

**SUPPORTING STATEMENT**  
**The National Sample Survey of Registered Nurses 2008**

**A. Justification**

**1. Circumstances of Information Collection**

The National Sample Survey of Registered Nurses (NSSRN) is a periodic survey conducted by the Health Resources and Services Administration's (HRSA) Bureau of Health Professions (BHP). This is a request for Office of Management and Budget (OMB) approval of the ninth NSSRN, planned for 2008. The first national survey was conducted in 1977, and HRSA has conducted this national survey every 4 years since 1980. Data from these periodic surveys provide the basis for evaluating the trends in, the availability of, and projection of the future supply of nursing resources at the national and State levels. The NSSRN is the major source of nationwide information on nurses, the largest group of health care providers. The survey is significant because it (1) is the only comprehensive source of information about the nursing workforce; (2) has provided crucial information on which to base policy decisions in the past; and (3) is needed to assess changes in the structure of health care in the Nation and within each State.

**Legislative History:** The NSSRN originated from legislative requirements included in amendments of July 29, 1975 to Title IX of the Public Health Service Act, codified as 42 USC 296. Section 951(a)(2) of P.L. 94-63 stated that "the Secretary shall survey and gather data, on a continuing basis . . . ." This survey was mandated to provide national and State level estimates on the following:

- (a) number and distribution of nurses, by type of employment and location practice;
- (b) number of nurses practicing full-time and part-time within the United States and within each State and the District of Columbia;
- (c) average rates of compensation for nurses, by type of practice and location of practice;
- (d) the activity status of the total number of nurses within the United States and within each State;
- (e) the number of nurses with advanced training or graduate degrees in nursing by

specialty, including nurse practitioners, nurse clinicians, nurse researchers, nurse educators, and nurse supervisors and administrators; and

(f) the number of nurses entering the United States annually from other nations.

The terms of coverage in Section 951(a)(1) were quite specific as to minimum coverage and use of the data for reporting the current and future supply, distribution, and educational requirements for nurses, nationally and within each State. Furthermore, in Section 951(a)(3), within 6 months of its enactment, the Secretary was to develop procedures for making these projections.

Subsequent legislative modifications of the Public Health Service Act occurred in P.L. 95-623 of November 9, 1978 and P.L. 96-88 of October 17, 1979. In P.L. 95-623, paragraph 12(h), there was an amendment of the due date for the development of procedures for projections using these data. In P.L. 96-88, Sec. 509(b) of Title V, the responsibility was changed from the Secretary of the Department of Health Education and Welfare to the Secretary of the Department of Health and Human Services.

In 1988, Section 792 of the Public Health Service Act (42 USC 295k) was enacted under P.L. 100-607. In Subtitle C: General Provisions of Title VII, the Secretary was directed to provide evaluations and disseminations of information developed as part of the program to collect, compile, and analyze data on health professions, including nurses, specifically.

The Public Health Service Act was further modified in 1998, appearing in Section 806(f) and through codification in 42 USC Chapter 6A, Subchapter VI, on the Nursing Workforce Development. In Part A, codified as Section 296e, Generally applicable provisions, the Secretary was required to ensure that there be (1) cross-cutting analytical workforce activities, including nursing, and (2) collection of discipline-specific workforce information relating to basic nursing education, diversity of the nursing workforce, and advanced nursing education.

These laws required the collection of data to accommodate the conduct of analytic and descriptive studies including evaluations and projections of supply of, and the

requirements for, registered nurses by specialty and by geographic location.

Chapter 6A, Subchapter VI, of the Public Health Service Act (42 USC 296e) is the current legislative requirement for the collection of information. The NSSRN is still considered the cornerstone of nursing workforce data. It is the principal data source used for disseminating information to the Federal Government, researchers, and the public on the nursing workforce, as well as being essential for performing supply-demand projections of nursing requirements and foreseen shortages. Periodic monitoring of the number and characteristics of the registered nurse (RN) population is vital to maintain an up-to-date picture of the registered nurse population and to assess the future availability of this critical resource. Recent surveys have been integral to identifying the shortages of RNs that occurred at the end of the 1980's and then reappeared around 2000.

