

College of Population* Health

“An Organic Approach”

3/12/2014



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****CEPH Accreditation Procedures, pg. 29 "1) accredited public health programs seeking a change in accreditation status may not refer to themselves as schools or colleges of public health until an application for accreditation as a school of public health has been submitted and approved by CEPH."***

Executive Summary

It is well known that the US spends far more on health care per capita than any other country, yet it ranks low on overall health outcomes. For example, half of the deaths in the US occur prematurely and can be prevented. The state of health care in the US overall, and specifically in New Mexico requires attention to prevention and early intervention. A trained workforce is required to address these needs. Unfortunately, the public health workforce is diminishing. Currently there are 450,000 state and federal public health workers in the USA, of which 20% to 40% may retire in the next five years. A workforce comprised of undergraduates with degrees in public health can address many of the public health problems in communities. The Institute of Medicine recommends that the Master of Public Health (MPH) degree should be required of those in public health leadership and management positions within all federal, state, and local public health agencies. The public health/medical workforce needs include: healthcare administrators, community-based outreach workers, public health nurses, environmental health administrators, epidemiologists (health care and population sciences), policy analysts, compliance officers, emergency medical technicians and infection surveillance personnel. Other disciplines, such as engineering and architecture, are increasingly important to public health and are part of the interdisciplinary team needed to protect public health and safety. Fields such as communications, public relations, marketing, journalism, health education and fine arts will benefit from students with transferable skills in public health.

Less than 50% of public health workers nationwide have received any formal training in public health; however, they bear the responsibility for decisions that affect the health of millions. The annual output of students from schools of public health is insufficient to meet the demand for their skills. UNM's rationale for establishing a College of Population Health includes: addressing the tremendous health disparities of New Mexico, filling the need for public health professionals with outstanding educations, and leveraging a critical mass of investigators across disciplines to enhance public health education and research. PhD graduates of public health colleges are well suited to meet these needs.

In addition to the need for additional schools of public health nationwide, New Mexico's need for such an institution is particularly great as evidenced by:

- (1) New Mexico's overall health ranking compared to the rest of the nation is 31 out of 50
- (2) New Mexico's overall mental health ranking is 44 out of 50
- (3) New Mexico's overall physical health ranking is also 44 out of 50
- (4) New Mexico ranks 49 out of 50 for the number of children in poverty
- (5) New Mexico ranks 49 out of 50 for the number of healthcare uninsured residents
- (6) New Mexico ranks last (50 out of 50) for access to adequate prenatal care
- (7) New Mexico ranks last (50 out of 50) for teen birth rates

Currently in New Mexico there are two accredited public health Masters programs, one at UNM and the other at NMSU. Both institutions are considering enhancing their public health education programs

with the eventual goal of becoming accredited by the Council of Education for Public Health (CEPH) as “schools of public health”. Currently the two institutions have complementary programs and areas of specialization. As each public health education program matures there will be opportunities for collaboration in education, research and practice.

We propose an *innovative* approach to developing the UNM College of Population Health (CPH) that challenges the traditional model. Most of the 51 accredited schools of public health have developed in compliance with CEPH accreditation requirements, limiting the opportunity for innovative structures and approaches. The proposed model is organic and therefore provides very real opportunities to “home grow” the CPH to meet New Mexico’s diverse population needs.

Initially the new approach will be simpler and less expensive, and will benefit those whose needs cannot be met by a traditional approach. In the context of public health education at UNM, the model is transparent, cost effective, and will be sustained through collaboration rather than competition (reducing the likelihood of creating silos of public health practice). It will provide opportunities for faculty, staff and students from the entire University and members of the community to participate in building educational programs to improve the public health of New Mexico. This superior “network” approach is flexible and non-linear and will be more easily able to incorporate feedback, communication and self-correction. It is envisioned as a coherent, integrated, cross-institutional plan for public health that will be superior to a traditional College of Population Health (CPH).

Our broad-based outreach to leaders, faculty, staff and students at UNM and other institutions, and community leaders (New Mexico, regional and national) has led us to conceptualize a pioneering approach that efficiently utilizes existing resources and maximizes mutual benefits. This “organic” CPH will centralize the administrative management of public health activities. It will bring together and synergize currently widely dispersed public health education; research and practice, in order to better meet the needs of the State. Revenues will be generated through tuition, fees, formula funding and institutional research grants.

Principal investigators at UNM hold multi-millions of dollars in grants and contracts that fund projects related to public health issues. The CPH will act as a connector for collaborative *Transdisciplinary* research with faculty across UNM and with faculty from other research institutions in New Mexico. The CPH will sponsor research where faculty members and research staff work in collaboration to exchange information and share resources while transcending their own disciplines to achieve a common public health goal and the CPH will provide resources to stimulate pilot initiatives to engage research participation outside the CPH.

In the early years the new structure will be leaner than a traditional college because it will not have financial responsibility for faculty because for the first 3-5 years, faculty members will maintain their appointments in their current college/school/department. Colleges will make strategic investments through collaboration and resource accommodations to benefit faculty, their department and college

and the institution as a whole by eliminating duplication of courses and working together with the CPH to generate enrollment growth. No faculty members will have primary appointments in the CPH. All faculty members who wish to have a joint/secondary appointment in the CPH will contribute to the mission and vision of the CPH: e.g. curriculum development, teaching, advising, mentoring, collaborative research, public health practice, or faculty governance. Faculty members with joint/secondary appointments will be eligible for special pilot funds and professional career development funds (for example Public Health Leadership scholarships). Joint/secondary appointments will be administered through an MOU developed in collaboration with the CPH Dean, the faculty member and his or her Chair/Dean. These MOUs will be carefully constructed to consider faculty effort and faculty contracts and to align with college/school/department policies and faculty performance expectations and promotion and tenure requirements.

As the CPH generates revenue, funds will be allocated for faculty lines so that the CPH will be able to meet CEPH accreditation requirements. Currently the Public Health Program faculty reside in the Department of Family and Community Medicine. The Public Health Program (PHP) is fully accredited by CEPH. Over time these faculty lines will move into the CPH (see figure 1).

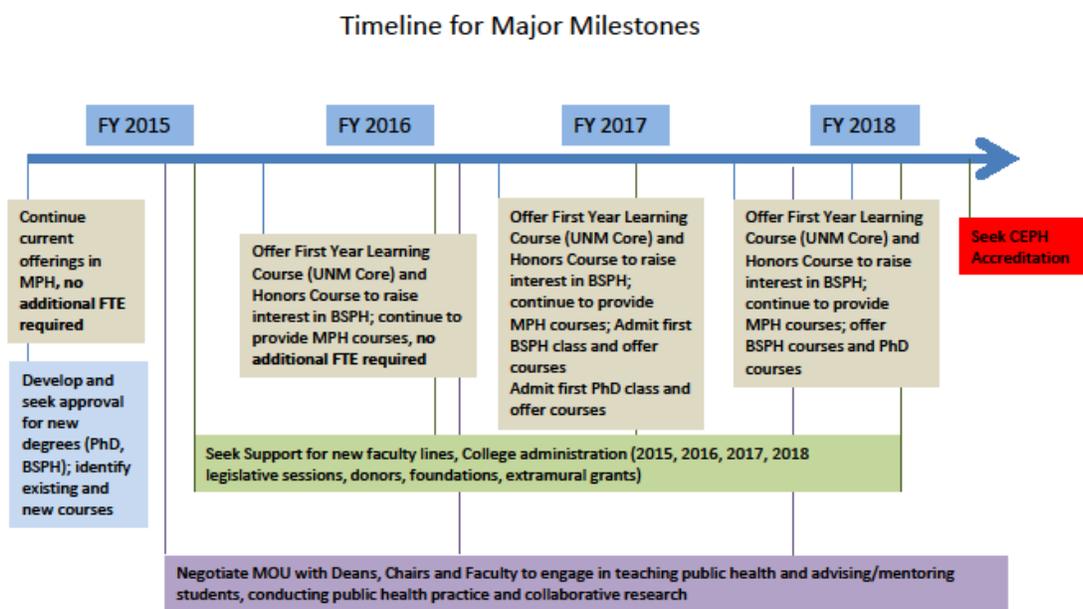


Figure 1. CPH Major Milestones Timeline

Courses and advising required for the Bachelor of Science in Public Health (BSPH), Master of Public Health (MPH) and Doctor of Public Health Sciences (PhD) will be taught by qualified faculty across the institution. As revenue is generated, resources will be available to compensate departments/colleges/schools for faculty effort. There are tremendous benefits of this innovative academic model. It provides a resource for the HSC and Central and South Campuses' Colleges and

Schools that builds on existing strengths and eliminates duplication. The model requires minimal office space. The need for additional classroom space will be dependent on the student demand that we anticipate will grow over time. Table 2 provides two illustrations of growth at similar institutions.

Table 1: Growth at Similar Public Health Universities

	2010 -2011	2011-2012	2012-2013	2013-2014
Kent State University*-Kent Ohio				
BSPH	81	225	494	588
MPH	32	68	89	125
PhD	6	19	36	36
University of South Florida**-Tampa Florida				
BSPH	308	667	984	943
* UG Enrollment 2014 = 18,772 @ Main Campus				
** UG Enrollment 2014= 30,425 @ Main Campus				

Growth at both institutions in the BSPH program alone over the same time period was significant. Kent State growth increased by a factor of 2.77% in year two, a factor of 2.2% in year three and 1.2% in year four and a growth factor of 7.25% from year one to year four. University of Southern Florida growth increased by a factor of 2% in year two, 1.48% in year three, decreased by 5% in year four and from year one to year four increased by a factor of 3.1%. These examples are for illustration purposes, only and do not represent guaranteed growth projections at UNM. They do, however, provide reason to be encouraged that UNM’s growth could be comparable.

Importantly, this approach does not disrupt existing department’s/school’s/college’s resources or faculty security. It does presume that there is a mutual interest in building a CPH. This model provides an opportunity for Chairs and Deans to strategically invest in the CPH’s success to the advantage of multiple partners. Faculty from all over the University, in addition to community stakeholders, will have multiple and flexible opportunities to participate. Most importantly this innovative approach creates very little disruption to faculty and administration and provides the opportunity for “buy-in” as it grows to meet the demand for public health education, research and practice. This model also enhances the opportunity for collaboration between NMSU and UNM; it incentivizes us to share the responsibility for teaching public health statewide, while not duplicating resources and ensuring that students at both institutions have access to multiple educational and research opportunities. It also stimulates opportunities for faculty from both institutions to collaborate on research to address the public health needs of the State.

In order for this model to move forward and unfold into a functional CPH, it will require a tremendous amount of goodwill, trust and mutual interest in advancing public health education, practice, and research in New Mexico. It will also require the vested interest of healthcare employers, community

leaders, other institutions of higher education (community colleges and 4 year universities) and state health agencies. The college will pursue active service activities, consistent with its mission and UNM policies, through which participating faculty and students contribute to the advancement of public health practice. The community is the site where public health is implemented; effective linkages with organizations and agencies in the community are essential to the success of the college in meeting its overall objectives.

The College must be provided a long-term financial commitment to grow roots and establish itself as a sustainable entity. A mission, vision, goals and business plan will be developed for the CPH in collaboration with the community, students, staff, faculty and administration. Public awareness of, interest in and collaboration with the CPH will increase enrollments and for admitted students to develop a foundation and fully progress through the program. With UNM's plan to move to a Results Oriented Management (ROM) structure, the UNM Financial Leadership Team will help the CPH develop a plan to share resources so that CPH offerings can meet degree requirements and achieve program outcomes.

It is important that the CPH remain focused on meeting the public health needs of the state: which include extending in the healthcare workforce with educated professionals who can complement existing health services to reach and maintain the wellness of broader groups of citizens through their work in public health. This model will evolve as the CPH grows and new dynamics develop such as student interest in new courses, community involvement and needs, and faculty participation and interest.

1. What is the Need for a College of Population Health?

A. Teaching

1) Evidence of Why a College of Population Health is Needed

a) Legislative Request for Public Health Education

New Mexico House Memorial 43 states that the Higher Education Department (HED) will study the feasibility of establishing a school of public health in New Mexico. To strengthen the state's capacity to provide public health education, we propose to develop a formal public health *collaborative* between the University of New Mexico (UNM), New Mexico State University (NMSU) and the New Mexico Department of Health (DOH).

In the response to Memorial 43, José Garcia, Secretary of HED stated "There appear to be powerful reasons to establish a School of Public Health in the interests of public health in New Mexico. Strong assets exist at UNM and NMSU that could be shared in the creation of such a center, and this would seem to be propitious time to begin."

Public Health Needs along the US-Mexico Border Region and in NM

The US-Mexico Border region is one of the most medically underserved and economically deprived areas in the US. It is also an area where public health interventions can do the most good, particularly given the number of low-income families and the lack of health professionals in the region. The US-Mexico Border Region includes the area of land that is 100 kilometers (62.5 miles) north and south of the international boundary. It stretches approximately 2,000 miles from the southern tip of Texas to California, and has a population of 15 million.

Approximately 432,000 people live in 1,200 *colonias* in Texas and New Mexico, which are unincorporated, semi-rural communities characterized by substandard housing and unsafe public drinking water or wastewater systems. New Mexico alone is home to 135 *colonias*; 75% are located in the southern part of the state. The unemployment rate along the US side of the Texas-Mexico border is 250-300 percent higher than in the rest of the country. If the border region were to be made the 51st state, the US-Mexico border region would rank: (1) last in access to health care; (2) second highest in deaths from hepatitis; (3) third highest in deaths related to diabetes; (4) last in per capita income; (5) first in the number of school children living in poverty; and, (6) first in the number of uninsured children. These facts argue for the need for more competently trained public health professionals, and hence the need for a school of public health in the border region.

Health Resources and Services Administration (HRSA) has identified most of the southern part of the state as medically underserved and underserved by mental health professionals. Twenty-nine of the

state's 33 counties are considered full or partial Health Professional Shortage Areas. The counties of Bernalillo, Los Alamos and Santa Fe are served by 64.4% of the state's physicians, but contain only 38.7 % of the state's residents. Dona Ana County, in which NMSU is located, has 35 *colonias*. Residents of *colonias*, according to Department of Housing and Urban Development HUD, are largely US citizens (85%) and of Hispanic origin (97%) with an average income of \$5,000. Along the three southern most counties in New Mexico the number of designated *colonias* include, in addition to the 35 in Dona Ana County, 16 in Otero County and 5 in Eddy County.

Student Demand

The Council on Education for Public Health (CEPH) reports that the public health system is already experiencing a dearth of properly trained professionals and, lacking a sufficient number of professionals with graduate education in public health, individuals with the BSPH degree will fill these critical positions.¹

To meet this growing need for public health workforce and to avert the public health crisis, many universities in the nation have already taken steps by adding public health majors to their curriculum. In 2007, the Association of Schools and Programs of Public Health² conducted a survey of 40 accredited schools of public health. Each school was asked to complete a brief survey questionnaire regarding their undergraduate public health course offerings. Thirty-five schools (88 percent response rate) responded by the deadline. The compilation of responses indicated that: (a) 16 of the 35 schools (46 percent) had an undergraduate public health program; (2) six of the 16 (35 percent) offer a combined bachelor's–master's degree program; (3) 10 of the 16 (63 percent) offer public health as a major with enrollment ranging from four to 301 students; and (4) seven of the remaining 19 schools (37 percent) without an undergraduate public health program were planning to establish a major or minor in public health. A recent examination of the ASPPH website reveals that 67 schools and programs are offering bachelor's training in public health, representing significant growth in four years. The University of Arizona Mel and Enid Zuckerman College of Population Health began offering courses toward the BSPH in Fall 2009.³ In short, this proposal is based upon an established need and a national trend.

Undergraduate education in public health is burgeoning and appearing in many different variations in educational institutions across the country – including two-year colleges, four-year institutions without schools or programs of public health and in accredited schools and programs. These programs may offer majors and minors in public health, starting freshman year, but often beginning in the junior year of college. As well, education in public health is appearing more and more within general education requirements and among elective courses (ASPPH, 2012). Moreover, non-health disciplines that play emerging roles in impacting human health, such as architecture, business, engineering, law, security and other areas that support environmental health, and/or global health, are increasingly seeking

¹ "Including Undergraduate Public Health Degree Programs in Your Unit of Accreditation" Council on Education for Public Health (September 30, 2006)

² "ASPPH and Undergraduate Public Health Education," Association of Schools of and Programs of Public Health (May 19, 2008)

³ New Bachelor of Science in Public Health to Be Offered Beginning in Fall of 2009. Posted May 28, 2009.

<http://publichealth.arizona.edu/News/degrees/2009-05-28-NewBSPH.aspx>

opportunities to integrate public health content into their educational programs, whether through courses, interdisciplinary certificates or joint degrees and the opportunities for collaborative research.

Public health education at the graduate level has also experienced a significant increase in applications. In 2000, graduate applications to public health institutions were at 19,953. In 2010, applications increased to 49,227, an increase of nearly 30,000 enrollments.

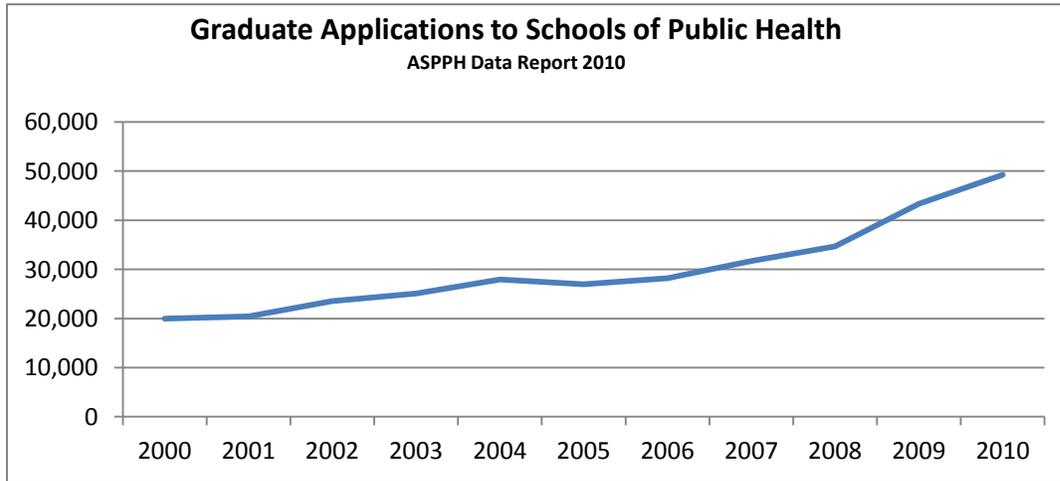


Figure 2. ASPPH Schools of Public Health Graduate Application Trends, 2000-2010

Currently all the public health teaching and research is isolated and hidden within multiple institutions at the University of New Mexico (UNM). Unless they explored each college's/school's offerings, students may not be aware of the more than 250 UNM course offerings with public health content. While courses from the Public Health Program in the School of Medicine's Department of Family and Community Medicine are more visible, public health related courses within the School of Architecture and Planning, School of Public Administration, College of Education, School of Arts and Sciences, College of Fine Arts and School of Law are less transparent. The College of Population Health (CPH) would become a conduit for these courses that are less transparent while dispersing them throughout the University, creating new educational opportunity and growth through existing untapped resources. Unlike other institutions, that have had to build programs from scratch, which is time-consuming and costly, UNM has an advantage because the educational infrastructure exists, but strategically needs to be developed. Further examples of public health education demand are reflected at NMSU College of Health and Social Services that also offers an MPH in Health Education. Similar to UNM, colleges in New Mexico also offer public health related courses including the College of Agriculture, the College of Education and the College of Engineering. Public health draws from multiple disciplines and for students on both campuses the opportunities are abundant.

This is an unprecedented period of change and opportunity for public health in New Mexico. The Patient Protection and Affordable Care Act (ACA) require us to transcend our traditional roles in public

health to adapt to an evolving healthcare system. As the ACA, along with accrediting and governance entities, shifts accountability for health outcomes to additional stakeholders such as providers/practitioners, payers of health care and business communities, new opportunities arise for public health. These opportunities require that our New Mexico public health workforce have new skills to influence how the healthcare system evolves. In addition to course work, the public health workforce in New Mexico needs to be equipped with practical competencies required to effectively inform policies and to lead new innovative approaches for prevention of disease, promotion of wellness and protection against disability.

