Supporting Statement A

National Sample Survey of Nurse Practitioners Data Collection

OMB Control No. 0915-XXXX

A. Justification

1. Circumstances Making the Collection of Information Necessary

This statement is a request for Office of Management and Budget (OMB) approval of a new data collection activity, the National Sample Survey of Nurse Practitioners. The major purpose of this survey is to provide national estimates of the current nurse practitioner (NP) numbers as well as assist in the development of more current and accurate NP supply and demand projections. Estimates of current nurse practitioner numbers for the four census regions may also be produced, permitting within these broader geographic areas subgroup estimates of reasonable precision for some of the important subgroups of interest to this study. While state level estimates of desired precision levels for current nurse practitioner numbers are not feasible for all states, they may be able to be produced for many of the larger states.

The Health Resources and Services Administration (HRSA), Bureau of Health Professions' (BHPr) mission is to improve access to health care by providing national leadership in the development and distribution of a diverse, culturally competent health workforce that can adapt to the population's changing health care needs while offering the highest quality care. The National Center for Health Workforce Analysis (NCHWA), in BHPr, provides critical support for this mission through quality analytic work to inform health workforce policy decisions which are based on current and projected supply and demand figures for the health care workforce.

Nurse Practitioners (NPs) play a critical role in the nation's efforts to expand access to health services. With a growing and aging population, demand for health services is expected to rise more rapidly than supply. The expansion of health insurance under the Affordable Care Act (ACA) will also increase the demand for services in the next couple of years.

The number of NPs in the United States has been growing rapidly over the past decade. Continued growth is expected as the annual number of NP program graduates is at an all time high. Furthermore, over the past 20 years, many regulatory and financial barriers to using NPs have been removed, although some may still exist. With increasing numbers, nurse practitioners are poised to play an even greater role in the future to ensure access to quality health care.

Despite their increasing numbers, only limited and inconsistent data are available to help the health care community and policy makers fully understand or quantify their roles in the current

or future health care system. In fact, it is difficult to even estimate with confidence the number of NPs practicing in the US today.

Unfortunately, the number of NPs in HRSA's quadrennial National Sample Survey of Registered Nurses (NSSRN) is too small to provide adequate information to inform programs and create policies. Other potential sources of data also have serious gaps. Better quality and more complete information is needed to be able to assess the number of nurses educated and working as NPs, the specialties they are working in, their roles and responsibilities, their practice/organizational relationships with physicians, and whether they are practicing to the full extent of their training and license. It is also important to determine whether NPs are satisfied with their career and their roles as NPs. Furthermore, without solid baseline data, the nation will not be able to assess whether NP roles and contributions are changing as the demand and needs evolve over time.

This project is directly related to the core mission of HRSA's NCHWA, created by the Patient Protection and Affordable Care Act of 2010 (Public Law 111-148), that is to provide comprehensive health workforce data and intelligence to inform public policies and private sector investments in the workforce arena. The NCHWA's efforts will assist HRSA in promoting an adequate supply and distribution of well-prepared health professionals, assuring access to high quality, efficient care for the nation.

The basic framework for health workforce data and information established by the ACA is a federal-state partnership with the NCHWA to provide data and information on national trends and needs and allow states to assess their unique local needs and develop local solutions. For this reason, it is important that the models developed to project supply and demand for health professions are applicable at the state level. Informing the community of the supply, demand, and gaps in the health care workforce is the centerpiece of the NCHWA's role.

2. Purpose and Use of Information Collection

The primary purpose of the Bureau of Health Profession's National Sample Survey of Nurse Practitioners data collection is to:

- 1) improve estimates of NPs providing services,
- 2) describe the settings where NPs are working,
- 3) identify the positions/roles in which NPs are working,
- 4) describe the activities and services NPs are providing in the health care workforce,
- 5) determine the specialties in which NPs are working,

- 6) understand NPs' perception and satisfaction with their scope and level of practice, and
- 7) assess variations in practice settings, positions and practice patterns by demographic and educational characteristics.

