mattes worked on the NIH-funded project "Wood stove interventions and child respiratory infections in rural communities". Faculty supervisors: Drs. Ward and Noonan.

3.1.f. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

Overall, the University and our College provide for a supportive atmosphere that encourages research activities. This has resulted in the majority of our Core and Program faculty being engaged in active and successful research programs. The most recent grant funded through the SPCHS was awarded in September 2016 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development to develop the Montana Pediatric Clinical Trial Site (MPCTS). The charge of MPCTS is to include children from rural and Native American populations in multi-centered studies examining the influence of environmental factors on childhood health as part of the larger Environmental Influences on Child Health Outcomes (ECHO) program. The grant will allow researchers and physicians in Montana to become part of the IDeA (Institutional Development Award) Pediatric Network and develop methods for

including children from rural states in such studies. The MCTPS will establish a network of collaborators located across the state and larger national institutions. In addition to the Director, Paul Smith D.O. (Director of Pediatric Inpatient Care, Pulmonology and Critical Care at Community Medical Center and 20% effort with SPCHS), other key personnel include Drs. Erin Semmens and Dr. Curtis Noonan, as well as Ms. Kathrene Conway (staff member within SPCHS). The SPCHS also hired a full-time nurse (Ms. Sara Cox) in November 2016 to help coordinate subject enrollment and data management. Importantly, Dr. Annie Belcourt will serve on the Community Advisory Board for this project to ensure cultural appropriateness.

In addition to research funding, SPCHS faculty members support research initiatives and serve on Research committees at the University of Montana. One example is the Research & Creative Scholarship working group, which promotes research and seeks opportunities for the SPCHS to become engaged with new research opportunities. Dr. Tony Ward is a member of this Committee, and Dr. Curtis Noonan is the Chair of the Committee. Importantly, Dr. Noonan is also the Chair for the Research Committee within SPCHS, providing connectivity between our SPCHS efforts and our College. Finally, our faculty have been successful in publishing and presenting their findings at local, regional, national, and international conferences and forums, as evidenced by their CVs found in the ERF (4.1.a. CVs of primary faculty and 4.1.b. CVs of other faculty).

Weaknesses

Our PhD students will all be actively engaged in research during their graduate careers. However, we do not currently engage a large amount of MPH students in our research, though we do have a modest amount of grant funding in the SPCHS. This is because many of our MPH students are currently employed full-time, and do not live in Missoula where the University of Montana is located. Another reason is that MPH students are only around the program for two-three years – oftentimes too short a time to become a major part of a research team.

To address this issue, we will actively advise MPH students about opportunities for research within the SPCHS, and across our campus. Students are welcome to get involved with research on a volunteer basis, or receive credit for their efforts by signing up for an Independent Study (PUBH 596). Alternatively, some of the research grants may provide funding for MPH students, similar to what Mr. Mattes received during the Fall 2016 and Spring 2017 semesters working in the Ward/Noonan research group. Our University of Montana partners have also expressed interest in getting our students involved in their research projects, including the Rural Institute (Dr. Meg Traci). Finally, we will continue to encourage our faculty to write students into proposals when they submit grant applications. This is especially true for PhD students who will be on-campus at the University for four to five year periods.

- 3.2. Service. The program shall pursue active service activities, consistent with its mission, through which faculty and students contribute to the advancement of public health practice.
- 3.2.a. Description of the program's service activities, including policies, procedures and practices that support service. If the program has formal contracts or agreements with external agencies, these should be noted.

SPCHS faculty members pursue service activities consistent with the program mission and service objectives and that fit their individual expertise and interests within public health and higher education. The percentage of time that a faculty member devotes to community service is considered in faculty annual reviews, and is a component of promotion deliberations. University of Montana service is part of most faculty members' contractual obligations, with service a part of faculty performance for continuation and Promotion and Tenure (see the 1.3.c. SPCHS unit standards in the ERF). All core faculty and many affiliate members serve on the SPCHS program committees (see Figure 4) and on campus-wide task forces, boards, and committees (e.g. Institutional Review Board, Faculty Senate, Technology Transfer, external hiring committees, etc.).

SPCHS faculty members provide educational service as well across the UM campus (e.g. guest lecturing) as well as directly to the public. Faculty members often give formal and informal talks locally and regionally about health topics from their areas of expertise to various organizations and agencies. Faculty members are encouraged to collaborate with local and regional partners, such as the Montana Public Health Association. For faculty to fulfill their university roles, they must participate in their fields on a national level. We also encourage program faculty at the same time to use their skills to develop projects aiming to improve the health of local and regional populations. Our faculty members (and students) serve on a number of coalitions, administrative task forces and committees of local and regional agencies. Our faculty – and students – are sought out by the local health departments, agencies, and the state health department (DPHHS) to serve in these roles because we have expertise and technical skills in areas such as epidemiology, biostatistics, informatics, data management, grant writing, health communication and qualitative research methods.

Finally, faculty members are encouraged to serve their profession through active membership in their local, national, and/or international professional organizations. We encourage our students to be active in the Montana Public Health Association, the American Public Health Association, the Montana Environmental Health Association, and the Montana Cancer Control Coalition, and other professional organizations that provide a good fit with their areas of interest and professional aspirations. Our faculty are also encouraged to provide professional service as reviewers of manuscripts and grants.

3.2.b. Description of the emphasis given to community and professional service activities in the promotion and tenure process.

Performing community service that contributes to the advancement of public health practice and providing service to our University is an expectation of our SPCHS faculty. In fact, along with teaching and scholarly activities, service is a major component when considering promotion in academic rank and tenure for tenure-track faculty. This expectation is spelled out in the SPCHS Unit Standards and the Collective Bargaining Agreement (see 1.3.c. UM CBA in the ERF). Research Assistant Professors and adjunct teaching faculty are not evaluated on service. Therefore, community service is neither tracked nor required.

3.2.c. A list of the program's current service activities, including identification of the community, organization, agency or body for which the service was provided and the nature of the activity, over the last three years. See CEPH Data Template 3.2.1. Projects presented in Criterion 3.1 should not be replicated here without distinction. Funded service activities may be reported in a separate table; see CEPH Template 3.2.2. Extramural funding for research or training/continuing education grants should be reported in Template 3.1.1 (research) or Template 3.3.1 (funded workforce development), respectively.

Major service activities are tracked annually. Specifically, we ask all faculty to report community-based educational or technical service activities to the Research Committee as part of the annual Research Report. The program expectation is that each program faculty member will participate in at least one local and/or regional service activity each year, and that MPH students in the program will participate in at least one local service activity during their period with the program. Community service activities of our faculty are presented in **Table 3.2.c(1)**.

It should also be noted that many of our core faculty (Belcourt, Harris, Noonan, Semmens and Ward) are involved with two large, NIH-funded Clinical and Translational projects. Below is a description of these extramurally funded service projects, while **Table 3.2.c(2)** presents the funding information.

Clinical and Translational Research Infrastructure Network, IDeA-CTR-IN (PI Dr. Parvesh Kumar, University of Nevada, Las Vegas). This project supports a network to expand the capacity of partner institutions across seven states to put clinical research into practice to address regional health concerns, including access to care, cancer, obesity, diabetes, and cardiovascular and infectious diseases.

American Indian - Alaska Native Clinical and Translational Research Program, AI-AN CTRP (co-PIs Dr. Allen Harmsen, Montana State University and Dr. Bert Boyer, University of Alaska Fairbanks). This project supports a network to expand the capacity of partner institutions in Montana and Alaska to put clinical research into practice to address health disparities within American Indian and Alaska Native populations.

Table 3.2.c(1). Service activity of faculty for the last 3 years (2014-2016).

	Role	Organization	Activity or Project	Year(s)
Primary				
(Core)				
Faculty				
Kari Harris	Manuscript reviewer	Multiple journals	Manuscript reviewer	2014 - present
Kari Harris	Grant reviewer	National Institutes of Health	National Institutes of Health	2015
Kari Harris	Conference planning committee	Society of Behavioral Medicine	Annual meeting	2013 - present
Kari Harris	Organizer	Mekelle University, Ethiopia and University of Montana	Memo of Understanding for Collaboration	2013 - present
Kari Harris	Organizer	University of Gondar, Ethiopia and University of Montana	Memo of Understanding for Collaboration	2015 - present
Kari Harris	Planning committee	Salish Kootenai College	Health promotion degree development	2015 - present
Kari Harris	Trainer	Missoula Public Health City County Health Department	Gathering and using public input	2016
Kari Harris	Chair and judge	Montana Science Fair	Social Science Section	2013 - present
Curtis Noonan	Workgroup member	DPHHS	Montana state asthma partners workgroup	2004 - present
Curtis Noonan	Workgroup member	World Health Organization	Indoor air quality guidelines development group	2011 - 2014
Curtis Noonan	Workgroup member	American Thoracic Society	Household air pollution from solid fuel combustion smoke and global health equality	2015
Curtis Noonan	Workgroup member	New Zealand Woodsmoke Research Network	Technical work group	2016 - present
Curtis Noonan	Board member	American Lung Association	Missoula advocacy board	2012 - present
Curtis Noonan	Committee member	European Respiratory Society, Environment & Health Section	Committee workgroup	2014
Curtis Noonan	Manuscript reviewer	Multiple journals	Manuscript reviewer	2003 - 2016
Curtis Noonan	Member	Center for Scientific Review, NIH	IRAP study section	2016 - present
Curtis Noonan	Ad-hoc reviewer	NIH, Centers for Disease Control and Prevention, National Institute of Occupational Safety and Health, and Health Effects Institute	Grant reviewer	2004 - present
Curtis Noonan	Judge	Montana science fair	Environmental science section	2014 - 2016
Erin Semmens	Manuscript reviewer	Multiple journals	Manuscript reviewer	2014 - 2016
Erin Semmens	Judge	Montana Science Fair	Environmental science section	2014 - present

