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Perceived Facilitators and Barriers to Rural Nursing Practice

- Most nurses are satisfied with their profession and their jobs with no differences based on practice location. Nearly all nurses surveyed reported that it was “not at all likely” that they would leave nursing in the next year (94.2%), and a majority reported that it was “not at all likely” that they would leave their current job within the next year (73.3%).
- Nurses practicing in rural settings were less likely than nurses in urban or suburban practices to report that their nursing education had equipped them for work (84.7% versus 94.9% and 94.6%, respectively; $p = 0.009$).
- Similarly, nurses in rural practices were more likely to report that inadequate training was a barrier to their ability to do their job (33.4% versus 18.2% and 28.6% for suburban and urban nurses, respectively; $p = 0.03$).
- With the exception of the education and training questions, elements of job satisfaction and barriers to practice were not different for nurses in rural, suburban, and urban settings.
- Further research is needed to ascertain specific educational gaps experienced by rural nurses and design programs to address these gaps.

INTRODUCTION

A 2010 report from the Institute of Medicine (IOM) called for fullest use of nursing capacity to lead the transformation of the health care system following passage of the Patient Protection and Affordable Care Act (PPACA).¹ The passage of the PPACA precipitated an influx of newly insured individuals seeking care, introduced new models of care, such as patient-centered medical home, and expanded the tasks handled by registered nurses, for example, adding care coordination. In addition, the changing demographics of the patient population and the increasing prevalence of multiple morbidities increased the demands of nursing in primary care settings.

With the persistent shortage of nurses, especially in rural areas, both policy planners and local facility administrators benefit from understanding the contributors to both job satisfaction and dissatisfaction among registered nurses.²⁻³ Retaining these professionals is essential to ensure health care access and reduce the health disparities that persist in rural populations.⁴ Previous research has assessed rural-urban differences in job satisfaction among nurse practitioners and hospital nurses, but there is little research on nurses in broader practice settings and across levels of training.⁵⁻⁶

We used a web-based survey, disseminated to a geographically diverse sample of nurses throughout the United States, to assess their perceptions of their practice experiences (see Appendix for details). This brief examines three issues among registered nurses: 1) perceived barriers and facilitators to nursing practice; 2) job satisfaction, and 3) self-identified challenges in nursing work environments and patient care. Practice location and residence were self-described as rural, suburban, or urban. Given the relative shortage of prior research, we were particularly interested in the characteristics and perceptions of nurses in ambulatory care practice; findings among these nurses are discussed in the second section of the report.

Findings: All Respondents

Survey Participant Characteristics

A total of 435 nurses responded to the survey, including 72 (16.6%) from rural, 177 (40.7%) from suburban, and 186 (42.8%) from urban practice settings. Survey respondents did not differ by age, gender, ethnicity, race, marital status, overall health status, or years of experience across the rural-suburban-urban practice spectrum (See Table A-1, in Appendix). Responding RNs averaged 47 years of age and were mostly female (89.4%) and white (89.2%). Nurses practicing in rural areas were more likely to be 55 years or older than their counterparts in suburban or urban settings (47.8% rural versus 29.4% suburban and 37.1% urban; $p < 0.03$). Nurses practicing in suburban settings were more likely to have one or more children in the home (58.8%) than were those practicing in rural (45.1%) or urban (37.7%) settings. Nurses who practiced in either a rural or suburban area principally lived in a rural or suburban area (88.9% and 86.3%, respectively), while there was greater variability in the residential locations of nurses who practiced in urban areas.

Education & Practice Experience

The average nurse respondent had 20.8 years of nursing practice with no statistically significant differences across practice locations (data not in table). Educational differences among nurses in different geographic settings were most noticeable at different ends of the educational spectrum. Nurses in rural practice were more likely to report a diploma in nursing (11.1%) than were nurses in suburban (6.2%) or urban (5.9%) practice locations (see Table 1, next page). The nursing diploma is an educational certification delivered through a hospital-based nurse

Technical Notes

We emailed a web-based survey to nurses listed as being in ambulatory care practice by a commercial mailing service. Practice location--rural, suburban, or urban--was self-reported by responding nurses. Our survey completion rate was 10.4%. Details are provided in the Appendix.

training program. Once common, with over 1,300 programs across the U.S. in the 1960's, nursing diploma programs have declined to only 100 or so at present.⁷ On the other hand, both rural (40.3%) and suburban (40.1%) nurses were more likely to report having a master of science in nursing (MSN) than were urban nurses (22.6%). The "other" educational category (28 respondents) contained a variety of qualifications, including eight respondents with LPN or CMA status, six respondents who identified as advanced practice nurse practitioners but did not specify a degree, five respondents with an MBA or other non-nursing master's degree, and nine various other combinations.

Because degree attainment is not the full story of job preparation, we asked whether each nurse felt that his or her education "has equipped me for work." While a majority of nurses believe that their education has prepared them for practice, a smaller percentage of nurses who practice in rural areas (84.7%) felt their education prepared them for their job compared to suburban (94.9%) and urban (94.6%) practicing nurses (see Table 1, below). There were no differences in whether nurses perceived that their education had equipped them for work based on level of educational attainment either examining each degree separately or looking at BSN-prepared versus lower levels of attainment (93.0% "yes" among BSN nurses; 92.3% among Diploma/ADN nurses).