## **2. Purpose and Use of Information**

The primary purpose for this data collection is to provide an integrated and in-depth picture of the total RN population. In addition, the NSSRN data are used to assess the impact of current Federal programs for nursing, evaluate the need for future Federal intervention, and help determine the nature of the intervention. The NSSRN is viewed throughout the Department of Health and Human Services (DHHS) and by other executive branch and legislative branch agencies as the key source of important data on the RN workforce. HRSA conducted the last administration of the NSSRN in 2004.

Analyses of the NSSRN resulting in the state of the nursing workforce and the projections of nursing supply-demand from the NSSRN data are instrumental in informing the strategic agenda of BHPPr. BHPPr's agenda includes eliminating barriers to care, eliminating health disparities, assuring quality of care, and improving public health and health care systems.

Over the last 30 years, various initiatives have been undertaken within DHHS to develop policy that could ameliorate the shortages in nursing supply that have been identified. For example, an extreme shortage of registered nurses was identified in the latter part of the 1980s. In its December 1988 report, DHHS Secretary Bowen's

Commission on Nursing specifically pointed to the need to continuously monitor the labor market behavior of RNs. The Commission also recommended that steps be taken to ensure that timely information on this subject is maintained. The BHP, in response to these concerns, contracted with Project Hope for a study of data required and a plan to ensure availability of appropriate data. The Project Hope report pointed out the need to have timely data of the type developed in the NSSRN and called for these studies to be conducted on a 3-year cycle basis.

In 1996, the National Advisory Council for Nursing Education and Practice (NACNEP) used these survey data, and the projections of supply and demand arising out of the data, to advise the Secretary of the upcoming nursing shortage after 2000.

In 2004<sup>1</sup>, HRSA published the latest supply and demand projections of registered nurses. These projections indicated a shortage of a little more than one million full time (FTE) registered nurses would occur in 2020. HRSA has contracted to produce new supply-demand projections using 2004 data; these new projections are anticipated to be available by 2009.

Given the aging of the population and projected record numbers of elderly by 2020, the monitoring of the workforce is critical to developing strategies to ensure adequate supply of RNs in the workforce.

In addition to using the NRSSN database for analytical and policy purposes within DHHS HRSA now provides public use data files for those outside of HRSA who seek to conduct further research on RNs. The NSSRN is the main data source for published literature on this topic. Public use files from the 1977 to 2004 surveys are now available at no charge on HRSA's Web site.

## **2a. 2008 Questionnaire**

To meet the above data needs, the NSSRN questionnaire has to keep current with emerging trends while maintaining important trend data. Hence, when reviewing and updating the questionnaire, HRSA seeks input from the Interagency Collaborative on Nursing Statistics (ICONS) and other nursing experts and stakeholders in the United

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<sup>1</sup> Using the 1996 and 2000 NSSRN data

States. For the 2004 and 2008 surveys, ICONS dedicated many hours of its meetings towards reviewing the draft questionnaires and providing suggestions for improving the scope and wording of questions for the respective upcoming surveys. ICONS has been a long-term supporter of the NSSRN initiatives every 4 years, but has also advocated the need for a more-frequent survey every 2 years in order to keep abreast of dynamics in the nursing workforce, changes in the educational pipeline, changes in the distribution of initial and highest degrees held by nurses, and the ability of the nursing workforce to meet demand for nursing now and in the future.

The 2008 questionnaire has been updated to provide an integrated, in-depth picture of the RN workforce in the United States. The 2008 questionnaire includes similar topics and sections as the 2004 version:

- Section A: Eligibility and Education
- Section B: Principal Nursing Employment
- Section C: Secondary Employment in Nursing
- Section D: Nurses Not Working in Nursing
- Section E: Employment Outside Nursing
- Section F: Prior Nursing Employment
- Section G: General Information (Demographic questions)
- Section H: License and Certification Detail
- Section I: Contact information/Comments (about the questionnaire)

Minor changes have been made in the 2008 questionnaire to capture emerging trends in the nursing workforce. Appendix A provides an explanation of the salient changes. The main purpose of these changes is to capture emerging trends, reduce respondent burden by clarifying the intent of the questions, providing clearer definitions, and improving the flow of the questionnaire.

