Four Year Comparison of North Dakota Nurses: Results and Implications

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# TABLE OF CONTENTS

Executive Summary .................................................................................................................................. 3

**North Dakota Nursing Needs Study Introduction** ......................................................................... 5

Survey Results ..................................................................................................................................... 6

- Demographics ................................................................................................................................. 7
- Income ............................................................................................................................................ 8
- Pursing a Faculty Role ...................................................................................................................... 13
- Part-time Employment ....................................................................................................................... 16
- Primary Employment Setting ........................................................................................................... 17
- Secondary Employment Setting ....................................................................................................... 23
- Direct Patient Care .......................................................................................................................... 24
- Retirement Plans .............................................................................................................................. 24
- Workplace Environment .................................................................................................................. 32

Survey Conclusions and Policy Recommendations ............................................................................... 45

**Licensed Nurse Survey Method** .................................................................................................. 47

References ........................................................................................................................................... 48
EXECUTIVE SUMMARY

Background

The “Projected Supply, Demand and Shortages of Registered Nurses 2000-2020” (U.S. Department of Health and Human Services, 2002) report cited a 6 percent nationwide shortage of registered nurses nationwide in 2000 with this shortage increasing to 29 percent by 2020. North Dakota is currently experiencing a shortage of registered nurses (RNs) and licensed practical nurses (LPNs) with an increased shortage projected through the next 10 years (Moulton & Wakefield, 2003). Potential reasons for this shortage include a nationwide decline in the number of nursing graduates, aging of the nursing workforce, decline in relative salaries, an aging population, health care financing issues, and an uneven distribution of demand according to employment setting.

The Nursing Needs Study was recommended by the North Dakota Century Code Nurse Practices Act 43-12.1-08.2 in which the North Dakota Board of Nursing was directed to address issues of supply and demand including recruitment, retention and utilization of nurses. The North Dakota Board of Nursing then contracted with the Center for Rural Health at the University of North Dakota (UND) School of Medicine and Health Sciences to conduct the Nursing Needs Study.

Results

In this report, results from the current licensed nurse survey are presented. This data was collected from 1,457 of 4,913 nurses (30% response rate) during license renewal from October-December 2005. These results are also compared with licensed nurse survey results from 2003, 2004, and 2005 in order to present the beginning of a trend analysis.

- Demographics

The average age for RNs in North Dakota was 44 years which is comparable to the National Sample Survey (Spratley, Johnson, Sochalski, Fritz, & Spencer, 2000) average RN age of 45 years. Average LPN age of 42 years was also comparable to the national average of 43 years (Seago, Spetz, Chapman, Dyer, & Grumbach, 2004). The average age for advanced practice nurses (APNs) in North Dakota was 46 years. Ninety-five percent (95%) of North Dakota’s nurses were female, which is equivalent to the national average. In North Dakota, 98 percent of nurses were Caucasian, not of Hispanic origin. The largest minority group, American Indian/Alaska Native, comprised nearly two percent of nurses in North Dakota.

- Income

RNs in rural settings reported an income 12 percent lower than that reported by RNs in urban settings. Surprisingly, LPNs in rural settings reported an income six percent higher than that reported by LPNs in urban settings. Rural APNs reported an income 16 percent lower than APNs working in urban settings.
• **Pursuing a Faculty Role**

  In 2006, 17 percent of nurses planned to pursue a nursing faculty role sometime in the future, slightly less than the 20 percent reported in 2005. Barriers included a disinterest in a faculty position, disinterest in meeting educational requirements, and better pay outside of educational settings.

• **Part-Time Employment**

  About one-quarter of nurses worked part-time due to taking care of home and family or enrollment in college. This is approximately equal to the figure reported in last year’s report, but lower than the 2003 figure, where one-third of nurses reported working part-time.

• **Employment Setting**

  Regarding primary work setting, most LPNs and APNs worked in ambulatory care or hospitals, and most RNs worked in hospitals. One-quarter of RNs, one-fifth of LPNs, and one-third of APNs were employed in two nursing jobs.

• **Retirement Plans**

  About one-quarter of nurses planned to retire within the next 10 years. Nurses indicated that increased pay, flexible scheduling, and retention of benefits while working part-time would encourage them to work for more years.

• **Workplace Environment**

  Almost one-half of nurses indicated that they had an increase in patient loads over the past two years. Nurses also noted increased floating and voluntary overtime. Nurses were most satisfied with the direct care aspects of their work and least satisfied with their pay.

**Summary**

Four years of licensed nurse survey data were examined to assess shifting and emerging trends in a variety of areas, including income levels, anticipated years remaining in one’s career, and work environment factors. Recommended avenues of action and workforce policy implications are presented and discussed in this report.
Health personnel shortages can negatively impact health care quality, through reduced health care access, increased stress on providers, and the use of under-qualified personnel. Also, shortages can contribute to higher costs by raising compensation levels to attract and retain personnel and by increasing the use of overtime pay and expensive temporary personnel. Workforce shortages, while a problem for the entire health care system, are likely to be most severe for rural/frontier regions and medically needy population groups such as the elderly. North Dakota has 41 designated medically underserved areas, and 81 percent of North Dakota’s 53 counties are designated as partial or whole county health professional shortage areas. North Dakota also has the highest proportion of residents aged 85 and older, the age group with the greatest need for healthcare services. In North Dakota, this cohort is predicted to double in size by 2020.

Nurses are an integral part of the health care system providing nursing services to patients requiring assistance in recovering or maintaining their physical and/or mental health (North Dakota Healthcare Association, 2002). In the United States, nurses comprise the largest group of health care providers. They practice in settings ranging from public health to long-term care. The ability to provide accessible, high quality care depends on the availability of a nursing workforce with the requisite skills and knowledge. Over the past few years, research studies have identified clear relationships between nurse staffing and patient outcomes. For example, lower nurse staffing in hospitals has been linked to longer hospital stays for patients, as well as a number of complications such as pneumonia (e.g., Aiken, Clarke, Sloane, Sochalski, & Silber, 2002). Directly challenging the health care system’s ability to provide quality patient care is a growing national and international disparity in nursing workforce supply and demand. North Dakota is not immune to this problem.

The Nursing Needs Study was recommended, in 2001, by the North Dakota State Legislature (NDCC Nurse Practices Act 43-12.1-08.2) to address potential shortages in nursing supply. Specifically, the North Dakota Board of Nursing was directed to address issues of supply and demand for nurses, including issues of recruitment, retention, and utilization of nurses. To respond to this request, the North Dakota Board of Nursing contracted with the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences.

This study, initiated in 2002, was designed to obtain an accurate and complete picture of nurses in rural and urban areas of North Dakota, compare North Dakota’s trends to national trends, and inform institutional and public policy. The study, currently in its fourth year, is approved to continue until 2012 by the Board of Nursing. This study will continue to provide valuable information about the nursing workforce through a 10-year period of time.