This information obtained from this survey will ultimately lead to more accurate and complete national estimates of the current NP supply as well as assist in the development of more accurate NP supply and demand projections. Moreover, it is likely to influence decisions regarding both the educational capacity and the number of NP programs nationally. Specifically, HRSA and BHPr will benefit from the collection of data to inform policy development and funding decisions about nurse practitioner education, training and employment. These data will provide specific information to understand and support health care reform policy goals. Policy makers need to understand the role of the NP and be able to quantify the potential contribution they could make to a reformed health care system. The NCHWA intends to offer the survey results in a public use dataset for health workforce planners and researchers to access.

3. Use of Improved Information Technology and Burden Reduction

The National Sample Survey of Nurse Practitioners will utilize state board of nursing's licensure data to develop the sample. In many cases, these state data do not include e-mail addresses for the NPs requiring that the questionnaire survey method be by mail. The questionnaire will be designed in a Teleform scannable format to reduce the burden of data entry, and improve information collection and aggregation efficiency.

4. Efforts to Identify Duplication and Use of Similar Information

This survey will serve as an important source of information about NPs. Unfortunately, the number of NPs in HRSA's quadrennial National Sample Survey of Registered Nurses (NSSRN) is too small to provide adequate information to inform programs and policies. Other potential sources of data also have serious gaps. The NCHWA assessed other surveys about NPs, specifically surveys conducted by the American Association of Nurse Practitioners (AANP) and by health workforce researchers and found essential limitations from each of the surveys to adequately inform national estimates of NP practice. The AANP survey, which has been conducted sporadically over the last 23 years (in 1988, 1998, 2003 and 2009) has critical methodological issues related to the development of the sampling frame and the randomization of the sample. The lack of rigor in the methodology of this survey would severely limit the ability to use those data to inform policy. In addition, the AANP data have been purchased and reviewed by HRSA and NCHWA staff, with the consensus being the dataset has severe user limitations. Several other surveys of NP practice were done in only one state (such as California or Washington) or conducted on NPs that care for a targeted population, such as a survey of rural NPs only. These limited and inconsistent data do not provide the confidence necessary for the NCHWA to estimate numbers of nurses educated and working as NPs, the specialties they are working in, their roles and responsibilities, their practice/organizational relationships with

physicians, and whether they are practicing to the full extent of their training and license.

Review of available data informed the development of NCHWA's survey in a number of important ways. In the review of sampling strategies, it was determined that prior sample surveys conducted by AANP did not sample from the known universe of NPs. Instead, a sample was drawn from the set of NPs who have responded to one of AANP's Practice Site surveys. Sampling from anything other than the universe of NPs introduces bias that is difficult to quantify. In this case, sampling from Practice Site survey respondents likely inflates estimates of the labor force participation of NPs. Our review of survey instruments from AANP and other sources identified the need for questionnaire items that accurately identify NPs working in non-NP roles, particularly nursing roles that do not require advanced practice education. In addition to accurately identifying these nurses, the NCHWA questionnaire identifies reasons for not working in the NP role and solicits job satisfaction information from NPs across roles, allowing comparisons to be made. Finally, review of instruments uncovered the need for an alternative method of identifying the specialty choice of NPs. While prior surveys have asked about clinical specialty, it is often unclear whether NPs are selecting the specialty in which they were trained (largely primary care), the specialty they feel characterizes their work, or the specialty of the practice in which they are employed. The NCHWA survey, in an effort to provide more accurate estimates of NPs practicing in primary care settings, has constructed an item specifically asking about the practice site as opposed to training or self-description of the work performed.

5. <u>Impact on Small Businesses or Other Small Entities</u>

No data will be collected from small businesses or other small entities.

6. Consequences of Collecting the Information Less Frequent Collection

This is a new survey and at this point will be collected only in 2012 requiring each respondent to complete the questionnaire one time. There are no legal obstacles to reduce the burden.

7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

This survey will be implemented in a manner fully consistent with 5 CFR 1320.5(d)(2).

