

2016 Neonatal Nurse Practitioner Workforce Survey

Report of Findings

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ABSTRACT

The National Association of Neonatal Nurse Practitioners (NANNP) conducted its second workforce survey of certified neonatal nurse practitioners in the fall of 2016. National Association of Neonatal Nurse Practitioners partnered with the National Certification Corporation and the American Association of Nurse Practitioners to conduct this electronic survey, containing 69 questions and focusing on practice sites and total compensation packages (including benefits) and workforce deficits.

Findings indicate a rising neonatal nurse practitioners (NNPs) position vacancy rate across the country. Regional salary data indicated that the southeast had lower compensation rates for NNPs, with regions 4 and 11 (South) having the lowest rates. A promising trend indicated that new graduate NNPs with a doctorate are earning more. The study findings indicate that tailoring benefit packages to the age and years of experience for the individual NNP may aid in recruiting and retaining NNPs in practice. For experienced NNPs, altered shift lengths (shorter), higher employer matching rates in retirement plans, and less employee cost sharing for health insurance benefits are more appealing strategies.

It is critical for NNPs to continually evaluate the profession's workforce data. There are more than 205,000 nurse practitioners practicing in the United States, with neonatal NPs making up approximately 3% of the larger whole. Increased participation in future surveys will assist in creating sustainable solutions to the workforce crisis facing the profession.

Key Words: advanced practice, APRN, compensation, neonatal, neonatal nurse practitioner, NNP, NP, salary, survey, workforce

In keeping with the Institute of Medicine's mandate to collect and track healthcare provider workforce data,¹ the National Association of Neonatal Nurse Practitioners (NANNP) undertook its second workforce analysis in an effort to quantify the workforce trends and compensation for neonatal nurse practitioners (NNPs) across the country. National Association of Neonatal Nurse Practitioners partnered with the National Certification Corporation and the American Association of Nurse Practitioners to conduct the study. The survey questions included demographic data points and focused mostly on compensation. Some data points, related to practice models and employment structures, were collected to stratify compensation data. This summary discusses the data analytics of the 2016 survey

data including total compensation, benefits, and workforce data. The full report will include comparative analysis of 2014 survey data² and 2016 survey data, along with 2017 salary data from the American Association of Nurse Practitioners national survey.

BACKGROUND

The study was funded through an unrestricted grant from Mallinckrodt. The electronic survey was sent out to 5433 certified NNPs across the country with each potential respondent receiving his or her own individualized access code to prevent participants from entering multiple responses. The survey contained a total of 69 questions with branching logic and was open for a 14-day period in September to October 2016. The study yielded 1100 responses, a response rate of 20%. Respondents were screened on the basis of primary role: clinician (at least 50% of full-time equivalent (FTE) in providing direct patient care), transport NNP, faculty/dean/director, or NNP coordinator/manager/administrator. Data were then aggregated nationally, regionally (in congruence with American Association of Nurse Practitioners regions), and by state where appropriate (Figure 1). Participants in the primary role of NNP coordinator/manager/administrator were given