Table 1: Educational training and perceived work preparation by rurality of practice site

	All (n=435)	Rural (n=72)	Suburban (n=177)	Urban (n=186)	P-value for differences by location‡
	%	%	%	%	
Highest Nursing Degree					
Diploma in Nursing	6.9	11.1	6.2	5.9	0.01
Associate's in Nursing (ADN)	14.0	11.1	15.3	14.0	
Bachelor of Science, Nursing (BSN)	34.5	27.8	29.9	41.4	
Master of Science, Nursing (MSN)	32.6	40.3	40.1	22.6	
PhD or Doctor of Nursing Practice (DNP)	5.5	2.8	4.5	7.5	
Other	6.4	6.9	4.0	8.6	
Nursing education has equipped me for work, yes	93.1	84.7	94.9	94.6	0.009
‡ Chi-Square Analysis Note: Percentages may not sum to 100% due to rounding.					

Job Characteristics

Respondents reported working in ambulatory care (47.8%), hospitals (35.9%), and a variety of other settings (16.3%); work settings did not differ across geography (See Table A-2 in Appendix). Most nurse respondents, regardless of location, worked in a practice that was part of a healthcare system (83.2%), in a full-time position (83.0%), and had been in their position for a little less than 8 years (7.9 years; See Table A-2 in Appendix). Fewer than half of respondents reported that they "normally" work overtime (40.2%) with no significant differences based on location. Among those reporting overtime work, it averaged a work day per week (8.4 hours). Respondents reported an average travel distance of 16.7 miles with no difference based on practice location. Travel time, however, did differ by location with urban nurses having the longest average travel time

(30.2 minutes), followed by 25.1 minutes for suburban nurses and 22.4 minutes for rural nurses ($p = 0.0008$).

Job Satisfaction - Retention

Two questions addressed job satisfaction: asking nurses how likely it was that they would leave their current job in the next year and how likely it was that they would leave the nursing profession entirely within the next year. Overall, nurses were satisfied with no differences based on practice location. A majority of nurses reported that it was “not at all likely” that they would leave their current job within the next year (73.3%), and nearly all reported that it was “not at all likely” that they would “leave nursing altogether” in the next year (94.2%; See Table A-2 in Appendix).

Perceived Barriers to Nursing Practice

With one exception, barriers checked as being experienced “weekly” or “at least daily” by nurses were statistically similar across geography (see Table A-3 in Appendix). Two potential barriers, injury sustained at work and feeling unsafe in the workplace, were experienced weekly or daily by very few nurses with only 1.6% reporting injury and 2.8% reporting an unsafe workplace. More common barriers included too much work to do well, organizational rules and procedures, and lack of adequate equipment or supplies (See Figure 1).

Geographic differences were found with regard to preparation for practice: a greater percentage of rural nurses (33.3%) noted that inadequate training affected their ability to do their job monthly or more frequently than did nurses in suburban (18.2%) and urban (28.6%) practices ($p=0.03$).

Job Satisfaction-Work Environment and Tasks

Satisfaction with time with patients and patient load did not vary across rural, suburban, and urban practice locations with one exception (Details in Table A-4, Appendix). Geographic differences in satisfaction were found regarding the amount of paperwork the respondent was required to complete. A higher proportion of nurses in rural workplaces (62.0%) were dissatisfied with paperwork than were nurses in suburban (41.7%) and urban (39.8%) settings.

In other areas, nurses expressed highest satisfaction with their perceived ability to use personal initiative or judgment in carrying out work (87.3% satisfied or very satisfied), followed by respect from colleagues (83.0%), the degree to which they can make their own decisions about scheduling their work (76.2%), and the proportion of time they spend in patient care (74.2%; see Figure 2, next page). Lower levels of satisfaction were reported for patient load (67.4%), opportunities for growth (63.1%), and administrative support (61.3%). There were not differences based on practice location in any of these items.

