# RETENTION OF NURSES IN WYOMING



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**Wyoming Department of Employment**

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# RETENTION OF NURSES IN WYOMING

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# Chapter 1: The System As a Whole

## KEY POINTS

- Wyoming was operating in a deficit situation (more nurses exiting health care than entering) by fourth quarter 2005.

- Wages appeared as the most frequently mentioned topic among all age groups except the oldest (age 65+). Issues with management appeared as the second most frequently referenced topic overall, as well as among each age group, again, with the exception of the 65+ group.

- Several variables significantly correlated to nurses' stated intent to leave: salary satisfaction, professional development satisfaction, interpersonal interactions satisfaction, age, and the extent RNs felt tied (or bound) to their communities.

- Substantial numbers of comments regarding workload, paperwork, corporate issues, and quality of new nurses were found, even though the related factors were not statistically significant predictors of a nurse's stated intent to leave her or his employer.

- Nurses who attended high school out of state were more likely to be older than nurses who went to high school in Wyoming. This observation could be taken into account as retention strategies are developed.

# Introduction

*by: Tom Gallagher, Manager*

The most sparsely populated areas of the state are the most vulnerable to a shortage of nurses. They are more vulnerable not only because they serve a population older than more urbanized areas of the state, but also because the population of nurses serving these areas is also older. As described in *Nurses In Demand: A Statement Of The Problem,* the availability of nurses statewide is expected to become increasingly problematic as a large proportion of nurses enter an age of traditional retirement, as the health care industry expands to meet the needs of a growing population of elderly, and as the health care delivery system adapts to new technologies and evolves different business models. And, as we have seen, the demand for nurses is expanding as hospitals employ a retention strategy of more flexible part-time staffing, utilizing an increasing number of nurses per full-time equivalent position. Given the inability of the supply system to keep up with demand-based pressures, the emphasis shifts to retention as a principal strategy to ensure an adequate staffing level of nurses.

Retention is also a cost-control consideration. "Stocks and flows" analysis of 2006 hires indicates that the cost of hiring nurses exceeded $7.8 million in Wyoming (see Chapter 2, Figure 12, page 93). These analyses are conducted using administrative records with only the interaction between nurses and employers as the unit of analysis. It is important to note that throughout this paper the unit of analysis changes. We may focus on the perceptions of nurses, the behavior of industries, the interaction between nurses and employers, and the

## Glossary

*Turnover:* The ratio of the number of workers who had to be replaced in a given time period to the average number of workers.

*Re-entrant:* A person who has worked in health care within the past 16 quarters and is now working in health care after an absence (no wages) of at least 1 quarter.

*New entrant:* A licensed nurse who has not worked in health care in more than 16 quarters, but is working as of the base quarter.

*Permanent exit:* A licensed nurse who has not worked in health care for four consecutive quarters. May refer to nurses who are no longer working in health care or those for whom no wage records are found in any industry.

*Ambulatory health care services:* Provide health care services directly or indirectly to ambulatory patients and do not usually provide inpatient services. Examples include offices of physicians, outpatient care centers, and medical laboratories.

*Nursing & residential care facilities:* Provide residential care combined with either nursing, supervisory, or other types of care as required by the residents. Examples

(**GLOSSARY** continued from page 2)

include continuing care retirement communities, homes for the elderly, and residential mental health & substance abuse facilities.

*Hospitals:* Provide medical, diagnostic, and treatment services that include physician, nursing, and other health services to inpatients and the specialized accommodation services required by inpatients. May also provide outpatient services secondarily. Examples include general medical & surgical hospitals and psychiatric & substance abuse hospitals.

*Source for industry definitions: http://www.2010census.biz*

interaction between geography (e.g., the state) and nurses. Research & Planning's use of multiple units of analysis is a distinguishing characteristic of this report.

Utilizing multiple units of analysis means relying upon multiple sources of data and information. Qualitative information was collected through working with an advisory committee of nurses, networking with informants (both nurses and others in health care) in a variety of settings, some of which may persist over time or be as brief as an exit interview with a nurse leaving work in Wyoming. Qualitative and quantitative information was also obtained from a survey of nurses conducted in the summer of 2007. All nurses in hospitals, ambulatory care, and nursing & residential care were asked to participate in a mail survey. Quantitative information was also drawn from administrative

records: Board of Nursing licensing records linked to Unemployment Insurance (UI) wage records information for individuals linked, in turn, to UI employer account information. These administrative records were then linked to data for the individual nurses responding to R&P's survey. Finally, separate establishment survey data that describe the staffing characteristics and compensation levels of workers in the health care industry were obtained from a state-federal survey program operated by R&P and from selected surrounding states and for the nation as a whole. Multiple sources of physically linked data and theoretically linked statistical information permitted a range of complex analyses to be performed.

Defining a nursing shortage empirically is a difficult task in part because of the subjective nature of the concept and in part because of the policy responses elicited by different definitions. In this report, we define a point of imbalance between the supply of nurses and the demand for them with the longitudinal analysis of administrative records. Even as the population of the state and the health care industry grew, the supply of new nurses into health care fell below the level of permanent exit of nurses from health care. Tracking of Board of Nursing licensure records linked to UI employer payroll files from 1999 through 2005 revealed that permanently exiting nurses exceeded entrants in fourth quarter 2005. Even without geographic imbalances between supply and demand, this is clear empirical evidence that supply is not meeting demand.

R&P's comparative analysis of the ratio of nurses to other health care staff (staffing pattern analysis, see Chapter 2, page 75) also provides a supporting, empirical means of quantifying the shortage of

nurses in Wyoming. Researchers obtained occupational staffing patterns from selected neighboring state research offices and national staffing patterns from the U.S. Department of Labor's Bureau of Labor Statistics for subsectors in the health care industry. These comparisons revealed that the ratio of nurses to other staff was consistently lower in Wyoming hospitals and nursing & residential care facilities, in comparison to surrounding rural states and the nation. This suggests that regardless of the nationwide shortage, and the shortage in neighboring states, the situation is more difficult in Wyoming. Conducting comparative analyses and tracking supply and demand with administrative records to define the extent of the shortage points to another feature of this research: Findings tend to be supported by evidence derived from multiple sources in a triangulation strategy. Findings supported by multiple sources tend to attain a higher profile in the report than those supported by only one source of information.

A lower ratio of nurses to other health care staff than is the case nationally and among surrounding states tends to corroborate some of the survey scores on scaled items relating to workplace satisfaction and nurses' comments to open-ended questions (see page 22). While this report is structured in discrete segments, it is intended that each segment provide supporting context and that the document be treated as a whole.

R&P's researchers used longitudinal analysis of administrative records to uncover how nurses interact with the health care delivery system. This is a hallmark of the report, as is the linkage of longitudinal data to a cross-sectional survey of nurses working in Wyoming. Each segment of the

report demonstrates a dialogue between powerful quantitative analysis informed by rich qualitative analysis. A critical component of the research is a capacity, outlined in the methodological synopsis that follows (see page 20), to unobtrusively validate with administrative records the survey-based stated intention of nurses to leave or remain with their health care employer. By linking Board of Nursing licensure records to survey responses and employer payroll files, we greatly enhance our capacity to determine whether or not survey responses predict retention behavior.

While we were not predisposed to study the hospital Magnet status movement,[1] the research literature on workplace environments and how to measure them are strongly influenced by the concepts associated with magnet status. Such underlying workplace constructs as the adequacy of human resources, a consultative environment, professionalism, compensation, and participative management populate the theoretical perspective of much of the retention research preceding our work. Most of these workplace factors are subject to management intervention and, if they can be demonstrated to effectively limit nurse exit rates from their employers, can be manipulated to attain desired retention levels.

A substantial portion of the survey questionnaire covered workplace satisfaction issues, which when modeled were significantly related to statements regarding the intent to leave an employer in the next year. Additional comparison of ratings of hospitals using these same satisfaction measures compared to exit rates for nurses

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1    See "Magnet Status: A Guide for the Nursing Staff," HCPro, Inc, April 2006.

who were employed in these facilities revealed that survey satisfaction measures were limited in their capacity to predict measures of exit from employer. However, exit rates for each hospital were calculated only on the basis of payroll records for the quarter following the survey date. Workplace satisfaction measures may prove to be more effective predictors of exit behavior in the longer run. In April 2009, four quarters of payroll-based exit data will be available and the analysis replicated as part of R&P's continuing study.

The inference may be drawn that the character of the workplace is important to retention using information other than scaled items relating to workplace satisfaction. A large proportion of the nurses indicating an intention to leave their current employer in the next year do so to take a job elsewhere in health care even though there are sometimes disincentives for doing so. As a nurse recently stated, "When you move from hospital to hospital, you start at the bottom" of privileged status. "I am trying to figure out why I stay in nursing," she confided.[2]

While workplace quality appears to be of greater importance to nurses of middle age, non-workplace factors for nurses at the two ends of the age distribution, in particular, appear to play a greater role in retention. Community ties, children in school, spouse's employment, and quality of community life are important to the retention of nurses in the workplace and in Wyoming as well. These are all factors over which the employer has little control but which are in many respects related to a nurse's age. Age is a factor in almost all retention considerations since it is an

indication of family and career development phases coinciding with decisions about job changing and migration.

There is a second factor over which the employer has little control, and that is the nativity of the labor supply. Most nurses working in health care in Wyoming are not native to the state. This means that they probably bring with them a work experience that includes a greater ratio of nurses in the work environment compared to other staff, than they currently enjoy in Wyoming. Compared to the majority of Wyoming nurses who have a community college-based, two-year degree, nonnative nurses may also have a higher level of educational attainment and may also have more experience working in more specialized settings. An emergent theme of this study is that the manner in which nonnative nurses are made a part of the institutional setting affects their retention in the workplace and potentially in the state as a whole.

Qualitative information developed during the study suggests that areas of future research should focus on the manner in which nurses, native and nonnative alike, become integrated into the work environment and the community as well. Limited time and resources did not permit full analysis of the data or examination of every question encountered as the study evolved.

This report does not make explicit recommendations to improve retention and, by so doing, encourage word-of-mouth recruitment. However, it clearly produces findings around which strategies could be planned, developed, and implemented, and be relatively inexpensive to monitor. For example, because facility-specific exit rates can be calculated for nurses by age through

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2      Personal conversation evening of June 17, 2008, Wyoming Medical Center General Staff meeting.

**1. The System as a Whole**

the use of readily available administrative data, a reasonable implementation strategy may involve contacting those facilities with demonstrated lower rates of nurse exit and higher levels of tenure, for best practices that may be adopted at other facilities. This report demonstrates that the effects of best practices can be unobtrusively monitored with wage records while using the characteristics of nurses (age, education, earnings, and nativity) from Board of Nursing files to account for the effects of personal characteristics on retention strategies.

Finally, the lower level of staffing ratios, dispersed health care delivery structure, the interstate nature of the workforce development system, and dominance of the workforce by nonnative nurses

imply a uniqueness to the current nurse retention issue. At the community level, the available survey data permits a nurse-based assessment of quality of life while at least anecdotal evidence indicates that attachment to the community is partly a function of a job opportunity for a spouse as well as housing availability and cost. And yet, these avenues of investigation have only marginally been explored. A way needs to be found to develop additional analysis from the existing data collected to produce this report by making microdata available to researchers in an environment in which the confidentiality of the data remains under the control of Research & Planning. Researchers interested in pursuing this possibility are urged to contact us.

# Review of Literature Related to Nursing Retention

*by Lisa Knapp, Research Analyst*

According to the U.S. Bureau of Labor Statistics (BLS; 2006), nurses treat, monitor, and educate patients; record medical histories; help to perform and analyze diagnostic tests; teach patients and family members how to manage illnesses and disorders; and provide patient and family support. Although three of five registered nurse (RN) positions are found in hospitals, nurses also work in correctional institutions, schools, long-term care facilities, and pharmaceutical and medical research companies among others. They may also analyze health data, run educational seminars, or work in medical, legal, or investigative research areas (BLS, 2006).

Nursing shortages are not unusual. Shortages of nurses were recorded in the 1950s, 1970s, 1980s, and early 1990s. For the most part, those shortages were remedied by offering better wages and better benefits, or by recruiting nurses from other countries (Berliner & Ginzberg, 2002). The current nursing shortage is different, though. It is still based in part on dissatisfaction with workplace issues such as wages. However, it also is due to an aging workforce and a decline in nursing school enrollment coupled with less space in nursing programs for new enrollees. These issues will be discussed later in this publication.

It is difficult to predict the exact shortage of nurses the U.S. will face because the scope of the problem depends on the number of vacancies and on the projected number of new positions needed to meet the needs of the nation's aging population. The Health Resources and Services Administration has created a projection model that, if current trends continue, indicates there will be a shortage of up to 1 million full-time equivalent positions by 2020 (Biviano, Tise, Fritz, & Spencer, 2004). The BLS (2006) does not create projections for unfilled jobs, but modeling indicates that nursing jobs will grow "much faster than average" in the future.

A shortage of nurses can have negative consequences for hospitals and patients alike. Studies have found that replacing a nurse can cost up to twice the nurse's salary with costs going to advertising, interviewing, increased use of traveling nurses, overtime payments for hospital staff, and money lost due to decreased productivity (Atencio, Cohen, & Gorenberg, 2003). Likewise, studies have shown that shortages of nurses in hospitals may cause emergency room overcrowding and fewer staffed beds, which, in turn, may cause the hospital to cancel services and programs or cancel some elective surgeries (Joint Commission on Accreditation of Healthcare Organizations, 2002).

More serious, though, are the threats to patient health. Studies by Needleman, Buerhaus, Mattke, Stewart, and Zelvinsky (2002) found that more nurses resulted in lower levels of "failure to rescue" among surgery patients. These researchers also found that patients who received more attention from nurses were less likely to suffer from several common, nonfatal illnesses that were associated with a lack of nurses in past literature, such as urinary tract infections, pneumonia, gastrointestinal bleeding, and shock. Patients with attentive nurses were also more likely to have shorter hospital stays (Needleman et al.). Finally, Aiken, Clarke, Sloane, Sochalski, and Silber

(2002) found that there is a 7.0% increase in patient mortality for every patient added to the average nurse's workload.

Although most of the following research focuses on nurses in acute care facilities, a shortage of nurses will also have a sizeable effect on nursing & residential care facilities. The baby boom generation, which is currently between the ages of 44 and 62, will be entering health care facilities in greater numbers in 15-20 years, the same period as the projected peak of the nursing shortage. Some nursing homes already are experiencing problems with providing quality care. A recent article from the U.S. Government Accountability Office (2005) found that although the proportion of nursing homes that offer poor quality care has declined since 1999, there are still quite a few, and this number might be higher due to poor reporting. This report states that better surveying of nursing homes is needed. Additionally, it is difficult to hire the RN staff necessary to survey these facilities due to the nurse shortage and the competition among hiring units. The report states that the RNs hired to survey long-term care facilities often are inexperienced at finding and reporting care-related problems and often do not stay long in the position.

## Retention Issues

Workplace satisfaction is important in explaining nursing staff shortages. Wages and benefits, workplace stress, high injury rates, and overtime demands can combine to create an unfavorable work environment. When this occurs, nurses may look for employment in other areas of health care, such as in physicians' offices or with pharmaceutical companies, or they may leave the health care industry entirely.

Nurses often cite their general work environment as a source of dissatisfaction. In particular, they state they no longer have enough time to spend on caring for patients due to both a shortage of nursing staff and a shortage of support staff. In fact, one study showed more than half of nurses rated their satisfaction regarding staff levels as low (Peter D. Hart Research Associates, 2001). Because of this, nurses said they spend a greater share of their time on paperwork and other tasks such as ordering supplies and coordinating activities rather than caring for patients (Joint Commission on Accreditation of Healthcare Organizations, 2002).

Additionally, nurses report they do not receive a proper level of respect from their employers and from the physicians and other staff with whom they work. Some studies have found that nurses who work in environments with poor organizational support and those who don't get enough recognition from their employers are more likely to be dissatisfied (Aiken, et al., 2002; United States Government Accountability Office, 2001). Other studies show that verbal abuse by physicians increases nurse stress and job dissatisfaction levels (Joint Commission on Accreditation of Healthcare Organizations, 2002).

Dissatisfaction with work schedules is sometimes mentioned in nursing research (Easton, Rossin, & Borders, 1991). Nurses generally work 8-hour or 12-hour shifts, both of which were studied in a meta-analysis by Smith, Folkard, Tucker, and Macdonald (1998). The authors found that although 12-hour shifts are often associated with better employee morale and fewer absences due to illness among nurses, they are also associated with decreased alertness and increased levels of fatigue, increased work strain, and negative effects on family and social life.

Increasingly, mandatory overtime is being used to offset the problems associated with a shortage of nurses (Lovell, 2006; Ginty, 2004; American Organization of Nurse Executives, 2003; United American Nurses, n.d.; United Nurses of America, n.d.). The Fair Labor Standards Act (FLSA) of 1938, amended, states that if an employee works more than 40 hours in a seven-day period that employee must be paid no less than one and one half times his or her rate of pay. Because the work schedules in hospitals and other medical institutions tend to be varied and may be longer than 40 hours in one week, an exemption was made for these workers that states an employee must be paid time and a half if he or she works more than 80 hours in a 14-day period.

Mandatory overtime in hospitals has become more prevalent in part because of insufficient staffing levels and in part because of the belief that it is less expensive to require nurses to work overtime than to spend money on recruiting (United Nurses of America, n.d.). One study by the Joint Commission on Accreditation of Healthcare Organizations (2002) found that nurses work more than an estimated eight weeks of overtime per year. Another study (Berney, Needleman, & Kovner, 2005) found that the average nurse works up to an extra 4.5% of the work week as overtime.

A 2000 study by the U.S. Department of Labor found that 40.0% of nursing & residential care facilities failed to comply with Fair Labor Standards Act regulations governing overtime pay, minimum wages, and child labor laws. In particular, they found that these facilities did not pay overtime to employees due to misclassification, failure to pay for time worked during meals, and general failure to

pay time and a half for extra hours worked.

In reaction to the growing use of overtime in health care, many nurses increasingly search for work with pharmaceutical companies, insurance companies, medical device vendors, and consulting firms that are more likely to offer higher wages (Lovell, 2006), regular shifts with little or no overtime, and weekends off (Joint Commission on Accreditation of Healthcare Organizations, 2002). In 2005, members of Congress introduced the Safe Nursing and Patient Care Act of 2005 (H.R. 791). Although this bill did not pass, it was intended to increase patient safety by limiting the number of overtime hours nurses may work.

Nursing can be a hazardous occupation. Studies have shown that at least one-third of on-the-job injuries suffered by nurses are musculoskeletal (Joint Commission on Accreditation of Healthcare Organizations, 2002) such as sprained backs or necks, joint problems, and repetitive movement injuries (American Nurses Association, n.d.). Other injuries and illnesses include cardiovascular disease, hypertension, stress, and depression (United American Nurses, n.d.).

Although health care settings have not been specifically studied for these adverse reactions, other industries such as transportation and manufacturing have been studied and similar effects have been noted (Agency for Healthcare Research and Quality, 2004). Many occupations in these industries now have regulations on the length of time an employee is allowed to work due to the negative effects that long hours have on workers (United Nurses of America, n.d.). In addition, 10 states have enacted statutes regulating how hospitals

use overtime, and 15 other states have considered similar legislation (United American Nurses, 2005).

Another source of job dissatisfaction among nurses involves wages. According to research by the American Hospital Association and the Lewin Group (2005), 64.0% of the money hospitals spend on purchases of goods and services goes to pay staff salaries and benefits. Many factors have led to the decreased financial capabilities of hospitals and other health care providers. The Balanced Budget Act of 1997, which was created to control the amount of money spent on Medicare payments (Wilensky, 2000), is one of the most important factors for the decrease. Demands by managed-care organizations, insurance companies, and private parties to lower health care costs also contribute to the decrease (Needleman, et al., 2002; Peterson, 2001). In addition, pharmaceutical and supply costs have steadily increased as have the costs of new technology (American Hospital Association, 2005). The combination of these factors has led hospitals to claim they have less expendable income.

According to Levine (2002), during the most recent past nursing shortage, from 1989 to 1993, nursing wages increased at a faster pace (20.7%) than wages in other professional occupations (16.0%). Recent research by the Institute for Women's Policy Research (Lovell, 2006) shows that although hospitals started to report shortages of nurses in 1997, inflation-adjusted wages for nurses between 1996 and 2000 actually fell. In addition, Schumacher (2001) reports that nurses' inflation-adjusted wages fell in comparison to the wages of both other female college graduates and other health care professionals. It has been found that nurses' wages do not increase substantially

in relation to years of service. The United States Department of Health and Human Services (2002) found that, on average, wages for nurses with 20 years of service were only about 3.0% higher than those of nurses with only five years of experience. Similarly, it appears that education level does not have a significant effect on nurse wages (Ault & Rutman, 2002).

## Rural Nursing and Migration

In rural areas, issues with recruitment and retention of nurses are more pronounced. In fact, Bushy (2004) lists five major obstacles that rural nurses may face: scarce resources, the need to be a generalist, social isolation, lack of anonymity and confidentiality, and differences in views on gender roles.

Nurse wages in rural areas can be a detriment to attracting and retaining nurses. Studies have found that nurses in rural settings earn less than their urban counterparts regardless of education level (Skillman, Palazzo, Keepnews, & Hart, 2005). In addition, it is difficult for rural health care providers to offer wages or bonuses that are competitive to those offered by urban health care providers. This is due, in part, to firm size because rural providers tend to be smaller and care for fewer paying patients than their urban counterparts, and in part to a lower level of funding received from the federal government in the form of Medicare reimbursements (Trossman, 2001; Bushy, 2004; Frontier Education Center, 2004). Even though the lower cost of living may balance out the pay difference between rural and urban settings, bigger paychecks combined with more social activities and less isolation can make urban areas more appealing (Skillman et al., 2005).

Rural nurses often are expected to

become generalists with the ability to care for people in many areas of health care rather than specializing in one area, as urban nurses often do. Many nursing programs emphasize choosing a specialty. Consequently, nurses starting work in a rural facility tend to feel they have not been properly prepared for the work (Frontier Education Center, 2004; Bushy, 2004).

Another issue associated with rural nursing is that nurses in these settings tend to have lower levels of education than urban nurses. For example, Frontier Education Center (2004) found that more rural nurses than urban nurses had associate's degrees, while more urban than rural nurses had bachelor's degrees.

Other factors that pose problems for recruiting and retaining nurses in rural areas are social and physical isolation. When nurses and other medical professionals work near medical facilities in urban areas, they have greater opportunities to consult and network with other professionals. This tends to be more difficult for rural nurses although advances in telecommunication equipment and computers have eased some of the difficulty (Bushy, 2004). A contributing factor is the lack of job opportunities for spouses. A nurse interested in working in a rural setting may choose not to do so if his or her spouse is unable to find employment (Tone, 1999). Isolation also creates a problem for obtaining necessary continuing education credits. Although advanced telecommunication and computer systems help to ease this problem, proximity makes it easier for an urban nurse to access educational programs (Bushy, 2004).

Finally, lack of anonymity and confidentiality are factors that dissuade many people. Nurses in rural areas complain that they have lost their anonymity and are often accosted in stores or at home by people wanting ailments diagnosed (Bushy, 2004). Trossman (2001) points out there are three types of people who generally want to work in rural settings: those with spouses who are employed in the area, those who grew up in a rural area and wish to return, and those who move to rural areas in order to escape "big-city life."

In 1997 Congress implemented the Rural Hospital Flexibility Program as part of the Balanced Budget Act of 1997. Part of this program allowed for the designation of critical access hospital in order to increase funding to rural hospitals through cost-based medical reimbursements rather than basing repayments on the typical Medicare reimbursement schedule (Stensland, Davidson, & Moscovice, 2003). Prior to this program, rural hospitals suffered from financial issues and many faced closure (Henderson & Coopey, 2000). Reasons for this include a Medicare repayment system that was structured for larger hospitals, the costs of meeting minimum staffing levels even when patient levels are low (Hagopian, Johnson, Fordyce, Blades, & Hart, 2003), and a lack of income caused by people choosing to go to larger hospitals (Henderson & Coopey).

In order to be designated a critical access hospital, a rural hospital may only have up to 15 beds or up to 25 beds if 10 are swing beds. Additionally, patients cannot be admitted for more than 96 hours, the hospital must provide 24-hour emergency services, and they must apply for and be granted designation by the state (Henderson & Coopey, 2000).

The Rural Hospital Flexibility Program

was created to keep small rural hospitals viable and increase funding for better services and technology (Henderson & Coopey, 2000) and to increase funding for staff, particularly nursing staff. Rural administrators have long stated that they have problems recruiting and retaining nurses, especially nurses with experience (Hagopian et al., 2003). With the additional funds provided by Medicare, critical access hospitals have been able to increase nurse wages, although rural nursing wages are still not as high as nonrural nursing wages (Stensland et al., 2003). To balance out the lower wages when retaining nurses, rural hospital administrators have also applied strategies such as extensive networking, "grow your own" training programs, and improved work environments (Hagopian, Johnson, Fordyce, Blades, and Hart, 2003).

Migration in and out of the state is also a topic of concern with regard to nurses. Historically, migration patterns have flowed from nonmetropolitan areas to metropolitan areas, but there was a shift in the 1970s and the 1990s during which more people moved into nonmetropolitan places (Fuguitt, Beale, Fulton, & Gibson, 1998). Wyoming has seen in-migration in recent years, mostly due to jobs in the mining and construction industries, and may see in-migration in the near future due to baby boom retirees seeking retirement locations featuring natural amenities. However, there is a high rate of out-migration, especially among younger people in search of better-paying jobs. Both of these patterns will affect the future supply of nurses in Wyoming.

Research has shown that younger people are more likely to migrate than older people (Sandefur & Scott, 1981), usually for education or career purposes. Cohort analysis by Jones (2005), which examined

the appearance of one group of individuals in Wyoming wage records between 1993 and 2003, found that by 2003, 56.6% of people age 18-24 in 1992 no longer worked in the state. This research also found that although 56.6% of the cohort left the state, there was significant in-migration to fill the gap.

The type and education of workers entering and leaving the state may help explain this. Baron, Glover, and Henderson (1998) found that University of Wyoming graduates who left the state often were in white-collar professions such as engineering, physical sciences, and health care. While recent job growth in the state has occurred predominately in the natural resources & mining and construction industries (Bullard, 2006), white-collar workers may be leaving the state in search of better-paying jobs in their fields as skilled laborers move into the state to fill high-paying blue-collar jobs.

Just as out-migration of young professionals can impact nursing in the state, so can in-migration of retirees. Research by Conway and Houtenville (2003) found that, among other things, retirees tend to move to states with favorable income tax laws. In addition, baby boom retirees differ somewhat from previous generations in that they are more likely to look for retirement places that offer outdoor recreation, natural amenities, and opportunities for education. The combination of these factors may be making Wyoming and other Western states very appealing to many older migrants.

## Solutions

There have been several suggestions to fix the nursing shortage, including improved work conditions, minimized stress and work injuries, and increased wages. These solutions have worked in the past and

could potentially work now, but because this nursing shortage is based not only on nurse dissatisfaction but also on an aging population, other solutions will also be necessary.

One suggestion is to improve the retention levels of older nurses past the age of typical retirement. Older nurses tend to have worked in the field longer and are a valuable source of experience and knowledge. The factors that may entice an older nurse to remain employed are somewhat different than those aimed at retaining younger workers. In general, older people are more susceptible to workplace injuries, allergies and other sensitivities, foot or leg pain, and vision problems (Hatcher, 2006). Therefore, policies that create a safer, more ergonomic workplace likely would be important to older nurses. Flexible or part-time work schedules are also important to older nurses (Holtom & O'Neill, 2004), as are phased retirement plans (Hatcher). Although wages are an important factor – research has shown that the wages of more experienced nurses are only 1.0% to 3.0% greater than those of newly hired nurses (Cohen, 2006; Norman et al., 2005) – benefits packages often are considered more important (Letvak, 2002; Hatcher, 2006).

Magnet hospital status is often discussed as a means of attracting and retaining nursing staff. Magnet hospitals must pass a certification process through the American Nurses Credentialing Center that includes documentation of nurse satisfaction levels, patient safety records, and fair labor practices. Magnet hospitals have existed for the last 20 years, and research about them has shown that these hospitals have less turnover and greater levels of nurse satisfaction than nonmagnet hospitals (Aiken, Havens, & Sloane, 2000).

These hospitals are known for offering an environment of autonomy that allows nurses to participate in decision-making, has career advancement programs in place, allows for a regular exchange of information among nurses, and has adequate nurse-to-patient staffing ratios (Upenieks, 2003).

The recruitment of foreign-trained nurses to fill nursing shortages has been used in the United States and other developed nations for decades (Brush, Solchaski, & Berger, 2004). In general, foreign-trained nurses come to the U.S. in order to improve their personal and professional lives through better wages and better working and living environments. Additionally, foreign-trained nurses often send part of their pay back home to family members, which becomes a source of income in developing nations. This practice is so important to some countries, such as the Philippines, that they train nurses expressly to work in other countries (Aiken, Buchan, Sochalski, Nichols, & Powell, 2004).

Although foreign nurses can fill a hole in the workforce, there are some issues associated with their recruitment. Specifically, there are language and cultural barriers that must be overcome. In the United States, foreign-trained nurses must pass the National Council Licensure Examination for Registered Nurses as well as the Test of English as Foreign Language to become a registered nurse (Brush et al., 2004; Davis & Nichols, 2002). Even those who pass these tests experience language barriers and may have trouble understanding unfamiliar slang or medical jargon. Likewise, adjusting to cultural differences in such things as body language, eye contact, and various forms of communication may be difficult for some (Davis & Nichols).

Perhaps more important are the ethical considerations involved with the recruitment of foreign-trained nurses from nations already facing nursing shortages. The impending nursing shortage is not unique to the United States; rather, it is occurring in most developed nations for many of the same reasons (Aiken et al., 2004). Recruiting creates a more pronounced shortage among impoverished, at-risk populations from which the nurses come (Brush et al., 2004). This is true for most African nations and some, such as Ghana, have requested that recruitment stop in their country (Brush et al., 2004). Even countries that have policies aimed specifically at training and exporting nurses (e.g., the Philippines) are feeling a strain on their own health care system (Aiken et al., 2004; Brush et al., 2004).

Several states have recently passsed legislation allowing the use of medication aides in an attempt to lighten nurse workloads (McDermott, 2004). These aides are tasked with administering routine medications to patients, usually in long-term care settings (Wood, 2006). Many states require that medication aides be certified and some states require that they be certified nursing assistants before completing training to dispense medications, but the education requirements are not uniform across states (McDermott).

There is very little research on the effectiveness or safety of having medication aides (Wood, 2006), but the practice tends to be controversial, especially among the nursing community. Because medication aides are unlicensed and often have minimal training, there are questions regarding their ability to judge a situation or patient's health well enough to recognize adverse effects caused by medications (Glazer, 2002). A recent study by Scott-Cawiezell,

Pepper, Madsen, Petroski, Vogelsmeier, and Zellmer (2007) found that medication aides were actually less likely to make errors than registered nurses, probably because the medication aide is less likely to be interrupted or distracted. The authors point out, though, that this study involved a very small sample and based their conclusions on "naive observation." Because medication aides are so new to the field of health care, more research will be necessary to determine what effect these aides have on patient outcomes and on decreasing nurse workloads.

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1. The System as a Whole

## Synopsis of Methodology

*by: Lisa A. Knapp, Research Analyst*

Research and Planning (R&P) began the survey process by conducting an extensive review of professional research pertaining to areas that affect nurses. This review was then used to design the survey instrument. The instrument measures nurse satisfaction and its influence on job retention. It includes measures related to staffing levels, non-nursing tasks, wages and benefits, and hospital safety for both nurses and patients.

In order to ensure that all relevant questions were asked, the instrument was presented to a nurse advisory committee prior to finalizing the survey instrument. This nurse advisory committee was comprised of several nurses from various disciplines including hospital and long-term care nurses and nurse managers, public health nurses, and members of the Wyoming Board of Nursing.

Two versions of the survey were created: one for nurses working in ambulatory care (includes private doctor's offices and surgery centers) and one for nurses working in

hospitals and long-term care. Both surveys included questions involving satisfaction, background, and demographics, but the hospital and long-term care survey also included questions about overtime and shift work. Nurses were given a reference date to standardize their answers to a specific point in time. The reference date for ambulatory care nurses was June 12, 2007 and for hospital and long term care nurses it was July 12, 2007.

All nurses were sent an advance letter to inform them of the upcoming survey as well as act as a form of address refinement and population verification (e.g. nurses we can no longer locate). This left a survey population of 672 nurses in ambulatory care and 2,969 nurses in hospitals and long-term care.

Each nurse was assigned a confidential random identification number and was mailed a copy of the survey, a cover letter explaining the purpose of the survey, and a stamped, addressed return envelope. Nurses were sent up to two more mailings between July and October depending on how they responded to the previous mailing.

**Table 1: Timeline for Wage Record Follow-Up on Nurse Intention to Leave Primary Employer Within One Year**

| Reference Quarter | | | | | |
|---|---|---|---|---|---|
| 2007Q2 | 2007Q3 | 2007Q4 | 2008Q1 | 2008Q2 | 2008Q3 |
| Ambulatory Care Nurses Surveyed | Hospital and LTC Nurses Surveyed | | | One Year Follow-Up for Ambulatory Care Nurses | One Year Follow-Up Hospital and LTC Nurses |
| **Date Wage Records Available** | | | | | |
| October 15, 2007 | January 15, 2008 | April 15, 2008 | July 15, 2008 | October 15, 2008 | January 15, 2009 |

Nurses younger than age 35 in the hospital and long-term care survey were less likely to respond than nurses older than 35. In order to increase the response rate for these younger nurses, phone calls were made in early November and resulted in an additional 49 (1.7%) responses.

After nurses identified as no longer working in Wyoming were removed from the sample, the final response rate for nurses working in an ambulatory setting was 71.4% (N=434) and the response rate for nurses working in a hospital setting was 67.5% (N=1,901).

**Table 2: Ambulatory Health Care Services Nurses Who Indicated an Intent to Leave Their Primary Employer Within One Year**

| Status | n | % |
|---|---|---|
| Not Found Working In Wyoming During 2007Q2 | 5 | 6.0% |
| Working in Wyoming During 2007Q2 | 78 | 94.0% |
| **Total** | **83** | **100.0%** |
| | | |
| Working For The Same Primary Employer in both 2007Q2 and 2007Q4 | 45 | 54.2% |
| **Total** | **83** | **100.0%** |

Note: These nurses have only had two quarters to leave.

**Table 3: Hospital and Nursing & Residential Care Facilities Nurses Who Indicated an Intent to Leave Their Primary Employer Within One Year**

| Status | n | % |
|---|---|---|
| Not Found Working In Wyoming During 2007Q3 | 23 | 7.3% |
| Working in Wyoming During 2007Q3 | 292 | 92.7% |
| **Total** | **315** | **100.0%** |
| | | |
| Working For The Same Primary Employer in both 2007Q3 and 2007Q4 | 242 | 76.8% |
| **Total** | **315** | **100.0%** |

Note: These nurses have only had one quarter to leave.

# Factor Analysis

*by: Douglas W. Leonard, Senior Economist*

During September 2007, Research & Planning (R&P) mailed surveys to all licensed Registered Nurses in Wyoming (see Chapter 3: Methodology). The survey instrument consisted of 86 questions ranging from satisfaction with base salary to perceptions of community services. Given the wide array of perception and satisfaction data collected, it was determined that results would be more understandable if questions were grouped based on common themes. To accomplish this, we used a statistical technique called exploratory factor analysis. The factor analysis reduced the number of items scaled 1 to 5, from 45 to 8 (see Table 4). Reducing the number of items for analysis makes subsequent statistical models easier to understand. See Chapter 6 (page 274) for complete details of the factor analysis.

**Table 4: Factor Analysis Question Groupings**
1= Very Dissatisfied 2= Dissatisfied 3= Neither Satisfied nor Dissatisfied 4= Satisfied 5= Very Satisfied NA= Not Applicable

| | I. Professional Development | | | | | |
|---|---|---|---|---|---|---|
| 34. | Opportunities for advancement | 1 2 3 4 5 NA |
| 43. | Opportunities to use your skills | 1 2 3 4 5 NA |
| 44. | Opportunities to learn new skills | 1 2 3 4 5 NA |
| 45. | Opportunities for continuing education | 1 2 3 4 5 NA |
| | **II. Interpersonal** | |
| 24. | Skill of RNs where you work | 1 2 3 4 5 NA |
| 30. | Level of personal safety at the facility where you work | 1 2 3 4 5 NA |
| 31. | Work schedule | 1 2 3 4 5 NA |
| 33. | Job security | 1 2 3 4 5 NA |
| 35. | Support from nurses with whom you work | 1 2 3 4 5 NA |
| 36. | Support from your nursing administration | 1 2 3 4 5 NA |
| 37. | Interactions with physicians | 1 2 3 4 5 NA |
| 38. | Interactions with other non-nursing staff | 1 2 3 4 5 NA |
| 40. | Interaction with patients | 1 2 3 4 5 NA |
| 42. | Involvement in policy and management decisions | 1 2 3 4 5 NA |
| 46. | Quality of patient care where you work | 1 2 3 4 5 NA |
| 47. | Feeling that your work is important | 1 2 3 4 5 NA |
| | **III. Compensation** | |
| 21. | Your current base salary | 1 2 3 4 5 NA |
| 22. | Salary range for your position | 1 2 3 4 5 NA |
| 23. | Employee benefits | 1 2 3 4 5 NA |
| | **IV. Non-Nursing Tasks** | |
| 26. | Adequacy of clerical support services | 1 2 3 4 5 NA |
| 27. | Non-nursing tasks required of you (e.g., housekeeping, lab) | 1 2 3 4 5 NA |
| 28. | Amount of paperwork required | 1 2 3 4 5 NA |
| 41. | Time available for patient education | 1 2 3 4 5 NA |
| | **V. Local Economic Conditions** | |
| 71. | Economic opportunities | 1 2 3 4 5 NA |

*Table continued from page 22*

**Table 4: Factor Analysis Question Groupings**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 73. | Cost of living | 1 | 2 | 3 | 4 | 5 | NA |
| 74. | Rural character | 1 | 2 | 3 | 4 | 5 | NA |
| 76. | Housing | 1 | 2 | 3 | 4 | 5 | NA |
| | **VI. Family Proximity** | | | | | | |
| 72. | Proximity to family | 1 | 2 | 3 | 4 | 5 | NA |
| | **VII. Community Services** | | | | | | |
| 78. | Parks and recreation/natural amenities | 1 | 2 | 3 | 4 | 5 | NA |
| 79. | Education (K-12) | 1 | 2 | 3 | 4 | 5 | NA |
| 80. | Access to post-secondary education, including continuing education | 1 | 2 | 3 | 4 | 5 | NA |
| 81. | Day care services | 1 | 2 | 3 | 4 | 5 | NA |
| 82. | Medical care services | 1 | 2 | 3 | 4 | 5 | NA |
| 83. | Mental health services | 1 | 2 | 3 | 4 | 5 | NA |
| | **VIII. Disposable Income** | | | | | | |
| 84. | Retail shopping | 1 | 2 | 3 | 4 | 5 | NA |
| 85. | Restaurants/entertainment | 1 | 2 | 3 | 4 | 5 | NA |

## Logistic Regression Model Development

We modeled the factors (see Table 5, page 24) on the stated intent to leave (see Appendix A, survey question 6, page 109) both singly and in combination. Binary logistic regression allows us to predict the value of a question response with only two values: yes and no. Initial results indicated that age, interpersonal interactions, professional development, and community ties most accurately predicted stated intent to leave. However, the literature review and respondent comments (see pages 7 and 30, respectively) indicated that base salary satisfaction was an important factor in the decision to leave. Salary was inserted into the model with the previously mentioned variables and a significant statistical relationship was found. The final model is presented in Table 6 (see page 24). The indented items in Table 5 indicate the questions that, when added together, comprise a factor. Two items, question 86 (tied to community) and question 69a (opportunity to move) were reverse-coded on the questionnaire (see Table 5). The coding scheme on these questions was changed to enable easier interpretation of the results. Changing the coding scheme on those items had no effect on the results.[1]

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1    Because not all respondents answered every question, some question responses contained missing data. To maximize the number of cases available for analysis on the scaled items, median answers (by question) filled missing responses. This method eliminates bias that may occur when mean values are used. By utilizing the imputation method on the scaled items, 2,370 observations were available for the factor analysis. In addition, for the logistic regression model we excluded some cases from the analysis that had 1) a missing value on the dependent variable, 2) respondents age 65+, 3) an undetermined age, or 4) indicated a desire to retire in the next 12 months. We excluded cases under scenario 1 because there is nothing to predict. Cases under scenarios 2 and 4 were excluded because respondents at or near retirement age might have skewed the results for younger workers (out of scope), or if respondents' birthdates were missing or deemed invalid. The data exclusions left 2,061 observations available for the regression analysis.

**Table 5: SAS Logistic Regression Model Variables and Descriptions**

| SAS Model Variable Name + Survey Question Number and Description | Possible Responses |
|---|---|
| PRIM_LV 6. Do you plan to leave...? | Yes/No |
| SALARY 21. Your current base salary? | (1-5) 1=Very Dissatisfied 5=Very Satisfied |
| INTERPERS: Interpersonal Interactions | |
| 24. Skill of RNs where you work | Same as 21 |
| 30. Personal safety | Same as 21 |
| 31. Work schedule | Same as 21 |
| 33. Job security | Same as 21 |
| 36. Nursing administration support | Same as 21 |
| 37. Physician interactions | Same as 21 |
| 38. Non-nursing staff interactions | Same as 21 |
| 40. Patient interactions | Same as 21 |
| 42. Involvement in policy and management | Same as 21 |
| 46. Quality of patient care | Same as 21 |
| 47. Feeling that your work is important | Same as 21 |
| PROF_DEV: Professional Development | |
| 34. Opportunities for advancement | Same as 21 |
| 43. Opportunities to use your skills | Same as 21 |
| 44. Opportunities to learn new skills | Same as 21 |
| 45. Opportunities for continuing education | Same as 21 |
| MOVE2: 86. If given the opportunity would you move away from your current community?[1] | (1-5) 1=Very Likely 5=Very Unlikely |
| TIED_COMM2: 69a. I am tied to this community and cannot move.[2] | (1-5) 1=Strongly Agree 5=Strongly Disagree |
| AGE: (Calculated from Board of Nursing license file) | Used if birth date available and reasonable |

[1]The responses for this question were recoded so that 1=Very Unlikely and 5=Very Likely.
[2]The responses for this question were recoded so that 1=Strongly Disagree and 5 = Strongly Agree

**Table 6: Analysis of Maximum Likelihood Estimates**

| Parameter | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|---|---|---|---|---|---|
| Intercept | 1 | 2.8405 | 0.6157 | 21.2842 | <.0001 |
| SALARY | 1 | -0.1432 | 0.0643 | 4.9600 | 0.0259 |
| tied_comm2 | 1 | -0.2474 | 0.0547 | 20.4761 | <.0001 |
| prof_dev | 1 | -0.1274 | 0.0245 | 26.9439 | <.0001 |
| move2 | 1 | 0.3409 | 0.0550 | 38.3550 | <.0001 |
| interpers | 1 | -0.0393 | 0.0123 | 10.2763 | 0.0013 |
| age | 1 | -0.0308 | 0.00652 | 22.2293 | <.0001 |

## Logistic Regression Results

Selected model output statistics are shown in Table 6. All model coefficients were significant at the p<.05 level.[1] The parameter (independent variable) estimates indicate that the probability a respondent planned to leave in 12 months declined if:

1. Salary satisfaction increased (SALARY)

2. The perceived level respondents felt tied to the community increased (TIED_COMM2)

3. Satisfaction with professional development opportunities increased (PROF_DEV)

4. Satisfaction with interpersonal interactions increased (INTERPERS)

5. Respondents were older (AGE)

Conversely, the probability of stated intent to leave increased the more

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1 This indicates that the probability of the result occurring by chance was less than 5%. Similarly p<.001 indicates the probability of the result occurring by chance was less than 0.1% (one in 1,000).

**Table 7: Odds Ratio Estimates**

| Effect | Point Estimate | 95% Wald Confidence Limits | |
|--------|---------------|-------|-------|
| SALARY | 0.867 | 0.764 | 0.983 |
| tied_comm2 | 0.781 | 0.701 | 0.869 |
| prof_dev | 0.880 | 0.839 | 0.924 |
| move2 | 1.406 | 1.262 | 1.566 |
| interpers | 0.961 | 0.939 | 0.985 |
| age | 0.970 | 0.957 | 0.982 |

**Table 8: Association of Predicted Probabilities and Observed Responses**

| | |
|--|--|
| Somers' D | 0.539 |
| Gamma | 0.541 |
| c | 0.769 |

respondents felt they would move if the right opportunity availed itself to them (MOVE2). Conversationally, we categorize the predictors as one demographic variable (AGE), two community-related variables (TIED_COMM2, MOVE2), and three workplace variables (SALARY, INTERPERS, PROF_DEV; See Figure 1, page 26).

The model's predictive properties are further illustrated by the odds ratios shown in Table 7. Odds ratios indicate the change in the chance of leaving for a given variable value. For example, the estimate for the variable SALARY is 0.867. This means that for every point (1 – 5 scale, see Table 4) satisfaction with salary increases (controlling for other model variables) the probability of a planned exit from primary facility decreases by 13.3% (1 – 0.867). The same type of result occurs for TIED_COMM2, PROF_DEV, INTERPERS and AGE in that as their values increase, stated intent to leave declines. However, for the variable MOVE2, we see that the odds of a planned exit increase by 40.6% (1.406) for each one point increase in response to question 69a (following the change in coding scheme, see Table 5 and associated footnotes).

Three sets of statistics describe how well the model predicts stated intent to leave (see Table 8). Several measures indicate how well the model reduces error when correctly predicting the stated intent to leave when compared to random chance. The first of the measures, Somers' D, indicates that the model reduces error in predicting stated intent to leave by 53.9% (D=0.539). The second measure, Goodman and Kruskal's Gamma, shows a similar reduction in error compared to random chance (γ=0.541). The c-statistic is another model performance indicator. In this case, the value of c is 0.769. A value larger than 0.5 indicates the model predicts the outcome better than random chance. All three measures indicate a significant reduction in the error of predicting a correct response to question 6 compared to random chance.

Another measure of model accuracy is its classification table. The classification groups modeled and actual responses into four categories, 1) Model=Yes, Actual=Yes (correct), 2) Model=No, Actual=No (correct), 3) Model=Yes, Actual=No (false positive), and 4) Model=No, Actual=Yes (false negative). In this instance, at the 0.500 cutoff level, the model correctly predicts a "yes" answer on question 6 60.6% of the time (40/66) and correctly predicts a "no" response 86.7% of the time (1,730/1,995).

**Figure 1: Probability of Respondents' Stated Intent to Leave Primary Employer Within 12 Months and Correlated Factors**

**Greater Probability of Stated Intent to Leave Primary Employer in 12 Months**

**LEAVE**
- Younger
- Lower salary satisfaction
- Lower professional development satisfaction
- Less tied to community
- Lower interpersonal satisfaction
- Greater inclination to move

A knowledge of these factors allows us to correctly predict 85.9% of the time the answer to the question, "Do you plan to leave employment with your primary facility within the next 12 months?"

- Greater salary satisfaction
- Greater professional development satisfaction
- Stronger ties to community
- Greater interpersonal satisfaction
- Less inclined to move

**STAY**

**Lesser Probability of Stated Intent**

The overall accuracy rate of the model was 85.9% (1,770 correctly identified cases/2,061 total cases).

## Discussion

The factor analysis provided a way of reducing the number of variables analyzed in the study. An additional benefit was to clarify which of the scaled items could be grouped together as common measures of different types of satisfaction. While the method used is computationally intensive, it is by no means exhaustive. Alternative methods of factor extraction and rotation may yield different solutions and potentially affect the result.

Although the overall accuracy of the model is satisfactory (86.7%), 60.6% of those RNs stating they would leave their jobs in 12 months were correctly predicted by the model. This is most likely due to variables not measured with the questionnaire. As R&P receives feedback from the Nurse Advisory Council, Wyoming Healthcare Commission, and other groups, measures not utilized in the current study may be included in future study iterations.

Model results indicated respondent age was a statistically significant predictor of stated intent to leave.

## Summary

The factor analysis and modeling exercise integrated administrative and questionnaire data. It is possible that alternative factor extraction and rotation procedures could produce slightly different

results. However, given the amount of rigor employed during the data investigation phase, it is unlikely to produce substantive differences from the configuration reported in this chapter. It is of great interest to R&P, the Board of Nursing, and the Health Care Commission to study how well the model predicts not only stated intent to leave, but also the actual separation event itself. In doing so, we can determine how well the questionnaire predicts turnover among Wyoming's Registered Nurses.

# From Modeling to Prediction

*by: Douglas W. Leonard, Senior Economist*

In the previous section, we described the use of factor analysis and logistic regression to estimate registered nurses' (RNs) stated intent to leave their primary employer. While this information provided useful insights into RNs' future intentions, further use of administrative data allows the analysis to proceed to the next step. In this section, we analyze RN exit rates from hospitals in light of the factors identified in the previous section to determine if satisfaction and other scaled item scores predict near-term turnover.