The highlights of 2008 NSSRN include the following:

1. Less burdensome instrument:
  - Where possible and appropriate, write-ins have been eliminated and replaced by check boxes. HRSA anticipates that this will reduce respondent burden and improve data quality.

- Nursing employment settings. The list of employment settings is included in the question (Questions<sup>2</sup> 22 and 53) rather than at the end of the survey so that the respondent doesn't have to flip back and forth while completing the survey. Also, the respondent has to only check a box and does not have to write in a code.
2. Positioning of instructions. Respondents by and large do not pay attention to instructions when they are placed after the question stem. Hence when a question has instructions, where appropriate, they now precede the question.
  3. Employment settings (Questions 22 and 53): The current list reflects the results of an evaluation of the 2004 responses and input provided by nursing experts. The listing attempts to more-precisely define hospital settings to make it easier for the respondent to make a selection.

The instrument will remain at 16 pages. While the draft in the appendix is 17 pages; the final formatted scannable form will be 16 pages.

### **3. Use of Improved Information Technology**

HRSA has used a multi-mode design in 2004 and will continue to do so for the 2008 NSSRN. The primary mode of data collection is a self-administered mail questionnaire. All respondents will also be offered the option of completing a Web survey. In addition, all nonrespondents will receive a follow-up telephone call offering the survey via a Computer Assisted Telephone Interview (CATI) application. This mixed mode of data collection is designed to optimize the response rate while controlling costs.

### **4. Efforts to Identify Duplication**

This survey is the primary source of information on the nursing workforce. HRSA along with the National Center for Health Statistics, the Bureau of Labor Statistics, and the major nursing organizations participate in the Interagency Collaborative on Nursing Statistics (ICONS)<sup>3</sup>. The ICONS group identifies

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<sup>2</sup> Note all question numbers refer to the 2008 questionnaire

<sup>3</sup> Major non-Federal organizations who are members of ICONS include: American Academy of Nurse Practitioners; American Association of Colleges of Nursing; American Association of Critical-Care Nurses; American Association of Nurse Anesthetists; American College of Nurse Midwives; American Nurses Association; American Organization of Nurse Executives; Commission of Graduates of Foreign Nursing Schools; National Association of Clinical Nurse Specialists; National Council of State Boards of Nursing; National League for Nursing; and National Organization of Nurse Practitioner Faculties.

complementary and/or duplicate data collection efforts as well as the major gaps in data. The representatives from ICONS' member organizations are thoroughly familiar with the study design including the sampling plan and the questionnaire. There is general agreement among these organizations that the data collected in the NSSRN are an important addition to the body of nursing data, are otherwise unavailable, and hence must be obtained frequently to capture trends for policy planning by the nursing community.

While some States may conduct periodic surveys of their RNs, the data from these surveys are not comparable from State to State and are rarely, if ever, as comprehensive as the NSSRN's rigorous design. Also, State surveys do not reflect the characteristics of RNs nationally and no other survey has attempted to account for the effects of nurses who hold licenses in multiple States or work in multiple States, a common characteristic of RNs. Other studies, such as the American Hospital Association's Annual Survey of Hospitals and the National Center for Health Statistics' Provider Inventories surveys are limited to employed nurses in most, but not all, employment settings; therefore, they lack data on the 500,000 licensed nurses not employed in nursing as well as those employed in some of the diverse settings outside hospitals and clinics.

## **5. Involvement of Small Entities**

This information collection does not affect small entities.

## **6. Consequences If Information Is Collected Less Frequently**

The NSSRN data are important due to the many changes occurring in the health care delivery system that have major implications for the supply of and future demand for RNs. Also, nurses make up the largest group of health care workers. There is a critical need for frequent data collection given that the demand and provision of care in the health care market is dynamic, the age distribution of nurses is changing, and overall supply is changing more than anticipated by previous forecasting models.