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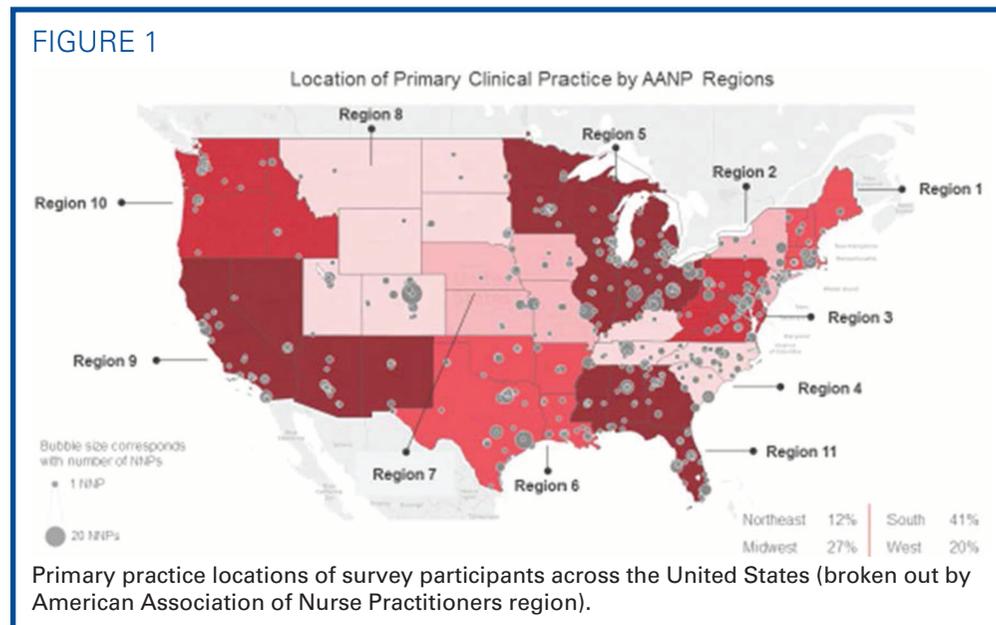
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additional questions related to vacancy rates, workforce need projections, NNP program capacity, and precepting of NNP students.

Demographics of the current respondents include an average age of 49 years, with 52% older than 50 years. The NNP profession is still predominately female (96%), with 78% holding a master's degree as their highest level of education. Ninety-one percent of respondents were working in level III or IV neonatal intensive care units. Seventy-two percent of NNPs report working full-time (defined as 35 h/wk or more). By comparison, 81% of respondents in the 2014 survey worked full-time.²

The respondents identified as coordinator/manager/administrator reported an average of 20 NNPs per practice, covering 2.9 distinct sites or units. This is a mean of about 7 NNPs per site/unit. By comparison, the data reported in 2014 were a mean of 14 NNPs per practice covering an average of 2 distinct sites/units (mean of 7 NNPs/site).² As the number of practice sites has increased, so has the number of NNPs. It must be noted that all survey participants were asked about number of FTEs and sites covered in their primary practice, so this data trend must be interpreted with caution. The analysis of data did not take into account data reported from identical practice sites.

DATA ANALYSIS

Compensation

There were a series of questions in the survey regarding the total compensation packages of NNPs. This included questions related to salary, overtime and call time, paid time off, continuing education time (monies and/or time off), tuition reimbursement,

composition of benefits packages, and seniority "benefits." Eighty-three percent of the NNPs completed information on the compensation salaries. Of these, 77% reported that they were salaried. Ninety-two percent of those reporting provide direct patient care in a level II, III, or IV neonatal intensive care unit and 72% work full time. Although 70% of NNPs stated that they were expected to work 35 to 40 hours per week, more than 50% of these reported that they actually worked over the agreed upon hours, with 34% indicating more than 40 hours being scheduled weekly. The mean hourly rate reported was \$55 per hour.

The mean salary for a full-time NNP (working at least 35 hours per week) was \$114,000 (range: \$50,000-\$233,000); male NNPs ($n = 40$) had a mean salary of \$117K while their female colleagues had a mean salary of \$114K. When mean salary was analyzed on the basis of years of experience, those with less than 1 year of experience (new graduates) earned \$97,000 (range: \$74,000-\$118,000) annually and their mean age was 34 years. Ten percent of these new graduates held doctoral degrees and their mean salary was higher at \$108,000 (range: \$100,000-\$116,000); almost \$11,000 more in earnings when hired with a doctoral degree as a new graduate but no difference in mean age ($M = 34$). The majority of new graduates work in level III or IV nurseries (95%). Neonatal nurse practitioners who worked in neonatal transport had a mean salary of \$115,000, only slightly above the overall mean and not statistically significant. When looking at income over time, it appeared that income increased by about \$1000 per year in the first 5 years, with the mean salary of those with 1 year of experience at \$96,000; those with 5 years of