8. Comments in Response to the Federal Register Notice/Outside Consultation

The 60 day notice required by 5 CFR 1320.8(d) was published in the *Federal Register* on 08/08/2011 (Vol. 76, No. 152). Twenty-three comments were received as a result of the 60-day *Federal Register* posting. The public comments were positive and supportive of HRSA's intention to carry out a National Sample Survey of Nurse Practitioners. Comments were received from individuals who declared their support for the survey and volunteered to be a part

of the sample. Comments were also received from NP professional groups who voiced support and provided comments to strengthen the data collection efforts. These suggestions were vetted by the NCHWA staff and many have been included as part of the questionnaire final draft submitted with this application. There were two comments in particular; one from the AANP and one from an individual who stated that she was prompted by the AANP to submit her comments, on the need for this survey because of the previous survey work done by the AANP. However, as discussed above, the AANP survey is lacking in rigorous methodology and could not be used with confidence to make conclusions or to use as a basis for decision making to inform policy.

As a result of the 30-Day comment period one change to the questionnaire was made in response to the public comment. The National Association of Pediatric Nurse Practitioners requested that "Pediatric Subspecialties" be added to the list of specialties for question #31 in order to increase understanding of the settings where pediatric nurse practitioners are practicing.

The attached questionnaire was developed in collaboration with and reviewed by the Division of Nursing and the HRSA Bureau of Health Profession's leadership. Additionally, outside consultation was obtained with national nursing stakeholder groups and nursing workforce researchers, who are listed below with the organization they represent, to determine their views on the format of the questionnaire, clarity of the directions, availability of the data, and data elements to be collected. These consultations were held in May and June 2011.

HRSA Staff who participated in the review of the questionnaire:

Kathleen White, Senior Advisor, National Center for Health Workforce Analysis

Jennifer Nooney, Management Analyst, National Center for Health Workforce Analysis

Edward Salsberg, Director, National Center for Health Workforce Analysis

Julie Sochalski, Director, Division of Nursing

George Zangaro, Branch Chief, Advanced Nursing Education, Division of Nursing

Alexis Bakos, Deputy Director, Division of Nursing

Janet Heinrich, Administrator, Bureau of Health Professions

Carole Johnson, Director for Policy, Bureau of Health Professions

Deborah Gardner, Senior Advisor, Bureau of Health Professions

Outside Consultants who participated in the review of the questionnaire:

Kathy Apple, Executive Director, National Council of State Boards of Nursing, 312-525-3600

Polly Bednash, Executive Director, American Association of Colleges of Nursing, 202-463-6930

Joan Stanley, Director for Education, American Association of Colleges of Nursing, 202-463-6930

Louise Kaplan, Senior Nurse Researcher, American Nurses Association, 301-628-5000

MaryJo Goolsby, Director of Research, American Association of Nurse Practitioners, 512-442-4262

Ken Miller, Associate Dean for Administration, The Catholic University, 202-319-6536, (representing the American College of Nurse Practitioners and Carolyn Hutcherson)

Kathryn Werner, Executive Director, National organization of Nurse Practitioner Faculties, 202-289-8044

Jean Moore, Director, New York Center for Health Workforce Studies, 518-402-0250

Linda Tieman, Executive Director, Washington Center for Nursing, 206-787-1200

Sue Skillman, Deputy Director Center for Health Workforce Studies and Rural Health Research Center, University of Washington, 206-543-3557

Joanne Spetz, Associate Director, Center for California Health Workforce Studies at University of California San Francisco, 415-502-4443

Patricia Moulton, Assistant Professor at the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences, (701) 858-6770

Erin Fraher, Director of the North Carolina Health Professions Data System (HPDS) at the Cecil G. Sheps Center for Health Services Research and holds joint faculty appointments in UNC-Chapel Hill's Departments of Surgery and Family Medicine, (919) 966-5012

Chris Kovner, Professor at the College of Nursing, New York University and Senior Fellow, Hartford Institute for Geriatric Nursing also at the College of Nursing, 212-998-5300

Carol Brewer, Associate Professor, University of Buffalo-SUNY School of Nursing, 716-829-3241

Cheryl Jones, Associate Professor, University of North Carolina, 919-966-5684

9. Remuneration of Respondents

There will be no remuneration for respondents.