	Role	Organization	Activity or Project	Year(s)	
Erin	Board member	Missoula Community School	Board member	2015 - 2016	
Semmens					
Erin	Board president	Missoula Community School	Board president	2016 - present	
Semmens					
T	D 1 1	D's Cl. H's L Calas at	II. Mariana da mariana	2014	
Tony Ward	Board member	Big Sky High School	Health science academy	2014 - present 2012 - present	
Tony Ward	Board member Task force	American Lung Association			
Tony Ward	member	DPHSS	improvement task force	2014 - 2015	
Tony Ward	Treasurer	Air & Wasta Managament	Board of directors	2014 - present	
Tony ward	d Treasurer Air & Waste Management Association, Montana Chapter		Board of directors	2014 - present	
Tony Ward	Board member	Air & Waste Management	Board of directors	2015 - present	
Tony ward	Board member	Association	Board of directors	2013 - present	
Tony Ward	Assistant director	Montana Science Fair	Planning committee	2014 - present	
Tony ward	Tibbibiant director	Withmana Science I an	member	2011 present	
Tony Ward	Technical advisor	Libby Technical Assistance	Community work group	2014	
J		Group	,		
Tony Ward	Workgroup	American Thoracic Society	Household air pollution	2015	
-	member	<u> </u>	from solid fuel combustion		
			smoke and global health		
			equality		
Tony Ward	Workgroup	New Zealand Woodsmoke	Technical work group	2016 - present	
	member	Research Network			
Tony Ward	Manuscript	Multiple journals	Manuscript reviewer	2003 - present	
	reviewer				
Tony Ward	Grant reviewer	NIH and Health Effects Institute	Grant reviewer	2014 - present	
Program					
Faculty					
Annie	Board member	YWCA Board member	Board member	2010 - present	
Belcourt				1	
Annie	Board member	MT Geriatric Health Education	Board of directors	2010 - present	
Annie Belcourt	Board member	MT Geriatric Health Education Center	Board of directors	2010 - present	
Belcourt	Board member Committee		Racial justice taskforce	2010 - present 2011 - present	
Belcourt Annie	Committee member	Center YWCA		-	
Belcourt Annie Belcourt Annie	Committee	Center	Racial justice taskforce	-	
Belcourt Annie Belcourt Annie	Committee member Committee member	Center YWCA MT Geriatric Health Education Center	Racial justice taskforce committee Curriculum committee	2011 - present 2010 - present	
Belcourt Annie Belcourt Annie Belcourt Annie	Committee member Committee	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal	Racial justice taskforce committee	2011 - present	
Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Annie	Committee member Committee member Board member	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board	Racial justice taskforce committee Curriculum committee Tribal IRB	2011 - present 2010 - present 2011 - 2015	
Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Annie	Committee member Committee member	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health	2011 - present 2010 - present	
Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Annie	Committee member Committee member Board member Representative	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral Workgroup, US DHHS	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health services	2011 - present 2010 - present 2011 - 2015 2007 - 2014	
Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Annie	Committee member Committee member Board member Representative Review panel,	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health	2011 - present 2010 - present 2011 - 2015	
Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Annie Belcourt Belcourt	Committee member Committee member Board member Representative Review panel, chair	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral Workgroup, US DHHS Ford Foundation	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health services Psychology review panel	2011 - present 2010 - present 2011 - 2015 2007 - 2014 2011 - present	
Belcourt Annie	Committee member Committee member Board member Representative Review panel,	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral Workgroup, US DHHS	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health services Psychology review panel Research institutional	2011 - present 2010 - present 2011 - 2015 2007 - 2014	
Belcourt Annie Belcourt	Committee member Committee member Board member Representative Review panel, chair Board member	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral Workgroup, US DHHS Ford Foundation Blackfeet Nation	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health services Psychology review panel Research institutional review board	2011 - present 2010 - present 2011 - 2015 2007 - 2014 2011 - present 2013 - present	
Belcourt Annie	Committee member Committee member Board member Representative Review panel, chair Board member Study section	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral Workgroup, US DHHS Ford Foundation	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health services Psychology review panel Research institutional review board Community health	2011 - present 2010 - present 2011 - 2015 2007 - 2014 2011 - present	
Belcourt Annie	Committee member Committee member Board member Representative Review panel, chair Board member	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral Workgroup, US DHHS Ford Foundation Blackfeet Nation	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health services Psychology review panel Research institutional review board Community health influences on health	2011 - present 2010 - present 2011 - 2015 2007 - 2014 2011 - present 2013 - present	
Belcourt Annie Belcourt	Committee member Committee member Board member Representative Review panel, chair Board member Study section member	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral Workgroup, US DHHS Ford Foundation Blackfeet Nation National Institute of Health	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health services Psychology review panel Research institutional review board Community health influences on health behavior study section	2011 - present 2010 - present 2011 - 2015 2007 - 2014 2011 - present 2013 - present 2013 - present	
Belcourt Annie	Committee member Committee member Board member Representative Review panel, chair Board member Study section	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral Workgroup, US DHHS Ford Foundation Blackfeet Nation	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health services Psychology review panel Research institutional review board Community health influences on health behavior study section Ford foundation	2011 - present 2010 - present 2011 - 2015 2007 - 2014 2011 - present 2013 - present	
Belcourt Annie Annie	Committee member Committee member Board member Representative Review panel, chair Board member Study section member	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral Workgroup, US DHHS Ford Foundation Blackfeet Nation National Institute of Health	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health services Psychology review panel Research institutional review board Community health influences on health behavior study section Ford foundation fellowship psychology	2011 - present 2010 - present 2011 - 2015 2007 - 2014 2011 - present 2013 - present 2013 - present	
Belcourt Annie Belcourt	Committee member Committee member Board member Representative Review panel, chair Board member Study section member	Center YWCA MT Geriatric Health Education Center Rocky Mountain Tribal Institutional Review Board Indian Health Service Behavioral Workgroup, US DHHS Ford Foundation Blackfeet Nation National Institute of Health	Racial justice taskforce committee Curriculum committee Tribal IRB Billings area Indian health services Psychology review panel Research institutional review board Community health influences on health behavior study section Ford foundation	2011 - present 2010 - present 2011 - 2015 2007 - 2014 2011 - present 2013 - present 2013 - present	

	Role	Organization	Activity or Project	Year(s)	
Jean Carter	American Association of Colleges of Pharmacy (AACP) representative	DHS/DHHS	Healthcare sector coordinating council	2008 - present	
Ann Cook	Board member	Institute of Medicine and Humanities	Executive board	2004 - 2016	
Ann Cook	Manuscript reviewer	Multiple journals	Manuscript reviewer	2014 - 2016	
Ann Cook	Grant reviewer	NIH	Grant reviewer	2014 - present	

Table 3.2.c(2). Extramurally funded service projects from 2014 to 2016.

Project Name	Principal Investigator and Concentration	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014	Amount 2015	Amount 2016	Community- Based Y/N	Student Participation Y/N
Clinical and Translational Research Infrastructure Network	Curtis Noonan (site PI), with Molgaard, Semmens and Ward (co-Is).	National Institutes of Health (NIGMS), via UNLV	2013- 2018	\$846,105	\$169,303	\$169,303	\$169,303	N	N
American Indian- Alaskan Native Clinical and Translational Research Project (AI-AN CTRP)	Tony Ward (site PI), with Belcourt, Harris and Semmens (co-Is).	National Institutes of Health (NIGMS), via MSU	2016- 2020	\$20,299,429	\$0	\$0	\$1,353,295	Y	N

3.2.d. Identification of the measures by which the program may evaluate the success of its service efforts, along with data regarding the program's performance against those measures for each of the last three years.

Table 3.2.d presents the measures by which the program evaluates the success of its service efforts.

Table 3.2.d. Faculty service outcome measures and results (Core and Program faculty).

Outcome Measure	Target	2013-2014	2014-2015	2015-2016
Objective 3.1. Each				
year, all core faculty	100% of core faculty	Target Met	Target Met	Target Met
members will provide	reporting at least one			
leadership, education, or	service activity per year	100% of core	100% of core	100% of core
technical service to		faculty	faculty	faculty
organizations and				
individuals devoted to				
health and public health				
in our community.				
Objective 3.2. Faculty	100% of students will	Target Not Met	Target Not Met	Target Not Met
will provide students	report engaging in service			
with opportunities to be	during their tenure in the	20% of students	22% of students	39% of students
involved in service.	UM MPH program.			

3.2.e. Description of student involvement in service, outside of those activities associated with the required practice experience and previously described in Criterion 2.4.

