

# Highlights From the 2012 National Sample Survey of Nurse Practitioners



Health Resources and Services Administration  
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National Center for Health Workforce Analysis



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Suggested citation:

U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. Highlights From the 2012 National Sample Survey of Nurse Practitioners. Rockville, Maryland: U.S. Department of Health and Human Services, 2014.

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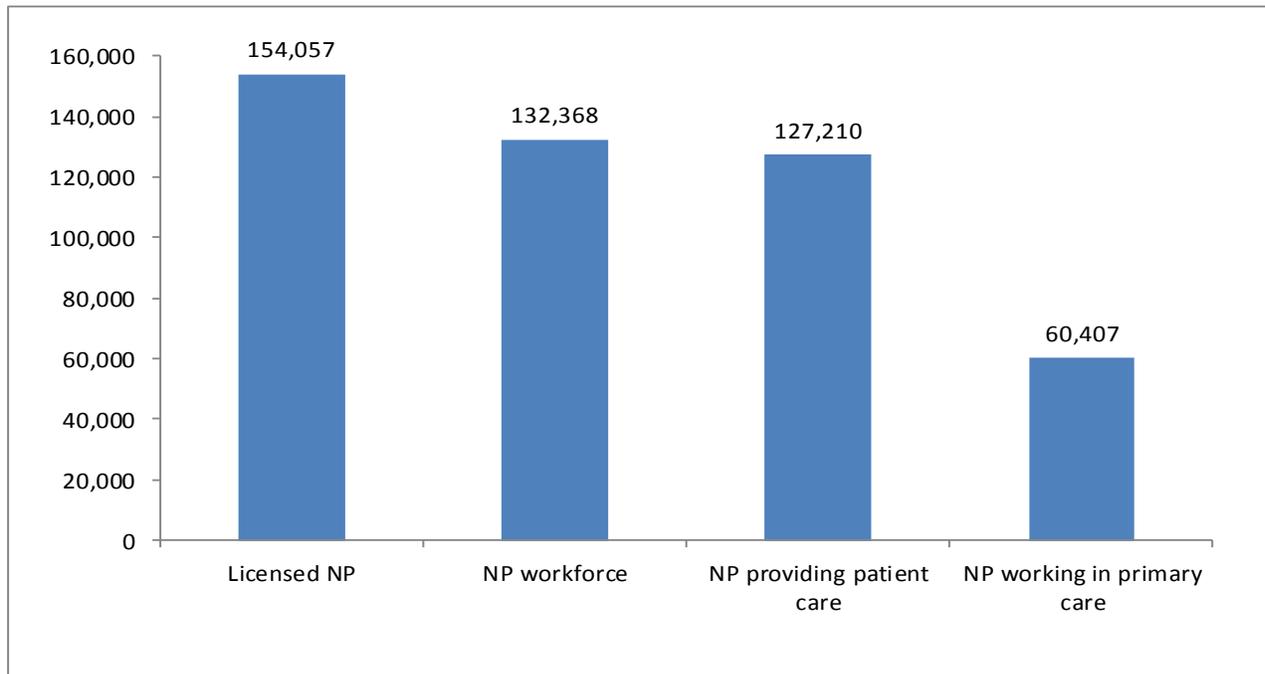
## Highlights From the 2012 National Sample Survey of Nurse Practitioners

Nurse Practitioners (NPs) play a critical role in extending access to health care by providing a range of primary and specialty care services. The Health Resources and Services Administration (HRSA) conducted the 2012 National Sample Survey of Nurse Practitioners (NSSNP) to provide accurate national estimates of the NP workforce and to profile their education, certification, and practice patterns. Surveys were completed by nearly 13,000 randomly selected licensed NPs, a 60.1-percent response rate. This brief provides a summary of the key findings. See “About the Data” at the end of this brief for more information on the study design.

### NP Supply

There were an estimated 154,000 licensed NPs in the United States in 2012 (see Exhibit 1). Of these, more than 132,000 worked in a position requiring an NP credential (“the NP workforce”).