We have serious health issues in New Mexico that can be addressed and lessened through trained public health professionals. It is well known the US spends far more on health care per capita than any other country, yet it ranks low on overall health outcomes. Public health can reduce health care expenditures by addressing population health challenges and helping to improve wellness in our communities.

In New Mexico alone:

- The American Diabetes Association estimates direct health care costs and complications to be about \$1.7 billion, not including costs due to reduced work performance, lost work days, reduced worker productivity and care provided by non-paid caregivers.
- Prescription opioid abuse, dependence and misuse cost \$890 million.
- The cost of alcohol abuse was estimated to be \$2.5 billion. The economic burden of alcohol abuse amounted to over \$1,250 for every person in New Mexico.
- 2,100 people die from tobacco use annually and another 42,000 are living with tobacco-related diseases. Annual smoking-related costs hit \$954 million (\$461 million in direct medical costs and \$493 million in lost productivity).

**New Mexico Department of Health Indicator-Based Information System*

Additionally, in 2002, the Institute of Medicine (IOM) recommended that the Master of Public Health degree should be required of those in public health leadership and management positions within all federal, state and local public health agencies and subsequently in 2003, the IOM report, *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century* recommended “all undergraduates should have access to education in public health.” The authors “challenged educators to integrate core public health instruction into all US college and university curricula and to view undergraduate public health education not as a professional credential but as part of the preparation of an educated individual.”

The gaps in workforce development in New Mexico must be addressed through education in order for our state to effectively care for its population and to meet the demands that the ACA will create on our existing healthcare professionals.

- New Mexico graduates need to be better prepared to immediately contribute upon entering the public health workforce. Our public health workforce is often weak in areas such as epidemiology, policy, health economics and health law.
- The existing New Mexico workforce requires opportunities for continuous learning in order to maintain and gain new competencies to address the continuously evolving healthcare environment.
- There are under-utilized resources, such as the New Mexico Department of Health (NMDOH) alliance with Community Health Councils and/or the communities receiving funding from the New Mexico Community Transformation Initiative that may enhance the currently existing applied training for public health workers.
- Collaborations with our neighboring tribal nations and their health institutions including Indian Health Services (IHS), Albuquerque Area Indian Health Board and the National Indian Health Board are important to the success of the CPH.

Anticipated workforce demands in public health occupations and student interest will lead to CPH projected enrollment increases each fiscal year. Projections include the three existing MPH concentrations and new program enrollment starting in FY15-16 with the Bachelors of Science in Public Health and the PhD in Public Health Sciences. These figures are based on current enrollments, the experience of similar institutions who have started BSPH programs and our knowledge of current students who wish to pursue a PhD and would have to leave the state in order to do so.

Table 2. Projected CPH Enrollments

CPH Three-year Anticipated Projected Enrollments						
New Matriculations						
	MPH EPI	MPH CH	MPH HSSP	BSPH	PhD	Total
FY 2014-2015	8	8	8			24
FY 2015-2016	12	12	12	30	5	71
FY 2016-2017	15	15	15	100	5	150
Total Projected Three-year Enrollments						245

b) Recruitment of Students

Several audiences represent potential student base for public health programs at the undergraduate and graduate levels at UNM. First, experience suggests that the vast majority of high school students are not familiar with what public health is or career opportunities it provides. We need to target high school juniors and their guidance counselors to educate them about public health, and to consider UNM as their school of choice. Second, there are currently more than 8,500 students enrolled in University College at the University of New Mexico as first and second year students. University College’s mission, in part, is to prepare these students for admission to colleges or schools of their

choice across campus. The CPH will partner with University College to offer public health as an option on their menu of academic majors. Third, we believe there are significant portions of students interested in health care careers who will not attain those aspirations because of demand outpacing capacity and academic standards not being met. Public health provides the chance to remain in a health field, but shift their focus from individuals and treatment to communities and prevention. This new avenue will also provide the opportunity for the university to potentially maintain the tuition revenue these students generate. A look at the number of applicants applying to programs that could transition to a public health pathway shows a great need for alternative avenues for applicants who are not offered admission:

UNM College/School	Application Completed	Offered Admission
UNM College of Nursing Undergraduate Program	1032	583
UNM College of Nursing Graduate Program	353	234
UNM School of Public Administration Graduate Program	589	325
College of Pharmacy-PharmD Graduate Program	993	320
College of Pharmacy-PEPPOR Graduate Program	173	14

Additionally, the CPH will recruit students through state workforce programs, on and off-campus recruitment events, visits to public health employers and community partners, attendance at professional conferences, partner educational institutions, website traffic and mailing of recruitment materials to identified prospects. Self-selected prospects, which contact the school directly, will be directed to the admissions process. Graduate students will be recruited from membership groups such as New Mexico Public Health Association (NMPHA), Society for Advancement of Chicanos and Native Americans in Science (SACNAS) and Annual Biomedical Research Conference for Minority Students (ABRCMS).

2) Description of CPH instructional programs, courses, other training opportunities and expected learning outcomes:

Major Public Health Disciplines

- (1) Epidemiology and Biostatistics: to determine risk factors-disease associations; design and analyze interventions.
- (2) Social and Behavioral Sciences: to uncover the social and behavioral determinants of illness and promote lifestyle change.
- (3) Environmental and Occupational Health Sciences: to uncover environmental and occupational factors including biological, physical, and chemical factors that affect the health of a community.

- (4) Health Policy and Management: to analyze new organizational models to optimize health care access, quality and cost effectiveness; to develop cost effective public health interventions, and policy analysis.
- (5) Laboratory Sciences: to elucidate the mechanisms of disease and risk.

In addition, a new CPH would also begin to address the eight new content areas added by the Institute of Medicine including informatics, communication, cultural-based participatory research, global health, genomics, cultural competency, policy and law, and ethics.

Student Learning Outcome Assessment

The CPH would like explore the use of Tk20 as implemented by the College of Education at UNM to monitor and assess the progress of students and align information to help meet requirements for accreditation. Tk20 is a comprehensive data management and learning outcomes assessment system that provides a rich set of tools for students and faculty that help track and enhance students' learning, as well as make our assessment and accountability tasks easier at the University of New Mexico. UNM students have access to Tk20 for 8 years beyond graduation to build their professional electronic portfolios and support career advancement.

Assessment is a systematic process of:

- articulating the knowledge, skills and dispositions we expect students to develop;
- gathering evidence about how well students have learned what we have said is important;
- interpreting the evidence to reveal patterns of learning strengths and weaknesses; and
- modifying learning and teaching strategies to improve learning outcomes.

Each course in the public health curriculum will yield a detailed syllabus that reflects the degree competencies and student learning outcomes tied with assignments to reflect evaluation of those outcomes.

Master of Public Health (MPH) Degree

The existing Master of Public Health (MPH) and concentrations in *Community Health, Epidemiology and Health Systems, Services and Policy* with dual degree offerings and the public health certificate will be incorporated into the College of Population Health structure. A new concentration titled *Public Health Practice* will be developed in FY 16 and will expand offerings to meet growing healthcare education demands.

A Master of Public Health in Public Health Practice is a program that prepares students pursuing an MD degree to develop the public health skills needed to work in a variety of governmental and non-governmental settings including the local, county and state departments of health, the Indian Health Service, Medicaid and Medicare programs, hospitals, and community health centers.

The Public Health Program prepares graduates to improve the health of populations with primary focus on New Mexico, the Southwest, the United States/Mexico border region and south of the border. Graduates will learn to work in partnership with New Mexico’s diverse communities, tribes and the public and private sectors to build on community strengths and to increase the capacity within the state to respond to public health problems.

The curriculum promotes an interdisciplinary and comprehensive approach to research and interventions to address health problems, provides multiple opportunities for students to practice public health skills in communities and fosters critical thinking about issues addressed by the students. Students are drawn from a broad range of social sciences, biomedical science and clinical disciplines. Specific core content areas include: principles of public health, epidemiology, biostatistics, environmental and occupational health, health policy and health services administration, and cultural and social health theory or rural health.

Graduate Requirements:

The program will consider applicants who satisfy all admission requirements as follows:

- BS, BA or equivalent from an accredited US institution or recognized foreign institution.
- GPA of at least 3.0 is preferred or 9 credit hours with G.P.A of 3.0 or better in public health-related graduate courses.
- Undergraduate basic statistics course or graduate-level basic statistics course with a 3.0 or higher. MD and PhD students who have received their accredited degrees from U.S. institutions are exempt from this requirement. All students must have recent (within five years) GRE scores with preferred verbal, quantitative and analytical writing scores approximately the 50th percentile (~150) or GMAT with preferred score of 500 and above. MD and PhD applicants who received their degrees from a U.S. university are exempt from submitting the above test scores. Foreign medical graduates must be licensed to practice in the U.S. or must have received their degrees from an accredited U.S. institution to be exempt from the test scores requirement. Foreign applicants must take the TOEFL examination and score at least 550.

Foreign applicants must submit one of the following English proficiency tests:

	Paper Test	Computer Test	IBT
Graduate TOEFL	550	213	79-80
Graduate IELTS	7.0	7.0	7.0

- Preference is given to students who have public health experience. Their experience may be in public health practice in a health department, community development, research, health education, health science, health promotion, or other health-related work. Experience may be paid or voluntary.

- Students may transfer up to 17 credit hours with "B" or better to the program from other institutions or other non-degree or graduate programs within UNM. However, those hours cannot have been used to meet the requirements of another degree program.

Students living in New Mexico who are particularly interested in helping to meet the needs of their communities will find this program attractive because of its interdisciplinary nature and practice based learning approach. Because of its connections to the communities of the state and neighboring Indian nations, the public health training programs at UNM will seek students who are vested in returning to their roots.

PhD of Public Health Sciences Degree

CPH is developing and seeking approval for a PhD of Public Health Sciences with an anticipated launch in FY 15-16.

PhD Requirements:

- Master's degree from an accredited college or university in a related discipline
- Minimum graduate GPA of 3.0 on a 4.0 scale.
- All students must have recent (within five years) GRE scores with preferred verbal, quantitative and analytical writing scores approximately the 50th percentile (~150) or GMAT with preferred score of 500 and above or MCAT with preferred total score of 24.
- A personal statement and a resume.
- 3 Letters of Recommendation from college or university faculty.
- TOEFL score, as applicable.
- Required interview with faculty and students.

Table 4. Proposed PhD Curriculum

Proposed PhD of Public Health Sciences (Under Development)							
Entering Status	Basic PH Sciences Doctoral Core	Additional Doctoral Core	Advanced Courses for Focus Area	Targeted Electives	Doctoral Proposal/Seminar	Dissertation	Total Credits
Credits Hours	18	9	12	8	4	18	
No MPH	Principles PH (3) Epi I (3) Env/Occup (3) Prog Planning (3) HC Systems/PHHC Manage (3) Biostats I (3)	Ethics (1) Sci Writing (3) Doctoral Sem (2) Mixed Methods (3)	Biostats II (3) Epi II (3) HC Systems (3) Adv Policy/Analysis (3)	Selected w/advisor	Doctoral Prop (2) Doctoral Sem (2)	18 credits	69
MPH not Policy (Transfer 18-24 credits)	18 core credits transferred	Ethics (1) Sci Writing (3) Doctoral Sem (2) Mixed Methods (3)	Transfer up to 6 credits + 6 add'l as doctoral student: Biostats II (3) Epi II (3) HC Systems (3) Adv Policy/Analysis (3)	Selected w/advisor	Doctoral Prop (2) Doctoral Sem (2)	18 credits	69 45 - 51 Post-MPH
MPH with Policy (Transfer 18-24 credits)	18 core credits transferred	Ethics (1) Sci Writing (3) Doctoral Sem (2) Mixed Methods (3)	Transfer up to 6 credits + 6 add'l as doctoral student: Biostats II (3) Epi II (3) HC Systems (3) Adv Policy/Analysis (3)	Selected w/advisor	Doctoral Prop (2) Doctoral Sem (2)	18 credits	69 45 - 51 Post-MPH

Competencies of a PhD in Public Health:

The following are the Association of Schools and Programs of Public Health (ASPPH) competencies for a Doctorate of Public Health which will be used as a guideline for the PhD and adjusted as the PhD curriculum is fleshed out. Not all competencies are relevant to all students and their educational pathways.

Advocacy-The ability to influence decision-making regarding policies and practices that advance public health using scientific knowledge, analysis, communication and consensus-building.

1. Present positions on health issues, law, and policy.
2. Influence health policy and program decision-making based on scientific evidence, stakeholder input and public opinion data.
3. Utilize consensus-building, negotiation, and conflict avoidance and resolution techniques.
4. Analyze the impact of legislation, judicial opinions, regulations and policies on population health.
5. Establish goals, timelines, funding alternatives, and strategies for influencing policy initiatives.
6. Design action plans for building public and political support for programs and policies.
7. Develop evidence-based strategies for changing health law and policy.

Communication-The ability to assess and use communication strategies across diverse audiences to inform and influence individual, organization, community and policy action.

1. Discuss the inter-relationships between health communication and marketing.
2. Explain communication program proposals and evaluations to lay, professional and policy audiences.
3. Employ evidence-based communication program models for disseminating research and evaluation outcomes.
4. Guide an organization in setting communication goals, objectives and priorities.
5. Create informational and persuasive communications.
6. Integrate health literacy concepts in all communication and marketing initiatives.
7. Develop formative and outcome evaluation plans for communication and marketing efforts.
8. Prepare dissemination plans for communication programs and evaluations.
9. Propose recommendations for improving communication processes.

Community/Cultural Orientation-The ability to communicate and interact with people across diverse communities and cultures for development of programs, policies and research.

1. Develop collaborative partnerships with communities, policy makers and other relevant groups.
2. Engage communities in creating evidence-based, culturally competent programs.
3. Conduct community-based participatory intervention and research projects.
4. Design action plans for enhancing community and population-based health.
5. Assess cultural, environmental and social justice influences on the health of communities.
6. Implement culturally and linguistically appropriate programs, services, and research.

Critical Analysis-The ability to synthesize and apply evidence-based research and theory from a broad range of disciplines and health-related data sources to advance programs, policies and systems promoting population health.

1. Apply theoretical and evidence-based perspectives from multiple disciplines in the design and implementation of programs, policies and systems.
2. Interpret quantitative and qualitative data following current scientific standards.
3. Design needs and resource assessments for communities and populations.
4. Develop health surveillance systems to monitor population health, health equity and public health services.
5. Synthesize information from multiple sources for research and practice.
6. Evaluate the performance and impact of health programs, policies and systems.
7. Weigh risks, benefits, and unintended consequences of research and practice.

Leadership-The Ability to create and communicate a share vision for a positive future; inspire trust and motivate others; and use evidence-based strategies to enhance essential public health services.

1. Communicate an organization's mission, shared vision, and values to stakeholders.
2. Develop teams for implementing health initiatives.
3. Collaborate with diverse groups.
4. Influence others to achieve high standards of performance and accountability.
5. Guide organizational decision-making and planning based on internal and external environmental research.
6. Prepare professional plans incorporating lifelong learning, mentoring and continued career progression strategies.
7. Create a shared vision.
8. Develop capacity-building strategies at individual, organizational and community level.
9. Demonstrate a commitment to personal and professional values.

Management-The ability to provide fiscally responsible strategic and operational guidance within both public and private health organizations for achieving individual and community health and wellness.

1. Implement strategic planning processes.
2. Apply principles of human resource management.
3. Use informatics principles in the design and implementation of information systems.
4. Align policies and procedures with regulatory and statutory requirements.
5. Deploy quality improvement methods.
6. Organize the work environment with defined lines of responsibility, authority, communication and governance.

7. Develop financial and business plans for health programs and services.
8. Establish a network of relationships, including internal and external collaborators.
9. Evaluate organizational performance in relation to strategic and defined goals.

Professionalism and Ethics-The ability to identify and analyze an ethical issue; balance the claims of personal liberty with the responsibility to protect and improve the health of the population and act on the ethical concepts of social justice and human rights in public health research and practice.

1. Manage potential conflicts of interest encountered by practitioners, researchers and organizations.
2. Differentiate among the administrative, legal, ethical and quality assurance dimensions of research and practice.
3. Design strategies for resolving ethical concerns in research, law and regulations.
4. Develop tools that protect the privacy of individuals and communities involved in health programs, policies and research.
5. Prepare criteria for which the protection of the public welfare may transcend the right to individual autonomy.
6. Assess ethical considerations in developing communications and promotional initiatives.
7. Demonstrate cultural sensitivity in ethical discourse and analysis.

Proposed Bachelor of Science in Public Health Undergraduate Degree

The College of Population Health will develop and seek approval for a Bachelor of Science in Public Health (BSPH) undergraduate program in FY 15 to launch in FY 16 that will be problem-based and utilize experiential learning principles. It will incorporate existing courses in partnership with UNM colleges/schools to avoid duplication. As part of program development, curriculum gaps will be examined to determine what new courses are needed to link program content into a cohesive degree structure. The undergraduate program will enhance the number of students registering for these existing courses and promote new cross-disciplinary interest. The program will assist in meeting the growing public health workforce crisis both in New Mexico and across the country.

ASPPH Growth of Undergraduate Public Health Programs

- Between 2003 and 2007, the number of bachelor degrees awarded in public health doubled, increasing from 1,322 to 2,639.
- By 2005 - 2006 approximately half the schools and graduate programs of public health were offering undergraduate courses, minors, or majors.
- By 2008, among all four-year institutions about one in every six was offering a major, minor, or concentration in public health or a similar field.

Undergraduate Requirements:

- Completion of pre-admission core undergraduate coursework.
- A minimum overall cumulative GPA of 2.5 on all required pre-admission coursework.
- An overall combined GPA of 2.5 on all University of New Mexico and transfer coursework.
- Submission of Application to the College of Population Health Advisement Center during the semester that pre-admission coursework is to be completed.
- Admission to UNM before you can be admitted to the College of Population Health
- Official transcripts from all institutions attended.

Competencies of a BSPH in Public Health:

As a foundation, the undergraduate degree will address the following content areas as set forth by the ASPPH and align with our model of integrating existing UNM courses from our partner colleges/schools. Competencies of an Undergraduate in Public Health:

Content Areas

Science: Students will have an introduction to the foundations of scientific knowledge, including the biological and life sciences and the concepts of health and disease

Social and Behavioral Sciences: Students will have an introduction to the foundations of social and behavioral sciences

Math/Quantitative Reasoning: Students will have an introduction to basic statistics

Humanities/Fine Arts: Students will have an introduction to the humanities/fine arts

Skill Areas

Communications: Students will be able to communicate, in both oral and written forms and through a variety of media, to diverse audiences

Information Literacy: Students will be able to locate, use, evaluate and synthesize information

Public Health Domains

Overview of Public Health: Students will have an introduction to the history and philosophy of public health as well as its core values, concepts and functions across the globe and in society

Role and Importance of Data in Public Health: Students will have an introduction to the basic concepts, methods, and tools of public health data collection, use and analysis and why evidence-based approaches are an essential part of public health practice

Identifying and Addressing Population Health Challenges: Students will have an introduction to concepts of population health, the basic processes, approaches and interventions that identify and address major health-related needs/concerns of populations

Human Health: Students will have an introduction to the underlying science of human health and disease including opportunities for promoting and protecting health across the life course

Determinants of Health: Students will have an introduction to the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities

Project Implementation: Students will have an introduction to the fundamental concepts and features of project implementation, including planning, assessment and evaluation

Overview of the Health System: Students will have an introduction to the fundamental characteristics and organizational structures of the U.S. health system as well as to the differences in systems in other countries

Health Policy, Law, Ethics, and Economics: Students will have an introduction to basic concepts of legal, ethical, economic, and regulatory dimensions of health care and public health policy, and the roles, influences and responsibilities of different agencies and branches of government

Health Communication: Students will have an introduction to the basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology

Outcomes

Students will have opportunities to integrate, apply, and synthesize knowledge through cumulative and experiential activities that include:

Cumulative Experience: Students will have a cumulative, integrative, and scholarly or applied experience or inquiry project that serves as a capstone to their educational experience

Field Exposure: As an integral part of their education, students will be exposed to local level public health professionals and/or to agencies that engage in population health practice

Students will be exposed to concepts and experiences necessary for success in the workplace, further education, and life-long learning. These may include the following:

- Advocacy for protection and promotion of the public's health at all levels of society
- Community dynamics
- Critical thinking and creativity
- Cultural contexts in which public health professionals work
- Ethical decision making as related to the self and society
- Independent work and a personal work ethic
- Networking
- Organizational dynamics
- Professionalism
- Research methods
- Systems thinking
- Teamwork and leadership

We have identified 250 courses at UNM that could meet the requirements for a majority of the competencies for the Bachelor of Science in Public Health (BSPH). We are working with the President's Office to create financial models that will foster collaboration with colleges/schools, avoid duplication and limit the need for additional resources. Concentrations within the BSPH will focus on regional needs, as well as global needs, and growing interest in cross-disciplinary education, which will lead our

students to having a broader transferable skills base. Transferable skills are important to workforce development as it leads to better employability and more opportunity for our graduates. The following chart outlines the proposed BSPH program and looks at the course availability at UNM to determine needed course development.