Student service activities include serving on standing committees (Admissions, Curriculum, and Research). Further, just within the past year, there were four occasions that our MPH students were involved in service:

- alumni and students (and several faculty) served as both organizers and judges for the 61st Annual Montana Science Fair in March 2016. In fact, one of our alumni (Ms. Desirae Ware) is the Assistant Director of the Fair, hosting over 600 middle and high school students at UM from throughout Montana each year.
- 2) the Public Health Student and Alumni Association (PHSAA) participated in the Juvenile Diabetes Research Foundation's Walk for a Cure on April 24, 2016.
- 3) members of PHSAA served as ambassadors to new students entering our MPH program during the fall semester at our New-Student Orientation (see 3.2.e. Fall 2016 orientation agenda in the ERF). On August 26, 2016, several of our students put together a minipresentation on things that incoming students should know about entering the program. This service to our incoming students was well received as demonstrated by student-reviews of the orientation.

4) the PHSAA organized a movie night and food drive at a local theatre on November 30, 2016. A movie was shown that focused on health issues related to diet and food, followed by a panel discussion on the topic(s). Sponsors for the event included the Missoula City-County Health Department, University of Montana Health & Medicine (UMHM), the Missoula Food Bank, and the SPCHS. Following the event, the donated food was provided to the Missoula Food Bank.

Faculty have also made a concerted effort to investigate ways of including more service opportunities for students in the program. One example is the PUBH 560 Environmental and Rural Health class taught by Dr. Ward during the Spring 2017. A requirement for this course is to identify and conduct a service opportunity (preferably in Environmental Health given the course theme) as part of their grade (5%). This requirement will be pilot tested during this Spring 2017 class. If successful, we will look for opportunities to include this requirement in other classes throughout the SPCHS in the future.

Finally, service opportunities will be provided for students to get involved with the upcoming Montana Public Health Association annual conference in Missoula September 19-20, 2017. Our MPH and PhD students will be encouraged to present results of any projects they are working on through posters/presentations, as well as volunteer their time at the event through the PHSAA / MPHA chapters.

3.2.f. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

Our faculty are all engaged with multiple service activities. This includes service at the local community level in Missoula, as well as involvement with regional, national, and international service activities. Like teaching and research, service is a part of the faculty promotion and tenure process. Importantly, service opportunities for faculty and students are oftentimes supported by SPCHS as well as CHPBS through travel awards, payment of professional organization membership dues, sponsorship of events (such as the Montana Science Fair) and release time to be involved with such activities. Finally, UM has an active student and alumni association (PHSAA), providing opportunities for students to be involved with service to the community.

We are proud of our service to our University and state through our two large NIH grants that help develop health disparities research in Montana. The Clinical and Translational Research Infrastructure Network (CTR-IN) supports a network to expand the capacity of partner institutions across seven states to put clinical research into practice to address regional health concerns, including access to care, cancer, obesity, diabetes, and cardiovascular and infectious diseases. The mission of the American Indian-Alaska Native Clinical and Translational Research Program (AI-AN CTRP) is to increase the capacity of Montana and Alaska institutions

and researchers to address health disparities that Native communities experience. Both grants provide pilot project funding to investigators from the University of Montana, and include the following SPCHS staff and faculty: Belcourt, Conway, Dye, Graham, Harris, Niewald, Noonan, Semmens, Ward and Ware.

Weaknesses

Having an online program limits the amount of service opportunities for students outside of Missoula. Though we do have an active student/alumni association, most of the active members participating in PHSAA live in Missoula. We are aware of most service activities that the PHSAA carries out in Missoula, but we currently do not have a good way of engaging students/alumni outside of Missoula in our program's service activities. One new development that should increase not only numbers of student / alumni in the PHSAA from across our region but also service opportunities is the recent inclusion of the PHSAA as an official chapter of MPHA. One of the upcoming service opportunities for the PHSAA/MPHA chapter is to have our students/alumni volunteer their time in hosting the MPHA annual conference in Missoula (Sept 19-20, 2017).

Another thing that we have done to increase the amount of service activities of our students is to make it a requirement in the PUBH 560 Environmental and Rural Health class taught by Dr. Ward during the Spring 2017. The goal is for students to identify and conduct a service opportunity as part of their grade (5%). Given that PUBH 560 is a core class in our MPH program, this will provide opportunities for every MPH student to fulfill their service requirement. This new requirement will be pilot tested during the Spring 2017, and, if successful, we will look for opportunities to include this option in additional classes in the future.

We have also done a poor job of meeting our **Objective 3.2.** targets (see **Table 3.2.d**). Upon graduation, we have not done a good job of getting copies of the student's updated CV / resume as part of their Portfolios. The low service percentages are likely not accurate representations of the service efforts of our students, but more reflects the missing CVs / resumes. To address this weakness, we have updated the Portfolio guidelines (see 2.5.a. Portfolio guidelines in the ERF) to explicitly ask students to provide a resume or CV at the conclusion of their Portfolio, as well as document in the CV/resume their community service activities while in the program.

- 3.3. Workforce Development. The program shall engage in activities other than its offering of degree programs that support the professional development of the public health workforce.
- 3.3.a. Description of the ways in which the program periodically assesses the continuing education needs of the community or communities it intends to serve. The assessment may include primary or secondary data collection or data sources.

A primary way that we gather community input is via our EAC comprised of representatives from public health and health care agencies in Montana. Our current membership represents interests from local health departments in Montana (Leahy, alumni), tribal colleges/Native American populations (Graham, alumni), public school systems / non-profits in Montana (Hovenkotter, alumni), the state health department (Harwell), and the MPHA (Weir). When the EAC meets with the Chair, representatives formally advise the Program of workforce needs. Our program also gathers information informally through our relationships with other public health professionals across our state, including our alumni. By having our faculty serving on a variety of local and state Boards/Committees, this provides for a conduit of information regarding continuing education needs back to our program. In addition, Dr. Harris is collaborating with UM faculty members Dr. Sara Rinfret and Christina Barsky to conduct a formal assessment of the workforce needs within DPHHS (see **Table 3.3.b**.). Finally, service by Dr. Ward on the DPHHS Public Health System Improvement Task Force has been invaluable in learning what the professional development / workforce development needs are for the state health department workforce.

3.3.b. A list of the continuing education programs, other than certificate programs, offered by the program, including number of participants served, for each of the last three years. Those programs offered in a distance-learning format should be identified. Funded training/ continuing education activities may be reported in a separate table.

Our Certificate of Public Health program (described in **Criterion 3.3.c**) is our primary continuation education program within the SPCHS. However, we also support workforce and professional development through grant funding as listed in **Table 3.3.b.**

Table 3.3.b. Funded training/continuing education activity from 2014 to 2016.

Project Name	Principal Investigator & Concentration	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014	Amount 2015	Amount 2016	Community- Based Y/N	Student Participation Y/N
Public health and safety	Sara Rinfret		September						
division workforce	(Political	MT	15, 2016	\$40,821	\$0	\$0	\$40,821	N	N
development	Science), Kari	DPHHS	through June	\$40,821	\$0	\$0	\$40,821	IN	IN
Participants served: 50	Harris (SPCHS)		30, 2017						

Two additional continuing education programs / activities offered by our program within the last three years include the following:

Conference in Public Health. On August 7 and 8, 2014, members of the Montana Chapter of the Air & Waste Management Association (AWMA) and the University of Montana student chapter of the AWMA hosted a conference entitled "Strategies to Reduce Residential Wood Smoke". The conference focused on how communities, states, regions and provinces have successfully reduced airborne smoke impacts from residential wood heating (wood stoves), and how these strategies can be used by other communities. Specific topics included the following: 1) human health effects related to residential wood smoke, 2) impacts of residential wood smoke on ambient air, 3) policy, regulations, and enforcement, 4) wood stove changeouts, 5) outreach and education strategies, and 6) indoor studies focused on residential wood smoke.

Over 100 conference attendees came to the University of Montana from throughout Alaska, Canada, and the continental US. This included professionals from a variety of disciplines, including local/state/federal/tribal governmental agencies, industry, and academia. Sponsorship for the conference was provided by the American Lung Association of the Mountain Pacific, the Missoula City-County Health Department, the Montana Department of Environmental Quality, and the Pacific Northwest International Section of AWMA. Dr. Tony Ward was the co-Chair of the conference, along with Mr. Ben Schmidt of the Missoula City-County Health Department.

DPHHS MOU. As noted previously, the SPCHS recently entered into a formal MOU with the State of Montana Health Department (DPHHS) which allows for the development of research activities, technical support of their staff, as well as Practicum and job networking opportunities for our students (**see 1.4.c. SPCHS_DPHHS MOU in the ERF**). This occurred at the request of the DPHHS in response to their need for additional formal training of their younger employees. Importantly, DPHHS and UM will work together to develop and implement continuing education and training opportunities to support State, Local, and Tribal public health practitioners. The continuing education component includes a new, 12-credit Certificate for approximately 45 DPHHS and local/tribal health department employees beginning in Fall 2017.

3.3.c. Description of certificate programs or other non-degree offerings of the program, including enrollment data for each of the last three years.

From its inception, the public health program at the University of Montana has included a Certificate program (http://health.umt.edu/publichealth/2prospective-students/Program-information/Certificate%20in%20Public%20Health.php), primarily aimed at state and local health department employees. This Certificate of Public Health (CPH) is a 12-credit subset of the basic 42-credit program, and is distance based. The 12-credit program is unique and distinct for each Certificate student, with the 12 credits being selected in conjunction with the student's advisor prior to entering the program. The student may take three core courses and one elective, or four core classes. Practicum and culminating experience courses are not normally used in the Certificate program. To ensure the quality of the student, all applications are reviewed by our Admissions Committee at the same time of MPH program applicant reviews. However, students applying after the set Fall/Spring deadlines may still enter the CPH program pending approval of the student's application at a biweekly faculty meeting.