TABLE 1. Survey Participant Demographics

(n = 1100)	
Age (\bar{x} =39), y	
26-50	48%
>50-60	35%
>60	17%
Gender	
Female	96%
Male	4%
Highest education	
Certificate	9%
Masters	78%
Postmasters/postgraduate certificate	2%
Doctorate	11%
Level of care (primary site)	
Multihospital system (network)	36%
Academic medical center/university	28%
Physician practice group	24%
Community hospital	10%
Other (military hospital, clinics)	2%

experience earned \$107,000. Seventy percent of respondents state that they receive yearly pay increases, with 68% noting that increases are based on merit. See Table 1 for further salary data. Mean salaries were NOT adjusted for cost-of-living variances across the country (Table 2).

Salary variance did not show statistical significance related to level of education, primary practice setting, or shifts worked. But the mean salary for

doctoral prepared nurses was higher at \$121,000 (range: \$95,000-\$171,000), \$7000 above the overall mean. There were variances when salary was correlated with age/years of experience, region, type of hospital/practice setting, and whether the NNP also held an administrative role. Regionally, regions 4, 6, and 11 (southern United States) had the lowest salaries, with statistical significance in regions 4 and 11 ($P = .05$, 95% confidence interval), when compared with the other 9 regions. Those who identified themselves in the role of NNP coordinator, manager, or administrator made an average of \$9000 per year more in compensation, with a mean salary of \$134K (range: \$86,000-170,000) (Figure 2).

Table 3 compares salaries across all types practice setting. Job satisfaction also positively correlated with salary earned; as salary increased, so did job satisfaction. Neonatal nurse practitioners working within or employed by a physician practice or group earned less than NNPs in all other practice setting. Survey respondents who work for a physician practice group report making, on average, \$8000 (range: \$5000-\$12,000) less than NNPs in other practice settings. Statistical significance (95% confidence interval) was achieved across all other subgroups.

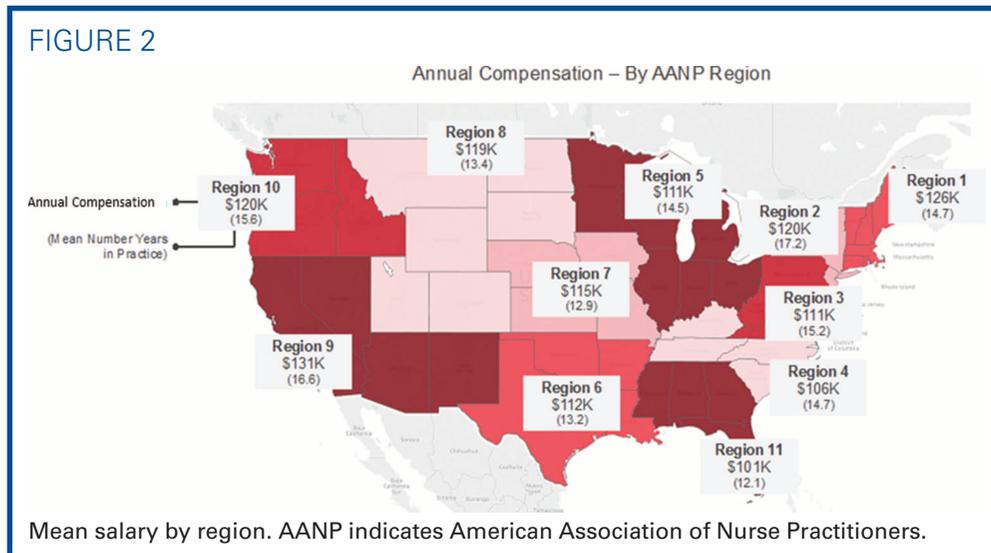
Indirect Compensation/Benefits

When evaluating other “benefits,” 32% of survey respondents indicated that they received some sort of annual bonus in their practice, with those in regions 6, 8, and 11 more likely to receive a bonus and least likely for NNPs in regions 1 and 7; 69% of NNPs practicing in physician practice groups receive bonuses, which may offset the significantly lower salaries. Neonatal nurse practitioners working in higher level of care units (level III/IV) were more