The concept of public health is more vague than that of medicine, nursing and pharmacy, law and business. To introduce students to public health perspectives and the opportunities afforded to graduates with a public health degree, we propose to offer two new UNM Core courses titled *Health Challenges and Responses Across the Globe* and *Introduction to Public Health*. The global health course would cover the following: health concepts and major determinants of health status. International organizations and control programs, disease-related problems within population groups, healthcare delivery systems, efforts to improve health by investigating current and previous programs and projects. Cultural, economic, and political contexts in international health will be reviewed. The Introduction to Public Health course will provide an overview of public health issues and approaches to disease prevention and health promotion. A variety of teaching approaches will be used including lectures, guest speakers, case studies, class discussion, audio-visual presentations, and student presentations. Both courses, if approved as UNM core course options, would serve all students introducing them to public health and serve as a recruitment source.

Table 5 provides a preliminary approach to structuring a BSPH at UNM. As illustrated, there are four principal degree requirements:

1. UNM Core
2. Electives
3. Public Health Core
4. Public Health Concentration Core

Column three indicates whether UNM has such a course (Y) or (N) and column 4 indicates course location (Central Campus) or (HSC), current or proposed location. These determinations were made by reviewing the UNM catalog and do not reflect the benefit of course syllabus analysis.

Table 5. Proposed Bachelor of Science in Public Health (BSPH)

UNM Undergraduate Core	Credit Hours	Available at UNM	Course Location (Central Campus or HSC)
Fine Arts	3	Y	Central Campus
Humanities	6	Y	Central Campus
Social and Behavioral Sciences	6	Y	Central Campus
Writing and Communication	9	Y	Central Campus
Mathematical Reasoning	3	Y	Central Campus
Foreign Language	3	Y	Central Campus
Scientific Methods in the Physical/Natural Sciences	7	Y	Central Campus
Diversity Course (Under Consideration)	3	Y	Central Campus
UNM Core Total	40		
Public Health Electives			
Public Health Related Courses (see appendix A)	17		
Electives Total	17		
Public Health Core			
Introduction to Public Health *Could be part of UNM Core	3	Y	Central Campus or HSC
Health Challenges and Responses Across the Globe *Could be part of UNM Core	3	N	HSC
Essentials of Epidemiology	3	Y	Central Campus or HSC
Introduction to Biostatistics	3	Y	Central Campus
Public Health Research	3	N	HSC
Behavioral Theories in Public Health	3	Y	Central Campus
Introduction to Environmental Health and Safety	3	N	HSC
Chronic Diseases	3	N	HSC
Communicable Diseases	3	N	HSC
Prevention Strategies in Public Health	3	Y	Central Campus
Public Health Policy and Decision Making	3	Y	Central Campus
Health Disparities	3	Y	Central Campus or HSC
Public Health Core Total	36		
Public Health Concentrations (One concentration is chosen, plus Field and Capstone Experiences)			
Health Services and Systems	15	N	Central Campus or HSC
The Built Environment (Architecture, Planning and Public Health)	15	Y	Central Campus
Health Policy	15	Y	Central Campus
Disaster Response	15	Y	HSC
Gerontology and Public Health	15	Y	Central Campus or HSC
Art and Health (Substance Abuse Prevention)	15	Y	Central Campus
Field Experience	6	Y	Central Campus or HSC
Capstone Experience	6	Y	Central Campus or HSC
Public Health Concentration Total	27		
BSPH Degree Total	120		

The development of a BSPH curriculum will be guided by a BSGP Working Group composed of faculty from interested departments and colleges/schools. The table below represents a starting point from which formal curriculum and program development can be initiated. It is expected that a student wishing to attain a BSPH would enroll in the UNM core courses and electives and then apply to the CPH for the last two years of their program.

In addition to the ability to earn a BSPH, students will declare a concentration to allow for additional specialization in public health and to further increase their marketability. There are six areas under consideration (see table 5). Two examples of concentrations are described below:

Currently, the UNM SOM Center for Disaster Medicine offers a 3.5 hour Core Disaster Life Support® (CDLS) course. It introduces clinical and public health concepts and principles for the management of disasters and public health emergencies in New Mexico. The course incorporates the “all-hazards” approach to personal, institutional, and community disaster management through the use of two unique mnemonics, the PRE-DISASTER Paradigm™ (which applies to event recognition, response, and recovery). The overarching aim of the CDLS Course is to provide participants from diverse professions, disciplines, and backgrounds with a common lexicon, vocabulary, and knowledge in disaster-related medicine and public health. This curriculum can be expanded using the CDC and APHA recommendations to offer a more in-depth look at disaster management as it relates to public health and the landscape of New Mexico.

New Mexico has experienced a 5% growth in our aging population from 2010 to 2012 with continued growth projected. Gerontology plays a large role in public health as the population is aging.

Understanding how to prevent the disability that comes with age and chronic diseases that can occur can prolong a person’s self-sufficiency and minimize reliance on the healthcare system. Pairing gerontology with courses in anthropology can give cultural insight into how aging is viewed throughout the Southwest and can give public health professionals a better understanding of how to treat populations when culture, religion and demographics come into play. The UNM’s Center on Aging, Division of Geriatrics and Department of Anthropology could all be potential collaborative partners.

Table 6. NM Population Census Estimates by Age			
2012		2010	
Age Group	Total	Age Group	Total
55 to 59 years	140,970	55 to 59 years	136,799
60 to 64 years	126,400	60 to 64 years	120,137
65 to 69 years	98,926	65 to 69 years	87,890
70 to 74 years	71,073	70 to 74 years	65,904
75 to 79 years	51,999	75 to 79 years	50,230
80 to 84 years	37,958	80 to 84 years	36,238
85 and over	34,877	85 and over	31,993

Integration with UNM Central and South Campuses

There are multiple colleges/schools with public health-relevant courses and programs and many centers focus on public health related missions (see appendix B). The partnership of our internal colleges/schools is important to the structure of the College of Population Health in providing a cross-discipline, subject matter expert focused education. The CPH will enhance existing programs that incorporate public health and provide a collaborative approach to education as to not duplicate courses, curriculum development and research initiatives. For example, The School of Public Administration's *Master of Health Administration (MHA)* lists several public health courses as part of the MHA curriculum and offers courses related to public health administration. This is an excellent example of how the proposed CPH model can enhance participation in courses through cross-listing CPH degree requirements. UNM also offers similar opportunities within the College of Education that awards a bachelor's and a master's degree in community health education. Faculty in the College of Architecture provide courses to PHP students in regional and community planning and the Water Resources Program works collaboratively with PHP students and faculty on joint master's professional paper projects.

Integration with Public Health Oriented Centers

The following are just a sample of institutes and centers that address public health related topics and provide opportunities for public health focused research at UNM's Health Sciences Center. These centers address the needs of many of the diverse populations in New Mexico:

Center for Injury Prevention
Prevention Research Center
Center for Native American Health
Women's Health Policy Initiative
Center for Health Policy
UNM Cancer Center
New Mexico Tumor Registry
Office for Community Health
Center for Participatory Research
Center for Development and Disability
Center for Disaster Medicine
Center for Global Health
Geriatric Education Center
Institute for Ethics
Institute of Public Health
Center for Hispanic Health
Center for African American Health
Cybermedicine Research

Institute for Social Research
Institute for American Indian Research
Center for Native American Health Policy
Center for Rural and Community Behavioral
Health Center for Telehealth & Clinical
Translational Science
Office of Bio-Computing: Translational
Informatics
Center for Occupational & Environmental
Health Promotion
Native American Academy for Community
Health and Wellness
Robert Wood Johnson Foundation Center for
Health Policy
Institute for the Study of Race and Social Justice
Center on Alcoholism, Substance Abuse, and
Addictions
Southwest Hispanic Research Institute

Additional Training and Educational Opportunities:

UNM Graduate Certificate in Public Health

Residents in the UNM Family Medicine program and Fellows in the Maternal and Child Health program are offered the opportunity to complete a professional development *Certificate in Public Health* that will continue to be offered. The 15 course credits certificate has been created to emphasize the importance the residency program places upon public health skills and knowledge. These credits fit into the existing 3-year residency curriculum. They include:

- Principles of Public Health for Clinicians (3 credits)
- Epidemiology (3 credits)
- Biostatistics (1 credit)
- Evidence-based Medicine (1 credit)
- Health Policy and Advocacy (3 credits)
- Community Project (2 credits)
- Public Health Elective (2 credits)

Residents and Fellows are paired with faculty mentors from the clinical and public health faculty to assist with coordinating their schedule and facilitating completion of the Certificate.

Nursing Certificate Program (N.U.R.C.P)

Students who hold a master's degree in nursing have the opportunity to specialize in an area of nursing not covered in their initial master's program. The program of studies consists of specialty courses in the chosen area (at least 15 graduate credit hours) to be designated by the Concentration Advisor or faculty in the specialty area, with approval from the Executive Dean. Course work must be completed within three years and a 3.0 (B) average is required. Contact concentration coordinator for admission and curriculum details. Areas include:

- Family and Community Health Practicum
- Community Assessment
- Applications of Epidemiology to Community Health Problems
- Rural and Cultural Health
- Environments of Human Health

Future UNM Public Health Certificate Topics

Topics will be developed within the College of Population Health to meet community demand in collaboration with UNM colleges and schools. These topics in Table 7 below will merge areas of focus between partners and those potential topics include:

Table 7. Public Health Certificate Topics

Certificate Topics	UNM Partner Colleges/Schools/Departments
Healthy Communities	CPH/School of Architecture and Planning
Healthcare Management	CPH/Anderson School of Management
Health Policy	CPH/College of Arts and Sciences/School of Law
Environment and Public Health	CPH/ College of Pharmacy/Department of Geography and Environmental Studies
Water and Public Health	CPH/Civil Engineering Department
Art and Public Health	CPH/College of Fine Arts
Health Economics	CPH/College of Arts and Sciences
Global Health	CPH/ Department of Anthropology/Department of History
Clinical Psychology and Public Health	CPH/Department of Psychology/Psychiatry

Doctor of Nursing Practice/ Master of Public Health Dual Degree

CPH will partner with the College of Nursing to explore a dual degree option for nurses to earn both DNP and MPH degrees in a course of study that is informed by both Nursing and Public Health sciences and that concurrently and efficiently satisfies both academic programs. The DNP/MPH program is ideal for nurses whose highest degree is a Bachelor of Science in Nursing (BSN). The DNP/MPH offers nurses with a Master’s degree in Public Health Nursing or Community Health Nursing the opportunity to acquire even greater depth in public health science. Those with master’s degrees in other clinical nursing specialties may expand their expertise to impact a new domain of practice.

National Opportunities in Public Health Leadership

As a CPH, UNM can be a member of the National Public Health Leadership Development Network. It is a consortium of organizations and individuals from academic institutions, national and international organizations, and local, state, and federal agencies dedicated to advancing the practice of public health leadership. The mission of the Network is to build public health leadership capacity by sustaining a collaborative and vibrant learning community of leadership programs in order to improve health outcomes.

The Network continues to play a key role in facilitating inter-state, inter-regional, and international collaboration efforts and in encouraging the recognition and support of the leadership institutes to further enhance their efforts of increasing access to systematic public health workforce education and training programs. The Network continues to facilitate partnering among current and new funding agencies in order to expand their range of support

for Institutes and enable them to increase integrated strategic development of and expanded scope of service for, professional development programs through academic and practice partnerships across the country.

The purpose of the Network is to:

- Collaborate with and promote linkages among organizations, agencies, associations, foundations and other stakeholders to develop and/or expand PH leadership programs
- Increase and diversify participation in public health leadership programs
- Disseminate information regarding need and access to public health leadership programs
- Provide technical assistance to emerging and existing public health leadership programs
- Contribute to the body of knowledge around public health leadership and development and improve utilization of public health leadership resources, assets, and knowledge
- Expand advocacy and visibility of the Network and member institutes

B. Research

The CPH staff will circulate announcements of public health research opportunities on a regular basis. The college will maintain a list of faculty and their research interests. All affiliated faculty will have a VIVO (<https://vivo.health.unm.edu/>) account that includes public health related keywords for searching and identifying potential collaborators.

There is already significant public health related research at UNM. Currently, principal investigators at UNM hold multi-millions of dollars in grants and contracts that fund projects related to public health issues. In FY13 at the Health Sciences Center, 67 investigators held 254 grants and contracts. These awards represent \$41,772,672.00 in annual direct costs, \$6,171,017.00 in F&A, totaling \$47,943,689.00. Additionally, the Health Sciences Center has awards and contracts directly from the New Mexico Department of Health. Forty-six investigators hold 92 awards/contracts totaling \$13,300,973.00 in annual direct costs, \$713,232.00 in F&A, totaling \$14,014,205.00.

On the Central and South Campuses, 20 investigators hold 122 public health-related grants and contracts. These awards represent \$16,127,478.00 in annual direct costs, \$1,481,672.00 in F&A, totaling \$17,609,150.00. Thus, in totality, UNM is generating \$79,567,344.00 in public health related research funding.

Research Focus Areas

- (1) Health disparities in underserved populations
- (2) Health effects of environmental contaminants and pollutants
- (3) Maternal and child health research
- (4) Public health nutrition and obesity

- (5) Prevention and control of chronic diseases including cancer, cardiovascular disease, and diabetes
- (6) Disease prevention and behavioral modification in multiple areas, built form settings
- (7) Public health forensics; forensic epidemiology; terrorism, public health preparedness and homeland security
- (8) Public health informatics
- (9) Public health genetics; pharmacogenetics; pharmacogenomics; molecular/genetic epidemiology; statistical genetics
- (10) Studies of drug use, abuse and addiction
- (11) Infectious diseases

The CPH will continue to encourage more collaborative research with faculty across UNM and with faculty from other research universities in New Mexico. CPH resources will be provided to stimulate collaborative *Transdisciplinary Research* pilot initiatives to engage research participation outside the CPH. CPH will sponsor research where faculty members and research staff work in collaboration to exchange information and share resources while transcending their own disciplines to achieve a common public health goal. The HSC has had since 2005 six “signature research programs” which focus on cancer, environmental health, child health, infectious disease, metabolic and cardiovascular disease, and brain and behavioral health (<http://hsc.unm.edu/research/info/programs.shtml>). These signature research programs bring together researchers from multiple disciplines and institutions (e.g., Sandia National Labs, Los Alamos National Labs, NM Department of Health and Lovelace Respiratory Research Institute) to solve problems in these areas, using their expertise in basic science, health education and promotion, community planning, engineering and clinical, translational and community engaged research.

Transdisciplinary Research

- (1) Moves from research dominated by a single discipline or a small number of disciplines to *transdisciplinary* research which is conducted by investigators from multiple disciplines and institutions working jointly to create new conceptual, theoretical, methodological, and translational innovations that integrate and move beyond discipline-specific approaches to address a common problem.
- (2) Involves the conception of research questions that transcend the individual disciplines because they are intended to solve applied public health research questions that are, by definition, beyond the purview of a single discipline.
- (3) In transdisciplinary research the different specialties combine their expertise (and that of community members) to collectively define the health problem and solutions to be implemented.

- (4) The New Mexico IDeA Network of Biomedical Research Excellence (NM-INBRE), funded by the NIH to strengthen biomedical research at New Mexico's institutions of higher education and prepare faculty and students to participate in NIH research programs. This program is directed by Dr. Jeff Arterburn of NMSU.
- (5) Center for Education Policy Research (CEPR), the mission is to conduct independent research on a wide range of education issues and to use that research to strengthen the efforts of policy makers, educators and citizens in meeting the challenges facing New Mexico. CEPR is accomplishing its mission by providing better access to data for policymakers, practitioners and community members; fostering and sustaining a rigorous, broad-based education research program; assembling teams of leading policy analysts and social scientists to work on key educational problems facing our state; creating new venues in which policymakers, practitioners, and researchers can regularly use educational data to address current issues; and cultivating a new generation of scholars focused on educational data and policy impact.
- (6) The Robert Wood Johnson Foundation Center for Health Policy (RWJF Center) is dedicated to increasing the diversity of health policy leaders in the social, behavioral and health sciences and nursing through increasing the number of social and health scientists from Latino, American Indian and other racial and ethnic communities underrepresented in these fields. Focus includes: Conducting research and policy analyses that addresses the many social, political and economic factors that contribute to the inequities we observe in health and health care in our society, supporting leadership development activities that encourage interdisciplinary collaboration among scholars in the social, behavioral and health sciences and building stronger and richer connections with our communities so that they can share their knowledge and teach us how best to improve the health and well-being of the individuals living in their environment.

Research Funding Opportunities

Research efforts at UNM with a public health-related focus are supported by grants and contracts from various public and private agencies. Currently National Institute of Health (NIH), National Cancer Institute (NCI), Patient Centered Outcomes Research Institute (PCORI), Health Resources and Services Administration (HRSA), Agency for Healthcare Research and Quality (AHRQ), Centers for Disease Control and Prevention (CDC), United States Department of Agriculture (USDA), Substance Abuse and Mental Health Services Administration (SAMHSA), National Institute for Occupational Safety and Health (NIOSH), Institute of Education Sciences (IES), US Agency for International Development (USAID), Department of Health and Human Services (DHHS), Environmental Protection Agency (EPA) and Department of Defense (DOD) sponsor public health related research. Foundations particularly interested in supporting research on public health problems include: Kellogg, Robert Wood Johnson Foundation (RWJF), Pfizer, Commonwealth Fund, Pew Memorial, Carnegie, Public Health Foundation, Kresge, Gates

Foundation, Health Partners Research Foundation to name a few. Local funders include Department of Health (DOH) and McCune Foundation, among others (see appendix C).

C. Service

Service as described herein refers to contributions of professional expertise to the public, including professional practice. The CPH model is built on the UNM service guidelines through its collaborative approach with colleges, schools, departments and participating faculty. The model will only enhance and give further opportunity for faculty to meet the service goal. The college shall pursue active service activities, consistent with its mission and UNM policies, through which participating faculty and students contribute to the advancement of public health practice. The college's service activities will contribute to the fulfillment of its stated mission and goals and will complement learning objectives. Because the community is the site where public health is implemented, effective linkages with organizations and agencies in the community are essential to the success of the college in meeting its overall mission. Participating faculty should be actively involved with the community through communication, collaboration, consultation, research, provision of technical assistance and other means of sharing the college's professional knowledge and competence. There will be effective ways for the community to participate in the work of the college, including assessing the relevance of curricula, participating in instruction and evaluating the effectiveness of the college. The service activities may relate to local, regional, national and international opportunities and needs.

The college will offer opportunities for students to cultivate professionalism and conscious responsibility toward the profession and the goals of public health through service to communities, agencies, underserved populations and organizations. The primary educational function of a college is the preparation of well-qualified public health professionals, and this takes place not only through courses and degree programs but also through service-based interactions with faculty. Service is an explicit activity undertaken for the benefit of the greater society, over and beyond what is accomplished through instruction and research. Participating faculty engage in service by consulting with public or private organizations on issues relevant to public health; serving as board members and officers of professional associations; and serving as members of community-based organizations, community advisory boards or other groups.

Letters of Support from internal and external partners are in progress and will be added to the proposal upon receipt (see appendix J).

D. Demand for Public Health Graduates

The Association of Schools and Programs of Public Health (ASPPH) estimates that 250,000 more public health workers will be needed in the US by 2020 and in 2012 approximately 125,000 or 23% of the public health workforce in were eligible to retire leaving positions open to replacement. In a 2001 report by the Centers for Disease Control and Prevention (CDC) it was

identified that four out of five public health workers had no formal training, yet held occupations in public health. The lack of trained professionals within public health agencies and organizations has likely contributed to the lack of educational resources available at the time and with a large portion of the workforce retiring, we must offer these resources to the emerging workforce.