This Certificate program is aligned with workforce needs of additional, accessible, and affordable training in the five core areas of public health that can serve as part of a recognizable career ladder. Upon completion of the Certificate, a Certificate student may apply to the MPH program. If accepted into the MPH program, the 12 credits already taken through the Certificate program may be applied to the MPH degree requirements of 42 credits. It should also be noted that the Admissions Committee has on occasion denied students entry into the MPH program, and has instead deferred them to the CPH program. For the 2014/2015 academic year, there were 16 students enrolled in our Certificate program, with 9 enrolled during 2015/2016. There are 21 CPH students as of the start of the Spring 2017 semester.

3.3.d. Description of the program's practices, policies, procedures and evaluation that support continuing education and workforce development strategies.

At the University of Montana, there are multiple opportunities for our staff and faculty to take advantage of continuing education / professional development opportunities through our School of Extended & Lifelong Learning (http://www.umt.edu/sell/programs/profdev/). Their mission is to teach courses that "help arm working professionals or job seekers with the skills they need to get ahead in their chosen careers." Each staff and faculty member in the SPCHS receives a flyer

at the start of each semester that communicates the dates of multiple short courses and events each semester. Continuing education is taken very serious at the University of Montana. In fact, per our CBA (see 1.3.c. UM CBA in the ERF), involvement in continuing education programs is one of the items that is evaluated when faculty members are considered for tenure.

As the only CEPH-accredited MPH and PhD in Public Health programs in the state of Montana, we have a unique opportunity to support workforce development in our state. This is evidenced by our MOU with the state health department (see 1.4.c. SPCHS_DPHHS MOU in the ERF) where we provide technical support and training workforce development opportunities for local and state health department employees from across our state (including the new certificate described in Criterion 3.3.c.). Our EAC is also a major driver of helping our program identify new and emerging workforce development strategies for our program. In fact, workforce development is written into the mission statement of our EAC: "The mission of the External Advisory (EAC) Committee is to provide programmatic guidance, workforce development, and accreditation advice to the SPCHS through its Chair and Steering Committee. Specific responsibilities include assistance in determining the training needs of different constituencies in Montana and the establishment of consistent field placement opportunities for MPH students." The mission of the EAC is stated on our website: http://health.umt.edu/publichealth/labout-us/committees/external-advisory-committee/default.php.

Finally, we will continue to gather information informally about emerging continuing education and workforce development needs through our relationships with other public health professionals across our state, including our alumni. For example, we are in the very early stages of planning the development of a multi-day, in-person, foundations of public health course that could be offered annually or biennially in Helena or Missoula to support DPHHS staff. Specifically, DPHHS is interested in the SPCHS offering a course that covers Montana public health history and laws related to public health, including Montana adopting the 10 essential services of Public Health model, laws related to communicable disease reporting, and environmental health related laws.

3.3.e. A list of other educational institutions or public health practice organizations, if any, with which the program collaborates to offer continuing education.

The SPCHS has most frequently partnered with the State Health Department (DPHHS) on continuing education opportunities. This is evidenced by the current workforce development grant that includes Dr. Kari Harris, as well as faculty participation by Dr. Ward on the DPHHS Public Health System Improvement (PHSI) Task Force. The purpose of the PHSI Task Force is to 1) Assess Montana's progress in implementing the goals and objectives of Section F of the state health improvement plan and other system improvement efforts, 2) assure the implementation of Section F of the state health improvement plan with updated "action plans", 3) provide policy development recommendations to state and local agencies regarding public health system improvement efforts, and 5) serve as the advisory board to the Public Health Block Grant and the Title V Maternal and Child Health Block Grant.

We have also collaborated extensively with the Missoula City-County Health Department on continuing education opportunities since the inception of our program. For example, at the request of the Missoula Public Health City-County Health Department, Dr. Harris provided workshops during October 2016 on how to conduct focus groups. Dr. Harris designed the training to assist health department leaders in meeting accreditation and grant requirements to collect and use public input. Trainings were offered twice in-person and taped for broadcast on the local community access television channel.

The SPCHS also strives to offer continuing education via the Certificate in Public Health. Across our campus, we have agreements with the School of Physical Therapy and the School of Pharmacy within our College, and with the Department of Health and Human Performance in the College of Education and Human Sciences. These agreements allow graduate students from Physical Therapy, Pharmacy, and Health and Human Performance to enter the Public Health Certificate Program. Applicants from these programs must still be reviewed by the Admissions Committee and the SPCHS Chair before being accepted, but the application process and paper submissions for those in these other programs on the Missoula campus is expedited.

3.3.f. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

Regarding continuing education, there are multiple opportunities for our staff and faculty to take advantage of activities through our School of Extended & Lifelong Learning. They offer multiple trainings each semester that have been attended by our staff and faculty to improve their overall workplace skillset. In addressing our engagement with professional development activities, we have relied on our strong relationships with our local health department (Missoula City-County) as well as the state health department (DPHHS). This has resulted in grant funding through DPHHS (Harris, "Public health and safety division workforce development"), as well as being asked to serve on state-wide committees (Ward), hosting conferences related to public health issues (Ward and Noonan), current workforce development funding and workshops (Harris), and planning towards the development of a multi-day, in-person, foundations of public health course for DPHHS staff (Ward). Our Certificate in Public Health program is not only a strength of the SPCHS, but it has provided multiple professional development opportunities for public health professionals throughout our region since its inception.

To further increase our capacity in offering professional / workforce development opportunities, we recently transitioned Ms. Bernadette Bannister into the SPCHS in October 2016. Ms. Bannister is a Program Director that previously worked within our College (CHPBS) on various contracts and grants, primarily focusing on public health. She currently manages a long-term contract with the State Health Department (DPHHS) to provide technical assistance and training in support of the Montana Tobacco Use Prevention Program. She recently completed a three-year contract to develop and convene "Leadership Forums for Public Health" for Montana lead

local public health officials. As a trainer, facilitator, and strategic planner, she has managed contracts with State and Federal agencies, having covered community-based projects in tobacco use prevention, leadership training, obesity and diabetes prevention, emergency preparedness and response, wildfire urban interface mitigation, and wildlands-wildfire training. She's developed and presented Leadership Forums for the Association of Montana Public Health Officials and DPHHS since 2012. Ms. Bannister also worked with USFS Region 1 to develop the annual Leadership Forum for Forest Service employees and managers and to launch the Exploring Leadership Workshop series, conducted annually to date.

Weaknesses

Up until the last year (2016), our program did not have any formal agreements or commitments related to workforce development activities that supported public health in our state and region. To address this weakness, our faculty and staff have recently made great strides. We are very proud of the MOU with the state health department (see 1.4.c. SPCHS_DPHHS MOU in the **ERF**). Not only does the MOU formalize our intent to provide technical support to the state health department, it also formalizes our commitment to provide workforce development opportunities to local and state health department employees across Montana through the new certificate program (described in Criterion 3.3.c.). We have also revised the mission statement of the EAC to focus more on workforce development issues, while carefully selecting the makeup of our EAC to represent a variety of public health employers in our state. This includes local health departments in Montana (Leahy), tribal colleges/Native American populations (Graham), public school systems / non-profits in Montana (Hovenkotter), the state health department (Harwell), and the Montana Public Health Association (Executive Director Weir). To further our commitment to workforce development, the SPCHS (as of Spring 2017) is participating in the state health department (DPHHS) State Public Health Workforce Development Plan. The goal of this work group is to identify three to five priority focus areas for Workforce Development that we can collaborate with DPHHS on and measure progress (evaluate) over the next three years. In addition, we will be identifying objectives, strategies, and activities linked to the identified priority focus areas. The SPCHS will be intricately involved in implementing workforce training for the identified priority areas by offering activities such as workshops, new curriculum, and specialized trainings, including the foundations of public health course requested by DPHHS.

Just within the past year, we feel we have made notable progress in supporting professional development of the public health workforce in Montana and our region. We fully expect to continue this high level of engagement in Workforce Development activities moving forward.

Criterion 4: Faculty, Staff, and Students.

- 4.1. Faculty Qualifications. The program shall have a clearly defined faculty which, by virtue of its distribution, multidisciplinary nature, educational preparation, practice experience and research and instructional competence, is able to fully support the program's mission, goals and objectives.
- 4.1.a. A table showing primary faculty who support the degree programs offered by the program. It should present data effective at the beginning of the academic year in which the self-study is submitted to CEPH and should be updated at the beginning of the site visit. This information must be presented in table format and include at least the following: a) name, b) title/academic rank, c) FTE or % time, d) tenure status or classification*, g) graduate degrees earned, h) discipline in which degrees were earned, i) institutions from which degrees were earned, j) current instructional areas and k) current research interests. *Note: classification refers to alternative appointment categories that may be used at the institution.

Table 4.1a presents the information for the primary (core) faculty in the SPCHS as of Spring 2017. For more detail, **CVs of the SPCHS primary faculty** are available in the **ERF** (**Criterion 4.1.a.**).

Table 4.1.a. Primary (Core) faculty who support degree offerings of the program.