## Methodology

According to Glover (2001), we define exits as workers attached to an employer in the previous quarter (second quarter 2007; 2007Q2) and the current quarter (2007Q3), but not in the subsequent quarter (2007Q4). We applied the definition to unemployment insurance wage records (Gosar, 1995) to calculate exit rates at the employer level. RNs were assigned to industries according to their primary employers (e.g., the employer who paid them the greatest wages in 2007Q3). We chose 2007Q3 as the base quarter because the questionnaire data collection occurred in 2007Q2. Using the same questionnaire data analyzed in the factor and logistic regression analysis, we plotted employer-level turnover rates in hospitals on the x-axis and standardized factor scores on the y-axis. We standardized factor and item scores to a mean of zero and a standard deviation of one by industry. Standardized scores allowed us to compare factors with different numbers of scaled items directly. Although using 2007Q3 turnover rates is a very near-term estimation of model and questionnaire predictive validity, our intent is to demonstrate the application of these methods. For the purposes of this analysis, we selected the top three questionnaire items, or factors, based on linear regression models.

## Results

Figure 2 (see page 28) represents the variable with the strongest linear relationship to firm-level exit rates, base salary satisfaction (question 21). As the trend line indicates, increasing values of exit rates negatively correlate to base salary satisfaction at the employer level. Exit rates account for approximately 34% of the variance in standardized base salary satisfaction (and vice versa). Similar to the model results, increasing values of satisfaction tend to lead to decreasing exit rates.

Figure 3 (see page 29) illustrates the relationship between employer-level exit rates and perceived RN ties to the

**Figure 2: Wyoming Firm-Level Registered Nurse Exit Rates and Salary Satisfaction Scores (Question 21), Third Quarter 2007**

$$y = -0.0421x + 0.1732$$
$$R^2 = 0.3451$$

N (Exit Rates) = 2,214
N (Satisfaction) = 1,531
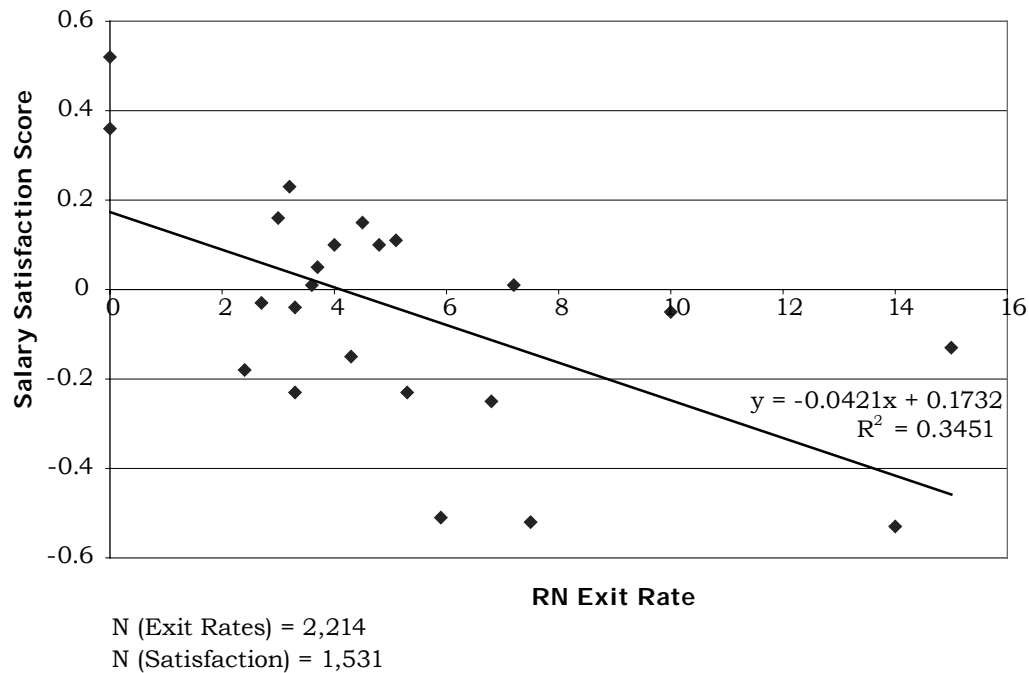
community (question 69). Higher scores on this item indicate increased levels of agreement with the question, "I am tied to my community and cannot leave." This is a change from the original question scoring in which increasing scores indicate increasing *disagreement* with the statement in question 69. Therefore, as perceived ties to the community increase, exit rates increase at the employer level. While this finding seems counterintuitive, Figure 3 (see page 29) compares employer-level exit rates with employer level standardized satisfaction scores, whereas modeling compared individuals' characteristics to individuals' stated intent to leave employment. In addition, if RNs perceive community ties as a negative, frustration may build to the point where they choose to leave not only their primary employers, but also the community (and state) altogether.

Figure 4 (see page 29) illustrates how satisfaction with professional development scores (the sum of questions 34, 43, 44, and 45; see page 57) varied with employer-level exit rates. The trend line indicates a weak but inverse relationship between professional development scores and employer exit rates. In other words, as professional development satisfaction scores rise, exit rates tend to decline and vice versa. Should this finding hold true in 2008Q3, employers may be able to reduce RN exit rates by increasing their satisfaction with professional development opportunities.

## Summary

In this chapter, we demonstrated how R&P could combine questionnaire

**Figure 3: Wyoming Firm-Level Registered Nurse Exit Rates from Hospitals vs. Feelings of Being Tied to the Community (Question 69), Third Quarter 2007**



$y = 0.0231x - 0.1318$
$R^2 = 0.1982$

Z-Score of Feelings of Being Tied to the Community

RN Exit Rate

N (Exit Rates) = 2,214
N (Satisfaction) = 1,531
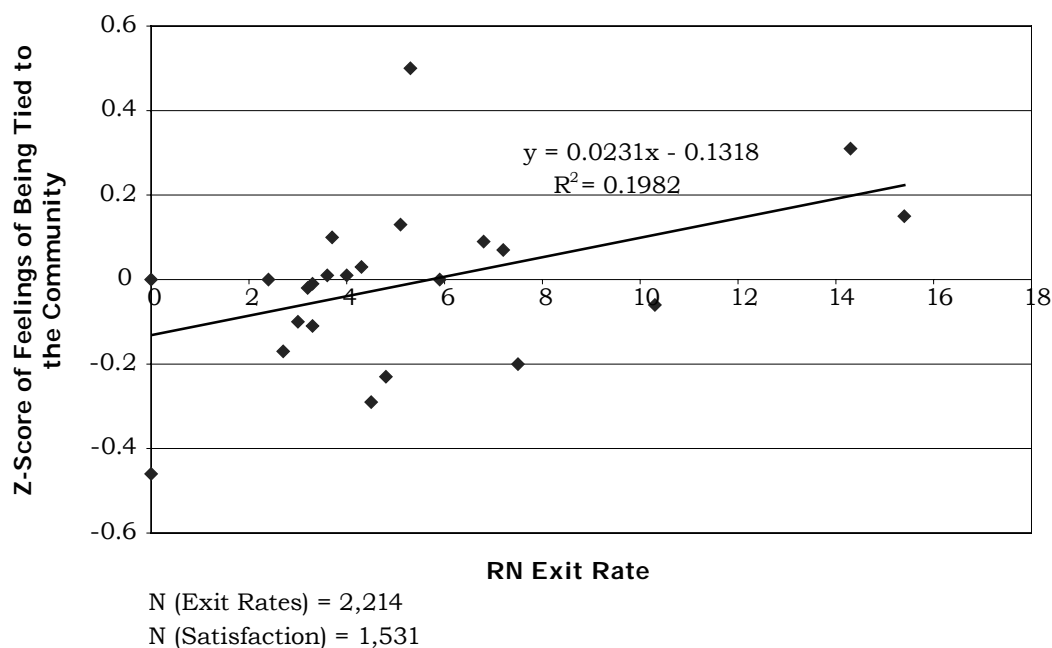
**Figure 4: Wyoming Firm-Level Registered Nurse Exit Rates from Hospitals and Professional Development Satisfaction Scores (Questions 34, 43, 44, and 45), Third Quarter 2007**



$y = -0.0329x + 0.0163$
$R^2 = 0.1222$

Professional Development Satisfaction Score

RN Exit Rate

N (Exit Rates) = 2,214
N (Satisfaction) = 1,531
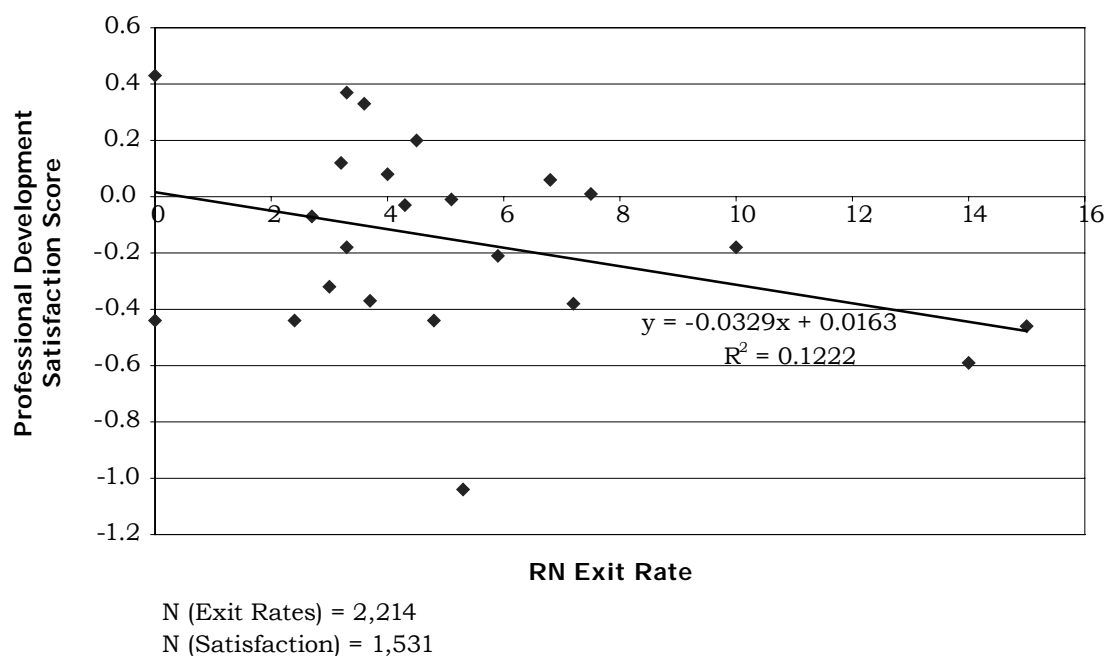
(Text continued from page 28)

and administrative data to measure the predictive validity of the survey instrument. This approach is more cost-effective and accurate than conducting another survey to determine if RNs left their primary employers. The real test of the questionnaire's predictive validity will take place in 2009 when we can measure exit rates that match the time horizon specified in question 6. Until then, we can monitor exit rates and compare them to scaled item scores.

## References

Glover, W. (2001, December 11). Turnover analyses; definitions, process, and quantification. Retrieved May 8, 2008, from http://doe.state.wy.us/LMI/w_r_research/Turnover_Methodology.pdf

Gosar, W. (1995, May). Wyoming unemployment insurance wage record summary statistics – A new way to look at Wyoming. *Wyoming Labor Force Trends, (32)5*. Downloaded May 8, 2008 from http://doe.state.wy.us/LMI/0595/0595a2.htm

## Comment Analysis

*by: Sylvia D. Jones, Senior Research Analyst*

At the end of the survey form we asked nurses to comment on any topic raised in the questionnaire. Not all respondents chose to do so; however, those who did offered substantial insight into the issues that mattered to them personally. In order to quantify the information in the comments, we created a list of 32 themes found in the nursing literature, in the questionnaire satisfaction measures, and in other survey questions. We also included themes from the comments themselves that did not appear elsewhere. Each incidence of a comment was counted one time such that respondents could have multiple entries. No attention was paid to the context of the comment, only to the mention of the comment theme itself. For instance, whether the sentence was "I think nurses are overpaid" or "I think nurses are underpaid," the wages theme was coded. Future analysis could investigate differences between positive and negative comments.

After coding the comments into themes, they were tabulated and frequencies were computed. There were 1,694 total comments made by 558 individual nurses (23.2% of respondents). Comment themes and frequencies can be found on page 32 and Appendix B, page 123, respectively. For the sake of discussion in this study, we assumed that frequency of appearance was related to the relative importance of the comment theme. In other words, those ideas commented on most frequently were relatively more important than those ideas receiving fewer mentions.

While content analysis is interesting and often reveals useful data, the most frequent use is as illustration and corroboration for the more quantitative sections of the analysis. It serves as a potential guide for subsequent studies because, in essence, it either provides or fails to provide face validity to the study. For instance, comments largely in line with modeled predictors of behavior would basically substantiate the validity of the model's

conclusions. Alternatively, comments on topics not explained in the quantitative model raise questions about the efficacy of the conclusions. Such questions could lead to further investigation.

The primary reason for using content analysis as a secondary source of analysis rather than a primary source is the issue of randomization. Not all responding nurses chose to write comments; therefore, the comments collected were not from a random sample and cannot be viewed as representative. If all nurses who returned the questionnaire were engaged in conversation or an unstructured interview, the results would potentially be representative, barring overall response bias.

## Comments on Modeled Concepts

*by: Sylvia D. Jones, Senior Research Analyst*

As stated in the previous section, content analysis is often used as illustration and corroboration for the quantitative sections of the analysis as well as a method for uncovering unexplained theoretical avenues. In this study, as in others that include content analysis, investigators looked to the comments as a method of gauging the efficacy of the modeled conclusions. Congruence between the content analysis results and the quantitative model is associated with confidence in the validity of the statistical results. In general, the content themes found in this analysis corresponded to the modeled concepts. However, the issues appear to be much more complex than simple analysis of the scaled items would suggest.

## KEY POINTS

- In general, the content themes found in this analysis corresponded to the modeled concepts.
- There were 256 comments covering two categories that could be described by the Compensation factor: Wages and Benefits.
- There were 279 comments covering four categories that could be described by the Tied to Community factor: Community, Family, Housing/Cost of Living, and Daycare.
- There were 28 comments in only one category (Continuing Education/Advancement) that could be described by the Professional Development factor.
- There were 672 comments covering 12 categories that could be described by the Interpersonal factor: Management, Respect, Autonomy, Abuse, Physician Interaction, Unlicensed Staff, Overtime, Shifts/Flexibility, Patient Safety, Nurse Safety, Patient Ratio, and Quality of Patient Care.
- The following items were not found by the quantitative model to be significant predictors of a nurse's stated intent to leave his or her current employer: Workload, Paperwork, Corporate Issues, and Quality of New Nurses.

**Table 9: Comments by Factor Analysis Question Grouping**

| | n of Comments | % of Comments | % of Nurses Who Responded |
|---|---|---|---|
| **Tied to the Community** | **279** | **16.4%** | **35.2%** |
| Community | 115 | 6.8% | 19.4% |
| Family | 74 | 4.4% | 13.1% |
| Housing/Cost of Living | 68 | 4.0% | 10.9% |
| Daycare | 22 | 1.3% | 3.4% |
| **Compensation** | **256** | **15.1%** | **35.8%** |
| Wages | 198 | 11.7% | 31.2% |
| Benefits | 58 | 3.4% | 9.7% |
| **Interpersonal** | **672** | **39.6%** | **60.2%** |
| Management | 148 | 8.7% | 23.8% |
| Respect | 111 | 6.5% | 17.5% |
| Autonomy | 5 | 0.3% | 1.0% |
| Abuse | 4 | 0.2% | 0.8% |
| Physician Interaction | 23 | 1.4% | 4.0% |
| Unlicensed Staff | 9 | 0.5% | 1.7% |
| Overtime | 38 | 2.2% | 6.1% |
| Shifts/Flexibility | 76 | 4.5% | 12.2% |
| Patient Safety | 42 | 2.5% | 7.0% |
| Nurse Safety | 16 | 0.9% | 2.7% |
| Patient Ratio | 121 | 7.1% | 18.7% |
| Quality of Patient Care | 79 | 4.6% | 13.7% |
| **Professional Development** | **28** | **1.6%** | **5.1%** |
| Continuing Education/ Advancement | 28 | 1.6% | 5.1% |
| **Non-Nursing Tasks** | **115** | **6.8%** | **17.3%** |
| Workload | 63 | 3.7% | 10.9% |
| Paperwork | 52 | 3.1% | 8.6% |
| **Other Themes** | | | |
| Corporate Issues | 81 | 4.8% | 13.3% |
| Quality of New Nurses | 83 | 4.9% | 13.3% |

**Compensation**: There were 256 comments covering two categories – Wages and Benefits – that could be described by the Compensation factor (see Factor Analysis section, Page 22). Taken together, the two comment groups encompassed 15.1% (256) of comments and were mentioned by 35.8% of commenting nurses (see Table 9). As evidenced by the only slightly elevated percentage of responding nurses (35.8% rather than the expected 40.9% if the comments were unique), nurses commonly mentioned issues with both wages and benefits rather than just one or the other.

An example of the Wages category is: "The main problem, I feel, in the nursing field in Wyoming is the low pay scale. If the pay was comparable to other states, then a lot of the other problems we deal with would not be so hard to handle, including excess paperwork or duties." This category received the most comments (198 or 11.7% of comments) and was mentioned by the largest percentage of nurses (31.2%). It could certainly be argued that wages are the most important issue to those nurses who included written comments.

An example of the Benefits category is: "I believe wages and insurance should be better for nursing personnel." Almost 10% (9.7%) of nurses who commented mentioned Benefits at least once. There were 58 (3.4%) references to the category, often in conjunction with concern for wages.

**Tied to the Community**: There were 279 comments

covering four categories that could be described by the Tied to the Community factor. The categories include: Community, Family, Housing/Cost of Living, and Daycare. Taken together, the four comment groups encompassed 16.4% of total comments and were mentioned by 35.2% of commenting nurses.

The community theme is illustrated by: "All my children NEVER considered living here after college. They need to go where the money is and that is why we are leaving, to be closer to them, our parents, and grandchildren (future). Soon there won't be anyone left to work in the shops and restaurants. The retirees and children of the wealthy don't want to work there. The blue collar workers are being forced out by high land/home prices and how many will want to drive from [other towns] for a minimum [wage] to $10/hr job? Especially with increasing gas prices?" The Community theme included all comments that referenced the respondent's town or place of residence, regardless of connotation. It included issues about shopping, restaurants, attitudes of neighbors, economic development, and "home," among others. This category received 115 comments (6.8%) from 19.4% of nurses who chose to comment.

An example of Family is: "When your family and ties to the community make it difficult to move to an urban area for employment it is difficult to survive." The theme included any mention of the respondent's family, either immediate or through marriage. Most comments focused on the spouse (as in, "My spouse loves it here."), parents ("I would leave if my parents went with me."), or children ("I will stay here until my youngest child graduates high school."). The category received 74 comments (4.4%) from 13.1% of

## KEY POINTS

- **The age distribution of those nurses who commented was similar to the distribution of those who responded to the survey.**
- **Most of the themes had age distributions similar to that of commenters in general.**
- **Wages appeared as the most frequently mentioned topic among all age groups except the oldest (65+) group.**
- **Issues with Management appeared as the second most frequently referenced topic overall, as well as among each age group, again, with the exception of the 65+ group.**
- **Patient Ratio and Understaffing was frequently mentioned by the three younger age groups (20-34, 35-44, and 45-54).**

the commenting nurses. It was one of the most popular comments among nurses who indicated intent to retire within 12 months and among those nurses who were already working in another occupation. It was also common among those who planned to continue their education.

An illustration of Housing/Cost of Living is: "Cost of living is escalating – salaries are not." This theme included comments on the cost of living or specific issues with housing. Slightly more than 10% (10.9%) of responding nurses commented on either the cost of living or the housing situation

in their community. This constituted 68 comments (4.0%).

The Day Care theme can be illustrated by: "The day care situation in my community is absolutely unacceptable and very few have openings. The ones that have an opening are way too expensive and are closed throughout the year on days that my spouse and I have to work! This situation is impossible!" The theme included all references to child care, regardless of content. Day Care was commented on 22 times (1.3%) by 3.4% of commenting nurses. As expected, the issue was mentioned more frequently by younger nurses, probably because younger nurses were more likely to have children who need day care services.

**Professional Development**: There were 28 comments in only one category (Continuing Education/Advancement) that could be described by the Professional Development factor. An example is: "Would like to see more continuing education in the nursing field offered at our work facility." The factor encompassed 1.6% of comments and was mentioned by 5.1% of commenting nurses. Despite the fact that the factor was a significant predictor of intent to leave in the regression model, the concept appeared fairly unimportant to those nurses who chose to comment. However, because we cannot know, with confidence, whether the comments represented the issues of greatest importance to all nurses or just an unrepresentative sample, we can only recommend that this issue receive further investigation. In-depth interviews or focus groups may be required in this case.

Although the category combined the concepts of continuing education and advancement opportunities, the majority of the comments were focused on

advancement ("There are few opportunities for advancement in my facility,") rather than continuing education ("Our continuing education department is poor."). This is contrary to the factor analysis in which continuing education loaded more strongly on the factor than opportunity for advancement. Again, because the results of the content analysis vary somewhat from the modeled findings, further investigation may be warranted.

**Interpersonal**: There were 672 comments covering 12 categories that could be described by the Interpersonal factor. The categories are: Management, Respect, Autonomy, Abuse, Physician Interaction, Unlicensed Staff, Overtime, Shifts/Flexibility, Patient Safety, Nurse Safety, Patient Ratio, and Quality of Patient Care. Taken together, the 12 comment groups encompassed 39.6% of comments (672) and were mentioned by 60.2% of commenting nurses. Occupational staffing patterns can be found in Chapter 2 (see page 75). As can be seen from these tables, management occupations are over-represented in Wyoming in comparison to surrounding rural states and the nation.

An example of Management is: "I wish the lower nurses were respected by upper nursing management/administration, but I feel treated like dirt." All comments that included mention of managers, management, supervisors, etc., were included in this theme. It did not include comments written specifically about corporate policy, however. The Management category was the focus of 148 comments (8.7%) by 23.8% of nurses. It was the second most common theme among all nurses who wrote a comment.

The Respect theme is exemplified by: "I

believe I am underpaid, undervalued, and not respected as a nurse." Typically the word "respect" appeared in the comments found in this group. The category received 111 comments (6.5%) from 17.5% of commenting nurses.

An example of Autonomy is: "We need to bring nursing in Wyoming up to standards higher than all other states. More autonomy. Retention. Opportunity for advanced skills." This comment was fairly rare in that it was only mentioned five times (0.3%), by 1.0% of commenting nurses.

The Abuse theme is illustrated by: "I would really like to know when it became legal for patients, admin, managers, and other staff to abuse nurses both verbally and physically." Abuse was mentioned very infrequently (only four times (0.2%) by 0.8% of nurses).

An example of Physician Interaction is: "There also seems to be a growing disrespect in general from physicians for the work we do." This theme included all comments that referenced physicians in the context of their working relationship with the nurse. Comments about physician shortages were included in the Community theme. The Physician Interaction category was the focus of 23 comments (1.4%) by 4.0% of commenting nurses.

An illustration of Unlicensed Staff is: "I'm most disappointed when I see nursing duties assigned to other staff who are not trained in a school setting but have been told how to do it at the work place." This comment was fairly rare in that it was only mentioned nine times (0.5%) total, by 1.7% of commenting nurses.

An example of Overtime is: "There is too much forced overtime/call, and I am forced to float on a weekly basis. I feel I was lied to when I interviewed at this hospital." Comments were included in this category if they specifically mentioned overtime (forced or voluntary). The Overtime category was the focus of 38 comments (2.2%) by 6.1% of nurses.

The Shifts/Flexibility theme is illustrated by, "I do not like mandated 12 hour shifts – too long – dangerous." The theme also included issues about shift flexibility such as: "I wish my facility was willing to be more flexible in my scheduling." This category was mentioned 76 times (4.5%), by 12.2% of commenting nurses.

An instance of Patient Safety is: "The nurses in my hospital are being overworked drastically and it is impairing patient care. We are hiring traveling RNs that don't have the best practices because we are so short handed and they are putting patient lives at stake. This makes me rethink my job daily." This category included all references to patient safety, either explicit or implied. There were 42 comments (2.5%) by 7.0% of commenting nurses who chose to mention this category.

An example of Nurse Safety is: "Injured back more than 1 time." Contrary to patient safety issues, there were only 16 comments (0.9%) by 2.7% of commenting nurses who opted to discuss nurse safety issues.

The Patient Ratio theme is exemplified by: "Nurses in long-term care take care of too many people at one time to give thorough adequate care." All comments referencing the number of patients in a nurse's care were included in this category. This was one of the more popular topics of discussion with 121 comments (7.1%) from 18.7% of commenting nurses and frequently

**1. The System as a Whole**

occurred with mention of patient care quality.

An example of Quality of Patient Care is: "I enjoy the WORK at this facility. In this lifetime I hope to never be a caregiver or a patient in this facility. The care is abysmal." Comments about patient care quality were included in this category regardless of whether the care was considered good or bad. There were 79 comments (4.6%) about the quality of patient care from 13.7% of commenting nurses.

## Themes in the Comments Not Found in the Model

The following items were not found by the quantitative model to be significant predictors of a nurse's stated intent to leave his or her current employer. However, because of common mention in the content section, they appear to be important to the quality of work life and should not be disregarded. Inclusion in future projects is certainly warranted.

**Non-Nursing Tasks**: One of the identified factors in the factor analysis that did not prove to be a reliable predictor in the model (see Factor Analysis section, page 22) was Non-Nursing Tasks. Concern over the number

and types of non-nursing tasks may be a function of the lower proportion of office and administrative support occupations in Wyoming hospitals. As can be seen in Table 14, page 86, only 12.5% of the staff in Wyoming hospitals are classified as office and administrative support workers, while the proportion of support staff nationally is 15.2%. While not important as a predictor of exit behavior, the factor was mentioned fairly frequently by nurses who chose to comment. There were 115 comments covering two categories – Workload and Paperwork – that could be described by the factor. Taken together, the two comment groups encompassed 6.8% of comments and were mentioned by 17.3% of commenting nurses.

An example of workload is, "Nurses in our facility doing too much ancillary

work – POCT testing, drawing blood, EKGs. Just what are lab personnel for?" The category included any reference to the amount of work required. There were 63 comments (3.7%) about Workload from 10.9% of commenting nurses.

An example of Paperwork is: "I have been a practicing RN for 44 years. I have always loved nursing but find the paperwork limits greatly the time spent caring for patients." All references to paperwork or charting (even electronic) were included in this category. There were 52 (3.1%) comments about paperwork from 8.6% of commenting nurses. Paperwork was also one of the scaled items that received the largest number of "Dissatisfied" and "Very Dissatisfied" ratings

**Corporate Issues**: While this issue was not included in any of the satisfaction measures and therefore

> • While not important as a predictor of exit behavior, [non-nursing tasks] were mentioned fairly frequently by nurses who chose to comment.

not included in the factor analysis, it was mentioned 81 times (4.8%) by 13.3% of commenting nurses. An example is: "I am very dissatisfied that what is best for the patient is never the bottom line, the pay source is." And "I've been a family member and now an employee – staffing ratios are woefully inadequate. Companies are going to do

the least they are legislated to do and no more and nursing home residents pay in more ways than financially. Orphanages were considered inhumane – it's so frustrating to care and want to help and have your hands tied by what you HAVE to do, to what you should do for another human being who, for the majority, was a productive member of society."

**Quality of New Nurses**: Again, this issue was not included in the satisfaction measures but was frequently mentioned in the comments. A total of 13.3% of commenting nurses made 83 references (4.9%) to the quality of new nurses. An example is: "I am very tired of teaching RNs how to do their jobs because they are not taught in college."

# Why Age Is important

*by: Dr. Mark A. Harris, Sociologist, and Sylvia D. Jones, Senior Research Analyst*

Age is likely correlated with job relocation, career advancement (for a nurse or nurse's spouse), childbirth, the number and spacing of school-age children, divorce, achieving an empty nest, retirement planning, and the level of physical stamina (including the result of injuries) to name just a few. These factors likely influence the ability of nurses to work in any given health care setting as they move through various life cycle events.

To illustrate, given variation in schedule requirements across health care subsectors, age may play a role as nurses begin having children and when shift work and overtime frequently required in hospitals become problematic. Likewise, achieving an empty nest and the desire to increase income for retirement purposes may make overtime attractive and encourage moving back into a hospital setting.

It would appear from the stocks and flows analysis presented in this document (see Chapter 2, Figure 12, page 93) that a fairly substantial amount of movement occurs

within Wyoming's health care subsectors and that nurses are apparently taking advantage of the various pros and cons inherent in any given subsector.

Given the importance of age, we have tried to account for it and display results broken down by age at various points in the analysis.

## Age by Intent to Leave Primary Employer in the Next 12 Months

Overall, 80.0% (1,868) of responding nurses indicated that they did not plan to leave their current employer within the ensuing 12 months (see Table 10, page 38). Another 376 (16.1%) indicated they did plan to leave. The largest percentage (41.2%) of those who planned to leave was found among the youngest group (age 20-24). This group was by far the smallest group, so the results should be interpreted with caution. However, considering the migration patterns of the youth in the state and elsewhere, one would expect the youngest group to be likely to exit their employer. Following the 20-24

**Table 10: Wyoming Registered Nurses' Intent to Leave Primary Facility Within 12 Months by Age Group**

| Age Group | | Yes | No | Skip, Not Employed In Nursing | Skip | No Answer | Total |
|---|---|---|---|---|---|---|---|
| 20-24 | N | 7 | 9 | 1 | | | 17 |
| | Row % | 41.2% | 52.9% | 5.9% | | | 100.0% |
| | Col. % | 1.9% | 0.5% | 1.3% | | | 0.7% |
| 25-34 | N | 60 | 274 | 8 | 1 | | 343 |
| | Row % | 17.5% | 79.9% | 2.3% | 0.3% | | 100.0% |
| | Col. % | 16.0% | 14.7% | 10.3% | 50.0% | | 14.7% |
| 35-44 | N | 73 | 386 | 13 | | 2 | 474 |
| | Row % | 15.4% | 81.4% | 2.7% | | 0.4% | 100.0% |
| | Col. % | 19.4% | 20.7% | 16.7% | | 18.2% | 20.3% |
| 45-54 | N | 108 | 634 | 20 | 1 | 4 | 767 |
| | Row % | 14.1% | 82.7% | 2.6% | 0.1% | 0.5% | 100.0% |
| | Col. % | 28.7% | 33.9% | 25.6% | 50.0% | 36.4% | 32.8% |
| 55-64 | N | 67 | 422 | 22 | | 3 | 514 |
| | Row % | 13.0% | 82.1% | 4.3% | | 0.6% | 100.0% |
| | Col. % | 17.8% | 22.6% | 28.2% | | 27.3% | 22.0% |
| 65+ | N | 13 | 38 | 9 | | | 60 |
| | Row % | 21.7% | 63.3% | 15.0% | | | 100.0% |
| | Col. % | 3.5% | 2.0% | 11.5% | | | 2.6% |
| Unknown | N | 48 | 105 | 5 | | 2 | 160 |
| | Row % | 30.0% | 65.6% | 3.1% | | 1.3% | 100.0% |
| | Col. % | 12.8% | 5.6% | 6.4% | | 18.2% | 6.9% |
| Total | N | 376 | 1,868 | 78 | 2 | 11 | 2,335 |
| | Row % | 16.1% | 80.0% | 3.3% | 0.1% | 0.5% | 100.0% |
| | Col. % | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

group was the retirement age group (65+) with 21.7% planning to exit. Again, this finding is of no surprise. As nurses move into traditional retirement ages, there is an expectation that they will retire from their primary job. Some might continue working part-time or in a different capacity, but one would expect them to eventually retire from full-time employment. The smallest percentage of planned exiters (13.0%) was in the 55-64 age. This age group is often less mobile than other groups, likely because they are approaching traditional retirement age.

## Age by Primary Reason for Leaving Primary Employer Within 12 Months

**Overall:** Table 11 (see page 39) shows a plurality (39.0%) of nurses who responded that they intended to leave their current employer within 12 months also indicated that they planned to "Take Another Job in Health Care." This suggests simple job-changing behavior and potential dissatisfaction with the employer or factors associated with the employer rather than a generalized dissatisfaction with nursing or the community. While a job change represents a loss to the employer, it does not represent a loss of nursing resources to the state as a whole. Similarly, few nurses (3.2%) indicated intent to leave the current employer to take a job outside of health care. Many

nurses appeared to want to remain in the occupation. However, 23.4% of responding nurses who planned to leave their employer indicated intent to relocate. While we do not know if the nurses planned to relocate to another community in Wyoming or to another state, we can ascertain that the loss will affect the current community much more so than simple job changing.

**Age 20-24**: The largest percentage (42.9%) chose "Relocating" as their reason for leaving their primary employer. The group was quite small and the largest category represented only three responses so the results are unlikely to be representative of the population. Regardless, it is not surprising to have findings suggesting that young nurses plan to relocate, especially considering the percentage of youth who choose to leave Wyoming.

**Age 25-34**: By far the largest percentage (46.7%) of this age group selected "Taking Another Job in Health Care" as the reason for planning

**Table 11: Wyoming Registered Nurses by Age Group and Stated Reason for Intent to Leave Primary Facility**

| Age group | | Taking Another Job in Health Care | Col % | Taking Another Job Outside Health Care | Col % | Family Status Change | Col % | Relocating | Col % | Continuing Education | Col % | Retiring | Col % | Other | Col % | Total | Col % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20-24 | N | | | | | 1 | | 3 | | 2 | | | | 1 | | 7 | 1.9% |
| | Row% | | | | | 14.3% | 5.9% | 42.9% | 3.4% | 28.6% | 11.1% | | | 14.3% | 1.9% | 100.0% | |
| 25-34 | N | 28 | | | | 7 | | 14 | | 6 | | | | 5 | | 60 | 16.1% |
| | Row% | 46.7% | 19.3% | | | 11.7% | 41.2% | 23.3% | 16.1% | 10.0% | 33.3% | | | 8.3% | 9.6% | 100.0% | |
| 35-44 | N | 29 | | 6 | | 2 | | 22 | | 2 | | | | 13 | | 74 | 19.9% |
| | Row% | 39.2% | 20.0% | 8.1% | 50.0% | 2.7% | 11.8% | 29.7% | 25.3% | 2.7% | 11.1% | | | 17.6% | 25.0% | 100.0% | |
| 45-54 | N | 55 | | 2 | | 2 | | 20 | | 4 | | 3 | | 18 | | 104 | 28.0% |
| | Row% | 52.9% | 37.9% | 1.9% | 16.7% | 1.9% | 11.8% | 19.2% | 23.0% | 3.8% | 22.2% | 2.9% | 7.3% | 17.3% | 34.6% | 100.0% | |
| 55-64 | N | 13 | | 4 | | 1 | | 13 | | 4 | | 24 | | 8 | | 67 | 18.0% |
| | Row% | 19.4% | 9.0% | 6.0% | 33.3% | 1.5% | 5.9% | 19.4% | 14.9% | 6.0% | 22.2% | 35.8% | 58.5% | 11.9% | 15.4% | 100.0% | |
| 65+ | N | | | | | | | | | | | 12 | | | | 12 | 3.2% |
| | Row% | | | | | | | | | | | 100.0% | 29.3% | | | 100.0% | |
| Unknown | N | 20 | | | | 4 | | 15 | | | | 2 | | 7 | | 48 | 12.9% |
| | Row% | 41.7% | 13.8% | | | 8.3% | 23.5% | 31.3% | 17.2% | | | 4.2% | 4.9% | 14.6% | 13.5% | 100.0% | |
| **Total** | **N** | **145** | | **12** | | **17** | | **87** | | **18** | | **41** | | **52** | | **372** | **100.0%** |
| | **Row%** | **39.0%** | 100.0% | **3.2%** | 100.0% | **4.6%** | 100.0% | **23.4%** | 100.0% | **4.8%** | 100.0% | **11.0%** | 100.0% | **14.0%** | 100.0% | **100.0%** | |

to leave their primary employer. "Relocating" followed with 23.3% of the total. This group was understandably the most likely to leave in order to pursue additional education or for family status changes.

**Age: 35-44:** This group was very similar to the group as a whole because the largest reason for planned exit was "Taking Another Job in Health Care" (39.2%) followed by "Relocating" (29.7%). In fact, this group was the most likely of the age groups to relocate. The group was also the most likely to exit employment in order to take a job outside health care. In other words, this group represents the largest potential loss to the state because they are the most likely to exit the nursing profession in Wyoming.

**Age 45-54:** In addition to being similar to the younger groups who chose "Taking Another Job in Health Care" and "Relocating" as the most common reasons for leaving employment, the age 45-54 group was also the most likely to leave their current job for "other" reasons. As will be explored in the Content Analysis section, selecting "Other" was associated with very emotional responses such

as "I hate this place and will leave as soon as I can" rather than an actual plan to leave employment.

**Age 55-64:** This group selected "Retiring" (35.8%) as the primary reason for planning to leave their primary employer. "Taking Another Job in Health Care" and "Relocating" followed, each with 19.4% of the total.

**Age 65+:** Every nurse in this category who indicated intent to leave the primary employer also indicated "Retiring" as the reason.

Arguably the most informative finding in the study of why nurses plan to leave their current employer is that most nurses, regardless of age, do not plan to leave health care. They may be unhappy with their current position or with their employer for any number of reasons; however, they are not necessarily unhappy with the profession of nursing. Unfortunately, the study also revealed that a substantial portion of those planning to leave are planning to relocate. Overall, the percentage of those planning to relocate is fairly small (3.7% of total responding nurses), but in the time of an accelerated nursing shortage, that percentage could be significant.

## Age and Nativity
*by: Tom Gallagher, Manager*

Age is important because it is associated with a range of predictable behaviors in the labor market. However, in Wyoming the explanatory nature of this variable is complicated by nativity. The majority of nurses working in hospitals, nursing & residential care, and ambulatory care, having moved to Wyoming, are nonnatives. These nurses are older than native nurses and consequently are closer to retirement age and withdrawal from the health care market. Moreover, nativity may be associated with other variables such as work experience in a larger, more complex work environment and educational level. New and re-entrants tend to be younger, native-born nurses.

There is some indication that a culture of nonacceptance by native nurse co-workers may counter employer retention strategies. Further, as we see in analysis in Combining the Elements (see page 51), exiting the health care workplace is strongly associated with nurses

exiting the labor market in the state altogether. "(I)f an RN leaves health care, there is a 67.8% chance that RN will exit Wyoming's market entirely." Future analysis of the relationship between the INTERPERSONAL factor described previously (see Factor Analysis, page 20) and discussed in comments (see Comments on Modeled Concepts, page 31) against the propensity to exit the workplace in the near term and subsequently leave the market should be conducted for these two segments of nurses over a period of time. Collection of data over time is needed to allow enough incidents to accumulate for statistical analysis, and to determine whether different rates of exit are persistent.

Model results (see Table 6, page 24) indicate respondents' age was a statistically significant predictor of stated intent to leave their place of work in the following year. The younger the nurse, the greater the likelihood that an intent to leave was indicated on the questionnaire. The purpose of the model was to account for nonretirement-based stated intentions to leave their employer and excluded nurses at or near traditional retirement age.

The age variable was

## KEY POINT

- **Using a Factorial Logistic Regression model, we were able to test whether anticipated exit behavior could be predicted by where the nurse went to high school or for what reason the nurse was living in his or her current community. We found no significant predictive relationship between the variables. However, the relationship observed between a respondent's age and social security number state of origin was statistically significant.**

obtained from Board of Nursing files. Nativity was measured with question 55: "Where did you last attend high school?"

Those responding "Wyoming" were treated in the analysis as Wyoming natives. Subsequent analysis of responses to question 55 by state of social security number (SSN) origin revealed that 87% of those responding to question 55 that they went to high school in Wyoming had an SSN issued in Wyoming. In addition, 96% of those responding that they went to high school elsewhere had an SSN issued in a state other than Wyoming. These results suggest that the response to question 55 is a very good indication of place of birth and that SSN can

be used in future analysis of administrative records to determine where the supply of nurses in Wyoming comes from.

Table 12 (see page 42) illustrates that the age distributions of RNs having attended high school inside and outside Wyoming, are somewhat different. We can formalize these distributions as being different by performing a chi square statistical test.[1]

Table 13 (see page 43) displays the chi square test results. Table 13 shows that the relationship between

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1    The chi square tells us whether we can predict the value of a variable by knowing the value of another variable. In this case, we tested whether we could predict the value of RN age if we knew where an RN attended high school (or vice versa).

RN age and where an RN attended high school is statistically significant. Other displayed statistics describe the strength of relationship between RN age and high school location.

In Table 13, Cramer's V indicates the correlation between RN age and location of high school attended is 0.39 – a positive, moderate, and statistically significant result.

The results of Tables 12 and 13 may suggest policy implications for health care organizations. Table 12 shows that RNs who graduated from Wyoming high schools tended to be younger than those who graduated from out of state high schools. If organizations wish to retain more RNs, intervention programs designed to better integrate RNs and their families into their respective communities may be required. However, any such interventions must occur early enough in the careers of RNs to affect their decision to remain in Wyoming over the longer term. Community or statewide coordination with health care providers may be needed to slow the rate at which RNs exit the state.

### Meeting with Nurse Advisory Committee, May 19, 2008, Casper, WY

Given the importance of nonnative nurses in Wyoming's health care delivery system, R&P shared Table 12 with six nurses as part of a meeting on May 19, 2008, with the Nurse Advisory Committee that assists in guiding this study. The following discussion reflects comments made at an earlier committee meeting

**Table 12: Age Distribution of Registered Nurses by Age Group and High School Location**

| | | Where RN last attended high school | | | | |
| | | Wyoming | | Out of State | | |
| Statistic | Age Group | | Column % | | Column % | Total |
|---|---|---|---|---|---|---|
| Frequency | | 15 | | 2 | | **17** |
| Expected | | 7.1 | | 9.9 | | |
| Cell Chi-Square | 16-19 | 8.9 | | 6.3 | | |
| Row % | | 88.2 | | 11.8 | | **100.0** |
| | | | 1.5 | | 0.2 | |
| Frequency | | 243 | | 99 | | **342** |
| Expected | | 142.0 | | 200.0 | | |
| Cell Chi-Square | 20-24 | 71.8 | | 51.0 | | |
| Row % | | 71.1 | | 29.0 | | **100.0[a]** |
| | | | 24.9 | | 7.2 | |
| Frequency | | 288 | | 186 | | **474** |
| Expected | | 196.9 | | 277.1 | | |
| Cell Chi-Square | 25-34 | 42.2 | | 30.0 | | |
| Row % | | 60.8 | | 39.2 | | **100.0** |
| | | | 29.5 | | 13.5 | |
| Frequency | | 248 | | 515 | | **763** |
| Expected | | 316.9 | | 446.1 | | |
| Cell Chi-Square | 35-44 | 15.0 | | 10.6 | | |
| Row % | | 32.5 | | 67.5 | | **100.0** |
| | | | 25.4 | | 37.5 | |
| Frequency | | 157 | | 354 | | **511** |
| Expected | | 212.2 | | 298.8 | | |
| Cell Chi-Square | 45-54 | 14.4 | | 10.2 | | |
| Row % | | 30.7 | | 69.3 | | **100.0** |
| | | | 16.1 | | 25.8 | |
| Frequency | | 14 | | 49 | | **63** |
| Expected | | 26.2 | | 36.8 | | |
| Cell Chi-Square | 55-64 | 5.7 | | 4.0 | | |
| Row % | | 22.2 | | 77.8 | | **100.0** |
| | | | 1.4 | | 3.6 | |
| Frequency | | 11 | | 169 | | **180** |
| Expected | | 74.8 | | 105.2 | | |
| Cell Chi-Square | 65+ | 54.4 | | 38.6 | | |
| Row % | | 6.1 | | 93.9 | | **100.0** |
| | | | 1.1 | | 12.3 | |
| **Total** | | **976** | **100.0** | **1,374** | **100.0** | **2,350** |

**Table 13: Statistical Tests of Frequency Distribution**

| Statistic | Degrees of Freedom | Value | Probability |
|---|---|---|---|
| Chi-Square | 6 | 363.04 | <.0001 |
| Likelihood Ratio Chi-Square | 6 | 388.92 | <.0001 |
| Mantel-Haenszel Chi-Square | 1 | 324.79 | <.0001 |
| Phi Coefficient | | 0.39 | |
| Contingency Coefficient | | 0.37 | |
| Cramer's V | | 0.39 | |

and suggests that nonnative nurses may not be welcomed in facilities by native Wyoming nurses:

> **Researcher:** "Now remember … the pie charts showing what proportion of nurses came from out of state … Part of the subtext of what we're telling you is this state is dependent upon other states for the supply of labor in general – and in nurses in particular – and nurses for hospitals. So if we have a situation as we do now where we're bringing in people from out of state, we're bringing families in, in many cases. Among some of those families are nurses. And that's where we're getting a considerable amount of our supply. So if we want to think about a retention strategy, we've got to think about whether or not those people who come from outside have some sort of different characteristic that you would want to be cognizant of as you develop your retention strategy. They may be no different from people who are

graduating from here. But this would be something that would be distinctly different, that you wouldn't find in the literature necessarily.
>
> **Nurse 1:** I think you would: insider, outsider. … And people who at least have called my office, maybe somebody from California coming into Wyoming, they've been treated terrible by the nurses here, and they are going into real estate. And it's been more than one call just in the short time that I could …
>
> **Researcher:** By their peers?
> **All Nurses:** Oh yes.
> **Nurse 1:** By their peers – you have the Casper nurse who's grown up here, and you have the outsider Californian coming in.
>
> **Nurse 2:** By nature of our rurality and the fact that they haven't left, there is a kind of a – I don't want to say a xenophobia – but they're very much believing this is the world as it exists. Well, as people come from California or Wisconsin – or all our transplants in the military, they come to Cheyenne – and they're like, "You guys, there's another way to do things." And you've got your insiders saying, "We don't want to hear it."
>
> **Researcher:** When you look at decennial data, at the proportion of people who live here who are not born here, it's almost as high as it is in Nevada or Florida. It's a very, very high proportion of the people who are here who are not born here. And I'd be one of them. So that is something that is unique – not that it exists, but

**1. The System as a Whole**

the extent to which it exists. So maybe part of the retention issue is teaching the nurses to be nice.

**Nurse 3**: You're not far from being wrong.

**Researcher**: As an employer, I'm not going to do that.

**Nurse 3**: I'll tell you what, I tell nurses all over this state, just irritates the bejeebers out of me, that we can take care of our patients and the families and all the stuff that goes on, and we're wonderful, wonderful care providers, but we are just crap to each other. And they just … it is … and why, why we do that … and I have to tell you that the addition of travelers has not helped us one darn bit, because you want to talk about – you get even someone who's on staff from California to one of our Wyoming hospitals – well, you bring a traveler into your hospital and you just get this horrible morale and horrible attitude amongst the nurses because everybody knows … if you're a traveler, number one you're being paid more than me – way, way more, almost double – and you're working right next to me and you get to pick your own shifts. And you know what? In six weeks you get to pick up your stuff and move on, and I have to *stay* here and put up with this stuff. And so … having travelers in our buildings, as much as we need them … but just by the nature of the fact that they're getting these extra perks just ticks us off. And so we automatically get mad at them and treat them like crap."

## Summary

It is unclear whether being from outside is as important as other traits such as urban experience, prior work in a larger facility, educational attainment, or some other factors. However, what seems apparent, here as well as elsewhere in this report, is the fact that nurses are not a homogenous set of incumbents in an occupation central to the health care delivery system. Diversity probably needs to be recognized in retention strategies. Put another way, common retention strategies may produce different results for natives and nonnatives in conjunction with different family requirements associated with age.

Finally, at mid-decade almost all new workers in Wyoming came from other states or were natives of Wyoming returning to the state (Jones, 2008). Industries driving the in-migration of workers are higher-wage and dominated by males (mining, construction, wholesale trade). As the families of these workers migrate to the state, spouses who are nurses come to represent a key share of the overall supply of nurses in the state. Whether and in what context they choose to work may well depend upon the reception they receive from native and established nurses at those work sites.

## References

Jones, S.D., (2008, June) Cashing out? Labor market withdrawal by Wyoming workers age 45 and older. *Wyoming Labor Force Trends 45*(6). Retrieved June 26, 2008, from http://doe.state.wy.us/LMI/0608/a1.htm

## Analysis of Comments by Age

*by: Sylvia D. Jones, Senior Research Analyst*

The age distribution of those nurses who commented was similar to the distribution of those who responded to the survey (see Table 14). The largest group was the 45- to 54-year-olds (34.6%) followed by the 55- to 64-year-olds (24.2%). Those age 65 and older comprised the smallest percentage (3.2%).

Similar to the overall distribution of comments, Wages appeared as the most frequently mentioned topic among all age groups except the age 65 and older group (see Table 15, page 46). Overall, 11.7% of those who commented mentioned Wages while 14.0% of those age 35-44 mentioned it.