The NSSRN is conducted once every four years. This is the longest time frame that still gives reasonable tracking and evidence of supply-demand shifts. Historically, the cyclical periods of shortages and surpluses of nurses in the workforce since the mid-

1980 have occurred over as little as 4 years. Anything less frequent would jeopardize HRSA's ability to track shifts in demand and supply of RNs. In fact organizations such as NACNEP and ICONS have advocated for surveys with intervals of 2 years, rather than the existing 4-year interval, in order to capture trends that would lead to shortages before the impact spreads nationally.

**7. Consistency With the Guidelines in 5 CFR 1320.5(d)(2)**

This information collection fully complies with 5 CFR 1320.5(d) (2).

**8. Federal Register/Consultation Outside the Agency**

**8a. Federal Register Notice**

The notice required by 5 CFR 1320.8(d) was published in the *Federal Register* on October 11, 2007 (Vol. 72, page 57952). One comment was received and a copy of the comment and response is attached.

**8b. Summary of Comments Received and Summary of Action Taken**

HRSA received one comment on using the NSSRN dataset with a request to subset and analyze foreign-trained nurses. The comment submitted from the public was based upon a review of the FR notice only, as the commenter did not request a copy of the survey instrument. As a result, the person did not realize that the instrument contained any questions on the country in which trained was received. The current questionnaire does collect data on country of initial training. This should allow the user to subset the data for further analysis.

**8c. Outside Consultation**

The survey instrument and procedures were reviewed by the Division of Data Policy, Office of Science and Data Policy in the Office of the Assistant Secretary for Planning and Evaluation in HHS.

- Interagency Collaborative on Nursing Statistics (ICONS) Attendees:  
Di Fang, Director of Research and Data Services, American Association



of Colleges of Nursing, 202-463-6930 x 225

Lorraine Jordon, Executive Director, American Association of Nurse Anesthetists, 847-655-1172

Linda Bell, Clinical Practice Specialist, American Association of Critical-Care Nurses, 800-394-5995 ext. 318

Kerri Schuiling, Senior Staff Researcher, American College of Nurse Midwives, 906-227-2844

Carol Bickford, Senior Policy Fellow, American Nurses Association, 301-628-5060

Brett Lockard, Economist, Bureau of Labor Statistics, U.S. Department of Labor, 202-691-5730

Catherine Davis, Director of Research and Evaluation, Commission on Graduates of Foreign Nursing School, 215-222-8454, x228

Janice Buelow, Assistant Professor, National Association of Clinical Nurse Specialists, 317-274-9639

Suling Li, Associate Director of Research, National Council of State Boards of Nursing, 312-525-3658

Kathy Kaufman, Senior Research Scientist, Public Policy, National League for Nursing, 212-812-0326

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

- Holly Andrilla, Biostatistician and Research Scientist, Center for Health Workforce Studies and Rural Health Research Center, University of Washington, 206-685-6680
- Carol Brewer, Associate Professor, University of Buffalo-SUNY School of Nursing
- Ralph DiGaetano, Senior. Statistician, Westat, 301-294-2062
- Sherm Edwards, Vice President, Westat, 301-294-3993
- Nancy Fishman, Senior Evaluation Officer for Human Capital, Robert Wood Johnson Foundation, 609-627-5893
- Stephanie Fry, Senior Study Director, Westat, 240-401-4643
- Roxanne Fulcher, Director of Health Professions Policy, American