TABLE 2. NNP Salary Data

Years in NNP Role	Mean Salary	Salary Range, \$	Mean Age	Female/Male	Doctorates	% in Level III/IV
0	97,000	74,000-118,000	34	100%/0%	10%	95
1	96,000	84,000-119,000	36	98%/2%	2%	98
2	97,000	76,000-120,000	37	97%/3%	14%	92
3	100,000	66,000-125,000	38	94%/6%	2%	92
4	101,000	75,000-140,000	38	100%/0%	6%	97
5	107,000	80,000-150,000	42	95%/5%	2%	90
6-10	112,000	55,000-205,000	44	96%/4%	9%	90
11-15	121,000	58,000-185,000	49	97%/3%	15%	93
16-20	120,000	50,000-187,000	54	96%/4%	15%	93
21-25	125,000	60,000-233,000	56	96%/4%	17%	88
26-30	119,000	54,000-181,000	57	97%/3%	5%	78
>30	121,000	65,000-170,000	61	93%/7%	17%	87

Abbreviation: NNP, neonatal nurse practitioner.



likely to receive annual salary increases (70%). Ninety-five percent of NNPs receive health insurance benefits and 96% reported receiving some sort of retirement plan. When asked to rank importance of benefits, retirement benefits outranked health insurance benefits by 3% points. Other benefits offered to NNPs are noted in Figure 3. Neonatal nurse practitioners in physician practice groups are more likely than those in other settings to receive other benefits. When survey respondents were asked to rank various aspects of their jobs on the basis of importance, work-life balance was most important (85%), followed by salary (78%), retirement benefits (75%), and paid time off/vacation (70%).

Workforce

The majority of NNPs are scheduled with a day/night rotation (43%) or 24-hour shifts (54%). When asked what shift they preferred, there was an even split, with 41% choosing days and 41% choosing 24-hour shifts. When reviewing the data, it was clear that 38% of NNPs are not working shift they would prefer to work. Eight-five percent state that shift length and configuration would influence where they chose to work. Two-thirds of NNPs are working more than their “required” hours each week. When asked about protected time to work on quality, safety, or other initiatives, only 45% reported receiving protected time. One in 5 NNPs responded that overtime or “on-call” was mandatory. This,

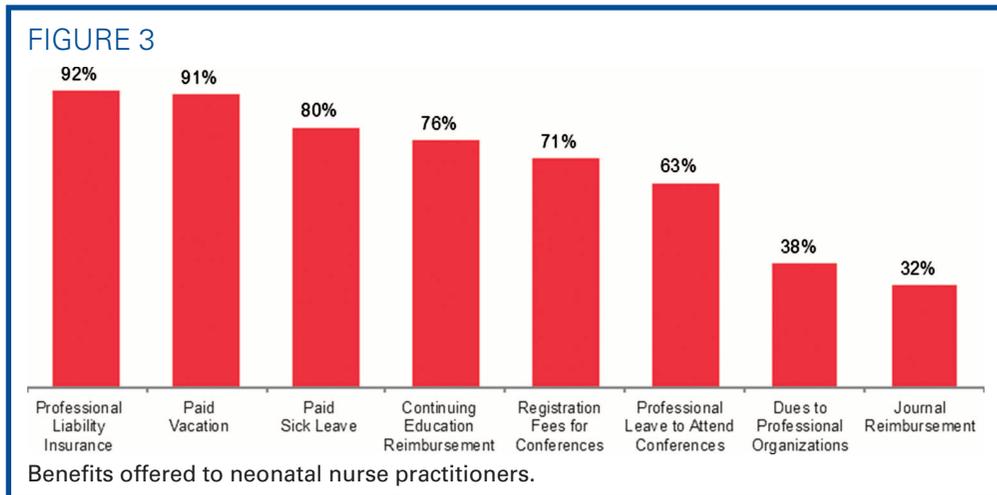
however, did not correlate with lower compensation rates or number of openings per practice. Approximately 80% of NNPs who are “required” to work overtime are compensated for the extra shift.