**Exhibit 1. The Estimated Nurse Practitioner (NP) Supply, 2012**



Data Source: 2012 National Sample Survey of Nurse Practitioners.

Within the NP workforce, about 127,000 NPs were providing patient care, and nearly half of NPs in patient care (60,407) were working in primary care practices or facilities. Approximately

22,000 licensed NPs were not working in an NP position at the time of the survey; of these, approximately 11,000 were working as RNs.

## Education and Certification

**Education:** About 94 percent of the total NP workforce held a graduate degree in some field. The majority (86 percent) held a master's degree in nursing as their highest degree, 5 percent held a doctoral degree in nursing, and 3 percent had a graduate degree in a non-nursing field. Of the 6 percent without a graduate degree, most (69 percent) were individuals who were trained before 1992. States have increasingly moved to requiring a graduate degree for entry to the profession, with NPs holding less than a master's degree "grandfathered in."

**Certification:** Nearly all of the NP workforce (96 percent) reported having received formal certification from a national certifying organization at some point in their careers. The majority (76 percent) received certification in what is generally considered a primary care specialty (family, adult, pediatric, or gerontology). The most widely held certification is family NP, reported by almost half of the NP workforce.

## Demographics

**Diversity:** In 2012, the NP workforce was largely homogeneous in gender and race/ethnicity. About 86 percent were white and non-Hispanic, 3 percent were Hispanic/Latino (any race), 5 percent were Black (non-Hispanic), and 6 percent were of other non-Hispanic groups. Approximately 7 percent were male.

**Age Distribution:** The average age within the NP workforce was 48 years. The largest-age cohort of NPs, 55 to 59 year olds, represented nearly 18 percent of the NP workforce, and those 60 years of age and older represented 16 percent. At the same time, there was a healthy representation of younger-age categories: 14 percent of NPs were under 35, 12 percent were between 35 and 39 years of age, 13 percent were in each of the 40 to 44 and 45 to 49 age groups, and another 15 percent were between 50 and 54 years of age.

## Practice Patterns

**Practice Position:** The vast majority (75 percent) of the NP workforce reported working in a single position. Only 19 percent held additional positions that also require NP licenses. The

remaining (6 percent) held additional positions that did not require NP credentials. Almost all of the NP workforce were also in clinical practice (96 percent) providing direct patient care. However, a small number of NPs were in non-clinical roles requiring an NP credential, such as faculty (nearly 3 percent) or administration (about 1 percent).

**Services Provided:** The 127,210 NPs working in patient care in 2012 reported providing a variety of services to their patients, from patient education to medical procedures (see Exhibit 2).

**Exhibit 2. Services Provided by Nurse Practitioners (NP) Providing Direct Patient Care\***

	Services provided to:				Total
	Most patients	Some patients	Few patients	No patients	
	Percent				
Counsel and educate patients and families	85.6	11.9	2.0	0.5	100.0
Conduct physical examinations and obtain medical histories	83.9	11.0	2.9	2.2	100.0
Prescribe drugs for acute and chronic illnesses	80.4	12.3	3.6	3.7	100.0
Order, perform, and interpret lab tests, x-rays, EKGs, and other diagnostic studies	75.4	17.6	4.9	2.1	100.0
Diagnose, treat, and manage acute illnesses	68.3	21.0	7.1	3.5	100.0
Diagnose, treat, and manage chronic illness	60.9	24.2	10.0	4.9	100.0
Provide preventive care including screening and immunizations	55.0	19.8	15.1	10.1	100.0
Provide care coordination	53.3	30.2	12.7	3.8	100.0
Make referrals	46.1	41.4	10.2	2.3	100.0
Perform procedures	26.2	30.3	25.8	17.7	100.0

Data Source: 2012 National Sample Survey of Nurse Practitioners.

\*Survey question: "Thinking about your main NP position, for how many of your patients do you provide the following services?"

Note: Not all totals equal 100, because of rounding.