Management appeared as the second most frequently referenced topic overall, as well as among each age group, again, with the exception of the 65+ group. Management was mentioned 8.7% of the time among everyone who commented. The largest percentage was found within the age 35-44-group (9.4%). For those in the youngest group (20-34), Management was tied for second place with comments about Respect

and Fair Treatment at 8.5%.

Patient Ratio and Understaffing was frequently mentioned by the three younger groups (20-34, 35-44, and 45-54) such that the theme was the third most common. However, it appeared much less frequently among the older groups as their focus was on other issues. Specifically, the 55-64 group wrote about the quality of new nurses.

The oldest group (65+) was dissimilar to the other groups in that the most commented theme was Family rather than wages. Because this group is likely to be focused more on retirement than the other groups, concern with family seems logical. While Wages was a common theme, it appeared in second place rather than first. Community themes rounded out the top

three. The trends within this group are certainly interesting, but considering the small number of respondents, few definitive conclusions are possible.

Most of the themes had age distributions similar to that of commenters in general (the age 45-54 group made up the largest percentage). However, there were exceptions. Notably, the youngest age group mentioned Daycare far more frequently than any other group. Commuting was dominated by both the age 45-54 and 55-64 groups. Pay Compression was more of an issue for the 55-64 group than the other groups, as was Forced Float to other departments, the Quality of New Nurses, Paperwork, and Lawsuit Threats. Issues with physician interaction were mentioned by the age

**Table 14: Age Distribution of Total Responding Nurses and Those Who Wrote Comments**

| Age Group | Nurses Who Commented | | Nurses Who Responded | |
|---|---|---|---|---|
| | Frequency | Percentage | Frequency | Percentage |
| 20-34 | 79 | 14.2% | 366 | 15.2% |
| 35-44 | 99 | 17.7% | 484 | 20.1% |
| 45-54 | 193 | 34.6% | 781 | 32.4% |
| 55-64 | 135 | 24.2% | 528 | 21.9% |
| 65+ | 18 | 3.2% | 65 | 2.7% |
| Unknown | 34 | 6.1% | 183 | 7.6% |
| **Total** | **558** | **100.0%** | **2,407** | **100.0%** |

20-34, 35-44, and 55-64 groups equally. The 35- to 44-year-old group was most concerned with Unlicensed Staff. The group also shared the highest percentage of concern with Patient Safety with the 45- to 54-year-old group.

**Table 15: Theme of Comment by Age of Respondent**

| Comment Theme | | 20-34 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
|---|---|---|---|---|---|---|---|---|
| **Happy** | N | 1 | 2 | 7 | 6 | . | . | **16** |
| | Row% | 6.3% | 12.5% | 43.8% | 37.5% | . | . | **100.0%** |
| | Col% | 0.4% | 0.7% | 1.2% | 1.5% | . | . | **0.9%** |
| **Community** | N | 18 | 23 | 35 | 29 | 3 | 7 | **115** |
| | Row% | 15.7% | 20.0% | 30.4% | 25.2% | 2.6% | 6.1% | **100.0%** |
| | Col% | 7.7% | 7.5% | 5.9% | 7.1% | 7.0% | 6.3% | **6.8%** |
| **Family** | N | 14 | 15 | 19 | 15 | 7 | 4 | **74** |
| | Row% | 18.9% | 20.3% | 25.7% | 20.3% | 9.5% | 5.4% | **100.0%** |
| | Col% | 6.0% | 4.9% | 3.2% | 3.7% | 16.3% | 3.6% | **4.4%** |
| **Housing/Cost of Living** | N | 16 | 8 | 19 | 14 | 1 | 10 | **68** |
| | Row% | 23.5% | 11.8% | 27.9% | 20.6% | 1.5% | 14.7% | **100.0%** |
| | Col% | 7.1% | 2.6% | 3.2% | 3.4% | 2.3% | 8.9% | **4.0%** |
| **Daycare** | N | 10 | 4 | 5 | 2 | . | 1 | **22** |
| | Row% | 45.5% | 18.2% | 22.7% | 9.1% | . | 4.5% | **100.0%** |
| | Col% | 4.4% | 1.3% | 0.8% | 0.5% | . | 0.9% | **1.3%** |
| **Commuting** | N | 2 | 7 | 10 | 10 | . | 3 | **32** |
| | Row% | 6.3% | 21.9% | 31.3% | 31.3% | . | 9.4% | **100.0%** |
| | Col% | 0.9% | 2.3% | 1.7% | 2.5% | . | 2.7% | **1.9%** |
| **Corporate Issues** | N | 13 | 10 | 29 | 21 | 2 | 6 | **81** |
| | Row% | 16.0% | 12.3% | 35.8% | 25.9% | 2.5% | 7.4% | **100.0%** |
| | Col% | 5.8% | 3.3% | 4.9% | 5.1% | 4.7% | 5.4% | **4.8%** |
| **Management** | N | 20 | 29 | 52 | 36 | 1 | 10 | **148** |
| | Row% | 13.5% | 19.6% | 35.1% | 24.3% | 0.7% | 6.8% | **100.0%** |
| | Col% | 8.5% | 9.4% | 8.8% | 8.8% | 2.3% | 8.9% | **8.7%** |
| **Wages** | N | 32 | 43 | 62 | 42 | 6 | 13 | **198** |
| | Row% | 16.2% | 21.7% | 31.3% | 21.2% | 3.0% | 6.6% | **100.0%** |
| | Col% | 13.6% | 14.0% | 10.5% | 10.3% | 14.0% | 11.6% | **11.7%** |
| **No Pay Increase for Tenure/ Pay Compression** | N | 1 | 2 | 4 | 6 | . | . | **13** |
| | Row% | 7.7% | 15.4% | 30.8% | 46.2% | | | **100.0%** |
| | Col% | 0.4% | 0.7% | 0.7% | 1.5% | . | . | **0.8%** |

1. The System as a Whole

*Table continued from page 46*

**Table 15: Theme of Comment by Age of Respondent**

| Comment Theme | | 20-34 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
|---|---|---|---|---|---|---|---|---|
| **Benefits** | N | 14 | 5 | 23 | 12 | 2 | 1 | **57** |
| | Row% | 24.6% | 8.8% | 40.4% | 21.1% | 3.5% | 1.8% | **100.0%** |
| | Col% | 6.2% | 1.6% | 3.9% | 2.9% | 4.7% | 0.9% | **3.4%** |
| **Respect/Fair Treatment/ Value/Support/ Appreciation** | N | 20 | 18 | 43 | 19 | 2 | 8 | **110** |
| | Row% | 18.2% | 16.4% | 39.1% | 17.3% | 1.8% | 7.3% | **100.0%** |
| | Col% | 8.5% | 5.9% | 7.3% | 4.7% | 4.7% | 7.1% | **6.5%** |
| **Autonomy** | N | | . | 4 | 1 | . | . | **5** |
| | Row% | | . | 80.0% | 20.0% | . | . | **100.0%** |
| | Col% | | . | 0.7% | 0.2% | . | . | **0.3%** |
| **Abuse** | N | | . | 2 | 2 | . | . | **4** |
| | Row% | | . | 50.0% | 50.0% | . | . | **100.0%** |
| | Col% | | . | 0.3% | 0.5% | . | . | **0.2%** |
| **Physician Interaction** | N | 5 | 5 | 4 | 5 | 2 | 2 | **23** |
| | Row% | 21.7% | 21.7% | 17.4% | 21.7% | 8.7% | 8.7% | **100.0%** |
| | Col% | 2.2% | 1.6% | 0.7% | 1.2% | 4.7% | 1.8% | **1.4%** |
| **Unlicensed Staff/ Unknowledgeable** | N | 1 | 3 | 1 | 2 | 1 | 1 | **9** |
| | Row% | 11.1% | 33.3% | 11.1% | 22.2% | 11.1% | 11.1% | **100.0%** |
| | Col% | 0.4% | 1.0% | 0.2% | 0.5% | 2.3% | 0.9% | **0.5%** |
| **Overtime** | N | 2 | 11 | 16 | 4 | 1 | 4 | **38** |
| | Row% | 5.3% | 28.9% | 42.1% | 10.5% | 2.6% | 10.5% | **100.0%** |
| | Col% | 0.9% | 3.6% | 2.7% | 1.0% | 2.3% | 3.6% | **2.2%** |
| **Shifts/Flexibility** | N | 8 | 10 | 33 | 17 | 1 | 6 | **75** |
| | Row% | 10.7% | 13.3% | 44.0% | 22.7% | 1.3% | 8.0% | **100.0%** |
| | Col% | 3.6% | 3.3% | 5.6% | 4.2% | 2.3% | 5.4% | **4.4%** |
| **Workload/Ancillary Load** | N | 5 | 12 | 26 | 16 | 1 | 3 | **63** |
| | Row% | 7.9% | 19.0% | 41.3% | 25.4% | 1.6% | 4.8% | **100.0%** |
| | Col% | 2.2% | 3.9% | 4.4% | 3.9% | 2.3% | 2.7% | **3.7%** |
| **Physical Demands/ Long Hours/Hard Work** | N | | 3 | 13 | 12 | 1 | 4 | **33** |
| | Row% | | 9.1% | 39.4% | 36.4% | 3.0% | 12.1% | **100.0%** |
| | Col% | | 1.0% | 2.2% | 2.9% | 2.3% | 3.6% | **1.9%** |
| **Stress** | N | 5 | 5 | 14 | 9 | 2 | 1 | **36** |
| | Row% | 13.9% | 13.9% | 38.9% | 25.0% | 5.6% | 2.8% | **100.0%** |
| | Col% | 2.2% | 1.6% | 2.4% | 2.2% | 4.7% | 0.9% | **2.1%** |
| **Forced Float/Call for Other Departments** | N | . | 3 | 3 | 4 | . | 1 | **11** |
| | Row% | . | 27.3% | 27.3% | 36.4% | . | 9.1% | **100.0%** |
| | Col% | . | 1.0% | 0.5% | 1.0% | . | 0.9% | **0.6%** |

# Retention of Nurses in Wyoming

*Table continued from page 47*

**Table 15: Theme of Comment by Age of Respondent**

| Comment Theme | | 20-34 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
|---|---|---|---|---|---|---|---|---|
| **Patient Safety** | N | 3 | 12 | 12 | 10 | 1 | 3 | **41** |
| | Row% | 7.3% | 29.3% | 29.3% | 24.4% | 2.4% | 7.3% | **100.0%** |
| | Col% | 1.3% | 3.9% | 2.0% | 2.5% | 2.3% | 2.7% | **2.4%** |
| **Nurse Safety** | N | | 2 | 11 | 2 | . | 1 | **16** |
| | Row% | | 12.5% | 68.8% | 12.5% | . | 6.3% | **100.0%** |
| | Col% | | 0.7% | 1.9% | 0.5% | . | 0.9% | **0.9%** |
| **Quality of New Nurses** | N | 7 | 13 | 28 | 30 | 2 | 2 | **82** |
| | Row% | 8.5% | 15.9% | 34.1% | 36.6% | 2.4% | 2.4% | **100.0%** |
| | Col% | 3.1% | 4.2% | 4.8% | 7.4% | 4.7% | 1.8% | **4.8%** |
| **Paperwork/Charting** | N | 2 | 11 | 18 | 20 | . | 1 | **52** |
| | Row% | 3.8% | 21.2% | 34.6% | 38.5% | . | 1.9% | **100.0%** |
| | Col% | 0.9% | 3.6% | 3.1% | 4.9% | . | 0.9% | **3.1%** |
| **Lawsuit Threats** | N | 4 | . | 4 | 5 | 1 | 2 | **16** |
| | Row% | 25.0% | . | 25.0% | 31.3% | 6.3% | 12.5% | **100.0%** |
| | Col% | 1.8% | . | 0.7% | 1.2% | 2.3% | 1.8% | **0.9%** |
| **Burned Out** | N | 3 | 2 | 8 | 3 | 1 | 2 | **19** |
| | Row% | 15.8% | 10.5% | 42.1% | 15.8% | 5.3% | 10.5% | **100.0%** |
| | Col% | 1.3% | 0.7% | 1.4% | 0.7% | 2.3% | 1.8% | **1.1%** |
| **Patient Ratio/Understaffing** | N | 17 | 25 | 44 | 26 | 1 | 8 | **121** |
| | Row% | 14.0% | 20.7% | 36.4% | 21.5% | 0.8% | 6.6% | **100.0%** |
| | Col% | 7.6% | 8.1% | 7.5% | 6.4% | 2.3% | 7.1% | **7.1%** |
| **Continuing Education/ Advancement** | N | 5 | 4 | 11 | 6 | 1 | 1 | **28** |
| | Row% | 17.9% | 14.3% | 39.3% | 21.4% | 3.6% | 3.6% | **100.0%** |
| | Col% | 2.1% | 1.3% | 1.9% | 1.5% | 2.3% | 0.9% | **1.7%** |
| **Politics** | N | | 2 | 3 | 2 | 1 | 1 | **9** |
| | Row% | | 22.2% | 33.3% | 22.2% | 11.1% | 11.1% | **100.0%** |
| | Col% | | 0.7% | 0.5% | 0.5% | 2.3% | 0.9% | **0.5%** |
| **Quality of Patient Care** | N | 7 | 18 | 26 | 20 | 2 | 6 | **79** |
| | Row% | 8.9% | 22.8% | 32.9% | 25.3% | 2.5% | 7.6% | **100.0%** |
| | Col% | 3.1% | 5.9% | 4.4% | 4.9% | 4.7% | 5.4% | **4.7%** |
| **Total** | **N** | **235** | **307** | **589** | **408** | **43** | **112** | **1,694** |
| | **Row%** | **13.9%** | **18.1%** | **34.8%** | **24.1%** | **2.5%** | **6.6%** | **100.0%** |
| | **Col%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** | **100.0%** |

## Labor Flow Components

*by: Doug Leonard, Senior Economist*

### Introduction

This section of the report describes the similarities and differences between different types of labor flow components. Specifically, we focus on Registered Nurse (RN) entries and exits related to groups of industries or Wyoming's labor market. Doing so allows us to construct a balance sheet as an indicator of the ability (or lack thereof) of health care facilities to retain RNs.

### Market-Level Exits

The first component analyzed is market-level exits (see Tables 16 and 17, page 50). For those identified as being in health care, this indicates the industry or group of industries that paid RNs the most wages in a quarter. Table 16 (Health Care) displays the number of RNs exiting health care for at least one quarter by date and age group. The row in each table displays the average number of quarterly exits by age group. We repeat the same analysis for all other industries excluding health care in Table 17.

Table 16 shows that RNs age 45-54 on average exit in the greatest numbers (44.3 per quarter). The average number of exits for RNs younger than 35 and those between 35 and 44 was greater than 30 per quarter but less than the 45-54 year old group. Total RN exits from health care averaged 146.2 per quarter.

### Labor Market Permanent Exits

The next type of exit behavior described is permanent exits from the labor market Table 18 (see page 51). We define *permanent exits* as when an RN did not work in

## KEY POINT

- **Permanent exits for RNs age 45-54 are the highest (26.1 per quarter), followed by RNs less than 35 years of age (24.8 per quarter) and RNs between 35 and 44 years of age (23.6 per quarter). Total RN permanent exits averaged 103.6 per quarter from 2000 through 2005.**

Wyoming for at least four consecutive quarters. The last quarter the RN worked prior to the extended absence is the quarter in which the permanent exit is logged.

The number of permanent labor market exits shown in the table is less than the amount shown in the previous tables. This is because permanent statewide exits are a subset of those leaving an industry for at least one quarter. The pattern of average exits per quarter is similar to that shown before. Permanent exits for RNs age 45-54 are the highest (26.1 per quarter), followed by RNs less than 35 years of age (24.8 per quarter), and RNs between 35 and 44 years of age (23.6 per quarter). Total RN permanent exits averaged 103.6 per quarter from 2000 through 2005.

### New and Re-Entrant RNs

The last two components analyzed are new entrants and re-entrants (see Tables 19 and 20, page 52). We define a *new entrant* as an RN who did not work in health care prior to the base quarter or had not worked in health care for at least four years prior to the base quarter. We define a *re-entrant* as an RN who left health care for less than

four years. The results are organized by the type of entrant (new or "re") and by industry (see Tables 19-22, pages 52-53). For the purposes of this analysis, we focus only on the health care industry entrants.

Table 19 shows that workers less than 35 years old compose the single largest component of new entrants. This is most likely because new nurses (graduates) are generally in this age group. The average number of new entrants declines rapidly as age increases; from a high of 27.6 per quarter (35 and younger) to a low of 0.5 per

quarter (65+). The average number of RN new entrants was 79.0 per quarter.

Table 20 displays the re-entrant nurses for the same time span. The quarterly average of 81 re-entrant RNs is nearly the same as the new entrant average. Re-entrant is somewhat different from new entrants in that the quarterly average is greatest for the 45-54 year old age group. This may be due to younger nurses not having enough experience to leave and then return to health care. It also could be due to RNs whose children have left home which allows them to re-enter the workforce.

**Table 16: Market-Level Exits from Health Care for Registered Nurses by Age Group, First Quarter 2000 to Fourth Quarter 2005**

| | | Age Group | | | | | | |
| Year | Quarter | <35 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
|------|---------|-----|-------|-------|-------|-----|---------|-------|
| 2000 | 1 | 28 | 43 | 28 | 13 | . | 10 | **122** |
|      | 2 | 37 | 50 | 42 | 18 | 2 | 13 | **162** |
|      | 3 | 45 | 54 | 49 | 14 | . | 15 | **177** |
|      | 4 | 33 | 43 | 33 | 13 | 2 | 9 | **133** |
| 2001 | 1 | 29 | 31 | 35 | 11 | 2 | 6 | **114** |
|      | 2 | 32 | 64 | 46 | 10 | 7 | 10 | **169** |
|      | 3 | 45 | 39 | 58 | 17 | 4 | 21 | **184** |
|      | 4 | 23 | 35 | 45 | 18 | 3 | 15 | **139** |
| 2002 | 1 | 27 | 36 | 57 | 10 | 3 | 15 | **148** |
|      | 2 | 32 | 44 | 48 | 13 | 3 | 10 | **150** |
|      | 3 | 44 | 52 | 63 | 10 | 3 | 8 | **180** |
|      | 4 | 35 | 62 | 81 | 24 | 6 | 6 | **214** |
| 2003 | 1 | 26 | 27 | 41 | 5 | 1 | 3 | **103** |
|      | 2 | 37 | 32 | 38 | 16 | 3 | 4 | **130** |
|      | 3 | 35 | 26 | 53 | 13 | 1 | 9 | **137** |
|      | 4 | 22 | 19 | 37 | 21 | 4 | 5 | **108** |
| 2004 | 1 | 14 | 20 | 36 | 11 | 4 | 9 | **94** |
|      | 2 | 25 | 27 | 35 | 17 | 8 | 8 | **120** |
|      | 3 | 33 | 32 | 44 | 23 | 3 | 8 | **143** |
|      | 4 | 28 | 36 | 46 | 30 | 6 | 6 | **152** |
| 2005 | 1 | 24 | 25 | 37 | 17 | 4 | 22 | **129** |
|      | 2 | 34 | 22 | 37 | 16 | 7 | 20 | **136** |
|      | 3 | 53 | 43 | 57 | 28 | 10 | 24 | **215** |
|      | 4 | 27 | 35 | 38 | 27 | 14 | 19 | **160** |
| Average | | **32** | **37** | **45** | **16** | **5** | **11** | **147** |

**Table 17: Market-Level Turnover Exits from All Other Industries for Registered Nurses by Age Group, First Quarter 2000 to Fourth Quarter 2005**

| | | Age Group | | | | | | |
| Year | Quarter | <35 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
|------|---------|-----|-------|-------|-------|-----|---------|-------|
| 2000 | 1 | 35 | 31 | 23 | 4 | 1 | 4 | **98** |
|      | 2 | 43 | 40 | 33 | 10 | 3 | 3 | **132** |
|      | 3 | 71 | 57 | 50 | 17 | . | 12 | **207** |
|      | 4 | 33 | 31 | 36 | 13 | 1 | 5 | **119** |
| 2001 | 1 | 18 | 34 | 32 | 12 | 1 | 2 | **99** |
|      | 2 | 37 | 40 | 41 | 14 | 3 | 7 | **142** |
|      | 3 | 56 | 30 | 41 | 11 | 2 | 9 | **149** |
|      | 4 | 24 | 36 | 42 | 12 | 1 | 3 | **118** |
| 2002 | 1 | 26 | 31 | 32 | 16 | 3 | 6 | **114** |
|      | 2 | 39 | 48 | 52 | 13 | 4 | 3 | **159** |
|      | 3 | 51 | 24 | 38 | 13 | 2 | 11 | **139** |
|      | 4 | 38 | 49 | 59 | 21 | 3 | 2 | **172** |
| 2003 | 1 | 22 | 28 | 40 | 11 | 3 | 4 | **108** |
|      | 2 | 40 | 36 | 46 | 12 | 2 | 6 | **142** |
|      | 3 | 48 | 26 | 43 | 16 | 3 | 7 | **143** |
|      | 4 | 22 | 31 | 39 | 10 | 3 | 9 | **114** |
| 2004 | 1 | 27 | 31 | 39 | 18 | 3 | 6 | **124** |
|      | 2 | 23 | 34 | 42 | 17 | 3 | 8 | **127** |
|      | 3 | 26 | 18 | 33 | 26 | 2 | 3 | **108** |
|      | 4 | 25 | 43 | 47 | 13 | 5 | 16 | **149** |
| 2005 | 1 | 20 | 15 | 27 | 19 | 8 | 11 | **100** |
|      | 2 | 29 | 22 | 49 | 14 | 10 | 8 | **132** |
|      | 3 | 22 | 21 | 32 | 12 | 5 | 21 | **113** |
|      | 4 | 20 | 28 | 42 | 15 | 3 | 20 | **128** |
| Average | | **33** | **33** | **40** | **14** | **3** | **8** | **131** |

## Combining the Elements

Perhaps the most useful application of entry and exit data is in combining the elements graphically. Figure 5 (see page 54) displays all the aforementioned labor flow components. Note that each line represents a four-quarter moving average of actual values. Using the values in Figure 5, we can see whether a gap exists between new and re-entrant RNs and those who exit, creating the balance sheet discussed earlier.

The first point in the data series (1999Q4) shows the following result:
- New Entrants: 83.8
- Re-Entrants: 92.5
- Total Entrants: 176.3
- Exits from Health Care: 159.3
- Exits from Wyoming: 108.3

In looking at health care labor flows, total entrants exceeded exits from health care by an average of 17.0. Meanwhile, 108 of the 159.3 average exits did not work in Wyoming for at least four quarters after leaving health care. This indicates that in 1999Q4, if an RN left health care, there was a 67.8% chance that RN exited Wyoming's labor market entirely.

We now examine the last point in each data series to form our second balance sheet (2005Q4):
- New Entrants: 85.0 (an increase of 1.3 from 1999Q4)
- Re-Entrants: 68.0 (a decrease of 24.5 from 1999Q4)
- Total Entrants: 153.0 (a decrease of 23.3 from 1999Q4)
- Exits from Health Care: 160.0 (an increase of 0.8 from 1999Q4)
- Exits from Wyoming: 129.3 (an increase of 21.0 from 1999Q4)

In this case, an RN exiting health care had an 80.8% chance of exiting the labor market for at least one year. Note that the increase in the probability of a permanent exit increased markedly while the number of one-quarter (minimum) exits from health care remained steady.

The trends displayed in Figure 5 also

**Table 18: Labor Market Level Permanent Exits for Registered Nurses**

| Year | Quarter | <35 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
|------|---------|-----|-------|-------|-------|-----|---------|-------|
| | | | | **Age Group** | | | | |
| 1999 | 1 | 23 | 32 | 12 | 3 | 1 | 12 | **83** |
| | 2 | 37 | 38 | 27 | 3 | 0 | 16 | **121** |
| | 3 | 36 | 36 | 27 | 5 | 2 | 17 | **123** |
| | 4 | 25 | 22 | 25 | 10 | 2 | 22 | **106** |
| 2000 | 1 | 24 | 30 | 14 | 11 | 0 | 12 | **91** |
| | 2 | 44 | 30 | 25 | 9 | 0 | 13 | **121** |
| | 3 | 43 | 33 | 28 | 9 | 0 | 26 | **139** |
| | 4 | 16 | 29 | 16 | 7 | 2 | 14 | **84** |
| 2001 | 1 | 16 | 18 | 19 | 11 | 0 | 5 | **69** |
| | 2 | 24 | 28 | 24 | 7 | 3 | 16 | **102** |
| | 3 | 45 | 24 | 28 | 9 | 2 | 29 | **137** |
| | 4 | 18 | 23 | 22 | 9 | 2 | 17 | **91** |
| 2002 | 1 | 20 | 24 | 21 | 5 | 3 | 19 | **92** |
| | 2 | 34 | 30 | 28 | 6 | 1 | 11 | **110** |
| | 3 | 32 | 30 | 32 | 7 | 2 | 17 | **120** |
| | 4 | 20 | 27 | 37 | 12 | 1 | 4 | **101** |
| 2003 | 1 | 13 | 15 | 25 | 4 | 2 | 6 | **65** |
| | 2 | 31 | 17 | 28 | 12 | 2 | 9 | **99** |
| | 3 | 25 | 17 | 27 | 7 | 3 | 8 | **87** |
| | 4 | 11 | 11 | 30 | 17 | 1 | 9 | **79** |
| 2004 | 1 | 8 | 12 | 27 | 8 | 3 | 7 | **65** |
| | 2 | 16 | 23 | 24 | 16 | 5 | 13 | **97** |
| | 3 | 19 | 18 | 27 | 19 | 2 | 8 | **93** |
| | 4 | 16 | 22 | 34 | 21 | 6 | 10 | **109** |
| 2005 | 1 | 13 | 14 | 21 | 15 | 8 | 29 | **100** |
| | 2 | 25 | 15 | 30 | 15 | 10 | 23 | **118** |
| | 3 | 40 | 25 | 44 | 18 | 8 | 39 | **174** |
| | 4 | 20 | 19 | 28 | 19 | 8 | 31 | **125** |
| Average | | 24.8 | 23.6 | 26.1 | 10.5 | 2.8 | 15.8 | **103.6** |

inform us regarding RN behavior. Both industry and permanent exits declined during the early part of the decade, but then began to increase rapidly by mid-decade.

The number of re-entrant RNs remained steady throughout the period, except for 2003-2004. The same did not hold for new entrants. Their numbers declined until 2002Q4, then began to recover. The increase in new entrants from 2002Q4 to 2005Q4 was 56.0%.

**Table 19: New Entrant Registered Nurses in Health Care by Age Group, First Quarter 1999 to Third Quarter 2006**

| | | Age Group | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Year | Quarter | <35 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
| 1999 | 1 | 22 | 23 | 10 | 4 | 0 | 7 | **66** |
| | 2 | 40 | 18 | 19 | 5 | 0 | 9 | **91** |
| | 3 | 38 | 31 | 27 | 4 | 1 | 9 | **110** |
| | 4 | 21 | 24 | 11 | 1 | 1 | 10 | **68** |
| 2000 | 1 | 16 | 17 | 16 | 5 | 0 | 8 | **62** |
| | 2 | 41 | 27 | 21 | 3 | 1 | 9 | **102** |
| | 3 | 49 | 25 | 25 | 6 | 1 | 16 | **122** |
| | 4 | 17 | 18 | 15 | 4 | 0 | 10 | **64** |
| 2001 | 1 | 26 | 24 | 14 | 3 | 0 | 14 | **81** |
| | 2 | 25 | 27 | 14 | 4 | 1 | 16 | **87** |
| | 3 | 33 | 13 | 26 | 1 | 1 | 14 | **88** |
| | 4 | 26 | 13 | 16 | 6 | 1 | 14 | **76** |
| 2002 | 1 | 19 | 11 | 13 | 1 | 0 | 4 | **48** |
| | 2 | 24 | 12 | 7 | 9 | 1 | 1 | **54** |
| | 3 | 29 | 14 | 18 | 5 | 1 | 9 | **76** |
| | 4 | 12 | 11 | 9 | 2 | 2 | 4 | **40** |
| 2003 | 1[a] | 60 | 21 | 9 | 0 | 0 | 1 | **92** |
| | 2 | 34 | 17 | 13 | 5 | 0 | 8 | **77** |
| | 3 | 39 | 17 | 15 | 7 | 0 | 6 | **84** |
| | 4 | 23 | 12 | 14 | 9 | 0 | 12 | **70** |
| 2004 | 1 | 17 | 5 | 12 | 1 | 0 | 8 | **43** |
| | 2 | 22 | 11 | 8 | 12 | 0 | 12 | **65** |
| | 3 | 36 | 18 | 23 | 6 | 0 | 14 | **97** |
| | 4 | 36 | 20 | 25 | 7 | 1 | 19 | **108** |
| 2005 | 1 | 16 | 14 | 14 | 4 | 0 | 26 | **74** |
| | 2 | 17 | 10 | 17 | 4 | 2 | 24 | **74** |
| | 3 | 35 | 19 | 22 | 8 | 1 | 40 | **125** |
| | 4 | 11 | 7 | 14 | 7 | 0 | 28 | **67** |
| 2006 | 1 | 23 | 5 | 11 | 2 | 1 | 23 | **65** |
| | 2 | 17 | 14 | 5 | 5 | 1 | 34 | **76** |
| | 3 | 30 | 10 | 16 | 11 | 0 | 30 | **97** |
| Average | | **27.6** | **16.4** | **15.5** | **4.9** | **0.5** | **14.2** | **79.0** |

[a]Values for this quarter were adjusted because of a statistical outlier.

**New Entrant: First appearance or out for >4 years**

**Table 20: New Entrant Registered Nurses in All Other Industries (Not Health Care) by Age Group, First Quarter 1999 to Third Quarter 2006**

| | | Age Group | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Year | Quarter | <35 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
| 1999 | 1 | 1 | 6 | 1 | 0 | 0 | 2 | **10** |
| | 2 | 1 | 2 | 1 | 0 | 0 | 7 | **11** |
| | 3 | 4 | 2 | 3 | 0 | 0 | 10 | **19** |
| | 4 | 2 | 2 | 0 | 0 | 1 | 5 | **10** |
| 2000 | 1 | 0 | 2 | 3 | 2 | 0 | 12 | **19** |
| | 2 | 2 | 3 | 1 | 0 | 0 | 7 | **13** |
| | 3 | 4 | 7 | 6 | 2 | 0 | 6 | **25** |
| | 4 | 5 | 1 | 3 | 1 | 0 | 4 | **14** |
| 2001 | 1 | 3 | 2 | 3 | 0 | 0 | 6 | **14** |
| | 2 | 2 | 1 | 2 | 2 | 0 | 13 | **20** |
| | 3 | 6 | 2 | 4 | 1 | 2 | 6 | **21** |
| | 4 | 2 | 5 | 5 | 1 | 1 | 1 | **15** |
| 2002 | 1 | 2 | 3 | 6 | 0 | 0 | 9 | **20** |
| | 2 | 2 | 3 | 1 | 2 | 0 | 4 | **12** |
| | 3 | 3 | 3 | 7 | 4 | 1 | 1 | **19** |
| | 4 | 3 | 3 | 4 | 3 | 0 | 4 | **17** |
| 2003 | 1 | 4 | 5 | 3 | 0 | 0 | 2 | **14** |
| | 2 | 5 | 1 | 2 | 4 | 0 | 4 | **16** |
| | 3 | 2 | 5 | 6 | 1 | 0 | 2 | **16** |
| | 4 | 6 | 1 | 4 | 2 | 1 | 4 | **18** |
| 2004 | 1 | 2 | 1 | 1 | 1 | 0 | 3 | **8** |
| | 2 | 3 | 1 | 3 | 1 | 1 | 2 | **11** |
| | 3 | 5 | 5 | 8 | 3 | 0 | 11 | **32** |
| | 4 | 6 | 3 | 6 | 0 | 3 | 7 | **25** |
| 2005 | 1 | 1 | 3 | 3 | 1 | 0 | 7 | **15** |
| | 2 | 6 | 2 | 1 | 2 | 0 | 12 | **23** |
| | 3 | 5 | 4 | 6 | 1 | 0 | 14 | **30** |
| | 4 | 4 | 3 | 4 | 2 | 1 | 15 | **29** |
| 2006 | 1 | 3 | 2 | 6 | 3 | 0 | 13 | **27** |
| | 2 | 5 | 2 | 3 | 1 | 0 | 22 | **33** |
| | 3 | 2 | 2 | 3 | 2 | 0 | 19 | **28** |
| Average | | **3.3** | **2.8** | **3.5** | **1.4** | **0.4** | **7.5** | **18.8** |

**New Entrant: First appearance or out for >4 years**

## Description of Net Mortality

Figures 6-8 (see pages 55 and 56) describe the net mortality rates of nurses who graduated from a nursing program and became registered in Wyoming during a given calendar year. The figures identify any appearance (health care related or not) in Wyoming Unemployment Insurance wage records across the span of quarters shown

**Table 21: Re-Entrant Registered Nurses in Health Care by Age Group, First Quarter 1999 to Third Quarter 2006**

| | | Age Group | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Year | Quarter | <35 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
| 1999 | 1 | 19 | 33 | 20 | 7 | 0 | 0 | 79 |
| | 2 | 26 | 37 | 24 | 6 | 0 | 0 | 93 |
| | 3 | 31 | 30 | 33 | 11 | 1 | 0 | 106 |
| | 4 | 24 | 29 | 28 | 9 | 2 | 0 | 92 |
| 2000 | 1 | 24 | 29 | 14 | 11 | 2 | 0 | 80 |
| | 2 | 21 | 28 | 31 | 11 | 1 | 0 | 92 |
| | 3 | 19 | 25 | 24 | 3 | 0 | 1 | 72 |
| | 4 | 23 | 42 | 35 | 15 | 2 | 0 | 117 |
| 2001 | 1 | 19 | 19 | 29 | 7 | 3 | 1 | 78 |
| | 2 | 19 | 24 | 20 | 8 | 1 | 1 | 73 |
| | 3 | 32 | 24 | 22 | 11 | 3 | 2 | 94 |
| | 4 | 16 | 41 | 24 | 13 | 7 | 1 | 102 |
| 2002 | 1 | 6 | 23 | 20 | 9 | 0 | 1 | 59 |
| | 2 | 10 | 18 | 27 | 10 | 1 | 1 | 67 |
| | 3 | 25 | 25 | 33 | 10 | 0 | 4 | 97 |
| | 4 | 16 | 18 | 23 | 11 | 2 | 0 | 70 |
| 2003 | 1 | 17 | 17 | 35 | 17 | 2 | 0 | 88 |
| | 2 | 24 | 22 | 30 | 13 | 5 | 2 | 96 |
| | 3 | 15 | 32 | 56 | 13 | 2 | 5 | 123 |
| | 4 | 15 | 16 | 28 | 14 | 2 | 1 | 76 |
| 2004 | 1 | 18 | 22 | 23 | 11 | 2 | 3 | 79 |
| | 2 | 16 | 17 | 25 | 6 | 3 | 3 | 70 |
| | 3 | 20 | 18 | 35 | 14 | 0 | 3 | 90 |
| | 4 | 9 | 11 | 16 | 6 | 4 | 2 | 48 |
| 2005 | 1 | 16 | 17 | 20 | 7 | 4 | 1 | 65 |
| | 2 | 19 | 13 | 16 | 16 | 3 | 2 | 69 |
| | 3 | 15 | 29 | 22 | 11 | 3 | 2 | 82 |
| | 4 | 13 | 11 | 19 | 4 | 7 | 2 | 56 |
| 2006 | 1 | 15 | 15 | 13 | 9 | 2 | 4 | 58 |
| | 2 | 12 | 22 | 21 | 14 | 8 | 5 | 82 |
| | 3 | 11 | 15 | 17 | 7 | 4 | 5 | 59 |
| Average | | 18.2 | 23.3 | 25.3 | 10.1 | 2.5 | 1.7 | 81.0 |

**Re-Entrant: Out of industry not more than 4 years.**

**Table 22: Re-Entrant Registered Nurses in All Other Industries (Not Health Care) by Age Group, First Quarter 1999 to Third Quarter 2006**

| | | Age Group | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Year | Quarter | <35 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
| 1999 | 1 | 19 | 7 | 7 | 4 | 1 | 0 | 38 |
| | 2 | 37 | 9 | 9 | 3 | 0 | 2 | 60 |
| | 3 | 23 | 8 | 10 | 1 | 1 | 0 | 43 |
| | 4 | 17 | 18 | 21 | 5 | 1 | 0 | 62 |
| 2000 | 1 | 19 | 12 | 12 | 3 | 1 | 0 | 47 |
| | 2 | 31 | 8 | 9 | 2 | 0 | 0 | 50 |
| | 3 | 26 | 12 | 12 | 2 | 1 | 1 | 54 |
| | 4 | 11 | 16 | 18 | 5 | 3 | 3 | 56 |
| 2001 | 1 | 19 | 8 | 4 | 5 | 0 | 0 | 36 |
| | 2 | 22 | 11 | 10 | 6 | 2 | 0 | 51 |
| | 3 | 15 | 14 | 10 | 3 | 0 | 1 | 43 |
| | 4 | 15 | 12 | 23 | 8 | 4 | 0 | 62 |
| 2002 | 1 | 16 | 5 | 10 | 6 | 1 | 2 | 40 |
| | 2 | 20 | 11 | 18 | 5 | 0 | 0 | 54 |
| | 3 | 8 | 3 | 13 | 9 | 1 | 1 | 35 |
| | 4 | 12 | 14 | 18 | 4 | 3 | 1 | 52 |
| 2003 | 1 | 8 | 7 | 15 | 7 | 3 | 2 | 42 |
| | 2 | 22 | 8 | 14 | 6 | 0 | 0 | 50 |
| | 3 | 13 | 7 | 14 | 8 | 3 | 2 | 47 |
| | 4 | 10 | 14 | 24 | 6 | 1 | 2 | 57 |
| 2004 | 1 | 6 | 5 | 19 | 7 | 1 | 2 | 40 |
| | 2 | 16 | 10 | 13 | 7 | 2 | 5 | 53 |
| | 3 | 7 | 12 | 18 | 6 | 2 | 3 | 48 |
| | 4 | 9 | 12 | 25 | 11 | 4 | 4 | 65 |
| 2005 | 1 | 5 | 5 | 13 | 11 | 1 | 2 | 37 |
| | 2 | 9 | 7 | 9 | 7 | 4 | 4 | 40 |
| | 3 | 6 | 8 | 6 | 9 | 2 | 4 | 35 |
| | 4 | 8 | 10 | 16 | 7 | 4 | 1 | 46 |
| 2006 | 1 | 7 | 7 | 9 | 7 | 2 | 2 | 34 |
| | 2 | 4 | 6 | 7 | 12 | 1 | 3 | 33 |
| | 3 | 2 | 9 | 10 | 7 | 2 | 1 | 31 |
| Average | | 14.3 | 9.5 | 13.4 | 6.1 | 1.6 | 1.5 | 46.5 |

**Re-Entrant: Out of industry not more than 4 years.**

**Figure 5: Stock and Flow of Wyoming Registered Nurses (Four-Quarter Moving Average) Fourth Quarter 1999 to Fourth Quarter 2005 (1999Q4 to 2005Q4)**



- ◆ Exits from Wyoming Labor Market (Worked At Least One Year)
- ● Exits from Health Care (Worked At Least One Quarter)
- △ New Entrant RNs to Health Care[a] (First Appearance or Have Been Out More Than Four Years)
- ✕ Re-Entrant RNs to Health Care (Have Been Out Less Than Four Years)
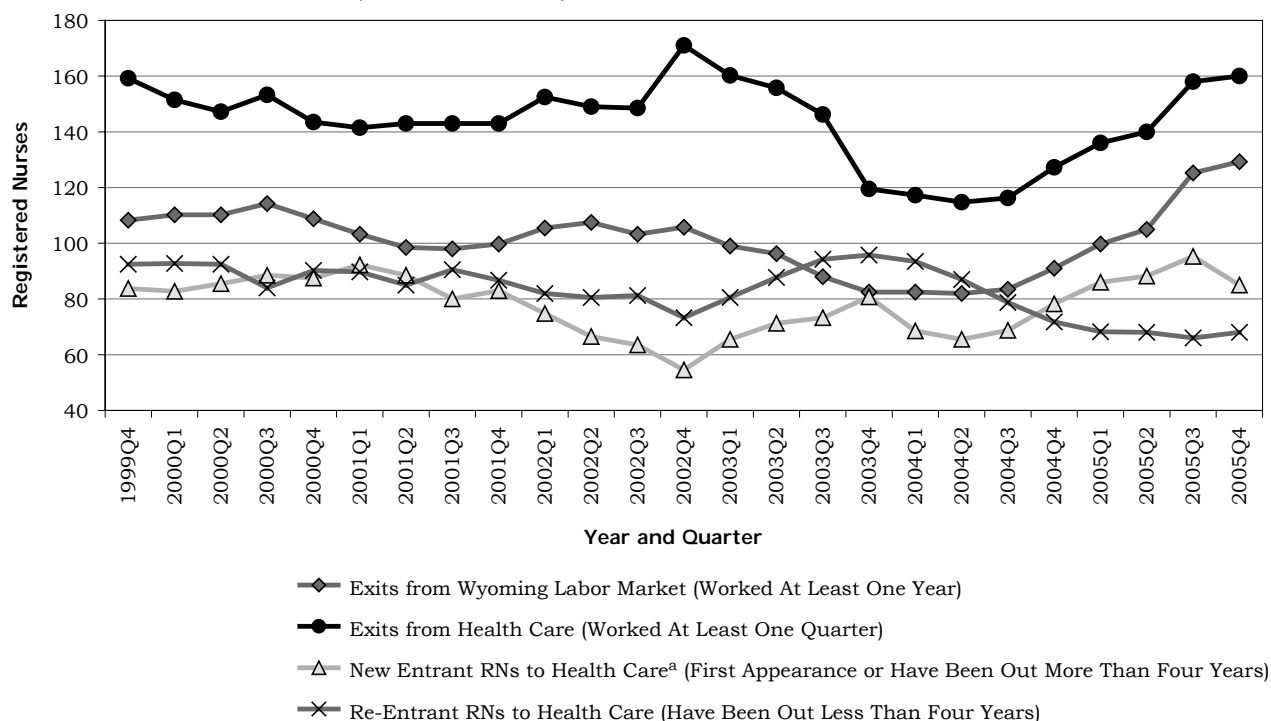
[a]One outlier (2003Q1) was adjusted to the average first quarter value for 1999, 2000, 2001, and 2002.

in each figure. The totals in each quarter represent a net of the original cohort total. Any nurse in the original cohort may be employed or not employed in any given quarter. The mortality rate shown on each figure represents the net average loss of the cohort each quarter. The linear decline for all three cohorts is very similar. For the 2001-2003 cohorts of graduating nurses who became registered in Wyoming, approximately 2.0% were lost (on a net basis) from Wyoming's labor market each quarter. Across the 20 quarters shown in Figure 6, only 79 of the original 118 nurses in the 2001 cohort can be found working in Wyoming five years later for a net loss of 39 nurses.

## Summary

The preceding turnover analysis reveals underlying trends. First and most important, RNs who leave health care have become increasingly more likely to leave the Wyoming labor market altogether. This may make it more difficult for employers to recruit those RNs back into the health care workforce. Second, the flow of new and re-entrants to health care is not keeping pace with the numbers of exits. A deficit situation such as this is not sustainable over the long run. Both factors taken together indicate a challenging future in the retention of RNs in Wyoming.

Figure 6: Subsequent Wyoming Work Status of the Cohort of Nurses (N =118) Who Graduated
From a Nursing Program and Became Registered in Wyoming[a] During Calendar Year 2001
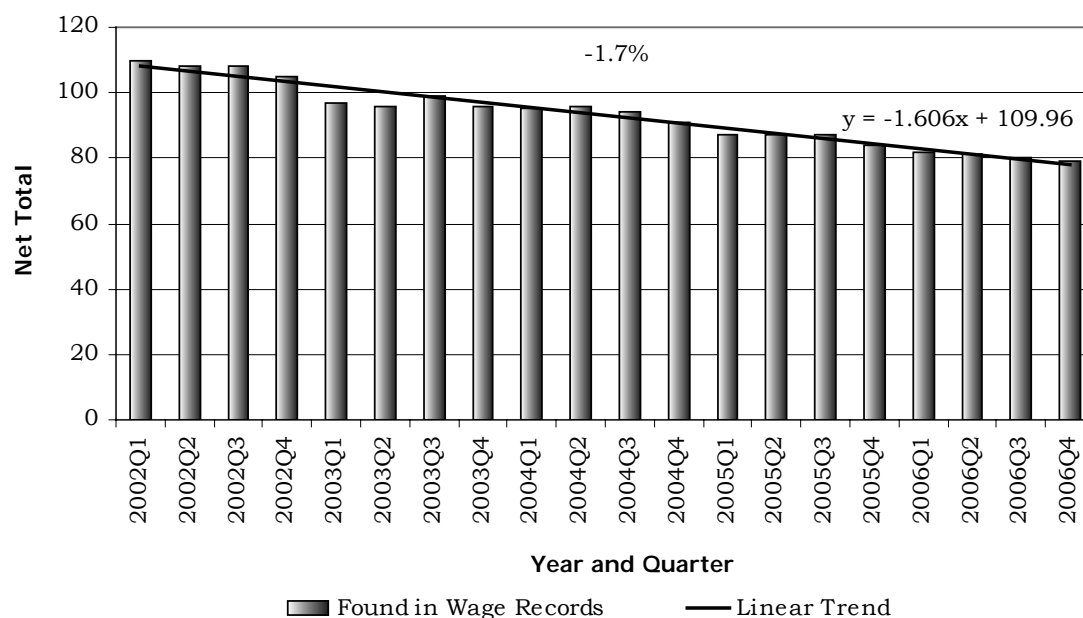
[Bar chart with linear trend line. Y-axis labeled "Net Total" ranging from 0 to 120. X-axis labeled "Year and Quarter" with values from 2002Q1 through 2006Q4. Trend label: -1.7%. Equation: y = -1.606x + 109.96. Legend: "Found in Wage Records" and "Linear Trend".]

$$y = -1.606x + 109.96$$

[a]Source Data: Wyoming Unemployment Insurance Wage Records and Wyoming Board of
Nursing registration files.

# Differences Between Net Mortality and Permanent Exit

*by: Dr. Mark A. Harris, Sociologist*

A *permanent exit* occurs when an RN exits from the labor market and does not appear again for at least four quarters (one year). *Net mortality* occurs when we compare counts of an RN cohort appearing in one quarter with counts of the same cohort appearing in a later quarter. Net mortality can be thought of as nurse attrition. RNs could disappear one quarter out and then return in less than one year. By definition, this does not occur under the permanent exit construct. Furthermore, net mortality focuses on new RN graduates exclusively, while all RNs are included in the permanent exit counts. Thus, the determination of permanent exit status in a given quarter is a more dynamic process, as it takes account of future quarters to assign a category status in a reference quarter. The process for calculating net mortality simply examines each successive reference quarter separately and totals the number of persons found working and not found working.

**Figure 7: Subsequent Wyoming Work Status of the Cohort of Nurses (N =169) Who Graduated From a Nursing Program and Became Registered in Wyoming[a] During Calendar Year 2002**
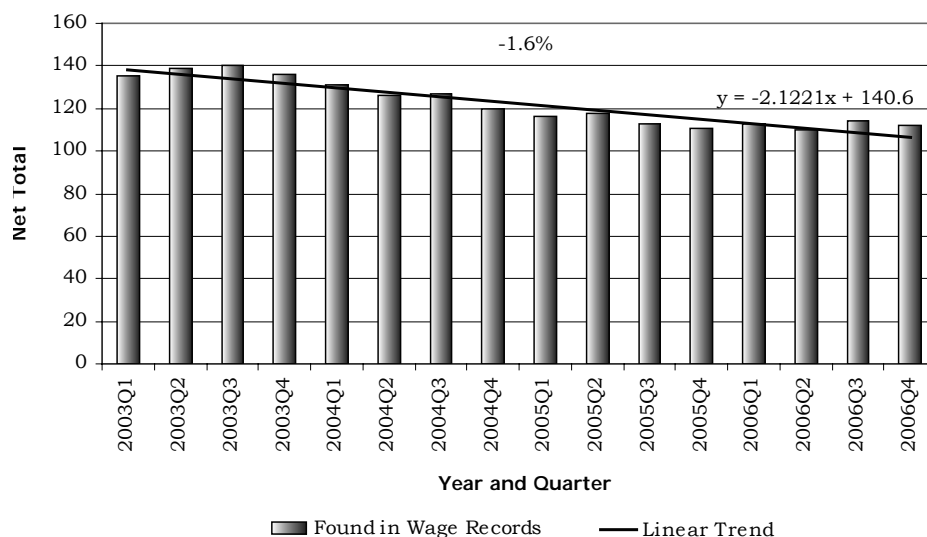


-1.6%

$y = -2.1221x + 140.6$

Net Total

Year and Quarter

⬜ Found in Wage Records    ▬ Linear Trend

[a]Source Data: Wyoming Unemployment Insurance Wage Records and Wyoming Board of Nursing registration files.