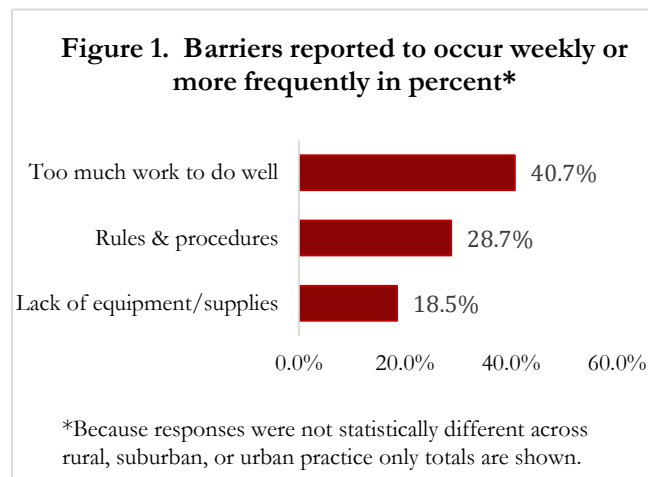
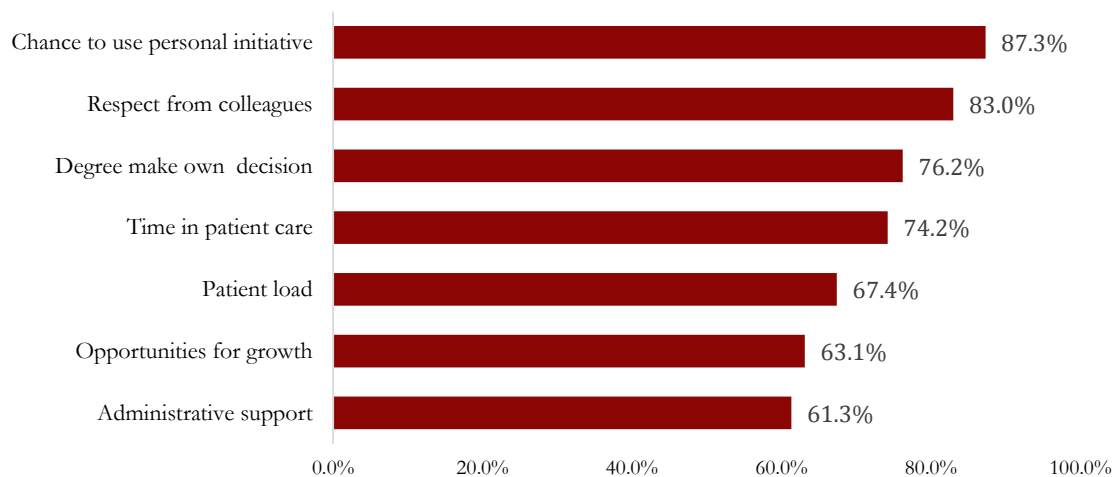


Figure 2. Nurse satisfaction with various workplace characteristics in percent.* (response of "satisfied" or "very satisfied")



*Because responses were not statistically different across rural, suburban, or urban practice only totals are shown.

Experience of Ambulatory Care Practice Nurses

Survey Participant Characteristics—Ambulatory Care Nurses

Our aim was to survey only ambulatory primary care practice nurses. However, only a subset of respondents (208 of 435) reported currently working in an ambulatory care setting. In the following section, we focus on those nurses alone.

Responding ambulatory care nurses averaged 48 years of age, were predominantly female (89.9%), non-Hispanic (90.4%), married (75.5%), and slightly less than half (46.4%) had children; there were no differences in these characteristics by geography. Ambulatory care nurses tend to practice where they live with 92.9% of nurses who practice in rural settings living in rural settings and 88.4% of nurses practicing in suburban areas living in suburban settings. Nurses practicing in urban settings were drawn from a variety of residential settings including 16.7% who reported living in rural areas (See Table A-5, in Appendix). As would be expected in a working population, very few respondents (4.3%) described their health as only “fair.”

Education and Practice Location Among Ambulatory Care Nurses

The average ambulatory care nurse respondent had 21.4 years of nursing practice with no statistically significant differences across practice locations (data not in table). Nearly half (45.7%) reported having an MSN. The MSN degree was more commonly reported by rural (54.8%) and suburban nurses (58.6%) than by their urban counterparts (26.6%); (See Table 2, next page). Nearly all nurses (92.3%) reported that their education had equipped them for their work. Perhaps because of the relatively high education of rural respondents in this ambulatory care group compared to the total sample, there were no geographic differences in the proportion of ambulatory care nurses who indicated that their nursing education equipped them for their work.

	All (n=208)	Rural (n=42)	Suburban (n=87)	Urban (n=79)	P-value for differences by location‡
		%	%	%	
Highest Nursing Degree					0.011
Diploma or ADN	17.3	19.0	21.9	17.8	
BSN	21.6	16.7	8.1	32.9	
MSN	45.7	54.8	58.6	26.6	
PhD/DNP & Other	15.4	9.5	11.5	22.8	
Nursing education has equipped me for work, yes	92.3	85.7	93.1	94.9	0.18

Job Characteristics of Ambulatory Care Nurses

Responding nurses were employed by physician offices (52.9%), urgent care clinics (15.4%), and “other” (31.7%; “other” options were ambulatory surgery centers and “other”). A higher proportion of rural ambulatory care nurses practiced in physician’s offices (71.4%) compared to those in suburban (51.7%) and urban practice (44.3%); ($p=0.02$. See Table A-6 in Appendix). Most ambulatory care nurse respondents, regardless of geography, worked in a practice that was part of a healthcare system (79.8%), in a full-time position (86.5%), and had been in their current position for approximately 7.3 years (See Table A-6 in Appendix). Fewer than half of respondents reported that they “normally” work overtime (44.2%) with no significant differences based on location. Among those reporting overtime work, the average was a little less than a day per week (7.4 hours).