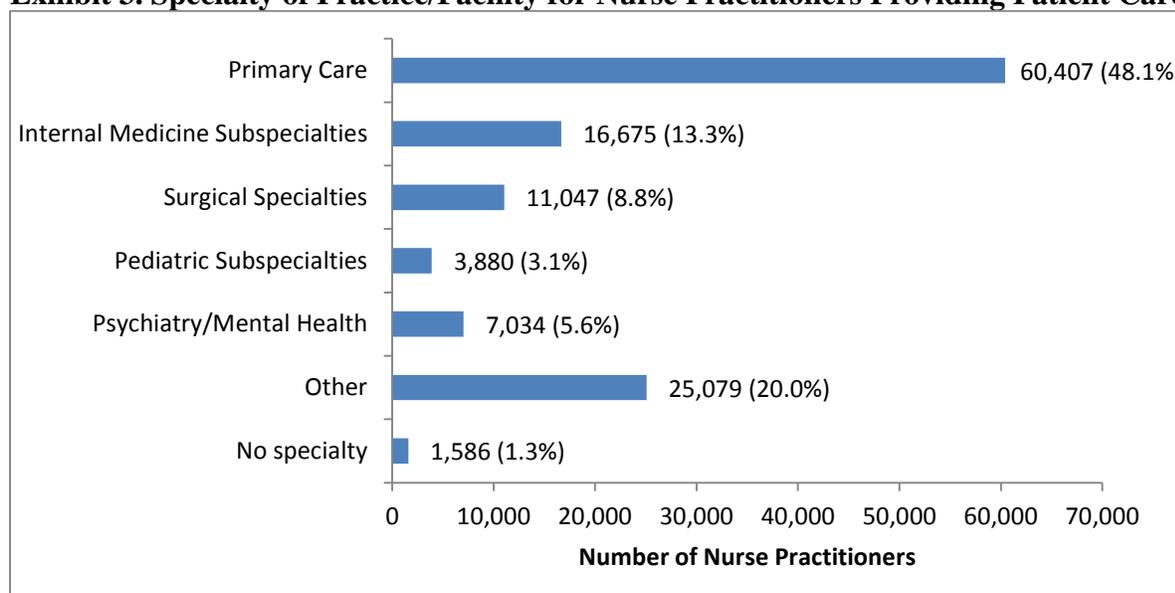
EKG: Electrocardiogram.

More than three-quarters of NPs reported providing the following services for most patients: counseling and educating them; conducting physical examinations and obtaining medical

histories; prescribing drugs; and ordering, performing, and interpreting diagnostic studies. Fewer NPs reported performing procedures, and making referrals.

**Specialty of Practice:** In this study, specialty of practice is defined for those in patient care as the reported specialty of the practice or facility in which NPs work in their main NP position. Although three-quarters of the NP workforce reported having been certified in a primary care specialty, less than half of those in patient care (48 percent) worked in a primary care office or facility (see Exhibit 3). More than 16 percent were in internal medicine or pediatric subspecialties, almost 9 percent were in surgical specialties, and 6 percent were in psychiatry/mental health. Neonatal (3 percent), emergency care (3 percent), and palliative care/pain management (2 percent) were the most frequently reported specialties in the “other” category.