When NNP coordinator/manager/administrators (n = 40) were asked about staffing, 73% did not feel that they had enough NNP staff to cover their practice needs. The mean number of vacancies per practice was 4, with 34% having 5 or more vacancies in their practice. Eighty-four percent of all NNPs in the survey reported earning paid time off each year, but 79% of these stated that they could not use all the hours secondary to staffing/coverage issues. Perception of understaffing and expectations of vacancies being filled showed that 83% did not feel that there were enough NNPs to meet practice needs, even in the next 10 years. With a deficit of NNPs to fill open positions, other healthcare providers are replacing or augmenting the NNPs to alleviate staff shortages. In an attempt to recruit NNPs, 67% of sites offer relocation packages and 70% offer benefit packages, which include 401ks. 2016 was the first time NANNP asked questions related to practice “seniority” and any potential benefits given. Twenty-six percent of survey respondents indicated that their practice allowed for some sort of “benefit” based on longevity with the practice. Of that 26%, more than half (56%) indicated more than 1 “perk.” Those most frequently reported included more paid time off/vacation time or working fewer night shifts.

TABLE 3. Salary Comparison by Practice Setting^a

	Multihospital System/Network ^b	Independent/Community Hospital ^c	Physician Practice Group ^d	University/Medical Center ^e	Other ^f
Mean ^d	\$117K	\$113K	\$108K	\$115K	\$120K
Range	\$69-\$233K	\$54-\$185K	\$53-\$205K	\$50-\$189K	\$73-\$162K

^aSuperscript letters (b to f) indicate statistically significant difference between subgroups with P = .05 at 95% confidence level.



Faculty/NNP Programs

The need for well-trained NPs across the country has been well documented in the 2014 and the 2016 NNP Workforce surveys. We know that there are 33 “active” academic programs in the United States currently.³ Despite best efforts by NNP faculty, program numbers and new graduate numbers have remained relatively stagnant over the past several years. Factors influencing NNP program enrollment numbers are numerous,³ with the workforce survey respondents identifying that the lack of faculty was a key component to this issue. The mean salary for faculty was \$120,000 (range: \$100,000-\$135,000). The mean age for faculty was 54 years, with 92% holding doctorate degrees.

CONCLUSIONS

There is a rising NNP position vacancy rate demonstrated between the 2014 and 2016 studies. This may be due to several key issues. With so many NNPs older than 50 years, many are choosing to decrease the number of hours of clinical coverage in direct patient care they work. Some are leaving clinical practice all together to pursue full-time faculty or leadership roles in health systems or national organizations. In addition, many are at the age to retire. Neonatal nurse practitioners fill a vital role in the care of critically ill and convalescing neonates. Their training programs provide them with the knowledge to not only meet the needs of this vulnerable population but also improve outcomes and decrease costs.^{4,5}

Traditionally, the southeast has had lower compensation rates for nurses.⁶ This was demonstrated in the comparison of regional salary data for NNPs as well, with regions 4 and 11 (South) having the lowest annual compensation rates and region 9 (West Coast region) with the highest compensation. These regional differences could make recruiting in the southern states more difficult. With shortages,

neonatal units may be forced to hire other types of providers who do not have adequate education to care for the neonatal population. Given the high rates of prematurity (9.6%) and neonatal morbidity and mortality in the United States, this should raise serious concerns.⁷ Neonatal nurse practitioners reported that receiving paid time off and being able to take the time off was a significant benefit, with retirement plans being the most important insurance benefit they considered in their employment choice.

