

KEEPING HEALTH CARE BLOOMING: AN ASSESSMENT OF THE FRONTIER
NURSING WORKFORCE OF EASTERN MONTANA

DATA SUMMARY

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The purpose of this study was to describe characteristics of the frontier nursing workforce in eastern Montana, including personal demographics, educational preparation, professional characteristics, career projections, and level of job satisfaction. Current health care industry studies have raised concern about evidence of a growing nursing workforce shortage. The findings from this study provide foundational information to guide nursing recruitment and retention efforts among frontier nurses. The study employed a nonexperimental (descriptive) design. Using the mailing list supplied by the Montana State Board of Nursing (MSBON), surveys were sent to all RNs and LPNs residing in 15 eastern Montana counties in May 2002. Data analyses were conducted in a custom database in Microsoft Excel, Windows version ME. Descriptive statistics were employed to analyze the data. Limited financial support for this study was provided by the Montana Area Health Education Center, Montana Initiative for Nursing Transformation, and Sidney Health Center.

Summary of Findings

The findings of this study were based on responses to a single mailed survey. Survey responses were returned by 100 LPNs (51.28%) and 433 RNs (61.68%) for a combined response rate of 59.42% (533 nurses). Data from the surveys were analyzed in three categories: LPNs, RNs, and the combined nursing workforce.

When possible, comparisons to national data were made. The National Sample Survey of Registered Nurses (NSSRN) 2000, a survey of RNs conducted every four years, was used for comparison unless otherwise stated.

Personal Demographics

The typical nurse respondent was married (79%), Caucasian (95.45%), and female (96.8%). Only 2.3% of the workforce was male, however, 40% of male frontier RNs were in advanced practice roles such as nurse anesthetist. RNs were more likely to have dependent children at home (51.64%) than LPNs (41.41%). Mean age was 46.7 years (NSSRN mean age was 45.2 years); LPNs tended to be older than RNs. While the NSSRN found that 31.7% of nurses were under the age of 40 years, only 24.82% of frontier nurses were under the age of 40 years. Median household income reported was \$54,529, with RN household income averaging approximately \$10,000 higher than LPN income. The majority (59.7%) of nurses had lived in the same county for 20 or more years. Similarly, most (66.3%) nurses graduated from a Montana high school, with 47.9% graduating from high school in a community of fewer than 2500 people. This finding of frequent rural community of origin among frontier nurses is consistent with past rural nursing research findings. Personal choice (55.93%) and employment of a significant other (34.27%) were the most frequently cited reasons for choosing to live in a rural community. Fewer than 8% of nurses stated that a nursing employment opportunity was the primary reason why they worked in a frontier community.

Nursing Workforce Educational Characteristics

The mean year of graduation among the current workforce was 1981. The typical RN graduated from basic nursing preparation when she was 26.61 years, while LPNs

tended to be younger, with a mean age at graduation of 25.25 years. Among nurses who graduated after 1995 (n = 66), the mean age of entry into initial practice was somewhat older than the frontier workforce average age at entry into practice but younger than the national average age of entry into practice during the same timeframe. Most LPNs (83%) reported basic preparation at the certificate level. The majority of RNs (56.6%) of RNs held associate degrees, compared to 34.3% of RNs nationally. Only 26% of the nurses in the study held a baccalaureate degree as basic preparation, compared to 42.4% across Montana (MSBON, 2000). Few nurses (13.3%, n = 71) pursued additional degrees beyond basic preparation compared to 19% nationally (NSSRN 2000). Baccalaureate degree completion (52.1%) was the most commonly reported achievement. Among nurses who completed a master's degree, 83% attended a nursing program outside of Montana. Non-master's degree advanced practice certificates were reported by six nurses (8.5%). A significant proportion of nurses (32.3% of LPNs and 25% of RNs) indicated that they were either seeking or interested in seeking an additional degree in nursing. Distance-learning options for degree completion were preferred to site-based education by 93.2% of respondents. An additional 11.7% of nurses indicated an interest in pursuing a non-nursing degree.