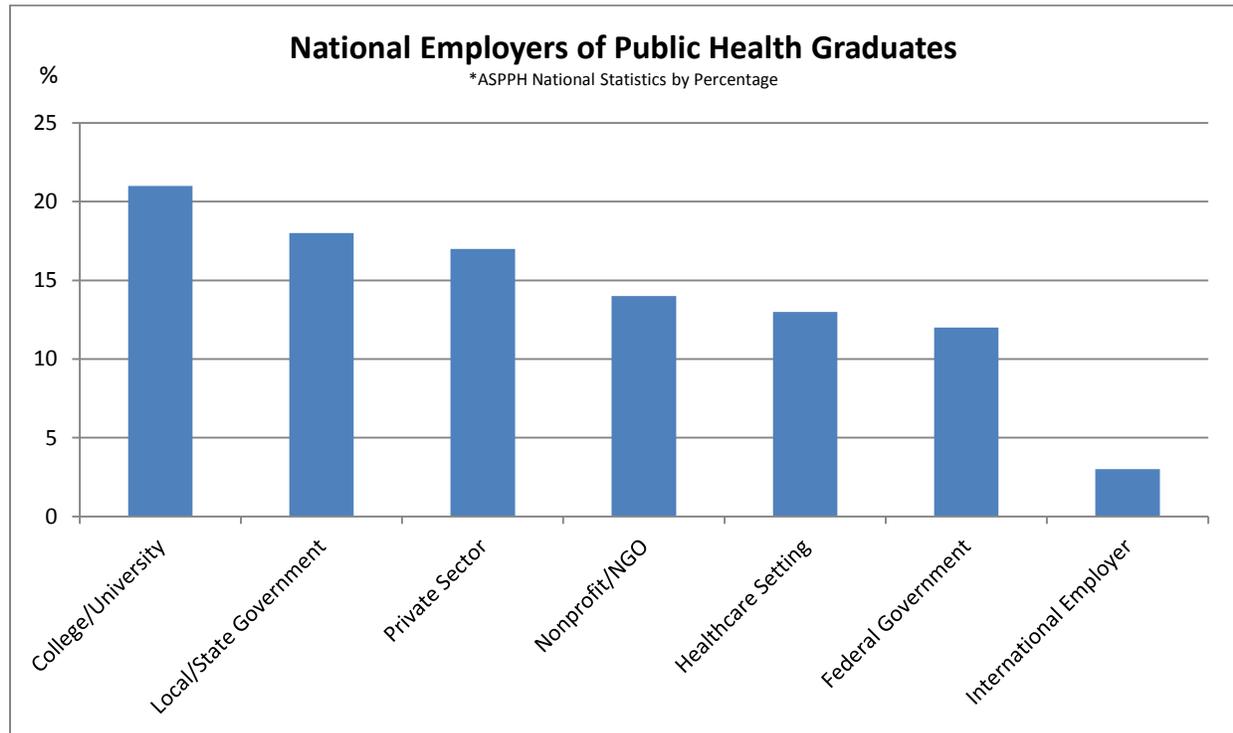


Figure 3. National Employers of Public Health Graduates

Nationally, ASPPH issued a report titled *Confronting the Public Health Workforce Crisis: ASPH Statement on the Public Health Workforce (2008)*. Dramatic public health advances in the 20th century have improved quality of life—an increase in life expectancy, worldwide reduction in infant and child mortality, and the elimination or reduction of numerous life-threatening communicable diseases. These achievements could not have occurred without the research, practice, and service of professionals who comprise the public health workforce. Excerpts from the ASPPH report are below.

Today’s public health workforce is faced with daunting public health challenges, and has been forced to do more with fewer people. For example, in the U.S. in the year 2000, there were about 50,000 fewer public health employees than in 1980.^{5,6} While the 1980 workforce ratio (220 per 100,000) may in fact be an underestimate of the ideal number of public health workers, it provides a benchmark for estimating current and future needs.² And although technological advances may to some extent mitigate the impact of the decrease in the size of

the public health workforce, this trend cannot continue without drastically compromising the public's health.

To have the same public health workforce-to-population ratio in 2000 as existed in 1980, there would have had to have been more than 600,000 public health workers, or an additional 150,000 on top of the 450,000 that existed at the time. In 2020, to have the same ratio (220:100,000), the public health workforce would need to number 700,000, or 250,000 more than the most recent count.

Retirement projections of public health profession- also are not available for most private-sector positions. However, for the public sector, the estimated retirement potential is sobering (Table 2). If we assume that the public health workforce numbered 450,000 in the years when each of the retirement waves is projected (2003, 2010, 2012), then by 2012 a total of more than 100,000 public health workers (or 23% of the current workforce) will retire, leaving a large void of expertise to be filled. Of note, this projected retirement wave will place an added burden on the looming workforce shortage of 250,000 estimated for 2020.

The proposed College of Population Health at UNM is part of a nationwide response to the shortage in public health workforce. Public Health Infrastructure is important to address both acute and chronic health threats that face the nation. It includes three key components that enable the public health system to deliver public health services. These components are:

- A capable and qualified workforce
- Up-to-date data and information systems
- Public health agencies capable of assessing and responding to public health needs

These components are necessary to fulfill the ten essential public health services and support national health objectives, for example, [PHI-5 \(Developmental\) Increase the proportion of 4-year colleges and universities that offer public health or related majors and/or minors that are consistent with the core competencies of undergraduate public health education.](#)

Locally, the Health Resources and Services Administration (HRSA) has identified most of the southern part of New Mexico as medically underserved and underserved by mental health professionals. Twenty-nine of the state's 33 counties are considered full of partial health professional shortage areas. The counties of Bernalillo, Los Alamos and Santa Fe are served by 64.4% of the state's physicians, but only 38.7% of the state's residents. To meet the needs of the public health workforce demands in the state of New Mexico, we must provide the proper educational opportunities to expand the resources needed to create a solid infrastructure of public health professionals within the state. Providing these resources will enable New Mexico to keep our future public health workers from seeking training and eventually employment outside our state.

According to New Mexico’s public health labor statistics, by the year 2020, New Mexico will see a projected 30% increase in job growth in the Health Educator occupation alone and the Bureau of Labor Statistics (BLS) projects an overall growth of 21% in the nation, faster than the average for all occupations. The increase in workforce demands is driven by efforts to improve health outcomes and reduce health care costs by insurance groups, employers and the government. Health Educators teach people how to live healthy lives and avoid costly diseases through preventive measures. Health educators held about 58,000 jobs in 2010. They work primarily in two industries with 20 percent working in state and local government and 53 percent working in health care and social assistance. In addition, a small percent of health educators work in grant-making services and social advocacy organizations. The average wage for health educators is around \$50,000. (Source: Bureau of Labor Statistics)

A look at the public health workforce needs and job postings in New Mexico below reflects not only job growth but, both workforce retirements and an inability to fill positions with qualified candidates, all leading to bigger gaps in providing the needed health care to the citizens of New Mexico. An educated workforce in New Mexico is necessary to close these gaps or our state will continue to see health care costs rise and health status decline.

Table 8. New Mexico’s Public Health Workforce Needs

State of New Mexico Occupational Employment Statistics 2010-2020								
Standard Occupational Titles	2010 Employment	Projected 2020 Employment	Total Change	Annual % Change	Total % Change	Annual Openings Due to Growth	Annual Openings Due to Replacements	Total Annual Openings
Medical Scientists, Except Epidemiologists	393	518	125	2.80%	31.80%	12	2	14
Health Educators	479	625	146	2.70%	30.50%	15	10	25
Environmental Science/Protection Technicians	138	170	32	2.10%	23.20%	3	6	9
Dietitians and Nutritionists	229	275	46	1.80%	20.10%	5	8	13
Medical and Health Services Managers	1,508	1,810	302	1.80%	20.00%	30	37	67
Epidemiologists	**	**	1	1.80%	20.00%	0	0	0
Occupational Health and Safety Technicians	102	122	20	1.80%	19.60%	2	4	6
Occupational Health and Safety Specialists	551	657	106	1.80%	19.20%	11	19	30
Environmental Scientists and Specialists	369	433	64	1.60%	17.30%	6	11	17
Mental Health/Substance Abuse Social Workers	1,979	2,294	315	1.50%	15.90%	32	47	79
Social and Human Service Assistants	2,979	3,423	444	1.40%	14.90%	44	64	108
Statisticians	54	61	7	1.20%	13.00%	1	3	4
Sociologists	**	**	N/A	0.00%	0.00%	0	0	0

Source: New Mexico Department of Workforce Solutions

** Represents data that is suppressed.

Table 9. New Mexico’s Public Health-Related Job Postings

January 1, 2013 to October 18, 2013						
Title	OPEN JOB ORDERS		CLOSED JOB ORDERS		NOT FILLED	
	Total Job Orders	Total Job Openings	Total Job Orders	Total Job Openings	Openings Not Filled	% Not Filled
Statisticians	3	3	2	2	1	33.3%
Environmental Scientists and Specialists	35	35	20	20	15	42.9%
Environmental Science and Protection Technicians	17	17	12	12	5	29.4%
Health Educators	19	22	13	16	6	27.3%
Dietitians and Nutritionists	19	19	14	14	5	26.3%
Medical Records and Health Information Technicians	98	99	82	83	16	16.2%

Source: New Mexico Department of Workforce Solutions

The need for more trained public health workers in New Mexico has been recognized at the highest level of our state government. Governor Susana Martinez, seeing the need for healthcare workers in rural and underserved areas in New Mexico, recently approved a \$1.5 million investment in growing and developing New Mexico’s healthcare workforce through the Nursing Loan-for-Service (NLFS), Health Professional Loan Repayment program (HPLRP) and additional dental slots to the Western Interstate Commission on Higher Education (WICHE) program. The infusion of funding, if approved by the New Mexico Legislature, would secure up to 720 additional healthcare practitioners to these areas over the next ten years.

Additionally, the Affordable Care Act has placed more responsibility on public health initiatives outside of traditional health care roles, and challenges the public health workforce to identify new innovative ways to rollout preventive health care measures. These challenges will drive the need for workers who can implement and manage these programs. For example, in 2014, ACA will make available \$200 million for wellness grants for small business that employ fewer than 100 individuals that work 25 or more hours per week. The benefit is a win-win for employers who pay less for plans and for the employee who pays a reduced premium.

An example of a BSPH concentration that addresses employee health is *Worksite Health Promotion and Protection*. Two factors, personal health and personal safety—each essential to a productive worker and to a productive workplace are effectively combined in a symbiotic manner that increases their impact on overall health and productivity. The whole becomes greater than the sum of its parts. Once health protection and promotion programs are intertwined and deployed strategically to enhance each other, a healthier workforce thus

becomes a safer workforce and vice-versa (Hymel et al., 2011). Increase in chronic disease and an increasingly older workforce together create a significant need for public health specialists with worksite health promotion and protection skills. A CDC study concluded that well designed health programs in the workplace could achieve long-term health and productivity improvements in worksite populations (Goetzel et al., 2007).

Developing a BSPH concentration in Worksite Wellness will help meet a growing public health need, uniquely position the University of New Mexico in this field and create partnerships with professional entities ([UNM's employee assistance program](#), [New Mexico Department of Health](#), [CDC](#), and [WELLCOA](#)) that will support our students' development as professionals.

Our state healthcare workforce demand is evident through the New Mexico State Personal Office (SPO) website. As of February 19, 2014, SPO posted 133 positions in the public health category statewide; 72 of them residing in the NMDOH alone.

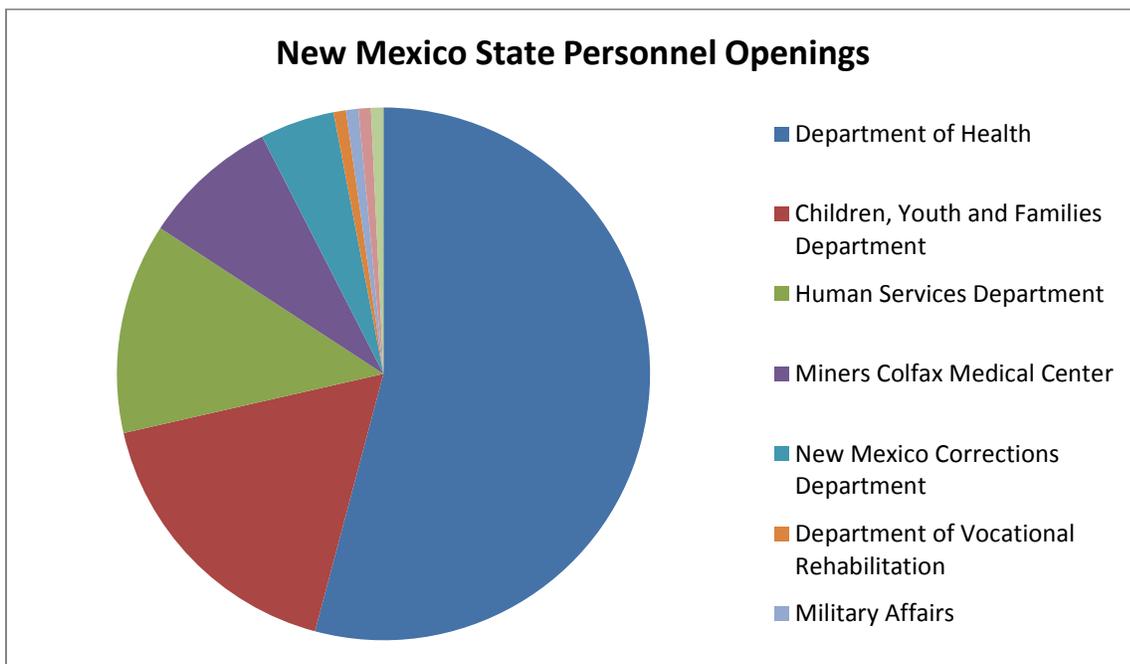


Figure 4. New Mexico State Personnel Employment Openings as of February 19, 2014

Complex initiatives, such as Sandoval County's Economic Development Corporation's (EDC) strategy to bring employers to their communities will focus on a health and human services complex at Rio Rancho's City Center. EDC anticipates this complex will bring in 20 major employers and 2,200 jobs for New Mexicans. To facilitate this process, they have invited area healthcare providers to the table to discuss the considerable need for "education, training, innovation and enterprise development." A CPH will be invaluable to the development of the

workforce needed to ensure healthcare employers that New Mexico has the skilled personnel to support their growth and development.

Local, Regional and National Employers of UNM MPH Graduates:

Acute Disease Services, Oklahoma	Pueblo of San Felipe
Albuquerque Ambulance	Rape Crisis Center
Albuquerque Health Partners	Sandia Laboratories
Albuquerque Public Schools	Shaening & Associates, INC.
Amy Biehl High School	Shiprock High School
Blue Cross/Blue Shield	Southwest Research and Information Center
Brain Injury Advisory Council	Southwest Tribal NARCH Coordinator
Centers for Disease Control and Prevention	St Luke's Hospital Network
Chapel Hill, North Carolina	Supreme Court Navajo Nation
Children's Safety Network	Swedish Hospital, Seattle, WA
Eielson Air Force Base US Air Force	Tri-City Health Center
First Nations Community Health Source	UNM Cancer Center
Four Corners Regional Health Center	UNM Center on Alcoholism, Substance Abuse, and Addictions
Georgia Hospital	UNM Center for Development & Disability
Glaxo Smith Kline	UNM Center for Disaster Medicine
Government of Santa Fe	UNM Center for Participatory Research
Harris County Public Health and Environmental Services	UNM College of Education
Health Care for the Homeless	UNM College of Pharmacy
HHS/NIHS/OEHE/DEHS	UNM Department of Anthropology
HealthInsight New Mexico	UNM Department of Dental Medicine
HIS Santa Fe Indian Hospital	UNM Department of Emergency Medicine
Houston VA Medical Center	UNM Department of Family and Community Medicine
Human Needs Coordinating Council	UNM Department of Internal Medicine
Indian Health Services	UNM Department of OB/GYN
Institute for Functional Medicine	UNM Department of Pediatrics
National Congress of American Indians	UNM Department of Psychiatry
National Indian Health Board	UNM Emerging Infections Program
New Zealand	UNM Hospital
NIGB	UNM NM CARES Disparities Center
NIH	UNM Office of Substance Abuse Prevention
NM Alliance for Retired Americans	UNM Pediatric Oncology
NM Department of Health	UNM Prevention Research Center
NM Emerging Infections Program	UNM Public Health Program
Northern Navajo Medical Center	UNM RWJF Center for Health Policy
Office of Regulatory Affairs, FDA	UNM School of Medicine

New Mexico Public Health Association (NMPHA)

The NMPHA membership workforce consists of community organizations/coalitions (including private consultants doing public health work), government employees (state, county, city, federal) and university/academic-related (staff, faculty, students), representing over 30 different communities in New Mexico and neighboring states. Countless others are not actual members, but still consider themselves part of the NMPHA family and benefit from NMPHA events and activities. NMPHA is the New Mexico state affiliate of the American Public Health Association (APHA), which represents more than 30,000 members nationally and worldwide.

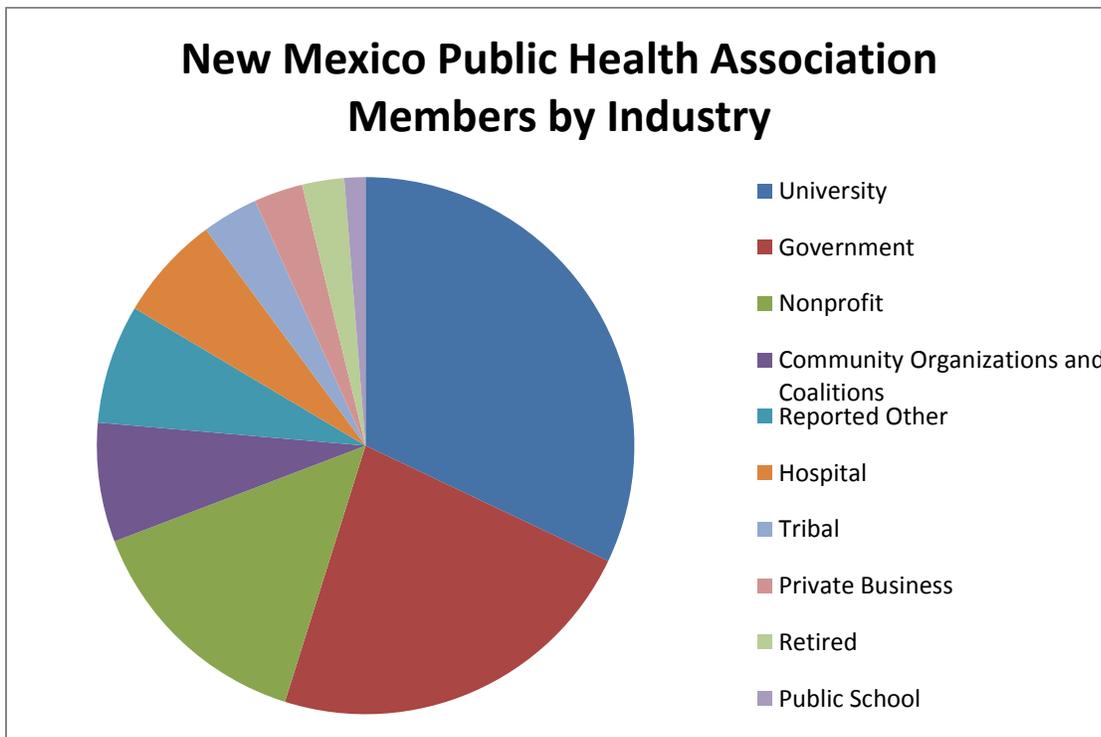


Figure 5. NMPHA Members by Industry as of January 24, 2014

Opportunities for BSPH Graduates in New Mexico

Nationwide undergraduates with educational grounding in public health principles and practices have been relatively rare. But, undergraduates with classroom training and field experience can be prepared to enter and grow in public health organizations and agencies,

appropriately filling the workforce gap between an untrained workforce and graduate-degreed professionals.

Current and anticipated public health workforce gaps require not just a replacement, but a recalibration of the workforce. In order to meet the more complex challenges and opportunities they face, agencies need workers with new and different skills and a broader background that includes health information technology and informatics, cultural competence, global health, communication, policy, community participatory research and disaster preparedness, as well as skill in the core functions of public health practice.