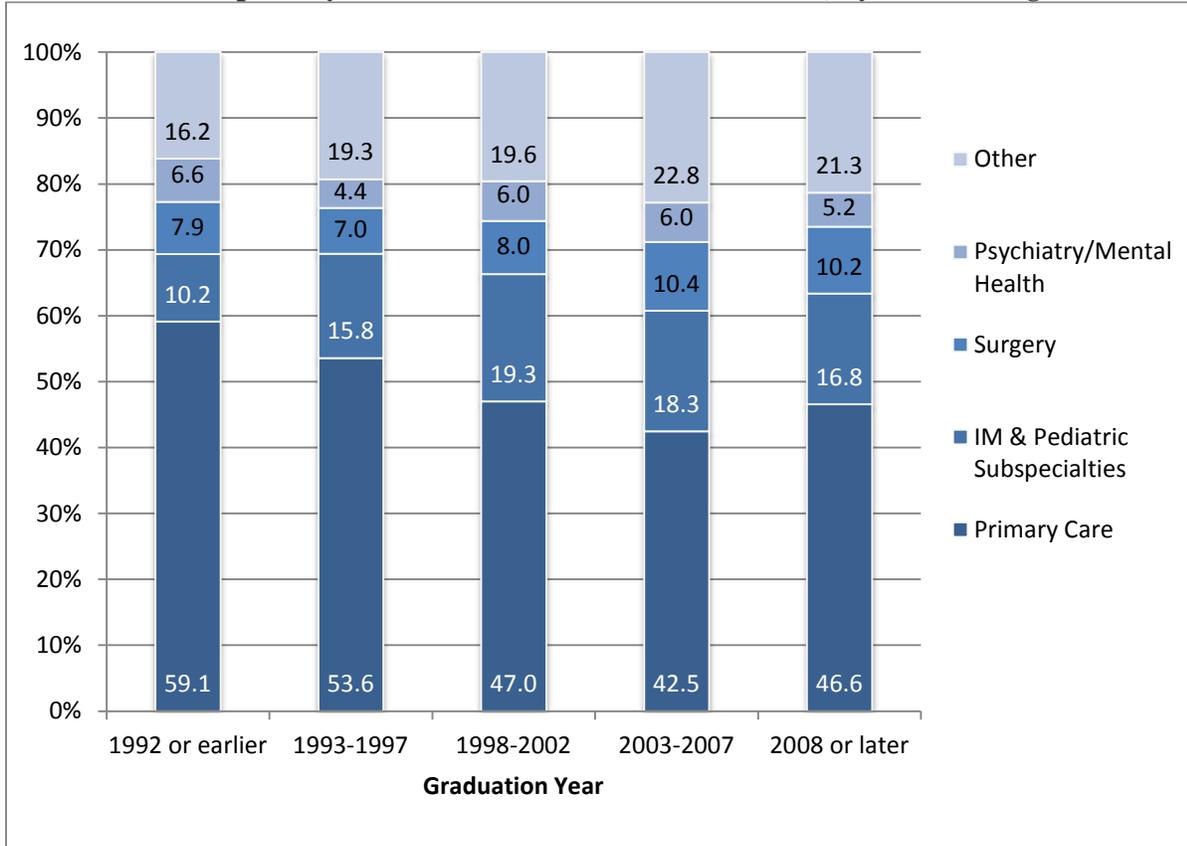
**Exhibit 3. Specialty of Practice/Facility for Nurse Practitioners Providing Patient Care**



Data Source: 2012 National Sample Survey of Nurse Practitioners.

Until recently, the probability of working in primary care decreased with each successive graduating year (see Exhibit 4). While 59 percent of NPs who graduated in 1992 or earlier work in primary care, only 42 percent of those who graduated in 2003 to 2007 do so. However, the very newest NPs (those graduating more recently than 2008) diverged from the overall trend, showing an uptick in the proportion in primary care (47 percent).

**Exhibit 4. 2012 Specialty Distribution of Nurse Practitioners, by Graduating Year**



Data Source: 2012 National Sample Survey of Nurse Practitioners.

**Setting of Practice:** NPs in the workforce reported practicing in a large variety of settings (see Exhibit 5). Over half worked in ambulatory care settings in their principal NP positions, including private physician or NP practices and private or federal ambulatory clinics. Nearly one-third of the NP workforce practiced in hospitals, and the largest share of this group worked in inpatient units.