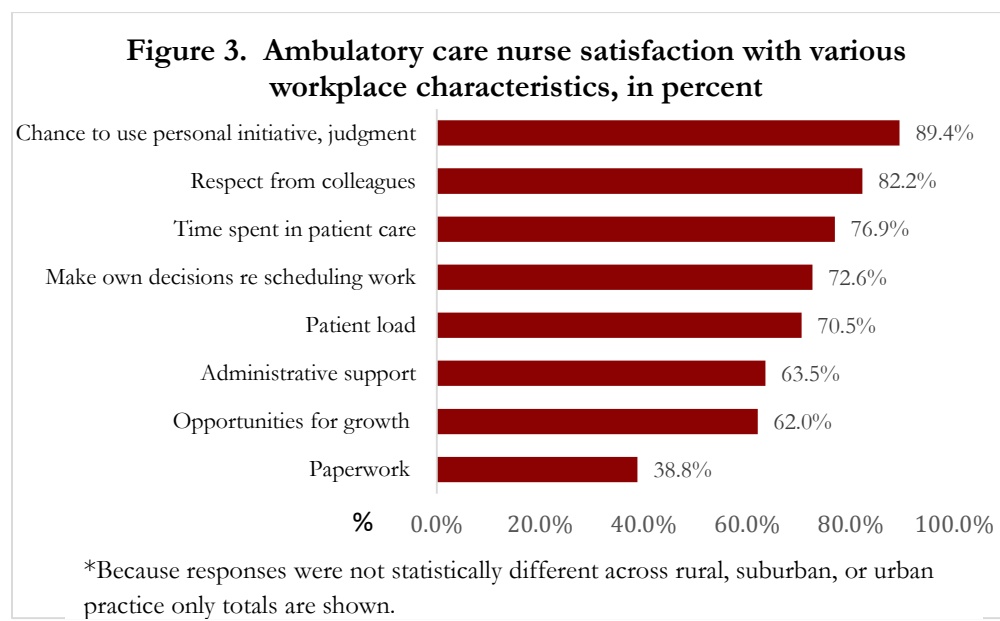
Both travel distance and time varied by practice location for ambulatory nurses (See Table A-6 in Appendix). Rural (15.2 miles) and urban (18.7 miles) ambulatory care nurses lived further from their practice locations than did suburban nurses (12.2 miles; $p=0.03$). Ambulatory nurses in urban areas had the longest mean travel time (33.0 minutes) followed by suburban (22.0 minutes) and rural nurses (20.1 minutes); ($p<0.001$. See Table A-6).

Perceived Barriers to Nursing Practice and Job

Among ambulatory care nurses, there were no differences in perceived barriers to practice by location of practice site (See Table A-7 for details). The most commonly reported barriers, those occurring weekly or more often, paralleled those reported by the entire population of nurses: more work than the respondent could do well (40.0%), organizational rules and procedures (27.9%), and lack of equipment or supplies (15.4%). Feeling unsafe at work and being hindered by an injury sustained at work were rarely reported as weekly or daily barriers (2.4% and 1.0%, respectively). As was the case among nurse respondents as a whole, respondents in a rural ambulatory care practice were more likely to report that inadequate training affected their ability to do their job monthly or more frequently (35.7%) than did nurses in suburban (13.9%) and urban (33%) practices ($p=0.009$).

Job Satisfaction Among Ambulatory Care Nurses

The majority of ambulatory care nurses reported they were “satisfied” or “very satisfied” with all aspects of their work environment that were studied except paperwork (See Figure 3; Details in Table A-8, Appendix). Satisfaction was highest with the degree to which ambulatory care nurses perceived they could use their own initiative or judgment in carrying out their work (89.4% satisfied) declining to 62.0% satisfaction for opportunities for growth. Only 38.8% of nurses reported being satisfied with the amount of paperwork they are required to complete. There were no differences in satisfaction with the indicated job characteristics based on practice location. Corresponding to generally high job satisfaction, the majority of nurses did not anticipate leaving their job during the next year (74.0% characterizing this as “not at all likely”). Similarly, an even greater percentage of responding nurses did not anticipate leaving nursing altogether during the next year (94.2%).



CONCLUSION

Regardless of the type of work they are engaged in (ambulatory care practice versus other settings) or the geography of the facility in which they practice (rural, suburban, or urban), nurses are in general satisfied with their work. A majority of responding nurses reported that it was “not at all likely” they would leave their current job within the next year (73.3%) and nearly all reported that it was “not at all likely” they would “leave nursing altogether” in the next year (94.2%). Ambulatory nurses responded similarly with 74.0% indicating that they were “not at all likely” to leave their current job within the next year and 94.2% indicating that it was “not at all likely” they would “leave nursing altogether” in the next year. Nurses perceive that their jobs offer them respect from colleagues (83.0% all nurses, 82.2% ambulatory practice nurses) and a chance to use their personal initiative (87.3% all nurses, 89.4% ambulatory practice nurses).

The most crucial finding of the present analysis pertains to rural nurses' perception of their preparation for their practice. Both among the total respondent group and among ambulatory care nurses alone, nurses working in rural settings were more likely to indicate that inadequate training was a barrier to their work performance. Correspondingly, rural nurses in the total group, although not among ambulatory care nurses alone, were less likely to report that their nursing education had equipped them for work. In assessing these findings, it should be noted that while rural nurses were more likely than urban or suburban nurses to have a diploma or associate degree, they were also more likely than urban nurses to have an MSN (See Tables 1 and 2). In addition, education alone was not associated with perception of educational preparation. When responses are tallied by the respondent's educational attainment, no significant differences are present (See Table 3, above). Thus, it would appear likely that unique characteristics of the rural practice environment are causing nurses to perceive educational or training gaps.