10. Assurance of Confidentiality

The sampling frame list will include names and addresses of persons recorded by their state as receiving recognition/licensure as a nurse practitioner. However, the questionnaire itself will not collect any additional personally identifiable information. Data files holding mailing names and addresses will be kept separate from questionnaire data. Participants will be told that the information they provide will be kept private to the extent permissible by law. Participants will also be told that their participation is voluntary and that neither their participation/non-participation nor any particular responses to items will have any effect on their current or future participation in HRSA programs

11. Justification for Sensitive Questions

The proposed questionnaire does not contain questions of a personally sensitive nature. In accordance with HHS policy, information about race and ethnicity will be collected and is important data to inform future workforce policy development for a culturally sensitive and competent healthcare workforce.

12. Estimates of Annualized Hour and Cost Burden

Respondents to the National Sample Survey of Nurse Practitioners will come from a sample of 50 states and the District of Columbia state licensure listings. These individuals represent all registered nurses in the nation educationally prepared to serve as an NP, whether or not they are working as an NP.

The total number of NPs that will be contacted as part of the sample will be 22,000. Based on a 65% response rate, the respondent sample is estimated to be 14,300.

Instrument timing was based on agency in-house estimates and will be confirmed through pretesting with 9 or fewer persons prior to the study launch.

The total respondent burden for the National Sample Survey of Nurse Practitioners is estimated to be a total of 4,719 hours.

Respondent Cost and Burden

Form	Number of	Response	Hours per	Total	Wage Rate 2011*	Total
	Respondents	per	Response	Burden		Cost
		Respondents		Hours		
National						\$215,847
Sample			0.22		\$45.74 per hour;	
Survey of	14,300	1	0.33 (20 minutes)	4,719	\$95,130 annual	
Nurse			(20 minutes)		salary	
Practitioners					-	

^{*}Wage rate calculated at the upper percentile of wage estimates from data obtained from the Bureau of Labor 2010 Statistics Occupational Estimates Survey for the Registered Nurse: \$45.74 per hour or \$95,130 annual salary. Even though Nurse Practitioners were given a SOC number in 2010, estimates of wage rate will not be available for 2-3 years.

13. <u>Estimates of other Total Annual Cost Burden to Respondents or Recordkeepers/Capital Costs</u>

There are no operation or maintenance costs for the respondents.

14. Estimates of Annualized Cost to Federal Government

The one year cost to the federal government for the National Sample Survey for Nurse Practitioners includes three estimates: the cost of the contract, \$367,983; the estimated annualized cost of federal personnel during the year of the contract (.6 and .25 FTEs @ \$130,000 = \$110,500); and the amount set aside for General Printing Office cost for the mailing of the questionnaire (\$60,000). The total cost for the project is therefore estimated at \$539,483.

15. Explanation for Program Changes or Adjustments

The National Sample of Nurse Practitioners is a new data collection.

16. Plans for Tabulation and Publication and Project Time Schedule

The National Sample Survey for Nurse Practitioners will be conducted within a 3 month period of time following OMB final clearance. The following schedule is the proposed timeline for survey administration, data collection and analysis, and report preparation:

Timetable for Key Activities

Activity	Expected Date		
Select sample and prepare for mailing	Following OMB approval		
Field Survey and Manage Returns	Within 1 month following OMB approval		
Data Analysis, Clean Dataset and Documentation	Within 4 months following OMB approval		
Present Preliminary Analyses for BHPr and NCHWA staff	Within 5-6 months following OMB approval		
Submit Final Report of Findings	Within 6 months following OMB approval		
Meeting and PowerPoint Presentation	Within 6 months following OMB approval		

Analysis Plan

See Supporting Statement B for a detailed description of the statistical methods, including:

- respondent universe and sampling methods
- procedures for the collection of information
- methods to maximize response rates and deal with non-response
- procedure test discussions
- individuals consulted on the statistical aspects
- collection and analysis of the expected data

Publication

HRSA will publish the Findings Report of the final survey results. HRSA staff will use the data from the National Sample Survey of Nurse Practitioners in ongoing activities of analyzing and responding to issues on the supply and demand for nurse practitioners. HRSA will make the Findings Report available to the public via the HRSA website.

17. Reason(s) Display of OMB Expiration Date is Inappropriate

No exemption is requested. The expiration date will be displayed.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification. This information collection activity will comply with the requirements in 5 CFR 1320.9.