**Exhibit 5. Setting for Principal Nurse Practitioner (NP) Position\***

	Number	Percent
<b>Ambulatory Settings</b>	67,337	56.7
Private physician office/practice	37,587	31.6
Private NP office/practice	4,871	4.1
Federal clinic <sup>†</sup>	7,940	6.7
Community clinic	3,429	2.9
Retail-based clinic	2,676	2.2
School/college health service	2,592	2.2
Urgent care clinic	2,125	1.8

	Number	Percent
Health maintenance organization/managed care	1,357	1.1
Mental health center	1,259	1.1
Rural health clinic <sup>‡</sup>	1,169	1.0
Nurse managed clinic <sup>‡</sup>	778	0.6
Ambulatory surgery center	616	0.5
Other (unclassified) clinic	938	0.8
<b><u>Hospital Settings</u></b>	<b>37,503</b>	<b>31.6</b>
Hospital inpatient unit	15,936	13.4
Hospital outpatient clinic	12,833	10.8
Hospital emergency department	3,521	3.0
Hospital surgical settings	1,317	1.1
Hospital other clinical roles	1,315	1.1
Hospital—other	1,269	1.1
Federal hospital	1,312	1.1
<b><u>Long-Term and Elder Care</u></b>	<b>5,528</b>	<b>4.7</b>
Long-term care facility	4,039	3.4
Hospice	670	0.6
Home care agency	819	0.7
<b><u>Public or Community Health</u></b>	<b>2,527</b>	<b>2.1</b>
Health department	1,546	1.3
Correctional facility	981	0.8
<b><u>Other Settings</u></b>	<b>5,921</b>	<b>5.0</b>
Academic education program	3,673	3.1
Occupational/employee health	1,273	1.1
Other	975	0.8
<b>Total</b>	<b>118,820</b>	<b>100.0</b>

Data Source: 2012 National Sample Survey of Nurse Practitioners.

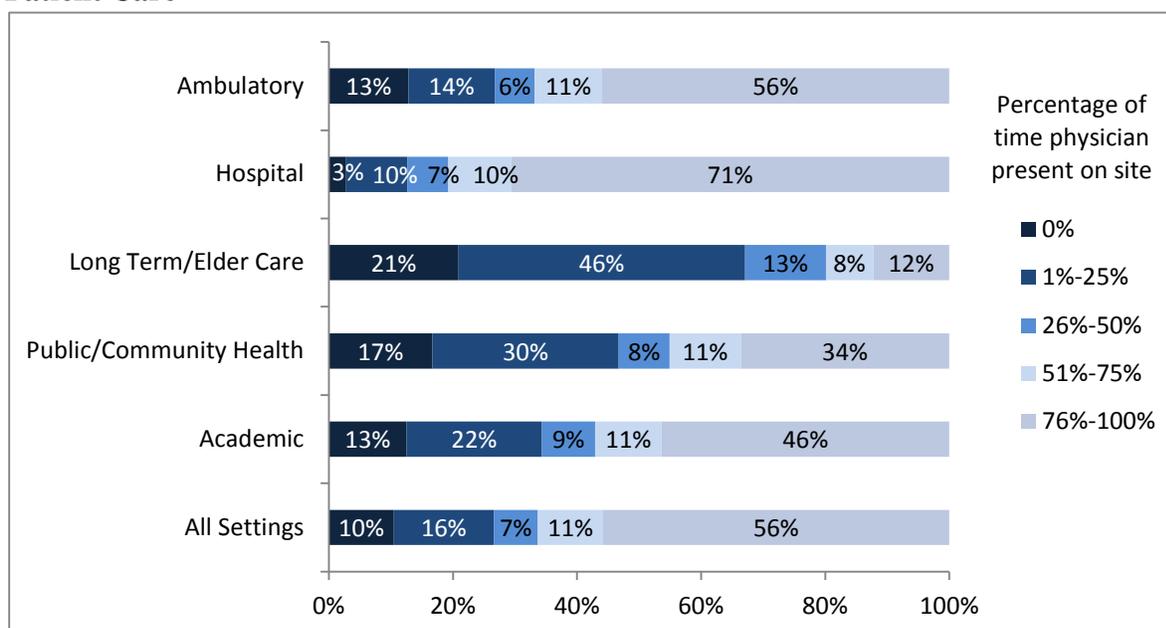
\*Survey question: “Your principal position is the position in which you work the most hours per week. Please report only nursing (NP) positions for which you are paid. Do not include volunteer positions or adjunct faculty status. Describe your principal position. Check only one.