A Bachelor of Science in Public Health will not only lead to careers in public health, but lends itself to transferable skills in other areas of workforce. Public health touches many areas including medicine, economics, sociology, anthropology, mathematics and communications. New Mexico demonstrates the diversity in occupational avenues and need for public health graduates in the workforce projections below.

Table 10. New Mexico's Workforce Needs at the Undergraduate BSPH Level

Standard Occupational Titles	2010 Employment	Projected 2020 Employment	Total Change	Annual % Change	Total % Change	Annual Openings Due to Growth	Annual Openings Due to Replacements	Total Annual Openings
Health Specialties Teachers, Postsecondary	760	1,010	250	2.80%	31.90%	20	10	30
Medical Scientists, Except Epidemiologists	390	520	130	2.80%	31.80%	10	0	10
Health Educators	480	630	150	2.70%	30.50%	20	10	30
Middle School Teachers (Special/Vocational Edu)	4,540	5,890	1350	2.60%	29.80%	140	100	240
Nursing Instructors & Teachers, Postsecondary	360	460	100	2.60%	29.60%	10	10	20
Registered Nurses	15,150	19,070	3920	2.30%	25.90%	390	270	660
Environmental Science & Protection Technicians	140	170	30	2.10%	23.20%	0	10	10
Compliance Officers (Including Healthcare)	1,080	1,320	240	2.00%	22.30%	20	10	30
Environmental Engineers	780	950	170	2.00%	21.80%	20	20	40
Medical Assistants	4,400	5,350	950	2.00%	21.40%	90	70	160
Technical Writers	340	420	80	1.90%	20.60%	10	10	20
Dietitians & Nutritionists	230	280	50	1.80%	20.10%	10	10	20
Medical & Health Services Managers	1,510	1,810	300	1.80%	20.00%	30	40	70
Occupational Health & Safety Technicians	100	120	20	1.80%	19.60%	0	0	0
Occupational Health & Safety Specialists	550	660	110	1.80%	19.20%	10	20	30
Secondary School Teachers (Special/Vocational Edu)	5,910	7,020	1110	1.70%	18.80%	110	160	270
Public Relations Specialists	510	600	90	1.60%	17.30%	10	10	20
Social & Community Service Managers	1,440	1,610	170	1.10%	11.80%	20	30	50

Source: NMDWS Economic Research & Analysis Bureau. Data is specific to employment in New Mexico. All numbers are rounded.

2. College of Population Health Structure

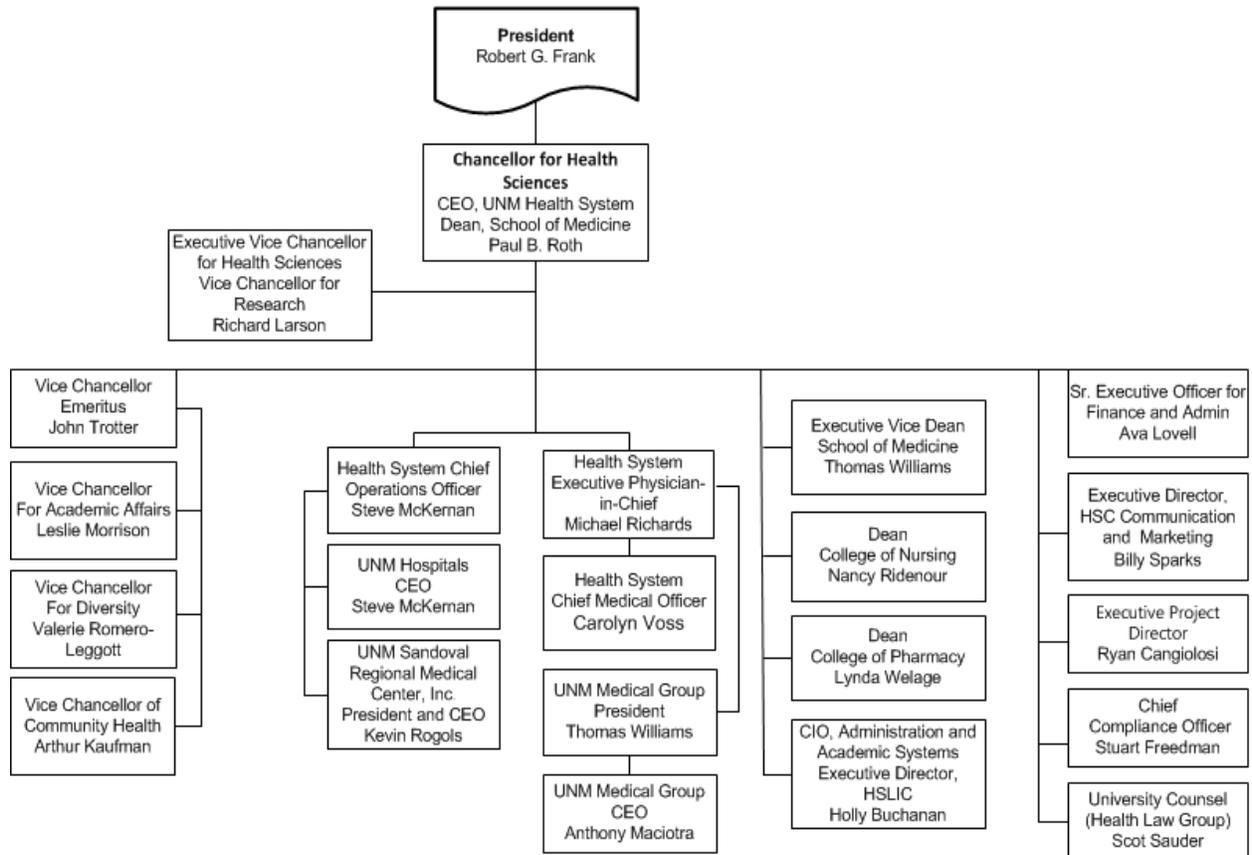


Figure 6. Source: UNM Office of the Chancellor for Health Sciences Current Structure

Figures 6 and 7 represent the current organizational structure of the HSC and the current structure of the Public Health Program at UNM. The CPH, with a Dean who will report to the Chancellor of the HSC, will function as an “organic” college. The request for funds to hire a Dean and the minimal administrative and programmatic support has been requested for FY15. The budget also includes funds for curriculum development. A Legislative request will be developed in collaboration with the Offices of the President, Chancellor and Provost for FY16.

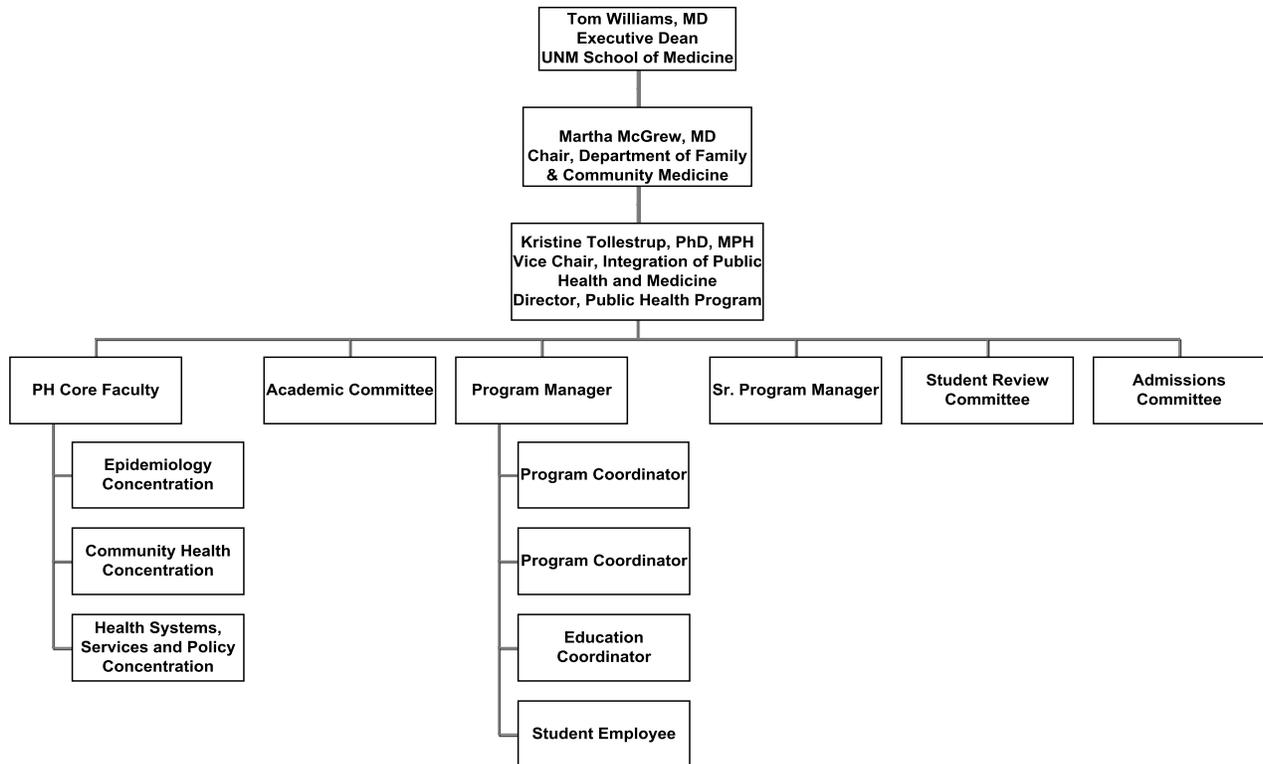


Figure 7. Current UNM Public Health Program Structure

In the early years the new structure will be leaner than a traditional college because it will not have financial responsibility for faculty. For the first 3-5 years, faculty members will maintain their appointments in their current college/school/department. Colleges will make strategic investments through collaboration and resource accommodations to benefit faculty, their department and college and the institution as a whole by eliminating duplication of courses and working together with the CPH to generate enrollment growth. No faculty members will have primary appointments in the CPH. All faculty members who wish to have a joint/secondary appointment in the CPH will contribute to the mission and vision of the CPH: e.g. curriculum development, teaching, advising, mentoring, collaborative research, public health practice, or faculty governance. Faculty members with joint/secondary appointments will be eligible for special pilot funds and professional career development funds (for example Public Health Leadership scholarships). Joint/secondary appointments will be administered through an MOU developed in collaboration with the CPH Dean, the faculty member and his or her Chair/Dean. These MOUs will be carefully constructed to consider faculty effort and faculty contracts and to align with college/school/department policies and faculty performance expectations and promotion and tenure requirements.

As the CPH generates revenues funds will be allocated for faculty lines so that the CPH will be able to meet a CEPH accreditation requirements. Currently the public health program faculty resides in the Department of Family and Community Medicine. The Public Health Program is fully accredited by CEPH. Over time these faculty lines will move into the CPH. A proposed timeline is shown below.

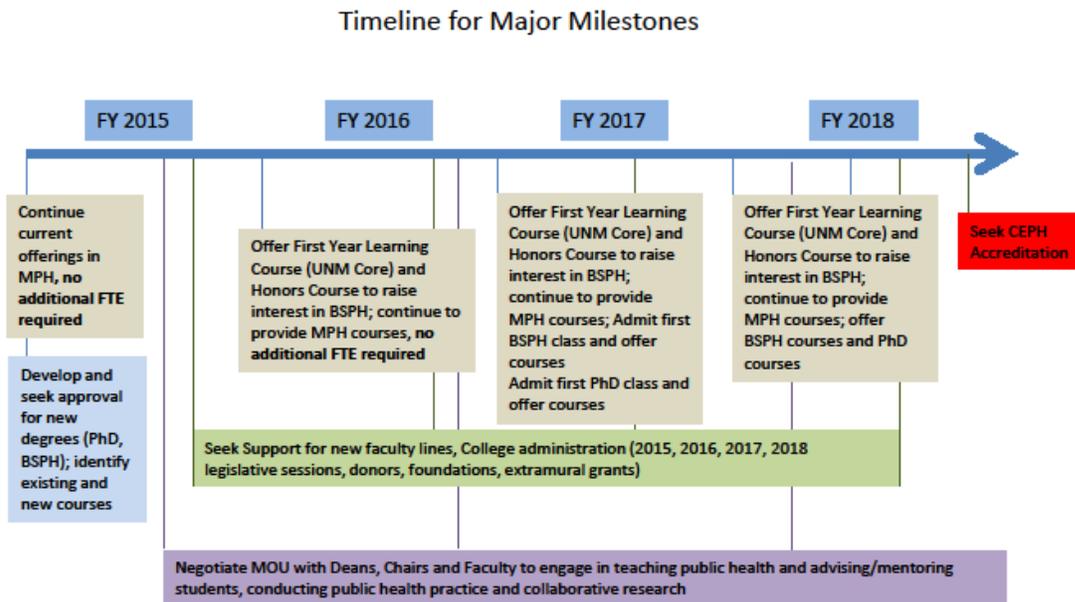


Figure 1. CPH Major Milestones Timeline

Courses and advising required for the Bachelors of Science in Public Health, Master of Public Health and Doctor of Public Health Sciences (PhD) will be taught by qualified faculty across the institution. As revenue is generated, resources will be available to compensate departments/colleges/schools for faculty effort. There are tremendous benefits of this innovative model. It provides a resource for the HSC and Central and South Campuses' Colleges and Schools that builds on existing strengths and eliminates duplication. The model requires minimal office space. The need for additional classroom space will be dependent on the student demand, which we anticipate will grow over time. Importantly, this approach does not disrupt existing department's/school's/college's resources or faculty security. It does presume that there is a mutual interest in building a CPH. This model provides an opportunity for Chairs and Deans to strategically invest in the CPH's success to the advantage of the multiple partners. Faculty from all over the University, in addition to community stakeholders, will have multiple and flexible opportunities to participate. Most importantly this innovative approach creates very little disruption to faculty and administration and provides the opportunity for "buy-in" as it grows to meet the demand for public health education, research and practice. This model also enhances the opportunity for collaboration between NMSU and UNM; it incentivizes us to

share the responsibility for teaching public health statewide, while not duplicating resources and ensuring that students at both institutions have access to multiple educational and research opportunities. It also stimulates opportunities for faculty from both institutions to collaborate on research to address the public health needs of the state.

In order for this model to move forward and unfold into a functional CPH, it will require a tremendous amount of goodwill, trust and mutual interest in advancing public health education, practice, and research in New Mexico. It will also require the vested interest of healthcare employers, community leaders, other institutions of higher education (community colleges and 4 year universities) and state health agencies. The College must be provided a long-term financial commitment to grow roots and establish itself as a sustainable entity. A mission, vision, goals and business plan will be developed for the CPH in collaboration with the community, students, staff, faculty and administration. Public awareness of, interest in and collaboration with the CPH will increase enrollments and for admitted students to develop a foundation and fully progress through the program. With UNM's plan to move to a Results Oriented Management (ROM) structure, the UNM Financial Leadership Team will help the CPH to develop a plan to share resources so that CPH offerings can meet degree requirements and achieve program outcomes.

It is important that the CPH remain focused on meeting the public health needs of the state: which include extending in the public health workforce with educated professionals who can complement existing health services to reach and maintain the wellness of broader groups of citizens through their work in public health. This model will evolve as the CPH grows and new dynamics develop such as student interest in new courses, community involvement and needs, and faculty participation and interest.

CPH Structure Years 1-3

- (1) Dean
- (2) Director of Graduate Programs @ 30%
- (3) Director of Undergraduate Programs @ 30%
- (4) Sr. Program Manager
- (5) Administrative Assistant III

Existing PHP Staff (Currently budgeted and funded under FCM)

- (1) Program Manager
- (2) Program Coordinators (2)
- (3) Education Support Coordinator
- (4) TAs/Student Worker Support

Accreditation

The CPH will seek full college accreditation through the Council on Education for Public Health accreditation (CEPH) once we have procured additional resources, faculty and staff. It will maintain existing accreditation for the current MPH degrees and seek accreditation for the undergraduate, PhD and additional graduate concentrations and seek accreditation at a time when the CPH is ready to transition from a virtual college to a traditional college. An outline of the CEPH accreditation process can be found in *Appendix D*. In a recent conversation with the Executive Director of the CEPH she shared that the requirements for accreditation are in evolution and the proposed organic process of gaining approval for public health education programs (see BSPH and PhD) before seeking accreditation for a school of public health will give us sufficient time to prepare for the changing accreditation standards.

3. Resources Needed to Establish the CPH

Existing Resources/Faculty

In the Department of Family and Community Medicine there are ten 1.0 FTE faculty members who together offer the accredited MPH degree with three concentrations. These faculty will become core faculty once the CPH is approved and sufficient I&G is allocated for their positions and will have expertise in epidemiology, biostatistics, health policy, health services, community health and public health practice, all core disciplines for public health education.

Table 11. *Dedicated Faculty Resources*

College of Population Health Dedicated Faculty Resources									
Program		Current Dedicated Faculty	Dedicated Extra Lines Needed	Current Dedicated Faculty	Dedicated Extra Lines Needed	Current Dedicated Faculty	Dedicated Extra Lines Needed	Current Dedicated Faculty	Dedicated Extra Lines Needed
		FY 15		FY 16		FY 17		FY 18	
MPH	Epidemiology Concentration	3		3		3		3	
	Community Health Concentration	3		3		3		3	
	Health Systems, Services and Policy	3		3		3		3	
	Public Health Practice			1	2	3		3	
PhD	Public Health Sciences			10 MPH	1	11	1	12	1
BSPH				2 MPH	3	5	3	8	3

Potential Collaborative Faculty, Instructors and Colleges/Schools/Departments

Initially, the CPH will not hire any new faculty, nor transfer any faculty under the proposed “organic” structure. It has been determined that the teaching resources exist from the Health Sciences Center (HSC) and Central Campus colleges, schools and centers, as well as affiliated faculty from the NM Department of Health and private entities to launch the new college now. A preliminary review found that at least 265 faculty members at UNM have more than sufficient expertise, interests and research involving public-health related fields and issues to be considered “core” members of the CPH. Fifty-seven (21%) of the 265 faculty members hold MPH degrees. It is likely that more faculty members have public health training, but we are unable to determine how many of those holding PhD degrees have public health training. The numerous faculty resources will provide a pathway to collaboration with many UNM colleges/schools/departments avoiding duplication of courses and opening up additional opportunity for growth and innovation of new course offerings. The CPH has requested funding for faculty development to enhance, promote and support the collaborative structure of the CPH.

Faculty members from the colleges listed below have expressed interest in having CPH affiliation. Once the college is established the Dean will actively reach out to identify faculty who wish to contribute to the efforts to articulate the CPH’s mission and vision and to determine their level of interest in becoming an affiliated member of the CPH.

Anderson School of Management
School of Architecture and Planning
College of Arts and Sciences
College of Education
School of Engineering
College of Fine Arts
Honors College
School of Law

School of Medicine
College of Nursing
College of Pharmacy
School of Public Administration
University College
College of University Libraries and Learning Sciences

The areas of research expertise of faculty members in these colleges are varied and cover a broad spectrum of important public health issues and general topics, including, in part:

Intervention Research
Maternal and Child Health
Genetic Epidemiology
Emergency/Disaster Management
Health Education and Health Literacy
Public Health Policy
Chronic Diseases

Cancer
Infectious Disease
Health Disparities
Health Economics
Environmental Health
The Built Environment
Health Systems and Management
Substance Abuse Prevention and Treatment

Psychology of Trauma, Domestic Violence
Chronic Pain
Nutrition and Food Safety
Physical Education and Exercise
Diabetes

Children, Adolescents, and the Media
Family Planning and Teen Pregnancy
Prevention

Leadership

In three years as the CPH grows and evolves, we will evaluate the need for additional staff support for the administration of new programs and faculty for curriculum development (see figure 8). The details of a UNM CPH leadership structure will evolve to meet the local needs. If there is insufficient demand for public health education at UNM despite intensive marketing and promotion, the CPH leadership will discuss an orderly process for redistribution of resources. However, given the step-by-step approach proposed in this document it is unlikely that effort will outpace demand. To the contrary, national experience suggests that we will have to add resources to keep up with the growing interest in public health education at the undergraduate and graduate levels.

