1. **State the proposed Institute/Center’s name and purpose.**

   Center for Interdisciplinary Health Workforce Studies

   The purpose of the proposed Center for Interdisciplinary Health Workforce Studies (The Center) is to conduct research on the nursing and larger health care workforce, disseminate the results and implications of this research to the nation, and convene stakeholders to solve problems confronting the nation’s nursing workforce.

   The Gordon & Betty Moore Foundation (GBMF) has provided a grant to develop the proposed Center at Montana State University. The GBMF is located in Palo Alto, California, and was established by Gordon Moore (co-founder of Intel) to support major programs in the environment, science and patient care. The director of the proposed Center, Dr. Peter Buerhaus, PhD, RN, FAAN, received a four-year grant from the GBMF to establish the Center at Vanderbilt University. Dr. Buerhaus relocated to Montana State University in the middle of the grant support, and with the backing of the GBMF seeks to establish the proposed Center within the College of Nursing at Montana State University.

2. **A comprehensive statement of the Institute/Center’s mission and its relationship to the University mission.**

   **A. State the Institute/Center’s mission.**

   The proposed Center’s mission is to measurably improve the performance of the nation’s health care workforce. The Center will engage policy leaders and professionals to help facilitate discussions around workforce issues, collect data, and help solve problems facing the nursing and larger health workforce. The Center will aim to provide consistent, reliable, and unbiased data and information to improve and sustain the local, state, regional, and national health workforce.

   **B. Identify the Institute/Center’s goals and objectives.**

   **Goal 1:** The proposed Center will conduct research on the nursing and larger health care workforce, publish results in leading peer-reviewed journals, and populate the Center’s website with timely information about the nursing workforce

   **Objectives:**

   1. Develop and maintain an active program of research on the nursing workforce, focusing on analyzing trends in employment, changing demographics, educational attainment and other characteristics
   2. Periodically update forecasts of the nation’s supply of registered nurses and physicians
   3. Conduct studies of nurse practitioners, physicians, physician assistants, and medical assistants involving economic factors (hours worked, participation in the workforce, earnings, employment settings, location)
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4. Conduct comparative studies of primary care nurse practitioners and primary care physicians on the types of services provided, characteristics of practices, characteristics of patients served, costs and quality of services

5. Conduct routine national surveys of nurse practitioners and physicians to describe practice characteristics and gather information on the attitudes, knowledge and behavior on various aspects of their relationships (teamwork, quality of professional relationships, trust, responsibilities, etc.) and how changes in the health care delivery system are affecting access, quality, and costs of care.

6. Develop new data sets useful for conducting research on the nation’s health care workforce and make these data sets easily available to others

7. Publish no less than 3 peer-reviewed manuscripts per year that describe the results of studies on the health care workforce

8. Regularly present results of studies at international, national, regional, state and local conferences

9. Routinely interact with the media (on-air, radio, internet, print) on the results of studies

Goal 2: The proposed Center will develop and maintain the nation’s “go-to” website providing timely information, data, analysis and perspective on the nursing and larger health care workforce

Objectives:

1. Provide a state of the art and easy to use website that provides the most respected source of timely information on the nation’s nursing workforce

2. Provide social media forums for discussion of issues confronting the nation’s nursing workforce

3. Employ state of the art analytics to identify, monitor and analyze website use

Goal 3: The proposed Center for Interdisciplinary for Interdisciplinary Health Workforce Studies will educate the next generation of workforce researchers

1. Develop a post-doctoral fellowship program of two years duration in health workforce studies

2. Two or more nurses will complete the post-doctoral fellowship program

3. Investigate other opportunities beyond post-doctoral education to mentor and train nursing workforce researchers
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Goal 4: The proposed Center will convene stakeholders to address problems confronting the nation’s nursing workforce

1. Organize and provide no less than 4 webinars per year

2. Organize a national conference on the nursing workforce on an every other year basis

3. Investigate other means by which to convene stakeholders to address problems affecting the nursing workforce

C. What specific need is being responded to in developing the proposed Institute/Center?

The nation’s health care delivery and payment systems are being transformed by the implementation of numerous public and private sector reforms. Because the nursing profession is the largest of all health professions (more than 3 million RNs in the labor market), the vitality of the nursing workforce is essential for the success of health reforms and to assure the public’s access to health care services. Yet in 2015 nearly 40% of RNs are over age 50 (a little more than 1 million RNs) and essentially all of these RNs will be retiring over the next 15 years. Health care reforms will exert tremendous challenges to both the demand and supply of nurses, yet the federal government has not provided timely data or information useful to policymakers, employers, insurers, payers, and others who seek to ensure the nation has a well prepared and adequately sized nursing workforce. Additionally, existing shortages of primary care physicians amidst growing demand for health care means that an estimated 14% of the nation’s population is without adequate access to primary care. Consequently, policymakers and others have recommended greater investments in the nurse practitioner workforce to expand the capacity of the overall primary care workforce, yet studies are needed to assess and update our understanding of the costs and quality of the nurse practitioner workforce.