**Figure 8: Subsequent Wyoming Work Status of the Cohort of Nurses (N = 141) Who Graduated From a Nursing Program and Became Registered in Wyoming[a] During Calendar Year 2003**



-2.2%

$y = -2.5594x + 127.64$

Net Total

Year and Quarter

⬜ Found in Wage Records    ▬ Linear Trend
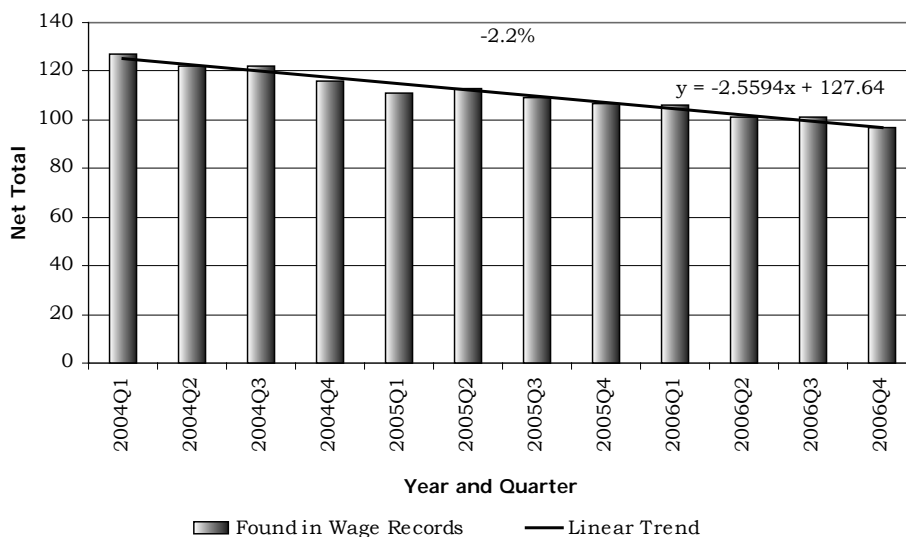
[a]Source Data: Wyoming Wage Records and Wyoming Board of Nursing registration files.

# Employer-Level Turnover Rates by Industry and Experience

*by: Sylvia D. Jones, Senior Research Analyst*
*data by: Doug Leonard, Senior Economist*

Turnover is an obvious concern for most employers but for health care firms especially. High turnover is expensive because of replacement costs as well as potential lost revenue from decreased patient care. While overall turnover rates may serve as useful benchmarks to which employers can compare their firm-specific rates, benchmarks for turnover by experience level may be better indicators. For example, it would be useful to discover if there is a level of experience after which turnover greatly diminishes. If nurse turnover decreases dramatically after two years of experience, it may be logical for retention efforts to be focused on new nurses. Alternatively, if turnover is fairly evenly distributed, retention efforts should be spread out evenly among all nurses.

Comments provided by nurses who responded to the survey (see page 31) indicate that some employers appear to be focusing their retention strategies, in the form of elevated wages, on those nurses with the least amount of experience. A potential implication of this strategy is that the more experienced nurses may feel they are viewed by the administration as less important. As such, they may be more likely to seek out new employment opportunities, which would lead to higher firm-level turnover among experienced nurses. R&P-provided turnover rates by experience level, especially when used over time, would allow health care firms to gauge the effects of implemented retention strategies in their own organization.

## Ambulatory Health Care Services

Overall, the highest turnover rate was found among those with the least amount of experience in health care and the rate decreased as experience increased. The means appeared to have a distinct separation point between relatively high turnover and more moderate turnover. Those nurses with 1-2 years of experience had an average rate of 21.0 while the next group, those with 2-5 years of experience, had a rate of 15.9 (see Table 23, page 58).

While the reliability is questionable, there was an overall decline in turnover rates between 2000 and 2006. The average for all experience levels in 2000 was 16.2. By 2006 the average had fallen to 12.6. The decline was seen at every experience level.

## Hospitals

The highest turnover rate was found among those with 1-2 years of experience (8.5) rather than those with less than one year (8.2; see Table 24, page 58). Those with 10 or more years of experience had the lowest rate (3.8). There was a separation point, but instead of falling between 1-2 years and 2-5 years, it fell between 2-5 years and 5-10 years.

The overall turnover rate fell from 5.5 in 2000 to 5.2 in 2006. The decline was not found among those with 2-5 or 5-10 years of experience but was found in every other experience level.

## Nursing Homes and Residential Care Facilities

Similar to hospitals, nurses with 1-2 years of health care experience were most likely to exit their job in nursing & residential

care facilities (21.5; see Table 25, page 59). Those with less than one year followed closely with a rate of 21.3. Again, 10 years or more of experience was associated with

the lowest turnover rate (12.2). There was not a simple point of separation. Those with less experience (<1 and 1-2 years) clustered together (21.3 and 21.5, respectively), and those with more experience (5-10 and

**Table 23: Employer-Level Turnover Rates for Registered Nurses in Ambulatory Health Care Services by Health Care Experience, First Quarter 2000 to Fourth Quarter 2006**

| | | | | Health Care Experience | | | |
| Year | Quarter | <1 year | 1-2 years | 2-5 years | 5-10 years | 10+ years | All |
|---|---|---|---|---|---|---|---|
| 2000 | 1 | 11.5 | 16.4 | 15.9 | 15.5 | 18.0 | **15.9** |
| | 2 | 36.8 | 26.7 | 12.9 | 14.4 | 8.0 | **15.6** |
| | 3 | 34.8 | 17.5 | 18.3 | 12.2 | 15.1 | **16.1** |
| | 4 | 23.5 | 25.8 | 17.8 | 14.4 | 18.6 | **17.1** |
| 2001 | 1 | 11.6 | 23.5 | 17.4 | 13.5 | 19.5 | **16.1** |
| | 2 | 32.7 | 23.3 | 15.5 | 13.4 | 13.4 | **15.8** |
| | 3 | 26.4 | 23.4 | 22.1 | 14.2 | 14.6 | **17.4** |
| | 4 | 20.0 | 22.4 | 21.1 | 17.8 | 19.7 | **19.5** |
| 2002 | 1 | 18.2 | 25.0 | 15.1 | 16.1 | 15.1 | **16.3** |
| | 2 | 29.4 | 25.0 | 17.7 | 13.8 | 14.7 | **16.4** |
| | 3 | 14.3 | 14.0 | 12.1 | 13.1 | 13.4 | **13.1** |
| | 4 | 21.4 | 20.5 | 12.0 | 14.9 | 12.3 | **13.9** |
| 2003 | 1 | 14.0 | 17.1 | 14.3 | 13.4 | 6.8 | **11.2** |
| | 2 | 16.7 | 34.9 | 13.5 | 15.0 | 11.6 | **14.5** |
| | 3 | 28.6 | 19.2 | 18.8 | 19.9 | 10.6 | **16.0** |
| | 4 | 6.7 | 18.5 | 20.8 | 17.5 | 15.9 | **17.0** |
| 2004 | 1 | 15.6 | 13.0 | 13.4 | 10.8 | 8.8 | **10.6** |
| | 2 | 29.0 | 19.3 | 15.0 | 16.5 | 13.1 | **15.3** |
| | 3 | 32.3 | 20.9 | 14.8 | 15.2 | 14.1 | **15.5** |
| | 4 | 17.1 | 24.4 | 17.9 | 13.7 | 15.4 | **16.0** |
| 2005 | 1 | 17.1 | 21.1 | 9.6 | 11.2 | 8.7 | **10.5** |
| | 2 | 18.2 | 20.9 | 18.1 | 14.5 | 11.3 | **13.9** |
| | 3 | 23.5 | 24.4 | 20.7 | 14.5 | 12.8 | **15.5** |
| | 4 | 23.3 | 17.9 | 11.6 | 14.9 | 13.4 | **14.0** |
| 2006 | 1 | 13.0 | 17.1 | 13.0 | 13.2 | 11.9 | **12.7** |
| | 2 | 7.4 | 19.0 | 15.3 | 12.5 | 11.7 | **12.7** |
| | 3 | 32.4 | 28.2 | 14.6 | 14.7 | 8.6 | **12.9** |
| | 4 | 27.6 | 9.4 | 12.8 | 13.0 | 10.7 | **12.0** |
| Averages | | **22.0** | **21.0** | **15.9** | **14.4** | **12.6** | **14.7** |

**Table 24: Employer-Level Turnover Rates for Registered Nurses in Hospitals by Health Care Experience, First Quarter 2000 to Fourth Quarter 2006**

| | | | | Health Care Experience | | | |
| Year | Quarter | <1 year | 1-2 years | 2-5 years | 5-10 years | 10+ years | All |
|---|---|---|---|---|---|---|---|
| 2000 | 1 | 8.3 | 5.1 | 4.3 | 2.8 | 4.1 | **3.7** |
| | 2 | 11.0 | 8.8 | 8.8 | 4.1 | 6.6 | **6.1** |
| | 3 | 13.0 | 10.5 | 8.3 | 5.4 | 2.1 | **6.7** |
| | 4 | 7.6 | 12.9 | 7.3 | 3.7 | 5.8 | **5.6** |
| 2001 | 1 | 8.2 | 8.9 | 6.4 | 3.0 | 1.6 | **4.4** |
| | 2 | 10.6 | 10.9 | 6.2 | 5.9 | 6.4 | **6.8** |
| | 3 | 10.1 | 11.7 | 9.5 | 5.5 | 4.3 | **6.9** |
| | 4 | 10.5 | 9.2 | 5.4 | 3.8 | 2.8 | **4.7** |
| 2002 | 1 | 11.4 | 11.6 | 7.2 | 5.6 | 3.6 | **5.9** |
| | 2 | 5.1 | 10.6 | 11.3 | 6.0 | 4.2 | **6.6** |
| | 3 | 14.6 | 13.5 | 12.9 | 10.0 | 7.4 | **9.9** |
| | 4 | 13.5 | 10.8 | 12.1 | 9.7 | 7.9 | **9.6** |
| 2003 | 1 | 3.3 | 8.9 | 5.1 | 4.3 | 1.5 | **3.4** |
| | 2 | 5.4 | 9.7 | 7.7 | 7.2 | 2.8 | **5.4** |
| | 3 | 6.5 | 6.7 | 5.9 | 3.8 | 2.0 | **3.8** |
| | 4 | 4.3 | 4.3 | 6.5 | 4.8 | 2.5 | **4.0** |
| 2004 | 1 | 3.5 | 5.8 | 7.5 | 3.0 | 4.3 | **4.6** |
| | 2 | 4.5 | 5.3 | 5.4 | 7.8 | 2.8 | **4.7** |
| | 3 | 6.7 | 3.7 | 6.0 | 7.8 | 3.2 | **4.9** |
| | 4 | 4.5 | 6.7 | 6.4 | 6.4 | 3.8 | **5.1** |
| 2005 | 1 | 10.0 | 6.3 | 6.0 | 3.9 | 2.7 | **4.3** |
| | 2 | 8.8 | 11.2 | 7.1 | 4.5 | 3.6 | **5.3** |
| | 3 | 14.9 | 9.1 | 12.5 | 8.5 | 5.4 | **8.4** |
| | 4 | 7.4 | 7.8 | 8.2 | 5.6 | 4.0 | **5.6** |
| 2006 | 1 | 9.9 | 7.4 | 6.8 | 6.9 | 4.1 | **5.8** |
| | 2 | 5.9 | 9.7 | 7.0 | 5.5 | 4.0 | **5.5** |
| | 3 | 8.1 | 10.9 | 8.5 | 3.7 | 3.9 | **5.5** |
| | 4 | 3.6 | 7.5 | 7.5 | 3.4 | 2.5 | **4.0** |
| Averages | | **8.2** | **8.5** | **7.7** | **5.2** | **3.8** | **5.6** |

10+) clustered together (13.6 and 12.2, respectively). However, those in the middle (2-5 years, with a turnover rate of 17.9) did not fit into either group.

The average turnover for all nurses decreased from 16.2 in 2000 to 13.1 in 2006. Every experience level had a decline except for those with 5-10 years.

## Conclusion

There appears to be little supporting evidence for the hypothesis that there is a distinct experience level at which nurses become less likely to exit employment. Nurses with less experience were the most likely to turnover, regardless of industry, but the pattern of turnover rate decline was different for every industry. While unable to provide detailed information such as, "If a firm can keep a new nurse for two years, they are likely to become a lifetime employee," the information can still be used by firms to gauge their own implemented retention strategies.

**Table 25: Employer-Level Turnover Rates for Registered Nurses in Nursing & Residential Care Facilities by Health Care Experience, First Quarter 2000 to Fourth Quarter 2006**

| Year | Quarter | <1 year | 1-2 years | 2-5 years | 5-10 years | 10+ years | All |
|------|---------|---------|-----------|-----------|------------|-----------|-----|
| 2000 | 1 | 23.5 | 25.7 | 21.7 | 16.8 | 15.6 | **19.1** |
| | 2 | 27.3 | 23.1 | 16.5 | 11.8 | 8.8 | **14.5** |
| | 3 | 28.0 | 23.3 | 23.0 | 18.9 | 13.3 | **20.2** |
| | 4 | 11.5 | 13.0 | 15.1 | 7.9 | 11.8 | **10.8** |
| 2001 | 1 | 11.4 | 8.7 | 10.4 | 14.3 | 19.3 | **13.6** |
| | 2 | 15.4 | 32.4 | 20.7 | 11.0 | 13.1 | **16.2** |
| | 3 | 38.1 | 30.3 | 22.4 | 17.1 | 12.9 | **19.9** |
| | 4 | 33.3 | 18.8 | 24.0 | 10.3 | 11.4 | **15.5** |
| 2002 | 1 | 18.2 | 21.4 | 13.2 | 9.6 | 13.7 | **13.0** |
| | 2 | 5.9 | 33.3 | 20.0 | 10.4 | 11.4 | **14.4** |
| | 3 | 25.0 | 23.1 | 10.4 | 9.8 | 11.2 | **11.9** |
| | 4 | 6.7 | 30.0 | 19.7 | 15.3 | 11.9 | **15.3** |
| 2003 | 1 | 16.2 | 5.9 | 16.1 | 11.5 | 12.7 | **13.0** |
| | 2 | 25.7 | 12.5 | 12.5 | 11.7 | 7.0 | **11.7** |
| | 3 | 29.7 | 23.8 | 13.3 | 17.2 | 20.2 | **19.2** |
| | 4 | 22.2 | 10.7 | 11.3 | 8.9 | 9.2 | **10.3** |
| 2004 | 1 | 14.3 | 17.2 | 10.3 | 13.4 | 19.5 | **15.6** |
| | 2 | 18.2 | 32.4 | 19.0 | 11.6 | 12.1 | **15.3** |
| | 3 | 14.3 | 30.8 | 22.2 | 16.5 | 10.6 | **16.0** |
| | 4 | 8.0 | 6.3 | 18.5 | 13.9 | 13.8 | **13.9** |
| 2005 | 1 | 40.6 | 31.8 | 34.2 | 22.7 | 18.8 | **25.0** |
| | 2 | 16.7 | 22.2 | 15.9 | 16.0 | 10.6 | **14.1** |
| | 3 | 33.3 | 13.6 | 23.2 | 9.2 | 9.2 | **13.2** |
| | 4 | 31.6 | 17.6 | 15.5 | 12.5 | 8.6 | **12.5** |
| 2006 | 1 | 26.3 | 5.9 | 12.5 | 11.0 | 9.1 | **10.9** |
| | 2 | 8.3 | 19.0 | 15.1 | 21.2 | 7.6 | **13.3** |
| | 3 | 20.0 | 20.0 | 14.5 | 14.3 | 12.5 | **14.0** |
| | 4 | | 25.0 | 22.6 | 13.8 | 11.0 | **14.2** |
| **Averages** | | **21.3** | **21.5** | **17.9** | **13.6** | **12.2** | **15.0** |

## Comparing Labor Market Outcomes for Nurses, Teachers, State Employees, and a Control Group

*by: Dr. Mark A. Harris, Sociologist*

One of the fundamental issues when studying labor market outcomes is determining how an occupation differs from other similarly situated occupations. This can help determine whether market outcomes are occupation-specific or if they are a function of work setting or demographics. To compare jobs requiring advanced training beyond high school that provide opportunities for educated women, Research & Planning (R&P) used available data on nurses, elementary & secondary school teachers, and educated state government employees in Wyoming. R&P also compared nurses to a randomly selected control group that had identical age, gender, and prior earnings characteristics (Glover, 2002).

This article examines job exit rates and the average age of exiting employees. These comparisons provide context for the experience of nurses in Wyoming's labor market. Although differences exist, research can show how similar the experiences of nurses, particularly hospital nurses, are to other selected occupations.

### Data and Methodology

Wyoming Unemployment Insurance wage records were used in this study to identify specific employees and employers. The Wage Records database is the definitive source for empirically establishing a person's work history in Wyoming, including turnover, tenure, and wage progression. The Wyoming Department of Transportation's Driver's License database was matched to wage records to identify employees' age and gender.

One of the difficulties in studying occupational outcomes is that wage records do not identify a person's occupation. Occupations (e.g., nurses and teachers) were identified from the following files: registered nurses from the Nursing Licensure database provided by the Wyoming State Board of Nursing, state employees and their respective job titles from the Wyoming State Auditor's Office, and teachers from the Wyoming Department of Education's Education Staff File.

The base year for all three occupational cohorts was 2003. The methodology for calculating turnover was developed previously by Glover (2001). Exit rates were restricted to nurse exits from hospitals, ambulatory health care services, and nursing & residential care facilities; state employee exits from state government; and teacher exits from elementary & secondary schools. Nurses were registered as indicated by the Wyoming State Board of Nursing. Teachers were designated with a job category of "Teacher" in the Wyoming Department of Education's Education Staff File. Wyoming state employees included here had an associated Bureau of Labor Statistics educational and experience category of associate's degree or higher for their respective job titles (i.e., they were working in occupations requiring a post-secondary degree).

Statistically matched control groups were constructed using methodology developed by Glover (2002). This was done by stratifying the nurse group by age, gender, and prior wages. Some nurses were eliminated from

the file primarily due to a lack of data on prior earnings. A control group of non-nurses was then selected with identical age, gender, and prior wage distributions. Quasi-experimental designs such as this allow comparison of groups of persons who are statistically similar at a particular reference point — in this case, nurses with non-nurses.

## Exit Rate Comparisons

Among the groupings considered here, hospital nurses, state government employees, and teachers had turnover rates at or below 8% each quarter and below 5% for most quarters (see Figure 9, page 62). Teaching was the most stable of the three occupations (exiting later in the work career). Nursing appeared to be the least stable among the three occupations. Hospital nurses, however, had turnover rates clustered more closely with teachers and state government employees. Nurses working in ambulatory health care services and nursing & residential care facilities had very similar turnover rates but were approximately 10 percentage points higher than nurses working in hospitals. In third quarter 2003, more than half of Wyoming nurses worked in hospitals (see Table 26, page 62).

A study of exit patterns among nurses was presented in "Where Did the Nurse Go? Using Administrative Data to See Changes in Employment in Nursing" in June 2007 *Wyoming Labor Force Trends*.

Because nursing has a much higher concentration of female employees than either teaching or state government employment (see Table 27, page 63), turnover rates were run separately for males and females. Turnover rates for professional females showed a very similar pattern to the rates for all employees (compare Figure 9, page 62, and Figure 10, page 63). Rates for males followed the same general pattern but were more erratic for nurses from ambulatory health care services and nursing & residential care facilities (see Figure 11, page 64), likely due to the small number working in these settings.

As anticipated when comparing nurse and control groups, nurses from hospitals, nurses from ambulatory health care services, and nurses from nursing & residential care facilities had exit rates similar to those shown previously (see Figure 12, page 64). Due to the stratification process, this was a smaller subset of nurses than those examined previously; however, the stratification process did not alter the general pattern of turnover. Members of the control group who exited from private ownerships (not including health care) had approximately a 10% exit rate each quarter, while nurses who exited from health care (all three nurse groups) had approximately a 7% exit rate per quarter. The control group had higher turnover than nurses from hospitals and nurses from health care. However, nurses from ambulatory health care services and nursing & residential care facilities had the highest rates of turnover.

## Average Age Comparisons

The average age of exiters can also be used for comparison. Among the occupational groups considered here, most clustered tightly within a 4-year age range (see Figure 13, page 65). The notable exception was teachers within elementary & secondary schools, whose average age was 2 to 3 years older than the other groups, supporting the idea that teaching appears to be a more stable occupation than nursing or state government employment. Comparisons

Figure 9: Exit Rates for Nurses, State Employees, and Teachers in Wyoming, First Quarter 2003 to Fourth Quarter 2005 (2003Q1-2005Q4)
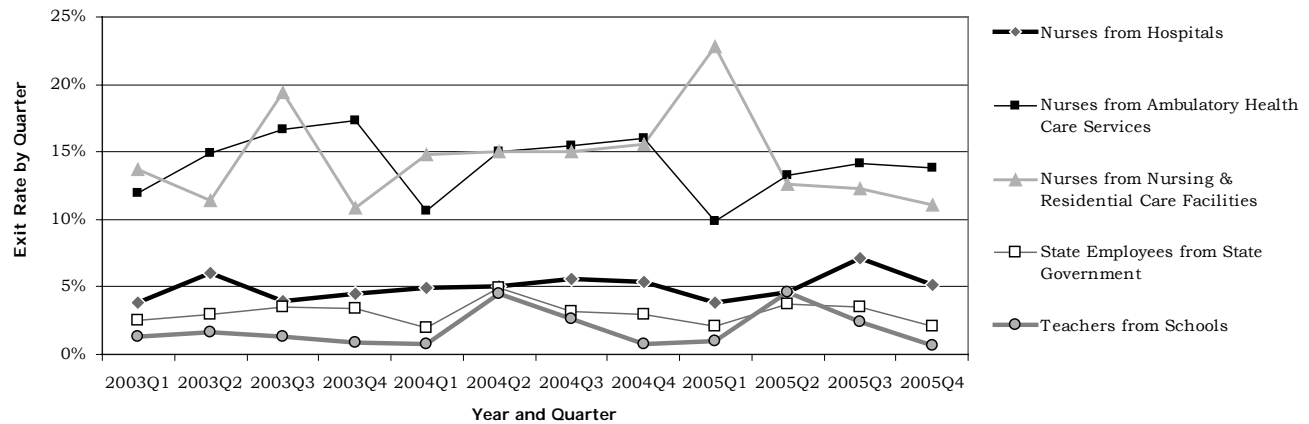


Restricted to nurse exits from Hospitals (North American Industry Classification System--NAICS 622), nurse exits from Ambulatory Health Care (NAICS 621), nurse exits from Nursing and Residential Care Facilities (NAICS 623), state employee exits from State Government (State Gov. Ownership), and teacher exits from Schools (NAICS 611110). Nurses are registered nurses as per the Wyoming State Board of Nursing. Teachers are designated with a job category of "Teacher" in the Wyoming Department of Education's Education Staff File. Wyoming state employees included here have an associated Bureau of Labor Statistics educational and experience category of associate's degree or higher.

restricted to females were similar to the pattern for all employees (see Figure 6, page 65). The pattern for males was also similar but showed more variability, particularly among nurses from health care occupations due to the small number of male nurses (see Figure 7, page 66). Average age comparisons were not meaningful between the nurse group and the matched control group due to the fact that they were statistically forced to be identical through the stratification process.

## Summary

This turnover analysis indicates that exit rates for nurses from hospitals were similar to other occupations that concentrate professional females — namely elementary & secondary school teachers and state employees working in occupations that require post-secondary education. Members of the statistically matched control group working in Wyoming's private sector economy

**Table 26: Registered Nurses with Active Licenses by Place of Work, Third Quarter 2006**

|  | Registered Nurses | |
|---|---|---|
|  | n | % |
| Ambulatory Care | 656 | 16.5% |
| Hospitals | 2,199 | 55.3% |
| Long-Term Care | 288 | 7.2% |
| Higher Education | 108 | 2.7% |
| State Government | 192 | 4.8% |
| Local Education | 144 | 3.6% |
| Local Government | 107 | 2.7% |
| Other Industry, Not Health Care | 282 | 7.1% |
| **Total** | **3,976** | **100.0%** |

Prepared by Lisa Knapp, Research Analyst, Wyoming Department of Employment, Research & Planning, April 20, 2007.

**Table 27: Gender Distribution for Nurses, Teachers, and Highly Educated State Employees, 2003Q2**

|  | Males | Col % | Females | Col % | Unknown | Col % | Total | Col % |
|---|---|---|---|---|---|---|---|---|
| **Nurses** | 337 | 9.8% | 4,961 | 48.8% | 3 | 5.0% | 5,301 | 38.8% |
| Row % | 6.4% | | 93.6% | | 0.1% | | 100.0% | |
| **Teachers** | 1,747 | 50.9% | 3,647 | 35.8% | 31 | 51.7% | 5,425 | 39.7% |
| Row % | 32.2% | | 67.2% | | 0.6% | | 100.0% | |
| **State Employees** | 1,345 | 39.2% | 1,565 | 15.4% | 26 | 43.3% | 2,936 | 21.5% |
| Row % | 45.8% | | 53.3% | | 0.9% | | 100.0% | |
| **Total** | **3,429** | **100.0%** | **10,173** | **100.0%** | **60** | **100.0%** | **13,662** | **100.0%** |
| **Row %** | **25.1%** | | **74.5%** | | **0.4%** | | **100.0%** | |

Note: Nurses are registered nurses as per the Wyoming State Board of Nursing. Teachers are designated with a job category of "Teacher" in the Wyoming Department of Education's Education Staff File. Wyoming state employees included here have an associated Bureau of Labor Statistics educational and experience category of associate's degree or higher.

and nurses from ambulatory health care services and nursing & residential care facilities had somewhat higher rates of turnover. Hospitals, similar to teaching and state government employment, may provide more stable avenues of employment. Characteristics of the work setting, rather than occupation, potentially explain exit rates. Future studies will explore explanatory variables, particularly wage differences.

## References

Glover, W. (2001). Turnover analysis: Definitions, process, and



**Figure 10: Exit Rates for Female Nurses, State Employees, and Teachers in Wyoming, First Quarter 2003 to Fourth Quarter 2005 (2003Q1-2005Q4)**

Restricted to nurse exits from Hospitals (North American Industry Classification System--NAICS 622), nurse exits from Ambulatory Health Care Services (NAICS 621), nurse exits from Nursing and Residential Care Facilities (NAICS 623), state employee exits from State Government (State Gov. Ownership), and teacher exits from Schools (NAICS 611110). Nurses are registered nurses as per the Wyoming State Board of Nursing. Teachers are designated with a job category of "Teacher" in the Wyoming Department of Education's Education Staff File. Wyoming state employees included here have an associated Bureau of Labor Statistics educational and experience category of associate's degree or higher.

quantifications. Retrieved August 16, 2007, from http://doe. state.wy.us/LMI/w_r_research/ Turnover_Methodology.pdf

Glover, W. (2002). Compared to

what? Purpose and method of control group selection. *Wyoming Labor Force Trends, 39*(6). Retrieved August 17, 2007, from http://doe.state.wy.us/ LMI/0602/a2.htm

**Figure 11: Exit Rates for Male Nurses, State Employees, and Teachers in Wyoming, First Quarter 2003 to Fourth Quarter 2005 (2003Q1 to 2005Q4)**



Restricted to nurse exits from Hospitals (North American Industry Classification System--NAICS 622), nurse exits from Ambulatory Health Care Services (NAICS 621), nurse exits from Nursing and Residential Care Facilities (NAICS 623), state employee exits from State Government (State Gov. Ownership), and Teacher exits from Schools (NAICS 611110). Nurses are registered nurses as per the Wyoming State Board of Nursing. Teachers are designated with a job category of "Teacher" in the Wyoming Department of Education's Education Staff File. Wyoming state employees included here have an associated Bureau of Labor Statistics educational and experience category of associate's degree or higher.

**Figure 12: Exit Rates for Nurse and Control Groups in Wyoming, First Quarter 2003 to Fourth Quarter 2005 (2003Q1-2005Q4)**
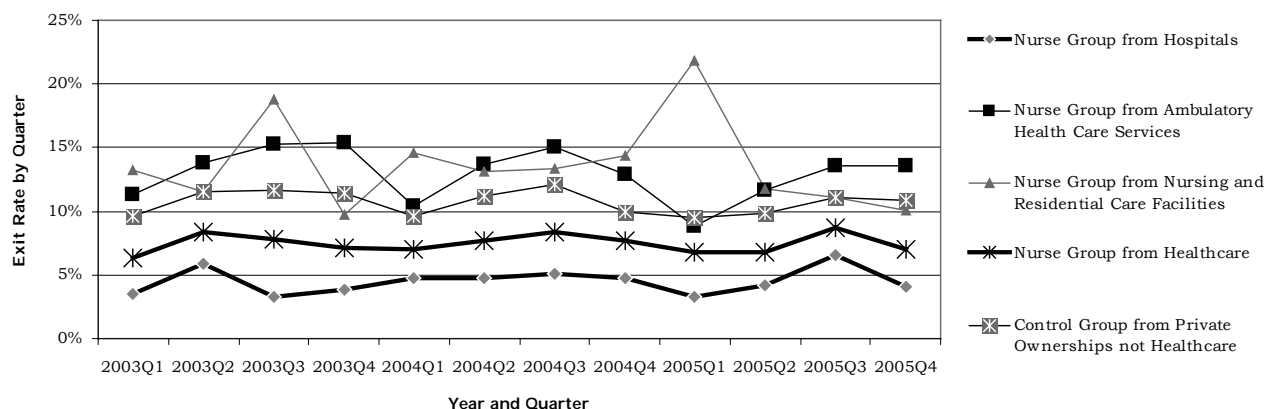


Control Group matched to the Nurse Group on on age, gender, attachment to the market, and prior earnings.
Restricted to nurse exits from Hospitals (North American Industry Classification System--NAICS 622), nurse exits from Ambulatory Health Care Services (NAICS 621), nurse exits from Nursing and Residential Care Facilities (NAICS 623), state employee exits from State Government (State Gov. Ownership), and teacher exits from Schools (NAICS 611110). Nurses are registered nurses as per the Wyoming State Board of Nursing. Teachers are designated with a job category of "Teacher" in the Wyoming Department of Education's Education Staff File. Wyoming state employees included here have an associated Bureau of Labor Statistics educational and experience category of associate's degree or higher.

**Figure 13: Average Age for Exiting Nurses, State Employees, and Teachers in Wyoming, First Quarter 2003 to Fourth Quarter 2005 (2003Q1-2005Q4)**



Restricted to nurse exits from Hospitals (North American Industry Classification System--NAICS 622), nurse exits from Ambulatory Health Care Services (NAICS 621), nurse exits from Nursing and Residential Care Facilities (NAICS 623), state employee exits from State Government (State Gov. Ownership), and teacher exits from Schools (NAICS 611110). Nurses are registered nurses as per the Wyoming State Board of Nursing. Teachers are designated with a job category of "Teacher" in the Wyoming Department of Education's Education Staff File. Wyoming state employees included here have an associated Bureau of Labor Statistics educational and experience category of associate's degree or higher.

**Figure 14: Average Age for Exiting Female Nurses, State Employees, and Teachers in Wyoming, First Quarter 2003 to Fourth Quarter 2005 (2003Q1-2005Q4)**



Restricted to nurse exits from Hospitals (North American Industry Classification System--NAICS 622), nurse exits from Ambulatory Health Care Services (NAICS 621), nurse exits from Nursing and Residential Care Facilities (NAICS 623), state employee exits from State Government (State Gov. Ownership), and teacher exits from Schools (NAICS 611110). Nurses are registered nurses as per the Wyoming State Board of Nursing. Teachers are designated with a job category of "Teacher" in the Wyoming Department of Education's Education Staff File. Wyoming state employees included here have an associated Bureau of Labor Statistics educational and experience category of associate's degree or higher.

**1. The System as a Whole**

**Figure 15: Average Age for Exiting Male Nurses, State Employees, and Teachers in Wyoming, First Quarter 2003 to Fourth Quarter 2005 (2003Q1-2005Q4)**

Restricted to nurse exits from Hospitals (North American Industry Classification System--NAICS 622), nurse exits from Ambulatory Health Care Services (NAICS 621), nurse exits from Nursing & Residential Care Facilities (NAICS 623), state employee exits from State Government (State Gov. Ownership), and teacher exits from Schools (NAICS 611110). Nurses are registered nurses as per the Wyoming State Board of Nursing. Teachers are designated with a job category of "Teacher" in the Wyoming Department of Education's Education Staff File. Wyoming state employees included here have an associated Bureau of Labor Statistics educational and experience category of associate's degree or higher.

# 2. Description of the System

# Nurse Commuting Patterns: Where Nurses Live and Work

*by: Doug Leonard, Senior Economist*

2. Description of the System

Where registered nurses (RNs) live and work can provide important clues about their behavior. Choice of residence and work locations may be due to several factors including the desire for anonymity, reduction in on-call time, family life cycle needs, and differing management practices. In this section, we compare and contrast the work and residence locations for RNs.

Table 1 shows where RNs worked and lived from fourth quarter 2004 (2004Q4) to 2007Q1. The tables indicate that the number of RNs with unknown residency (those without Wyoming driver's licenses), increased markedly from 305 in 2004Q4 to 604 by 2006Q4, suggesting a substantial increase in the number of nonresident RNs working in the state. This result corresponds with other research performed by R&P (Jones, 2007; Leonard, 2008) regarding nonresident workers in Wyoming.

An examination of more recent history shows which counties "import" and "export" RNs. Data for Natrona and Laramie counties (2006Q4) show that both locales were net importers of RNs. That is, the number of RNs working in the counties exceeded the number residing in the counties (201 more in Laramie County, 135 in Natrona County). We can generate similar balance calculations for the other counties.

Another way to analyze the movement of RNs for work is with mapping software. Maps 1 and 2 (see page 71) show the commuting flows of RNs into and out of Sweetwater County. Map 1 indicates that in 2005Q4, 28 RNs commuted to Sweetwater County, spread evenly from

among neighboring locales (except for the nonresidents). In contrast, as shown in

**Table 1: Registered Nurses Residing and Working in Wyoming Counties by Quarter**

| Date | County | Resident Nurses | Working Nurses |
|---|---|---|---|
| 2004Q4 | Albany | 288 | 291 |
| | Big Horn | 89 | 80 |
| | Campbell | 302 | 327 |
| | Carbon | 114 | 114 |
| | Converse | 111 | 85 |
| | Crook | 44 | 45 |
| | Fremont | 306 | 319 |
| | Goshen | 78 | 81 |
| | Hot Springs | 57 | 53 |
| | Johnson | 74 | 80 |
| | Laramie | 841 | 949 |
| | Lincoln | 86 | 79 |
| | Natrona | 721 | 827 |
| | Niobrara | 17 | 13 |
| | Park | 248 | 257 |
| | Platte | 82 | 57 |
| | Sheridan | 271 | 279 |
| | Sublette | 35 | 29 |
| | Sweetwater | 229 | 240 |
| | Teton | 164 | 213 |
| | Uinta | 152 | 171 |
| | Washakie | 83 | 78 |
| | Weston | 42 | 37 |
| | Unknown | 305 | 35 |
| | **Total** | **4,739** | **4,739** |
| 2005Q1 | Albany | 275 | 271 |
| | Big Horn | 89 | 85 |
| | Campbell | 298 | 329 |
| | Carbon | 122 | 121 |
| | Converse | 113 | 88 |
| | Crook | 42 | 47 |
| | Fremont | 307 | 318 |
| | Goshen | 81 | 75 |
| | Hot Springs | 54 | 57 |
| | Johnson | 74 | 78 |
| | Laramie | 842 | 982 |
| | Lincoln | 93 | 78 |
| | Natrona | 714 | 821 |
| | Niobrara | 16 | 11 |
| | Park | 252 | 261 |
| | Platte | 84 | 55 |
| | Sheridan | 272 | 289 |
| | Sublette | 30 | 23 |
| | Sweetwater | 224 | 235 |
| | Teton | 167 | 229 |
| | Uinta | 154 | 169 |
| | Washakie | 84 | 79 |
| | Weston | 42 | 41 |
| | Unknown | 343 | 30 |
| | **Total** | **4,772** | **4,772** |

Map 2, a substantial proportion of RNs who commuted out of Sweetwater County chose to work in Uinta County, with small numbers scattered among neighboring locales.

*Table continued from page 68*

**Table 1: Registered Nurses Residing and Working in Wyoming Counties by Quarter**

| Date | County | Resident Nurses | Working Nurses | Date | County | Resident Nurses | Working Nurses |
|---|---|---|---|---|---|---|---|
| 2005Q2 | Albany | 280 | 276 | 2005Q4 | Albany | 282 | 287 |
| | Big Horn | 90 | 84 | | Big Horn | 104 | 95 |
| | Campbell | 311 | 340 | | Campbell | 322 | 356 |
| | Carbon | 122 | 123 | | Carbon | 122 | 117 |
| | Converse | 110 | 89 | | Converse | 107 | 92 |
| | Crook | 43 | 48 | | Crook | 45 | 55 |
| | Fremont | 305 | 323 | | Fremont | 305 | 317 |
| | Goshen | 80 | 76 | | Goshen | 80 | 77 |
| | Hot Springs | 56 | 61 | | Hot Springs | 59 | 63 |
| | Johnson | 73 | 75 | | Johnson | 70 | 73 |
| | Laramie | 852 | 1,010 | | Laramie | 856 | 1,023 |
| | Lincoln | 93 | 78 | | Lincoln | 92 | 77 |
| | Natrona | 730 | 832 | | Natrona | 751 | 870 |
| | Niobrara | 17 | 15 | | Niobrara | 20 | 11 |
| | Park | 249 | 256 | | Park | 265 | 268 |
| | Platte | 84 | 57 | | Platte | 84 | 59 |
| | Sheridan | 270 | 287 | | Sheridan | 275 | 289 |
| | Sublette | 33 | 25 | | Sublette | 33 | 22 |
| | Sweetwater | 222 | 230 | | Sweetwater | 223 | 227 |
| | Teton | 170 | 230 | | Teton | 170 | 243 |
| | Uinta | 148 | 168 | | Uinta | 154 | 177 |
| | Washakie | 82 | 76 | | Washakie | 84 | 75 |
| | Weston | 42 | 44 | | Weston | 43 | 47 |
| | Unknown | 381 | 40 | | Unknown | 408 | 34 |
| | **Total** | **4,843** | **4,843** | | **Total** | **4,954** | **4,954** |
| 2005Q3 | Albany | 283 | 288 | 2006Q1 | Albany | 282 | 284 |
| | Big Horn | 101 | 99 | | Big Horn | 107 | 99 |
| | Campbell | 323 | 353 | | Campbell | 321 | 352 |
| | Carbon | 128 | 122 | | Carbon | 121 | 115 |
| | Converse | 110 | 96 | | Converse | 105 | 96 |
| | Crook | 43 | 53 | | Crook | 42 | 52 |
| | Fremont | 308 | 331 | | Fremont | 312 | 318 |
| | Goshen | 80 | 76 | | Goshen | 82 | 73 |
| | Hot Springs | 58 | 59 | | Hot Springs | 57 | 62 |
| | Johnson | 72 | 76 | | Johnson | 66 | 74 |
| | Laramie | 888 | 1,067 | | Laramie | 865 | 1,035 |
| | Lincoln | 93 | 82 | | Lincoln | 93 | 78 |
| | Natrona | 739 | 855 | | Natrona | 746 | 873 |
| | Niobrara | 18 | 13 | | Niobrara | 19 | 11 |
| | Park | 260 | 274 | | Park | 264 | 276 |
| | Platte | 86 | 56 | | Platte | 82 | 62 |
| | Sheridan | 275 | 294 | | Sheridan | 272 | 278 |
| | Sublette | 32 | 22 | | Sublette | 31 | 23 |
| | Sweetwater | 224 | 232 | | Sweetwater | 221 | 223 |
| | Teton | 172 | 246 | | Teton | 164 | 231 |
| | Uinta | 151 | 173 | | Uinta | 152 | 175 |
| | Washakie | 83 | 79 | | Washakie | 78 | 68 |
| | Weston | 44 | 50 | | Weston | 43 | 39 |
| | Unknown | 467 | 42 | | Unknown | 413 | 41 |
| | **Total** | **5,038** | **5,038** | | **Total** | **4,938** | **4,938** |

## References

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Leonard, D. (2008, May). Barriers to growth in Wyoming's economy. *Wyoming Labor Force Trends, 45*(5). Retrieved July 31, 2008, from http://doe.state.wy.us/LMI/0508/a1.htm

*Table continued from page 69*

**Table 1: Registered Nurses Residing and Working in Wyoming Counties by Quarter**

| Date | County | Resident Nurses | Working Nurses | Date | County | Resident Nurses | Working Nurses |
|---|---|---|---|---|---|---|---|
| 2006Q2 | Albany | 279 | 292 | 2006Q4 | Albany | 279 | 292 |
| | Big Horn | 101 | 93 | | Big Horn | 103 | 99 |
| | Campbell | 310 | 339 | | Campbell | 310 | 346 |
| | Carbon | 120 | 127 | | Carbon | 122 | 126 |
| | Converse | 101 | 98 | | Converse | 111 | 89 |
| | Crook | 42 | 52 | | Crook | 41 | 61 |
| | Fremont | 299 | 326 | | Fremont | 309 | 330 |
| | Goshen | 78 | 71 | | Goshen | 85 | 83 |
| | Hot Springs | 58 | 59 | | Hot Springs | 52 | 55 |
| | Johnson | 62 | 77 | | Johnson | 69 | 84 |
| | Laramie | 851 | 1,032 | | Laramie | 877 | 1,078 |
| | Lincoln | 95 | 79 | | Lincoln | 102 | 89 |
| | Natrona | 723 | 884 | | Natrona | 747 | 882 |
| | Niobrara | 21 | 12 | | Niobrara | 20 | 22 |
| | Park | 251 | 293 | | Park | 264 | 296 |
| | Platte | 80 | 60 | | Platte | 82 | 58 |
| | Sheridan | 261 | 291 | | Sheridan | 264 | 291 |
| | Sublette | 31 | 27 | | Sublette | 36 | 30 |
| | Sweetwater | 209 | 227 | | Sweetwater | 221 | 237 |
| | Teton | 151 | 231 | | Teton | 162 | 248 |
| | Uinta | 149 | 173 | | Uinta | 156 | 175 |
| | Washakie | 77 | 71 | | Washakie | 77 | 78 |
| | Weston | 43 | 40 | | Weston | 45 | 44 |
| | Unknown | 610 | 48 | | Unknown | 604 | 45 |
| | **Total** | **5,002** | **5,002** | | **Total** | **5,138** | **5,138** |
| 2006Q3 | Albany | 286 | 298 | 2007Q1 | Albany | 280 | 293 |
| | Big Horn | 103 | 96 | | Big Horn | 106 | 88 |
| | Campbell | 311 | 347 | | Campbell | 307 | 346 |
| | Carbon | 120 | 127 | | Carbon | 118 | 115 |
| | Converse | 100 | 84 | | Converse | 108 | 90 |
| | Crook | 44 | 59 | | Crook | 39 | 56 |
| | Fremont | 308 | 325 | | Fremont | 309 | 333 |
| | Goshen | 83 | 79 | | Goshen | 87 | 85 |
| | Hot Springs | 56 | 55 | | Hot Springs | 52 | 55 |
| | Johnson | 66 | 84 | | Johnson | 67 | 86 |
| | Laramie | 843 | 1,047 | | Laramie | 892 | 1,094 |
| | Lincoln | 101 | 86 | | Lincoln | 100 | 86 |
| | Natrona | 742 | 888 | | Natrona | 746 | 888 |
| | Niobrara | 18 | 18 | | Niobrara | 21 | 26 |
| | Park | 250 | 286 | | Park | 259 | 296 |
| | Platte | 82 | 60 | | Platte | 81 | 60 |
| | Sheridan | 258 | 291 | | Sheridan | 254 | 273 |
| | Sublette | 36 | 29 | | Sublette | 32 | 34 |
| | Sweetwater | 222 | 241 | | Sweetwater | 223 | 247 |
| | Teton | 154 | 250 | | Teton | 159 | 237 |
| | Uinta | 151 | 169 | | Uinta | 157 | 176 |
| | Washakie | 75 | 73 | | Washakie | 74 | 80 |
| | Weston | 45 | 43 | | Weston | 48 | 43 |
| | Unknown | 632 | 51 | | Unknown | 605 | 37 |
| | **Total** | **5,086** | **5,086** | | **Total** | **5,124** | **5,124** |

**2. Description of the System**

**2. Description of the System**

**Map 1: Intercounty Commuting Inflow of Nurses to Sweetwater County, 2005Q4**

Park

Sheridan
○ Sheridan

Big Horn
○ Cody

Crook
Gillette
○ Sundance

**1**
Basin
○

○ Buffalo
Johnson

Campbell

Weston
○ Newcastle

Worland
○
Washakie

Teton
Hot **1**
Springs
○ Jackson
Thermopolis ○

**1** Converse

Niobrara

Sublette
Fremont

Natrona
○ Casper

○ Douglas

○ Lusk

○ Pinedale

○ Lander

**3**

Goshen
Platte
○ Wheatland
○ Torrington

**3**

**4**

Carbon

**3**

Lincoln
○ Kemmerer
Sweetwater

○ Rawlins

Albany

**Unknown    18**

**Total    46**

Uinta
Evanston
○

○ Green River

**6**

**1**
○ Laramie

Laramie
☆ Cheyenne

**5**

**Map 2: Intercounty Commuting Outflow of Nurses from Sweetwater County, 2005Q4**

Park

Sheridan
○ Sheridan

Big Horn
○ Cody

Crook
Gillette
○ Sundance

Basin
○

○ Buffalo
Johnson

Campbell

Weston
○ Newcastle

Worland
○
Washakie

**1**

Teton
Hot
Springs
○ Jackson
Thermopolis ○

Sublette
Natrona
○ Casper

Converse

Niobrara

Fremont

○ Pinedale

○ Lander

**6**

○ Douglas

○ Lusk

**3**

**2**

Goshen
Platte
○ Wheatland
○ Torrington

**Utah    3**
**Unknown-WY    6**

**1**

Carbon

**1**

Lincoln
○ Kemmerer
Sweetwater

○ Rawlins

Albany

**Total    42**

Uinta
Evanston
○

○ Green River

**4**

**2**
○ Laramie

Laramie
☆ Cheyenne

**12**

# Nurses Leaving the Labor Market

*by: Dr. Mark A. Harris, Sociologist*

*Market-level exit* refers to an exit from Wyoming's labor market rather than an exit from an employer. This is an important distinction because if a nurse leaves an employer for another Wyoming employer, there is no net loss of nurses in the state. This may affect the employer but does not have an effect on the number of nurses working in the state. However, if a nurse leaves the labor market entirely, there is one less nurse working in the state, which adds to the shortage of nurses. The following tables and figures show market exits for nurses working in health care industries and other industries between 1999 and 2006.

Between first quarter 1999 (1999Q1) and 2006Q3 nurses who worked in health care-related industries and were age 45-54 had the greatest average number of market exits (44.3). Those age 65 and older had the lowest average number of exits (4.1; see Table 2). Similarly, nurses age 45-54 working in non-health care industries had the highest average number of market exits (36.7) while those age 65 and older had the lowest (3.2; see Table 3, page 73).