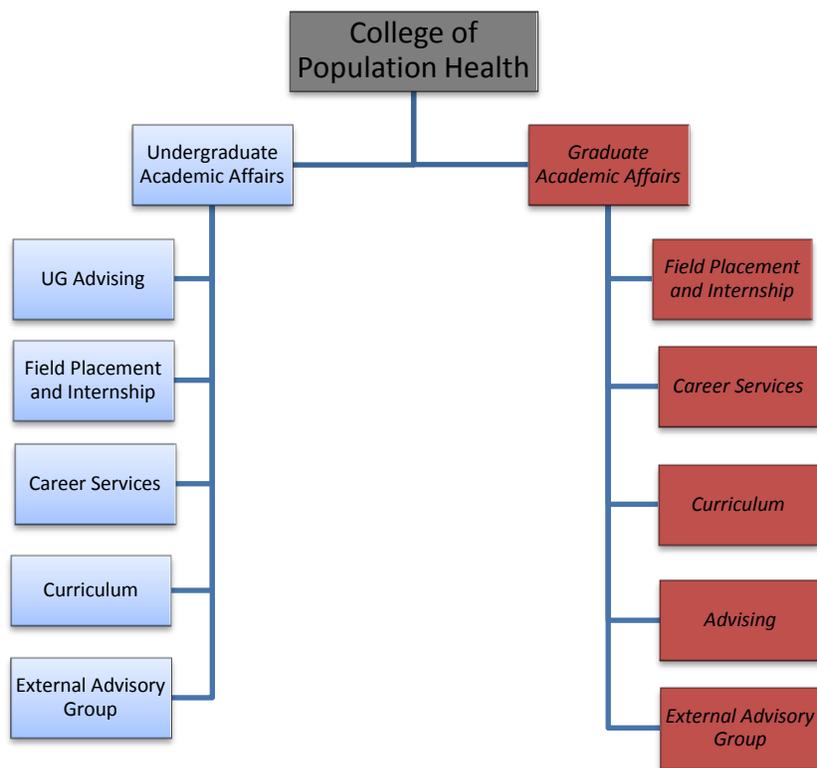


Figure 8. Anticipated College of Population Health Structure

Facility

The CPH will not immediately require a full-fledged facility as faculty will reside in their current departments and provide cross collaboration. The CPH core administrative and leadership staff will need approximately 800 square feet to operate as a cohesive structure. As the CPH grows, enrollments increase and more revenue is generated, the CPH will explore the need for its own facility to house programs, research, courses, faculty and staff. The benefit to an “organic” college is that we are able to grow as the interest and need grow. The CPH’s structure can adapt as necessary instead of building now for a projected future.

Student Financial Support

The PhD program will have a goal to provide resident assistant stipends while the current Public Health Program budgets are sufficient for requisite TAs and student worker support. The CPH will work with external partners to develop opportunity for staff development in the form of tuition support and internally to promote tuition remission opportunities.

A. Sources of Revenue

According to the ASPPH the average yearly cost of graduate education including tuition and fees in 2008-2009 was \$16,236 for in-state tuition and fees and \$23,518 for out-of-state tuition and fees; and the median for in-state was \$12,426 and \$22,134 for out-of-state. For in-state, the range is from \$4,054 per year to \$51,000; and \$10,171 to \$51,000 for out-of-state. Most master’s programs are two years in length, and these figures are based on a two-year completion of degree. However, there are also accelerated programs, programs for part-time students, etc.

The CPH will charge a graduate tuition rate differential much like the College of Nursing to allow for funds to support graduate curriculum development (currently \$249/credit Masters training, \$366/credit for Doctoral training). BSPH students will not pay a differential at the undergraduate level. CPH students will not be required to pay any additional course fees or instructional fees. The CPH will generate revenue through program graduates, I&G and the tuition differential in accordance with the ROM model to support growth and development (see appendix E). UNM and NMSU will collaborate to request funding from the New Mexico Legislature to become Council on Education for Public Health (CEPH) accredited.

4. Timetable for Establishing the CPH

The anticipated start date of the CPH is July 1, 2014. The “organic” model will allow for the CPH to grow as needed and allow for phases of implementation. The CPH needs approval to move forward with the creation of the college shell so that collaboration and program development can begin. Conversations with external partners, such as NMSU, DOH, HED and the NM

Legislature need the assurance that the UNM leadership and faculty are committed to the development and sustainability of the CPH. Furthermore, approval for additional degrees requires internal and external approval, including the NM Higher Education Department (see appendix F).

NMSU Collaboration

There are multiple discussions involving ways in which NMSU and UNM can collaborate as recommended by HED Secretary, Jose Garcia. Potential opportunities include:

- 1) Create two Schools of Public Health, one at NMSU that would have a focus on rural health given its strengths as a land grant institution. The UNM College of Population Health would have a primary focus on health services and health policy as outlined in the BSPH curriculum concentrations. This approach would enable the state to benefit from having its two largest research institutions addressing the public health workforce needs. There will be opportunities to share course content and reduce redundancies by developing core courses with a common curriculum similar to that organized through the New Mexico Nursing Education Consortium (<http://www.nmnec.org>).
- 2) Create a New Mexico Institute of Public Health-a nonprofit partnership of public and private health agencies, organizations and academic institutions to maximize resources for promoting health research, education and service focused on improving the health of New Mexicans. These institutes currently exist in about 30 states and are represented by the National Network of Public Health Institutes (<http://www.nnphi.org/>).
- 3) Build on the current collaboration between DOH, UNM and NMSU called the Public Health Learning Collaborative (<http://nmpnlc.org/>). Providing academic and non-academic training opportunities for the public health workforce across New Mexico. An application was submitted to HRSA for the creation of a formal training center, but was not funded.

(see appendices G, H, I for UNM and NMSU Program/Course Information)

Appendix A
Potential UNM Public Health Electives

Department	Course #	Course title	Course Description
ANTHROPOLOGY			
ANTH	350	Human biology	Human heredity, variation and adaptation within and between different ecological and cultural settings; genetics; quantitative variation; elements of human population biology and human ecology.
ANTH	365	Anthropology of Health	Analysis of systems of health, curing and disease in aboriginal, western and pluralistic societies.
ANTH	360	Human Behavior Ecology	Introduces students to the fundamental principles of evolutionary theory and their application to human behavior. It surveys current research on human sexuality, mate choice, reproduction and parenting from the perspective of human evolutionary ecology. Prerequisite: 150 or 160 or BIOL 110
ANTH	361	Behavioral Ecology and Biology of Sex Roles	Uses the perspective of evolutionary biology to examine the diversity of sex roles played by men and women in the historical and cross-cultural record. Restriction: upper division standing
AMERICAN STUDIES			
AMST	182	Introduction to Environment, Science and Technology	An introduction to the socially and politically constructed values directing Americans' attitudes toward nature, science and technology and to the impacts of those attitudes on built and natural environments regionally, nationally and globally.
AMST	185	Introduction to Race, Class & Ethnicity	An interdisciplinary introduction to the issues of race, class and ethnicity in American life and society.
ARCHITECTURE			

ARCH	241	Sustainability I	Lectures present the framework for creative analysis, including systems thinking and synergistic integration of the three pillars of sustainability, environments, equity, and economy, and their relationship to building systems.
BIOLOGY			
BIOL	123	Biology for Health Related Science and Non Majors	Principles of cell biology, genetics and organismic biology.
BIOL	123L	Biology for Health Related Science and Non Majors Lab	One credit optional laboratory to accompany 123.
BIOL	365	Evolution of Human Sexuality	An examination of how natural selection has shaped the sexual psychologies of men and women and how evolutionary theory can guide the study of sexual psychology and behavior
CIVIL ENGINEERING			
CE	435	Water Use	Principles and practice of the water quality characteristics, treatment, and environmental and human health concerns associated with the reuse of wastewater for municipal, industrial and agricultural purposes. Regulatory aspects will be considered.
COMMUNICATION & JOURNALISM			
CJ	115	Communication Across Cultures	An introduction to communication among people from different cultural backgrounds, emphasizing intercultural relations. The class seeks to identify, honor and enhance the strengths of different cultural perspectives.
CJ	314	Intercultural Communication	Examines cultural influences in communication across ethnic and national boundaries.
CJ	317	Intercultural Conflict Community Building	Cultural focus on communicative systems related to national, ethnic, gendered, class, religious, regions, corporations, and institutions. Research on mediation, intergroup dialogue, and community development focuses

			on three international sites.
CJ	327	Persuasive Communication	Analysis, practice and evaluation of principles of attitude change for a variety of interpersonal and public communication situations.
CJ	393	Refugee Wellbeing	
CJ	450	Health Communication	Concepts/strategies for preventive health communication in such contexts as provider-patient interaction, health campaigns, social marketing, health images in the mass media and communication in health care organizations.
COMMUNITY & REGIONAL PLANNING			
CRP	181	Introduction to Environmental Problems	Development of the major issues, concepts and methods emerging from the relationship of social systems and the natural environment
CRP/ECON	203	Society and the Environment	Introduction to environmental and natural resource issues of both global and local scale. Investigates basic causes and consequences of environmental problems, including interrelated physical and social science dimensions
CRP	403/503	Community Based Practice	Exploration of practical skills for creating and implementing community based programs and plans with community partners. Skill development in mobilization, facilitation, and organizational development to implement community based plans and strategies.
CRP	472/572	Indigenous Planning	Examines the relationship of indigenous planning to other planning approaches such as advocacy, equity, and radical planning; considers aspects of “indigeneity” such as sovereignty, land tenure, and culture, and their application to community planning.
DENTAL HYGIENE			

DEHY	330	Dental Health Education	This course includes the Etiology of prevalent oral diseases with a focus upon developing the education skills necessary to counsel dental hygiene patients. Dental and periodontal charting techniques are introduced.
DEHY	410/510	Dental Hygiene Research Methodology	Developing of research in regard to special areas in dental hygiene with emphasis on writing reports.
DEHY	422	Dental Public Health I	Study of the dental care delivery system in the world today and a global perspective of the science of oral disease prevention.
DEHY	423	Dental Public Health II	Application of principles and objectives studied in 422. Students will plan and develop specific educational programs for schools, hospitals, nursing homes, mental retardation centers and other groups in the community.
DEHY	440	Extramural Experience	Provides the student with the opportunity to achieve educational and clinical skills and in depth knowledge in various dental care delivery systems.
EARLY CHILDHOOD MULTICULTURAL EDUCATION			
ECME	103	Health, Safety and Nutrition	This course provides information related to standards and practices that promote children's physical and mental well-being, sound nutritional practices, and maintenance of safe learning environments.
ECME	111	Family and Community Collaboration I	This basic course examines the involvement of families from diverse cultural and linguistic backgrounds in early childhood programs. Ways to establish collaborative relationships with parents and others involved with children in early childhood settings are discussed.
ECONOMICS			
ECON	239	Economics of Health and Gender	Examines economic situation of women and minorities in the United States. Explores effects of race, gender and ethnicity on the economic performance of workers and evaluates various strategies for social change.

ECON	331	Economics of Poverty and Discrimination	Explores trends in income distribution especially across and within groups and examines theories explaining behavior and outcomes. Public policy concerning poverty and discrimination is studied and discussed.
ECON	335	Health Economics	Market concepts and health care issues. Economic assessment of the U.S. health care system. Explores physician supply and demand, hospitals, malpractice, pharmaceuticals, insurance and related topics.
ECON	410	Topics in Health Economics	Specialized topics in health care economics including medical education, national health insurance, comparative systems, drug industry and other contemporary issues. Emphasis on empirical applications in the study of health care issues. For course content, consult the economics department.
ENGLISH			
ENGL	413	Scientific, Environmental and Medical Writing	
GEOGRAPHY			
GEOG	281	Introduction to Maps and Geospatial Information	Maps are tools for communication. Will explore scale; projections; symbolization; generalization; alternative or non-tradition map representations provided by GIS, remote sensing, multimedia and animated maps.
GEOG	461	Environmental Management	Examination of critical issues of environmental degradation in global and local system related to: air and water pollution, soil erosion, deforestation, strip mining, over dependence on fossil fuels and improper management of toxic and other wastes. Appraisal of the conservation methods and policies applied to these issues and the outlook for the future.
FAMILY STUDIES			
FS	481	Families and Public Policy	Specialized topics in health care economics including medical education, national health insurance, comparative systems, drug industry and other contemporary issues. Emphasis on empirical applications in the study of

			health care issues. For course content, consult the economics department.
HEALTH EDUCATION			
HED	209	Education for AIDS Prevention	This course is designed to familiarize students about the HIV/AIDS epidemic with HIV/AIDS awareness including: basic information, prevention, history, compassion, legal issues, testing and societal implications.
HED	260	Foundations of Health Promotion	For those considering becoming health majors or minors in school health or community health. Exploration of the basic philosophy and fundamental practices currently utilized in health education.
HED	310	Injury Prevention	The course content will include specific strategies for preventing unintentional injuries in young children. Students will examine specific principles for the development of new strategies that will address unintentional injuries.
HED	321	Violence Prevention	The course will examine strategies that have been successful in preventing violence. Students will examine the literature to understand the principles to use in the development of strategies for the prevention of violence.
HED	333	Emotional Health and Interpersonal Relationships	Course will examine a psychological framework that is the cause of a dysfunctional lifestyle and create a psychological framework that can result in the improvement in the quality of living.
HED	362	Introduction to Health Behavior Theory	This course will provide an understanding of theoretical principles of various health behavior theories that explain the adoption of health-compromising and health-promoting behaviors.

HED	371	Community Health	New developments in research in major health problems, the ecology of local, national and world health problems. A basic foundation in the history of public health, principles in environmental health and control of disease in communities.
HED	446	Health Promotion Program Planning	This course develops professional competencies in program planning, implementation and evaluation related to community and school health education/promotion.
HED	451	Community-Based Interventions	
HED	473	Health Issues in Death and Dying	An introduction to content in the area of death and dying: the dying process, grief, types and alternatives to funerals, out-of-body experiences, types of death and community resources available for support.
HED	477/577	Stress Management	Deals with multiple causes of stress and its resolutions. Emphasizes chief stressors of adults, self-responsibility for change, holistic approach, emotional/mental methods of stress reduction.
HED	482	Social Determinants of Health	Course provides an overview of the health beliefs of people in NM with an emphasis towards Latino/Hispanics, Native Americans, African Americans, Asians and Anglos. Examines health behavior as influenced by health beliefs and practices.
HED	487/587	Physical Activity and Aging	Concerned with the process of aging as it affects physical activity and the potential of physical activity in adjustment to the process of aging.
HED	495	Field Experience	Planned and supervised professional laboratory or field experiences in agency or institutional setting.
HEALTH, MEDICINE & HUMAN VALUES			
HMHV	101	Contours of Health in New Mexico	Seminar exploring ethnic, economic, demographic, and geographic variables impacting public health in New Mexico and the Southwest. Topics include access to health care; local alternatives to medical treatment; cultural definitions of health, illness, and death.

HMHV	201	Literature, Fine Arts and Medicine	Seminar exploring links among health, illness, literature and the arts, encompassing a diverse range of forms and genres. Topics include representations of health, illness, and medicine; arts as therapy; medical history in literature and art.
HMHV	301	Health Economics, Politics and Policy	Seminar exploring political and economic forces that impact health care policies and practices. Topics include political and economic forces impacting health care; health care reform; the institutional and political organization of medicine.
HMHV	310	Health and Cultural Diversity	Seminar exploring cultural variables that affect the experience and practice of health and health care: how culture, ethnicity, race, and gender inform ideas of health and illness, death and dying, and the patient-physician relationship.
HMHV	350	Community Health Practicum I	Experiential learning project conducted in a variety of rural or underserved health care settings. Emphasis upon the roles of health professionals and teams, community health issues, and health care practices, processes and systems.
HMHV	398	Community Service/Public Health Workshop	Various topics in community service and public health as preparation for summer practicum/preceptorship.
HMHV	401	Ethics, Medicine and Health	Seminar exploring ethical and legal considerations that influence medical practices and decision-making. Topics include contemporary ethical and moral issues in medicine; and a comparative and critical analysis of relationship between professional ethics and personal beliefs.
HMHV	450	Community Health Practicum II	Experiential and research project conducted in a variety of rural or underserved health care settings. Emphasis upon the roles of health professionals and teams, community health issues, and health care practices, processes and systems.

LANDSCAPE ARCHITECTURE

LA	411	Topics in Landscape Architecture	Individual, independent study of topics and research issues in landscape architecture undertaken by a student with faculty approval, advisement and supervision.
MECHANICAL ENGINEERING			
ME	217 (2)	Energy, Environment and Society	A look at the social, ethical and environmental impacts of energy use both now and through history. A survey of renewable energy and conservation and their impact on environmental and social systems.
MANAGEMENT			
MGMT	190	Special Topics in Management	Selected offering of management topics not represented in the regular curriculum.
MGMT	202	Principles of Financial Accounting	An examination of the conceptual framework of accounting and the functions of accounting in a business-oriented society. Topics include valuation theory and its applications to assets and liabilities, concepts of business income, funds-flow analysis, problems of financial reporting.
MGMT	306	Organizational Behavior and Diversity	Emphasis on application of behavioral science theory and concepts. Focus on individual, interpersonal and group processes in a diverse work force.
MGMT	307	Organizational Change and Innovation	Intensive examination of behavioral science research and theory as a basis for understanding, managing and changing organizations. Emphasis is on a comparative organizational approach, public or private, as a socio-technical system.
NATURAL SCIENCES			
NTSC	263L (4)	Environmental Science	For pre-service K-8 teachers only. An activity-based interdisciplinary study of major issues in environmental science with emphasis on science process, scientific investigations and field-based activities and the integration of technology. Course topics include current issues on population, healthy ecosystems and natural resources. Various teaching methods are modeled and practiced by

			students.
NURSING			
NURS	331L	Principles and Application, Community Assessment	Application of the principles of community assessment related to the role of the community health nurse. Identification of health disparities, recognition of cultural diversity, and interdisciplinary work will be emphasized.
NURS	431L	Community Assessment	Addresses community as client; determinants and indicators of community health. Student groups partner with communities to assess the health of a defined population and share planning for an evidence-based intervention for an identified problem.
NURS	472	Victimology	This course examines the wide range of victimization experiences from the perspective of the victim, the offender, the families, and society. Assessment and intervention with victims, perpetrators and the community are explored.
NUTRITION			
NUTR	120	Nutrition for Health	General concepts of nutrition applied to food choices that support health. Cultural, psychological and economic implications of food choices.
NUTR	593	Maternal and Child Nutrition	This course number is listed as "Nutrition Research" in the Fall schedule
PEACE STUDIES			
PCST	307	Nonviolent Alternatives	This course studies the dynamics of violence and nonviolence at the interpersonal, institutional, cultural, and global level from a variety of disciplinary perspectives. Cross listed with SOC 307.
PHYSICAL ED (PROFESSIONAL)			