<sup>†</sup>Examples of federal clinics are Federally Qualified Health Centers, Veterans Affairs Medical Centers, and the Indian Health Service.

<sup>‡</sup>Numbers practicing in rural health clinics and nurse managed health clinics may be underestimates. They may be underestimates because some respondents who work in rural/nurse managed health clinics, which are also hospital outpatient clinics or private practices, may have reported the latter as their primary practice setting. About 4 percent of the eligible respondents did not answer the question.

**Presence of Physicians:** NPs providing patient care worked in a variety of collaborative arrangements with physicians, depending on state laws and the nature of the NP’s specific role. About 11 percent worked in a facility where there was no physician on site, but a majority (just over half) worked in settings where a physician was on site most of the time. NPs in long-term care and public health had the least amount of physician time on site, whereas NPs in hospitals reported the most physician presence (see Exhibit 6).

## Exhibit 6. Presence of On-Site Physician for Nurse Practitioners Providing Direct Patient Care



Data Source: 2012 National Sample Survey of Nurse Practitioners.

**Billing:** About 95 percent of NPs providing patient care reported having a National Provider Identifier (NPI) number, which is required for billing under Medicare, Medicaid, and many private insurance companies. However, not all NPs reported using their NPI number for billing purposes. About 63 percent of those who had an NPI number reported ever using it for billing.

**Salary:** Salary varied substantially across the NP workforce depending on role, setting, and specialty. NPs in patient care earned a median of \$87,500 annually in 2012; those in surgical specialties earned the most (median salary \$100,000), and primary care NPs earned the least (median salary \$82,000). NPs in administrative roles requiring an NP credential earned a median salary of about \$104,000, while NPs in faculty roles requiring an NP credential had a median salary of about \$80,000 in 2012.