Nursing Workforce Employment Characteristics

Previous health care experience was common among the nurses, as 52% of LPNs and 45.8% of RNs had been employed in a health care setting prior to basic nursing preparation. The majority (57.2%) of nurses reported careers of 15 years or longer, while 61.86% of LPNs had worked in nursing for 15 or more years. RNs reported slightly higher workforce participation (81.17%) than LPNs (79.17%). In comparison, the

NSSRN 2000 found that 81.7% of nurses were employed in nursing, and the MSBON 2000 report indicated that 84.9% of nurses were employed. Non-working RN respondents were significantly older (55.2 years, SD 10.9) than working RNs (44.46 years, SD 10.88). In comparison, national data found that the mean age of the non-working RN was 53.6 years and the RN employed in nursing was 43.3 years old. Working and non-working LPN respondents were more similar in age, 46.14 years (SD 12.53) and 48.67 years (SD 14.78), respectively. Younger LPNs were less likely to be employed in nursing. Half (50%) of non-working LPNs were younger than 50 years old, compared to 34% of RNs.

Among employed nurses, the typical LPN worked more hours per week (37.68 hours, SD 10.59) than her RN peer (35.74 hours, SD 9.68). LPNs working full time (35 or more hours per week) were older (47.4 years, SD 11.25) than RNs (44.23 years, SD 10.06). However, part time LPNs were younger (44.31 years) than part time RNs (45.33 years). Respondents reported an average shift length of 9.98 hours. While most (51.26%) nurses drove fewer than 5 miles to work, the mean commute was 18.15 miles.

The majority (51.2%) of nurses reported “personal choice” as the reason for their current number of hours of employment. The typical nurse had been employed in her current facility for 9.58 years (SD 8.17). Approximately a quarter of the RNs (23.57%) and LPNs (28.47%) had worked for the same employer for 15 years or more. RNs were more likely to work in acute care (39.2%) than LPNs (15.2%), however; significantly more LPNs were employed in long term care (50.6%) than RNs (21.9%). The primary position reported by the majority (57.6%) of nurses was “staff nurse,” followed by “charge nurse” (15.6%).

Scheduled work hours varied from the number of hours actually worked. About one quarter (26.9%) of nurses reported working an average of 12.3 hours fewer per month (SD 10.3) than scheduled, due to low patient census in their facility. Conversely, 65.5% of nurses reported that they worked overtime, citing an average of 16.78 hours of overtime per month (SD 15.55). The NSSRN respondents reported that they worked 50% fewer hours of overtime, at 11.6 hours of overtime per month. The average hourly wage for an LPN was \$13.36 per hour (SD \$2.52), while RNs earned \$19.46 (SD \$ 5.31). Most (86.7%) RNs reported that their facility did not offer a wage differential for associate degree RN preparation versus BSN preparation.

The majority (93.9%) of nurse employers offered health insurance benefits. Pension plans were available to 86.6% of nurses, with 76.4% of eligible nurses choosing to participate in the pension plan. Financial support for continuing education was offered to more RNs (80.8%) than LPNs (69.9%). RNs were more likely to have attended a health care conference outside of their home community within the past year (54.4%) than LPNs (24.4%) and to subscribe to a professional journal (61.8% and 40.3%, respectively). The majority of nurses (79.3%) reported that they had access to telemedicine (ITV) and Internet services.

RNs were more likely to have pursued a specialty certification (22%) than LPNs (2.5%). RNs reported higher rates of membership in a national nursing organization (18.3%) than LPNs (5.0%). Union/collective bargaining group membership was also more common among RNs (12.9%) than LPNs (3.7%). Nationally, 18% of nurses belong to unions or collective bargaining groups.

Nursing Workforce Career Projections

The nursing workforce was relatively stable at this time. Only 13.4% of nurses indicated that they planned to change employers within the next year, which compares favorably to the findings of NSSRN (18.6%) and the American Organization of Nursing Executives (AONE) 2002 survey of 16 % of nurses who planned to change employers. In addition, 35.5% of the nurses in the study planned to continue to work for their present employer for ten or more years, compared to 26% of respondents to the Nursing Executive Center (NEC) 2000 survey. Nurses considering a change of employment were most likely to pursue an alternate nursing position, however, among nurses in the study who planned to change employment, twice as many LPNs (11%) as RNs (6%) were planning to move to a non-nursing field of employment. Retention efforts focused on identifying nurses who plan to leave nursing would appear to be the most realistic place to bolster nursing workforce participation among current nurses.