**Table 2: Market-Level Exits for Wyoming Registered Nurses in Health Care Industries by Age Group, First Quarter 1999 to Third Quarter 2006**

| Year | Quarter | <35 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
|------|---------|-----|-------|-------|-------|-----|---------|-------|
| 1999 | 1 | 38 | 55 | 34 | 9 | 2 | 9 | 147 |
|      | 2 | 45 | 55 | 47 | 14 | 2 | 10 | 173 |
|      | 3 | 39 | 51 | 40 | 11 | 2 | 10 | 153 |
|      | 4 | 33 | 49 | 52 | 17 | 2 | 11 | 164 |
| 2000 | 1 | 30 | 42 | 25 | 12 | 0 | 7 | 116 |
|      | 2 | 35 | 47 | 41 | 18 | 2 | 13 | 156 |
|      | 3 | 45 | 53 | 51 | 15 | 0 | 13 | 177 |
|      | 4 | 33 | 41 | 32 | 12 | 2 | 5 | 125 |
| 2001 | 1 | 28 | 31 | 33 | 9 | 2 | 5 | 108 |
|      | 2 | 31 | 61 | 45 | 10 | 7 | 8 | 162 |
|      | 3 | 43 | 38 | 56 | 18 | 4 | 18 | 177 |
|      | 4 | 23 | 29 | 42 | 16 | 2 | 13 | 125 |
| 2002 | 1 | 27 | 36 | 56 | 9 | 3 | 15 | 146 |
|      | 2 | 32 | 43 | 48 | 13 | 3 | 9 | 148 |
|      | 3 | 42 | 51 | 60 | 11 | 3 | 8 | 175 |
|      | 4 | 35 | 62 | 82 | 24 | 6 | 6 | 215 |
| 2003 | 1 | 26 | 27 | 41 | 5 | 1 | 3 | 103 |
|      | 2 | 37 | 32 | 38 | 16 | 3 | 4 | 130 |
|      | 3 | 35 | 26 | 53 | 13 | 1 | 9 | 137 |
|      | 4 | 22 | 19 | 37 | 21 | 4 | 5 | 108 |
| 2004 | 1 | 14 | 20 | 36 | 11 | 4 | 9 | 94 |
|      | 2 | 25 | 27 | 35 | 17 | 8 | 8 | 120 |
|      | 3 | 33 | 32 | 44 | 23 | 3 | 8 | 143 |
|      | 4 | 28 | 36 | 46 | 30 | 6 | 6 | 152 |
| 2005 | 1 | 24 | 25 | 37 | 17 | 4 | 22 | 129 |
|      | 2 | 34 | 22 | 37 | 16 | 7 | 20 | 136 |
|      | 3 | 53 | 43 | 57 | 28 | 10 | 24 | 215 |
|      | 4 | 27 | 35 | 38 | 27 | 14 | 19 | 160 |
| 2006 | 1 | 24 | 27 | 43 | 23 | 6 | 18 | 141 |
|      | 2 | 18 | 28 | 44 | 20 | 5 | 21 | 136 |
|      | 3 | 29 | 30 | 44 | 27 | 9 | 23 | 162 |
| Average | | 31.9 | 37.8 | 44.3 | 16.5 | 4.1 | 11.6 | 146.2 |

Between 1999Q1 and 2006Q3 the number of market exits for nurses younger than age 45 working in health care industries and in all other industries declined (see Figures 1 and 2, page 74). During this time the number of market exits stayed relatively stable for nurses age 45-54 but showed increases for those older than 55. This is possibly due to an aging nurse workforce. Wyoming nurses are aging and nearing the typical retirement age, which would then lead to a greater number of exits from the market.

**Table 2: Market-Level Exits for Wyoming Registered Nurses in All Other Industries (Not Health Care) by Age Group, First Quarter 1999 to Third Quarter 2006**

| Year | Quarter | <35 | 35-44 | 45-54 | 55-64 | 65+ | Unknown | Total |
|------|---------|-----|-------|-------|-------|-----|---------|-------|
| 1999 | 1 | 32 | 41 | 22 | 7 | 1 | 2 | 105 |
|      | 2 | 46 | 56 | 43 | 13 | 2 | 6 | 166 |
|      | 3 | 61 | 36 | 21 | 8 | 2 | 7 | 135 |
|      | 4 | 43 | 32 | 24 | 7 | 1 | 11 | 118 |
| 2000 | 1 | 35 | 36 | 26 | 4 | 1 | 7 | 109 |
|      | 2 | 44 | 41 | 34 | 10 | 3 | 3 | 135 |
|      | 3 | 72 | 61 | 50 | 17 | 0 | 14 | 214 |
|      | 4 | 33 | 34 | 39 | 15 | 1 | 10 | 132 |
| 2001 | 1 | 19 | 33 | 30 | 14 | 1 | 3 | 100 |
|      | 2 | 38 | 44 | 43 | 13 | 3 | 9 | 150 |
|      | 3 | 59 | 32 | 42 | 11 | 2 | 12 | 158 |
|      | 4 | 26 | 43 | 44 | 11 | 1 | 5 | 130 |
| 2002 | 1 | 26 | 31 | 31 | 17 | 3 | 6 | 114 |
|      | 2 | 39 | 50 | 52 | 13 | 4 | 3 | 161 |
|      | 3 | 51 | 25 | 41 | 13 | 2 | 11 | 143 |
|      | 4 | 34 | 41 | 51 | 19 | 3 | 3 | 151 |
| 2003 | 1 | 22 | 28 | 40 | 11 | 3 | 4 | 108 |
|      | 2 | 40 | 36 | 46 | 12 | 2 | 6 | 142 |
|      | 3 | 48 | 26 | 43 | 16 | 3 | 7 | 143 |
|      | 4 | 22 | 31 | 39 | 10 | 3 | 9 | 114 |
| 2004 | 1 | 27 | 31 | 39 | 18 | 3 | 6 | 124 |
|      | 2 | 23 | 34 | 42 | 17 | 3 | 8 | 127 |
|      | 3 | 26 | 18 | 33 | 26 | 2 | 3 | 108 |
|      | 4 | 25 | 43 | 47 | 13 | 5 | 16 | 149 |
| 2005 | 1 | 20 | 15 | 27 | 19 | 8 | 11 | 100 |
|      | 2 | 29 | 22 | 49 | 14 | 10 | 8 | 132 |
|      | 3 | 22 | 21 | 32 | 12 | 5 | 21 | 113 |
|      | 4 | 20 | 28 | 42 | 15 | 3 | 20 | 128 |
| 2006 | 1 | 16 | 19 | 21 | 14 | 5 | 16 | 91 |
|      | 2 | 23 | 24 | 26 | 25 | 9 | 18 | 125 |
|      | 3 | 13 | 16 | 18 | 17 | 4 | 27 | 95 |
| Average | | 33.4 | 33.2 | 36.7 | 13.9 | 3.2 | 9.4 | 129.7 |

2. Description of the System

2. Description of the System

**Figure 1: Market-Level Exits for Registered Nurses in Health Care Industries by Age Group, First Quarter 1999 to Third Quarter 2006**
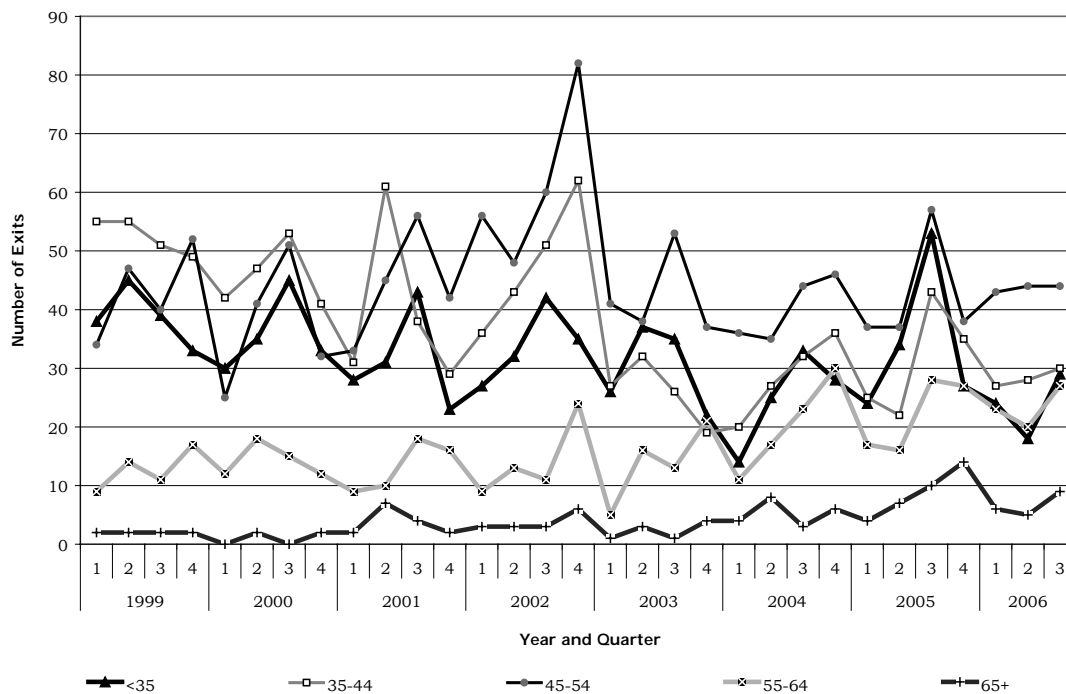


**Figure 2: Market-Level Exits for Registered Nurses in Other Industries (Non-Health Care) by Age Group, First Quarter 1999 to Third Quarter 2006**
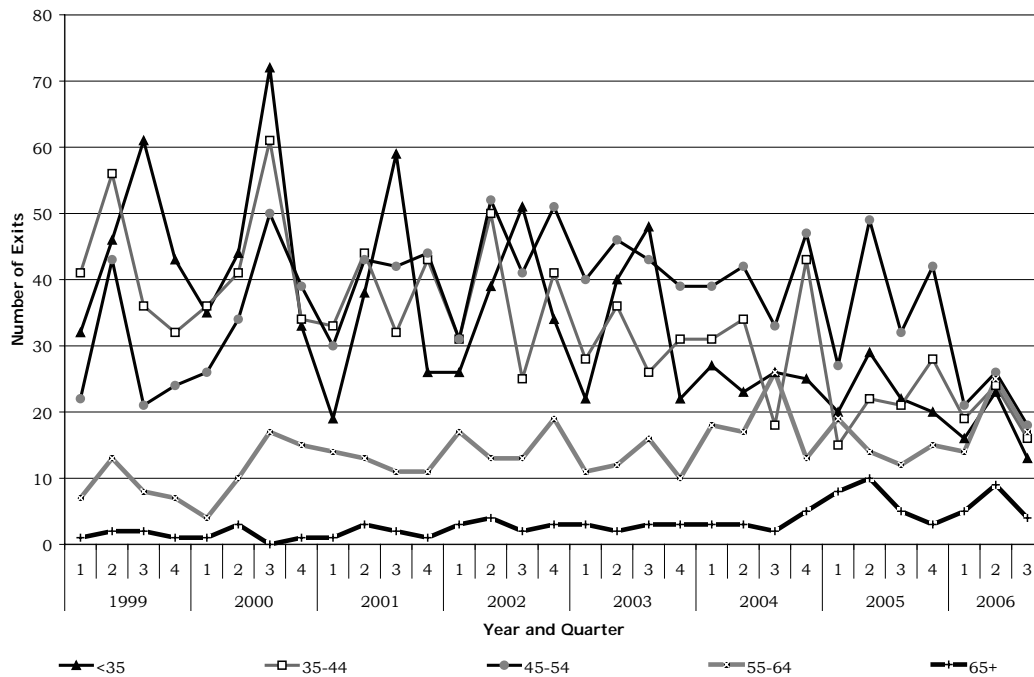
# Staffing Levels, Employment, and Employer-Level Exits in Ambulatory Health Care Services, Nursing & Residential Care Facilities, and Hospitals
## by: Lisa Knapp, Research Analyst

## Ambulatory Health Care Services

Overall, as shown in Table 4, a greater percentage of ambulatory health care workers in South Dakota were employed as healthcare practitioners & technical occupations (50.2% compared to 41.9% in Wyoming) while a greater percentage

Table 4: Occupational Staffing Levels for South Dakota and Wyoming, Ambulatory Health Care Services (NAICS[a] 621), May 2005

| Standard Occupational Classification Title and Code | Wyoming Employment | Column Percentage | WY Hourly Mean Wage | South Dakota Employment | Column Percentage | SD Hourly Mean Wage |
|---|---|---|---|---|---|---|
| Management (11) | 168 | 2.3% | $28.92 | 224 | 1.8% | $35.46 |
| Business & Financial Operations (13) | 24 | 0.3% | $21.13 | 121 | 1.0% | $19.21 |
| Computer & Mathematical (15) | 11 | 0.1% | $17.03 | 27 | 0.2% | $19.33 |
| Architecture & Engineering (17) | ND | ND | ND | ND | ND | ND |
| Life, Physical, & Social Science (19) | 68 | 0.9% | $29.43 | 58 | 0.5% | $30.73 |
| Community & Social Services (21) | 397 | 5.4% | $17.61 | 324 | 2.6% | $13.81 |
| Legal (23) | ND | ND | ND | ND | ND | ND |
| Education, Training, & Library (25) | ND | ND | ND | ND | ND | ND |
| Arts, Design, Entertainment, Sports, & Media (27) | ND | ND | ND | ND | ND | ND |
| Healthcare Practitioners & Technical (29) | 3,095 | 41.9% | $34.90 | 6,336 | 50.2% | $30.96 |
| Registered Nurses (29-1111) | 717 | 9.7% | $21.99 | 1,515 | 12.0% | $19.32 |
| LPN/LVN (29-2061) | 134 | 1.8% | $13.98 | 674 | 5.3% | $13.34 |
| Healthcare Support (31) | 1,416 | 19.2% | $11.48 | 1,982 | 15.7% | $11.46 |
| Home Health Aides (31-1011) | 131 | 1.8% | $10.70 | 158 | 1.2% | $9.07 |
| Nurse Aides, Orderlies, & Attendants (31-1012) | ND | ND | ND | 131 | 1.0% | $8.68 |
| Protective Service (33) | ND | ND | ND | ND | ND | ND |
| Food Preparation & Serving Related (35) | ND | ND | ND | ND | ND | ND |
| Building & Grounds Cleaning & Maintenance (37) | 61 | 0.8% | $9.54 | 162 | 1.3% | $8.05 |
| Personal Care & Service (39) | 36 | 0.5% | $8.39 | 176 | 1.4% | $8.38 |
| Sales & Related (41) | ND | ND | ND | ND | ND | ND |
| Office & Administrative Support (43) | 2,063 | 27.9% | $11.87 | 3,098 | 24.5% | $11.67 |
| Construction & Extraction (47) | ND | ND | ND | ND | ND | ND |
| Installation, Maintenance, & Repair (49) | ND | ND | ND | 38 | 0.3% | $15.11 |
| Production (51) | ND | ND | ND | 27 | 0.2% | $9.97 |
| Transportation & Material Moving (53) | 29 | 0.4% | $10.40 | 35 | 0.3% | $13.42 |
| **Total, All Occupations** | **7,388** | **99.7%** | **$22.23** | **12,630** | **99.8%** | **$21.92** |

[a]North American Industry Classification System.

ND – Not disclosable due to confidentiality.

Prepared by Lisa Knapp, Research Analyst, Wyoming Department of Employment, Research & Planning, April 18, 2007.

2. Description of the System

of ambulatory health care workers in Wyoming worked in healthcare support occupations (19.2% compared to 15.7% in South Dakota). In particular, there was a greater proportion of health care personnel employed as registered nurses in South Dakota (12.0%) than in Wyoming (9.7%).

Wages for health care-related occupations were somewhat higher in Wyoming than in South Dakota. Registered nurses in Wyoming were paid an average of $21.99 per hour while registered nurses in South Dakota were paid an average of $19.32 per hour. Similarly, nurse aides, orderlies, & attendants in Wyoming earned an average of $10.70 per hour and those in South Dakota earned an average of $9.07 per hour.

The average age of Wyoming nurses working in ambulatory care, according to results from the 2007 Wyoming Department of Employment Health Care Personnel Survey, was 50.5 years (see Table 5). Only 10.9% of those nurses were younger than 35 while the other 84.4% were older. Of those older than age 34, 58.6% were between the ages of 35 and 54 and the other 25.8% were 55 or older.

The rate of employer-level turnover for ambulatory health care nurses was highest for those who were younger than age 35 and, until recently, lowest for nurses age 55 and older (see Table 6, page 77, and Figure 3, page 78). Although the rate of turnover declined between 2000 and 2006 for most age groups, it increased for nurses age 55 and older.

## Nursing & Residential Care Facilities

A greater proportion of employees working in nursing & residential care facilities in South Dakota worked in healthcare practitioner or technical occupations compared to those in Wyoming (15.2% compared to 12.0%; see Table 7, page 79). A higher percentage of employees in this industry worked as registered nurses in South Dakota (8.7%) than in Wyoming (6.3%). Although a higher proportion of nursing & residential care facilities employees in Wyoming were employed in healthcare support occupations (35.4% compared to 33.1% in South Dakota), a greater proportion of South Dakota workers were employed as nursing aides, orderlies, & attendants (30.8%) than were Wyoming workers

**Table 5: Distribution of Employment in Ambulatory Health Care Services (NAICS[a] 621) by Age Group, 2007[b]**

| Age | n | % |
|---|---|---|
| 20-24 | 2 | 0.5% |
| 25-34 | 45 | 10.4% |
| 35-44 | 114 | 26.3% |
| 45-54 | 140 | 32.3% |
| 55-64 | 92 | 21.2% |
| 65+ | 20 | 4.6% |
| Unknown | 21 | 4.8% |

**Analysis Variable: Age**

| n | Mean |
|---|---|
| 434 | 50.5 |

[a]North American Industry Classification System.

[b]Wyoming Department of Employment Health Care Personnel Survey, 2007.

Note: Percentages may not sum to 100.0% due to rounding.

(23.5%). As was the case with hospitals, a greater proportion of hospital workers in Wyoming were employed in management occupations (6.2%) than in South Dakota (2.2%).

Overall, Wyoming nursing & residential care workers in healthcare practitioner & technical occupations earned a higher average hourly wage than those in South Dakota ($19.86 per hour compared to $17.01 per hour). Registered nurses in Wyoming earned an average of $21.95 per hour while registered nurses in South Dakota earned an average of $18.88 per hour.

Table 6: Employer-Level Turnover Rates for Wyoming Registered Nurses in Ambulatory Health Care Services by Age Group, First Quarter 2000 to Fourth Quarter 2006

| Year | Quarter | Under 35 | 35-44 | 45-54 | 55 and Older | Unknown | Total |
|------|---------|----------|-------|-------|--------------|---------|-------|
|      |         | Age Group | | | | | |
| 2000 | 1 | 16.9 | 16.5 | 15.5 | 13.9 | 0.0 | **15.9** |
|      | 2 | 16.2 | 17.0 | 13.3 | 11.0 | 62.5 | **15.6** |
|      | 3 | 19.6 | 13.2 | 17.9 | 8.5 | 62.5 | **16.1** |
|      | 4 | 18.3 | 16.5 | 15.7 | 19.5 | 33.3 | **17.1** |
| 2001 | 1 | 23.8 | 14.2 | 13.1 | 17.3 | 11.1 | **16.1** |
|      | 2 | 16.0 | 15.5 | 13.2 | 16.7 | 53.3 | **15.8** |
|      | 3 | 20.5 | 17.9 | 15.1 | 11.3 | 50.0 | **17.4** |
|      | 4 | 25.7 | 16.7 | 17.7 | 21.5 | 20.0 | **19.5** |
| 2002 | 1 | 20.4 | 16.4 | 13.3 | 12.1 | 50.0 | **16.3** |
|      | 2 | 18.6 | 16.2 | 14.7 | 14.1 | 62.5 | **16.4** |
|      | 3 | 16.3 | 13.2 | 13.5 | 6.6 | 16.7 | **13.1** |
|      | 4 | 14.4 | 15.1 | 13.4 | 10.1 | 60.0 | **13.9** |
| 2003 | 1 | 14.6 | 12.6 | 11.6 | 3.3 | 0.0 | **11.2** |
|      | 2 | 18.5 | 11.1 | 15.7 | 11.8 | 30.0 | **14.5** |
|      | 3 | 24.0 | 12.3 | 15.8 | 11.4 | 41.7 | **16.0** |
|      | 4 | 20.9 | 16.5 | 16.9 | 15.0 | 7.7 | **17.0** |
| 2004 | 1 | 13.3 | 10.5 | 10.2 | 7.0 | 29.4 | **10.6** |
|      | 2 | 20.4 | 10.6 | 13.6 | 18.7 | 35.0 | **15.3** |
|      | 3 | 18.7 | 15.7 | 13.4 | 14.6 | 27.8 | **15.5** |
|      | 4 | 21.1 | 14.6 | 13.7 | 16.3 | 26.1 | **16.0** |
| 2005 | 1 | 9.9 | 9.5 | 10.2 | 9.1 | 36.4 | **10.5** |
|      | 2 | 22.8 | 13.5 | 9.7 | 12.0 | 31.6 | **13.9** |
|      | 3 | 20.8 | 12.7 | 13.5 | 17.8 | 31.6 | **15.5** |
|      | 4 | 16.8 | 14.3 | 12.4 | 13.8 | 20.0 | **14.0** |
| 2006 | 1 | 12.5 | 12.2 | 13.5 | 10.7 | 22.2 | **12.7** |
|      | 2 | 8.2 | 13.6 | 13.8 | 11.4 | 18.5 | **12.7** |
|      | 3 | 15.8 | 13.8 | 8.8 | 12.9 | 30.0 | **12.9** |
|      | 4 | 9.8 | 12.6 | 10.3 | 12.9 | 33.3 | **12.0** |
| Average | | **17.4** | **14.8** | **13.6** | **12.8** | **37.5** | **15.1** |

Nurses in nursing & residential care facilities who participated in the Wyoming Department of Employment's Health Care Personnel Survey had the highest average age at 52.6 (see Table 8, page 80). Approximately 37.5% of these nurses were older than age 55 and another 43.9% were between the ages of 35 and 54. Only 13.7% were younger than age 35.

Overall, turnover in nursing & residential care facilities decreased between 2000 and 2006 for nurses who were younger than 35 and nurses who were older than age 55 (see Table 9, page 80, and Figure 4, page 81). This was the only industry that saw decreases in turnover for the oldest age group. There was an increase in turnover for nurses in the middle ages (35-54).

## Hospitals

In South Dakota, according to Table 10 (see page 82), a greater proportion of hospital workers were employed in healthcare practitioner & technical occupations compared to Wyoming hospitals (49.1% compared to 42.7%). South Dakota hospitals employed 4.4%

Wyoming employees working in healthcare support occupations also earned somewhat higher wages compared to those in South Dakota ($9.89 per hour compared to $9.09). Nurse aides, orderlies & attendants in Wyoming nursing & residential care facilities earned an average of $10.10 per hour while those in South Dakota facilities earned an average of $9.07.

more registered nurses in 2005 (27.4%) than did Wyoming hospitals (23.0%). In comparison, a greater proportion of employees in Wyoming hospitals worked in healthcare support occupations (19.2% compared to 15.4%). Wyoming hospitals employed 3.1% more nurse aides, orderlies, & attendants (14.1%) than South Dakota hospitals did (10.3%). In addition, a greater proportion of Wyoming hospital workers were employed in management positions (5.6%) compared to South Dakota.

The wages for workers in healthcare practitioner & technical occupations in both Wyoming and South Dakota hospitals were very close, but registered nurses in hospitals earned an average of almost a dollar more

per hour in South Dakota ($24.43) than in Wyoming ($23.44). In comparison, Wyoming workers in healthcare support occupations earned slightly higher average hourly wages in Wyoming ($11.03) than in South Dakota ($10.41). Nurse aides, orderlies, & attendants also earned slightly more in Wyoming ($10.06) than in South Dakota ($9.78).

The average age of nurses working in Wyoming hospitals, according to the 2007 Wyoming Department of Employment Health Care Personnel Survey, was 50.8 (see Table 11, page 83). A majority of these nurses were older than age 35 (75.2%). Of those nurses who were older than age 35, 53.3% were between the ages of 35 and 54 and the



**Figure 3: Employer-Level Turnover Rates for Wyoming Registered Nurses in Ambulatory Health Care Services by Age Group, 2000 to 2006 (Four-Quarter Moving Average)**
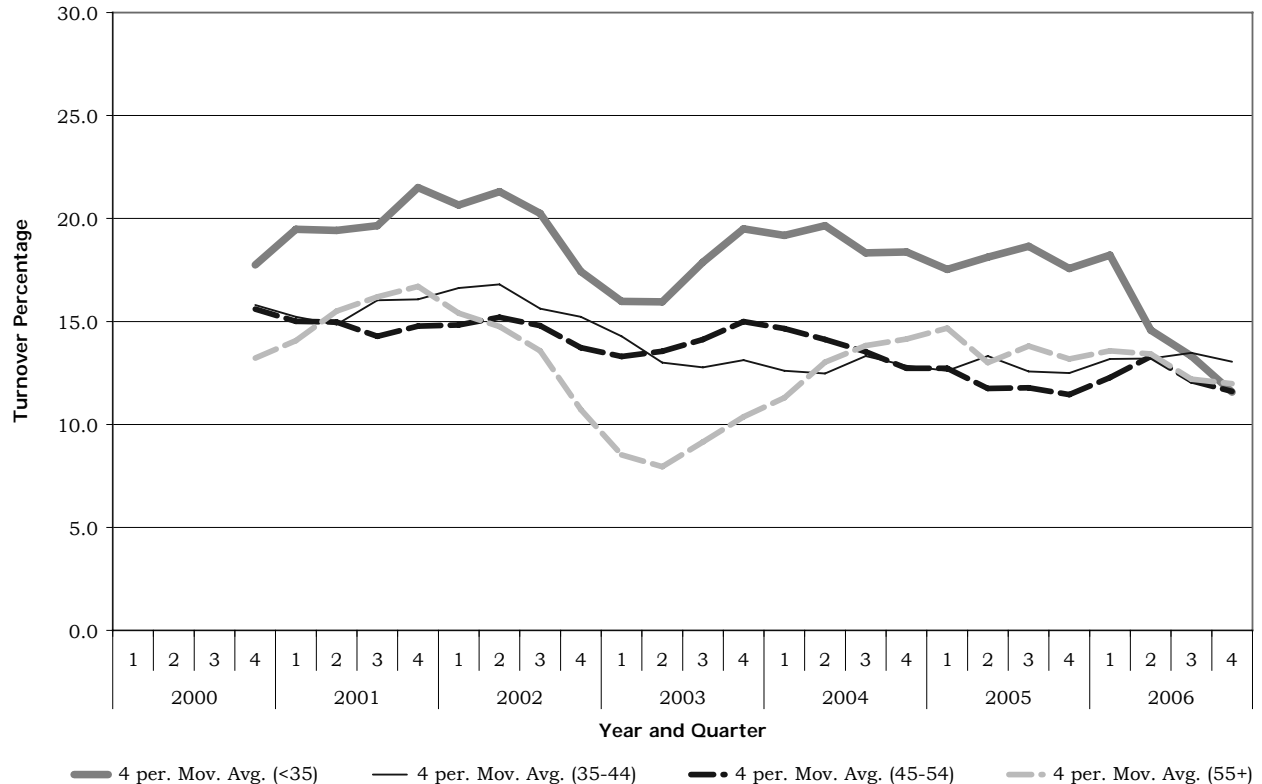
other 21.9% were older than 55. Compared to ambulatory health care services and nursing & residential care facilities, hospitals employed the greatest percentage of nurses younger than age 35 (16.9%).

Hospitals had the lowest levels of turnover for all age groups when compared to ambulatory health care services and nursing & residential care facilities (see Table 12, page 83,

and Figure 5, page 84). Over time the turnover rates for hospitals in the state remained well below 10.0%. Of all the age groups, nurses younger than age 35 had the highest rates of turnover and, as with those

**Table 4: Occupational Staffing Levels for Wyoming and South Dakota in Nursing & Residential Care Facilities (NAICS[a] 623), May 2005**

| Standard Occupational Classification Title and Code | Wyoming Employment | Column Percentage | WY Hourly Mean Wage | South Dakota Employment | Column Percentage | SD Hourly Mean Wage |
|---|---|---|---|---|---|---|
| Management (11) | 272 | 6.2% | $21.89 | 289 | 2.2% | $25.42 |
| Business & Financial Operations (13) | 19 | 0.4% | $18.18 | 81 | 0.6% | $17.57 |
| Computer & Mathematical (15) | ND | ND | ND | 587 | 4.5% | $13.95 |
| Life, Physical, & Social Science (19) | 33 | 0.8% | $22.28 | ND | ND | ND |
| Community & Social Services (21) | 718 | 16.5% | $10.82 | ND | ND | ND |
| Legal (230000) | ND | ND | ND | ND | ND | ND |
| Education, Training, & Library (25) | 33 | 0.8% | $15.59 | 66 | 0.5% | $14.35 |
| Arts, Design, Entertainment, Sports, & Media (27) | ND | ND | ND | 12 | 0.1% | $14.41 |
| Healthcare Practitioners & Technical (29) | 523 | 12.0% | $19.86 | 1,972 | 15.2% | $17.01 |
| Registered Nurses (29-1111) | 275 | 6.3% | $21.95 | 1,122 | 8.7% | $18.88 |
| LPN/LVN (29-2061) | 181 | 4.1% | $17.01 | 630 | 4.9% | $13.99 |
| Healthcare Support (31) | 1,547 | 35.4% | $9.89 | 4,288 | 33.1% | $9.09 |
| Home Health Aides (31-1011) | ND | ND | ND | 216 | 1.7% | $8.76 |
| Nurse Aides, Orderlies, & Attendants (31-3012) | 1,024 | 23.5% | $10.10 | 3,986 | 30.8% | $9.07 |
| Protective Service (33) | ND | ND | ND | ND | ND | ND |
| Food Preparation & Serving-Related (35) | 356 | 8.2% | $8.61 | 1,724 | 13.3% | $8.49 |
| Building & Grounds Cleaning & Maintenance (37) | 221 | 5.1% | $8.30 | 807 | 6.2% | $8.70 |
| Personal Care & Service (39) | 277 | 6.4% | $9.96 | 2,093 | 16.2% | $9.34 |
| Sales & Related (41) | ND | ND | ND | ND | ND | ND |
| Office & Administrative Support (43) | 202 | 4.6% | $12.01 | 515 | 4.0% | $10.87 |
| Farming, Fishing, & Forestry (45) | ND | ND | ND | ND | ND | ND |
| Construction & Extractions (47) | ND | ND | ND | ND | ND | ND |
| Installation, Maintenance, & Repair (49) | 51 | 1.2% | $13.24 | 174 | 1.3% | $11.94 |
| Production (51) | 55 | 1.3% | $8.90 | 291 | 2.2% | $8.32 |
| Transportation & Material Moving (53) | ND | ND | ND | 35 | 0.3% | $8.32 |
| **Total, All Occupations** | **4,365** | **98.7%** | **$12.07** | **12,957** | **99.8%** | **$11.10** |

[a]North American Industry Classification System.

ND – Not disclosable due to confidentiality.

Prepared by Lisa Knapp, Research Analyst, Wyoming Department of Employment, Research & Planning, April 18, 2007.

**Table 8: Distribution of Employment in Nursing & Residential Care Facilities (NAICS[a] 623) by Age Group, 2007[b]**

|  | n | % |
|---|---|---|
| 20-24 | 3 | 1.1% |
| 25-34 | 36 | 12.6% |
| 35-44 | 43 | 15.1% |
| 45-54 | 82 | 28.8% |
| 55-64 | 93 | 32.6% |
| 65+ | 14 | 4.9% |
| Unknown | 14 | 4.9% |

**Analysis Variable: Age**

| n | Mean |
|---|---|
| 285 | 52.6 |

[a]North American Industry Classification System.

[b]Wyoming Department of Employment Health Care Personnel Survey, 2007.

in ambulatory health care, the turnover rates of those age 55 and older had the lowest levels of turnover until recently. This increase in turnover rate is likely due to an increase in retirement.

**Table 9: Employer-Level Turnover Rates for Wyoming Registered Nurses in Nursing & Residential Care Facilities by Age Group, First Quarter 2000 to Fourth Quarter 2006**

| Year | Quarter | Age Group | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Under 35 | 35-44 | 45-54 | 55 and Older | Unknown | |
| 2000 | 1 | 25.0 | 15.4 | 16.8 | 27.9 | 0.0 | **19.1** |
| | 2 | 11.1 | 15.6 | 10.8 | 22.0 | 100.0 | **14.5** |
| | 3 | 22.6 | 21.3 | 20.3 | 11.9 | 50.0 | **20.2** |
| | 4 | 14.0 | 8.5 | 10.2 | 14.6 | 0.0 | **10.8** |
| 2001 | 1 | 11.5 | 14.1 | 15.9 | 7.8 | 50.0 | **13.6** |
| | 2 | 23.1 | 20.2 | 8.6 | 17.9 | 0.0 | **16.2** |
| | 3 | 19.6 | 15.7 | 22.2 | 22.2 | 33.3 | **19.9** |
| | 4 | 22.0 | 13.6 | 14.2 | 10.2 | 50.0 | **15.5** |
| 2002 | 1 | 22.2 | 7.2 | 14.7 | 11.1 | 25.0 | **13.0** |
| | 2 | 19.6 | 20.6 | 9.9 | 6.3 | 66.7 | **14.4** |
| | 3 | 16.0 | 8.9 | 13.9 | 6.3 | 66.7 | **11.9** |
| | 4 | 19.6 | 11.8 | 16.7 | 14.7 | 0.0 | **15.3** |
| 2003 | 1 | 12.5 | 13.5 | 15.2 | 7.7 | 50.0 | **13.0** |
| | 2 | 16.2 | 8.9 | 13.4 | 8.3 | 0.0 | **11.7** |
| | 3 | 23.7 | 14.6 | 23.7 | 13.2 | 33.3 | **19.2** |
| | 4 | 12.3 | 11.1 | 7.5 | 10.4 | 50.0 | **10.3** |
| 2004 | 1 | 12.5 | 15.8 | 13.3 | 20.5 | 33.3 | **15.6** |
| | 2 | 23.4 | 17.8 | 9.3 | 14.5 | 0.0 | **15.3** |
| | 3 | 23.1 | 14.7 | 17.6 | 6.4 | 50.0 | **16.0** |
| | 4 | 13.3 | 13.7 | 18.5 | 7.4 | 14.3 | **13.9** |
| 2005 | 1 | 34.3 | 25.5 | 24.1 | 15.2 | 54.5 | **25.0** |
| | 2 | 21.2 | 20.2 | 12.9 | 5.7 | 16.7 | **14.1** |
| | 3 | 12.8 | 12.5 | 11.9 | 14.7 | 28.6 | **13.2** |
| | 4 | 9.1 | 12.8 | 13.6 | 9.1 | 40.0 | **12.5** |
| 2006 | 1 | 11.9 | 13.5 | 13.8 | 3.3 | 16.7 | **10.9** |
| | 2 | 17.5 | 14.8 | 13.2 | 9.2 | 23.1 | **13.3** |
| | 3 | 5.3 | 18.8 | 16.8 | 10.2 | 14.3 | **14.0** |
| | 4 | 20.5 | 12.3 | 13.2 | 10.3 | 41.7 | **14.2** |
| Average | | **17.8** | **14.4** | **13.6** | **11.5** | **35.3** | **14.7** |

2. Description of the System

**Figure 4: Employer-Level Turnover Rates for Wyoming Registered Nurses Working in Nursing & Residential Care Facilities by Age Group, 2000 to 2006 (Four-Quarter Moving Average)**



2. Description of the System
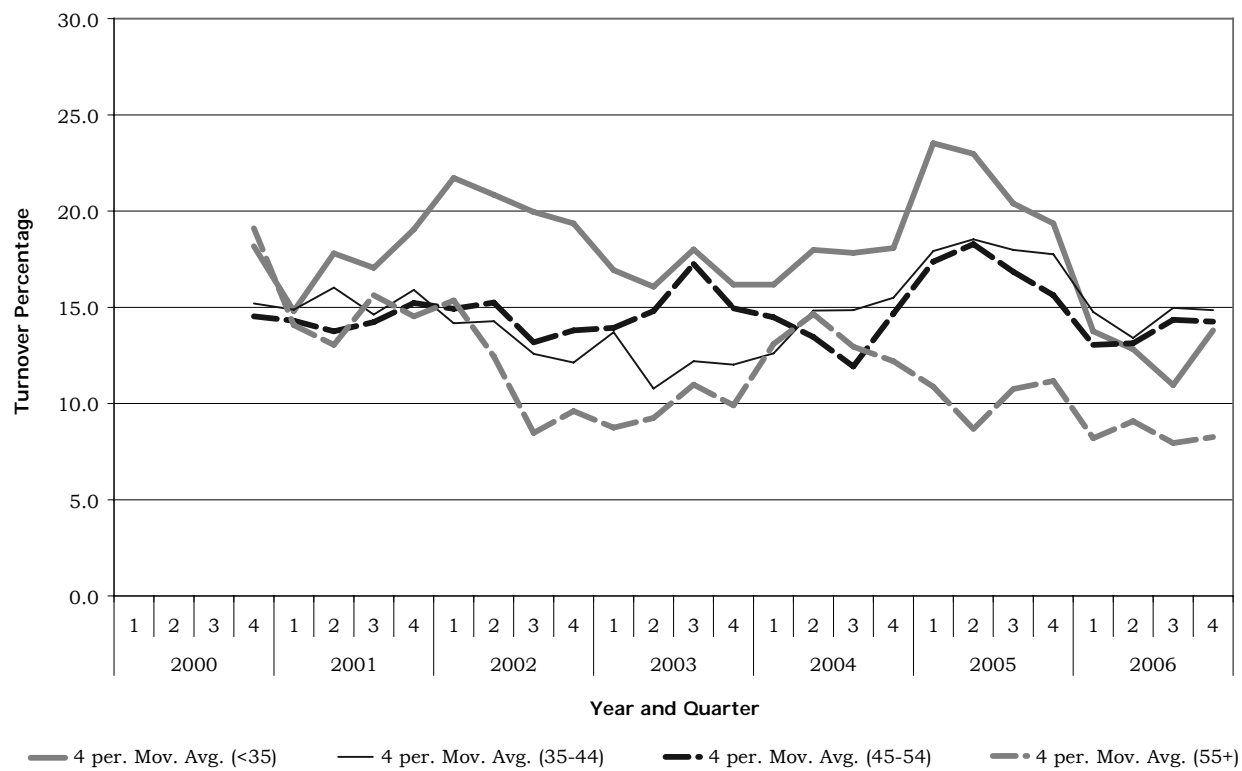
**Table 10: Occupational Staffing Levels for Wyoming and South Dakota Hospitals (NAICS[a] 622), May 2005**

| Standard Occupational Classification Title and Code | Wyoming Employment | Column Percentage | WY Hourly Mean Wage | South Dakota Employment | Column Percentage | SD Hourly Mean Wage |
|---|---|---|---|---|---|---|
| Management (11) | 505 | 5.6% | $33.91 | 467 | 2.4% | $40.01 |
| Business & Financial Operations (13) | 103 | 1.1% | $21.71 | 338 | 1.7% | $21.99 |
| Computer & Mathematical (15) | 52 | 0.6% | $19.76 | 246 | 1.3% | $23.69 |
| Architecture & Engineering (17) | ND | ND | ND | ND | ND | ND |
| Life, Physical, & Social Science (19) | 40 | 0.4% | $24.60 | 35 | 0.2% | $32.74 |
| Community & Social Services (21) | 150 | 1.7% | $20.11 | 406 | 2.1% | $19.12 |
| Legal (23) | ND | ND | ND | ND | ND | ND |
| Education, Training, & Library (25) | ND | ND | ND | ND | ND | ND |
| Arts, Design, Entertainment, Sports, & Media (27) | ND | ND | ND | 65 | 0.3% | $19.52 |
| Healthcare Practitioners & Technical (29) | 3,836 | 42.7% | $23.03 | 9,524 | 49.1% | $23.32 |
| Registered Nurses (29-1111) | 2,065 | 23.0% | $23.44 | 5,304 | 27.4% | $24.43 |
| LPN/LVN (29-2061) | 211 | 2.4% | $15.32 | 496 | 2.6% | $14.11 |
| Healthcare Support (31) | 1,727 | 19.2% | $11.03 | 2,982 | 15.4% | $10.41 |
| Home Health Aides (31-1011) | 32 | 0.4% | $9.93 | 112 | 0.6% | $9.35 |
| Nurse Aides, Orderlies, & Attendants (31-1012) | 1,264 | 14.1% | $10.06 | 1,998 | 10.3% | $9.78 |
| Protective Service (33) | 85 | 0.9% | $12.23 | 85 | 0.4% | $12.92 |
| Food Preparation & Serving Related (35) | 436 | 4.9% | $9.16 | 886 | 4.6% | $9.51 |
| Building & Grounds Cleaning & Maintenance (37) | 445 | 5.0% | $9.91 | 888 | 4.6% | $9.87 |
| Personal Care & Service (39) | 138 | 1.5% | $12.13 | 397 | 2.0% | $10.54 |
| Sales & Related (41) | ND | ND | ND | ND | ND | ND |
| Office & Administrative Support (43) | 1,127 | 12.5% | $11.97 | 2,336 | 12.1% | $11.96 |
| Construction & Extraction (47) | 12 | 0.1% | $22.44 | 33 | 0.2% | $19.26 |
| Installation, Maintenance, & Repair (49) | 132 | 1.5% | $15.95 | 263 | 1.4% | $16.84 |
| Production (51) | 80 | 0.9% | $9.89 | 198 | 1.0% | $11.09 |
| Transportation & Material Moving (53) | ND | ND | ND | 142 | 0.7% | $13.13 |
| **Total, All Occupations** | **8,980** | **98.8%** | **$17.84** | **19,377** | **99.6%** | **$18.45** |

[a]North American Industry Classification System.

ND – Not disclosable due to confidentiality.

Prepared by Lisa Knapp, Research Analyst, Wyoming Department of Employment, Research & Planning, April 18, 2007.

2. Description of the System

**Table 11: Distribution of Employment in Hospitals (NAICS[a] 622) by Age Group, 2007[b]**

| Age Group | n | % |
|---|---|---|
| 20-24 | 12 | 0.7% |
| 25-34 | 262 | 16.2% |
| 35-44 | 317 | 19.6% |
| 45-54 | 545 | 33.7% |
| 55-64 | 329 | 20.3% |
| 65+ | 26 | 1.6% |
| Unknown | 125 | 7.7% |

**Analysis Variable: Age**

| n | Mean |
|---|---|
| 1,616 | 50.8 |

[a]North American Industry Classification System.

[b]Wyoming Department of Employment Health Care Personnel Survey, 2007.

Note: Percentages may not sum to 100.0% due to rounding.

**Table 12: Employer-Level Turnover Rates for Registered Nurses in Hospitals by Age Group, First Quarter 2000 to Fourth Quarter 2006**

| Year | Quarter | Under 35 | 35-44 | 45-54 | 55 and Older | Unknown | Total |
|---|---|---|---|---|---|---|---|
| 2000 | 1 | 3.3 | 4.0 | 3.1 | 2.2 | 63.6 | **3.7** |
| | 2 | 6.9 | 6.2 | 4.9 | 5.6 | 66.7 | **6.1** |
| | 3 | 7.9 | 7.2 | 5.1 | 5.0 | 53.8 | **6.7** |
| | 4 | 8.1 | 6.0 | 4.0 | 3.4 | 21.4 | **5.6** |
| 2001 | 1 | 5.4 | 4.2 | 3.8 | 3.3 | 18.2 | **4.4** |
| | 2 | 7.4 | 8.0 | 5.4 | 4.0 | 25.9 | **6.8** |
| | 3 | 9.2 | 5.5 | 6.0 | 6.0 | 31.3 | **6.9** |
| | 4 | 4.7 | 4.3 | 4.2 | 4.2 | 32.1 | **4.7** |
| 2002 | 1 | 5.7 | 6.2 | 5.8 | 2.7 | 41.7 | **5.9** |
| | 2 | 7.7 | 6.8 | 5.7 | 5.6 | 25.0 | **6.6** |
| | 3 | 10.8 | 10.3 | 9.6 | 7.1 | 28.6 | **9.9** |
| | 4 | 11.2 | 9.5 | 8.8 | 8.7 | 16.7 | **9.6** |
| 2003 | 1 | 3.5 | 3.8 | 3.5 | 1.9 | 11.8 | **3.4** |
| | 2 | 6.3 | 6.1 | 4.8 | 3.2 | 11.1 | **5.4** |
| | 3 | 4.8 | 3.1 | 3.2 | 3.9 | 22.7 | **3.8** |
| | 4 | 5.4 | 3.3 | 3.2 | 4.4 | 11.5 | **4.0** |
| 2004 | 1 | 3.5 | 4.7 | 5.4 | 3.7 | 11.1 | **4.6** |
| | 2 | 4.5 | 5.4 | 4.7 | 2.9 | 12.5 | **4.7** |
| | 3 | 6.1 | 4.6 | 4.0 | 5.1 | 7.5 | **4.9** |
| | 4 | 5.2 | 5.2 | 4.0 | 7.0 | 5.8 | **5.1** |
| 2005 | 1 | 4.6 | 3.1 | 3.7 | 5.1 | 16.4 | **4.3** |
| | 2 | 6.4 | 4.2 | 4.4 | 4.9 | 17.7 | **5.3** |
| | 3 | 11.1 | 7.6 | 7.2 | 5.8 | 19.6 | **8.4** |
| | 4 | 5.3 | 5.7 | 4.0 | 7.1 | 13.6 | **5.6** |
| 2006 | 1 | 6.6 | 4.7 | 4.5 | 6.5 | 14.2 | **5.8** |
| | 2 | 5.7 | 4.9 | 4.9 | 4.7 | 13.0 | **5.5** |
| | 3 | 6.6 | 4.8 | 4.5 | 4.4 | 13.4 | **5.5** |
| | 4 | 4.9 | 4.6 | 2.8 | 2.6 | 11.4 | **4.0** |
| **Average** | | **6.8** | **5.8** | **4.8** | **4.8** | **21.8** | **5.9** |

2. Description of the System

**Figure 5: Employer-Level Turnover Rates for Registered Nurses Working in Hospitals by Age, 2000 to 2006 (Four-Quarter Moving Average)**
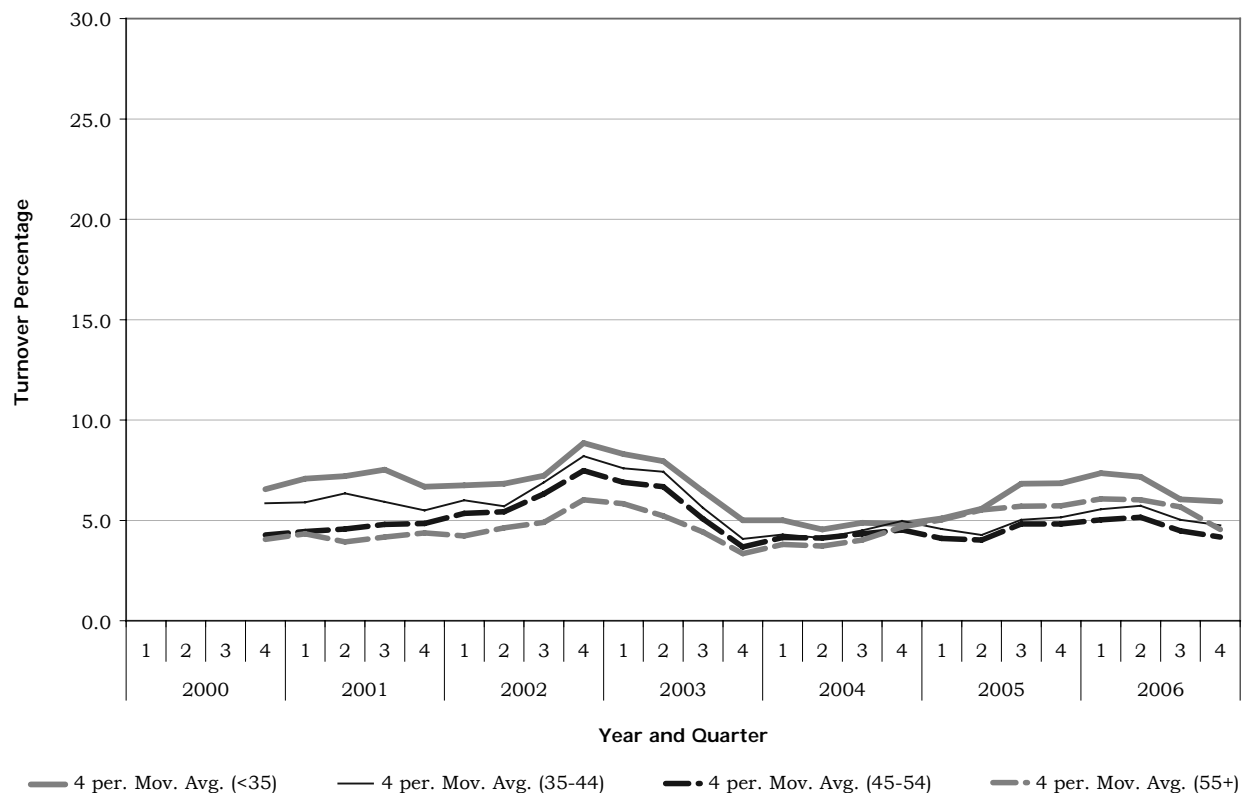
**Table 13: Occupational Staffing Levels for Wyoming and the United States, Ambulatory Care (NAICS[a] 621), May 2005**

| Occupation | Wyoming Employment[b] | Column Percent[c] | Wyoming Hourly Mean Wage[d] | U.S. Employment[d] | Column Percent[c] | U.S. Hourly Mean Wage |
|---|---|---|---|---|---|---|
| Management (11) | 168 | 2.3% | $28.92 | 131,910 | 2.6% | $38.68 |
| Business and Financial Operations (13) | 24 | 0.3% | $21.13 | 46,490 | 0.9% | $25.16 |
| Computer and Mathematical (15) | 11 | 0.1% | $17.03 | 17,360 | 0.3% | $24.83 |
| Architecture and Engineering (17) | ND | ND | ND | 650 | 0.0% | $30.64 |
| Life, Physical, and Social Science (19) | 68 | 0.9% | $29.43 | 35,860 | 0.7% | $33.72 |
| Community and Social Services (21) | 397 | 5.4% | $17.61 | 153,770 | 3.0% | $17.82 |
| Legal (23) | ND | ND | ND | ND | ND | ND |
| Education, Training, and Library (25 | ND | ND | ND | 6,250 | 0.1% | $18.47 |
| Arts, Design, Entertainment, Sports, and Media (27) | ND | ND | ND | 4,920 | 0.1% | $20.10 |
| Healthcare Practitioner and Technical (29) | 3,095 | 41.9% | $34.90 | 1,861,410 | 36.8% | $36.74 |
| Registered Nurses (291111) | 717 | 9.7% | $21.99 | 408,180 | 8.1% | $26.80 |
| Licensed Practical and Licensed Vocational Nurses (292061) | 134 | 1.8% | $13.98 | 164,420 | 3.2% | $16.70 |
| Healthcare Support (31) | 1,416 | 19.2% | $11.48 | 1,041,150 | 20.6% | $12.41 |
| Home Health Aides (311011) | 131 | 1.8% | $10.70 | 232,500 | 4.6% | $9.08 |
| Nursing Aides, Orderlies, and Attendants (311012) | ND | ND | ND | 66,140 | 1.3% | $10.68 |
| Protective Service (33) | ND | ND | ND | 2,830 | 0.1% | $12.66 |
| Food Preparation and Serving Related (35) | ND | ND | ND | 3,620 | 0.1% | $10.35 |
| Building and Grounds Cleaning and Maintenance (37) | 61 | 0.8% | $9.54 | 30,570 | 0.6% | $9.98 |
| Personal Care and Service (39) | 36 | 0.5% | $8.39 | 215,990 | 4.3% | $7.90 |
| Sales and Related (41) | ND | ND | ND | 16,740 | 0.3% | $21.94 |
| Office and Administrative Support (43) | 2,063 | 27.9% | $11.87 | 1,442,060 | 28.5% | $13.57 |
| Construction and Extraction (47) | ND | ND | ND | ND | ND | ND |
| Installation, Maintenance, and Repair (49) | ND | ND | ND | 10,920 | 0.2% | $16.04 |
| Production (51) | ND | ND | ND | 16,160 | 0.3% | $15.93 |
| Transportation and Material Moving (53) | 29 | 0.4% | $10.40 | 22,700 | 0.4% | $12.17 |
| **Total, all Occupations** | **7,388** | **99.7%** | **$22.23** | **5,064,630** | **99.9%** | **$22.69** |

[a]North American Industry Classification System.