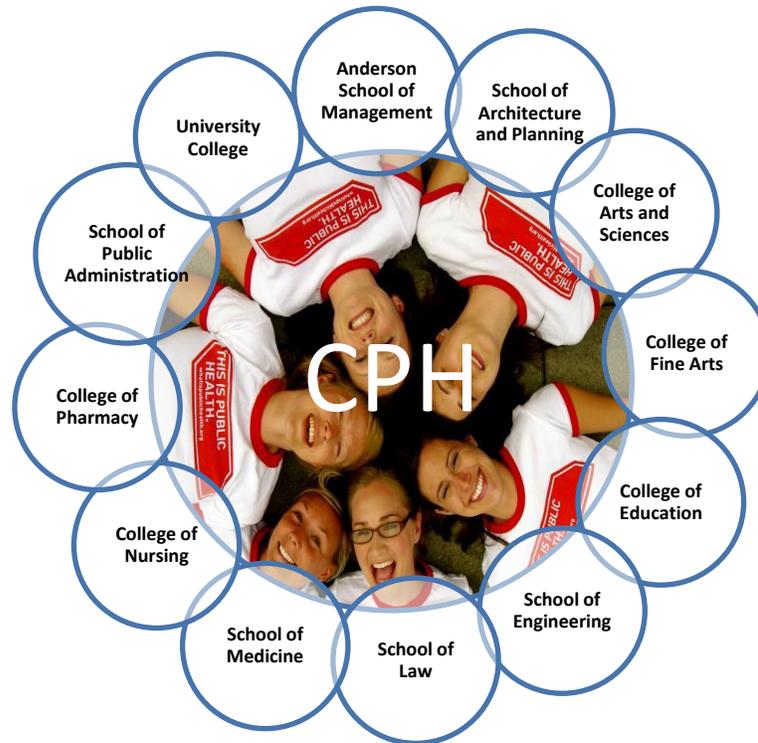
PEP	471	Exercise & Disease Prevention	Identification and analysis of current disease prevention issues related to exercise, physical activity and lifestyle.
POLITICAL SCIENCE			
POLS	270	Public Policy and Administration	Introduces public policy and bureaucracy, including decision-making and implementation
POLS	300	Topics in Latino Health	
POLS	376	Health Policy and Politics	Analysis of the politics of health care in the U.S. and the development of public health policies
POLS	377	Population Policy and Politics	Analysis of U.S. and multinational policies addressing issues of world population growth, including policy tools designed to control population growth.
POLS	400	Women's Health Policy	
POLS	475	Environmental Politics	A study of political problems of environmental protection and land use planning. (PP)
PSYCHOLOGY			
PSY	200	Statistical Principles	Presentation of the basic principles of the description and interpretation of data. Provides an acquaintance with statistical principles appropriate to a liberal arts education, as well as a basis for further work in data analysis. Students planning graduate study in any field are advised to take 300 and 302 as well.
PSY/WMST 231	231	Psychology of Human Sexuality	Exploration of the physiological, cultural, social and individual factors that influence sexual behavior, sex roles and sex identity.
PSY	280	Health Psychology	This course introduces Health Psychology. The course will cover the role of stress in illness, coping with chronic illness, stress, and pain, and the role of health behavior in health and disease.
PSY	347	Drugs and Behavior	Study of the pharmacological action and physiological and psychological

			effects of drugs of abuse including stimulants, depressants, narcotics and hallucinogens. Prerequisite PSY 240.
SOCIOLOGY			
SOC	200	Foundations of Social Welfare	Overview of social welfare institutions in Western societies related to social change, stratification, economy, politics, dependency, poverty, wealth, and unemployment in U.S. and other countries; examines social work and related human service occupations.
SOC	211	Social Problems	Description and analysis of major social problems facing American society. Foci may include: poverty, homelessness, alcohol and drug problems, race and ethnic relations, aging and mental illness.
SOC	300	Social Welfare: Policies and Programs	The development and operation of the U.S. social welfare programs (Social Security, Medicare, Medicaid), unemployment insurance, workers compensation, public assistance, and political ideologies shaping the public debate and attitudes toward social programs.
SOC	307	Nonviolent Alternatives	This course studies the dynamics of violence and nonviolence at the interpersonal, institutional, cultural, and global level from a variety of disciplinary perspectives. Cross listed with SOC 307.
SOC	340	Sociology of Medical Practice	An introduction to the delivery of health care in the U.S. and selected other countries is pursued with an emphasis on the interaction of patients, professionals and health care institutions.
SOC	342	Social Epidemiology	Examines the influence of social variables on human's health, illness and death. The complex role of lifestyle, socioeconomic status, marriage, occupation, culture and other variables are examined as they are related to survival. Offered at demand.
STATISTICS			
STAT	145	Introductory Statistics	Techniques for the visual presentation of numerical data, statistics, introduction to probability and basic probability models used in statistics,

			introduction to sampling and statistical inference, illustrated by examples from a variety of fields.
WOMEN'S STUDIES			
WMST	339	Women and Cultural Violence	An examination of cultural violence toward women (rape, domestic violence, sexual harassment, emotional and verbal abuse, media images, etc.) through political, economic, psychological, social and cultural perspectives.
WMST	377	Population Policy and Politics	Analysis of U.S. and multinational policies addressing issues of world population growth, including policy tools designed to control population growth.

Appendix B Potential UNM Public Health Related Courses

Public Health Touches All of UNM



The following is a list of public health related courses by college/school offered at UNM. This extensive list shows the potential at UNM to allow for expansive collaboration and great potential for new programs and increased enrollment.

Anderson School of Management

Health Services Management Certificate Program under development

College of Arts and Sciences

Anthropology-Human Biology, Anthropology of Health

Communication & Journalism-Communication Across Cultures, Intercultural Communication, Intercultural Conflict Community Building, Refugee Well-being, Health Communication Culture Borderlands and Change, Health Communication, Health Communication Campaigns, Culture Disparities and Health Communication, Diffusion of Innovations

Economics-Economics of Health and Gender, Economics of Poverty and Discrimination, Health Economics, Topics in Health Economics, Evaluation of Public Programs, Seminar in Health Economics

English-Scientific, Environmental and Medical Writing

Political Science-Public Policy and Administration, Topics in Latino Health, Health Policy and Politics, Women's Health Policy, Pro-seminar in Health and Public Policy

Psychology-Social Psychology of Health Promotion

Sociology-Foundations of Social Welfare, Social Problems, Social Welfare Policies and Programs, Medical Sociology and Health Policy

Statistics-Biostatistical Methods I and II for Public Health and Medical Sciences

Women's Studies-Population Policy and Politics

School of Architecture and Planning

Architecture and Planning- Community Based Practice, Indigenous Planning, Design and Planning Assistance Center Studio, Master of Science track in Public Health and Built Environment, Sustainability I.

College of Education

Early Childhood Multicultural Education-Health Safety and Nutrition, Family and Community Collaboration

Education-Community Health Education Program

Educational Psychology-Survey of Research Methods in Education, Statistical Software Applications for Educational Research, Conducting Quantitative Educational Research, Introduction to Educational Statistics, Survey and Questionnaire Design and Analysis, Introduction to Psychological Measurement, Applied Statistical Design and Analysis, Multiple Regression Techniques as Applied to Education, Applied Multivariate Statistics, Structural Equation Modeling

Family Studies-Families and Public Policies

Health Education-Education for AIDS Prevention, Foundations of Health Promotion, Violence Prevention, Emotional Health and Interpersonal Relationships, Introduction to Health Behavior Theory, Community Health, Health Issues in Death and Dying, Stress Management, Introduction to Health Education and Multicultural Health Beliefs, Physical Activity and Aging, Health Behavior, Management of Health Promotion Programs, Advanced Strategies for Prevention of Substance Abuse, Perspectives in Community Health Education, Advanced Community

Research, Community Health Education Program Planning Development and Evaluation, Epidemiological Principles for Health Educators, Measurement and Evaluation in Health Promotion, Health Promotion in Multicultural Settings, Perspectives on Patient Advocacy and Illness

School of Engineering

Civil Engineering-Introduction to Water and Wastewater Treatment, Biological Wastewater Treatment, Aqueous Environmental Chemistry and Analysis, Physical-Chemical Water and Wastewater Treatment, Advanced Physical-Chemical Water and Wastewater

College of Fine Arts

Fine Arts-Arts in Medicine program (Clinical Services, Education, Research, Community Outreach and International Collaboration)

School of Law

Law- Robert Wood Johnson Foundation Project, Health Law Ethics and Policy, Domestic Violence, Child Health Policy and Practice, AIDS and the Law, Health/Public Health Law Policy and Ethics, Health Law Moot Court, Bioethics

College of Nursing

Nursing-Principles and Application Community Assessment, Community Assessment, Victimology, Advanced Community Health Nursing I and II, Applications of Epidemiology to Community Health Problems, Emerging Issues in Adult Geriatric, Environments of Human Health, Rural and Cultural Health, Critical Ethnography and CBPR in Health Care Research, Personal and Social Context of Illness, Evidence Health Policy and Politics, Health Disparities and Policy, Applied Health Economics, Applied Epidemiology in Advanced Nursing Practice

College of Pharmacy

Pharmacy- Public Health in Pharmacy, Topics in Environmental Disease, Comprehensive Diabetes Elective, Substance Abuse Elective, Geriatric Medicine Management, Introductory Community Pharmacy Practice Experience, Navajo Birth Cohort Study-Uranium Exposure

College of Public Administration

Public Administration-Health Policy and Management, Health Governance in Global Perspective, Healthcare Finance, Healthcare Policy and Program Evaluation, Cultural Competence and Healthcare Administration, Health Economics, Healthcare Information Technology, Healthcare Payment Systems, Health Policy, Politics and Social Equity, Medical Sociology and Health Policy, Hospital and Clinic Administration, Epidemiologic Methods, Rural Health, Women's Health Policy, Reproductive Health Policy, New Mexico Border Health, Health Law, Bioethics, Health Policy and Politics, Medical Sociology and Health Policy

School of Medicine

Biomedical Science-Global Emerging Infections, Environmental Health Risk Assessment, Biostatistics in Clinical and Translational Research, Epidemiology in Clinical and Translational Research, Cultural Competence in Clinical and Transitional Research

Dental Hygiene-Dental Health Education, Dental Hygiene Research Methodology, Dental Public Health I and II, Extramural Experience, Oral Medicine

Health, Medicine and Human Values-Contours of Health in New Mexico, Literature Fine Arts and Medicine, Health Economics Politics and Policy, Health and Cultural Diversity, Community Health Practicum I and II, Community Service/Public Health Workshop, Ethics Medicine and Health

Nutrition-Nutrition for Health, Methods in Nutrition Education, Maternal and Child Nutrition

Occupational Therapy-Community Health

Public Administration-Public Management and Policy, Social Policy and Planning, Public Policy and Aging, Health Policy and Management, Health Governance in Global Perspective, Healthcare Finance, Healthcare Policy and Program Evaluation, Seminar Health Economics

Physician Assistant-Foundations of Medical Science I-Population Health

Physical Education- Exercise and Disease Prevention

Public Health-Principles of Public Health, Epidemiologic Methods I and II, Rural Health, Social and Cultural Theories, Environmental/Occupational Health, Healthcare Systems, Theory and Practice Seminar I, Public Health and Healthcare Management, Writing for Public Health Professionals, Public Health Seminar, Introduction to Epidemiology, Seminar in Epidemiology, Social Epidemiology, Epidemiology Surveillance, Chronic Disease Epidemiology, Infectious Disease Epidemiology, Environmental and Occupational Epidemiology, Perinatal Epidemiology, Cancer Epidemiology, Public Health Research Methods, Epidemiology Data Analysis, Disparities in Public Health, Epidemiology and Biostatistics, Community-based Service Learning, Evidence Based Practice, Public Health Program Planning, Health Policy Politics and Social Equity, Public Health Evaluation Methods, Community Participatory-based Research, International Health, Special Topics in Public Health, Social Medicine in Latin America, Public Health and Health Care Communication, Public Health Law Policy and Ethics, Popular and Empowerment Education, American Indian Health Issues, Community Health Intervention Models, Introduction to Public Health Planning and Evaluation, Community Health Improvement Strategies, Public Health Leadership on Facilitation, Public Health Leadership in Cross Cultural Communication and Conflict, Public Health Leadership in Policy and Advocacy, New Mexico Border Health, Community Assessment, Fundamentals of Public Health, Basic Public Health Epidemiology, Advanced Topics in Health Sector and Globalization, Child Health and Child Rights, Public Health and Mental Health, Public Health Law, International and US Health Policy Reform, Tuberculosis HIV Malaria, Independent Studies, Professional Paper, Public Health Integrative Experience, Public Health Practicum, Master's Thesis

Appendix C

Examples of Public Health Related UNM Faculty and Student Research Projects

UNM Public Health Projects for Tribal Populations

Circle Project- Jemez, Ramah Navajo and Mescalero

An intergenerational (child/ parent/elder) family prevention program to increase cultural identity, coping, self-confidence, and decrease depression in children and adult participants, including increased awareness about the importance of native language, culture, health, family communication and increased coping and control.

Tribal Preventative and Early Mental Health Intervention, Lincoln County

A culturally responsive prevention intervention to reduce mental, emotional and behavioral problems for tribal youth/ teens/ adolescents such as PTSD, depression, early signs of psychosis and the impact of historical trauma upon the youth

Navajo Uranium Assessment and Kidney Health Project, McKinley County

Investigates high prevalence of chronic kidney disease in communities of the Navajo Nation impacted by uranium mining to reduce uranium exposures due to drinking water from unregulated sources. A Prospective Birth Cohort Study Involving Uranium Exposure in the Navajo Nation, San Juan County. Studies the prenatal, perinatal, and early postnatal health effects of environmental exposures to uranium and related mining wastes on Navajo mothers and their infants.

UNM Public Health Nutrition Projects

Fiestas Project

A collaborative community-based intervention to improve food security in Santa Barbara Martineztown for women as family health and nutrition decision-makers. The project helps women in the community to connect people with information about food, food access and nutrition; with services related to food supports such as WIC or SNAP; and with each other for social supports that undergird basic survival for low-income families.

Adolescents Committed to Improvement of Nutrition & Physical Activity (ACTION)

Epidemic of childhood obesity has led to the recognition of metabolic syndrome which places our children at increased risk for developing type 2 diabetes and cardiovascular disease. This study, funded by NIH/NHLBI, evaluates the effects of clinical encounters with a school-based health center primary care provider using motivational interviewing techniques and a multidisciplinary intervention program to motivate 9th, 10th and 11th graders in adopting healthier eating and physical activity habits.

Diabetes Prevention Program Outcomes Study, Bernalillo County

Studies the effects of prevention and lifestyle intervention programs in preventing diabetes.

UNM Public Health Substance Abuse and Mental Health Projects

Treating Pain and Addictions in New Mexico

UNM faculty have trained over 2,000 clinicians throughout NM regarding safe opioid prescribing and best practices in pain management. Since December 2011, the NM Board of Pharmacy has noted a continuous and steady decline in the dispensing of morphine milligram equivalents and benzodiazepine milligram equivalents, the two most dangerous controlled substances dispensed.

Mental Health First Aid, Rio Arriba County

Skill building program serving persons facing the challenges of mental health illness and/or addictions by creating opportunities for improving their general life skills through environments that support recovery, self-efficacy, and empowerment, as well as assisting in improving a person's daily life. Classes include relaxation/meditation, GED prep, budgeting, computer skills and communication.

NIMH Outreach Partnership, Sandoval County

Increase access to science based information about mental health conditions to underserved groups. In conjunction with ongoing activities around the state, it disseminates educational materials and offers access to training and consultation on mental health symptoms and conditions.

UNM Public Health Community Projects

Intimate Partner Violence Death Review Team

A statewide multidisciplinary team funded by the New Mexico Crime Victims Reparation Commission and administered by UNM's Center for Injury Prevention Research and Education (CIPRE). Identifies gaps in the responses to domestic and sexual violence at the community and statewide levels and creates solutions for positive change for victims of domestic and sexual violence. The IPVDR's goal is to prevent future domestic and sexual violence related injury and death.

Pedestrian Safety (CIPRE), "Look For Me Campaign"

The program focuses on the 5 cities with the highest number and rate of pedestrian fatalities including, Albuquerque, Gallup, Farmington, Las Cruces, and Santa Fe. The campaign promotes pedestrian safety as a responsibility of both the driver and pedestrian.

Health Literacy and English as a Foreign Language Course

Working in Martineztown, this project collaborates with ESL programs to improve health literacy and reduce risks for cardiovascular disease in this vulnerable population.

Appendix D

CEPH REQUIREMENTS

Council on Education for Public Health Accreditation (CEPH)

CEPH is an independent agency recognized by the US Department of Education to accredit schools of public health and public health programs offered in settings other than schools of public health. These schools and programs prepare students for entry into careers in public health. The primary professional degree is the Master of Public Health (MPH), but other masters and doctoral degrees are offered as well. Currently UNM offers a CEPH accredited MPH and concentrations in Community Health Intervention, Epidemiology and Health Systems, Services and Policies with dual degree offerings and a public health certificate.

CEPH Accreditation Procedures, pg. 29 "1) accredited public health programs seeking a change in accreditation status may not refer to themselves as schools or colleges of public health until an application for accreditation as a school of public health has been submitted and approved by CEPH."

CEPH Accreditation Process for Bachelor's, Graduate and Doctoral Level Programs

To be eligible for CEPH accreditation, you must:

- Currently offer an MPH
- Be located in a regionally accredited college or university.
- Be prepared to submit an application, as outlined by CEPH prepared to comply with the appropriate set of accreditation criteria.

CEPH Accreditation Steps for a Program

- (1) Review CEPH's Accreditation Criteria
- (2) Review CEPH's Procedures Manual
- (3) Request a consultation visit if necessary to begin the planning process.
- (4) Plan a timeline for submitting the application for the Council's spring and fall meetings (twice a year).
- (5) Use the application template to prepare the application. The application should address each request by number/letter and should be approximately 15 pages in length, with appendices as needed.
- (6) Submit one paper copy, with original signatures, to the CEPH office and one by email.
- (7) CEPH schedules site visits on a first-come, first-served basis, starting approximately a year and a half to two years before the visit. CEPH staff will mail each program director and dean a letter approximately two years before the visit, inviting the program director or dean to contact CEPH for site visit scheduling. Site visits typically take place on Monday-Wednesday or Wednesday-Friday for schools.
- (8) The CEPH Board of Councilors will review the report at its next scheduled decision-making meeting, provided that the meeting is at least four months in the future. In general, reports

from site visits held in September through January will be considered at the “spring” meeting, and those from site visits held in February through June will be considered at the “fall” meeting. Spring and fall meeting dates are determined approximately one year in advance.

- (9) The Council’s decision will be in submitted writing, via e-mail, within 30 days of the meeting’s conclusion.

CEPH Accreditation Fees for Bachelor’s, Graduate and Doctoral Level Programs

- \$2,500 Application Fee
- \$2,700 Accreditation Review Fee (If more than one preliminary review of documentation is necessary, a \$1,350 charge will be made for each review. If a focused or abbreviated review is required, a charge of \$1,350 will be made.)
- \$1,500 surcharge on the above accreditation review fee for each day or partial day added to an on-site visit beyond the ordinary duration of 3 days for a school and 2 days for a program.
- \$4,175 per calendar year for an accredited public health program with three degree levels (masters AND bachelors AND doctoral).
- \$10,000 Appeal Fee if not approved.
- Consultation Visits:
 - \$500 per ½ day in CEPH office
 - \$1,500 per day, per CEPH consultant. Actual travel and living expenses must be reimbursed for all individuals involved in consultation visits and on-site evaluation visits. Schools and programs may be charged additional amounts for specific services or products they seek from CEPH, such as consultation, education sessions, conference call arrangements, and duplication expenses.

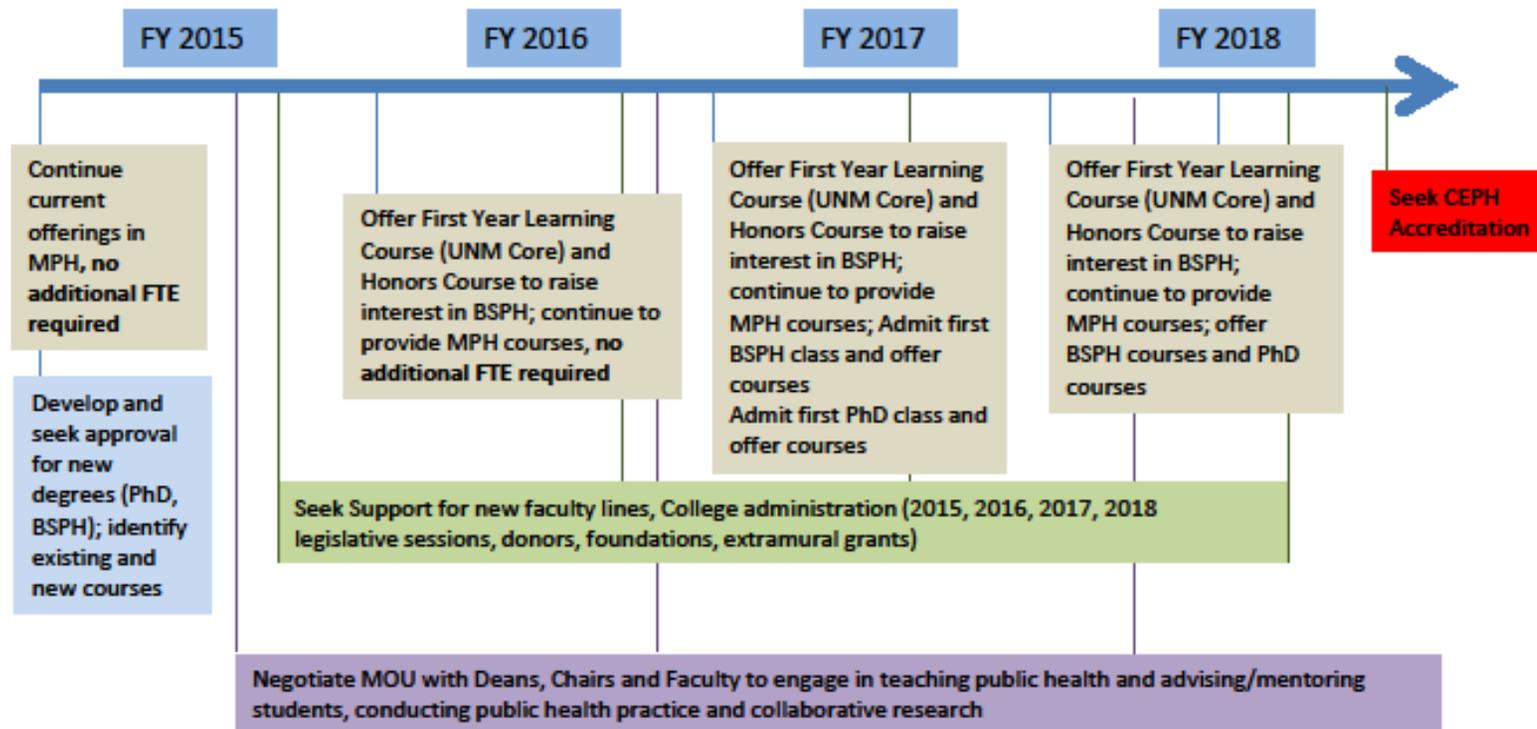
After accreditation, accredited schools and programs pay an annual support fee each year, including years in which there is an accreditation review. The review process for first-time accreditation is approximately three years from the date of the application’s acceptance to the date of the Council’s official decision.