Name	Title/ Academic Rank	FTE or % Time	Tenure Status or Classification	Graduate Degree (s) Earned	Discipline(s)	Institution(s)	Teaching Areas	Research Interests
Kari Harris	Professor	1.0	Tenured	PhD MPH	Behavioral Psychology, Public Health	University of Kansas University of Kansas Medical Center	Social and Behavioral Science, qualitative research	Health behavior, clinical and translational research
Curtis Noonan	Professor	1.0	Tenured	MA PhD	Environmental Epidemiology	University of California, Berkeley George Washington University Colorado State University	Epidemiology	Air pollution exposures and respiratory health, exposure to elongated mineral fibers and health effects, vulnerable communities, and biomarkers.
Erin Semmens	Assistant Professor	1.0	Research Assistant Professor (not eligible for tenure)	PhD MPH	Biostatistics Epidemiology Public Health	Duke University University of Washington	Biostatistics	Biostatistics, Occupational and environmental epidemiology, Clinical and translational research
Tony Ward	Associate Professor and Chair	1.0	Tenured	PhD MS	Chemistry Environmental Science	University of Montana University of Houston – Clear Lake	Environmental Health Sciences	Environmental health sciences, exposure assessment, environmental chemistry

Note that Dr. Craig Molgaard (primary faculty) left our program in early Spring 2017. We have retained his tenure-track line within our School, and will be hiring an epidemiologist in the Summer 2017 as his replacement.

4.1.b. Summary data on the qualifications of other program faculty (adjunct, part-time, secondary appointments, etc.). Data should be provided in table format and include at least the following: a) name, b) title/academic rank, c) title and current employment, d) FTE or % time allocated to the program, e) highest degree earned (optional: programs may also list all graduate degrees earned to more accurately reflect faculty expertise), f) disciplines in which listed degrees were earned and g) contributions to the program.

Table 4.1.b. presents the data on the qualifications of "other" program faculty that support teaching within the SPCHS. **CVs of the** "other" program faculty are available in the **ERF** (**Criterion 4.1.b.**).

Table 4.1.b. Other faculty used to support teaching programs.

Name	Title/ Academic Rank	Current Employment	FTE or % Time Allocated to Program	Highest Degree Earned	Discipline(s)	Contributions to the Program
*Annie Belcourt	Associate Professor	SPCHS / Pharmacy Practice, UM	25%	PhD	Clinical Psychology	Instructor: Multicultural and Native American Public Health (PUBH 525); Admissions and Steering Committees
Jean Carter	Professor	Pharmacy Practice, UM	10%	PhD	Pharmacy Administration	Instructor: Research Methods and Program Evaluation (PUBH 550); Curriculum Committee
Ann Cook	Research Professor	Psychology, UM	10%	PhD	Psychology and Ethics	Instructor: Public Health Ethics (PUBH 570)
Julie Fife	Adjunct Professor	University of Maryland Maternal and Child Health Program	20%	МРН	Maternal & Child Health	Instructor: Rural & Global Health (PUBH 580) / Maternal and Child Health (PUBH 595)
Kathryn Fox	Adjunct Professor	Cystic Fibrosis Foundation	15%	JD, MPH	Public Health Law	Instructor: Health Policy (PUBH 535)

^{*}Dr. Belcourt is supported 0.25 FTE in the School of Public and Community Health Sciences, and 0.75 FTE in Pharmacy Practice.

4.1.c. Description of the manner in which the faculty complement integrates perspectives from the field of practice, including information on appointment tracks for practitioners, if used by the program. Faculty with significant practice experience outside of that which is typically associated with an academic career should also be identified.

In addition to our primary (core) faculty members listed in **Table 4.1.a.** and our "other" faculty members (faculty and teaching adjuncts that are actively engaged in the SPHCS) listed in **Table 4.1.b**, our faculty affiliates have diverse backgrounds and experience in public health that they bring into the classroom and to our overall program. The faculty affiliates listed on our website (include Program Faculty (faculty located on the University of Montana campus, http://health.umt.edu/publichealth/4faculty/program-faculty.php) and Practitioner Faculty (Practitioners located off campus, http://health.umt.edu/publichealth/4faculty/practitioner.php). Regarding appointment tracks for practitioners located off campus, http://health.umt.edu/publichealth/4faculty/practitioner.php). Regarding appointment tracks for practitioners, many of the practitioners are formal appointments through completion of our Faculty affiliate recommendation form (see 4.1.c. Faculty affiliate form in the ERF) which is signed by the Chair, Dean, and Provost. Public health practitioners serve as affiliate faculty to assist in the instruction, service and research activities of the MPH program. These practitioners come from local health departments and agencies, the state health department (DPHHS), and other academic and federal and state institutions and organizations. Many have public health experience working with culturally diverse populations, including a variety of global health programs. There are also several physicians and dentists affiliated with our program (Drs. Price, Smith, and Kretzschmar), as well as the former Director of the Montana state health department (DPHHS, Opper). Table 4.1.c. displays the faculty affiliates who have served as instructors in our program, members of student committees, and mem

Table 4.1.c. Faculty affiliates (including practitioners) in the SPCHS.

Name	Department/ Employer	Title/ Academic Rank	Highest Degree Earned	Instruction Areas
Jennifer Bell	Physical Therapy, UM	Clinical Assistant Professor/Associate Director of Clinical Education	ScD	Increasing access to physical therapy care in rural areas, improving educational programs in developing countries
Blakely Brown	Health and Human Performance, UM	Professor	PhD	Nutrition and chronic disease prevention in Native American communities, childhood obesity and diabetes in rural communities
LeeAnn Bruised Head	Missoula Urban Indian Health Center	Executive Director	МРН	Native American studies
Duncan Campbell	Psychology, UM	Associate Professor	PhD	Depression and other common mental health concerns, Veterans affairs

Name	Department/ Employer	Title/ Academic Rank	Highest Degree Earned	Instruction Areas
Elizabeth Ciemins	Billings Clinic	Director of Research and Analytics, Center for Clinical Translation Research	PhD, MPH	Mental health and substance abuse policy Children's mental health services
Bryan Cochran	Psychology, UM	Professor, Director of Clinical Training	PhD	Health correlates of being part of a stigmatized minority group
Laura Dybdal	Health and Human Performance, UM	Professor	PhD	Mind/Body connection, Veteran resiliency, social marketing, mobile health application use and effectiveness
John Felton	RiverStone Health Billings, MT	President & CEO	MPH, MBA, FACHE	Rural health policy
Niki Graham	Salish Kootenai College	Prevention & Wellness Programs Director	МРН	HIV/AIDS Education
Willard O. Granath	Biological Sciences, UM	Professor	PhD	Parasitology
Rosemary Hughes	Rural Institute, UM	Research Professor	PhD	Abuse and violence against people with disabilities and depression in the context of disability
April Keippel	St. Vincent Healthcare in Billings, MT	Mission and Community Benefit Program Manager	MA	Public health education and health promotion, physical activity
Billie Jo Kipp	Blackfeet Community College	President	PhD	Tribal health and education
Ellen Leahy	Missoula City-County Health Department	Director	MN, MPH	Program development and management
Kimber Haddix McKay	Anthropology, UM	Professor	PhD	Applied medical anthropology, human evolutionary ecology
Dr. John Kretzschmar	Contractor, USAF	General Dentist	DMD, MPH	General dentistry
Trish Miller	Political Science, UM	Visiting Professor	PhD	Political Behavior, Policy Evaluation/Cost Benefit Analysis, Public Management
Richard Opper	Adjunct Professor, UM	Former Director of DPHHS	MS	Environmental health
Joanne Oreskovich	Children and Family Services Division, DPHHS	Research and Data Analyst	PhD	Public health data collection
Dr. Justin Price	Sisters of Charity of Leavenworth Hospital	Emergency Medicine Physician	MD	Global health and medicine
Kerry Pride	Public Health and Safety Division, DPHHS	Public Health Veterinarian and Local and Tribal Public Health Support Coordinator	DVM	Public health veterinarian, tribal health issues

Name	Department/ Employer	Title/ Academic Rank	Highest Degree Earned	Instruction Areas
Liz Putnam	Biomedical & Pharmaceutical Sci, UM	Chair and Associate Professor	PhD	Toxicology and genetics
Mindy Renfro	Rural Institute, UM	Research Assistant Professor, Clinical Coordinator Montana Adaptive Equipment Program	PhD, DPT	Public health policy, geriatrics, and physical therapy
Dr. Paul Smith	Community Medical Center	Physician, Director Pediatric Critical Care and Pulmonary Services	DO	Pediatric pulmonary health
K. Annie Sondag	Health and Human Performance, UM	Professor	PhD	Program planning and evaluation, health promotion
Gyda Swaney	Clinical Psychology, UM	Associate Professor	PhD	Multicultural and cross-cultural psychology, Native American health
Meg Ann Traci	Rural Institute, UM	Research Associate Professor	PhD	Development psychology, early intervention
Anna Winters	AKROS Inc., Zambia, Africa	CEO	PhD	Epidemiology of malaria
Erica Woodahl	Biomedical & Pharmaceutical Sci, UM	Associate Professor	PhD	Pharmacogenomics in American Indian populations
Abebaw Worku	Institute of Public Health, University of Gondar, Ethiopia	Professor, Director of the Institute of Public Health	PhD	Maternal and child health

4.1.d. Identification of measurable objectives by which the program assesses the qualifications of its faculty complement, along with data regarding the performance of the program against those measures for each of the last three years.

Table 4.1.d. Outcome measures for judging qualifications of SPCHS faculty.