[b]Data the Estimate Delivery System (EDF)

[d]Data from BLS OES search table (http://data.bls.gov/oes/search.jsp?data_tool=OES)

[c]Totals may not equal 100% due to rounding error

[d]Wyoming wages compared to U.S. wages

ND: No data available.

2. Description of the System

# Retention of Nurses in Wyoming

**Table 14: Occupational Staffing Levels for Wyoming and the U.S., Hospitals (NAICS[a] 622), May 2005**

| Occupation | Wyoming Employment[b] | Column Percent[c] | WY Hourly Mean Wage | U.S. Employment[d] | Column Percent[c] | U.S. Hourly Mean Wage |
|---|---|---|---|---|---|---|
| Management (11) | 505 | 5.6% | $33.91 | 180,990 | 3.4% | $39.25 |
| Business and Financial Operations (13) | 103 | 1.1% | $21.71 | 85,730 | 1.6% | $24.05 |
| Computer and Mathematical (15) | 52 | 0.6% | $19.76 | 47,550 | 0.9% | $27.12 |
| Architecture and Engineering (17) | ND | ND | ND | 4,680 | 0.1% | $26.76 |
| Life, Physical, and Social Science (19) | 40 | 0.4% | $24.60 | 30,390 | 0.6% | $28.07 |
| Community and Social Services (21) | 150 | 1.7% | $20.11 | 125,570 | 2.4% | $20.21 |
| Legal (23) | ND | ND | ND | 1,020 | 0.0% | $39.85 |
| Education, Training, and Library (25) | 12 | 0.1% | $20.55 | 25,130 | 0.5% | $25.52 |
| Arts, Design, Entertainment, Sports, and Media (27) | ND | ND | ND | 9,200 | 0.2% | $20.34 |
| Healthcare Practitioner and Technical (29) | 3,836 | 42.7% | $23.03 | 2,701,560 | 51.5% | $25.99 |
|     Registered Nurses (291111) | 2,065 | 23.0% | $23.44 | 1,424,860 | 27.2% | $27.76 |
|     Licensed Practical and Licensed Vocational Nurses (292061) | 211 | 2.4% | $15.32 | 187,420 | 3.6% | $16.70 |
| Healthcare Support (31) | 1,727 | 19.2% | $11.03 | 690,930 | 13.2% | $11.98 |
|     Home Health Aides (311011) | 32 | 0.4% | $9.93 | 18,470 | 0.4% | $10.88 |
|     Nursing Aides, Orderlies, and Attendants (311012) | 1,264 | 14.1% | $10.06 | 403,500 | 7.7% | $11.09 |
| Protective Service (33) | 85 | 0.9% | $12.23 | 46,150 | 0.9% | $13.92 |
| Food Preparation and Serving Related s(35) | 436 | 4.9% | $9.16 | 152,340 | 2.9% | $10.46 |
| Building and Grounds Cleaning and Maintenance (37) | 445 | 5.0% | $9.91 | 194,880 | 3.7% | $10.34 |
| Personal Care and Service (39) | 138 | 1.5% | $12.13 | 24,470 | 0.5% | $11.68 |
| Sales and Related (41) | ND | ND | ND | 12,150 | 0.2% | $13.37 |
| Office and Administrative Support (43) | 1,127 | 12.5% | $11.97 | 797,590 | 15.2% | $13.74 |
| Construction and Extraction (47) | 12 | 0.1% | $22.44 | 15,060 | 0.3% | $21.94 |
| Installation, Maintenance, and Repair (49) | 132 | 1.5% | $15.95 | 55,780 | 1.1% | $17.24 |
| Production (51) | 80 | 0.9% | $9.89 | 28,510 | 0.5% | $14.47 |
| Transportation and Material Moving (53) | ND | ND | ND | 16,940 | 0.3% | $12.40 |
| **Total, all Occupations** | **8,980** | **98.9%** | **$17.84** | **5,246,630** | **100.0%** | **$21.10** |

[a]North American Industry Classification System.

[b]Data from the Estimate Delivery System (EDS)

[c]Totals may not equal 100% due to rounding error and nondisclosable data.

[d]Data from BLS OES search table (http://data.bls.gov/oes/search.jsp?data_tool=OES)

ND: No data available.

2. Description of the System

**Table 15: Occupational Staffing Levels for Wyoming and the U.S. in Nursing & Residential Care Facilities (NAICSa 623), May 2005**

| Occupation | Wyoming Employment[b] | Column Percent[c] | Wyoming Hourly Mean Wage | U.S. Employment[d] | Column Percent[c] | U.S. Hourly Mean Wage |
|---|---|---|---|---|---|---|
| Management (11) | 272 | 6.2% | $21.89 | 94,830 | 3.3% | $30.05 |
| Business and Financial Operations (13) | 19 | 0.4% | $18.18 | 21,490 | 0.8% | $21.89 |
| Computer and Mathematical (15) | ND | ND | ND | 2,000 | 0.1% | $23.82 |
| Life, Physical, and Social Science 19) | 33 | 0.8% | $22.28 | 5,180 | 0.2% | $24.29 |
| Community and Social Services (21) | 718 | 16.5% | $10.82 | 192,610 | 6.8% | $13.93 |
| Legal (23) | ND | ND | ND | 200 | 0.0% | $30.52 |
| Education, Training, and Library (25) | 33 | 0.8% | $15.59 | 11,870 | 0.4% | $15.39 |
| Arts, Design, Entertainment, Sports, and Media (27) | ND | ND | ND | 2,340 | 0.1% | $20.25 |
| Healthcare Practitioner and Technical (29) | 523 | 12.0% | $19.86 | 472,460 | 16.6% | $20.72 |
| Registered Nurses (291111) | 275 | 6.3% | $21.95 | 157,870 | 5.6% | $24.53 |
| Licensed Practical and Licensed Vocational Nurses (292061) | 181 | 4.1% | $17.01 | 234,090 | 8.2% | $17.99 |
| Healthcare Support (31) | 1,547 | 35.4% | $9.89 | 1,060,230 | 37.3% | $10.11 |
| Home Health Aides (311011) | ND | ND | ND | 254,340 | 9.0% | $9.16 |
| Nursing Aides, Orderlies, and Attendants (311012) | 1,024 | 23.5% | $10.10 | 759,650 | 26.7% | $10.23 |
| Protective Service (33) | ND | ND | ND | 12,590 | 0.4% | $10.62 |
| Food Preparation and Serving Related (35) | 356 | 8.2% | $8.61 | 304,800 | 10.7% | $9.29 |
| Building and Grounds Cleaning and Maintenance (37) | 221 | 5.1% | $8.30 | 170,710 | 6.0% | $9.48 |
| Personal Care and Service (39) | 277 | 6.4% | $9.96 | 241,610 | 8.5% | $10.21 |
| Sales and Related (41) | ND | ND | ND | 4,290 | 0.2% | $19.01 |
| Office and Administrative Support (43) | 202 | 4.6% | $12.01 | 144,840 | 5.1% | $13.17 |
| Farming, Fishing, and Forestry (45) | ND | ND | ND | 140 | 0.0% | $10.08 |
| Construction and Extraction (47) | ND | ND | ND | 600 | 0.0% | $15.75 |
| Installation, Maintenance, and Repair (49) | 51 | 1.2% | $13.24 | 41,290 | 1.5% | $13.83 |
| Production (51) | 55 | 1.3% | $8.90 | 44,100 | 1.6% | $8.84 |
| Transportation and Material Moving (53) | ND | ND | ND | 11,770 | 0.4% | $10.14 |
| **Total, all Occupations** | **4,365** | **98.7%** | **$12.07** | **2,840,000** | **100.0%** | **$13.07** |

[a]North American Industry Classification System.

[b]Data from the Estimate Delivery System (EDS).

[c]Totals may not equal 100% due to rounding error or nondiscloseable data.

[d]Data from BLS OES search table (http://data.bls.gov/oes/search.jsp?data_tool=OES)

ND: No data available.

2. Description of the System

# Using Administrative Databases to Document the Source of Nurse Hires and Destination of Nurse Exits among Health Care Subsectors in Wyoming

*by: Dr. Mark A. Harris, Sociologist*

Examining the work history of registered nurses (RNs) in health care helps define the labor market for RNs working in Wyoming. The analysis reveals both in-state and external sources of labor and illuminates the dependencies and interrelationships among health care subsectors in the use of RN labor. Understanding market hiring patterns may be particularly useful for establishments looking to fill RN vacancies. Likewise, the distinct patterns in the destination location (i.e., where a nurse subsequently goes to work after leaving an employer) may provide useful hints about the reasons for turnover. The approach presented here is generic and can be applied to any number of occupations and industries provided that administrative data can be made available to Research and Planning (R&P) that identifies a person's occupation. The advantage of the administrative technique used here is that it is relatively low-cost compared to collecting survey data, it does not require that nurses or their employers be contacted personally, and it can be repeated quarterly to accumulate trends and identify patterns.

## Data

Data used for this study included Unemployment Insurance (UI) wage records for Wyoming and partner research states (identified below), the Wyoming Quarterly Census of Employment and Wages (QCEW), the Wyoming Department of Transportation's Driver's License database, and the Nursing Licensure database provided by the Wyoming Board of Nursing. The UI wage records identified a person's work history and employers, while the QCEW identified the employer's industry and ownership. Driver's license records showed a worker's age and gender and the nursing database identified RNs.

## Method

The method for tracking nurses was developed previously (Harris, 2006). The source and destination time frame was limited to the four quarters prior to and after the quarter in which a nurse was hired or exited (Glover, 2001). *Primary employer* was defined as the employer paying the highest wages. In cases where nurses were not employed prior to being hired or after exiting, they were categorized as Not Working. As defined here, health care establishments included three North American Industry Classification System (NAICS) subsectors; specifically, ambulatory health care services (621), hospitals (622), and nursing & residential care facilities (623).

## Category Definitions

The category of *partner research state*, for purposes of this analysis, included Alaska, Colorado, Idaho, Montana, Nebraska, New Mexico, South Dakota, and Utah. All states bordering Wyoming were included. No report was made of the industry or ownership status of the out-of-state firms in question.

*Wyoming resident status* (resident and nonresident) was determined by a methodology developed by Jones (2004). Residency status applied during the quarter in which a nurse was hired or exited. *Retirement* referred to Wyoming residents who were 65 or older.

**Figure 6 : Source of Nurse Hires into Ambulatory Care Facilities, Fourth Quarter 2004 (2004Q4) to Third Quarter 2006**



2. Description of the System
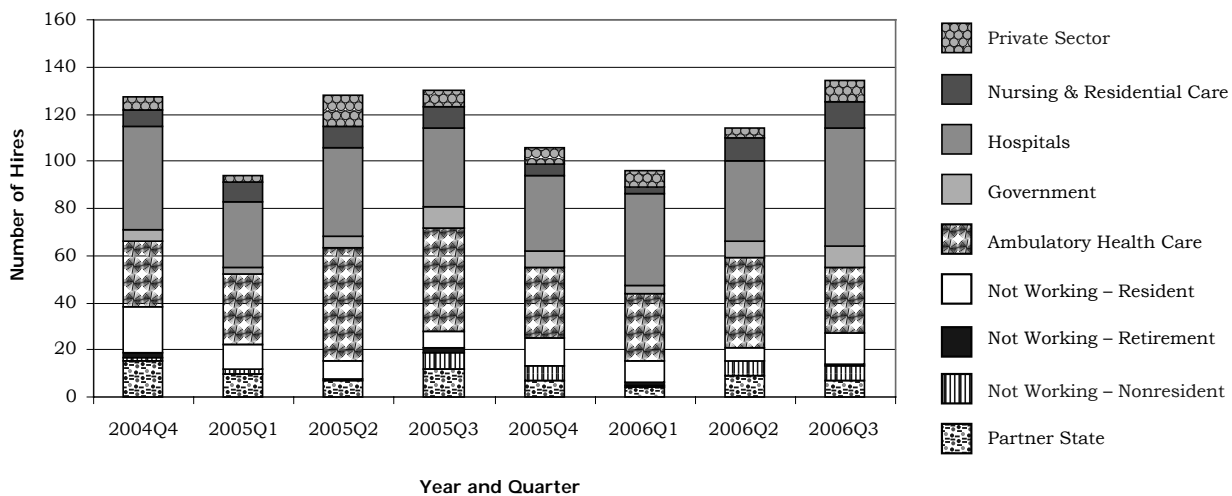
*Government* included establishments that were publicly owned. Health care establishments can be publicly owned (e.g., a county-owned hospital), but for purposes of this analysis were not included in Government. The category of Private Sector represented Wyoming establishments privately owned but excluded any health care establishments.

## Findings

All three health care subsectors in Wyoming hired RNs from a variety of sources and lost RN exiters to a variety of destinations. However, ambulatory health care and nursing & residential care establishments circulated RN labor within a more local market among existing resident nurses. Hospitals, on the other hand, were more heavily involved in an interstate market for RNs and were more likely to hire RNs who were Wyoming residents but had not previously worked as a nurse.

### Ambulatory Health Care Services

The dominant sources on a quarter-by-quarter basis for nurse hires within ambulatory health care services were Wyoming hospitals and other ambulatory health care facilities (see Figure 6). Similarly, hospitals and ambulatory health care services factored prominently as work destinations for nurses who exited from ambulatory health care services (see Figure 7, page 90). The private sector, nursing & residential care facilities, government, and partner research states factored less prominently as both sources of nurse hires and destinations for nurse exits. Taken together, Figures 1 and 2 show that on a quarter-by-quarter basis there was substantial circulation of nurses within ambulatory health care services and substantial exchange of nurses between ambulatory health care services and hospitals.

### Nursing & Residential Care Facilities

On a quarter-by-quarter basis, nursing & residential care facilities hired predominantly from within their own subsector and from hospitals (see Figure 8, page 90). Other settings factored less

**Figure 7: Destination of Nurse Exits from Ambulatory Care Facilities, Third Quarter 2003 (2003Q3) to Second Quarter 2005**
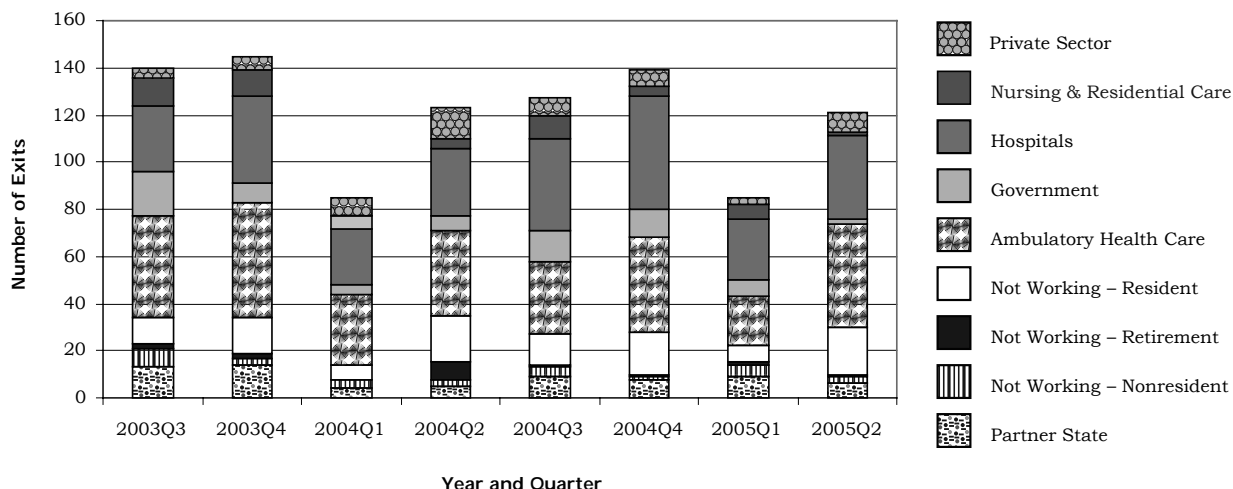


prominently as sources of hires. Hospitals and other nursing & residential care facilities were also the predominant work destination of RNs who exited from nursing & residential care facilities (see Figure 9, page 91), but other noteworthy work destinations include ambulatory health care services and a growing share exiting to the private sector. As with ambulatory health care services, there was substantial circulation of nurses within nursing &

residential care facilities and exchange of nurses between nursing & residential care facilities and hospitals.

*Hospitals*

Although hospitals factored prominently as a source of RNs for other hospitals (see Figure 10, page 91), several other sources factored prominently in the hiring equation as well. RNs working previously in a partner

**Figure 8: Source of Nurse Hires into Nursing Homes and Residential Care Facilities, Fourth Quarter 2004 (2004Q4) to Third Quarter 2006**
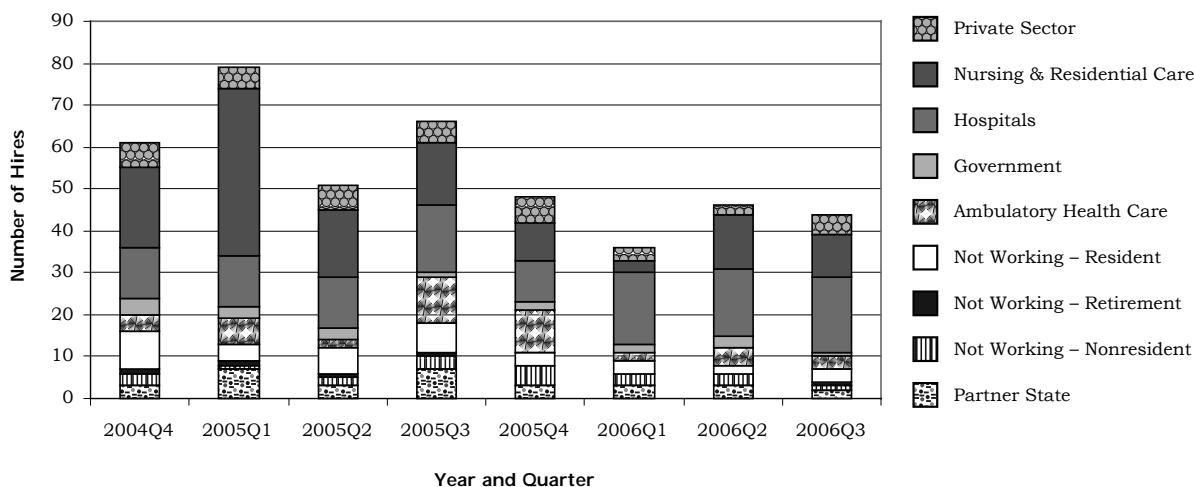
**Figure 9: Destination of Nurse Exits from Nursing and Residential Care Facilities, Third Quarter 2003 (2003Q3) to Second Quarter 2005**
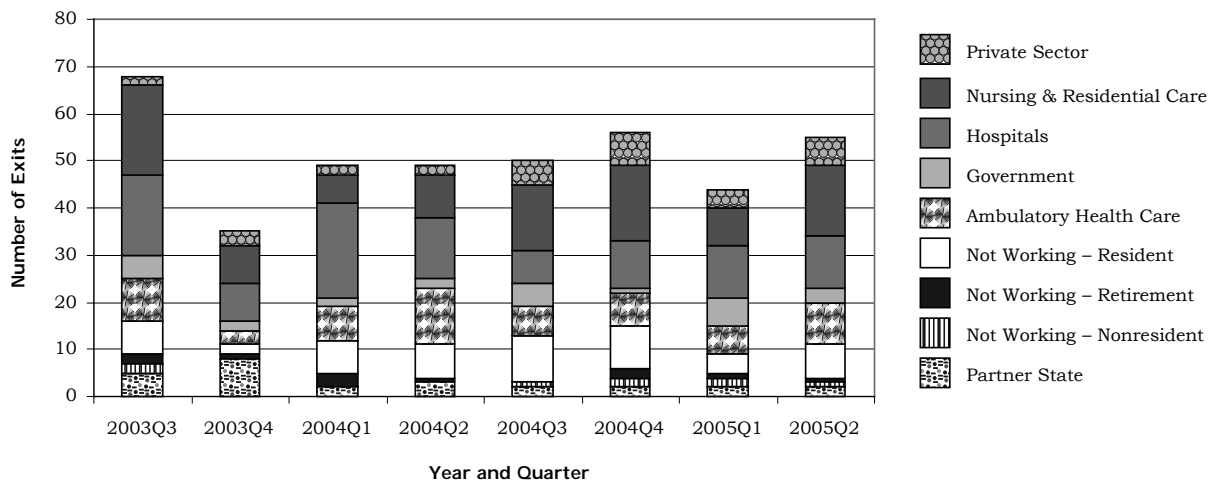


research state provided a number of nurses on a quarter-by-quarter basis. RNs who were not found working previously, both residents and nonresidents, also contributed a substantial portion of RN hires on a quarter-by-quarter basis. Some of the nonresidents may have been working, but in a state that does not share data with R&P (e.g., California). Some of the residents may have been nurses who recently completed college RN degrees in Wyoming and have not worked previously in the state.

The pattern for nurse exits from hospitals was equally varied on a quarter-by-quarter basis. RN exits from hospitals fed substantially into other hospitals, ambulatory health care services, and partner research states (see Figure 11, page 92). Additionally, a number of RNs did not work after exiting Wyoming hospitals, with the majority being residents younger than age 65.

**Figure 10: Source of Nurse Hires into Hospitals, Fourth Quarter 2004 (2004Q4) to Third Quarter 2006**
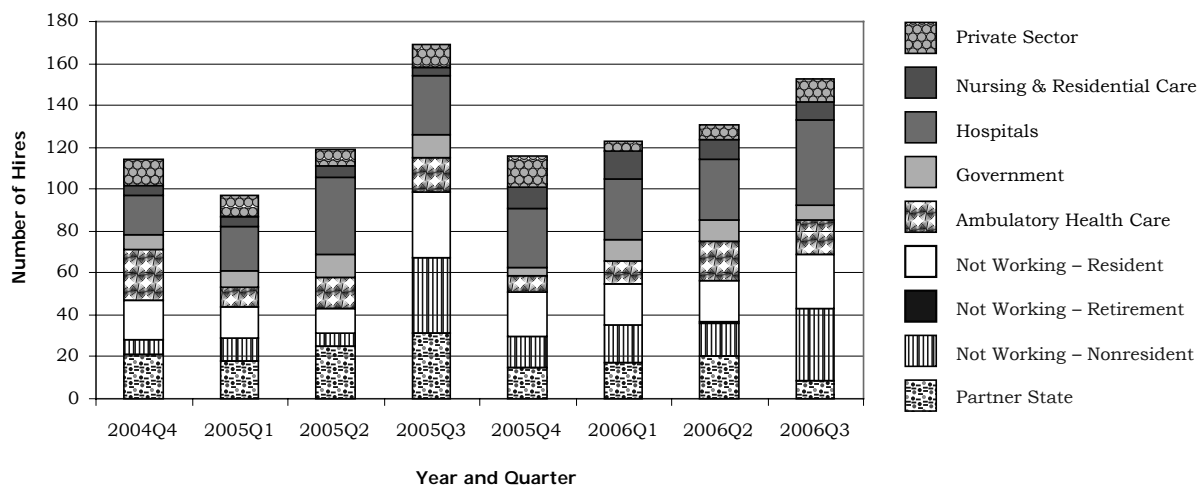
**Figure 11: Destination of Nurse Exits from Hospitals, Third Quarter 2003 (2003Q3) to Second Quarter 2005**



*2. Description of the System*
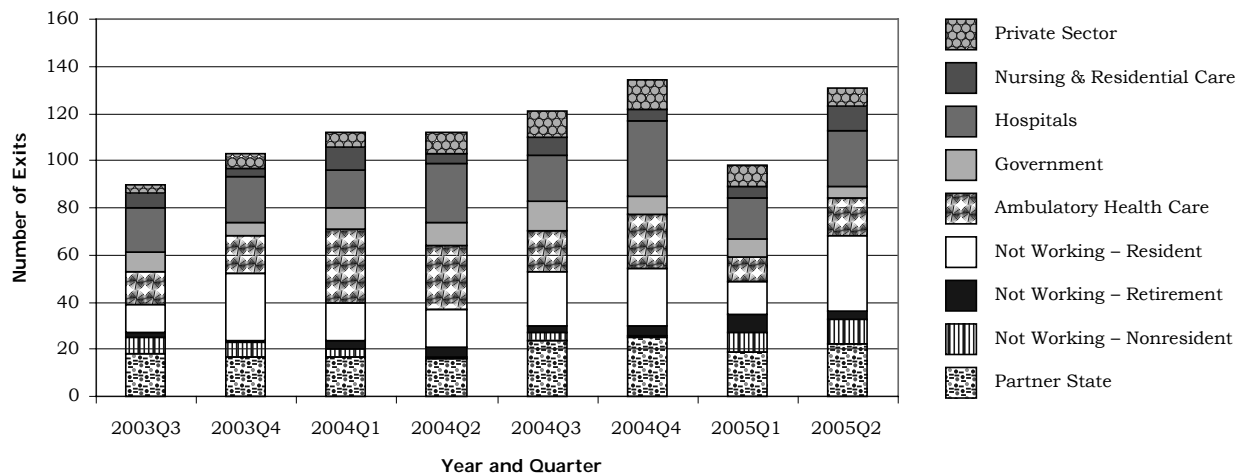
## Pattern of Nurse Hires in Health Care

To more explicitly demonstrate the general pattern of nurse hires, Figure 12 (see page 93) provides a visual breakdown of all nurse hires within health care in Wyoming for the calendar year 2006.[1] The largest percentage of nurse hires was in ambulatory health care services coming from hospitals (181, or 28.1%). The next largest was hires in ambulatory health care coming from ambulatory health care (123, or 19.1%). Circulation of nurse hires among hospitals ranked third (111, or 17.2%). The next largest percentage was nurse hires into nursing & residential care facilities coming from hospitals (61, or 9.8%).

Hospitals hired a total of 94 nurses in 2006 from ambulatory health care and nursing & residential care combined. However, collectively ambulatory health care and nursing & residential care hired 242

nurses from hospitals. The fewest number of hires was into nursing & residential care and coming from ambulatory health care (11, or 1.7%) followed by hires into ambulatory health care from nursing & residential care (30, or 4.5%).

## Wage Changes

Table 16 (see page 94) provides percentage wage change analysis for nurse hires within health care in Wyoming for the calendar year 2006.[2] Not all findings will be discussed here. Nurses hired into ambulatory health care from other ambulatory health care services usually experienced an increase in wages. Across age groups the percentage increase was smaller among older nurses. Nurses hired into hospitals from both ambulatory health care and nursing & residential care experienced substantial increases in pay, but the percentage increase was smaller among older nurses.

Nurses hired into ambulatory health care and nursing & residential care from hospitals experienced a substantial loss in

---

1 Figures for the flow of nurse hires were also developed broken down by age categories. The pattern of results across the various age groups was very similar to the overall pattern and is, therefore, not discussed separately here. Please see **Appendix ?** for the complete set of figures broken down by age group.

2 See **Appendix ?** for estimate of the dollar figures.

**Figure 12: Flow of Nurse Hires in Health Care Subsectors in Wyoming, 2006**

259 (58.7%)

111 (17.2%)

**Hospitals**

126 (28.6%)

54 (8.4%)

181 (28.1%)

61 (9.8%)

56 (12.7%)

40 (6.2%)

34 (5.3%)

123 (19.1%)

**Ambulatory Health Care Services**

**Nursing & Residential Care Facilities**

11 (1.7%)

30 (4.5%)

Hires Among Health Care Subsectors = 645
External Hires = 441

**Estimated Cost of Hires Among Health Care Subsectors**
Exchanges Between Subsectors (dotted lines)     $4,151,137
Circulation Within Subsectors (spirals)     $3,695,696
**Total**     **$7,846,833**

**2. Description of the System**

pay. Table 16 shows no clear trend across age groups, but nurses received at least an 8.0% decrease in pay.

## Observations

Ambulatory health care and nursing & residential care are dependent upon the circulation of RNs within their own industry subsectors, but are also heavily dependent upon hospitals as a source of RNs. Apparently, firms in ambulatory health care and nursing & residential care can largely rely upon nurses who have experience working in their own subsector or in hospitals to fill vacancies.

Although there is substantial internal circulation of RNs among all three health care subsectors, hospitals apparently

must draw from a larger geographic pool of available nurses than either ambulatory health care services or nursing & residential care facilities. It would appear that hospitals are more likely to be the starting point in Wyoming for resident nurses who have not worked previously in the state (presumably those who have recently graduated) and for nonresidents who have worked in another state.

Given that hospitals draw proportionately more resident nurses who have not worked previously in Wyoming, this likely places additional pressure on hospitals as a training and experiential environment for RNs.

Additionally, the data presented here indicate that hospitals reach into the

**Table 1: Percentage Change in Average Quarterly Earnings for Health Care Nurse Hires by Industry Subsector Source and Age, 2006**

*Hires: Ambulatory Health Care Services*

| | Age Group | | | |
| Subsector Source | Under 35 | 35-44 | 45-54 | 55 and Older |
| --- | --- | --- | --- | --- |
| Ambulatory Health Care Services | 22.7% | 32.0% | 12.5% | -8.5% |
| Hospitals | -8.0% | -32.5% | -51.8% | NA |
| Nursing & Residential Care Facilities | NA | NA | -54.0% | NA |

*Hires: Hospitals*

| | Age Group | | | |
| Subsector Source | Under 35 | 35-44 | 45-54 | 55 and Older |
| --- | --- | --- | --- | --- |
| Ambulatory Health Care Services | 65.6% | 38.7% | 9.1% | NA |
| Hospitals | -8.8% | 5.5% | 2.8% | -16.0% |
| Nursing & Residential Care Facilities | 70.1% | 23.5% | NA | NA |

*Hires: Nursing & Residential Care Facilities*

| | Age Group | | | |
| Subsector Source | Under 35 | 35-44 | 45-54 | 55 and Older |
| --- | --- | --- | --- | --- |
| Ambulatory Health Care Services | NA | NA | NA | NA |
| Hospitals | -29.0% | -38.7% | -16.5% | NA |
| Nursing & Residential Care Facilities | NA | -49.7% | NA | NA |

NA – Not available.

Note: Wages restricted to continuous employment transactions. Prior and subsequent quarterly wages were Consumer Price Index (not seasonally adjusted, U.S. city averages, all items) adjusted to 2006 dollars.

broader local and regional interstate market to fill nurse vacancies. Regional interstate competition and local private-sector boom conditions likely place strains and stresses on hospitals for recruiting nurses than on ambulatory health care or nursing & residential care establishments.

Wage change analysis does not show wage increases among all nurse hires in health care. Generally, the analysis reveals that being hired into a hospital from other health care subsectors means an increase in wages. Hires into ambulatory health care from hospitals (the largest number of hires in health

care in 2006) and nursing & residential care from hospitals show substantial decreases in pay. Factors in addition to pay likely affect the flow of nurse hires.

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2. Description of the System

# 3. Methodology

## Methodology

*by: Lisa Knapp, Research Analyst*

The first nursing studies conducted by Research and Planning (R&P) occurred in 2002 and 2003 and relied solely on Wyoming Board of Nursing (BON) files and in-house administrative databases to identify important aspects of nursing behavior in Wyoming (Glover, 2002a; Glover, 2002b; Glover, 2003). From these records, we were able to examine factors that affect the nursing situation in Wyoming, such as retention and turnover, sources of supply, and flow of nurses into and out of the state's health care systems. However, there are inherent limitations to this approach. As Denzin, 1970, states, "No measurement instrument is free from flaws or restrictions, combined strategies must be employed (this is termed a process of triangulation…)." Although a rich source of data, administrative databases can only provide a certain level of insight into the behaviors of nurses. In order to expand on this, R&P incorporated a three-pronged approach that combined both qualitative and quantitative methods (see Chart, page 97). These methods involved administrative record analysis, a survey questionnaire that included a section for comments, and focus-group style meetings with a nurse advisory committee both to ensure we were studying the important factors and to give us ideas on other pathways of study.[1] Although the activities are distinct, the data can be linked together to form a seamless whole.

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[1] Other opportunities for feedback were initiated with the nurse advisory committee through numerous presentations as well as with the Wyoming Hospital Association, the Wyoming Long-Term Care Association, the Wyoming Healthcare Commission, Wyoming Medical Center staff (a hospital in Casper, WY), and two statewide nursing summits.

### Design Issues

The production of knowledge about the nursing occupation in Wyoming depends very much on the techniques selected for collecting, analyzing, and interpreting data and on the way they are applied. In deciding on the research design for the project, we considered the strengths and weaknesses of many available research methods. Quantitative research is commonly used to investigate research questions. The array of quantitative research designs is great, but it can be difficult to conduct true experimental research. Thus a great many adaptations of experimental designs, called quasi-experimental and nonexperimental designs, have been developed. Quantitative research involves analysis of numerical data, often using tools such as questionnaires and administrative databases to collect the data. The main objective is to construct statistical models in an attempt to statistically explain a particular outcome of interest. Quantitative data are very efficient in that they make hypothesis testing possible. However, quantitative data may miss contextual detail.

Qualitative research involves analysis of data such as words (e.g., from interviews), pictures (e.g., video), or objects (e.g., an artifact). The aim is a complete, detailed description. It uses participant observation, in-depth interviews, and open comments to solicit individual and group interpretation of events or situations. While qualitative data are more detailed and context-rich, collecting the data is time-consuming and the results are less often generalizable.

**Chart: Methodology Process**

Nurse Advisory
Committee (Qualitative)

Administrative Databases
(Quantitative)

Survey (Quantitative
and Qualitative)

3. Methodology
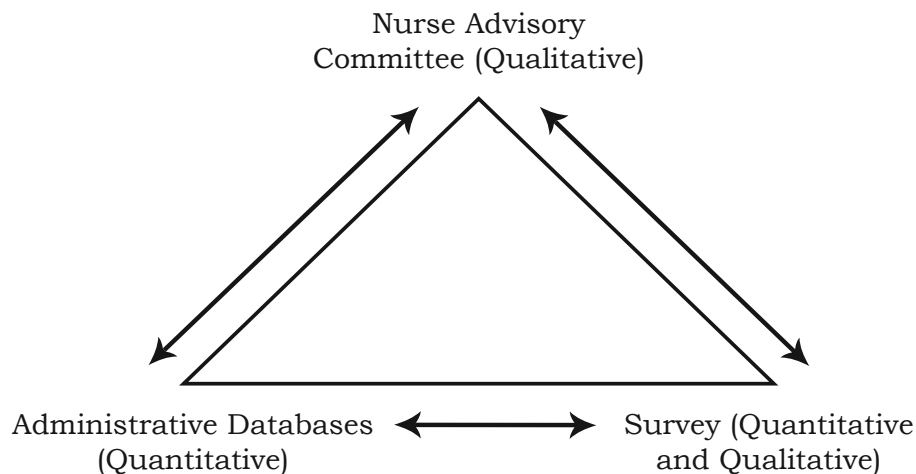
Because both quantitative and qualitative research provide valuable insight into the understanding of nursing issues, we decided to incorporate both into a mixed-methods design.

## Quantitative Analysis

A major trend in statistical entities is the increasing use of administrative records for producing various statistics (Chen & Cascagnette, 2004). This trend is influenced by several factors, especially the demand for statistics coupled with the increasing cost of conducting surveys. Fortunately, an increasing amount of administrative data and substantial storage and computing power have become available to statistical entities, often at little additional cost, making them an attractive source of information. There are several conspicuous strengths of most administrative data, namely low cost and near-complete coverage

of the population of concern. However, despite their increasing abundance and relative low cost, administrative data are collected for different purposes than survey data, so the number of potential research questions is limited by data availability and characteristics.

Previous nursing studies conducted by R&P relied solely on administrative databases to describe nurses in Wyoming. Analysis of wage records was used to determine supply and demand (Glover, 2002a), turnover patterns (Glover, 2002b), and the flow of nurses entering and exiting the state (Glover, 2003). Administrative data analysis is a relatively inexpensive and effective way to study the movement of nurses into and out of the system, but cannot explain why this movement occurs.

Although administrative records can be a useful source of information, they

## KEY POINT

> - **Physically linking existing administrative data with information gathered from surveys substantially expands the scope of potential research questions that can be addressed. It also reduces the limitations of both methods while highlighting the strengths and does so at a relatively low cost.**

3. Methodology

have limitations when used for research that requires information on decision making behaviors. In order to evaluate personal factors, such as workforce satisfaction and intent to leave employment, another data source must be introduced. Surveys can provide a vast supply of information because the questions are typically designed by the researcher. In order to create a good survey, the researcher must have clearly defined independent and dependent variables and a specific model of the expected relationships, which is tested against observations of the phenomenon. Survey research is especially well suited for answering questions about opinion and personal information. Best practices require that survey researchers attempt to maximize response rates and to minimize risk of nonresponse errors. However, obtaining the cooperation of the respondents in sample surveys is often difficult, and considerable effort (and cost) must be applied in order to obtain minimally acceptable response rates. If the response rates fall short, concerns about the introduction of systematic bias in variables of substantive importance are raised.

Most studies of nursing have used survey research. This typically occurs in one of two ways. The first involves surveying health care providers to determine the level of difficulty they have in hiring nurses. The other involves sending opinion questionnaires to nurses. These questionnaires are useful for gathering information on job satisfaction and intent to leave one's job but cannot be used to follow up on the movement of nurses through the system.

Physically linking existing administrative data with information gathered from surveys substantially expands the scope of potential research questions that can be addressed. It also reduces the limitations of both methods while highlighting the strengths and does so at a relatively low cost. R&P is in a unique position to use both types of research. Because we have expertise in both areas, we are able to use survey findings to describe nurses who intend to leave their current employer and then use administrative records to determine whether or not they actually leave.

### Survey Development

R&P began the survey process by conducting an extensive review of professional research pertaining to areas that affect nurses. This review was used to create a series of hypotheses that, in turn, were used to design the survey instrument. These hypotheses were developed to measure nurse satisfaction and its influence on retention with current employers. They included issues regarding staffing levels, non-nursing tasks, wages and benefits, and hospital safety for both nurses and patients. The analysis was not limited to these issues, however, because it was also important to describe subsequent withdrawal from

the health care market itself and from Wyoming entirely. After the hypotheses were established, a list of potential survey questions were compiled, using a variety of survey questionnaires from other sources as a guide for question selection (Fletcher, Guzley, Barnhill, & Philhour, 2004; Lacy & Shaver, 2002; United States Department of Health and Human Services, 2004).

In order to ensure the most appropriate questions were asked, we presented the list to a nurse advisory committee prior to the creation of the survey instrument. This nurse advisory committee is comprised of several nurses from various disciplines and includes hospital and long-term care nurses and nurse managers, public health nurses, and members of the Wyoming Board of Nursing (please see the inside front cover of this publication for the affiliations of this committee).

Two versions of the survey were created: one for nurses working in ambulatory care (including private doctors' offices and surgery centers) and one for nurses working in hospitals or long-term care. Both instruments had a section establishing employment status and included questions about full- or part-time employment, job title for primary position (e.g. management, direct patient care, case management), and future plans to retire or otherwise leave the primary place of employment.

The hospital and long-term care instrument included a section pertaining to shift work and overtime requirements. This section asked questions about the shift work and overtime practices of the nurse's primary employer, and their attitudes toward these practices. This section was not included on the ambulatory care version of the questionnaire because overtime and

shift work are not common in ambulatory care. Both versions of the questionnaire included a series of questions related to overall satisfaction with workplace issues and included satisfaction with co-workers and management, satisfaction with work environment and safety issues, and satisfaction with wages and benefits. There was also a section on both instruments about overall satisfaction with the field of nursing. Finally, both versions of the questionnaire included questions about demographics and community satisfaction. (Complete copies of these instruments can be found in Appendix A, beginning on page 105.)

Because R&P has access to several administrative data sets that include demographic data, such as the Wyoming State Board of Nursing (BON) license renewal files, the Unemployment Insurance (UI) Wage Records database, and the Quarterly Census of Employment and Wages (QCEW), there were several questions we did not include on the questionnaire, such as level of education, quarterly wages, gender, and age. This saved both space on the instrument and time needed to fill out the instrument. Nurses were given a reference date to standardize their answers to a specific point in time. The reference date for ambulatory care nurses was June 12, 2007, and for hospital and long-term care nurses it was July 12, 2007.

One of the purposes of this study was to survey the total population of nurses working in ambulatory care, hospitals, and long-term care facilities in Wyoming. To begin, we obtained a segment of the 2006 license renewal database from the Wyoming Board of Nursing, which contains data such as name, address, date of birth, license type, and education level of all

# KEY POINT

- **Confidentiality and privacy are important issues for research, especially when administrative records are being used. Although survey and administrative data were linked by using personal identification numbers, once the data were linked, personal identifiers were excluded from the data set used for research. In their place, confidential, random identification numbers were created. These measures allowed the merger of relevant information from administrative records and the survey instrument while preserving the confidentiality of survey respondents. Access to the data was made available only to those researchers engaged in the study.**

Confidentiality and privacy are important issues for research, especially when administrative records are being used. Although survey and administrative data were linked by using personal identification numbers, once the data were linked, personal identifiers were excluded from the data set used for research. In their place, confidential, random identification numbers were created. These measures allowed the merger of relevant information from administrative records and the survey instrument while preserving the confidentiality of survey respondents. Access to the data was made available only to those researchers engaged in the study.

In order to pretest the questionnaire to identify any potential problems respondents might have in understanding the questions, several R&P staff members gave copies of the instrument to local nurses they were familiar with for review. The first mailing of the ambulatory care version of the survey instrument (June 19 – July 2, 2007) also functioned as a pretest. No major problems were detected during either of these processes and no changes were made to the instrument.

All nurses were sent an advance letter (see Appendix A, page 106) to inform them of the upcoming survey as well as act as a form of address refinement. Approximately 4.4% (30) of the advance letters sent to ambulatory care nurses were returned with updated addresses. Another 2.2% (15) of letters sent to ambulatory and 1.9% (58) of letters sent to hospital and long-term care nurses were determined to be undeliverable and subsequently discarded from the original sample. This left a survey population of 672 nurses in ambulatory care and 2,969 nurses in hospitals and long-term care.

nurses registered to work in the state. This was a companion file to the BON files obtained for previous studies. To this file we attached fourth quarter 2006 (2006Q4) wage and employment data from the UI Wage Records database, which is collected by the Wyoming Department of Employment (DOE), and corresponding industry data from the QCEW, also collected by DOE under contract with the U.S. Bureau of Labor Statistics. Because this particular portion of the project pertained to nurses working in ambulatory care, hospitals, and long-term care facilities, only the information for these nurses was drawn from the larger nurse database.

Each nurse was mailed a copy of the questionnaire with the unique numeric identifier, a cover letter explaining the purpose of the survey (see Appendix A, page 107), and a stamped, addressed return envelope. The first mailing of surveys for ambulatory nurses was sent on June 19, 2007, and the first mailing for hospital and long-term care nurses was sent on July 31, 2007. Nurses were sent up to two more mailings between July and October, depending on how they responded to the previous mailing. If nurses returned a completed survey they were taken off the list for subsequent mailings; if they did not return a completed survey they were sent another. Nurses younger than age 35 in the hospital and long-term care survey were less likely to respond than nurses 35 and older. In order to increase the response rate for these younger nurses, phone calls were made in early November and resulted in an additional 49 (1.7%) responses.

The final response rate for ambulatory care nurses was 69.9% (470) and the final response rate for hospital and long-term care nurses was 66.6% (1,976). Because a purpose of this survey was to measure the attitudes of nurses in Wyoming, we removed any nurses who, according to wage records, were no longer working at a Wyoming firm. This was done by deleting any nurse record that appeared in 2006Q4 wage records when the corresponding contact data were drawn but did not appear in 2007Q1 or 2007Q2 wage records, and resulted in the removal of 64 (9.4%) nurses from the ambulatory care nurse sample and 151 (5.0%) from the hospital and long-term care nurse sample. This brought the response rate for nurses working in an ambulatory care setting up to 71.4% (434) and the response rate for nurses working in a hospital or long-term care setting up to 67.5% (1,901).

## Qualitative Analysis

According to Myers (2002):

> Qualitative studies are tools used in understanding and describing the world of human experience. Since we maintain our humanity throughout the research process, it is largely impossible to escape the subjective experience, even for the most seasoned of researchers. … Small qualitative studies are not generalizable in the traditional sense, yet have redeeming qualities that set them above that requirement.

They also often reveal information that was unknown to the researcher and not likely to be revealed by quantitative methods. A major strength of the approach is the depth to which explorations are conducted and descriptions are written, usually resulting in sufficient details for the reader to better understand the situation. Qualitative research offers a perspective of a situation that reflects the researcher's ability to illustrate or describe the corresponding phenomenon.

To take advantage of the perspective offered by qualitative methods, R&P used several strategies. The first was to develop both formal and informal associations with various nursing and health care organizations. Staff members routinely made presentations to the Wyoming Healthcare Commission, during which commission members were alerted to the status of the nursing research process as well as solicited for insight and discussion about the findings. Presentations were also made to the Wyoming Board of Nursing and the advisory council of nurses. In each instance, participants were asked for feedback about the findings. Comments received either

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validated our interpretation of findings or provided insight into alternative meanings. In either case, insight gained from the comments was integrated into the project.

Informal conversations were also initiated by R&P staff with members of the health care community. Whether during lunch with the nurse advisory council or casual conversation with a member of the Wyoming Hospital Association and Long-Term Care Association, individuals outside of R&P were given the opportunity to share their anecdotal knowledge of the nursing situation in the state. These conversations afforded researchers perspective on the issues from both employer and employee viewpoints.

An R&P staff member attended the annual nursing summit and was able to join the informal networking association of nurses. This allowed researchers insight into the less obvious issues that are nonetheless important to many nurses.

Finally, at the end of the questionnaire nurses were asked to comment on any topic raised in the questionnaire. Not all respondents chose to do so; however, those who did offered substantial insight into the issues that mattered to them personally. In order to quantify the information in the comments, we created a list of 32 themes found in the nursing literature, in the questionnaire satisfaction measures, and in other questions of the survey. We also included themes from the comments themselves that did not appear elsewhere. Each incidence of a comment was counted one time such that respondents could have multiple entries. No attention was paid to the context of the comment, only to the mention of the comment theme itself. For instance, whether the sentence was "I think

nurses are overpaid" or "I think nurses are underpaid," the Wages theme was coded. Future analysis could investigate differences between positive and negative comments.

After coding the comments into themes, they were tabulated and frequencies were computed. There were 1,694 total comments made by 558 (23.2%) individual nurses. Comment themes and frequencies can be found in Chapter 1 and Appendix A, respectively. For the sake of discussion in this study, we assumed that frequency of appearance was related to the relative importance of the comment theme. In other words, those ideas commented on most frequently were relatively more important than those ideas receiving fewer mentions. Results of the content analysis can be found in Chapter 1 beginning on page 30.

## Validity

There are two distinct types of validity. The first involves research design. In this case the term refers to how well a study supports the intended conclusion drawn from the results. Research design validity can be divided into four aspects: support for the conclusion that the independent variable caused the dependent variable in the specific study (internal validity), support that the same effect generalizes to the population from which the sample was drawn (statistical conclusion validity), support for the intended interpretation of the variables (construct validity), and support for the generalization of the results beyond the studied population (external validity; Rossi, Freeman, & Lipsey, 1999; Mohr, 1995).