In this report, results from the current licensed nurse survey are presented. These data were collected during state license renewal from October-December 2005. These results are also compared with licensed nurse survey results from 2003, 2004, and 2005 to establish the beginning of a trend analysis.
SURVEY RESULTS

This survey was designed to examine issues of recruitment, retention, and supply of licensed nurses. The survey was completed online, as part of the North Dakota Board of Nursing bi-annual license renewal process. The North Dakota Board of Nursing provided a link from their license renewal website that directed nurses to visit the UND Center for Rural Health website where they could complete the survey. From a total of 4,913 nurses that renewed their license online, 1,457 submitted completed surveys for a response rate of 30 percent. Licensed practical nurses (LPNs) comprised 310 of the respondents, while 1,070 registered nurses (RNs) responded. Additionally, 77 advanced practice nurses (APNs) responded to the survey.

Home zip codes were collected for each individual, and the sample represented nurses from urban, semi-rural, and rural areas of North Dakota. A total of 1,213 nurses reported the information necessary to determine the rurality of their geographic area. Of those, 652 were from urban areas, 480 were from semi-rural areas, and 81 were from rural areas (see Table 1). (Note: Rurality coding is described in the methods section.)

Table 1: Number of participants by Urban-Rural Status

<table>
<thead>
<tr>
<th>Nurse Level</th>
<th>Urban</th>
<th>Semi-Rural</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPN</td>
<td>118</td>
<td>129</td>
<td>21</td>
<td>268</td>
</tr>
<tr>
<td>RN</td>
<td>501</td>
<td>331</td>
<td>54</td>
<td>886</td>
</tr>
<tr>
<td>APN</td>
<td>33</td>
<td>20</td>
<td>6</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>652</td>
<td>480</td>
<td>81</td>
<td>1213</td>
</tr>
</tbody>
</table>
Demographics

- The average age for RNs in North Dakota was 44 years which is comparable to the National Sample Survey (Spratley et al., 2000) average RN age of 45 years. Average LPN age of 42 years was also comparable to the national average of 43 years (Seago et al., 2004). The average age for APNs in North Dakota was 46 years. In general, nurses in urban areas were younger than nurses in semi-rural and rural areas (see Table 2). The American Nurses Association Staffing Survey (2001) found 43 percent of RNs were between 41 and 50 years old.

Table 2: Mean Age by Urban-Rural Status and License

<table>
<thead>
<tr>
<th>Nurse Level &amp; Rurality</th>
<th>Urban</th>
<th>Semi-Rural</th>
<th>Rural</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPN</td>
<td>41</td>
<td>42</td>
<td>49</td>
<td>42</td>
</tr>
<tr>
<td>RN</td>
<td>42</td>
<td>45</td>
<td>46</td>
<td>44</td>
</tr>
<tr>
<td>APN</td>
<td>43</td>
<td>48</td>
<td>40</td>
<td>46</td>
</tr>
<tr>
<td>Overall</td>
<td>42</td>
<td>44</td>
<td>46</td>
<td>43</td>
</tr>
</tbody>
</table>
The average age for nurses in North Dakota has decreased slightly from 2003 to 2006 (see Figure 1).

**Figure 1: Overall Mean Age Four-Year Trend**

![Figure 1: Overall Mean Age Four-Year Trend](image)

Note: Previous years’ data in Figure 1 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003); Bennett, Moulton, and Wakefield (2004); and King, Moulton, and Wakefield (2005).

- Ninety-four percent (94%) of nurses were female and six percent (6%) were male. The number of male nurses was slightly higher than the national average of five percent (5%) (Spratley et al., 2000).

- Ninety-six percent (96%) of nurses were Caucasian (not of Hispanic origin), and two percent (2%) were American Indian/Alaskan Native. Comparatively, the National Sample Survey of Registered Nurses (Spratley et al., 2000) found that four percent were American Indian or Alaskan Native.

**Income**

- LPNs working full-time and part-time most often reported an annual nursing income of $20,001 to $30,000 (see Figure 2).

**Figure 2: LPN Gross Annual Income from Nursing Position**

![Figure 2: LPN Gross Annual Income from Nursing Position](image)
• Since 2003, the most frequently-reported income of LPNs has been $20,001 to $30,000, and the percentage of LPNs reporting this salary has increased by approximately three percent each year. The percentage of LPNs reporting higher nursing incomes (i.e., more than $40,000) has generally decreased each year. (Note: Trend analyses include both full-time and part-time nurses.)

Figure 3: Four Year Trend: LPN Gross Income from Nursing Position

Note: Previous years’ data in Figure 3 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003); Bennett, Moulton, and Wakefield (2004); and King, Moulton, and Wakefield (2005).
- RNs most often reported an income of $30,001 to $40,000 (see Figure 4).

**Figure 4: RN Gross Income from Nursing Position**

- For the first time since 2003, the percentage of RNs with an income of $30,001-$40,000 has decreased. Additionally, the percentage of RNs with incomes greater than the average has increased or remained stable (see Figure 5). (Note: Trend analyses include both full-time and part-time nurses.)

**Figure 5: Four-Year Trend: RN Gross Income from Nursing Position**

Note: Previous years’ data in Figure 5 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003); Bennett, Moulton, and Wakefield (2004); and King, Moulton, and Wakefield (2005).
• APNs most often reported an income of $60,000 to $70,000 followed by between $50,000 and $60,000 (see Figure 6).

![Figure 6: APN Gross Income from Nursing Position](image)

• In 2006, RNs in rural settings reported an income 12 percent lower than that reported by RNs in urban settings, with an overall mean of $40,188. According to the most recent U.S. Department of Labor statistics (2001), the national average income for RNs is $48,240 and LPNs is $31,490. Surprisingly, LPNs in rural settings reported an income six percent higher than that reported by LPNs in urban settings, with an overall mean of $23,828. Rural APNs reported an income 16 percent lower than APNs working in urban settings, with an overall mean of $79,149 (see Table 3).

(Note: Average income includes both full-time and part-time nurses.)

### Table 3: Average Income by Urban-Rural Status and License

<table>
<thead>
<tr>
<th>Nurse Level &amp; Rurality</th>
<th>Urban</th>
<th>Semi-Rural</th>
<th>Rural</th>
<th>Overall Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPN</td>
<td>$24,742 (n=104)</td>
<td>$22,490 (n=108)</td>
<td>$26,300 (n=20)</td>
<td>$23,828</td>
</tr>
<tr>
<td>RN</td>
<td>$42,057 (n=429)</td>
<td>$37,974 (n=294)</td>
<td>$37,039 (n=48)</td>
<td>$40,188</td>
</tr>
<tr>
<td>APN</td>
<td>$80,987 (n=31)</td>
<td>$80,000 (n=14)</td>
<td>$67,667 (n=6)</td>
<td>$79,149</td>
</tr>
<tr>
<td>Overall Mean</td>
<td>$40,941</td>
<td>$35,290</td>
<td>$36,620</td>
<td>$38,409</td>
</tr>
</tbody>
</table>
In the urban areas of the state, LPNs have reported slightly larger incomes than last year. In semi-rural areas, the average income for LPNs has increased slightly from last year. In rural areas, average incomes for LPNs have increased since 2004, with the largest increase occurring in the past year (see Figure 7). With this increase, the average income of LPNs in rural areas has surpassed that of LPNs in urban and semi-rural areas. (Note: Trend analyses include both full-time and part-time nurses.)