Appendix E
College of Population Health Implementation Budget

Salary Expenses	FY15 Requested Implementation Budget
Faculty Salaries	
Dean @ 1.0 FTE *	\$ 274,848
Undergraduate Program Director @ .30 FTE(\$137,614)	\$ 41,284
Graduate Program Director (Budgeted Under FCM)	
Fringe @ 29%	\$ 91,678
Subtotal Faculty Salaries	\$ 407,810
Staff Salaries	
Sr. Program Manager (Deanna Wall- partial year, beg Oct 2013)	\$ 71,556
Admin Assistant III (TBN)	\$ 33,114
Fringe @ 35%	\$ 36,635
Subtotal Staff Salaries	\$ 141,305
Subtotal Faculty and Staff Salaries	\$ 549,115
Non Salary Expenses	
Consultant Fees	\$ 100,000
In State Travel	\$ 7,452
Out of State Travel	\$ 9,000
SOPHAS/ASPPH Dues/Membership Fees	\$ 36,050
Other Expenses (student recruitment, marketing and outreach)	\$ 24,000
Office Supplies General	\$ 1,500
Computer Supplies	\$ 1,000
Copier Supplies General	\$ 500
Parking Permits	\$ 100
Postage including Overnight Delivery	\$ 900
Telecom Charges including Long Distance	\$ 1,000
Curriculum Development	\$ 50,000
Printing	\$ 2,000
Computer Equipment	\$ 6,000
Banner Tax	\$ 2,717
CPH Space Needs (Dean, Sr. Program Manager, Admin III, Conference Room, Reception)	
Space/Facility @ 800 sq. ft. plus common area (\$16.50 per sq ft)	\$ 13,200
Space Build-out	\$ 25,000
Subtotal Non Salary Expenses	\$ 280,419
Totals	\$ 829,534

Appendix F

Timeline for Major Milestones



Appendix G			
Public Health Programs at NMSU and UNM			
Program	NMSU	UNM	Comments
Undergraduate	BS in Community/PH	BS in Health Education with concentration in Community Health	NMSU is SABPAC approved, will be converted to CEPH accreditation when SABPAC term expires
Social and Behavioral Services	Community Health Education	Concentration in Community Health	NMSU accredited by CEPH UNM accredited by CEPH
Health Services Administration	Health Admin, Management and Policy	Concentration in Health Systems, Services and Policy	NMSU proposed. UNM accredited by CEPH
Epidemiology	Planned combo Epi/Biostat concentration	Concentration in Epidemiology	NMSU proposed. UNM accredited by CEPH
Biostatistics	Planned combo Epi/Biostat concentration	Currently being developed	
Environmental Health	Not available	Currently being developed	
MPH Masters International	Yes		
MPH Returning Peace Corp Volunteers	Yes		
MPH/MSW	Yes		
MALAS/MPH		Latin American Studies/PH	UNM accredited by CEPH
MD/MPH		Yes	UNM accredited by CEPH
Individual joint MPH/master's degree		Curriculum developed with another master's program (Anthropology, Nutrition, Community Health Nursing, Public Admin, Community Regional Planning)	UNM accredited by CEPH
MPH/Master in Business Admin	Proposed		
MPH/Masters in Public Administration	Proposed	Individual joint MPH/MPH	UNM accredited by CEPH
Doctorate of Nurse Practice/MPH	Proposed		
Doctorate	DrPH being developed	PhD in Public Health Sciences being developed	
Public Health Certificate	Yes	Yes	NMSU graduate PH certificate. UNM integrated PH certificate in UG medical curriculum, PH certificate for Family Medicine Residents and PH certificate for MCH fellows.

Appendix H
Existing Public Health-Related Resources at NMSU and UNM

Health-Related Degree Program Area	New Mexico State University	University of New Mexico
	College of Agricultural, Consumer and Environmental Sciences	College of Education
Community Nutrition	BS in Family and Consumer Sciences – major in Human Nutrition and Dietetic Sciences, option in Community Nutrition	BS in Nutrition and Dietetics, MS in Nutrition
Human Nutrition and Dietetics	BS in Family and Consumer Sciences – major in Human Nutrition and Dietetic Sciences, option in Dietetics	BS in Nutrition and Dietetics, MS in Nutrition
Nutrition and Fitness	BS in Family and Consumer Sciences – major in Human Nutrition and Dietetic Sciences, option in Nutrition and Fitness	BS in Nutrition and Dietetics, MS in Nutrition
Food Science and Technology	BS in Food Science and Technology	
	College of Arts and Sciences	College of Arts and Sciences
Pre-professional curriculum	Pre-dental, Pre-laboratory sciences, Pre-medicine, pharmacy, Pre-physical therapy, Pre-radiologic sciences	Pre-dental, Pre-laboratory sciences, Pre-medicine, pharmacy, Pre-physical therapy, Pre-radiologic sciences
Psychology	BA in Psychology, MA in Psychology, PhD in Psychology	BA in Psychology, BS in Psychology, Concentration in Basic Addiction Counseling. MS in Psychology, PhD in Psychology
Speech and Hearing Sciences	See BS and MA in Education – Communication Disorders in College of Ed	BA in Speech and Hearing Sciences, MS Speech-Language Pathology
Statistics	MS in Applied Statistics	BS in Statistics with an emphasis in Biostatistics, MS and PhD in Statistics
		School of Public Administration
Health Policy and Health Administration		Master of Public Administration, Master of Health Administration
	College of Education	College of Education
Communication Disorders	BS in Education – Communication Disorders, MA in Communication Disorders	BA, Speech and Hearing Sciences, MS Speech-Language Pathology, College of Arts and Sciences
Physical Education	BS in Athletic Training Education, BS in Education-Teaching Education	BS in Exercise Science, BS in Physical Education, BS in Athletic Training, MS General Physical Education and PhD in Exercise Science
Counseling Psychology	Minor in Counseling Psychology, MA and PhD in Counseling Psychology	MA and PhD in Counselor Education
School Psychology	EdS, Specialist in Education, Psychology	MA and PhD in Educational Psychology
Counseling and Guidance	MA Counseling and Guidance	MA in Counseling and PhD in Counselor Ed
		HSC School of Medicine
Behavioral Health Psychological Training on US/Mexico Border	Behavioral Health Seminar and Behavioral Health Practicum for doctoral students in counseling psychology, social work students and family medicine residents. Early Childhood Multicultural Education	Elective rotations through Center for Rural and Community Behavioral Health for psychiatry residents.
Health Education	See Bachelor of Community Health in HSC	BS and MS in Education - Community Health Education Concentration

Appendix H Continued

Health-Related Degree Program Area	New Mexico State University	University of New Mexico
College of Health and Social Services, School of Nursing		University College
Water Resources		MS in Water Resources
Undergraduate nursing	BS in Nursing (BSN)	BS in Nursing (BSN)
BSN completion program (RN-BSN)		Online
Accelerated nursing program	Roadrunner Program	Prelicensure Option
Master's level nursing	MS in Nursing	MS in Nursing
Doctoral degrees	PhD and DNP	PhD and DNP (online)
College of Health and Social Services, School of Social Work		College of Arts and Sciences
Undergraduate social work	Bachelor of Social Work (BSW)	Bachelor of Arts in Sociology – concentration in Human Services and Social Policy
Master's level social work	Master of Social Work (MSW) Las Cruces and Albuquerque campuses	
Joint degrees	MSW/MPH	
Doctoral degree	Plan to develop	
College of Arts and Sciences		Health Sciences Center, College of Pharmacy
Pharmaceutical sciences	UNM/NMSU Cooperative Pharmacy Program	MS in Pharmaceutical Sciences, PharmD/PhD
College of Health and Social Services, Department of Public Health Sciences		Health Sciences Center, School of Medicine
Biomedical Sciences		MS in Biomedical Sciences, PhD in Biomedical Sciences
Clinical Laboratory Sciences		MS in Clinical Laboratory Sciences
Community Health	Bachelor of Community Health changing to Bachelor of Public Health	See BS and MS in Education Community Health Education Concentration in College of Education
Dental Hygiene		BS in Dental Hygiene, BS in Dental Hygiene Degree Completion, MS in Dental Hygiene
Emergency Medical Services		BS in Emergency Medical Services
Emergency Medical Technician and Paramedic		Certification
Mountain Medicine		Diploma
Wilderness First Responder		Certificate
Medical Laboratory Sciences		BS in Medical Laboratory Sciences
Medicine		Doctor of Medicine (MD)
Occupational Therapy		Master of Occupational Therapy
Physical Therapy		Doctor of Physical Therapy
Physician Assistant		MS in Physician Assistant Studies
Public Health: master's level	Master of Public Health Las Cruces and online	MPH: Concentrations in Community Health, Epidemiology, Health Systems, Services and Policy

Appendix I
Public Health Faculty Resources at NMSU and UNM

Faculty	NMSU	Expertise	UNM	Expertise
Faculty/Full Time	15 (Department of Public Health Sciences, College of Health Sciences)	Community Health Education, Epidemiology, Biostatistics, Health Policy, Health Administration, Social and Behavioral Health Gerontology, Border Health	19 (Public Health Program, Department of Family and Community Medicine, School of Medicine, Health Sciences Center)	Biostatistics, Environmental Health, Epidemiology, Community and Behavioral Sciences, Community Based Participatory Research, Health Communication and Literacy, Health Policy, Health Systems and Services, Health Informatics, History of PH, Border Health, PH Nutrition
Adjuncts	24	Community Health Education, Epidemiology, Biostatistics, Health Policy, Health Administration, Gerontology, Women's Health, Human Sexuality, Program Planning, Border Health	31 (Faculty in School of Medicine; College of Pharmacy; College of Nursing; College of Education; School of Public Administration)	Biostatistics, Epidemiology, Community and Behavioral Sciences, Health Policy, Health Care Management, Health Outcomes Research, Community Environmental health; Health Promotion, Advocacy
Other Faculty in College/Health Sciences Center	8 (School of Nursing and School of Social Work)	Health Policy, Maternal/Child Health, Mental Health, Health Promotion	127 (Health Sciences Center with teaching or research focus in a public health area)	Biostatistics, Epidemiology, Cancer Research and Treatment, Community and Behavioral Sciences, Community Interventions, Health Policy, Environmental Health and others
Other Faculty Outside College/Health Sciences Center	24 (Includes faculty who have received federal funding on health-related projects or who have taught/experienced public health initiatives)	Departments include Medical Anthropology, Exercise Science, Agriculture, and Biology	104 (Other UNM faculty members outside Health Sciences Center in other departments and colleges with teaching or research focus in a public health area)	Biostatistics, Epidemiology, Community and Behavioral Sciences, Health Policy and Administration, Health Care Management, Health Outcomes Research, Community Environmental health; Health Promotion, Advocacy, Regional and Community Planning, Health Communication, Water Resources

Appendix J

Letters of Support for a College of Population Health-IN PROGRESS



Board of Regents
University of New Mexico
MSC05 3200
1 University of New Mexico
Albuquerque, NM 87131

March 7, 2014

Dear Regents President Fortner and members,

As an employer in the New Mexico healthcare industry we are facing the need to handle more healthcare issues with fewer resources. Data released by the New Mexico Economic Research and Analysis Bureau shows a 16 percent increase in healthcare employment in New Mexico between 2005 and 2010 and projects significant growth by 2019. The Affordable Care Act reinforces the need to keep the population well, reduce the burden of illness and enable us to meet the needs of our aging population.

Christus St. Vincent hospital must have access to a skilled workforce who understands New Mexico and its challenges with rural public healthcare and can look at community needs on a larger scale to identify ways to address these needs. The College of Population Health (CPH) at UNM can provide us with these resources.

Through the Christus St. Vincent Department of Community Health, we are working at the population health level in our response to the needs of our population as well as our patients. Finding and retaining professionals who understand the complexities of health care delivery and how it relates to population health is a challenge we face.

Within health care delivery, population health is a new and not well-developed area of expertise. Population health requires a different set of skills and ways of doing business than what currently exists either within health care or public health. Developing the systems needed is new territory for health care delivery organizations, there is no roadmap. In partnership with CPH, we feel that we can mutually benefit from what each of us bring to the table. Specifically and at a minimum, we can work together on data development, using population data to drive decisions, and population health strategies.

Christus St. Vincent hospital fully supports the implementation of a college to advance education, research and service in public health as it seeks approval from the Board of Regents to move forward and empower our students to positively impact the needs of the State, its communities and its citizens.

Sincerely,

A handwritten signature in cursive script that reads "Kathy Armijo Etre".

Kathy Armijo Etre, PhD
VP of Mission and Community Health

455 St. Michael's Drive * Santa Fe, NM 87507 * 505-913-5701



Office of the Dean

March 12, 2014

The University of New Mexico Board of Regents
MSC05 3200
1 University of New Mexico
Albuquerque, NM 87131

RE: College of Population Health at the University of New Mexico

Dear Regents President Fortner and Members of the Board of Regents:

As Dean of the Honors College at the University of New Mexico, I wish to express my support for the proposed College of Population Health (CPH). The Honors College provides the opportunity for high achieving students to gain a liberal arts education that engages the student in research and integrates ideas and methods from different disciplines. I believe the collaborative approach being taken by the CPH, similar to our structure in Honors, will avoid duplication of existing courses/programs and resources while creating increased student enrollment in our courses.

The CPH will also expand our educational and research efforts to create new innovative ways to link course content to real world issues, and specifically to public health initiatives. The potential for collaboration with the CPH is evident in the Honors College. We strive to provide our students with interdisciplinary content and encourage them to use those tools and skills to solve problems creatively. Clearly the problems that the CPH will seek to address are precisely the kinds of interdisciplinary issues that Honors students are trained to engage.

Many Honors students enter their university years with multiple interests and academic aspirations. Many may not have considered careers in public health, despite the need for talented people who can bring creative solutions to critical public health problems. The opportunity to obtain a degree from the CPH would be very attractive to some of these students. This unique opportunity may also attract high-achieving, talented students to UNM's Honors College and UNM more generally.

Field or clinical courses that introduce public health issues from an interdisciplinary perspective would both contribute to the bachelors degree contemplated by the CPH proposal and satisfy the Honors requirement that students complete experiential, interdisciplinary coursework. I can easily imagine a number of seminars offered jointly by Honors and the CPH that would meet the needs of our students and the needs of the State of New Mexico. In addition, a public health topics course would be an excellent addition to our suite of lower division Core Curriculum offerings in the Honors College.

The Honors College fully supports the implementation of the College of Population Health as it seeks approval from the Board of Regents. This initiative will, if approved, to move forward and empower our students to positively impact the needs of the State, its communities and its citizens.

Sincerely,

A handwritten signature in black ink, appearing to read "Kate Krause".

Kate Krause, Dean of Honors

Office of the Dean

March 20, 2014

The University of New Mexico Board of Regents
MSC05 3200
1 University of New Mexico
Albuquerque, NM 87131-0001

Dear Regents, President Fortner, and members,

As Dean of the Anderson School of Management at the University of New Mexico, I wish to express my support for the proposed College of Population Health (CPH). ASM's mission is to seek to develop business and management leaders through a balance of teaching and scholarship, and to contribute to economic development and the quality of life of our constituents. It is important as a university that we respond to the workforce development needs and demands of New Mexico by educating our students to meet employer and industry requirements. By creating a CPH, we are building a mechanism for educating and providing a skilled workforce who can create a pathway to preventative measures and reduce the costly burden of healthcare on our state and contribute to the quality of life for our constituents.

Anderson supports the CPH collaborative approach because it will avoid duplication of existing courses/programs and resources while creating increased student enrollment in our courses. The CPH will also expand our educational and research efforts to create new and innovative ways to link course content to public health initiatives and create broader interest.

The potential for collaboration with the CPH is evident throughout the Anderson curriculum.

Anderson's courses in Business Strategy, Marketing, Information Systems, Human Resources, Finance, and Accounting are all highly complementary to the offerings of CPH. In addition, Anderson offers a number of non-degree programs which can be tailored to meet the needs of students in CPH.

Healthcare has been one of the drivers of economic development for decades and promises further growth opportunities in the years to come. Already, many of our graduates have found employment in the healthcare industry, and the training that CPH can provide will enhance their career preparation. We also look forward to exploring the feasibility of creating joint degree programs.

The Anderson School of Management fully supports the implementation of the College of Population Health as it seeks approval from the Board of Regents to move forward and empower our students to positively impact the needs of the state, its communities and its citizens.

Sincerely,



Douglas M. Brown
Dean





Albuquerque Area Southwest Tribal Epidemiology Center

March 20, 2014

Board of Regents
University of New Mexico
MSC05 3200
1 University of New Mexico
Albuquerque, NM 87131

Dear Regents President Fortner and Members,

The mission of the Albuquerque Area Southwest Tribal Epidemiology Center (AASTEC) is to collaborate with the 27 Southwestern American Indian Tribes in the Albuquerque Area to provide high quality health research, surveillance and training to improve the quality of life of American Indians. AASTEC collects public health data to identify health needs, highlight strengths and assets, pinpoint key areas for intervention, advocate for additional funding and monitor trends in American Indian health. We have a vested interest in our area Tribes and it is our charge to support tribal communities by providing the necessary resources to engage Tribes in activities that benefit their well-being and create self-sufficiency.

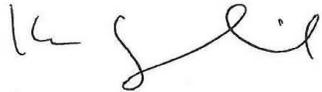
AASTEC feels a College of Population Health (CPH) can work collaboratively with our various initiatives including Tribal Community Health Assessments, Behavioral Risk Factor Surveillance Systems and Youth Risk and Resiliency Surveys, sharing and analyzing data concerning health status, health challenges and potential resources available to address health issues. The partnership can bring together resources that will further research initiatives to tackle health disparities and create a pathway to preventative measures to reduce the costly burden of healthcare on our State. Moreover, a UNM CPH can address the profound need to conduct state-of-the art public health research in a culturally appropriate manner that mirrors the unique and diverse cultural landscape of New Mexico, including our American Indian Tribes, Bands, Pueblos and Nations.

AASTEC also has a keen interest in student development and engendering a robust cadre of American Indian public health researchers and practitioners throughout our state. A UNM CPH is sorely needed to achieve this aim where residents with an interest in the field of public health can attain their educational goals in New Mexico and continue to serve our communities. Likewise, AASTEC is committed to partnering with a UNM CPH to provide opportunities for non-Native students and researchers to gain practical skills and experience in public health research in tribal settings.

5015 Prospect Ave NE Albuquerque, NM 87110
Toll-free 1.800.258.5722 Fax 505.764.0446 www.aastec.net

AASTEC fully and enthusiastically supports the implementation of the College of Population Health as it seeks approval from the Board of Regents to move forward and empower our students to positively impact the needs of the State, its communities and its citizens.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin English".

Kevin English, DrPH
AASTEC Director