Outcome Measure	Target	2013-2014	2014-2015	2015-2016
% of core faculty with PhD / MD degrees.	≥80% of core faculty	Target met 100%	Target met 100%	Target met 100%
% of core faculty with MPH or PhD degrees from Schools of Public Health.	≥50% of core faculty	Target met 50%	Target met 50%	Target met 60%
% of core faculty with experience in academic public health programs.	≥80% of core faculty	Target met 100%	Target met 100%	Target met 100%
% of core faculty engaged in funded research.	≥80% of core faculty	Target met 100%	Target met 100%	Target met 100%

4.1.e. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

Our faculty has experience in the five core disciplines of public health. Furthermore, our faculty has experience with conducting funded research, as well as working with public health professionals in rural and Native American communities throughout Montana and beyond. This is enhanced by our knowledgeable and experienced Program Faculty that teach within our classes and serve on our standing committees, as well as the extensive list of Practitioners involved with our program from a variety of public health disciplines. This knowledge and expertise provides students with a strong base in the core disciplines of public health.

Weaknesses

With the loss of two of our core faculty (Drs. Amanda Golbeck and Craig Molgaard) in July 2016 and January 2017, respectively, we have recently had to adjust to faculty turnover. However, we have replaced Dr. Golbeck with Dr. Erin Semmens (hired as a 1.0 FTE Assistant Professor within the SPCHS in Spring 2017), and we will be launching a search for Dr. Molgaard's position starting in Spring 2017 (to be filled in Summer 2017). We have also added Dr. Curtis Noonan (1.0 FTE Professor) to the SPCHS, transitioning him into the SPCHS from his dual appointment with the Department of Pharmacy Practice and the Department of Biomedical and Pharmaceutical Sciences. With Drs. Harris, Molgaard (line), Noonan, Semmens, and Ward, we have an FTE of 5.0 – allowing us to meet the minimum faculty requirements for a CEPH-accredited MPH and PhD generalist degree program.

Looking ahead, with the start of a new PhD program in Public Health in (Spring 2017) and the ~45 DPHHS and local health department staff entering our CPH program beginning in Fall 2017, we will be actively looking to hire an additional Assistant Professor as well as teaching adjuncts to add to our program to meet our emerging instruction needs. Though we have not yet received approval to hire an additional Assistant Professor, we have contracted with Dr. Trish Miller to teach our PUBH 550 (Program Evaluation & Research Methods) starting in Summer 2017. We will continue to hire Adjunct / Teaching faculty as the need arises until we are given approval to hire an additional tenure-track Assistant Professor.

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

4.2.a. A faculty handbook or other written document that outlines faculty rules and regulations.

The Collective Bargaining Agreement of the University of Montana (see 1.3.c. UM CBA) and the Unit Standards of the SPCHS Faculty (see 1.3.c. SPCHS unit standards) outline the policies and procedures for recruitment, appointment, evaluation and promotion of qualified faculty. These documents can be found in the ERF.

4.2.b. Description of provisions for faculty development, including identification of support for faculty categories other than regular full-time appointments.

The SPCHS is committed to providing resources, including financial support, for line faculty and adjunct development. Provisions for faculty development are carried out for both core faculty within the SPCHS and faculty from other departments and colleges on campus. In either case, these provisions for faculty development are developed by the Chair, the Dean, or the Chair and Dean jointly.

All faculty, including tenure and non-tenure-track personnel, are provided with the necessary equipment and supplies they need to fulfill their responsibilities in the program. Travel to conferences or meetings are often supported for core faculty in the SPCHS by funds from indirect recovery on grants (IDCs) and contracts or program tuition. In addition, non-primary faculty that teach classes within SPCHS can receive a stipend up to \$5,000 (average of \$3,500 per semester) for their teaching services.

Professional development such as local workshops and trainings within the state of Montana or the Pacific Northwest may be funded by program tuition surcharge funds returned to the School. Computer equipment is replaced every three years, per CBA, in the College from an equipment fund. The SPCHS core faculty thus receive new computer stations every three years. The SPCHS will grant sabbaticals for core, tenured faculty in accordance with the University procedures described in the UM Collective Bargaining Agreement (see 1.3.c. UM CBA in the ERF). The SPCHS allocates to core faculty members ~\$1,500 per year for professional development, including travel to various public health and health-related conferences, purchase of books, subscriptions to public health or health-related journals or other periodicals, or purchase of software.

Professional development in terms of mentoring occurs for the newer, more junior core faculty members. These activities include senior core faculty providing guidance in terms of advising students, serving on committees, grant writing and management, and the intricacies of the promotion and tenure process on a unionized campus. The SPCHS Chair takes a proactive role in these endeavors, and is currently mentoring Dr. Erin Semmens in her role as Assistant

Professor within the SPCHS. Finally, the Provost's Office makes available funding for professional development in terms of international exchanges (both short and long term) and sabbaticals. These funds are available in a campus wide competition on an annual basis. The SPCHS supports professional development of non-tenure track faculty in the form of attendance at national and international professional meetings at which the faculty are presenting a paper or have been invited to participate. This support usually comes in the form of funds for travel and room/ board. The continuing education program through our School of Extended & Lifelong Learning (**Criterion 3.3.d.**) is another example of how our University supports our faculty with professional development opportunities.

4.2.c. Description of formal procedures for evaluating faculty competence and performance.

Formal procedures for evaluating faculty competence and performance are carefully described in the Collective Bargaining Agreement (see 1.3.c. UM CBA) and the SPCHS Unit Standards (see **1.3.c. SPCHS unit standards**). Briefly, tenure track professors prepare an Individual Performance Record (IPR) (assistant professors every year; associates every two years; full professors every three years), which documents their activities in terms of teaching, service and research. Tenured faculty go through this review process every three years. Each individual under review in a unit then forwards the IPR to a Student Evaluation Committee (SEC). The students evaluate the teaching evaluations and make recommendations to a Faculty Evaluation Committee (FEC). The FEC evaluates the IPR and the students' comments and makes a recommendation to the Chair, who then recommends to the Dean of the College as to whether the candidate is performing at a normal level, a below normal level, or a merit level. The Dean then makes a recommendation as normal, below normal, or merit, which may or may not coincide with the recommendation of the FEC or the Chair. This recommendation then goes forward to the Office of the Provost for final review and decision. In the case of the SPCHS, the Chair and the candidate work together in selecting members for these two committees (SEC and FEC). Those individuals who receive merit reviews receive a salary increase from the University.

4.2.d. Description of the processes used for student course evaluation and evaluation of instructional effectiveness.

Online student course evaluations are carried out electronically by UMOnline Support Services, and then forwarded to the instructor and the Chair for review at the end of the semester. Anonymous student evaluation is required for all courses during each offering and for each section, and consists of students rating items related to teaching effectiveness and overall quality of the class. Availability of this form is announced via a global Moodle message towards the end of the semester, along with instructions on how to complete the survey. The Chair reviews the evaluation results and then discusses them with the Dean and faculty if appropriate. A copy of the class evaluation survey (2.12.b. Class evaluation survey instrument) can be found in the ERF. Course evaluations for Fall, Spring, and Summer 2016 (2.12.b. 2016 course evaluations) are also provided in the ERF.

4.2.e. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

Through our well-defined policies for faculty evaluations and student course evaluations, SPCHS has an effective system in place for overall program evaluation.

Weaknesses

We would like to improve our overall course evaluation strategies. To address this, we recently sent out an alumni survey (see 2.7.c. 2017 Qualtrics alumni survey in the ERF) that solicited information on all of our course offerings. These surveys included opportunities for students to reflect back on the quality of their courses, with results from these surveys (see 2.7.c. 2017 Alumni survey results in the ERF) providing a rich dataset and important feedback for our program.

In an effort to further improve our course evaluations, we have discussed strategies as a faculty as well as consulted with UMOnline. As a result, we have decided to implement some new strategies (starting in both Spring and Summer 2017) in an effort to increase evaluation responses, and improve our overall course evaluation program. Specifically:

- We will be exploring with UMOnline opportunities to include a mid-term class
 evaluation into our classes (in addition to the survey at the end of the semester). We are
 committed to doing more timely in-class assessments so that the instructor gets early
 feedback. To support these efforts, we intend to schedule a training with UMOnline this
 summer regarding class assessments.
- We will stress to the student that the information collected from evaluations will remain anonymous. We will also stress to the student how the information from course evaluations will be used, including how their responses will improve instruction and benefit not only the student, but also the course, the instructor, and the SPCHS. We will encourage instructors to point out examples of how the current course had changed in result to student feedback.
- We will send out reminders to students, including early announcements to students (two weeks in advance of the scheduled evaluations), during the evaluation period, and then following dissemination of the survey every three days until the end of the semester.

Another weakness is that the amount of money we can provide to faculty for faculty development and travel opportunities is fairly low. Given our budget projections for the University of Montana for the next several years, we will likely not be able to increase the faculty development/travel stipends in the near future.

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

4.3.a. Description of the program's recruitment policies and procedures. If these differ by degree (e.g., bachelor's vs. graduate degrees), a description should be provided for each.

The SPCHS recruitment policies and procedures focus on both mid-career professionals seeking a career change or improvement, as well as those recently graduated from undergraduate programs who desire to begin public health training. Public health experience is emphasized when considering mid-career applicants. The ultimate criterion is whether the applicant is perceived to be someone who, with additional training at the graduate level, would benefit the public health infrastructure of the state of Montana and our region.