Association of Community Colleges, 202-728-0200 x 274

- Jim Green, Senior Statistician, Westat, 301-251-4295
- Gary Hart, Professor and Director, Rural Health Office of Community, Environment and Policy, Mel and Enid Zuckerman College of Public Health, U. of Arizona 502-626-6258
- Joanna Jiang, Senior Research Scientist Center for Delivery, Organization and Markets, Agency for Healthcare Research and Quality, 301-427-1436
- Cheryl B. Jones, Associate Professor, University of North Carolina, 919-966-5684
- Barbara Mark, Sarah Frances Russell Distinguished Professor, University of North Carolina, 919-843-6209
- Jean Moore, Director, New York Center for Health Workforce Studies, 518-402-0250
- Vasudha Narayanan, Senior Study Director, Westat, 415-264-7064
- Jean Ann Seago, Director of Nursing Research, CCHWS at UCSF , 415-502-6340
- Sue Skillman, Deputy Director Center for Health Workforce Studies and Rural Health Research Center, University of Washington, 206-543-3557
- Julie Sochalski, Associate Professor of Nursing and Senior Fellow, Leonard David Institute of Health Economics, University of Pennsylvania, 215-898-3147
- Joanne Spetz, Associate Director, Center for California Health Workforce Studies at University of California San Francisco (CCHWS at UCSF), 415-502-4443

**8d. HRSA Staff Who Participated in the Design Include the Following:**

- Nettye Debisette, Director, Division of Nursing, 301-443-5688
- Marshall Fritz, Statistician and Project Officer 2008 NSSRN, Bureau of Health Professions, 301-443-6317
- Robert Oshel, Operations Research Analyst, Associate Chief for Resolution and Disputes, Practitioner Data Banks Branch, 301-443-6535
- Sarah Richards, Acting Branch Chief, Evaluation and Analysis Branch, Bureau of Health Professions, 301-443-5452
- William Spencer, Statistician and Evaluations Officer for Bureau of Health Professions, 301-443-6316
- Joan Weiss, Deputy Director, Division of Nursing, 301-443-0430

**9. Remuneration of Respondents**

Respondents will not be remunerated.

## **10. Assurance of Confidentiality**

Under contract to HRSA, Westat, a survey firm, will collect the 2008 NSSRN data. As a survey contractor, Westat will implement procedures to ensure the privacy and security of data, and will treat identifying information in strict confidence. Westat will analyze the data and present the survey findings only in the aggregate. At no time will Westat identify any respondent in the data delivered or in the Findings Report. The survey contractor and its agents will take precautionary measures to minimize the risk of unauthorized access to the survey data and identifying information, such as password protection for electronic data files and storage of the hard-copy questionnaires in locked rooms.

All identifying information is protected and masked with a randomly generated identification number (ID) for each sampled nurse. Only the survey contractor has access to the personally identifying information associated with each ID number and sampled nurse. The survey contractor will protect the Web survey application with a password and ID number for each sampled nurse. Sampled nurses can access the Web survey only with the password and ID assigned to them.

Survey respondents will be informed that their information will be protected and that their names will never be identified. The letter accompanying the questionnaire will serve to inform sampled nurses that their cooperation is voluntary and will reiterate the protection of survey information.

When HRSA releases the public use files for the 2008 Survey, as it has in the past, certain fields will be deleted or categories merged to mask workforce information that might otherwise allow misguided researchers to trace respondent's substantive workforce information to an individual nurse.

## **11. Questions of a Sensitive Nature**

The NSSRN does not contain questions considered personally sensitive. Some respondents, however, may consider questions about income to be sensitive.

At the present time, data on nurses' earnings may be available from discrete studies of certain employment settings but are not available through scientific survey studies for all areas of practice or for all segments of the employment settings studied. Also, since nursing salaries tend to cluster within a relatively small range, nurses are asked to report their actual earnings so that differences and similarities can be identified according to type and location of practice. HRSA collects household income data because household income has been shown to affect the labor force participation rates of RNs, and therefore these data are necessary to predict the supply of RNs.

## 12. Estimates of Annualized Hour Burden

The respondent burden is estimated as follows:

Form	Number of Respondents	Response per Respondents	Hours per Response	Burden Total (Hours)	Wage Rate (2006 adjusted to 2008)	Total Cost
2008 NSSRN	39,984	1	0.33	13,195	\$30.85	\$407,066

HRSA will select a sample of 54,000 licensed RNs. After de-duplication of the files for those RNs with licenses in more than one State, and setting a response rate target of 80 percent, the estimated number of respondents is 39,984. The above estimate of 20 minutes per response was derived from experience of the prior NSSRNs. Because respondents who are not employed, or are not employed as nurses, would skip through a large part of the questionnaire, their time burden would be less.