Table 3. Proportion of nurses reporting training and educational gaps, all respondents*

Nursing Education, highest attained:	Inadequate training a barrier: (%)	Nursing education equipped me for work ("no") (%)
Diploma	25.9%	3.7%
ADN	19.7%	8.2%
BSN	26.0%	7.5%
MSN	24.7%	6.3%
PhD/DNP	33.3%	8.3%
Other	26.5%	5.9%

*No differences were statistically significant. P = 0.98



This project was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U1CRH30539 Rural Health Research Grant Program Cooperative Agreement for \$573,000 with no nongovernmental sources. This information or content and conclusions are those of the authors and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

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APPENDIX

Methodology

Survey Development

We developed a web-based survey to assess barriers to nursing practice and satisfaction with daily workplace tasks and environment among nurses. Survey participants self-reported their practice location and their residence as rural, suburban, or urban; no definitions were provided in the survey. A series of Likert scale questions addressed the frequency of barriers to nursing practice including resource availability, training, bureaucracy, administrative, injury, safety, and other factors. Answer options ranged from less than once a month/never to multiple times a day. Additional Likert scale questions assessed nurses' satisfaction with their job tasks and work environment in which answer options ranged from extremely dissatisfied to extremely satisfied. Questions centered on patient interaction, paperwork, administrative support, autonomy, and opportunities for growth. Survey participants were also asked a series of open-ended questions regarding the most important nursing skills, work environment challenges, and patient care challenges. Additional questions asked participants' level of academic training, their perception of the adequacy of that training, and characteristics of their practice setting including setting type (e.g. ambulatory, hospital, etc.), ambulatory setting type (if applicable), occurrence and extent of overtime work, distance and travel time to work, and likelihood of seeking other employment or a non-nursing career. Demographic questions related to age, gender, race/ethnicity, marital status, number of children living at home, and self-reported health status.

Survey Dissemination

To obtain nurse emails, we purchased a database from Thomson Data, a firm that provides targeted mail and email lists (<https://www.thomsondata.com/>). We requested a data set with the name, job title, email address, company name, and phone number of 10,533 registered nurses (RNs) and advanced practice registered nurses (APRNs) working in ambulatory and primary care nationwide. The initial survey was sent in August 2018 with three follow-up surveys issued between September and November 2018. All surveys were sent using Qualtrics, a web-based survey tool. A total of 6,319 emails bounced back over the survey period leaving 4,214 valid addresses. A total of 435 nurses completed the survey, and an additional 88 RNs responded by reporting that they chose not to answer. Based on the valid addresses, the completion rate was 10.3% including persons who chose not to answer. The documented successful contact rate was 12.4%.

Survey Analysis

Continuous demographic and work variables (e.g. age, years of experience) across the rural-suburban-urban categories were assessed using Analysis of Variance (ANOVA); means and standard deviations were reported. Categorical demographic and work variables (e.g. race, education, and practice setting) were assessed using the chi-square test for independence. Frequencies and percentages are also reported. Chi-square analyses were also performed to assess barriers and facilitators to nursing practice and work satisfaction. After a preliminary analysis to assess the distribution of survey responses, Likert scale question options were collapsed for final analysis. For the question on practice type, options were collapsed into ambulatory, hospital, or other (nursing home, nursing education, long term/elder care, public health/community health, home health care, other). For the question regarding ambulatory practice setting, options were collapsed into physician's office (including Rural Health Clinics and Federally Qualified Health Centers), urgent care, and other (ambulatory surgery center, and other). For questions regarding frequency of practice barriers, answer options were collapsed into never/less than once a month, 1-2 a month, 1-2 a week, and at least daily. For questions regarding work satisfaction, options were categorized as dissatisfied, neutral, and satisfied. We also examined practice barrier and work satisfaction questions among only those nurses who worked in an ambulatory setting to assess differences by practice geography. All quantitative analyses were performed in SAS 9.4.

	All (n=435)	Rural (n=72)	Suburban (n=177)	Urban (n=186)	P-value for differences by location
	% Mean (SD)	% Mean (SD)	% Mean (SD)	% Mean (SD)	
Age, Years (SD)†	47.4 (12.5)	49.8 (12.4)	46.6 (11.7)	47.2 (13.3)	0.19
Age, categories					0.03
54 and younger	64.6	52.2	70.6	62.9	
55 & older	35.4	47.8	29.4	37.1	
Gender‡					0.18
Female	89.4	93.1	91.0	86.6	
Male	10.1	5.6	9.0	12.9	
Prefer Not to say	0.5	1.4	0	0.5	
Ethnicity‡					0.66
Hispanic	2.5	1.4	2.3	3.2	
Non-Hispanic	97.2	98.6	97.7	96.2	
Prefer Not to Say	0.2	0	0	0	
Race‡					0.50
White	89.2	94.4	89.8	86.6	
Black/African American	4.8	1.4	5.7	5.4	
Am. Indian/Alaska Native	0.5	0	0	1.1	
Asian	2.1	0	1.7	3.2	
Multi-Racial, Other	3.4	4.2	2.8	3.7	
Marital Status‡					0.25
Widowed	1.8	1.4	1.1	2.7	
Divorced	12.9	19.4	10.8	12.4	
Never Married	12.9	6.9	12.5	15.6	
Married/Domestic Partnership	72.4	72.2	75.6	69.4	
Children Living with You‡					0.001
0	52.5	54.9	41.2	62.4	
1	19.6	11.3	21.5	21.0	
2	17.5	21.1	25.4	8.6	
3+	10.4	12.7	11.9	8.1	
Location of Residence‡					<0.001
Rural	25.9	88.9	9.1	17.3	
Suburban	54.2	8.3	86.3	41.6	
Urban	19.9	2.8	4.6	41.1	
Overall Health Status‡					0.17
Fair*	5.3	8.3	1.7	7.5	
Good	26.4	25.0	26.6	26.9	
Very Good	43.7	43.1	43.5	44.1	
Excellent	24.6	23.6	28.3	21.5	