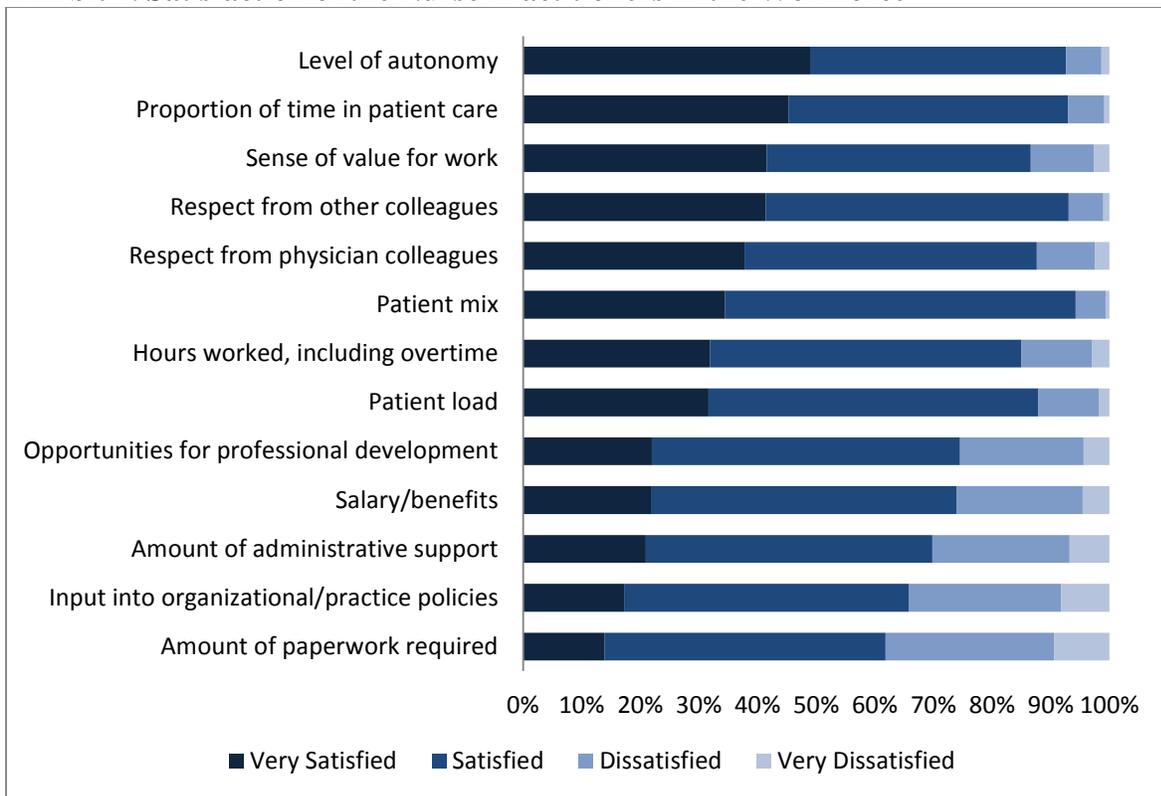
## NP Perceptions of Their Work

**Perception of Scope of Practice:** NPs in the workforce were generally satisfied that the duties of their principal position reflected the full scope of their NP capabilities and allowable scope of practice. Of those whose main position involves direct patient care, almost 84 percent agreed

that they “practice to the fullest extent of the state’s legal scope of practice,” and 89 percent agreed that their “NP skills are fully utilized.”

**Job Satisfaction:** In general, NPs in the workforce reported high levels of job satisfaction. Overall, 92 percent of NPs were “satisfied” or “very satisfied” with their principal position. When specific elements of the job were examined, NPs were most satisfied with their level of autonomy, time spent in patient care, sense of value for what they do, and respect from physician colleagues and other colleagues (see Exhibit 7). NPs were least satisfied with the amount of paperwork required, administrative support, and input into organizational or practice policies.

**Exhibit 7. Satisfaction of the Nurse Practitioners in the Workforce**



Data Source: 2012 National Sample Survey of Nurse Practitioners.

## About the Data

The 2012 National Sample Survey of Nurse Practitioners (NSSNP) was designed to provide nationally representative estimates of the U.S. Nurse Practitioner (NP) supply and to collect detailed data on the licensure, education, clinical practice characteristics, and demographics of NPs. This study was reviewed and approved by the Office of Management and Budget (OMB control number 0915-0348).

HRSA designed the questionnaire in consultation with national nursing stakeholder groups and nursing workforce researchers. Cognitive testing was conducted with six licensed NPs representing the range of individuals who would be responding to the NSSNP, and revisions to the questionnaire were made to improve its clarity and flow based on their feedback.

To construct the sample, HRSA obtained a list of all actively licensed NPs from each state licensing board and the District of Columbia in late 2011 and early 2012. A single national sampling frame utilizing probability matching was developed from 51 individual lists to help identify NPs with licenses in multiple states. A random sample of 22,000 NPs was drawn from the unduplicated list, allocated by state in approximate proportion to the number of NPs licensed in each state.

The survey was conducted entirely by mail, as the mailing address was the only contact information consistently captured across the 51 state licensing boards. The questionnaire was converted into a scannable data capture format to increase the accuracy and ease of data entry. Data were collected from March 2012 to July 2012, using three waves of mailed questionnaires and a reminder postcard. The survey achieved a 60.1-percent response rate,<sup>1</sup> and 12,923 NPs completed and returned usable questionnaires. Sample weights were established to permit the development of unbiased national estimates.

A public use file (PUF) is under development to facilitate more detailed analysis of the data. The PUF and related documentation will be housed on HRSA's Data Warehouse and will be available for download free of charge: <http://datawarehouse.hrsa.gov/data/dataDownload/AboutNSSNP2012.aspx>.

<sup>1</sup>The American Association for Public Opinion Research (AAPOR) response rate 3 was used to calculate the 2012 NSSNP response rate. See The American Association for Public Opinion Research. (2011). *Standard definitions: Final dispositions of case codes and outcome rates for surveys*. (7th ed.). Author. Available online at: <http://aapor.org/Content/NavigationMenu/AboutAAPOR/StandardsampEthics/StandardDefinitions/StandardDefinitions2011.pdf>.