These and many other gaps in information about the nursing workforce are particularly important to the State of Montana and other states with large rural frontier and Native populations and existing shortages of health care professionals.

The proposed Center will provide needed data, analysis and other information to help stakeholders anticipate changes affecting nurses and to better understand the impact of demographic and economic factors on the overall performance of the nurse labor market and the geographic distribution of nurses. Such data are needed to assist the development and evaluation of initiatives aimed at educating nurses, conducting research, and strengthening the ability of the nursing workforce to overcome health reform challenges and thereby assure the public’s access to healthcare.

D. Describe how the Institute/Center benefits the department, college, or institution.

The proposed Center will benefit the College of Nursing by providing new learning opportunities for undergraduate, graduate, doctoral students and faculty. The center will provide access to data for graduate students (in nursing and to non-nursing students as well) conducting research projects relevant to the workforce. The development of post-doctoral research will enhance the overall scholarly climate of the College. By working closely with other academic units of the University (e.g.,
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economics, business, engineering and medical education via the WWHAMI program), the proposed Center will further interdisciplinary research and education. Inter-professional communication and collaboration will be enhanced and The Center’s activities will increase the College of Nursing’s prestige within the University and enhance the national profile and visibility of the College.

E. Describe the Institute/Center’s relationship to the University mission.

The proposed Center’s mission, goals, and objectives (identified above) will directly align with the University’s mission to educate students, creates knowledge and art, and serve communities by integrating learning, discovery and engagement. Research conducted by investigators affiliated with the proposed Center will help inform local, state and national health care workforce policy development; Offering post doctoral education will help ensure the availability of future workforce researchers; and the Center’s website, webinars, conferences and interactions with the media will provide useful and much needed information to organizations, policy makers, and clinicians themselves.

3. Briefly describe the Institute/Center’s anticipated activities.

Over the next two years, the proposed Center will conduct research on the nation’s nursing and larger health care workforce, with studies focused on: the demographic and employment characteristics of key members of the health care workforce (e.g., nurses, physicians, nurse practitioners, physician assistants, medical assistants); assess whether changes in health care delivery systems, particularly the adoption of accountable care organizations, are affecting employment and earnings; assess the impact of state laws and regulations on the distribution of the nurse practitioner workforce; analyze national data bases to determine the contributions of nurse practitioners, including the types, quantities, costs and qualities of services and compare these attributes to physicians.

The proposed Center will maintain and constantly refine its website to enhance its ease of use, overall appeal, and ultimately achieve the goal of being the nation’s “go-to” resource on the nursing workforce. The Center will deliver a spring and fall webinar series in which we will organize up to 8 presentations focused on important and emerging topics affecting the workforce, such as barriers and challenges to tele-healthcare, understanding and preparing for the transition to value based payment, assessing the impact of accountable care organizations on the employment, earnings, and creation of new roles for members of the workforce and similar topics.

The proposed Center will organize a national conference on the nursing workforce in June 2017, and investigate organizing smaller and focused conferences aimed at gathering small groups of researchers/policy makers/educators/practitioners to address problems that impede the workforce planning and policy development (for example, convene a workshop/mini-conference aimed at building consensus on the assumptions, data, definitions and analytic methods used to estimate the future demand and supply of nurses).

The proposed Center will investigate the feasibility of providing post doctoral education to nurses, and explore opportunities to develop joint education programs with other academic units of the University (identified in question 3A) that will provide innovative education to prepare future nursing/health care workforce researchers.
A. Identify faculty expertise available for participation in the Institute/Center’s activities.