† Analysis of Variance; ‡ Chi-Square Analysis; * No respondent chose “poor” health.

	All (n=435)	Rural (n=72)	Suburban (n=177)	Urban (n=186)	
	% Mean (SD)	% Mean (SD)	% Mean (SD)	% Mean (SD)	P-value for differences by location
Setting†					0.20
Ambulatory	47.8	58.3	49.2	42.5	
Hospital	35.9	26.4	36.2	39.3	
Other	16.3	15.3	14.7	18.3	
Part of Healthcare System, Yes†	83.2	77.8	82.5	86.0	
Time in current position, years‡	7.9 (8.3)	9.1 (8.5)	7.7 (7.6)	7.6 (8.8)	0.42
Full-time position, Yes†	83.0	84.7	84.2	81.2	0.68
Normally work overtime, Yes†	40.2	52.8	37.9	37.6	0.06
Overtime hours per week, if yes‡	8.4 (8.5)	9.0 (9.8)	8.3 (9.8)	8.1 (6.2)	0.87
Miles from home to work ‡	16.7 (15.0)	18.7 (18.5)	15.1 (12.8)	7.4 (15.4)	0.16
Minutes from home to work ‡	26.8 (16.9)	22.4 (13.6)	25.1 (16.3)	30.2 (18.0)	0.0008
Likelihood of Leaving Job in the Next Year†					
Not at All Likely	73.3	76.4	75.0	70.4	0.21
Likely	18.7	20.8	18.2	18.3	
Very Likely	8.1	2.8	6.8	11.3	
Likelihood Leaving Nursing All Together in the Next Year†					
Not at All Likely	94.2	93.1	95.5	93.5	0.79
Likely	3.7	5.6	2.8	3.8	
Very Likely	2.1	1.4	1.7	2.7	

† Chi-Square Analysis; ‡ Analysis of Variance

Table A-3: Perceived Barriers to Nursing Practice by Rurality of Practice Site, All Respondents					
	All (n=435)	Rural (n=72)	Suburban (n=177)	Urban (n=186)	P-value for differences by location†
	%	%	%	%	
How often do you find it difficult or impossible to do your job because of organizational rules and procedures?					
Never/less than once a month	42.5	34.7	43.5	44.6	0.46
Monthly	28.8	29.1	31.6	25.8	
Weekly	19.5	22.2	18.1	19.9	
At Least Daily	9.2	13.9	6.8	9.7	
How often do you find it difficult or impossible to do your job because of lack of adequate equipment or supplies?					
Never/less than once a month	59.7	59.7	61.9	57.5	0.24
Monthly	21.9	18.1	23.3	22.0	
Weekly	11.8	11.1	11.9	11.8	
At Least Daily	6.7	11.1	2.8	8.6	
How often do you find it difficult or impossible to do your job because of inadequate training?					
Never/less than once a month	74.9	66.7	81.8	71.5	0.03
Monthly	17.1	27.8	10.2	19.4	
Weekly	5.3	4.2	5.7	5.4	
At Least Daily	2.8	1.4	2.3	3.8	
How often do you find it difficult or impossible to do your job because of injury sustained at work?					
Never/less than once a month	97.5	98.6	97.7	96.8	0.72
Monthly	0.9	0	1.1	1.1	
Weekly	0.9	0	1.1	1.1	
At Least Daily	0.7	1.4	0	1.1	
How often do you find it difficult or impossible to do your job because you have more work to do than you can do well?					
Never/less than once a month	32.4	25.0	33.9	33.9	0.48
Monthly	26.9	26.4	29.9	24.2	
Weekly	22.3	25.0	21.5	22.0	
At Least Daily	18.4	23.6	14.7	19.9	
How often do you find it difficult or impossible to do your job because you feel unsafe in your workplace?					
Never/less than once a month	88.5	91.7	91.5	84.4	0.20
Monthly	8.8	4.2	6.8	12.4	
Weekly	2.3	2.8	1.7	2.7	
At Least Daily	0.5	1.4	0	0.5	