The average projected age of retirement among respondents was 61.9 years (SD 6.6), with 40.10% of the workforce planning to retire between ages 65 and 70, which reflects the age of eligibility for full social security retirement benefits. However, an additional 39.85% of nurses planned to retire between ages 55 and 64 years. About one third of the RNs (32.05%) and LPNs (37.68%) planned to retire over the next 10 years (by 2012). While the majority (60.1%) of nurses planned to continue their current level of workforce participation until retirement, a significant proportion of both RNs (41.1%) and LPNs (33.8%) planned to reduce their hours of work prior to full retirement. The average age of planned work reduction was 52.9 years (SD 11.5).

Nursing Workforce Job Satisfaction Characteristics

Respondents were asked to rate their overall level of satisfaction with their current job in nursing (1 = Very satisfied, 4 = Very dissatisfied). The mean level of satisfaction reported by the nurses in the study (n = 428) was 1.75 (SD = 0.74), with the majority (89.02%) of respondents reporting that they were “very satisfied” or somewhat satisfied.” This reported level of satisfaction was higher than those reported in recent studies: NSSRN 2000, 69.5%; AONE 2002, 83%; and NEC 2000, 72%. In general, younger nurses reported lower levels of satisfaction (< 30 years, mean = 2.10) than older nurses (\geq 60 years, mean = 1.65). In contrast, the NSSRN reported that satisfaction decreased with age. This finding is consistent with past literature reports that rural nurses tend to experience congenial work settings and experience lower levels of burnout. LPNs of all age groups but one (< 30 years) ranked their satisfaction lower than their RN peers. Reported job satisfaction did not vary significantly between nurses employed full time and part time. However, the type of nursing position did affect satisfaction, with charge nurses (both RN and LPN) relating the lowest level of satisfaction (mean = 2.00, SD 0.84). RN educators reported the highest levels of satisfaction at 1.00 (SD 0.40). With the exception of RN charge nurses, LPNs had lower levels of satisfaction than RNs in all nursing positions.

When asked if they would recommend their facility to family and friends, the majority (89.9%) of nurses in this study responded affirmatively, compared to 40% of respondents to the American Nurses Association 2001 survey. In addition, 74.2% of the frontier nurses stated that they would recommend nursing as a career to someone considering a career in health care, a proportion that was also higher than the findings of

the AONE 2002 study (60%) and ANA 2001 study (46%). RN and LPN respondents were equally likely to recommend nursing as a career, although reported job satisfaction among LPNs was lower than among RNs. Among nurses recommending a career in nursing, the most common reasons given were “personal satisfaction” (48.2%) and job diversity/variety (28.0%). Reasons for not recommending a career in nursing included poor wages (24.4%) and high stress/responsibility levels (23.8%). Some responses reflected ambivalence, with comments such as “Yes, but only if they knew what they were getting into” and “I still believe that nursing is a wonderful profession—but a lot of changes need to be made.”

All nurses were asked to identify the three most important aspects of the work environment “that would keep you working, return you to work, or increase the number of hours you are currently working.” The most common response was salary and benefits (22.4%), followed by flexibility in scheduling (13.5%), personal growth and education (10.4%) and realistic patient workload (7.4%). These findings were consistent with the responses obtained in the NEC and AONE studies. LPN respondents were more likely to relate a need for work place improvement, while RNs desired a reduction in documentation and paperwork.

“Nurses have now told us what their world is really like, what can be done to improve it, and what they plan to do in their careers in the future. For both nursing and health care to succeed, we must listen to what they have said and act on it.” (C. Bradley, cited in Graham, 2002).

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Note: Additional information regarding the findings of this study is provided in the accompanying Power Point document at www.montana.edu/mint/iversen.html Questions may also be directed to the researcher, Patti Iversen, RN, at bpns@midrivers.com