The program website (http://health.umt.edu/publichealth/) serves as the face of our program, and is in many ways the first contact prospective students have with our program. Under the direction of Ms. Emily Weiler and Mr. Patrick Dye, our faculty spends a great deal of time ensuring that the website is up to date, and includes admissions information about our program. Prospective students will frequently send inquiries through the website asking questions about our program. These emails are responded to by Dr. Tony Ward (Program Chair) or Mr. Patrick Dye (Program Coordinator / Administrative Assistant) as quickly as possible. Our newsletter (see 4.3.a. Spring 2016 newsletter in the ERF) is another way of advertising our program regionally. This newsletter is mailed annually (each Spring) to all local health departments in the state, and a large list of hospitals, physicians, nurses and other health professional sites throughout Montana.

Our alumni network also serves as a recruiting tool for our program. In addition, we network and recruit with mid-career public health professionals at the local Montana health departments, in particular the Missoula, RiverStone (Billings), and Granite County Health departments, as well as the state health department in Helena, Montana (DPHHS). We also recruit within our own university. Specifically, we give presentations on our MPH/CPH program to incoming Pharmacy School students at the start of each Fall and Spring semester.

Marketing to mid-career professionals also includes networking with health care practitioners through the statewide Public Health System Improvement Task Force, on which Drs. Molgaard and Ward have served over the past seven years. This active engagement with the state health department has resulted in a Memorandum of Understanding in which they will send ~45 of their staff into our Certificate program starting in Fall 2017. Recruiting at local / state conferences is also one of our goals. Just in the past six months, we had a recruiting booth at a tobacco conference in Fairmont, Montana and the annual Montana Environmental Health / Montana Public Health Association (MEHA/MPHA) conference in Billings, Montana.

For our PhD program, since the program is so new, our recruitment strategies have focused on our current network of students, alumni, and other public health professionals in our region. Our website provides information on our PhD program for prospective students, and any calls or

emails directed to our office are addressed by Dr. Ward. In the future, we plan to actively promote the PhD program through marketing emails to our alumni and Practitioner Faculty, recruiting booths at local/statewide/regional meetings and conferences, and exploration of using a pay-for-service marketing firm in our region.

4.3.b. Statement of admissions policies and procedures. If these differ by degree (e.g., bachelor's vs. graduate degrees), a description should be provided for each.

Students apply to our program through an online system maintained by our UM Graduate School Office (https://www.applyweb.com/uomont/menu.ftl). Student applications are reviewed by the Admissions Committee using both qualitative and quantitative measures. The Committee evaluates the applicants' potential for a career in public health practice in Montana, and ranks the applicants in terms of their potential for success in either the MPH or Certificate programs.

Up until May 2016, the deadlines for the MPH and Certificate programs were: admissions for Fall semester (April 30); admissions for Spring semester (September 30). Students applying for the Certificate program after the deadlines were reviewed by the faculty/Steering Committee if space was available in the program. Starting in May 2016, the deadlines were changed to allow the Admissions Committee additional time to adequately review applications, and to inform students about the acceptance decisions earlier. Currently, the deadline for admissions is March 15 for Fall admissions, and September 1 for Spring admissions. Certificate student applications are reviewed by the Admissions Committee if applications are submitted before the deadlines, and by the faculty (Steering Committee) if applications are received after the deadlines.

Each applicant is evaluated by two members of the Admissions Committee for objective and subjective criteria, while the Chair of the Admissions Committee also reviews each application, and provides additional feedback to the Committee when necessary. A successful applicant will normally have a cumulative GPA of 3.0 or higher, competitive GRE scores (verbal 158-162; quantitative 159-164; and analytical 4.5-5), excellent letters of recommendation, noteworthy volunteer or professional employment experience relevant to public health, noteworthy life experience or leadership experience relevant to public health, and demonstration of potential for excellence in public health practice based on the student admissions essay. If an applicant is deficient on one or more of these criteria, a positive admission decision is still possible if the applicant demonstrates significant strengths on other criteria. Following a discussion of each applicant, the Admissions Committee makes its final recommendations to the SPCHS Chair regarding admission to the program. A copy of the Admissions Committee Rubric (4.3.b. Admissions committee rubric) is provided in the ERF.

The Admissions Committee ensures that all applicants are treated in a fair and reasonable manner by following the procedures outlined above. All materials submitted to the MPH program for consideration in the application process are considered confidential and are not discussed or disseminated for review with anyone outside the program. All decisions regarding acceptance are conveyed to the applicants in writing by the Graduate School Office. Students who are not offered admission into the MPH program can choose to discuss with the Chair of the Admissions Committee the rationale for being declined.

As noted previously, our first cohort of four PhD students entered the program in January 2017. For this cohort, students sent their applications to the Graduate School by October 15, 2016, with the completed applications reviewed by the Steering Committee. Given that our goal is to have only Fall admissions to our program going forward, our deadline for Fall admissions will be January 15, similar to our MPH program. Given that all faculty should have a say regarding the acceptance of PhD students, PhD applications will continue to be reviewed by the faculty / Steering Committee.

4.3.c. Examples of recruitment materials and other publications and advertising that describe, at a minimum, academic calendars, grading and the academic offerings of the program. If a program does not have a printed bulletin/catalog, it must provide a printed web page that indicates the degree requirements as the official representation of the program. In addition, references to website addresses may be included.

Because the MPH program is an online program, all recruitment materials and program publications are primarily available online. Academic calendars, grading, and the academic offerings of the program are included in the student handbook (see 1.1.f. SPCHS student handbook in the ERF), and at the MPH website "Prospective Students" page at: http://health.umt.edu/publichealth/2prospective-students/default.php. An example of a recruiting handout for our program is provided in the ERF (4.3.c. Recruiting handout). We also send out a newsletter each spring, with the latest version in the ERF (see 4.3.a. Spring 2016 newsletter).

4.3.d. Quantitative information on the number of applicants, acceptances and enrollment, by concentration, for each degree, for each of the last three years. Data must be presented in table format.

Table 4.3.d(1). presents the number of MPH applicants over a three-year period, and provides a breakdown of those applicants who were accepted and those who ultimately enrolled in the MPH program. **Table 4.3.d(2)** presents the same information for the PhD program.

Table 4.3.d(1). Quantitative information on the MPH program.

		Academic Year 2014-2015	Academic Year 2015-2016	Academic Year 2016-2017
MPH	Applied	20	24	24
Program	Accepted	17	20	17
	Enrolled	10	12	12

Table 4.3.d(2). Quantitative information on the PhD program.

		Academic Year 2014-2015	Academic Year 2015-2016	Academic Year 2016-2017
PhD	Applied			5
Program	Accepted			4
	Enrolled			4

4.3.e. Quantitative information on the number of students enrolled in each specialty area of each degree identified in the instructional matrix, including headcounts of full- and part-time students and an FTE conversion, for each of the last three years. Non-degree students, such as those enrolled in continuing education or certificate programs, should not be included. Explain any important trends or patterns, including a persistent absence of students in any degree or specialization. Data must be presented in table format.

Table 4.3.e(1) presents the enrollment data for our MPH program, while **Table 4.3.e(2)** presents the enrollment data for our new PhD program. Both periods of review include 2014/2015 – 2016/2017.

Table 4.3.e(1). Student enrollment data for the MPH program 2014 through 2017.

	Academic Year 2014-2015		Academic Year 2015-2016		Academic Year 2016-2017	
	HC FTE		HC	FTE	HC	FTE
MPH Program	48	80.0	40 66.7		51	85.0

For students, 1 FTE = 1 student taking 9 or more semester-credits per semester. Assume students are taking 15 credits per year (fall, spring, and summer).

Table 4.3.e(2). Student enrollment data for the PhD program 2014 through 2017.

	Academic Year 2014-2015		Academic Year 2015-2016		Academic Year 2016-2017	
	HC FTE		HC	FTE	HC	FTE
PhD Program					4	5.8

For students, 1 FTE = 1 student taking 9 or more semester-credits per semester. Assume students are taking 13 credits in spring 2017.

Many of our MPH students are working professionals with part time student status, as fits with our mission. The number of MPH students has fluctuated a bit over the three-year period of review, but our enrollment headcount remains above 40 students. Our four PhD students (starting Spring 2017) are encouraged to take nine or more credits each semester.

4.3.f. Identification of measurable objectives by which the program may evaluate its success in enrolling a qualified student body, along with data regarding the performance of the program against those measures for each of the last three years.

Table 4.3.f. Outcome measures for enrolling a qualified student body.

Outcome Measure	Target	2013-2014	2014-2015	2015-2016
Objective 1.3a. Enrollment of new students.	≥12 new students enrolled per year	Target met 21	Target not met 11	Target met 18
Objective 1.3.b. Enrolled students will enter the program with a GPA reflecting academic success.	>70% of incoming students will meet or exceed GPA of 3.0	Target met 89.1%	Target met 85.7%	Target met 87.3%
Objective 1.3.c. Enrolled students will enter the program with GRE scores reflecting potential for academic success in graduate study.	≥80% or more students will score competitively (greater than 140) on verbal (V) and quantitative (Q) components of the GRE test	Target met V: 100.0% Q: 100.0%	Target met V: 100.0% Q: 100.0%	Target met V: 100.0% Q: 83.0%
Objective 1.3.d. Enrollment of American Indian MPH students.	≥6% American Indian to match ethnic profile of Montana	Target met 10.5%	Target met 11.5%	Target met 14.6%
Objective 1.3.e. Enrollment of mid-career professionals.	≥50% or more enrolled students	Target not met 48.0%	Target not met 46.2%	Target not met 49.4%
Number of students admitted with advanced degrees (Masters/ Doctorates).	>1	Target not met 0	Target met	Target met 6

4.3.g. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met with some discussion.