Figure 7: Three-Year Trend: Average LPN Income by Rurality

Note: Previous years’ data in Figure 7 from Bennett, Moulton, and Wakefield (2004) and King, Moulton, and Wakefield (2005).
• Since 2004, the income for RNs working in rural areas has increased slightly but steadily and continues to approach that of RNs working in other areas. The income for RNs working in urban areas had decreased dramatically from 2004 to 2005, but increased slightly in 2006. (Note: Trend analyses include both full-time and part-time nurses.)

**Figure 8: Three-Year Trend: Average RN Income by Rurality**

Note: Previous years’ data in Figure 8 from Bennett, Moulton, and Wakefield (2004) and King, Moulton, and Wakefield (2005).

**Pursuing a Faculty Role**

• Fourteen percent (14%) of LPNs and 17 percent of RNs indicated they would be interested in pursuing a nursing faculty role sometime in the future. Of APNs, 30 percent responded that they would be interested in becoming nursing faculty. Of those who were interested in pursuing a faculty role, six percent desired to do so within the next year, while 48 percent expected to do so in 1-5 years. The remaining planned to pursue a faculty role in 6-10 years (32%) or more than 10 years (14%).
• Figure 9 shows the three year trends for percentage of nurses interested in pursuing a faculty role in the future. Note: APNs and RNs are combined into one group.

**Figure 9: Three-Year Trend: Percentage Willing to Pursue a Faculty Role**

Note: Previous years’ data in Figure 9 from Bennett, Moulton, and Wakefield (2004) and King, Moulton, and Wakefield (2005).

• Nurses indicated the major barriers that prevented them from considering teaching included disinterest in a faculty position (59%), disinterest in obtaining the required education (24%), and better pay outside of educational settings (14%) (see Figure 10).

**Figure 10: Barriers Preventing Consideration of a Faculty Position in Nursing**
The major barriers that prevented nurses from considering teaching in nursing have not changed markedly from 2004 to 2006 (see Figure 11). Comparisons indicated that faculty pay was less of a barrier than it had been in the past, while a personal lack of interest was increasing in frequency.

**Figure 11: Three-Year Trend: Barriers Preventing Consideration of a Faculty Position in Nursing**

Note: Previous years’ data in Figure 11 from Bennett, Moulton, and Wakefield (2004) and King, Moulton, and Wakefield (2005).
Part-Time Employment

- Nurses working part-time (23 percent of surveyed nurses) most frequently indicated a preference for part-time work or home and family responsibilities as their reason for working part-time (see Figure 12).

**Figure 12: Most Frequently Cited Reasons for Working Part-Time**

Comparatively, the number of nurses working part-time decreased between 2003 (33%) and 2004 (24%) and has remained relatively stable through 2005 (25%) and 2006 (23%) (see Figure 13).

**Figure 13: Four-Year Trend: Number of Nurses Working Part-Time**

Note: Previous years’ data in Figure 13 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003), Bennett, Moulton, and Wakefield (2004), and King, Moulton, and Wakefield (2005).
Primary Employment Setting

- Ninety-six percent (96%) of LPNs, 96 percent of RNs, and 99 percent of APNs were currently employed in nursing.

- Most LPNs worked in ambulatory care (31%), hospital (28%), and long-term care (27%) settings (see Figure 14).

**Figure 14: LPN Primary Employment Setting**
• Most North Dakota RNs worked in hospital (54%), ambulatory care (12%), and long-term care settings (12%) (see Figure 15). The American Nurses Association Staffing Survey (2001) found that most RNs (70%) worked in hospitals. The National Sample Survey of Registered Nurses (Spratley et al., 2000) also found that the greatest percentage of RNs (59%) worked in hospitals.

**Figure 15: RN Primary Employment Setting**

![Pie chart showing RN primary employment settings. Hospital: 54%, Long Term Care: 12%, Ambulatory: 12%, Nursing Education: 4%, Home Health: 4%, Public Health: 6%, Other: 8%.]

• Most APNs worked in hospital (46%), ambulatory (37%), and public health (8%) settings (see Figure 16).

**Figure 16: APN Primary Employment Setting**

![Pie chart showing APN primary employment settings. Hospital: 46%, Ambulatory: 37%, Nursing Education: 4%, Home Health: 2.5%, Long Term Care: 2.5%, Public Health: 8%, Other: 8%.]
Most LPNs (31%), RNs (31%), and APNs (37%) have worked as nurses in their primary work setting between one and five years (see Figure 17).

Figure 17: Number of Years Worked in Primary Nursing Setting
• The percentage of RNs who reported working as nurses for one to five years has remained steady over the past few years. However, the percentage of “new” LPNs has increased each year.

**Figure 18: Three-Year Trend: Percentage of Nurses w/ 1-5 Years Worked**

Note: Previous years’ data in Figure 18 from Bennett, Moulton, and Wakefield (2004) and King, Moulton, and Wakefield (2005).

• Across all levels, most nurses reported working between 36-40 hours per week in their primary employment setting (see Figure 19).

**Figure 19: Number of Hours Worked in Primary Setting**
• The percentage of nurses working full time (36 or more hours per week) has increased every year since 2004 (see Figure 20). In 2004, the majority of nurses worked between 16 and 20 hours per week. In both 2005 and 2006, the majority worked between 36 and 40 hours per week.

**Figure 20: Three-Year Trend: Percentage of Nurses Working 36-40 Hours per Week**

![Figure 20: Three-Year Trend: Percentage of Nurses Working 36-40 Hours per Week](image)

Note: Previous years’ data in Figure 20 from Bennett, Moulton, and Wakefield (2004) and King, Moulton, and Wakefield (2005).

• Nurses were asked to report which shift they typically worked in their primary employment setting. Sixty-three percent (63%) of LPNs, 66 percent of RNs, and 84 percent of APNs worked day shifts (see Figure 21).

**Figure 21: Shifts Worked in Primary Employment Setting**

![Figure 21: Shifts Worked in Primary Employment Setting](image)
Over the last three years, the majority of nurses have worked days. The percentage of RNs working the day shift has steadily increased by two percent each year (see Figure 22).

Figure 22: Three-Year Trend: Percentage of Nurses who Worked Day Shift

Note: Previous years’ data in Figure 22 from Bennett, Moulton, and Wakefield (2004) and King, Moulton, and Wakefield (2005).
Secondary Employment Setting

- Twenty-seven percent (27%) of RNs, 21 percent of LPNs, and 34 percent of APNs were employed in two nursing jobs. Secondary employment was higher than the national average (American Nurses Association Staffing Survey, 2001) where six percent of RNs had a second job (no national comparison data is available for LPNs or APNs). Clearly, as compared to national rates, many more nurses in North Dakota had a second job. This trend may be driven by lower incomes paid in North Dakota.