The second type of validity involves test validity, a concept that attempts to explain the degree to which a test measures what it

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was designed to measure. Test validity can be assessed in a number of ways, including construct-related evidence, content-related evidence, and criterion-related evidence, which involves two subtypes (concurrent and predictive). Criterion-related validity reflects the success of measures used for prediction or estimation. In predictive validity, we assess the construct's ability to predict something it should theoretically be able to predict (Rossi et al., 1999; Mohr, 1995).

One of the strengths of this study's mixed-method design is the ability to quantify the predictive validity of a respondent's indication of intent to leave the primary employer. Using administrative records we are able to longitudinally study respondents' work patterns. If a nurse indicated intent to leave his or her primary employer within 12 months, we are able to use the UI Wage Records database to find out when or if that particular nurse did leave his or her primary employer. We are also able to statistically model exit behaviors using both survey and administrative data. If administrative data prove to be as accurate as survey data in predicting exit intent, future research could reduce the amount of survey data collected by focusing on information readily available through administrative sources.

In summary, this project used a process of triangulation to combine three quantitative and qualitative methods of study and create a comprehensive analysis of the nursing experience in Wyoming. A thorough quantitative investigation of administrative databases and survey data allowed for statistical analysis while qualitative data gave us more insight into the questions and issues that are important to the recruitment and retention of nurses.

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3. Methodology

# Appendix A: Survey Instrument

Appendix A:
Survey Instrument

THE STATE     OF WYOMING

DAVE FREUDENTHAL
Governor

*Department of Employment*
**Research and Planning Section**

P.O. BOX 2760
CASPER, WYOMING 82602

(307) 473-3807

July 13, 2007

Dear :

As you may be aware, the Research and Planning  (R&P) Section of the Department of
Employment is under contract to the Health Care Commission to conduct a study of nurse
supply, demand, and retention in Wyoming.  This is an advance notice that you have been
selected to participate in the study by completing a mail questionnaire and returning it to us.

The results of the study will be broadly distributed and facilitate formal and informal forums
among all members of the community concerned with nursing in Wyoming.  Among other means
of distribution, the results will be posted on our web site at
http://doe.state.wy.us/lmi/nursing.htm

In a few days you will be receiving a questionnaire, a return envelope, and R&P contact
information.  Your completed questionnaire will ensure that an accurate perspective on nursing
will inform policies directed toward supply, demand, and retention of nurses in Wyoming.

Thank you for your time and consideration.

Sincerely,

Tom Gallagher
Manager, Research and Planning

THE STATE OF WYOMING

P.O. BOX 2760
CASPER, WYOMING 82602

*Department of Employment*
**Research and Planning Section**

**DAVE FREUDENTHAL**
Governor

(307) 473-3807

July 27, 2007

«ID»

Dear «FIRST»:

As you may be aware, the Department of Employment's Research and Planning (R&P) Section is under contract to the Health Care Commission to study nurse supply, demand, and retention in Wyoming. Because your decisions about work may be driven by a combination of work environment, views of nursing as a profession, and family and community circumstances, the enclosed questionnaire includes questions about these areas. There is no research for you to do, and since most of the questionnaire follows a simple "check item" format, it is expected that most people will need only 12-15 minutes to complete it.

The information provided by you will be maintained in confidence and used only by the staff of R&P to produce information in tabular and other statistical forms. Individually identifiable information collected by R&P may only be used for statistical purposes, and remain confidential under the Workforce Investment Act (see: http://doe.state.wy.us/lmi/section309.htm ) and Wyoming Employment Security Law (section 27-3-603).

The results of the study will be broadly distributed and facilitate formal and informal forums among all members of the community concerned with nursing in Wyoming. Among other means of distribution, the results will be posted on our web site at
http://doe.state.wy.us/lmi/nursing.htm
Your completed questionnaire will ensure that an accurate perspective on nursing in Wyoming informs future policy choices. Please return the questionnaire in the stamped self addressed envelope post marked no later than August 22, 2007. Should you have questions please contact Lisa Knapp at (307) 473-3835. Thank you for your time and consideration.

Sincerely,

Tom Gallagher
Manager, Research and Planning

enclosures

Appendix A:
Survey Instrument

# Retention of Nurses in Wyoming

**Department of Employment Healthcare Personnel Survey**

*Rev. 05/2007*

Wyoming Department of Employment
Research & Planning
P.O. Box 2760
Casper, WY 82602
Tel. (307) 473-3835    Fax (307) 473-3806
http://doe.state.wy.us/LMI/

Survey Date:  June 2007
***Please return form by June 30, 2007***

***We expect this form to take no more
than 12-15 minutes to complete***

**ID #**

**All data collected by Research & Planning must, by the Workforce Investment Act (see: 29 USC sec. 491-2 (a)(2)) and the Wyoming Employment Security Law (section 27-3-603), be held in the strictest confidence, with results published only as summary statistics.  The information you provide to us will be held confidential to the extent permitted by law.**

## A. Employment Situation:

Instructions: Unless otherwise specified, the **reference period** for this survey is June 12, 2007.
**Primary job** is defined as the employment situation in which you earned the most money during the reference period.  Thank you for your participation in this research.

1.  What was your employment status as of June 12, 2007? *(please check **one** response)*

    ☐ Employed in nursing full time *(more than 35 hours/week)*
    ☐ Employed in nursing part time *(less than 35 hours/week)*

    ☐ Retired – not working
    ☐ Not working outside of home        } *(Please skip to Page 4, Section D,*
    ☐ Volunteer                                         *Question #47, and continue survey)*
    ☐ Employed in another profession, not nursing

2.  a. Which of the following best describes the title of your <u>primary</u> nursing job? *(please check **one** response)*

    ☐ Nurse Educator                              ☐ Infection Control
    ☐ Administration/Management           ☐ Case Manager/Utilization Review
    ☐ Quality Assurance/Risk Manager   ☐ Other *(please describe)* _____
    ☐ Direct Patient Care *(please check **one** of the following)*:
        ○ Cardiac Care            ○ Cancer Care
        ○ Renal/Urology          ○ Orthopedics
        ○ Neurology                ○ Respiratory
        ○ Pediatrics                ○ Mental Health
        ○ General Surgery       ○ Women's Health
        ○ General Medicine/Family Practice
        ○ Other (please describe):_____

    b. Are you a Nurse Practitioner? *(please check **one** response)*

        ☐ No, I am not a Nurse Practitioner
        ☐ Yes, I am a Certified Registered Nurse Anesthetist
        ☐ Yes, I am a Family Nurse Practitioner
        ☐ Yes, other *(please describe)* _____

3.  During an average work day, with how many patients do you directly interact in your primary job?
    _____*(number)*

1

4. Which of the following best describes your <u>primary</u> facility? *(please check **one** response)*

   ☐ **Ambulatory Healthcare Services** *Ambulatory Healthcare Services provide healthcare services directly to ambulatory patients and do not usually provide inpatient services. Examples include offices of physicians, freestanding surgical centers, and medical or diagnostic laboratories.*

   ☐ **Hospitals** *Hospitals provide medical, diagnostic, and treatment services that include physician, nursing, and other health services to inpatients and specialized accommodation services to inpatients.*

   ☐ **Nursing and Residential Care Facilities** *Nursing and residential care facilities provide residential care combined with nursing, supervisor, or other types of care as required by residents.*

   ☐ **Other** *(please describe)* _____

5. How many miles would you estimate you drove for work purposes other than commuting to your primary facility during the week of June 12, 2007? _____ *(number)*

6. Do you plan to leave employment with your <u>primary</u> facility within the next 12 months?

   ☐ Yes
   ☐ No *(skip to question #8)*

7. If you answered <u>YES</u> to question #6, what is your <u>primary</u> reason for leaving? *(please check **one** response)*

   ☐ Taking another job in Healthcare          ☐ Continuing education
   ☐ Taking another job outside Healthcare     ☐ Retiring *(skip to question #9)*
   ☐ Family status change                      ☐ Other *(please describe)* _____
     (e.g., marriage, divorce, birth of a child)
   ☐ Relocating

8. When do you plan to retire from your primary facility: *(please check **one** response)*

   ☐ In more than 1 year but less than 3 years
   ☐ In more than 3 years but less than 5 years
   ☐ In more than 5 years
   ☐ Don't know

9. Do you plan to continue working as a nurse after retiring from your <u>primary</u> facility?

   ☐ Yes                    ☐ Don't Know
   ☐ No

10. If you have a second job, is it in nursing? *(please check **one** response)*

    ☐ Yes, I have a second job that involves nursing
    ☐ No, I only have one job *(skip to Section B, question #13, and please continue)*
    ☐ No, I have a second job, but it does not involve nursing *(In what occupation were you employed during this time (e.g., electrician, teacher)? After answering, skip to Section B, question #13 and please continue)*

    _____

2

11.  Which of the following best describes the position title of your <u>secondary</u> nursing job? *(please check* **one** *response)*

- ☐ Direct Patient Care
- ☐ Administration/Management
- ☐ Quality Assurance/Risk Manager
- ☐ Case Manager/Utilization Review
- ☐ Other *(please describe)*_____

- ☐ Nurse Educator
- ☐ Infection Control
- ☐ Researcher/Consultant
- ☐ Nurse Practitioner

12.  Which of the following best describes your <u>secondary</u> work environment? *(please see definitions in question #4 and check* **one** *response)*

- ☐ Ambulatory Healthcare Services
- ☐ Hospitals
- ☐ Nursing and Residential Care Facilities
- ☐ Other *(please describe)* _____

**B**. **The following questions apply to your primary facility**.

Using the provided scale of 1 to 5 where **1 means very dissatisfied** and **5 means very satisfied**, please circle the response that best describes how you feel about each of the following statements.

1= Very Dissatisfied    2= Dissatisfied    3= Neither Satisfied nor Dissatisfied    4= Satisfied    5= Very Satisfied    NA= Not Applicable

| | | | | | | |
|---|---|---|---|---|---|---|
| 13. Overall Satisfaction | 1 | 2 | 3 | 4 | 5 | NA |
| 14. Your current base salary | 1 | 2 | 3 | 4 | 5 | NA |
| 15. Salary range for your position | 1 | 2 | 3 | 4 | 5 | NA |
| 16. Employee benefits | 1 | 2 | 3 | 4 | 5 | NA |
| 17. Skill of RNs where you work | 1 | 2 | 3 | 4 | 5 | NA |
| 18. Adequacy of RN staffing where you work | 1 | 2 | 3 | 4 | 5 | NA |
| 19. Adequacy of clerical support services | 1 | 2 | 3 | 4 | 5 | NA |
| 20. Non-nursing tasks required of you (e.g., housekeeping, lab) | 1 | 2 | 3 | 4 | 5 | NA |
| 21. Amount of paperwork required | 1 | 2 | 3 | 4 | 5 | NA |
| 22. Physical work environment | 1 | 2 | 3 | 4 | 5 | NA |
| 23. Level of personal safety at the facility where you work | 1 | 2 | 3 | 4 | 5 | NA |
| 24. Work schedule | 1 | 2 | 3 | 4 | 5 | NA |
| 25. Job security | 1 | 2 | 3 | 4 | 5 | NA |
| 26. Opportunities for advancement | 1 | 2 | 3 | 4 | 5 | NA |
| 27. Support from nurses with whom you work | 1 | 2 | 3 | 4 | 5 | NA |
| 28. Support from your nursing administration | 1 | 2 | 3 | 4 | 5 | NA |
| 29. Interactions with physicians | 1 | 2 | 3 | 4 | 5 | NA |
| 30. Interactions with other non-nursing staff | 1 | 2 | 3 | 4 | 5 | NA |
| 31. Interactions with traveling agency staff | 1 | 2 | 3 | 4 | 5 | NA |
| 32. Interaction with patients | 1 | 2 | 3 | 4 | 5 | NA |

3

**Section B Continued:**

1= Very Dissatisfied   2= Dissatisfied   3= Neither Satisfied nor Dissatisfied   4= Satisfied   5= Very Satisfied   NA= Not Applicable

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 33. | Time available for patient education | 1 | 2 | 3 | 4 | 5 | NA |
| 34. | Involvement in policy and management decisions | 1 | 2 | 3 | 4 | 5 | NA |
| 35. | Opportunities to use your skills | 1 | 2 | 3 | 4 | 5 | NA |
| 36. | Opportunities to learn new skills | 1 | 2 | 3 | 4 | 5 | NA |
| 37. | Opportunities for continuing education | 1 | 2 | 3 | 4 | 5 | NA |
| 38. | Quality of patient care where you work | 1 | 2 | 3 | 4 | 5 | NA |
| 39. | Feeling that your work is important | 1 | 2 | 3 | 4 | 5 | NA |
| 40. | Other *(please describe)*_____ | 1 | 2 | 3 | 4 | 5 | NA |

_____

**C.** **Now we would like your views on the profession of nursing**.

Using the provided scale of 1 to 5 where **1 means you strongly disagree** and **5 means you strongly agree**, please circle the response that best describes how you feel about each of the following statements.

1= Strongly Disagree        2=Disagree        3=Neither Agree nor Disagree        4=Agree        5= Strongly Agree        DK=Don't Know

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 41. | Generally speaking, I am very satisfied with nursing. | 1 | 2 | 3 | 4 | 5 | DK |
| 42. | I frequently think of quitting nursing. | 1 | 2 | 3 | 4 | 5 | DK |
| 43. | I am generally satisfied with the kind of work I do in nursing. | 1 | 2 | 3 | 4 | 5 | DK |
| 44. | Most people on this job are satisfied with nursing. | 1 | 2 | 3 | 4 | 5 | DK |
| 45. | People on this job often think of quitting nursing. | 1 | 2 | 3 | 4 | 5 | DK |

46.  Which of the following statements best describe why you would leave nursing all together? *(please choose **up to 4** statements that are most important to you)*

☐ I would not leave nursing
☐ Feel burned out from nursing
☐ Feel unsupported as a nurse
☐ Concerned with the quality of care
☐ Better salary available outside nursing
☐ Better management support
☐ Better advancement opportunities available outside nursing
☐ Concerned with delegation to unlicensed assistive personnel

☐ Feel overworked
☐ Concerned with injury to patients
☐ Need more autonomy
☐ Need more respect
☐ Plan to retire
☐ Better work schedules available outside nursing
☐ Concerned with injury to self
☐ Seek more challenging work
☐ Other *(please describe)*_____

**D. Next we would like to learn about your situation and your community.**

47.  Where did you last attend high school? _____*(city/state)*

48.  To the best of your recollection, what was the date you began your college education to become a nurse? _____*(mm/yyyy)*

49.  What was the date you first received your nursing license? LPN: _____ *(mm/yyyy)*

RN: _____ *(mm/yyyy)*

4

50. What is your marital status? *(Please check **one** response; for all responses other than married or cohabitating skip to question #55)*

    ☐ Married or cohabitating        ☐ Divorced
    ☐ Single                    ☐ Widowed

51. What is the highest level of education your spouse or partner has completed? *(please check **one** response)*

    ☐ Less than high school
    ☐ High school graduate (includes equivalency)
    ☐ Some college or associate's degree
    ☐ Bachelor's degree
    ☐ Graduate or professional degree
    ☐ Other *(please describe)*:_____

52. Was your spouse or partner employed during the week of June 12, 2007?

    ☐ Yes
    ☐ No *(skip to question #55)*

53. In what occupation was your spouse or partner employed during this time (e.g., electrician, teacher)?

_____

54. What were this person's most important work activities or duties?

_____

55. Please enter the number of dependents under 25 living in your household for each of the following categories:

    _____Less than 6 years old
    _____6 to 12 years old
    _____13-18 years old
    _____19-24 years old
    _____I do not have any dependents under 25 years old living in my household

56. Do you provide care for your parents or your spouse/partner's parents?

    ☐ Yes
    ☐ No

57. a. For the week of June 12, 2007, what was your base rate of pay in your primary job? *(please check **one** response)*    $_____._____ per  ☐ Hour
                                                     ☐ Week
                                                     ☐ 2 Weeks
                                                     ☐ Month
                                                     ☐ Other *(please specify)*:
                                                      _____

    b. How many hours did you work at your primary job during the week of June 12, 2007?
    _____ *(number)*

5

58. What was the total pre-tax income in your household in the past 12 months? *(Please check **one** response)*

☐ Less than $20,000
☐ $20,000 to $29,999
☐ $30,000 to $39,999
☐ $40,000 to $49,999
☐ $50,000 to $59,999
☐ $60,000 to $69,999

☐ $70,000 to $79,999
☐ $80,000 to $99,999
☐ $100,000 to $124,999
☐ $125,000 to $149,999
☐ $150,000 to $199,999
☐ $200,000 or more

59. How many years have you lived in your current community? _____

60. Of the following reasons, which one best describes why you live in your current community: *(please check **one** response)*

☐ Existing job
☐ Proximity to school or work
☐ Spouse or partner's job
☐ Cost of living/affordable housing
☐ Other *(please describe)* _____

☐ Proximity to cultural amenities
☐ Proximity to natural amenities
☐ Proximity to family

61. a. How much do you agree or disagree with the following statement: "I am tied to this community and cannot leave." *(please check **one** response)*

☐ Strongly Agree
☐ Agree
☐ Neither Agree nor Disagree
☐ Disagree
☐ Strongly Disagree

61. b. What is the reason for your answer?

_____

The following questions apply to the community you currently live in. Using the provided scale of 1 to 5 where **1 means very dissatisfied** and **5 means very satisfied**, please circle the response that best describes how you feel about each of the following statements.

1=Very Dissatisfied   2= Dissatisfied   3=Neither Satisfied nor Dissatisfied   4=Satisfied   5=Very Satisfied   DK=Don't Know

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 62. | Economic opportunities | 1 | 2 | 3 | 4 | 5 | DK |
| 63. | Proximity to family | 1 | 2 | 3 | 4 | 5 | DK |
| 64. | Cost of living | 1 | 2 | 3 | 4 | 5 | DK |
| 65. | Rural character | 1 | 2 | 3 | 4 | 5 | DK |
| 66. | Urban character | 1 | 2 | 3 | 4 | 5 | DK |
| 67. | Housing | 1 | 2 | 3 | 4 | 5 | DK |
| 68. | Public safety services | 1 | 2 | 3 | 4 | 5 | DK |
| 69. | Parks and recreation/ natural amenities | 1 | 2 | 3 | 4 | 5 | DK |
| 70. | Education (K-12) | 1 | 2 | 3 | 4 | 5 | DK |
| 71. | Access to post-secondary education, including continuing education | 1 | 2 | 3 | 4 | 5 | DK |

6

**Continued:**

1=Very Dissatisfied    2= Dissatisfied    3=Neither Satisfied nor Dissatisfied    4=Satisfied    5=Very Satisfied    DK=Don't Know

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 72. | Daycare services | 1 | 2 | 3 | 4 | 5 | DK |
| 73. | Medical care services | 1 | 2 | 3 | 4 | 5 | DK |
| 74. | Mental health services | 1 | 2 | 3 | 4 | 5 | DK |
| 75. | Retail shopping | 1 | 2 | 3 | 4 | 5 | DK |
| 76. | Restaurants/Entertainment | 1 | 2 | 3 | 4 | 5 | DK |

77.  If given the opportunity, how likely would you be to move away from your current community?
*(please check **one** response)*

- ☐  Very likely
- ☐  Somewhat likely
- ☐  Neither likely nor unlikely
- ☐  Somewhat unlikely
- ☐  Very unlikely
- ☐  Don't know

Please comment on any topic raised in this questionnaire: *(Continue on back if necessary)*

_____

_____

_____

_____

_____

_____

***Thank you for your participation!***

**Appendix A:
Survey Instrument**

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# Retention of Nurses in Wyoming

Hospital and
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Questionnaire

**Appendix A**
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**Department of Employment Healthcare Personnel Survey**

*Rev. 05/2007*

Wyoming Department of Employment
Research & Planning
P.O. Box 2760
Casper, WY 82602
Tel. (307) 473-3835  Fax (307) 473-3806
http://doe.state.wy.us/LMI/

Survey Date: July 2007
***Please return form by October 19 , 2007***

***We expect this form to take no more***
***than 12-15 minutes to complete***

**ID #**

**All data collected by Research & Planning must, by the Workforce Investment Act (see: 29 USC sec. 491-2 (a)(2)) and the Wyoming Employment Security Law (section 27-3-603), be held in the strictest confidence, with results published only as summary statistics. The information you provide to us will be held confidential to the extent permitted by law.**

Instructions: Unless otherwise specified, the **reference period** for this survey is July 12, 2007. **Primary job** is defined as the employment situation in which you earned the most money during the reference period. Thank you for your participation in this research.

## A. Employment Situation:

1. What was your employment status as of July 12, 2007? *(please check **one** response)*

   ☐ Employed in nursing full time *(more than 35 hours/week)*
   ☐ Employed in nursing part time *(less than 35 hours/week)*

   ☐ Retired – not working
   ☐ Not working outside of home
   ☐ Volunteer
   ☐ Employed in another profession, not nursing

   } *(Please skip to Page 5, Section E, Question #55, and continue survey)*

2. a. Which of the following best describes the title of your <u>primary</u> nursing job? *(please check **one** response)*

   ☐ Nurse Educator
   ☐ Administration/Management
   ☐ Quality Assurance/Risk Manager
   ☐ Direct Patient Care *(please check **one** of the following)*:

   ☐ Infection Control
   ☐ Case Manager/Utilization Review
   ☐ Other *(please describe)* _____

   - ○ Cardiac Care
   - ○ Renal/Urology
   - ○ Neurology
   - ○ Pediatrics
   - ○ General Surgery
   - ○ General Medicine
   - ○ Other (please describe):_____

   - ○ Cancer Care
   - ○ Orthopedics
   - ○ Respiratory
   - ○ Mental Health
   - ○ Obstetrics or Neonatal
   - ○ Emergency Room

   b. Are you a Nurse Practitioner? *(please check **one** response)*

   ☐ No, I am not a Nurse Practitioner
   ☐ Yes, I am a Certified Registered Nurse Anesthetist
   ☐ Yes, I am a Family Nurse Practitioner
   ☐ Yes, other *(please describe)* _____

3. During an average work day, with how many patients do you directly interact in your primary job? _____*(number)*

1

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**Retention of Nurses in Wyoming**

4. Which of the following best describes your <u>primary</u> facility? *(please check **one** response)*

&#9633; **Ambulatory Healthcare Services** *Ambulatory Healthcare Services provide healthcare services directly to ambulatory patients and do not usually provide inpatient services. Examples include offices of physicians, freestanding surgical centers, diagnostic laboratories, and home health care.*

&#9633; **Hospitals** *Hospitals provide medical, diagnostic, and treatment services that include physician, nursing, and other health services to inpatients and specialized accommodation services to inpatients.*

&#9633; **Nursing and Residential Care Facilities** *Nursing and residential care facilities provide residential care combined with nursing, supervisor, or other types of care as required by residents.*

&#9633; **Other** *(please describe)* _____

5. How many miles would you estimate you drove for <u>work purposes other than</u> commuting to your primary facility during the week of July 12, 2007? _____ *(number)*

6. Do you plan to leave employment with your <u>primary</u> facility within the next 12 months?

&#9633; Yes
&#9633; No *(skip to question #8)*

7. If you answered <u>YES</u> to question #6, what is your <u>primary</u> reason for leaving? *(please check **one** response)*

&#9633; Taking another job in Healthcare     &#9633; Continuing education
&#9633; Taking another job outside Healthcare     &#9633; Retiring *(skip to question #9)*
&#9633; Family status change     &#9633; Other *(please describe)* _____
    (e.g., marriage, divorce, birth of a child)
&#9633; Relocating

8. When do you plan to retire from your <u>primary</u> facility: *(please check **one** response)*

&#9633; In more than 1 year but less than 3 years
&#9633; In more than 3 years but less than 5 years
&#9633; In more than 5 years
&#9633; Don't know

9. Do you plan to continue working as a nurse after retiring from your <u>primary</u> facility?

&#9633; Yes     &#9633; Don't know
&#9633; No

10. If you have a second job, is it in nursing? *(please check **one** response)*

&#9633; Yes, I have a second job that involves nursing
&#9633; No, I only have one job *(skip to Section B, question #13, and please continue)*
&#9633; No, I have a second job, but it does not involve nursing *(In what occupation were you employed during this time (e.g., electrician, teacher)? After answering, skip to Section B, question #13 and please continue)*

_____

2

11. Which of the following best describes the position title of your <u>secondary</u> nursing job? *(please check* **one** *response)*

    ☐ Direct Patient Care          ☐ Nurse Educator
    ☐ Administration/Management    ☐ Infection Control
    ☐ Quality Assurance/Risk Manager   ☐ Researcher/Consultant
    ☐ Case Manager/Utilization Review   ☐ Nurse Practitioner
    ☐ Other *(please describe)*_____

12. Which of the following best describes your <u>secondary</u> work environment? *(please see definitions in question #4 and check* **one** *response)*

    ☐ Ambulatory Healthcare Services
    ☐ Hospitals
    ☐ Nursing and Residential Care Facilities
    ☐ Other *(please describe)* _____

## B. Shiftwork and Overtime Experiences:

13. What is the length of your <u>typical</u> scheduled shift at your <u>primary</u> job? *(please check* **one** *response)*

    ☐ 8 hours
    ☐ 12 hours
    ☐ Both
    ☐ Other *(please describe)*_____

14. Do you have an on-call <u>requirement</u> for your <u>primary</u> job?

    ☐ Yes
    ☐ No *(please skip to question #16)*

15. During the week of July 12, 2007, <u>did you work on-call time</u> and why? *(please check* **all that apply***)*

    ☐ I did not work on-call time
    ☐ I was called in for a single procedure
    ☐ I was called in for an entire shift
    ☐ Other *(please describe)*_____

16. During the week of July 12, 2007, did you have unscheduled shift changes from your regularly scheduled shift <u>at the request or direction of your supervisor</u>? *(please check* **one** *response)*

    ☐ No
    ☐ Yes, once
    ☐ Yes, twice
    ☐ Other *(please describe)*_____

3

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# Retention of Nurses in Wyoming

17. Which of the following <u>best describes</u> why you worked <u>extra hours</u>? *(please check **one** response)*

   ☐ I wanted to help out when the unit was busy or understaffed
   ☐ I wanted extra money
   ☐ I wanted time off on another day
   ☐ I felt pressured by manager, supervisor, or other staff
   ☐ I was required (mandated) to work
   ☐ Other *(please describe)*_____

18. In the past year, has the amount of <u>mandatory</u> unscheduled overtime required of you: *(please check **one** response)*

   ☐ Increased
   ☐ Remained about the same
   ☐ Decreased
   ☐ Not applicable

19. Do you think that overtime hours <u>are fairly assigned</u> in your primary facility?

   ☐ Yes
   ☐ No

**C. The following questions apply to your primary facility.**

Using the provided scale of 1 to 5 where **1 means very dissatisfied** and **5 means very satisfied**, please circle the response that best describes how you feel about each of the following statements.

1= Very Dissatisfied   2= Dissatisfied   3= Neither Satisfied nor Dissatisfied   4= Satisfied   5= Very Satisfied   NA= Not Applicable

| | | | | | | |
|---|---|---|---|---|---|---|
| 20. Overall satisfaction | 1 | 2 | 3 | 4 | 5 | NA |
| 21. Your current base salary | 1 | 2 | 3 | 4 | 5 | NA |
| 22. Salary range for your position | 1 | 2 | 3 | 4 | 5 | NA |
| 23. Employee benefits | 1 | 2 | 3 | 4 | 5 | NA |
| 24. Skill of RNs where you work | 1 | 2 | 3 | 4 | 5 | NA |
| 25. Adequacy of RN staffing where you work | 1 | 2 | 3 | 4 | 5 | NA |
| 26. Adequacy of clerical support services | 1 | 2 | 3 | 4 | 5 | NA |
| 27. Non-nursing tasks required of you (e.g., housekeeping, lab) | 1 | 2 | 3 | 4 | 5 | NA |
| 28. Amount of paperwork required | 1 | 2 | 3 | 4 | 5 | NA |
| 29. Physical work environment | 1 | 2 | 3 | 4 | 5 | NA |
| 30. Level of personal safety at the facility where you work | 1 | 2 | 3 | 4 | 5 | NA |
| 31. Work schedule | 1 | 2 | 3 | 4 | 5 | NA |
| 32. The amount of overtime assigned to you at your primary place of employment | 1 | 2 | 3 | 4 | 5 | NA |
| 33. Job security | 1 | 2 | 3 | 4 | 5 | NA |
| 34. Opportunities for advancement | 1 | 2 | 3 | 4 | 5 | NA |
| 35. Support from nurses with whom you work | 1 | 2 | 3 | 4 | 5 | NA |
| 36. Support from your nursing administration | 1 | 2 | 3 | 4 | 5 | NA |

4

# Retention of Nurses in Wyoming

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**Section C Continued:**

1= Very Dissatisfied    2= Dissatisfied    3= Neither Satisfied nor Dissatisfied    4= Satisfied    5= Very Satisfied    NA= Not Applicable

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 37. | Interactions with physicians | 1 | 2 | 3 | 4 | 5 | NA |
| 38. | Interactions with other non-nursing staff | 1 | 2 | 3 | 4 | 5 | NA |
| 39. | Interactions with traveling agency staff | 1 | 2 | 3 | 4 | 5 | NA |
| 40. | Interaction with patients | 1 | 2 | 3 | 4 | 5 | NA |
| 41. | Time available for patient education | 1 | 2 | 3 | 4 | 5 | NA |
| 42. | Involvement in policy and management decisions | 1 | 2 | 3 | 4 | 5 | NA |
| 43. | Opportunities to use your skills | 1 | 2 | 3 | 4 | 5 | NA |
| 44. | Opportunities to learn new skills | 1 | 2 | 3 | 4 | 5 | NA |
| 45. | Opportunities for continuing education | 1 | 2 | 3 | 4 | 5 | NA |
| 46. | Quality of patient care where you work | 1 | 2 | 3 | 4 | 5 | NA |
| 47. | Feeling that your work is important | 1 | 2 | 3 | 4 | 5 | NA |
| 48. | Other *(please describe)*_____ | 1 | 2 | 3 | 4 | 5 | NA |

_____

**D**. **Now we would like your views on the profession of nursing.**

Using the provided scale of 1 to 5 where **1 means you strongly disagree** and **5 means you strongly agree**, please circle the response that best describes how you feel about each of the following statements.

1= Strongly Disagree        2=Disagree        3=Neither Agree nor Disagree        4=Agree        5= Strongly Agree        DK=Don't Know

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 49. | Generally speaking, I am very satisfied with nursing | 1 | 2 | 3 | 4 | 5 | DK |
| 50. | I frequently think of quitting nursing | 1 | 2 | 3 | 4 | 5 | DK |
| 51. | I am generally satisfied with the kind of work I do in nursing | 1 | 2 | 3 | 4 | 5 | DK |
| 52. | Most people on this job are satisfied with nursing | 1 | 2 | 3 | 4 | 5 | DK |
| 53. | People on this job often think of quitting nursing | 1 | 2 | 3 | 4 | 5 | DK |

54. Which of the following statements best describe why you would leave nursing all together? *(please choose **up to 4** statements that are most important to you)*

- ☐ I would not leave nursing
- ☐ Feel burned out from nursing
- ☐ Feel unsupported as a nurse
- ☐ Concerned with the quality of care
- ☐ Better salary available outside nursing
- ☐ Better management support
- ☐ Better advancement opportunities available outside nursing
- ☐ Concerned with delegation to unlicensed assistive personnel
- ☐ Feel overworked
- ☐ Concerned with injury to patients
- ☐ Need more autonomy
- ☐ Need more respect
- ☐ Plan to retire
- ☐ Better work schedules available outside nursing
- ☐ Concerned with injury to self
- ☐ Seek more challenging work
- ☐ Other *(please describe)*_____

**E. Next we would like to learn about your situation and your community.**

55. Where did you last attend high school? _____*(city/state)*

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56.  To the best of your recollection, what was the date you began your college education to become a nurse? _____ *(mm/yyyy)*

57.  What was the date you first received your nursing license? LPN:  _____ *(mm/yyyy)*

RN:  _____ *(mm/yyyy)*

58.  What is your marital status? *(Please check **one** response; for all responses other than married or cohabitating skip to question #63)*

    ☐ Married or cohabitating        ☐ Divorced
    ☐ Single        ☐ Widowed

59.  What is the highest level of education your spouse or partner has completed? *(please check **one** response)*

    ☐ Less than high school
    ☐ High school graduate (includes equivalency)
    ☐ Some college or associate's degree
    ☐ Bachelor's degree
    ☐ Graduate or professional degree
    ☐ Other *(please describe)*:_____

60.  Was your spouse or partner employed during the week of July 12, 2007?

    ☐ Yes
    ☐ No *(skip to question #63)*

61.  In what occupation was your spouse or partner employed during this time (e.g., electrician, teacher)?

_____

62.  What were this person's most important work activities or duties?

_____

63.  Please enter the number of dependents under 25 living in your household for each of the following categories:

    _____Less than 6 years old
    _____6 to 12 years old
    _____13-18 years old
    _____19-24 years old
    _____I do not have any dependents under 25 years old living in my household

64.  Do you provide care for your parents or your spouse/partner's parents?

    ☐ Yes
    ☐ No

65. a. For the week of July 12, 2007, what was your base rate of pay in your primary job? *(please check* **one** *response. If you were retired or not working during this time, please skip to question #66)*

$_____.\_\_\_\_\_$ per
- ☐ Hour
- ☐ Week
- ☐ 2 Weeks
- ☐ Month
- ☐ Other *(please specify):*
  _____

   b. How many hours did you work at your primary job during the week of July 12, 2007?
   _____ *(number)*

66. What was the total pre-tax income in your household in the past 12 months? *(Please check* **one** *response)*

- ☐ Less than $20,000
- ☐ $20,000 to $29,999
- ☐ $30,000 to $39,999
- ☐ $40,000 to $49,999
- ☐ $50,000 to $59,999
- ☐ $60,000 to $69,999
- ☐ $70,000 to $79,999
- ☐ $80,000 to $99,999
- ☐ $100,000 to $124,999
- ☐ $125,000 to $149,999
- ☐ $150,000 to $199,999
- ☐ $200,000 or more

67. How many years have you lived in your current community? _____

68. Of the following reasons, which one best describes why you live in your current community:
*(please check* **one** *response)*

- ☐ Existing job
- ☐ Proximity to school or work
- ☐ Spouse or partner's job
- ☐ Cost of living/affordable housing
- ☐ Other *(please describe)* _____
- ☐ Proximity to cultural amenities
- ☐ Proximity to natural amenities
- ☐ Proximity to family

69. a. How much do you agree or disagree with the following statement: "I am tied to this community and cannot leave." *(please check* **one** *response)*

- ☐ Strongly agree
- ☐ Agree
- ☐ Neither agree nor disagree
- ☐ Disagree
- ☐ Strongly disagree

70. b. What is the reason for your answer?
_____

The following questions apply to the community you currently live in. Using the provided scale of 1 to 5 where **1 means very dissatisfied** and **5 means very satisfied**, please circle the response that best describes how you feel about each of the following statements.

1=Very Dissatisfied    2= Dissatisfied    3=Neither Satisfied nor Dissatisfied    4=Satisfied    5=Very Satisfied    DK=Don't Know

| | | | | | | |
|---|---|---|---|---|---|---|
| 71. Economic opportunities | 1 | 2 | 3 | 4 | 5 | DK |
| 72. Proximity to family | 1 | 2 | 3 | 4 | 5 | DK |

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# Retention of Nurses in Wyoming

**Continued:**

1=Very Dissatisfied　2= Dissatisfied　3=Neither Satisfied nor Dissatisfied　4=Satisfied　5=Very Satisfied　DK=Don't Know

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 73. | Cost of living | 1 | 2 | 3 | 4 | 5 | DK |
| 74. | Rural character | 1 | 2 | 3 | 4 | 5 | DK |
| 75. | Urban character | 1 | 2 | 3 | 4 | 5 | DK |
| 76. | Housing | 1 | 2 | 3 | 4 | 5 | DK |
| 77. | Public safety services | 1 | 2 | 3 | 4 | 5 | DK |
| 78. | Parks and recreation/natural amenities | 1 | 2 | 3 | 4 | 5 | DK |
| 79. | Education (K-12) | 1 | 2 | 3 | 4 | 5 | DK |
| 80. | Access to post-secondary education, including continuing education | 1 | 2 | 3 | 4 | 5 | DK |
| 81. | Day care services | 1 | 2 | 3 | 4 | 5 | DK |
| 82. | Medical care services | 1 | 2 | 3 | 4 | 5 | DK |
| 83. | Mental health services | 1 | 2 | 3 | 4 | 5 | DK |
| 84. | Retail shopping | 1 | 2 | 3 | 4 | 5 | DK |
| 85. | Restaurants/entertainment | 1 | 2 | 3 | 4 | 5 | DK |

86.  If given the opportunity, how likely would you be to move away from your current community?
*(please check **one** response)*

- ☐ Very likely
- ☐ Somewhat likely
- ☐ Neither likely nor unlikely
- ☐ Somewhat unlikely
- ☐ Very unlikely
- ☐ Don't know

Please comment on any topic raised in this questionnaire: *(Continue on a separate piece of paper if necessary)*

_____
_____
_____
_____
_____
_____

### *Thank you for your participation!*

# Appendix B: Frequency Tables

## Frequencies for Ambulatory Survey, Nurses Working in-State During First and Second Quarter 2007

Frequency Missing = 174

| Ambulatory in-State Questionnaire | | | |
|---|---|---|---|
| **1. What was your employment status as of the reference date?** | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Employed Full-Time | 293 | 67.5% | 67.7% |
| | Employed Part-Time | 117 | 27.0% | 27.0% |
| | Retired | 5 | 1.2% | 1.2% |
| | Not Working Outside Home | 9 | 2.1% | 2.1% |
| | Volunteer | 1 | 0.2% | 0.2% |
| | Employed, Not in Nursing | 8 | 1.8% | 1.8% |
| | Total | 433 | 99.8% | 100.0% |
| | | | | |
| Missing | No Answer | 1 | 0.2% | |
| | Total | 1 | 0.2% | |
| Total | | 434 | 100.0% | |

| Ambulatory in-State Questionnaire | | | |
|---|---|---|---|
| **2a. Which of the following best describes the title of your primary nursing job?** | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Nurse Educator | 6 | 1.4% | 1.5% |
| | Administration/Management | 52 | 12.0% | 12.8% |
| | Quality Assurance/Risk Management | 2 | 0.5% | 0.5% |
| | Direct Patient Care | 312 | 71.9% | 76.7% |
| | Infection Control | 1 | 0.2% | 0.2% |
| | Case Manager/Utilization Review | 7 | 1.6% | 1.7% |
| | Other | 22 | 5.1% | 5.4% |
| | Multiple Responses Chosen | 5 | 1.2% | 1.2% |
| | Total | 407 | 93.7% | 100.0% |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 4 | 0.9% | |
| | Total | 27 | 6.2% | |
| Total | | 434 | 100.0% | |

**Ambulatory in-State Questionnaire**

**2a. If your primary nursing job is direct patient care, what kind of direct patient care do you provide?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Cardiac Care | 9 | 2.1% | 2.8% |
| | Renal/Urology | 12 | 2.8% | 3.7% |
| | Neurology | 6 | 1.4% | 1.9% |
| | Pediatrics | 19 | 4.4% | 5.9% |
| | General Surgery | 46 | 10.6% | 14.2% |
| | General Medicine/Family Practice | 56 | 12.9% | 17.3% |
| | Cancer Care | 15 | 3.5% | 4.6% |
| | Orthopedics | 22 | 5.1% | 6.8% |
| | Respiratory | 1 | 0.2% | 0.3% |
| | Mental Health | 11 | 2.5% | 3.4% |
| | Women's Health | 30 | 6.9% | 9.3% |
| | Emergency Room | 2 | 0.5% | 0.6% |
| | Corrections | 3 | 0.7% | 0.9% |
| | Allergies/Asthma | 5 | 1.2% | 1.5% |
| | Dermatology | 7 | 1.6% | 2.2% |
| | Anesthesia | 4 | 0.9% | 1.2% |
| | Assisted Living/LTC | 3 | 0.7% | 0.9% |
| | Home Health Care | 26 | 6.0% | 8.0% |
| | CCU/ICU | 2 | 0.5% | 0.6% |
| | PACU | 5 | 1.2% | 1.5% |
| | Med-Surg | 3 | 0.7% | 0.9% |
| | Gastrointestinal | 7 | 1.6% | 2.2% |
| | Float Pool | 5 | 1.2% | 1.5% |
| | Ophthalmology | 1 | 0.2% | 0.3% |
| | Urgent Care | 4 | 0.9% | 1.2% |
| | Public Health | 1 | 0.2% | 0.3% |
| | Other | 19 | 4.4% | 5.9% |
| | Total | 324 | 74.6% | 100.0% |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | Skip | 87 | 20.0% | |
| | Total | 110 | 25.3% | |
| Total | | 434 | 99.9% | |

Total does not equal 100.0% due to rounding.

**Ambulatory in-State Questionnaire**

**2b. Are you a nurse practitioner?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Not a Nurse Practitioner | 348 | 80.2% | 85.3% |
| | Nurse Anesthetist | 6 | 1.4% | 1.5% |
| | Family Nurse Practitioner | 34 | 7.8% | 8.3% |
| | Other | 20 | 4.6% | 4.9% |
| | Total | 408 | 94.0% | 100.0% |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 3 | 0.7% | |
| | Total | 26 | 6.0% | |
| **Total** | | | | |

**Ambulatory in-State Questionnaire**

**4. Which of the following best describes your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Ambulatory Healthcare | 335 | 77.2% | 82.5% |
| | Hospitals | 39 | 9.0% | 9.6% |
| | Long-Term Care | 12 | 2.8% | 3.0% |
| | Other | 20 | 4.6% | 4.9% |
| | Total | 406 | 93.5% | 100.0% |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | Total | 28 | 6.4% | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**6. Do you plan to leave employment with your primary facility within the next 12 months?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 74 | 17.1% | 18.1% |
| | No | 334 | 77.0% | 81.9% |
| | Total | 408 | 94.0% | 100.0% |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 3 | 0.7% | |
| | Total | 26 | 6.0% | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**7. If you answered YES to planning to leave in the next 12 months, what is your primary reason for leaving?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Taking Another Job in Healthcare | 26 | 6.0% | 35.1% |
|  | Taking Another Job Outside Healthcare | 4 | 0.9% | 5.4% |
|  | Family Status Change | 5 | 1.2% | 6.8% |
|  | Relocating | 12 | 2.8% | 16.2% |
|  | Continuing Education | 3 | 0.7% | 4.1% |
|  | Retiring | 8 | 1.8% | 10.8% |
|  | Other | 16 | 3.7% | 21.6% |
|  | Total | 74 | 17.0% | 100.0% |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | Skip | 332 | 76.5% |  |
|  | No Answer | 5 | 1.2% |  |
|  | Total | 360 | 82.9% |  |
| Total |  | 434 | 100.0% |  |

**Ambulatory in-State Questionnaire**

**8. When do you plan to retire from your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | More Than 1 Year But Less Than 3 | 39 | 9.0% | 10.1% |
|  | More Than 3 Years But Less Than 5 | 27 | 6.2% | 7.0% |
|  | More Than 5 Years | 190 | 43.8% | 49.2% |
|  | Don't Know | 130 | 29.9% | 33.7% |
|  | Total | 386 | 88.9% | 100.0% |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | Skip | 10 | 2.3% |  |
|  | No Answer | 15 | 3.5% |  |
|  | Total | 48 | 11.0% |  |
| Total |  | 434 | 100.0% |  |

**Ambulatory in-State Questionnaire**

**9. Do you plan to continue working as a nurse after retiring from your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 92 | 21.2% | 22.9% |
|  | No | 90 | 20.7% | 22.4% |
|  | Don't Know | 219 | 50.5% | 54.6% |
|  | **Total** | **401** | **92.4%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | Skip | 1 | 0.2% |  |
|  | No Answer | 9 | 2.1% |  |
|  | **Total** | **33** | **7.6%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**10. If you have a second job, is it in nursing?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 69 | 15.9% | 17.1% |
|  | No | 303 | 69.8% | 75.2% |
|  | Second Job Not in Nursing | 31 | 7.1% | 7.7% |
|  | Total | 403 | 92.8% | 100.0% |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 8 | 1.8% |  |
|  | Total | 31 | 7.1% |  |
| Total |  |  |  |  |

**Ambulatory in-State Questionnaire**

**11. Which of the following best describes the position title of your secondary nursing job?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Direct Patient Care | 44 | 10.1% | 59.5% |
|  | Administration/Management | 1 | 0.2% | 1.4% |
|  | Nurse Educator | 2 | 0.5% | 2.7% |
|  | Researcher/Consultant | 2 | 0.5% | 2.7% |
|  | Nurse Practitioner | 9 | 2.1% | 12.2% |
|  | Other | 14 | 3.2% | 18.9% |
|  | Don't Know | 2 | 0.5% | 2.7% |
|  | Total | 74 | 17.0% | 100.0% |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | Skip | 327 | 75.3% |  |
|  | No Answer | 10 | 2.3% |  |
|  | Total | 360 | 82.9% |  |
| Total |  | 434 | 100.0% |  |

**Ambulatory in-State Questionnaire**

**12. Which of the following best describes your secondary work environment?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Ambulatory Healthcare | 42 | 9.7% | 58.3% |
|  | Hospitals | 12 | 2.8% | 16.7% |
|  | Long-Term Care | 5 | 1.2% | 6.9% |
|  | Other | 13 | 3.0% | 18.1% |
|  | **Total** | **72** | **16.6%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | Skip | 327 | 75.3% |  |
|  | No Answer | 10 | 2.3% |  |
|  | Don't Know | 2 | 0.5% |  |
|  | **Total** | **362** | **83.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

| Ambulatory in-State Questionnaire | | | |
|---|---|---|---|
| **13. How would you rate your overall satisfaction with your primary facility?** | | | |
| | | **Frequency** | **%** | **Valid %** |

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 1.6% | 1.7% |
| | Dissatisfied | 25 | 5.8% | 6.2% |
| | Neither Satisfied Nor Dissatisfied | 60 | 13.8% | 14.8% |
| | Satisfied | 196 | 45.2% | 48.3% |
| | Very Satisfied | 118 | 27.2% | 29.1% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

| Ambulatory in-State Questionnaire | | | |
|---|---|---|---|
| **14. How would you rate your satisfaction with your base salary at your primary facility?** | | | |

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 39 | 9.0% | 9.7% |
| | Dissatisfied | 100 | 23.0% | 24.9% |
| | Neither Satisfied Nor Dissatisfied | 76 | 17.5% | 18.9% |
| | Satisfied | 136 | 31.3% | 33.8% |
| | Very Satisfied | 51 | 11.8% | 12.7% |
| | **Total** | **402** | **92.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 9 | 2.1% | |
| | **Total** | **32** | **7.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**15. How would you rate your satisfaction with the salary range for your position at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 41 | 9.4% | 10.1% |
| | Dissatisfied | 102 | 23.5% | 25.2% |
| | Neither Satisfied Nor Dissatisfied | 87 | 20.0% | 21.5% |
| | Satisfied | 119 | 27.4% | 29.4% |
| | Very Satisfied | 44 | 10.1% | 10.9% |
| | Not Applicable | 12 | 2.8% | 3.0% |
| | **Total** | **405** | **93.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 6 | 1.4% | |
| | **Total** | **29** | **6.7%** | |
| **Total** | | **434** | **99.9%** | |

Total does not equal 100.0% due to rounding.

**Ambulatory in-State Questionnaire**

**16. How would you rate your satisfaction with the employee benefits at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 35 | 8.1% | 8.6% |
| | Dissatisfied | 79 | 18.2% | 19.5% |
| | Neither Satisfied Nor Dissatisfied | 72 | 16.6% | 17.8% |
| | Satisfied | 109 | 25.1% | 26.9% |
| | Very Satisfied | 81 | 18.7% | 20.0% |
| | Not Applicable | 29 | 6.7% | 7.2% |
| | **Total** | **405** | **93.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 6 | 1.4% | |
| | **Total** | **29** | **6.7%** | |
| **Total** | | **434** | **100.0%** | |

Appendix B:
Frequency Tables

**Ambulatory in-State Questionnaire**

**17. How would you rate your satisfaction with the skill of RNs where you work?**

| | | Frequency | % | Valid % |
|---|---|---:|---:|---:|
| Valid | Very Dissatisfied | 4 | 0.9% | 1.0% |
| | Dissatisfied | 23 | 5.3% | 5.7% |
| | Neither Satisfied Nor Dissatisfied | 58 | 13.4% | 14.3% |
| | Satisfied | 168 | 38.7% | 41.5% |
| | Very Satisfied | 112 | 25.8% | 27.7% |
| | Not Applicable | 40 | 9.2% | 9.9% |
| | **Total** | **405** | **93.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 6 | 1.4% | |
| | **Total** | **29** | **6.7%** | |
| **Total** | | **434** | **99.9%**[a] | |

[a]Total does not equal 100.0% due to rounding.