† Chi-Square Analysis

Table A-4: Satisfaction with Job Tasks and Environment by Rurality of Practice Site, All Respondents					
	All (n=435)	Rural (n=72)	Suburban (n=177)	Urban (n=186)	P-value for differences by location†
	%	%	%	%	
How satisfied are you with the proportion of time you spend in patient care?					
Satisfied	74.2	70.8	75.0	74.7	0.95
Neither Satisfied nor dissatisfied	14.5	15.3	14.2	14.5	
Dissatisfied	11.3	13.9	10.8	10.8	
How satisfied are you with your patient load?					
Satisfied	67.4	70.8	69.7	64.0	0.77
Neither Satisfied nor dissatisfied	15.5	13.9	14.3	17.2	
Dissatisfied	17.1	15.3	16.0	18.8	
How satisfied are you with the amount of paperwork you're required to complete?					
Satisfied	35.9	25.4	33.1	42.5	0.004
Neither Satisfied nor dissatisfied	19.9	12.7	25.1	17.7	
Dissatisfied	44.2	62.0	41.7	39.8	
How satisfied are you with the respect you receive from colleagues? †					
Satisfied	83.0	84.7	81.4	83.9	0.30
Neither Satisfied nor dissatisfied	7.6	8.3	10.2	4.8	
Dissatisfied	9.4	6.9	8.5	11.3	
How satisfied are you with the amount of administrative support you receive?					
Satisfied	61.3	61.1	61.0	61.6	0.95
Neither Satisfied nor dissatisfied	13.6	11.1	14.7	13.5	
Dissatisfied	25.1	27.8	24.3	24.9	
How satisfied are you with the degree to which you can make your own decisions about how to schedule your work?					
Satisfied	76.2	70.8	80.7	74.1	0.31
Neither Satisfied nor dissatisfied	10.2	12.5	6.8	12.4	
Dissatisfied	13.6	16.7	12.5	13.5	
How satisfied are you with your chance to use personal initiative or judgment in carrying out the work?					
Satisfied	87.3	86.1	89.8	85.3	0.34
Neither Satisfied nor dissatisfied	6.7	4.2	5.7	8.7	
Dissatisfied	6.0	9.7	4.6	6.0	
How satisfied are you with your opportunities for growth?					
Satisfied	63.1	58.3	67.2	61.1	0.48
Neither Satisfied nor dissatisfied	19.4	19.4	16.4	22.2	
Dissatisfied	17.5	22.2	16.4	16.8	

† Chi-Square Analysis

	All (n=208)	Rural (n=42)	Suburban (n=87)	Urban (n=79)	
	% Mean (SD)	% Mean (SD)	% Mean (SD)	% Mean (SD)	P-value for differences by location
Age, Years (SD)†	48.0 (11.5)	49.4 (11.8)	47.3 (11.4)	48.1 (11.5)	0.67
Age, categories					
54 years and younger	64.9	58.5	65.5	67.1	0.76
55 years and older	35.1	41.5	34.5	32.9	
Gender‡					
Female	89.9	92.9	92.0	86.1	0.54
Male	9.6	7.1	8.1	12.7	
Prefer Not to say	0.5	0	0	0.5	
Ethnicity‡					
Non-Hispanic	90.4	97.6	88.5	88.6	0.21
Hispanic	9.6	2.4	11.5	11.4	
Marital Status‡					
Widowed	1.4	0	2.3	1.3	0.12
Divorced	12.5	23.8	6.9	12.7	
Never Married	10.6	4.8	10.3	13.9	
Married/Domestic Partnership	75.5	71.4	80.5	72.2	
Children Living with You‡					
0	53.6	53.7	46.0	62.0	0.07
1	15.5	12.2	12.6	20.3	
2	20.3	22.0	27.6	11.4	
3+	10.6	12.2	13.8	6.3	
Location of Residence‡					
Rural	28.2	92.9	7.0	16.7	<0.001
Suburban	52.9	4.8	88.4	39.7	
Urban	18.9	2.4	4.7	43.6	
Overall Health Status‡					
Fair*	4.3	4.8	0	8.9	0.16
Good	26.0	23.8	24.1	29.1	
Very Good	43.8	42.9	48.3	39.2	
Excellent	26.0	28.6	28.6	22.8	

† Analysis of Variance; ‡ Chi-Square Analysis

	All (n=208)	Rural (n=42)	Suburban (n=87)	Urban (n=79)	
	% Mean (SD)	% Mean (SD)	% Mean (SD)	% Mean (SD)	P-value for differences by location
Setting†					
Physician's Office	52.9	71.4	51.7	44.3	0.02
Urgent Care	15.4	16.7	16.1	13.9	
Other	31.7	11.9	32.2	41.8	
Part of Healthcare System, Yes†	79.8	78.6	78.2	82.3	0.78
Time in current position, years‡	7.3 (7.9)	8.2 (8.4)	7.2 (7.0)	6.9 (8.8)	0.67
Full-time position, Yes†	86.5	88.1	88.5	83.5	0.61
Normally work overtime, Yes†	44.2	54.8	42.5	40.5	0.30
Overtime hours per week, if yes‡	7.4 (7.8)	7.3 (5.1)	7.5 (10.6)	7.3 (5.6)	0.99
Miles from home to work ‡	15.7 (13.4)	15.2 (12.3)	12.2 (11.1)	18.7 (15.6)	0.03
Minutes from home to work ‡	25.7 (16.2)	20.1 (11.6)	22.0 (13.6)	33.0 (18.4)	<0.001
Likelihood of Leaving Job in the Next Year†					
Not at All Likely	74.0	81.0	75.9	68.4	0.12
Likely	17.3	16.7	18.4	16.5	
Very Likely	8.7	2.4	5.8	15.2	
Likelihood Leaving Nursing All Together in the Next Year†					
Not at All Likely	94.2	92.9	96.6	92.3	0.75
Likely	3.4	4.8	2.3	3.9	
Very Likely	2.4	2.4	1.2	3.9	