Estimated cost to respondents is \$407,066 (13,195x \$30.85/hour = \$407,066). The 2006 national average hourly rate for registered nurses in the Bureau of Labor Statistics (BLS-OES) tables was adjusted further by multiplying by the two-year education and health services occupation cost increase (Economic Cost Index level increase between 2005 and 2007).

## 13. Estimates of Annualized Cost Burden to Respondents

There are no operation and maintenance costs for respondents.

#### 14. Estimates of Annualized Cost to the Government

The cost of the study for Government personnel is estimated at \$108,000 for 2 years for an estimated annualized cost per year of \$54,000 (.5 FTE @ \$108,000 = \$54,000 per year). The estimated government cost for a contract to carry out this study is \$3 million. This cost is for roughly 37,320 person hours of which 42 percent are professional hours and 58 percent are support hours.

#### 15. Changes in Burden

This is the ninth round of the NSSRN. The burden time on each respondent and on the Federal administrators of this effort will be similar to 2004 NSSRN. The length of the survey remains at 20 minutes, the questions are similar, the availability of a Web survey will be featured again, and the expected follow-up analyses are envisioned to be generally the same. Thus, HRSA does not envision changes in burden.

For the 2004 NSSRN, HRSA had requested 13,195 burden hours. HRSA is requesting the same burden hours for 2008 NSSRN.

#### 16. Time Schedule, Publication, and Analysis Plan

**Time Schedule:** The following schedule is planned for the information collection and report preparation:

Activity	Expected Date
Select Sample and Prepare for Mail Out	Following OMB approval
Conduct Data Collection Activities	1-4 months following OMB approval
Code and Edit Data	2-6 months following OMB approval
Prepare Data for Analysis	3-7 months following OMB approval
Findings Report	8-10 months following OMB approval

**Publication:** HRSA will publish the 2008 Findings Report on the final results of the survey. HRSA staff will use the NSSRN data in ongoing activities of analyzing and responding to issues on the nurse supply and demand. HRSA will make the Findings

Report available to the public via the HRSA Web site, and will also fulfill hard-copy requests. The public use files of sanitized response data have been made available to the public, together with documentation, on the HRSA Web site and through special request for compact disc (CD) mailing at no charge.

**Analysis Plan:** The Findings Report will answer specific questions about the supply, distribution, education, employment, mobility, and demographic characteristics of RNs. In order to meet these objectives, HRSA will conduct three types of data analysis: (1) a descriptive analysis of the 2008 survey data; (2) a trend analysis comparing data from all nine studies (1977–2008); and, (3) an inferential analysis of the relationships between variables in the 2008 study. Any comparative analysis with the earlier nursing surveys will employ appropriate statistical techniques to determine statistical significance of the results.

For the descriptive analysis, HRSA will present cross-tabulations of: (1) the activity status of the estimated RN population in the United States and for each of the 50 States and the District of Columbia; and (2) the education and employment of RNs by variables such as age group, marital and family status, earnings, family income, racial/ethnic background, gender, compensation level, and geographic location.

HRSA will also conduct a trend analysis to compare results from 2008 with those of previous NSSRN administrations. Comparisons will be made on professional, employment and demographic characteristics. The inferential analysis will build upon the results of previous work on factors affecting nurse employment and professional development. Based on these studies and initial cross-tabulations from the 2008 data, variables will be selected for inclusion in a multivariate analysis. Previous studies have suggested that variables such as age, family status, initial and supplemental nursing education, and racial/ethnic background will affect employment status, type of practice, and professional development differently.

## **17. Exemption for Display of Expiration Date**

The expiration date will be displayed.

**18. Certifications**

This information fully complies with the guidelines in 5 CFR 1320.9.