- The percentage of RNs employed in a second nursing job had decreased from 2003 to 2005, while the percentage of LPNs employed in second jobs had increased. The 2006 data, however, reversed the trend (see Figure 23). Note: APNs were not included in the four-year trend graph because separate data was not collected for APNs in previous years.

Figure 23: Four-Year Trend: Percentage of Nurses with a Secondary Nursing Job

Note: Previous years’ data in Figure 23 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003), Bennett, Moulton, and Wakefield (2004), and King, Moulton, and Wakefield (2005).
Direct Patient Care

- Seventy-three percent (73%) of nurses provided direct care in 2006 compared to notably fewer in previous years (see Figure 24).

**Figure 24: Four-Year Trend: Percentage of Nurses who Provide Direct Care**

![Graph showing the percentage of nurses providing direct care from 2003 to 2006.](image)

Note: Previous years’ data in Figure 24 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003); Bennett, Moulton, and Wakefield (2004); and King, Moulton, and Wakefield (2005).

Retirement Plans

- Nurses were asked to estimate the age at which they intend to retire from nursing and the age at which they plan to stop providing direct care (see Table 4). The planned average retirement age was 62 years. Most nurses planned to end direct care approximately two to five years prior to retirement. Overall, nurses in urban areas planned to stop providing direct care earlier than nurses in semi-rural and rural areas.

**Table 4: Average Age at Which Nurses Plan to Stop Providing Direct Care and Retire from Nursing**

<table>
<thead>
<tr>
<th>Nurse Level</th>
<th>Urban Care</th>
<th>Urban Retire</th>
<th>Semi-Rural Care</th>
<th>Semi-Rural Retire</th>
<th>Rural Care</th>
<th>Rural Retire</th>
<th>Overall Care</th>
<th>Overall Retire</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPN</td>
<td>60</td>
<td>63</td>
<td>62</td>
<td>63</td>
<td>60</td>
<td>63</td>
<td>61</td>
<td>63</td>
</tr>
<tr>
<td>RN</td>
<td>56</td>
<td>62</td>
<td>59</td>
<td>62</td>
<td>56</td>
<td>62</td>
<td>57</td>
<td>62</td>
</tr>
<tr>
<td>APN</td>
<td>60</td>
<td>63</td>
<td>62</td>
<td>63</td>
<td>60</td>
<td>63</td>
<td>60</td>
<td>63</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td><strong>57</strong></td>
<td><strong>62</strong></td>
<td><strong>60</strong></td>
<td><strong>62</strong></td>
<td><strong>60</strong></td>
<td><strong>63</strong></td>
<td><strong>58</strong></td>
<td><strong>62</strong></td>
</tr>
</tbody>
</table>
• The age at which LPNs planned to stop providing direct care has decreased over time in rural areas, while remaining relatively constant in urban and semi-rural areas. Though down from 2003 in all rurality categories, the age at which LPNs planned to retire has increased or remained stable since last year (see Figure 25).

**Figure 25: Four-Year Trend: Average Age at Which LPNs Plan to Stop Providing Direct Care and Retire**

Note: Previous years’ data in Figure 25 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003), Bennett, Moulton, and Wakefield (2004), and King, Moulton, and Wakefield (2005).
• By 2017, 25 percent of LPNs are planning to have retired. Fifty percent (50%) planned to retire by 2026 and 75 percent are planning to enter retirement by 2035 (see Figure 26).

Figure 26: Cumulative Percentage of LPNs Planning to Retire by a Given Year
The age at which RNs planned to discontinue providing direct care has decreased for every rurality area since 2003 with the largest change in the rural areas. The desired age of retirement has also decreased since 2003, though less dramatically (see Figure 27).

Figure 27: Four-Year Trend: Average Age at Which RNs Plan to Stop Providing Direct Care and Retire from Nursing

Note: Previous years’ data in figure 27 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003), Bennett, Moulton, and Wakefield (2004), and King, Moulton, and Wakefield (2005).
• More than 25 percent of RNs planned to have retired by 2016, while 60 percent estimated their retirement by 2026 (see Figure 28).

Figure 28: Cumulative Percentage of RNs Planning to Retire by a Given Year

• Thirty percent (30%) of APNs planned to retire by 2016 (see Figure 29). This is a considerable loss in a short period of time.

Figure 29: Cumulative Percentage of APNs Planning to Retire by a Given Year

Note: 2009, 2012, 2017, 2023, 2032, 2034, and 2036 data points are the medians of the year before and year after.
Nurses were asked about workplace change(s) that might encourage them to work longer in the profession (see figure 30). Most LPNs (60%) and RNs (55%) indicated increased pay. Many nurses also indicated flexible scheduling and retention of benefits during part-time work. Surprisingly, none of the nurses surveyed indicated the ability to work part-time as a change that would encourage them to work longer.

Figure 30: Workplace Changes That Would Delay Retirement
• More LPNs indicated increased pay in 2006 compared to yearly data since 2003. Percentage of responses for all other changes decreased or remained relatively stable. In a dramatic change from previous years, no LPNs indicated the ability to work part-time as a potential encouragement to delaying retirement (see Figure 31).

**Figure 31: Four-Year Trend: LPN Workplace Changes That Would Delay Retirement**

Note: Previous years’ data in figure 31 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003), Bennett, Moulton, and Wakefield (2004), and King, Moulton, and Wakefield (2005).
Overall, fewer RNs than in previous years indicated changes would delay their expected retirement. Flexible scheduling increased only slightly, while other possible changes remained stable or decreased (see Figure 32).

**Figure 32: Four-Year Trend: RN Workplace Changes that Would Delay Retirement**

![Figure 32: Four-Year Trend: RN Workplace Changes that Would Delay Retirement](chart)

Note: Previous years’ data in Figure 32 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003), Bennett, Moulton, and Wakefield (2004), and King, Moulton, and Wakefield (2005).
Workplace Environment

- Nurses were asked about change(s) in their primary employment setting within the past two years (see figure 33). LPNs (51%), RNs (51%), and APNs (33%) all indicated larger patient care loads over the past two years along with using voluntary overtime to cover staffing needs, increased floating and non-patient care duties.

The National Survey of Registered Nurses (Nurseweek & AONE, 2002) found 68 percent of RNs had a greater number of patients, 66 percent had observed increases in overtime or double-shifts and 57 percent had observed increases in the use of agency, internal float pool, or traveling nurses. Also, 56 percent of RNs rated opportunities to influence decisions about workplace organization as fair or poor. The American Nurses Association Staffing Survey (2001) found that more than half of RNs have experienced increased patient care load, 40 percent reported increased use of “floating” between departments, and 30 percent noted mandatory overtime in their work setting in the past two years. Of the sample of North Dakota nurses, 75 percent of RNs responded that the quality of nursing care has declined in the last two years. Over 40 percent of RNs have also worked overtime on a voluntary basis.

Figure 33: Workplace Changes Observed in the Last Two Years
Though much larger than 2003, the percentage of LPNs reporting an increase in patient care load has remained relatively stable the past three years. Since last year, LPNs reported decreased incidences of all other changes except increased use of LPNs and non-patient care duties, which increased only very slightly (see Figure 34).