The proposing Center will find and work collaboratively with the nation’s best nursing and health workforce researchers. For example, the Center will involve researchers at universities (e.g., Dartmouth College, Harvard Medical School, Vanderbilt University, Brandeis University, Boston College University, University of San Francisco, etc.); policy and research organizations, including Mathematica Health Policy Research (in Boston); government agencies (The Health Resources and Services Administration, Massachusetts Commission to Assess Reform, etc.); and from national organizations, including the National Forum on State Nursing Workforce Commissions, the American Association of Colleges of Nursing, the American Organization of Nurse Executives, and others. Investigators at the above organizations will work closely with the Center to conduct the research studies identified above.

At Montana State University, the Center will reach out to establish relationships with faculty in:

- The College of Engineering – to work with experts in systems engineering and human factors research on projects designed to improve the nursing workplace environment, teamwork, and inter-professional relationships that affect the productivity of the workforce.
- Jake Jabs College of Business and Entrepreneurship – to work with experts in organization development and finance to conduct studies assessing current and emerging organizational and financial changes in health care and how they are affecting organizational culture and structures that impact patient safety and quality.
- Department of Agricultural Economics and Economics – to work with labor economists to investigate the impact on the nursing workforce as the fee-for-service payment system that spawns over-utilization of health care services shifts toward value based payments that reward quality, efficient resource use, use of electronic health records, and other factors.
- WWAMI – to work with faculty teaching/affiliated with the medical education program in the states of Washington, Wyoming, Alaska, Montana and Idaho on studies of physician location choices, effects of incentives to locate in rural underserved areas, use of tele-health, overcoming challenges for physicians selecting a career in primary care and other graduate medical education issues.
- Office of Rural Health and Montana Area Health Education Center – to work with staff on a myriad of health workforce research and education projects
- Center for Health Equity in Rural Montana and the Montana INBRE Program (IDEA Network of Biomedical Research Excellence) -- to work with Center staff on projects that involve the health workforce research and implementation of community engagement and education projects
- Native American Studies – to work with faculty, as appropriate, on health workforce research affecting Native Americans

B. Which departments on campus will be involved and how will the Institute/Center contribute to the academic programs of the institution?

The need for interdisciplinary research and scholarship has been increasingly recognized if not required by federal funders (the NIH, Agency for Health Research and Quality, Patient Centered Outcomes Research Institute), national policy influencing organizations (the National Academy of Medicine –
former the Institute of Medicine), payers of health care services (The Center for Medicare and Medicaid Services), and others. Studies of the nation’s workforce similarly require an interdisciplinary and interprofessional approach to solving key problems. Therefore, the proposed Center, where appropriate, will be actively involved with students and faculty in the College of Nursing, Department of Agricultural Economics and Economics, Jake Jabs College of Business and Entrepreneurship, Division of Health Sciences – WWAMI Education Program, College of Engineering, Native American Studies, Center for Health Equity in Rural Montana, and Montana INBRE Program.

Effective, mutually beneficial relationship will be established with the academic programs in these university entities. Such relationships will help ensure that the proposed Center will fulfill its mission and accomplish its objectives that were identified above. At the same time, the Center intends to help each of the above MSU entities achieve their respective mission and goals by conducting joint/collaborative research, jointly applying for research grants, and conducting education programs – webinars, class room instruction, small workshops, and conferences.

4. Identify the organizational structure of the Institute/Center within the institution.

The proposed Center will be housed in the College of Nursing at Montana State University and be directed by Dr. Peter I. Buerhaus, Professor of Nursing. Dr. Buerhaus will report to the Dean of the College of Nursing. A program manager and a yet to be hired part-time administrative assistant will report to the Center Director. The Program Manager has responsibility for maintaining, updating and refining the Center’s website, posting Center newsletters, developing materials for the website, organizing webinars, and assisting the Director in developing conferences and problem-solving convenings. The Director will oversee the Center’s program of workforce research and work directly with Montana State University departments/centers and faculty, and with externally-based faculty.

A. Identify all agencies, organizations and/or institutions that will be involved.

The primary, day-to-day, entity that will be involved with the proposed Center is the College of Nursing -- its administrators, students and faculty. Interdisciplinary collaborations will be developed with the College of Engineering, Department of Agricultural Economics and Economics, Jake Jabs College of Business and Entrepreneurship, Division of Health Sciences WWAMI Education Program, Native American Studies, Center for Health Equity in Rural Montana, and Montana Area Health Education Center.