† Chi-Square Analysis; ‡ Analysis of Variance

Table A-7: Perceived Barriers to Nursing Practice by Practice Site, Ambulatory Care Nurses Only					
	All (n=208)	Rural (n=42)	Suburban (n=87)	Urban (n=79)	P-value for differences by location †
	%	%	%	%	
How often do you find it difficult or impossible to do your job because of organizational rules and procedures?					
Never/less than once a month	42.3	33.3	50.6	38.0	0.34
Monthly	29.8	28.6	27.6	32.9	
Weekly	18.8	26.2	12.6	21.5	
At Least Daily	9.1	11.9	9.2	7.6	
How often do you find it difficult or impossible to do your job because of lack of adequate equipment or supplies?					
Never/less than once a month	64.9	61.9	67.8	63.3	0.12
Monthly	19.7	16.7	24.1	16.5	
Weekly	10.6	11.9	8.1	12.7	
At Least Daily	4.8	9.5	0	7.6	
How often do you find it difficult or impossible to do your job because of inadequate training?					
Never/less than once a month	74.5	64.3	86.2	67.1	0.009
Monthly	18.8	33.3	6.9	24.1	
Weekly	4.3	0	5.8	5.1	
At Least Daily	2.4	2.4	1.2	3.8	
How often do you find it difficult or impossible to do your job because of injury sustained at work?					
Never/less than once a month	98.1	97.6	98.9	97.5	0.68
Monthly	1.0	0	1.2	1.3	
Weekly	0	0	0	0	
At Least Daily	1.0	2.4	0	1.3	
How often do you find it difficult or impossible to do your job because you have more work to do than you can do well?					
Never/less than once a month	34.6	23.8	40.2	34.2	0.48
Monthly	25.5	28.6	27.6	21.5	
Weekly	21.2	21.4	20.7	21.5	
At Least Daily	18.8	26.2	11.5	22.8	
How often do you find it difficult or impossible to do your job because you feel unsafe in your workplace?					
Never/less than once a month	92.3	95.2	93.0	89.9	0.74
Monthly	5.3	2.4	4.7	7.6	
Weekly	1.9	2.4	2.3	1.3	
At Least Daily	0.5	0	0	1.3	

† Chi-Square Analysis

Table A-8: Satisfaction with Job Tasks and Environment by Practice Site, Ambulatory Care Nurses Only					
	All (n=208)	Rural (n=42)	Suburban (n=87)	Urban (n=79)	P value for differences by location †
	%	%	%	%	
How satisfied are you with the proportion of time you spend in patient care?					
Satisfied	76.9	76.2	80.5	73.4	0.73
Neither Satisfied nor dissatisfied	12.0	9.5	10.3	15.2	
Dissatisfied	11.1	14.3	9.2	11.4	
How satisfied are you with your patient load?					
Satisfied	70.5	69.1	79.1	62.0	0.09
Neither Satisfied nor dissatisfied	15.0	14.3	8.1	22.8	
Dissatisfied	14.5	16.7	12.8	15.2	
How satisfied are you with the amount of paperwork you're required to complete?					
Satisfied	38.8	26.8	39.5	44.3	0.18
Neither Satisfied nor dissatisfied	16.5	14.6	20.9	12.7	
Dissatisfied	44.7	58.5	39.5	43.0	
How satisfied are you with the respect you receive from colleagues?					
Satisfied	82.2	88.1	81.6	79.8	0.06
Neither Satisfied nor dissatisfied	6.7	2.4	11.5	3.8	
Dissatisfied	11.1	9.5	6.9	16.5	
How satisfied are you with the amount of administrative support you receive?					
Satisfied	63.5	61.9	65.5	62.0	0.36
Neither Satisfied nor dissatisfied	11.1	9.5	14.9	7.6	
Dissatisfied	25.5	28.6	19.5	30.4	
How satisfied are you with the degree to which you can make your own decisions about how to schedule your work?					
Satisfied	72.6	66.7	77.0	70.9	0.48
Neither Satisfied nor dissatisfied	11.5	16.7	6.9	13.9	
Dissatisfied	15.9	16.7	16.1	15.2	
How satisfied are you with your chance to use personal initiative or judgment in carrying out the work?					
Satisfied	89.4	92.9	89.5	87.3	0.60
Neither Satisfied nor dissatisfied	4.4	0	4.7	6.3	
Dissatisfied	6.3	7.1	5.8	6.3	
How satisfied are you with your opportunities for growth?					
Satisfied	62.0	59.5	67.8	57.0	0.44
Neither Satisfied nor dissatisfied	18.3	14.3	17.2	21.5	
Dissatisfied	19.7	26.2	14.9	21.5	

† Chi-Square Analysis

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