**Figure 34: Four-Year Trend: Workplace Changes Observed by LPNs**

Note: Previous years’ data in Figure 34 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003); Bennett, Moulton, and Wakefield (2004); and King, Moulton, and Wakefield (2005).
Until 2006, the percentage of RNs reporting larger patient care loads had steadily declined each year since 2003. This year, however, RNs reported a marked increase in larger patient loads. RNs reported slightly more mandatory overtime and increased floating in 2006, while reports of other changes remained relatively stable over the past four years (see Figure 35).

**Figure 35: Four-Year Trend: Workplace Changes Observed by RNs**

Note: Previous years’ data in Figure 35 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003); Bennett, Moulton, and Wakefield (2004); and King, Moulton, and Wakefield (2005).
Nurses were also asked to evaluate staffing at their primary setting on a scale from very inadequate to very adequate (see Figure 36). Most LPNs (46.5%), RNs (46%), and APNs (56%) rated staffing as adequate.

**Figure 36: Staffing Adequacy in the Primary Work Setting**

In 2006, the percentage of LPNs rating the staffing as adequate was the greatest since 2003, while the percentage of LPNs who feel staffing is somewhat inadequate or very inadequate was the smallest since 2003 (see Figure 37).

**Figure 37: Four-Year Trend: LPN Staffing Adequacy in the Primary Work Setting**

Note: Previous years’ data in Figure 37 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003); Bennett, Moulton, and Wakefield (2004); and King, Moulton, and Wakefield (2005).
The percentage of RNs who rated their staffing as very inadequate was the highest since 2003, while the percentage of RNs rating their staffing very adequate was the lowest since 2003. Since last year, the percentage reporting adequate staffing has remained stable, and the percentage of RNs who feel staffing is somewhat inadequate has increased (see Figure 38).

**Figure 38: Three-Year Trend: RN Staffing Adequacy in the Primary Work Setting**

Note: Previous years’ data in Figure 38 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003); Bennett, Moulton, and Wakefield (2004); and King, Moulton, and Wakefield (2005).
Nurses were asked to rate their overall level of satisfaction with their job this year as compared to last year on a five-point scale from much more dissatisfied to much more satisfied (see figure 39). Most LPNs (48%), RNs (49%), and APNs (44%) reported feeling neither more satisfied nor more dissatisfied than last year. The National Sample Survey of Registered Nurses (Spratley et al., 2000) found that 70 percent of nurses reported being satisfied in their current position.

**Figure 39: Overall Job Satisfaction This Year as Compared to Last Year**

Since 2003, substantially fewer LPNs reported feeling more satisfied this year compared to last. In 2006, however, the percentage of LPNs reporting more job satisfaction increased markedly from 2005 (see Figure 40).

**Figure 40: Four-Year Trend: LPN Job Satisfaction as Compared to Last Year**

Note: Previous years’ data in Figure 40 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003); Bennett, Moulton, and Wakefield (2004); and King, Moulton, and Wakefield (2005).
Compared to last year, more RNs felt neutral or satisfied about their job. Since 2003, more nurses shifted from being more satisfied to being neutral or dissatisfied (see Figure 41).

Figure 41: Four-Year Trend: RN Job Satisfaction as Compared to Last Year

Note: Previous years’ data in Figure 41 from Moulton, Christman, Dannewitz, Park, and Wakefield (2003); Bennett, Moulton, and Wakefield (2004); and King, Moulton, and Wakefield (2005).
Nurses were also asked to rank agreement with 24 statements regarding work setting and professional role satisfaction on a one to six scale (one = strongly agree to six= strongly disagree). Most of the statements were derived from a nurse job satisfaction index (Stamps, 1997). Lower scores suggest greater satisfaction. The most similar statements clustered together to form five satisfaction scales: pay (5 statements, e.g., “my present salary is satisfactory”), autonomy (7 statements, e.g., “nursing staff has sufficient control over scheduling”), professional role (5 statements, e.g., “if I had the decision to make again, I would go into nursing”), direct care (4 statements, e.g., “I have sufficient time for direct patient care), and power structures (3 statements, e.g., “nurses are encouraged to participate in decision making…”)

Nurses were most satisfied with the direct care (2.9) aspect of their work setting and least satisfied with their pay (4.5) (see Table 5).

Table 5: Average Ratings of Satisfaction on Work Setting Scales

<table>
<thead>
<tr>
<th>Scale Name &amp; Nurse Level</th>
<th>LPN</th>
<th>RN</th>
<th>APN</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>4.6</td>
<td>4.4</td>
<td>4.2</td>
<td>4.5</td>
</tr>
<tr>
<td>Autonomy</td>
<td>4.0</td>
<td>3.9</td>
<td>3.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Professional Role</td>
<td>3.4</td>
<td>3.4</td>
<td>3.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Direct Care</td>
<td>3.0</td>
<td>2.9</td>
<td>2.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Power Structures</td>
<td>3.4</td>
<td>3.3</td>
<td>3.3</td>
<td>3.4</td>
</tr>
</tbody>
</table>
In 2006, the increase in satisfaction (lower scores) for pay that was found last year was eliminated. Overall, LPNs and RNs were less or equally satisfied (greater or approximately equal scores) compared to previous years (see Figures 42 and 43).

Figure 42: Three-Year Trends: Average Rating of Satisfaction for Work Setting Scales for LPNs

Figure 43: Three-Year Trends: Average Rating of Satisfaction for Work Setting Scales for RNs

Note: Previous years’ data in Figure 43 from Bennett, Moulton, and Wakefield (2004) and King, Moulton, and Wakefield (2005). Note: Lower scores indicate more satisfaction; higher scores indicate less satisfaction.
• Questions that were collapsed into the pay scale are presented in Figure 44. Nurses most strongly agreed with the statement “Present rate of increase in pay is not satisfactory”.

Figure 44: Average Rating on Individual Questions for Work Setting Scales (Pay)

Note: Lower scores indicate greater agreement with the statement.
• Nurses most strongly agreed (lower score) with the statement “Too much clerical work is required of nurses” regarding autonomy (see Figure 45).

**Figure 45: Average Rating on Individual Questions for Work Setting Scales (Autonomy)**

Note: Lower scores indicate greater agreement with the statement.
Nurses most strongly agreed that they “could give better care if (they) had more time” (see Figure 46).

Figure 46: Average Rating on Individual Questions for Work Setting Scales (Professional Role)

Note: Lower scores indicate greater agreement with the statement.

Nurses most strongly agreed that “Patients receive high quality care” and “Patients receive safe care” (see Figure 47).

Figure 47: Average Rating on Individual Questions for Work Setting Scales (Direct Care)

Note: Lower scores indicate greater agreement with the statement.
• With regard to the power structure at their facility, nurses most strongly agreed that “Doctors and nurses work as a team” (see Figure 48).