Strengths

Results from **Table 4.3.d(1)** show that although we accept about 80% of the students that apply to our MPH program, only about 50% of the applicants ultimately enroll. This has resulted in a fairly stable student headcount throughout the period of review (40-51 students enrolled per year, ~66.7-85.0 FTE). The students that do enter our program have good GPAs (nearly 90% above 3.0), as well as GRE scores that are above our target levels for verbal and quantitative components. Once in the MPH program, students are successful in maintaining an average GPA above 3.0. It is also encouraging to see a trend in an increasing amount of students entering our program with advanced degrees (MS, PhD, DDS, MD), thereby increasing the overall quality of our academic offerings. Our students are increasingly culturally diverse; in 2015-2016 more than 14% of the students enrolled into our MPH program were Native American.

Regarding the first class of applicants for our PhD program for Spring 2017, we had four highly qualified applicants (out of five total applications) that we admitted into the program. We look forward to our next batch of PhD students starting in Fall 2017.

Weaknesses

One of the things observed by our Admissions Committee is a general trend in low GRE scores. Our current target (>140 on verbal and quantitative components) is lower compared to what is considered an "average" score (150-152). Therefore, the Admissions Committee has had discussions about raising this minimum guideline.

It should be noted that the student's application is always viewed as a sum of parts, with the GRE score accounting for only one part of the total application (along with resume, GPA, letters of support, and personal statement). Further, students that had low GRE scores upon enrollment have generally done well in our program, maintaining a high GPA and graduating in a timely fashion. We are interested in continuing to evaluate the implementation of more stringent admissions requirements, while still maintaining a robust and culturally diverse student population. Unless we get a significant increase in the number of applications we receive for our MPH and PhD programs in the coming years, therefore allowing us the luxury of being more selective with our applicants, we will not likely raise our minimum GRE requirement in the next year. Finally, while we did not quite meet our goal of enrolling 50% or more of mid-career professionals, we were very close to the target, suggesting no major changes are needed. We do intend to address this issue, however, by recruiting incoming Fall 2017 CPH students from the DPHHS cohort (many of which will be mid-career professionals) into our MPH program.

- 4.4. Advising and Career Counseling. There shall be available a clearly explained and accessible academic advising system for students, as well as readily available career and placement advice.
- 4.4.a. Description of the program's advising services for students in all degrees and concentrations, including sample materials such as student handbooks. Include an explanation of how faculty are selected for and oriented to their advising responsibilities.

Upon admission to the MPH program, students receive a welcome letter from the Department Chair, which includes assignment of an academic advisor. Only the Core SPCHS faculty (Belcourt, Harris, Noonan, Semmens, and Ward) serve as advisors. Dr. Belcourt, who is 0.25 FTE in Public Health, has six advisees, while the remainder of the SPCHS faculty have between 15 and 20 advisees. The SPCHS Chair makes assignments for advising based on the interests of the student and the overall availability (advisee load) of the advisor.

When MPH students enter the program, they participate in an institutional and programmatic orientation in the Fall semester. Information on use of the library, use and tutorials of the designated platform for web-based instruction (Moodle), introduction of core and program faculty, research activity of faculty, course sequencing, student services, opportunities for students to serve on standing committees, etc. are presented. Please see the ERF for a copy of the Fall 2016 Orientation Agenda (3.2.e. Fall 2016 orientation agenda). The first cohort of PhD students also attended an orientation hosted by our faculty in January 2017. At this event, an overview of the PhD program was given, including a discussion of research opportunities in the SPCHS. Please see the PhD orientation agenda in the ERF (4.4.a. 2017 PhD orientation agenda). It should be noted that all students are provided access to the SPCHS student handbook (see 1.1.f. SPCHS student handbook in the ERF) which describes the overall SPCHS program in more detail.

Student advising for the MPH program takes place either by video conference, email, phone or for local students, in person. Faculty members mentor students by providing advice on practicum strategies, assisting students with MPH program and career planning, and sharing their own experiences in public health. These advising activities may be initiated when the student specifically reaches out to the faculty member, or the faculty member may reach out to the student. We make an effort to reach out to all students at the beginning of the semester, letting them know who their advisors are and to encourage them to set up an advising appointment. An example of our MPH advising sheet (4.4.a. MPH advising sheet 2016-2017) is found in the ERF.

For the PhD program, students are initially assigned to the PhD Program Coordinator (Dr. Ward) upon entry into the program. By the end of the first year, students will choose a Research Advisor, and then form a five-person committee that advises the student for the duration of their PhD program.

4.4.b. Description of the program's career counseling services for students in all degree programs. Include an explanation of efforts to tailor services to meet specific needs in the program's student population.

At the University of Montana, there is a formal mechanism for students to receive career counseling at the Career Office. There they can receive help to enhance and draft effective resumes, cover letters and CVs; develop effective job search strategies; identify and articulate their skills, values, and expertise; and build competence and confidence for job interviews.

Through multiple mechanisms, career counseling also occurs within SPCHS. This can occur through a variety of mechanisms. Formal (and informal) student advising is a primary way that students can receive counseling on career opportunities. In addition, the MPH and PhD advisors frequently send information about job and training opportunities to the entire student body via email. Within the Portfolio document and presentation, MPH students discuss their future career plans. Frequently this leads to a discussion among the committee about career options. Alumni serve on the Admissions, Curriculum, Research, and External Advisory committees, allowing a continuation of communication and networking for other students. They also occasionally serve on MPH Practicum and Portfolio defense committees. It should be noted that because Montana is a large state with a small population, many public health professionals are well aware of the importance of social networks to career advancement and reach out across the expanses to mentor "young professionals." Students have opportunities for career counseling when they attend the annual meeting of the MPHA. Alumni also engage current students as part of the monthly student and alumni (PHSAA) meetings. Finally, one of the goals of the new PHSAA Chapter of the MPHA is to provide professional network opportunities for our students. Importantly, the PHSAA alumni that are already members of the MPHA are public health professionals across the state of Montana, and are in a position to strengthen the career counseling opportunities afforded by our program.

4.4.c. Information about student satisfaction with advising and career counseling services.

Four approaches are used to gauge student satisfaction with advising and career counseling services. First is the alumni survey described in **Criterion 2.7.c**. To date, graduated students formally report their level of satisfaction with the advising and career counseling they received.

Second, as part of the Portfolio defense, students are encouraged to provide input about the overall program, and the advising and career guidance specifically. This has been a productive and effective mechanism of getting feedback, and has led to the addition of numerous improvements to our overall program.

The third mechanism we gauge student satisfaction with advising and career counseling is by meeting with the PHSAA. As part of the monthly PHSAA meetings, a standing agenda item is to get feedback from students and alumni participating in the PHSAA. This informal discussion has generated excellent feedback from the students, and helped us understand the needs of the students, and as a program, if we are meeting their needs.

Finally, informal discussions with students has been the most effective way of getting feedback from students regarding their advising / career counseling needs. This is not really a measurable strategy, but it is an effective strategy nonetheless.

4.4.d. Description of the procedures by which students may communicate their concerns to program officials, including information about how these procedures are publicized and about the aggregate number of complaints and/or student grievances submitted for each of the last three years.

Students can communicate their concerns at both the School and the University levels. At the University of Montana, students have access to the formal campus grievance process, which is available at: https://www.umt.edu/dss/Students/Grievance-Procedure.php. Historically, however, the primary way that students communicate their concerns is through their assigned advisor. If they wish, students may express concerns to the Program Coordinator, other faculty members, and/or the Chair. The Chair then has the option of carrying such concerns to the Dean. It should be noted that since the last self-study (2011), we are unaware of any formal student complaints about our faculty members or overall program through the University of Montana grievance process.

As part of our course evaluations maintained by UMOnline, students in every course have the opportunity to anonymously evaluate both the course and the instructor. These evaluations go to the course instructor and also to the SPCHS Chair for review. We also maintain a formal "complaint/compliment" log maintained in the Program office. No formal complaints have been received in the last three years using this mechanism. We will continue to monitor all student concerns. If a complaint is received, it will be documented in the Student Complaint Log and if warranted, the Chair will follow-up to address the concerns.

4.4.e. Assessment of the extent to which this criterion is met and an analysis of the program's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths

To date, we have had a structured advising process within SPCHS. Each student in our program is assigned an advisor, and we encourage students to actively engage with their advisor throughout the duration of the program. At the very minimum, we encourage that the students and advisors meet each semester. Engaging the PHSAA and individual students in informal discussions regarding any programmatic or student-specific issues (including advising) has been beneficial to our program, and provided us with feedback that we can use to improve our overall service to the students.

Weaknesses

One of the drawbacks of the online system is that our students are not on campus. Therefore, students do not always take advantage of their advising opportunities, no matter how often they are encouraged. To address this weakness, we offer students the opportunity to meet with their advisor at the new student orientation. Our goal is to facilitate a personal connection between the student and their advisor early in the student's program. Additionally, some of our faculty proactively reach out to all the students they advise to schedule advising meetings at the beginning of each semester. This strategy has worked well in engaging with students in the program. In addition, it should be noted that we recently included a standing agenda item in our faculty meetings called "student-related issues". This is a good opportunity to identify and discuss issues related to students (or specific students), and provides for more impactful advising meetings as a result of data sharing.