While noting the small number of male participants in the study ($n = 40$), it was notable that male NNPs earned more on average than their female colleagues.⁸ A promising trend indicated that new graduate NNPs with a doctorate are earning more by some reports. This will need to be evaluated over time in subsequent survey analysis as more DNP graduates enter the NNP workforce.

For practices struggling to recruit or retain NNPs, the study findings indicate tailoring benefit packages to the age and years of experience for the individual NNP. Successful recruitment efforts in the past included hospitals/practices paying for the education of NNPs with a contracted mandatory time of employment for “repayment.” Others have been successful offering student loan repayment plans for new graduates. Relocation packages can be helpful, especially if the practice/hospital is not close to an NNP training program. For recruitment/retention of experienced NNPs, altered shift lengths (shorter), higher employer matching rates in retirement plans, and less employee cost sharing for health insurance benefits are more appealing strategies. When discussing recruitment and retention, it is important to note that NNPs indicate choosing their employment on the basis of shift choices, and having day and/or 24-hour shift opportunities may help in a competitive job market.

It is critical for NNPs to continually evaluate the profession’s workforce data. There are more than

205,000 nurse practitioners practicing in the United States, with neonatal NPs making up approximately 3% of the larger whole.⁹ Increased participation in future surveys will assist in creating sustainable solutions to the workforce crisis facing the profession. Creating a well-educated and trained neonatal workforce, while maintaining the delivery of high-quality and safe care in an ever-evolving healthcare system is the priority of the profession and the larger profession of nurse practitioners and nurse practitioner faculty.

References

1. Institute of Medicine. *The Future of Nursing: Leading Change, Advancing Health*. Washington, DC: Institute of Medicine; 2010. <http://www.nationalacademies.org/hmd/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health.aspx>. Accessed March 31, 2017.
2. Meier S, Staebler S. *2014 Neonatal Nurse Practitioner Workforce Survey Executive Summary*. Chicago, IL: National Association of Neonatal Nurse Practitioners; 2015. http://nann.org/uploads/Membership/NANNP_Pubs/NNP_Workforce_Survey_Executive_Summary-FINAL_01-13-15.pdf. Accessed April 14, 2017.
3. Sheldon RE, Bissinger RL, Kenner C, Staebler S. The status of US neonatal nurse practitioner education in 2015-2016. *NeoReviews*, 2017;18(1):e3-e21. <http://neoreviews.aappublications.org/>. Accessed April 14, 2017.
4. *The Future of Neonatal Advanced Practice Registered Nurse Practice: White Paper*. Chicago, IL: National Association of Neonatal Nurse Practitioners; 2014. http://nann.org/uploads/Membership/NANNP_Pubs/Future_of_APRNs_white_paper_FINAL.pdf. Accessed April 17, 2017.
5. *Competencies and Orientation Toolkit for Neonatal Nurse Practitioners*. 2nd ed. Glenview, IL: National Association of Neonatal Nurse Practitioners; 2014. Accessed April 21, 2017.
6. US Department of Labor, Bureau of Labor Statistics. Occupational employment statistics, 29-1141 registered nurses. [https://www.bls.gov/oes/current/oes291141.htm#\(2\)](https://www.bls.gov/oes/current/oes291141.htm#(2)). Published 2016. Accessed 2, 2017.
7. Centers for Disease Control and Prevention. 2015 infant health statistics. <https://www.cdc.gov/nchs/fastats/infant-health.htm>. Accessed April 21, 2017.
8. Muench U, Sindelar J, Busch S, Buerhaus PJ. Salary differences between male and female registered nurses in the United States. *JAMA*. 2015;313(12):1265-1267.
9. AANP. *About NPs Fact Sheet*. Austin, TX: American Association of Nurse Practitioners; 2016. from <https://www.aanp.org/all-about-nps/np-fact-sheet>. Accessed April 21, 2017.

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