**Figure 48: Average Rating on Individual Questions for Work Setting Scales (Power Structure)**

Note: Lower scores indicate greater agreement with the statement.
SURVEY CONCLUSIONS AND POLICY RECOMMENDATIONS

Overall, income for LPNs has decreased, while income for RNs has increased. However, rural RNs reported an income 12 percent lower than that reported by RNs in urban settings. This large difference emphasizes the need to work toward equivalent pay scales across areas of the state. Additionally, nurses in North Dakota reported incomes substantially less than the national average regardless of level even though the percentage of nurses working part-time was at its lowest in the four years surveyed. The percentage of nurses working full-time (36 or more hours per week) increased steadily over the past three years. The majority of nurses worked full-time, a trend that has remained stable. The increase of nurse hours could be due to nurses taking more hours in order to cover for vacant positions.

Current nurses becoming faculty is an essential element to the education of future nurses. Though still higher than 2004’s numbers, the percentage of nurses who reported interest in a faculty role decreased by eight percent from last year. Barriers to a faculty position have not changed markedly. Pay was less of a barrier, while a personal lack of interest was cited more frequently.

Data regarding nurses’ expected age to end direct care and retire from nursing have revealed important trends as well. The percentage of nurses who reported providing direct care on a daily basis has increased markedly over the past four years, with a 15 percent increase since last year. However, compared to previous years, the age at which rural nurses planned to stop providing direct care has decreased. Additionally, nurses in urban areas planned to stop providing direct care earlier than nurses in semi-rural and rural areas. These changes could lead to an experienced nursing staff that wishes to remain employed, yet does not desire direct care work. Management and other positions would have to be made available in order to retain these employees. Additionally, one-quarter of RNs and LPNs planned to retire in the next 10 years. One-third of APNs also planned to retire by 2016. Given the length of time required to obtain an APN license, recruitment and/or retention efforts must be increased. LPNs and RNs cited increased pay and flexible scheduling as the changes that would most likely delay retirement. APNs cited the ability to retain benefits during part-time work and flexible scheduling as the changes most likely to delay retirement.

Compared to last year’s data, nine percent more LPNs reported being more satisfied than the previous year, while only one percent of RNs reported more satisfaction. Both RNs and LPNs reported less satisfaction with their professional role this year than previous years. Large patient loads, too much to do, and lack of teamwork among nurses were most displeasing to nurses. Steps taken by facilities to improve these situations would likely result in higher job satisfaction among nurses, which could prevent early retirement for many nurses.

Demographic trend data indicated that North Dakota may have untapped populations on which future recruitment efforts can be focused. National data indicated that while North Dakota’s population has a larger percentage of certain minority groups, such as Native Americans, the nursing population does not reflect this larger percentage.
Specific Policy Recommendations

- Increase recruitment and retention rates among under-represented populations.

- Continue working toward equivalent pay scales for nurses working in rural and urban areas.

- Implement recruitment, retention, and education programs designed to address the loss of one-third of the APN workforce in the next 10 years.

- Design programs to retain older nurses in order to increase the number of years that nurses are working and providing direct care.

- Increase job satisfaction in order to improve retention of nurses.
The licensed nurse survey was designed to examine recruitment and retention issues. This survey was developed using the minimum data set from the Colleagues in Caring project (2002) and questions were also derived from the National Sample Survey of Registered Nurses (Spratley et al., 2000), the National Survey of Registered Nurses (Nurseweek & AONE, 2002), the American Nurses Association Staffing Survey (2001), and other state nursing surveys.

Percentages were calculated using the total number of nurses that completed each item and rounded to the nearest percentile. Where possible, data are compared with national numbers. When appropriate, data was also divided by Urban Influence Codes (Ghelfi & Parker, 1997). Urban Influence Codes are used to classify rurality of U.S. counties according to the size of neighboring metropolitan areas, proximity to metropolitan areas, and the population of the largest city within the county. There are 12 Urban Influence Codes including 2 metropolitan county categories and 9 non-metropolitan county categories (U.S. Department of Agriculture, 2003). Due to the rural nature of the state, several of the categories include no counties of North Dakota, and some categories have only a small number of the state’s counties included. Therefore, North Dakota counties were collapsed as follows into three larger categories based upon their Urban Influence Codes.

- **Urban counties**: Small metropolitan counties (fewer than one million residents) (four North Dakota counties).

- **Semi-rural counties**: Non-metropolitan counties with a town of at least 2,500 residents adjacent or not adjacent to a small metropolitan county (36 North Dakota counties).

- **Rural counties**: Counties that do not contain a town with at least 2,500 residents and are not adjacent to a small metropolitan area (13 North Dakota counties).

### Table 6: Number of participants by Urban-Rural Status

<table>
<thead>
<tr>
<th>Nurse Level</th>
<th>Urban</th>
<th>Semi-Rural</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPN</td>
<td>118</td>
<td>129</td>
<td>21</td>
<td>268</td>
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<tr>
<td>RN</td>
<td>501</td>
<td>331</td>
<td>54</td>
<td>886</td>
</tr>
<tr>
<td>APN</td>
<td>33</td>
<td>20</td>
<td>6</td>
<td>59</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>652</td>
<td>480</td>
<td>81</td>
<td>1213</td>
</tr>
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</table>
References


North Dakota Licensed Nurses Survey 2005

My name is Dr. Patricia Moulton and I am principal investigator for the Nursing Needs Study at the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. We are collecting information about the nursing workforce from LPNs, RNs and APNs in North Dakota. This is Year four of the study funded by the North Dakota State Board of Nursing. During the first three years, survey were sent to a large sample of licensed nurses. As a result, a large set of data was received allowing us to make some initial assessments and policy suggestions. Your time and input was greatly appreciated.

This survey is part of our continuing effort to determine characteristics of the nursing workforce; including supply, demand, recruitment and retention efforts. Questions on the survey include your educational background, employment history and job satisfaction. Results from this survey will better inform policy makers regarding the supply of nurses throughout the state and particularly in rural areas of North Dakota.

We estimate that the survey will take about 20 minutes of your time to complete. Using a mouse, you will need to click on the boxes associated with the responses you select. Once you have completed the survey, you will need to click on the submit button at the bottom of the page. Once the data has been submitted, it will be immediately be sent via secure communications, to a private and secure server at the Center for Rural Health, thereby protecting the anonymity of your responses.

Thank you in advance for assisting us in this assessment endeavor. You do not have a obligation to participate in the survey, and no penalty will be levied for non-participation. If you choose to complete the questionnaire, you may skip any questions you do not wish to answer. Any personal information that you have included, such as birth date, will not appear in any published document. Additionally, the North Dakota Board of Nursing will only receive data analyzed and presented as a group with no information that can lead to identification of individual nurses. An electronic copy of the survey data will be kept on a secure server for three years. After three years the data will be erased.

Thank you in advance for assisting us in this assessment endeavor. Feel free to contact Dr. Moulton at 701-777-6781 or Karyn Plumm at 701-777-0787 with any questions or comments. You may also contact the Office of Research and Program Development at the University of North Dakota at 701-777-4279.