B. Identify advisory council information.

In addition to adding one or more new members to its National Advisory Council to be drawn from Montana State University and/or the State of Montana, the proposed Center intends to continue its current advisory council that consists of leaders and executive directors of the following organizations:

- Association of American Colleges of Nursing
- National Health Policy Forum
- American Organization of Nurse Executives
- California Center for Nursing and Health Care
- President, American Psychiatric Nurses Association and Faculty Scholar for Community Engaged Behavioral Health at Vanderbilt University School of Nursing
- Good Must Grow – a marking and website consulting organization
5. Identify first year and continuing finances necessary to support the proposed Center/Institute, including the sources of funding.

As noted in question 1 above, the Gordon & Betty Moore Foundation has supported the Center with a four-year grant ($2.2 million). The first two years of funding established the center at Vanderbilt University and the remaining two years (approximately $1.5 million) will support the proposed Center at Montana State University College of Nursing. Discussions with the funder are underway to extend support for the proposed Center at Montana State University beyond the foundation’s original four-year commitment.

A. Will additional faculty and other resources be required to implement this Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.

No additional paid faculty, staff, or other resources are required for the proposed Center to achieve its goals and objectives.

B. Are other, additional resources required to ensure the success of the proposed Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.

Current resources provided by the GBMF grant are adequate to ensure the success of the proposed Center. No additional resources (i.e., personnel or space) are anticipated.

6. Describe other similar Centers/Institutes or research capacities in the state and surrounding region.

As noted below, there are a few Montana State University entities and researchers involved in studies and education of the health care workforce. Additionally, the University of Washington Center for Health Workforce Studies (UW CHWS) was established in 1998 with funding from the federal Health Resources and Services Administration (HRSA). This center is based in the Research Section of the Department of Family Medicine at the University of Washington School of Medicine. An award from the Health Resources and Services Administration in 2014 made the UW CHWS one of five Health Workforce Research Centers (HWRCs) across the U.S., each focusing on a specific aspect of the health workforce. The University of Washington’s HWRC at CHWS is addressing allied the health workforce and thus there is little or no overlap in the activities of the proposed Center whose focus is primarily on the nursing workforce.

A. Describe the relationship between the proposed Center/Institute and any similar Centers/Institutes, programs, or research capacities within the Montana University System.

The Office of Rural Health and Montana Area Health Education Center (AHEC) located at Montana State University conducts some research as part of its mission. The proposed Center will coordinate with both of these organizations to avoid duplication of research projects, education and webinar offerings.

The Center for Health Equity in Rural Montana and the Montana INBRE Program are also based at
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Montana State University. These entities conduct a diverse portfolio of research aimed at enhancing health of rural and Native American Indian populations. The proposed Center will seek to develop a relationship with this Center to not only avoid duplication, but more importantly determine areas where collaborative research and education projects can be mutually beneficial.

Importantly, the proposed Center will maintain a national focus of its research and education programs and will be careful to avoid intruding in research, education and service initiatives that are part of the missions of other organizations based at Montana State University health workforce.

B. In cases of substantial duplication, explain the differences between these and the need for the proposed Center/Institute at an additional institution. Describe any efforts that were made to collaborate with these Centers/Institutes, programs or research capacities. If no efforts were made explain why.

No substantial duplication is intended or anticipated. Rather, the development of a collaborative, complementary relationship will drive the focus of the proposed Center with other organizations who are concerned with the nation’s and the state’s nursing and health care workforce.

7. Assessment: How will the success of the program be measured?

The funder of the proposed Center, the Gordon and Betty Moore Foundation, has provided a list of measurable outcomes the Center must obtain. These outcomes include measures of the Center’s Website usage, number of published manuscripts, number of webinars provided, number of national conferences organized and implemented, and number of post-doctoral nursing fellows trained, and impact of the Center on resolving problems affecting the nursing workforce. Annual reports describing the Center’s performance on the GBMF outcomes were prepared submitted to the GBMF when the Center was based at Vanderbilt University. Annual reports will also be submitted to the GBMF by the proposed Center at MSU College of Nursing.

8. State the internal campus review and approval process which has occurred prior to submission to the Commissioner’s Office. Indicate, where appropriate, involvement by faculty, students, community members, professional constituencies, etc.

The proposed Center was an existing center at Vanderbilt University where Dr. Buerhaus served as its director. It was understood by the Dean of the college of Nursing that upon Dr. Buerhaus’ employment in the College of Nursing, the center would transfer to he MSU College of Nursing. The Dean of the College of Nursing has reviewed and approved this proposal.