Education

1. Indicate all educational programs completed. (Click on all that apply)
   - □ Certificate in nursing
   - □ Diploma in nursing
   - □ Associate degree in nursing
   - □ Associate degree, other field
   - □ Baccalaureate degree, nursing
   - □ Baccalaureate degree, other
   - □ Masters degree, nursing
   - □ Masters degree, other
   - □ Doctoral degree, nursing
   - □ Doctoral degree, other
2. Indicate all advanced practice educational programs completed. (Click on all that apply)
   - Nurse practitioner (NP)
   - Certified nurse midwife (CNM)
   - Clinical nurse specialist (CNS)
   - Certified nurse anesthetist (CRNA)
   - Physician Assistant (PA)

3. Are you currently enrolled in a formal education program leading to an academic degree with a major in nursing?
   - Yes (if yes, continue to question 4)
   - No (if no, skip to question 6)

4. Are you a full-time or part-time student?
   - Part-time
   - Full-time

5. What degree are you currently working toward in this program?
   - 1 year LPN program
   - Associate (LPN)
   - Associate (RN)
   - Baccalaureate (RN)
   - Masters
   - Doctorate
   - Other

6. Are you interested in pursuing a nursing faculty role sometime in the future?
   - Yes (if yes, continue to question 7)
   - No (if no, skip to question 8)
   - I currently have a faculty position (skip to question 9)

7. When do you plan on pursuing employment as a nursing faculty member?
   - Within the next year
   - 1-5 years
   - 6-10 years
   - over 10 years

   Why do you want to teach in a nursing education program?

8. What barriers are preventing you from considering teaching nursing? (click on all that apply)
   - Advanced education programs are unavailable to me
   - Better pay is available outside education settings
   - Better benefits are available outside education
   - Jobs in education are not available
   - Personally not interested in a faculty position
   - No interest in obtaining required education
   - Other (please specify)
9. Mark the highest license that you hold. (click on only one)
   ○ LPN
   ○ RN
   ○ RN Advanced Practice License
   ○ None

10. Indicate state(s) where you are currently licensed. (click on all that apply)
   □ ND
   □ SD
   □ MN
   □ MT
   □ Other
   □ None

Employment

11. Indicate one option that describes your CURRENT employment status.
   ○ Employed in nursing (continue to Question 12)
   ○ Employed in other field (skip to Question 39)
   ○ Not employed, attending college (skip to Question 39)
   ○ TEMPORARILY not working/looking for a job (skip to Question 39)
   ○ Retired OR no plans to return to work (skip to Question 39)
   ○ Seeking nursing employment (skip to Question 39)

12. Indicate ONE setting that best describes your primary employment setting (P) or the employment setting in which you work the most hours. If you practice in more than one setting, please indicate the ONE setting which best describes your secondary setting (S). Check only ONE in each column.

<table>
<thead>
<tr>
<th>Primary</th>
<th>Secondary</th>
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</thead>
<tbody>
<tr>
<td>Ambulatory Care</td>
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<tr>
<td>Home Health Care</td>
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<tr>
<td>Ambulatory Care</td>
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<td>Hospital</td>
<td>○</td>
</tr>
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<td>Hospital</td>
<td>○</td>
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<td>Long term care</td>
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<td>Public/community health</td>
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<tr>
<td>Regulation</td>
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<td>School nurse</td>
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<td>Other</td>
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</tr>
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</table>

Other, please specify ____________________________

12D. If you selected "Hospital" above, please indicate what type of patients you primarily care for in your primary (P) or secondary (S) setting.

<table>
<thead>
<tr>
<th>Primary</th>
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<tbody>
<tr>
<td>Acute care/ emergency room</td>
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<tr>
<td>Chronic care</td>
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<td>Obstetrics/gynecologic</td>
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<td>Basic medical/surgical</td>
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<td>Newborn</td>
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<td>Psychiatric</td>
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13. Indicate ONE position that best describes your role with your primary and secondary nursing employer.

<table>
<thead>
<tr>
<th>Primary</th>
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</thead>
<tbody>
<tr>
<td>Discharge planner, case manager</td>
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<tr>
<td>Educator</td>
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<tr>
<td>Nurse practitioner, certified nurse midwife, clinical nurse specialist, nurse anesthetist</td>
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<tr>
<td>Quality assurance, infection control</td>
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<tr>
<td>Researcher, consultant</td>
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<tr>
<td>Staff/general duty nurse</td>
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<tr>
<td>Team leader or charge nurse</td>
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<tr>
<td>Nurse manager or head nurse</td>
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</tr>
<tr>
<td>Director of nursing/nursing executive</td>
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</tr>
<tr>
<td>Utilization review, outcomes management, other insurance related role</td>
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</tr>
<tr>
<td>Public Health Nurse</td>
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</tbody>
</table>

14. How many years have you worked in your Primary and Secondary Settings?

<table>
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<tr>
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<tr>
<td>Less than One year</td>
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</tr>
<tr>
<td>1 - 5 years</td>
<td>0</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>0</td>
</tr>
<tr>
<td>11 - 15 years</td>
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<tr>
<td>16 - 20 years</td>
<td>0</td>
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<tr>
<td>21 - 25 years</td>
<td>0</td>
</tr>
<tr>
<td>26 - 30 years</td>
<td>0</td>
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<tr>
<td>31 - 35 years</td>
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<tr>
<td>36 - 40 years</td>
<td>0</td>
</tr>
<tr>
<td>More than 40 years</td>
<td>0</td>
</tr>
</tbody>
</table>

15. How many hours do you work in a typical week in your Primary and Secondary Settings?

<table>
<thead>
<tr>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5 hours</td>
<td>0</td>
</tr>
</tbody>
</table>
6 - 10 hours
11 - 15 hours
16 - 20 hours
21 - 25 hours
26 - 30 hours
31 - 35 hours
36 - 40 hours
More than 40 hours

16. What shift do you USUALLY work at your primary and secondary nursing position (click on only ONE in each column)?

<table>
<thead>
<tr>
<th></th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Evening</td>
<td>○</td>
<td>○</td>
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<tr>
<td>Night</td>
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<td>○</td>
</tr>
<tr>
<td>Weekends only</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

17. Does your primary nursing position involve providing direct care services to patients/families?
   - ○ Yes (if yes, continue to Question 18)
   - ○ No (if no, skip to Question 23)

18. How many patients were assigned to you at the beginning of your last shift?
   - □

19. Did you have a nurse aide during this shift?
   - ○ Yes (if yes, continue to Question 20)
   - ○ No (if no, skip to Question 23)

20. If yes on Question 19, how many nurses aides were assigned to you?
   - □

21. If you are an RN, did you have and LPN assigned to you during this shift?
   - ○ Yes (if yes, continue to Question 22)
   - ○ No (if no, skip to Question 23)
   - ○ I am not an RN (skip to question 23)

22. If yes on Question 21, how many LPNs were assigned to you?
   - □

23. Does your secondary nursing position involve providing direct care services to patients/families? (if do not have a secondary nursing position skip to Question 29)
   - ○ Yes (if yes, continue to Question 24)
   - ○ No (if no, skip to Question 29)

24. How many patients were assigned to you at the beginning of your last shift? (Secondary position)
   - □

25. Did you have a nurse aide during this shift? (Secondary position)
   - ○ Yes (if yes, continue to Question 26)
   - ○ No (if no, skip to Question 27)
26. If yes on Question 25, how many nurses aides were assigned to you?  
(Secondary position) 

27. If you are an RN, did you have and LPN assigned to you during this shift?  
(Secondary position)  
☐ Yes (if yes, continue to Question 28)  
☐ No (if no, skip to Question 29)  
☐ I am not an RN (skip to question 29)  

28. If yes on Question 27, how many LPNs were assigned to you?  
(Secondary position) 

29. At what age do you expect to stop providing direct patient care?  

30. At what age do you expect to retire from nursing?  

31. What change(s) in the workplace environment might encourage you to work longer as a nurse? (check all that apply)  
☐ Ability to work part-time  
☐ Reduction in amount of direct patient care work  
☐ Restrictions on heavy lifting  
☐ Flexible scheduling  
☐ No changes would encourage me to work longer  
☐ Assignment to supervisory/teaching duties  
☐ Reduction in shift length  
☐ Retention of benefits while working part-time  
☐ Adequate staffing levels  
☐ Increased pay  
Other (please specify) 

32. Which of the following have you observed in your primary and/or secondary setting in the previous two years? (click on all that apply)  

<table>
<thead>
<tr>
<th>Increased use of aides or techs</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory overtime to cover staffing needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased use of &quot;floating&quot; between departments</td>
<td></td>
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<tr>
<td>Assigned non-patient care activities to nurses</td>
<td></td>
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<tr>
<td>Increased involvement of nurses in organizational decisions</td>
<td></td>
<td></td>
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<tr>
<td>Increased use of LPNs</td>
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<td></td>
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<tr>
<td>Decreased quality care for patients</td>
<td></td>
<td></td>
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<tr>
<td>Increased patient care load for nurses</td>
<td></td>
<td></td>
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<tr>
<td>Voluntary overtime to cover staffing needs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

33. Would you say that in your primary work setting nurse staffing is....  
☐ Very inadequate  
☐ Somewhat inadequate  
☐ Adequate  
☐ Very adequate
34. Would you say that in your secondary work setting nurse staffing is... (if you have no secondary work site, skip to Question 35)
   - Very inadequate
   - Somewhat inadequate
   - Adequate
   - Very adequate

35. Compared to a year ago, how would you best describe your current feelings about your nursing job(s)? (click on only one)
   - Much more dissatisfied
   - More dissatisfied
   - Neither more satisfied nor more dissatisfied
   - More satisfied
   - Much more satisfied

36. Check the number that most closely indicates how you feel about each statement as it applies to your PRIMARY work setting:
   The Scale corresponds as 1 = Agree and 6 = Disagree

   The Nursing staff has sufficient control over scheduling their own shifts.
   - 1 2 3 4 5 6 n/a

   My present salary is satisfactory.
   - 1 2 3 4 5 6 n/a

   I am satisfied with the types of activities that I do on my job.
   - 1 2 3 4 5 6 n/a

   There is a great gap between the administration and the daily problems of the nursing service.
   - 1 2 3 4 5 6 n/a

   It is my impression that a lot of nursing personnel are dissatisfied with their pay.
   - 1 2 3 4 5 6 n/a

   I think I could do a better job if I did not have so much to do all the time.
   - 1 2 3 4 5 6 n/a

   There is too much "clerical" paperwork required of nurses.
   - 1 2 3 4 5 6 n/a

   There is ample opportunity for nursing staff to participate in the administrative decision-making process.
   - 1 2 3 4 5 6 n/a

   The present rate of increase in pay for nurses is not satisfactory.
   - 1 2 3 4 5 6 n/a

   I have plenty of time to discuss patient care problems with other nursing service personnel.
   - 1 2 3 4 5 6 n/a

   Administrative decisions interfere too much with patient care.
   - 1 2 3 4 5 6 n/a

   From what I hear, nurses at this facility believe they are fairly paid.
   - 1 2 3 4 5 6 n/a

   I have sufficient time for direct patient care.
   - 1 2 3 4 5 6 n/a

   I have all the voice in planning policies and procedures that I want.
   - 1 2 3 4 5 6 n/a

   An upgrading of pay schedules for nurses is needed at this facility.
   - 1 2 3 4 5 6 n/a

   I could deliver better care if I had more time with each patient.
   - 1 2 3 4 5 6 n/a

   The nursing administration generally consult with staff on daily problems and procedures.
   - 1 2 3 4 5 6 n/a
There is a good deal of teamwork and cooperation among various levels of nurses. I have the freedom in my work to make decisions as I see fit, and can count on my supervisors to back me up. If I had the decision to make again, I would go into nursing. There is a lot of teamwork between nurses/doctors at my facility. Patients at my facility consistently receive safe care. Patients at my facility consistently receive high quality care. Nurses are encouraged to participate in decision making through shared governance clinical councils, nursing representatives.

Part-time/Full-time

37. Is the total number of hours for both your primary and secondary setting combined.....
   - <32 hours/week (continue to Question 38)
   - 32 or more hours/week (continue to Question 41)

38. What are the reasons you are working PART-TIME? (click on all that apply)
   - Enrolled in college
   - Full-time nursing position unavailable
   - Health of family member is poor
   - Stressful work environment
   - Not valued/respected by physicians
   - Reorganization of facility
   - Taking care of home/family
   - Volunteer work
   - Have to commute long distances
   - Prefer to work part-time
   - Finances allow part-time work
   - Health is poor
   - Physical demands of nursing
   - Not valued/respected by management
   - Opportunities outside nursing
   - Schedule flexibility
   - Unable to provide high quality care
   - Age

39. (If you are currently working as a nurse please skip to Question 41) How long has it been since you last worked for pay as a nurse?
   - Never
   - Less than a year
   - 1 - 3 years
   - 4 - 6 years
   - 7 - 9 years
   - 10 - 12 years
   - 13 - 15 years
40. What is the reason(s) you are not working in nursing? (click on all that apply)
- Unable to provide high quality of care
- Enrolled in college
- Health is poor
- Lack of benefits
- Layoff
- Non-nursing position pays better
- Not valued/respected by physicians
- Nursing skills are not adequate
- Relocation
- Retired
- Taking care of home/family
- Volunteering
- Health of family member is poor
- Lack of nursing positions available
- More professionally challenging positions
- Non-nursing position has better hours
- Not valued/respected by management
- Reorganization
- Stressful work environment

Demographic/Biographic Information

41. Zip Code of Residence [__________]

42. Number of miles traveled to Primary work setting from home [__________]

43. Number of miles traveled to Secondary work setting from home (mark N/A if you do not have a Secondary work setting) [__________]

44. Year of Birth [__________]

45. Annual Gross Income (before taxes) from Nursing Position(s) in $ [__________]

46. Racial/ethnic group
- White, not of Hispanic origin
- Hispanic
- American Indian/Alaskan Native
- Black, not of Hispanic origin
- Asian/Pacific Islander
- Multi-racial
- Other

47. Gender
- Female
- Male

Thank you for completing our survey.
Please click the submission button now.