**Ambulatory in-State Questionnaire**

**18. How would you rate your satisfaction with the adequacy of RN staffing where you work?**

| | | Frequency | % | Valid % |
|---|---|---:|---:|---:|
| Valid | Very Dissatisfied | 23 | 5.3% | 5.7% |
| | Dissatisfied | 60 | 13.8% | 14.9% |
| | Neither Satisfied Nor Dissatisfied | 74 | 17.1% | 18.4% |
| | Satisfied | 128 | 29.5% | 31.8% |
| | Very Satisfied | 81 | 18.7% | 20.1% |
| | Not Applicable | 36 | 8.3% | 9.0% |
| | **Total** | **402** | **92.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 9 | 2.1% | |
| | Total | 32 | 7.4% | |
| **Total** | | **434** | **100.0%** | |

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**Ambulatory in-State Questionnaire**

**19. How would you rate your satisfaction with the adequacy of clerical support services at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 13 | 3.0% | 3.2% |
|  | Dissatisfied | 59 | 13.6% | 14.6% |
|  | Neither Satisfied Nor Dissatisfied | 93 | 21.4% | 23.0% |
|  | Satisfied | 152 | 35.0% | 37.5% |
|  | Very Satisfied | 83 | 19.1% | 20.5% |
|  | Not Applicable | 5 | 1.2% | 1.2% |
|  | **Total** | **405** | **93.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 6 | 1.4% |  |
|  | **Total** | **29** | **6.7%** |  |
| **Total** |  | **434** | **100.0%** |  |

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**Ambulatory in-State Questionnaire**

**20. How would you rate your satisfaction with the non-nursing tasks required of you at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 18 | 4.1% | 4.5% |
|  | Dissatisfied | 64 | 14.7% | 16.0% |
|  | Neither Satisfied Nor Dissatisfied | 122 | 28.1% | 30.5% |
|  | Satisfied | 135 | 31.1% | 33.8% |
|  | Very Satisfied | 27 | 6.2% | 6.8% |
|  | Not Applicable | 34 | 7.8% | 8.5% |
|  | **Total** | **400** | **92.1%** |  |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 11 | 2.5% |  |
|  | **Total** | **34** | **7.8%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**21. How would you rate your satisfaction with the amount of paperwork required of you at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 43 | 9.9% | 10.6% |
| | Dissatisfied | 91 | 21.0% | 22.5% |
| | Neither Satisfied Nor Dissatisfied | 115 | 26.5% | 28.5% |
| | Satisfied | 129 | 29.7% | 31.9% |
| | Very Satisfied | 24 | 5.5% | 5.9% |
| | Not Applicable | 2 | 0.5% | 0.5% |
| | **Total** | **404** | **93.1%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 7 | 1.6% | |
| | **Total** | **30** | **6.9%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**22. How would you rate your satisfaction with your physical work environment?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 1.6% | 1.7% |
| | Dissatisfied | 16 | 3.7% | 4.0% |
| | Neither Satisfied Nor Dissatisfied | 81 | 18.7% | 20.1% |
| | Satisfied | 184 | 42.4% | 45.8% |
| | Very Satisfied | 110 | 25.3% | 27.4% |
| | Not Applicable | 4 | 0.9% | 1.0% |
| | **Total** | **402** | **92.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 9 | 2.1% | |
| | **Total** | **32** | **7.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**23. How would you rate your satisfaction with the level of personal safety at the facility where you work?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 9 | 2.1% | 2.2% |
| | Dissatisfied | 15 | 3.5% | 3.7% |
| | Neither Satisfied Nor Dissatisfied | 49 | 11.3% | 12.1% |
| | Satisfied | 162 | 37.3% | 40.0% |
| | Very Satisfied | 167 | 38.5% | 41.2% |
| | Not Applicable | 3 | 0.7% | 0.7% |
| | **Total** | **405** | **93.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 6 | 1.4% | |
| | **Total** | **29** | **6.7%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**24. How would you rate your satisfaction with your work schedule at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 9 | 2.1% | 2.2% |
| | Dissatisfied | 26 | 6.0% | 6.4% |
| | Neither Satisfied Nor Dissatisfied | 42 | 9.7% | 10.3% |
| | Satisfied | 163 | 37.5% | 40.1% |
| | Very Satisfied | 166 | 38.2% | 40.9% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

Appendix B:
Frequency Tables

**Ambulatory in-State Questionnaire**

**25. How would you rate your satisfaction with job security at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 1.6% | 1.7% |
| | Dissatisfied | 24 | 5.5% | 5.9% |
| | Neither Satisfied Nor Dissatisfied | 57 | 13.1% | 14.1% |
| | Satisfied | 145 | 33.4% | 35.8% |
| | Very Satisfied | 171 | 39.4% | 42.2% |
| | Not Applicable | 1 | 0.2% | 0.2% |
| | **Total** | **405** | **93.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 6 | 1.4% | |
| | **Total** | **29** | **6.7%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**26. How would you rate the opportunities for advancement at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 26 | 6.0% | 6.4% |
| | Dissatisfied | 86 | 19.8% | 21.2% |
| | Neither Satisfied Nor Dissatisfied | 111 | 25.6% | 27.3% |
| | Satisfied | 99 | 22.8% | 24.4% |
| | Very Satisfied | 42 | 9.7% | 10.3% |
| | Not Applicable | 42 | 9.7% | 10.3% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**27. How would you rate your satisfaction with support from the nurses with whom you work at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 5 | 1.2% | 1.2% |
|  | Dissatisfied | 27 | 6.2% | 6.7% |
|  | Neither Satisfied Nor Dissatisfied | 48 | 11.1% | 11.8% |
|  | Satisfied | 148 | 34.1% | 36.5% |
|  | Very Satisfied | 138 | 31.8% | 34.0% |
|  | Not Applicable | 40 | 9.2% | 9.9% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**28. How would you rate your satisfaction with support from your nursing administration at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 28 | 6.5% | 9.1% |
|  | Dissatisfied | 45 | 10.4% | 14.6% |
|  | Neither Satisfied Nor Dissatisfied | 57 | 13.1% | 18.4% |
|  | Satisfied | 93 | 21.4% | 30.1% |
|  | Very Satisfied | 85 | 19.6% | 27.5% |
|  | Don't Know | 1 | 0.2% | 0.3% |
|  | **Total** | **309** | **71.2%** | **100.0%** |
| Missing | Not Applicable | 96 | 22.1% |  |
|  | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 6 | 1.4% |  |
|  | **Total** | **125** | **28.8%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**29. How would you rate your satisfaction with interactions with physicians at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 5 | 1.2% | 1.2% |
| | Dissatisfied | 32 | 7.4% | 7.9% |
| | Neither Satisfied Nor Dissatisfied | 65 | 15.0% | 16.0% |
| | Satisfied | 150 | 34.6% | 37.0% |
| | Very Satisfied | 147 | 33.9% | 36.3% |
| | Not Applicable | 6 | 1.4% | 1.5% |
| | **Total** | **405** | **93.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 6 | 1.4% | |
| | **Total** | **29** | **6.7%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**30. How would you rate your satisfaction with interactions with other non-nursing staff at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 0.7% | 0.7% |
| | Dissatisfied | 22 | 5.1% | 5.4% |
| | Neither Satisfied Nor Dissatisfied | 62 | 14.3% | 15.3% |
| | Satisfied | 190 | 43.8% | 46.8% |
| | Very Satisfied | 125 | 28.8% | 30.8% |
| | Not Applicable | 4 | 0.9% | 1.0% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**31. How would you rate your satisfaction with interactions with traveling agency staff at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 2 | 0.5% | 0.5% |
|  | Dissatisfied | 5 | 1.2% | 1.2% |
|  | Neither Satisfied Nor Dissatisfied | 38 | 8.8% | 9.4% |
|  | Satisfied | 42 | 9.7% | 10.4% |
|  | Very Satisfied | 13 | 3.0% | 3.2% |
|  | Not Applicable | 303 | 69.8% | 74.8% |
|  | Don't Know | 2 | 0.5% | 0.5% |
|  | **Total** | **405** | **93.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 6 | 1.4% |  |
|  | **Total** | **29** | **6.7%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**32. How would you rate your satisfaction with patient interactions at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 1 | 0.2% | 0.2% |
|  | Dissatisfied | 2 | 0.5% | 0.5% |
|  | Neither Satisfied Nor Dissatisfied | 26 | 6.0% | 6.4% |
|  | Satisfied | 140 | 32.3% | 34.6% |
|  | Very Satisfied | 232 | 53.4% | 57.3% |
|  | Not Applicable | 4 | 0.9% | 1.0% |
|  | **Total** | **405** | **93.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 6 | 1.4% |  |
|  | **Total** | **29** | **6.7%** |  |
| **Total** |  | **434** | **100.0%** |  |

Appendix B:
Frequency Tables

**Ambulatory in-State Questionnaire**

**33. How would you rate your satisfaction with the time available for patient education at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 14 | 3.2% | 3.5% |
| | Dissatisfied | 73 | 16.8% | 18.0% |
| | Neither Satisfied Nor Dissatisfied | 90 | 20.7% | 22.2% |
| | Satisfied | 157 | 36.2% | 38.8% |
| | Very Satisfied | 63 | 14.5% | 15.6% |
| | Not Applicable | 8 | 1.8% | 2.0% |
| | **Total** | **405** | **93.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 6 | 1.4% | |
| | **Total** | **29** | **6.7%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**34. How would you rate your satisfaction with your involvement in policy and management decisions at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 31 | 7.1% | 7.7% |
| | Dissatisfied | 66 | 15.2% | 16.3% |
| | Neither Satisfied Nor Dissatisfied | 110 | 25.3% | 27.2% |
| | Satisfied | 121 | 27.9% | 29.9% |
| | Very Satisfied | 55 | 12.7% | 13.6% |
| | Not Applicable | 22 | 5.1% | 5.4% |
| | **Total** | **405** | **93.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 6 | 1.4% | |
| | **Total** | **29** | **6.7%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**35. How would you rate your satisfaction with the opportunities to use your skills at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 8 | 1.8% | 2.0% |
|  | Dissatisfied | 32 | 7.4% | 7.9% |
|  | Neither Satisfied Nor Dissatisfied | 76 | 17.5% | 18.7% |
|  | Satisfied | 177 | 40.8% | 43.6% |
|  | Very Satisfied | 113 | 26.0% | 27.8% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**36. How would you rate your satisfaction with the opportunities to learn new skills at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 9 | 2.1% | 2.2% |
|  | Dissatisfied | 49 | 11.3% | 12.1% |
|  | Neither Satisfied Nor Dissatisfied | 103 | 23.7% | 25.4% |
|  | Satisfied | 145 | 33.4% | 35.7% |
|  | Very Satisfied | 98 | 22.6% | 24.1% |
|  | Not Applicable | 2 | 0.5% | 0.5% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

Appendix B:
Frequency Tables

**Ambulatory in-State Questionnaire**

**37. How would you rate your satisfaction with the opportunities for continuing education at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 26 | 6.0% | 6.4% |
|  | Dissatisfied | 76 | 17.5% | 18.7% |
|  | Neither Satisfied Nor Dissatisfied | 103 | 23.7% | 25.4% |
|  | Satisfied | 120 | 27.6% | 29.6% |
|  | Very Satisfied | 75 | 17.3% | 18.5% |
|  | Not Applicable | 6 | 1.4% | 1.5% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**38. How would you rate your satisfaction with the quality of patient care at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 1.6% | 1.7% |
|  | Dissatisfied | 12 | 2.8% | 3.0% |
|  | Neither Satisfied Nor Dissatisfied | 38 | 8.8% | 9.4% |
|  | Satisfied | 154 | 35.5% | 37.9% |
|  | Very Satisfied | 190 | 43.8% | 46.8% |
|  | Not Applicable | 5 | 1.2% | 1.2% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**39. How would you rate your satisfaction with the feeling that your work is important at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 12 | 2.8% | 3.0% |
|  | Dissatisfied | 9 | 2.1% | 2.3% |
|  | Neither Satisfied Nor Dissatisfied | 39 | 9.0% | 9.8% |
|  | Satisfied | 146 | 33.6% | 36.7% |
|  | Very Satisfied | 192 | 44.2% | 48.2% |
|  | **Total** | **398** | **91.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 13 | 3.0% |  |
|  | **Total** | **36** | **8.3%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**40. How would you rate your satisfaction with other issues at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 9 | 2.1% | 24.3% |
|  | Dissatisfied | 1 | 0.2% | 2.7% |
|  | Neither Satisfied Nor Dissatisfied | 4 | 0.9% | 10.8% |
|  | Satisfied | 6 | 1.4% | 16.2% |
|  | Very Satisfied | 9 | 2.1% | 24.3% |
|  | Not Applicable | 6 | 1.4% | 16.2% |
|  | Don't Know | 2 | 0.5% | 5.4% |
|  | **Total** | **37** | **8.5%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 374 | 86.2% |  |
|  | **Total** | **397** | **91.5%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**41. How would you rate the statement "Generally speaking, I am very satisfied with nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 8 | 1.8% | 2.0% |
| | Disagree | 42 | 9.7% | 10.4% |
| | Neither Agree Nor Disagree | 77 | 17.7% | 19.1% |
| | Agree | 171 | 39.4% | 42.3% |
| | Strongly Agree | 106 | 24.4% | 26.2% |
| | **Total** | **404** | **93.1%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 7 | 1.6% | |
| | **Total** | **30** | **6.9%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**42. How would you rate the statement "I frequently think of quitting nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 135 | 31.1% | 33.4% |
| | Disagree | 101 | 23.3% | 25.0% |
| | Neither Agree Nor Disagree | 64 | 14.7% | 15.8% |
| | Agree | 72 | 16.6% | 17.8% |
| | Strongly Agree | 31 | 7.1% | 7.7% |
| | Don't Know | 1 | 0.2% | 0.2% |
| | **Total** | **404** | **93.1%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 7 | 1.6% | |
| | **Total** | **30** | **6.9%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**43. How would you rate the statement "I am generally satisfied with the kind of work I do in nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 5 | 1.2% | 1.2% |
| | Disagree | 19 | 4.4% | 4.7% |
| | Neither Agree Nor Disagree | 57 | 13.1% | 14.1% |
| | Agree | 193 | 44.5% | 47.8% |
| | Strongly Agree | 130 | 29.9% | 32.2% |
| | **Total** | **404** | **93.1%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 7 | 1.6% | |
| | **Total** | **30** | **6.9%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**44. How would you rate the statement "Most people on this job are satisfied with nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 13 | 3.0% | 3.2% |
| | Disagree | 51 | 11.8% | 12.7% |
| | Neither Agree Nor Disagree | 108 | 24.9% | 26.8% |
| | Agree | 156 | 35.9% | 38.7% |
| | Strongly Agree | 47 | 10.8% | 11.7% |
| | Don't Know | 28 | 6.5% | 6.9% |
| | **Total** | **403** | **92.8%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 8 | 1.8% | |
| | **Total** | **31** | **7.1%** | |
| **Total** | | **434** | **100.0%** | |

Appendix B:
Frequency Tables

**Ambulatory in-State Questionnaire**

**45. How would you rate the statement "People in this job often think of quitting nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 70 | 16.1% | 17.4% |
| | Disagree | 106 | 24.4% | 26.3% |
| | Neither Agree Nor Disagree | 81 | 18.7% | 20.1% |
| | Agree | 66 | 15.2% | 16.4% |
| | Strongly Agree | 25 | 5.8% | 6.2% |
| | Don't Know | 55 | 12.7% | 13.6% |
| | **Total** | **403** | **92.8%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 8 | 1.8% | |
| | **Total** | **31** | **7.1%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**46. I would not leave nursing.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 106 | 24.4% | 26.1% |
| | Not Checked | 300 | 69.1% | 73.9% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I feel burned out from nursing.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 112 | 25.8% | 27.6% |
| | Not Checked | 294 | 67.7% | 72.4% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I feel unsupported as a nurse.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 74 | 17.1% | 18.2% |
| | Not Checked | 332 | 76.5% | 81.8% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I am concerned with the quality of care.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 78 | 18.0% | 19.2% |
| | Not Checked | 328 | 75.6% | 80.8% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing for a better salary outside nursing.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 86 | 19.8% | 21.2% |
| | Not Checked | 320 | 73.7% | 78.8% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Appendix B:
Frequency Tables**

**Ambulatory in-State Questionnaire**

**46. I would leave nursing for better management support.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 48 | 11.1% | 11.8% |
|  | Not Checked | 358 | 82.5% | 88.2% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing for better advancement opportunities.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 25 | 5.8% | 6.2% |
|  | Not Checked | 381 | 87.8% | 93.8% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I am concerned with delegation to unlicensed assistive personnel.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 63 | 14.5% | 15.5% |
|  | Not Checked | 343 | 79.0% | 84.5% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I feel overworked.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 113 | 26.0% | 27.8% |
| | Not Checked | 293 | 67.5% | 72.2% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I am concerned with injury to patients.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 32 | 7.4% | 7.9% |
| | Not Checked | 374 | 86.2% | 92.1% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I need more autonomy.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 17 | 3.9% | 4.2% |
| | Not Checked | 389 | 89.6% | 95.8% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

Appendix B:
Frequency Tables

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I need more respect.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 68 | 15.7% | 16.7% |
|  | Not Checked | 338 | 77.9% | 83.3% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I plan to retire.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 99 | 22.8% | 24.4% |
|  | Not Checked | 307 | 70.7% | 75.6% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing for a better work schedule outside nursing.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 50 | 11.5% | 12.3% |
|  | Not Checked | 356 | 82.0% | 87.7% |
|  | **Total** | **406** | **93.5%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% |  |
|  | No Answer | 5 | 1.2% |  |
|  | **Total** | **28** | **6.4%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I am concerned with injury to self.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 31 | 7.1% | 7.6% |
| | Not Checked | 375 | 86.4% | 92.4% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing because I seek more challenging work.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 19 | 4.4% | 4.7% |
| | Not Checked | 387 | 89.2% | 95.3% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**46. I would leave nursing for some other reason.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 50 | 11.5% | 12.3% |
| | Not Checked | 356 | 82.0% | 87.7% |
| | **Total** | **406** | **93.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 23 | 5.3% | |
| | No Answer | 5 | 1.2% | |
| | **Total** | **28** | **6.4%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**50. What is your marital status?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Married or Cohabitating | 357 | 82.3% | 82.3% |
|  | Single | 21 | 4.8% | 4.8% |
|  | Divorced | 49 | 11.3% | 11.3% |
|  | Widowed | 7 | 1.6% | 1.6% |
|  | **Total** | **434** | **100.0%** | **100.0%** |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**51. What is the highest level of education your spouse or partner has completed?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Less Than High School | 7 | 1.6% | 2.0% |
|  | High School Grad or GED | 61 | 14.1% | 17.1% |
|  | Some College or Associates Degree | 106 | 24.4% | 29.8% |
|  | Bachelors Degree | 87 | 20.0% | 24.4% |
|  | Graduate or Professional Degree | 87 | 20.0% | 24.4% |
|  | Other | 8 | 1.8% | 2.2% |
|  | **Total** | **356** | **82.0%** | **100.0%** |
| Missing | Skip | 75 | 17.3% |  |
|  | No Answer | 3 | 0.7% |  |
|  | **Total** | **78** | **18.0%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**52. Was your spouse or partner employed during the reference period?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 320 | 73.7% | 90.1% |
|  | No | 35 | 8.1% | 9.9% |
|  | **Total** | **355** | **81.8%** | **100.0%** |
| Missing | Skip | 75 | 17.3% |  |
|  | No Answer | 4 | 0.9% |  |
|  | **Total** | **79** | **18.2%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**55. Do you have dependents living in your house?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 201 | 46.3% | 46.3% |
|  | No | 233 | 53.7% | 53.7% |
|  | **Total** | **434** | **100.0%** | **100.0%** |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**56. Do you provide care for your parents or your spouse/partner's parents?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 58 | 13.4% | 13.4% |
|  | No | 376 | 86.6% | 86.6% |
|  | **Total** | **434** | **100.0%** | **100.0%** |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**58. What was the total pre-tax income in your household in the past 12 months?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Less than $20,000 | 6 | 1.4% | 1.5% |
|  | $20,000 to $29,000 | 9 | 2.1% | 2.2% |
|  | $30,000 to $39,999 | 19 | 4.4% | 4.7% |
|  | $40,000 to $49,999 | 31 | 7.1% | 7.7% |
|  | $50,000 to $59,999 | 37 | 8.5% | 9.2% |
|  | $60,000 to $69,999 | 42 | 9.7% | 10.5% |
|  | $70,000 to $79,999 | 53 | 12.2% | 13.2% |
|  | $80,000 to $99,999 | 70 | 16.1% | 17.5% |
|  | $100,000 to $124,999 | 64 | 14.7% | 16.0% |
|  | $125,000 to $149,999 | 25 | 5.8% | 6.2% |
|  | $150,000 to $199,999 | 27 | 6.2% | 6.7% |
|  | $200,000 or more | 18 | 4.1% | 4.5% |
|  | **Total** | **401** | **92.3%** | **100.0%** |
| Missing | No Answer | 33 | 7.6% |  |
|  | **Total** | **33** | **7.6%** |  |
| **Total** |  | **434** | **99.9%** |  |

[a]Total does not equal 100.0% due to rounding.

**Ambulatory in-State Questionnaire**

**60. Of the following reasons, which one best describes why you live in your current community?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Existing Job | 57 | 13.1% | 13.2% |
|  | Proximity to School or Work | 8 | 1.8% | 1.9% |
|  | Spouse or Partner Job | 121 | 27.9% | 28.0% |
|  | Cost of Living/Affordable Housing | 19 | 4.4% | 4.4% |
|  | Proximity to Natural Amenities | 35 | 8.1% | 8.1% |
|  | Proximity to Family | 103 | 23.7% | 23.8% |
|  | Other | 54 | 12.4% | 12.5% |
|  | Multiple Reasons Chosen | 35 | 8.1% | 8.1% |
|  | **Total** | **432** | **99.5%** | **100.0%** |
| Missing | No Answer | 2 | 0.5% |  |
|  | **Total** | **2** | **0.5%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**61. How much do you agree or disagree with the following statement: "I am tied to this community and cannot leave."**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Agree | 64 | 14.7% | 14.7% |
|  | Agree | 108 | 24.9% | 24.9% |
|  | Neither Agree Nor Disagree | 126 | 29.0% | 29.0% |
|  | Disagree | 82 | 18.9% | 18.9% |
|  | Strongly Disagree | 54 | 12.4% | 12.4% |
|  | **Total** | **434** | **100.0%** | **100.0%** |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**62. How would you rate your current community for economic opportunities?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 25 | 5.8% | 5.9% |
|  | Dissatisfied | 108 | 24.9% | 25.4% |
|  | Neither Satisfied Nor Dissatisfied | 133 | 30.6% | 31.3% |
|  | Satisfied | 127 | 29.3% | 29.9% |
|  | Very Satisfied | 28 | 6.5% | 6.6% |
|  | Don't Know | 4 | 0.9% | 0.9% |
|  | **Total** | **425** | **97.9%** | **100.0%** |
| Missing | No Answer | 9 | 2.1% |  |
|  | **Total** | **9** | **2.1%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

### 63. How would you rate your current community for proximity to family?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 51 | 11.8% | 11.9% |
| | Dissatisfied | 49 | 11.3% | 11.5% |
| | Neither Satisfied Nor Dissatisfied | 72 | 16.6% | 16.9% |
| | Satisfied | 116 | 26.7% | 27.2% |
| | Very Satisfied | 133 | 30.6% | 31.1% |
| | Don't Know | 6 | 1.4% | 1.4% |
| | **Total** | **427** | **98.4%** | **100.0%** |
| Missing | No Answer | 7 | 1.6% | |
| | **Total** | **7** | **1.6%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

### 64. How would you rate your current community for cost of living?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 45 | 10.4% | 10.4% |
| | Dissatisfied | 104 | 24.0% | 24.0% |
| | Neither Satisfied Nor Dissatisfied | 109 | 25.1% | 25.2% |
| | Satisfied | 145 | 33.4% | 33.5% |
| | Very Satisfied | 30 | 6.9% | 6.9% |
| | **Total** | **433** | **99.8%** | **100.0%** |
| Missing | No Answer | 1 | 0.2% | |
| | **Total** | **1** | **0.2%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

### 65. How would you rate your current community for rural character?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 11 | 2.5% | 2.6% |
| | Dissatisfied | 14 | 3.2% | 3.3% |
| | Neither Satisfied Nor Dissatisfied | 106 | 24.4% | 24.7% |
| | Satisfied | 177 | 40.8% | 41.2% |
| | Very Satisfied | 115 | 26.5% | 26.7% |
| | Don't Know | 7 | 1.6% | 1.6% |
| | **Total** | **430** | **99.1%** | **100.0%** |
| Missing | No Answer | 4 | 0.9% | |
| | **Total** | **4** | **0.9%** | |
| **Total** | | **434** | **100.0%** | |

Appendix B:
Frequency Tables

**Ambulatory in-State Questionnaire**

**66. How would you rate your current community for urban character?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 32 | 7.4% | 7.6% |
|  | Dissatisfied | 52 | 12.0% | 12.4% |
|  | Neither Satisfied Nor Dissatisfied | 161 | 37.1% | 38.3% |
|  | Satisfied | 113 | 26.0% | 26.9% |
|  | Very Satisfied | 30 | 6.9% | 7.1% |
|  | Don't Know | 32 | 7.4% | 7.6% |
|  | **Total** | **420** | **96.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | No Answer | 14 | 3.2% |  |
|  | **Total** | **14** | **3.2%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**67. How would you rate your current community for housing?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 49 | 11.3% | 11.4% |
|  | Dissatisfied | 75 | 17.3% | 17.5% |
|  | Neither Satisfied Nor Dissatisfied | 97 | 22.4% | 22.6% |
|  | Satisfied | 155 | 35.7% | 36.1% |
|  | Very Satisfied | 51 | 11.8% | 11.9% |
|  | Don't Know | 2 | 0.5% | 0.5% |
|  | **Total** | **429** | **98.8%** | **100.0%** |
|  |  |  |  |  |
| Missing | No Answer | 5 | 1.2% |  |
|  | **Total** | **5** | **1.2%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**68. How would you rate your current community for public safety services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 11 | 2.5% | 2.6% |
| | Dissatisfied | 32 | 7.4% | 7.4% |
| | Neither Satisfied Nor Dissatisfied | 130 | 29.9% | 30.2% |
| | Satisfied | 196 | 45.2% | 45.6% |
| | Very Satisfied | 53 | 12.2% | 12.3% |
| | Don't Know | 8 | 1.8% | 1.9% |
| | **Total** | **430** | **99.1%** | **100.0%** |
| | | | | |
| Missing | No Answer | 4 | 0.9% | |
| | **Total** | **4** | **0.9%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**69. How would you rate your current community in terms of parks and recreation/natural amenities?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 5 | 1.2% | 1.2% |
| | Dissatisfied | 32 | 7.4% | 7.4% |
| | Neither Satisfied Nor Dissatisfied | 69 | 15.9% | 16.0% |
| | Satisfied | 187 | 43.1% | 43.4% |
| | Very Satisfied | 136 | 31.3% | 31.6% |
| | Don't Know | 2 | 0.5% | 0.5% |
| | **Total** | **431** | **99.3%** | **100.0%** |
| | | | | |
| Missing | No Answer | 3 | 0.7% | |
| | **Total** | **3** | **0.7%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**70. How would you rate your current community in terms of education (K-12)?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 11 | 2.5% | 2.6% |
| | Dissatisfied | 32 | 7.4% | 7.4% |
| | Neither Satisfied Nor Dissatisfied | 90 | 20.7% | 20.9% |
| | Satisfied | 171 | 39.4% | 39.8% |
| | Very Satisfied | 78 | 18.0% | 18.1% |
| | Don't Know | 48 | 11.1% | 11.2% |
| | **Total** | **430** | **99.1%** | **100.0%** |
| | | | | |
| Missing | No Answer | 4 | 0.9% | |
| | **Total** | **4** | **0.9%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**71. How would you rate your current community in terms of access to post-secondary education, including continuing education?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 29 | 6.7% | 6.7% |
| | Dissatisfied | 62 | 14.3% | 14.4% |
| | Neither Satisfied Nor Dissatisfied | 105 | 24.2% | 24.3% |
| | Satisfied | 158 | 36.4% | 36.6% |
| | Very Satisfied | 68 | 15.7% | 15.7% |
| | Don't Know | 10 | 2.3% | 2.3% |
| | **Total** | **432** | **99.5%** | **100.0%** |
| | | | | |
| Missing | No Answer | 2 | 0.5% | |
| | **Total** | **2** | **0.5%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**72. How would you rate your current community in terms of day care services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 25 | 5.8% | 6.0% |
| | Dissatisfied | 51 | 11.8% | 12.1% |
| | Neither Satisfied Nor Dissatisfied | 100 | 23.0% | 23.8% |
| | Satisfied | 35 | 8.1% | 8.3% |
| | Very Satisfied | 15 | 3.5% | 3.6% |
| | Don't Know | 194 | 44.7% | 46.2% |
| | **Total** | **420** | **96.8%** | **100.0%** |
| Missing | No Answer | 14 | 3.2% | |
| | **Total** | **14** | **3.2%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**73. How would you rate your current community in terms of medical care services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 36 | 8.3% | 8.3% |
| | Dissatisfied | 89 | 20.5% | 20.6% |
| | Neither Satisfied Nor Dissatisfied | 87 | 20.0% | 20.1% |
| | Satisfied | 166 | 38.2% | 38.4% |
| | Very Satisfied | 52 | 12.0% | 12.0% |
| | Don't Know | 2 | 0.5% | 0.5% |
| | **Total** | **432** | **99.5%** | **100.0%** |
| Missing | No Answer | 2 | 0.5% | |
| | **Total** | **2** | **0.5%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**74. How would you rate your current community in terms of mental care services?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 51 | 11.8% | 11.8% |
|  | Dissatisfied | 95 | 21.9% | 22.0% |
|  | Neither Satisfied Nor Dissatisfied | 105 | 24.2% | 24.4% |
|  | Satisfied | 68 | 15.7% | 15.8% |
|  | Very Satisfied | 19 | 4.4% | 4.4% |
|  | Don't Know | 93 | 21.4% | 21.6% |
|  | **Total** | **431** | **99.3%** | **100.0%** |
| Missing | No Answer | 3 | 0.7% |  |
|  | **Total** | **3** | **0.7%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**75. How would you rate your current community in terms of retail shopping?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 63 | 14.5% | 14.6% |
|  | Dissatisfied | 126 | 29.0% | 29.2% |
|  | Neither Satisfied Nor Dissatisfied | 112 | 25.8% | 26.0% |
|  | Satisfied | 107 | 24.6% | 24.8% |
|  | Very Satisfied | 21 | 4.8% | 4.9% |
|  | Don't Know | 2 | 0.5% | 0.5% |
|  | **Total** | **431** | **99.3%** | **100.0%** |
| Missing | No Answer | 3 | 0.7% |  |
|  | **Total** | **3** | **0.7%** |  |
| **Total** |  | **434** | **100.0%** |  |

**Ambulatory in-State Questionnaire**

**76. How would you rate your current community in terms of restaurants/ entertainment?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 39 | 9.0% | 9.0% |
| | Dissatisfied | 122 | 28.1% | 28.2% |
| | Neither Satisfied Nor Dissatisfied | 123 | 28.3% | 28.5% |
| | Satisfied | 116 | 26.7% | 26.9% |
| | Very Satisfied | 31 | 7.1% | 7.2% |
| | Don't Know | 1 | 0.2% | 0.2% |
| | **Total** | **432** | **99.5%** | **100.0%** |
| Missing | No Answer | 2 | 0.5% | |
| | **Total** | **2** | **0.5%** | |
| **Total** | | **434** | **100.0%** | |

**Ambulatory in-State Questionnaire**

**77. If given the opportunity, how likely would you be to move away from your current community?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Likely | 81 | 18.7% | 18.8% |
| | Likely | 104 | 24.0% | 24.1% |
| | Neither Likely Nor Unlikely | 62 | 14.3% | 14.4% |
| | Unlikely | 64 | 14.7% | 14.8% |
| | Very Unlikely | 107 | 24.6% | 24.8% |
| | Don't Know | 13 | 3.0% | 3.0% |
| | **Total** | **431** | **99.3%** | **100.0%** |
| Missing | No Answer | 3 | 0.7% | |
| | **Total** | **3** | **0.7%** | |
| **Total** | | **434** | **100.0%** | |

# Frequencies for Ambulatory Survey, Nurses Working Out-of-State During First and Second Quarter 2007

Frequency Missing = 28

| Ambulatory Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **1. What was your employment status as of the reference date?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Employed Full-Time | 17 | 47.2% | 47.2% |
| | Employed Part-Time | 7 | 19.4% | 19.4% |
| | Retired | 3 | 8.3% | 8.3% |
| | Not Working Outside Home | 4 | 11.1% | 11.1% |
| | Employed, Not in Nursing | 5 | 13.9% | 13.9% |
| | **Total** | **36** | **100.0%** | **100.0%** |
| **Total** | | **36** | **100.0%** | |

| Ambulatory Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **2a. Which of the following best describes the title of your primary nursing job?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Administration/Management | 1 | 2.8% | 2.9% |
| | Direct Patient Care | 21 | 58.3% | 60.0% |
| | Case Manager/Utilization Review | 1 | 2.8% | 2.9% |
| | Skip, Not Employed in Nursing | 12 | 33.3% | 34.3% |
| | **Total** | **35** | **97.2%** | **100.0%** |
| | | | | |
| Missing | No Answer | 1 | 2.8% | |
| | **Total** | **1** | **2.8%** | |
| **Total** | | **36** | **100.0%** | |

## Ambulatory Out-of-State Questionnaire

**2a. If your primary nursing job is direct patient care, what kind of direct patient care do you provide?**

|       |                                | Frequency | %     | Valid % |
|-------|--------------------------------|-----------|-------|---------|
| Valid | Cardiac Care                   | 1         | 2.8%  | 4.8%    |
|       | Neurology                      | 1         | 2.8%  | 4.8%    |
|       | General Surgery                | 3         | 8.3%  | 14.3%   |
|       | General Medicine/Family Practice | 4       | 11.1% | 19.0%   |
|       | Mental Health                  | 2         | 5.6%  | 9.5%    |
|       | Women's Health                 | 1         | 2.8%  | 4.8%    |
|       | Other                          | 5         | 13.9% | 23.8%   |
|       | Emergency Room                 | 2         | 5.6%  | 9.5%    |
|       | CCU/ICU                        | 1         | 2.8%  | 4.8%    |
|       | Med-Surg                       | 1         | 2.8%  | 4.8%    |
|       | **Total**                      | **21**    | **58.3%** | **100.0%** |
|       |                                |           |       |         |
| Missing | Skip, Not Employed in Nursing | 12       | 33.3% |         |
|       | Skip                           | 3         | 8.3%  |         |
|       | **Total**                      | **15**    | **41.7%** |     |
| **Total** |                            | **36**    | **99.9%** |     |

[a]Total does not equal 100.0% due to rounding.

## Ambulatory Out-of-State Questionnaire

**2b. Are you a nurse practitioner?**

|       |                           | Frequency | %     | Valid % |
|-------|---------------------------|-----------|-------|---------|
| Valid | Not a Nurse Practitioner  | 19        | 52.8% | 79.2%   |
|       | Family Nurse Practitioner | 4         | 11.1% | 16.7%   |
|       | Other                     | 1         | 2.8%  | 4.2%    |
|       | **Total**                 | **24**    | **66.6%** | **100.0%** |
|       |                           |           |       |         |
| Missing | Skip, Not Employed in Nursing | 12   | 33.3% |         |
|       | **Total**                 | **12**    | **33.3%** |     |
| **Total** |                       | **36**    | **100.0%** |    |

## Ambulatory Out-of-State Questionnaire

**4. Which of the following best describes your primary facility?**

|       |                       | Frequency | %     | Valid % |
|-------|-----------------------|-----------|-------|---------|
| Valid | Ambulatory Healthcare | 12        | 33.3% | 50.0%   |
|       | Hospitals             | 10        | 27.8% | 41.7%   |
|       | Long-Term Care        | 2         | 5.6%  | 8.3%    |
|       | **Total**             | **24**    | **66.6%** | **100.0%** |
|       |                       |           |       |         |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |         |
|       | **Total**             | **12**    | **33.3%** |     |
| **Total** |                   | **36**    | **100.0%** |    |

**Ambulatory Out-of-State Questionnaire**

**6. Do you plan to leave employment with your primary facility within the next 12 months?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 9 | 25.0% | 37.5% |
|  | No | 15 | 41.7% | 62.5% |
|  | **Total** | **24** | **66.7%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | **Total** | **12** | **33.3%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**7. If you answered YES to planning to leave in the next 12 months, what is your primary reason for leaving?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Taking Another Job in Healthcare | 2 | 5.6% | 22.2% |
|  | Taking Another Job Outside Healthcare | 1 | 2.8% | 11.1% |
|  | Relocating | 3 | 8.3% | 33.3% |
|  | Continuing Education | 1 | 2.8% | 11.1% |
|  | Other | 2 | 5.6% | 22.2% |
|  | **Total** | **9** | **25.0%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | Skip | 15 | 41.7% |  |
|  | **Total** | **27** | **75.0%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**8. When do you plan to retire from your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | More Than 1 Year But Less Than 3 | 2 | 5.6% | 8.7% |
|  | More Than 3 Years But Less Than 5 | 1 | 2.8% | 4.3% |
|  | More Than 5 Years | 12 | 33.3% | 52.2% |
|  | Don't Know | 8 | 22.2% | 34.8% |
|  | **Total** | **23** | **63.9%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | No Answer | 1 | 2.8% |  |
|  | **Total** | **13** | **36.1%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**9. Do you plan to continue working as a nurse after retiring from your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 6 | 16.7% | 46.2% |
| | No | 7 | 19.4% | 53.8% |
| | **Total** | **13** | **36.1%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | Don't Know | 11 | 30.6% | |
| | **Total** | **23** | **63.9%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**10. If you have a second job, is it in nursing?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 7 | 19.4% | 29.2% |
| | No | 15 | 41.7% | 62.5% |
| | Second Job Not in Nursing | 2 | 5.6% | 8.3% |
| | **Total** | **24** | **66.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | **Frequency Missing = 28** | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**11. Which of the following best describes the position title of your secondary nursing job?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Direct Patient Care | 2 | 5.6% | 28.6% |
| | Nurse Practitioner | 3 | 8.3% | 42.9% |
| | Other | 2 | 5.6% | 28.6% |
| | **Total** | **7** | **19.4%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | Skip | 15 | 41.7% | |
| | No Answer | 2 | 5.6% | |
| | **Total** | **29** | **80.5%** | |
| **Total** | | | | |

**Ambulatory Out-of-State Questionnaire**

**12. Which of the following best describes your secondary work environment?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Ambulatory Healthcare | 4 | 11.1% | 57.1% |
| | Hospitals | 1 | 2.8% | 14.3% |
| | Other | 2 | 5.6% | 28.6% |
| | **Total** | **7** | **19.4%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | Skip | 15 | 41.7% | |
| | No Answer | 2 | 5.6% | |
| | **Total** | **29** | **80.5%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**13. How would you rate your overall satisfaction with your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 2 | 5.6% | 8.7% |
| | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 30.4% |
| | Satisfied | 11 | 30.6% | 47.8% |
| | Very Satisfied | 3 | 8.3% | 13.0% |
| | **Total** | **23** | **63.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **13** | **36.1%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**14. How would you rate your satisfaction with your base salary at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 1 | 2.8% | 4.3% |
| | Dissatisfied | 6 | 16.7% | 26.1% |
| | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 30.4% |
| | Satisfied | 8 | 22.2% | 34.8% |
| | Very Satisfied | 1 | 2.8% | 4.3% |
| | **Total** | **23** | **63.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **13** | **36.1%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**15. How would you rate your satisfaction with the salary range for your position at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 7 | 19.4% | 30.4% |
|  | Neither Satisfied Nor Dissatisfied | 8 | 22.2% | 34.8% |
|  | Satisfied | 7 | 19.4% | 30.4% |
|  | Very Satisfied | 1 | 2.8% | 4.3% |
|  | **Total** | **23** | **63.9%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | No Answer | 1 | 2.8% |  |
|  | **Total** | **13** | **36.1%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**16. How would you rate your satisfaction with the employee benefits at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 1 | 2.8% | 5.0% |
|  | Dissatisfied | 3 | 8.3% | 15.0% |
|  | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 35.0% |
|  | Satisfied | 5 | 13.9% | 25.0% |
|  | Very Satisfied | 4 | 11.1% | 20.0% |
|  | **Total** | **20** | **55.5%** | **100.0%** |
|  |  |  |  |  |
| Missing | Not Applicable | 3 | 8.3% |  |
|  | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | No Answer | 1 | 2.8% |  |
|  | **Total** | **16** | **44.4%** |  |
| **Total** |  | **36** | **100.0%** |  |

Appendix B:
Frequency Tables

**Ambulatory Out-of-State Questionnaire**

**17. How would you rate your satisfaction with the skill of RNs where you work?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 4 | 11.1% | 18.2% |
| | Neither Satisfied Nor Dissatisfied | 4 | 11.1% | 18.2% |
| | Satisfied | 10 | 27.8% | 45.5% |
| | Very Satisfied | 4 | 11.1% | 18.2% |
| | **Total** | **22** | **61.1%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 2 | 5.6% | |
| | **Total** | **14** | **38.9%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**18. How would you rate your satisfaction with the adequacy of RN staffing where you work?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 8.3% | 13.6% |
| | Dissatisfied | 6 | 16.7% | 27.3% |
| | Neither Satisfied Nor Dissatisfied | 8 | 22.2% | 36.4% |
| | Satisfied | 2 | 5.6% | 9.1% |
| | Very Satisfied | 3 | 8.3% | 13.6% |
| | **Total** | **22** | **61.1%** | **100.0%** |
| | | | | |
| Missing | Not Applicable | 1 | 2.8% | |
| | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **14** | **38.9%** | |
| **Total** | | **36** | **100.0%** | |

| Ambulatory Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **19. How would you rate your satisfaction with the adequacy of clerical support services at your primary facility?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Very Dissatisfied | 1 | 2.8% | 4.3% |
| | Dissatisfied | 4 | 11.1% | 17.4% |
| | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 30.4% |
| | Satisfied | 9 | 25.0% | 39.1% |
| | Very Satisfied | 2 | 5.6% | 8.7% |
| | **Total** | **23** | **63.9%** | **100.0%** |
| | | | | |
| Missing | Not Applicable | 1 | 2.8% | |
| | Skip, Not Employed in Nursing | 11 | 30.6% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **13** | **36.1%** | |
| **Total** | | **36** | **100.0%** | |

| Ambulatory Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **20. How would you rate your satisfaction with the non-nursing tasks required of you at your primary facility?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Very Dissatisfied | 2 | 5.6% | 9.5% |
| | Dissatisfied | 4 | 11.1% | 19.0% |
| | Neither Satisfied Nor Dissatisfied | 10 | 27.8% | 47.6% |
| | Satisfied | 4 | 11.1% | 19.0% |
| | Very Satisfied | 1 | 2.8% | 4.8% |
| | **Total** | **21** | **58.3%** | **100.0%** |
| | | | | |
| Missing | Not Applicable | 2 | 5.6% | |
| | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **15** | **41.6%** | |
| **Total** | | **36** | **100.0%** | |

Appendix B:
Frequency Tables

**Ambulatory Out-of-State Questionnaire**

**21. How would you rate your satisfaction with the amount of paperwork required of you at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 2 | 5.6% | 8.7% |
|  | Dissatisfied | 7 | 19.4% | 30.4% |
|  | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 30.4% |
|  | Satisfied | 6 | 16.7% | 26.1% |
|  | Not Applicable | 1 | 2.8% | 4.3% |
|  | **Total** | **23** | **63.9%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | No Answer | 1 | 2.8% |  |
|  | **Total** | **13** | **36.1%** |  |
| Total |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**22. How would you rate your satisfaction with your physical work environment?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 4 | 11.1% | 17.4% |
|  | Neither Satisfied Nor Dissatisfied | 4 | 11.1% | 17.4% |
|  | Satisfied | 11 | 30.6% | 47.8% |
|  | Very Satisfied | 4 | 11.1% | 17.4% |
|  | **Total** | **23** | **63.9%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | No Answer | 1 | 2.8% |  |
|  | **Total** | **13** | **36.1%** |  |
| **Total** |  | **36** | **100.0%** |  |

## Ambulatory Out-of-State Questionnaire

**23. How would you rate your satisfaction with the level of personal safety at the facility where you work?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 4 | 11.1% | 17.4% |
| | Neither Satisfied Nor Dissatisfied | 5 | 13.9% | 21.7% |
| | Satisfied | 9 | 25.0% | 39.1% |
| | Very Satisfied | 5 | 13.9% | 21.7% |
| | **Total** | **23** | **63.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **13** | **36.1%** | |
| **Total** | | **36** | **100.0%** | |

## Ambulatory Out-of-State Questionnaire

**24. How would you rate your satisfaction with your work schedule at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 1 | 2.8% | 4.3% |
| | Neither Satisfied Nor Dissatisfied | 6 | 16.7% | 26.1% |
| | Satisfied | 8 | 22.2% | 34.8% |
| | Very Satisfied | 8 | 22.2% | 34.8% |
| | **Total** | **23** | **63.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **13** | **36.1%** | |
| **Total** | | **36** | **100.0%** | |

## Ambulatory Out-of-State Questionnaire

**25. How would you rate your satisfaction with job security at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 2 | 5.6% | 8.7% |
| | Neither Satisfied Nor Dissatisfied | 2 | 5.6% | 8.7% |
| | Satisfied | 9 | 25.0% | 39.1% |
| | Very Satisfied | 10 | 27.8% | 43.5% |
| | **Total** | **23** | **63.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **13** | **36.1%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**26. How would you rate the opportunities for advancement at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 2 | 5.6% | 9.5% |
| | Dissatisfied | 4 | 11.1% | 19.0% |
| | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 33.3% |
| | Satisfied | 7 | 19.4% | 33.3% |
| | Very Satisfied | 1 | 2.8% | 4.8% |
| | **Total** | **21** | **58.3%** | **100.0%** |
| | | | | |
| Missing | Not Applicable | 2 | 5.6% | |
| | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **15** | **41.6%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**27. How would you rate your satisfaction with support from the nurses with whom you work at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 4 | 11.1% | 18.2% |
| | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 31.8% |
| | Satisfied | 7 | 19.4% | 31.8% |
| | Very Satisfied | 4 | 11.1% | 18.2% |
| | **Total** | **22** | **61.1%** | **100.0%** |
| | | | | |
| Missing | Not Applicable | 1 | 2.8% | |
| | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **14** | **38.9%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**28. How would you rate your satisfaction with support from your nursing administration at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 1 | 2.8% | 4.8% |
|  | Dissatisfied | 8 | 22.2% | 38.1% |
|  | Neither Satisfied Nor Dissatisfied | 6 | 16.7% | 28.6% |
|  | Satisfied | 3 | 8.3% | 14.3% |
|  | Very Satisfied | 3 | 8.3% | 14.3% |
|  | **Total** | **21** | **58.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Not Applicable | 2 | 5.6% |  |
|  | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | No Answer | 1 | 2.8% |  |
|  | **Total** | **15** | **41.6%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**29. How would you rate your satisfaction with interactions with physicians at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 2 | 5.6% | 8.7% |
|  | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 30.4% |
|  | Satisfied | 9 | 25.0% | 39.1% |
|  | Very Satisfied | 5 | 13.9% | 21.7% |
|  | **Total** | **23** | **63.9%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | No Answer | 1 | 2.8% |  |
|  | **Total** | **13** | **36.1%** |  |
| **Total** |  | **36** | **100.0%** |  |

Appendix B:
Frequency Tables

**Ambulatory Out-of-State Questionnaire**

**30. How would you rate your satisfaction with interactions with other non-nursing staff at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 1 | 2.8% | 4.5% |
| | Neither Satisfied Nor Dissatisfied | 5 | 13.9% | 22.7% |
| | Satisfied | 13 | 36.1% | 59.1% |
| | Very Satisfied | 3 | 8.3% | 13.6% |
| | **Total** | **22** | **61.1%** | **100.0%** |
| | | | | |
| Missing | Not Applicable | 1 | 2.8% | |
| | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **14** | **38.9%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**31. How would you rate your satisfaction with interactions with traveling agency staff at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 2 | 5.6% | 16.7% |
| | Neither Satisfied Nor Dissatisfied | 6 | 16.7% | 50.0% |
| | Satisfied | 3 | 8.3% | 25.0% |
| | Don't Know | 1 | 2.8% | 8.3% |
| | **Total** | **12** | **33.3%** | **100.0%** |
| | | | | |
| Missing | Not Applicable | 11 | 30.6% | |
| | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **24** | **66.6%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**32. How would you rate your satisfaction with patient interactions at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Neither Satisfied Nor Dissatisfied | 2 | 5.6% | 9.1% |
| | Satisfied | 10 | 27.8% | 45.5% |
| | Very Satisfied | 10 | 27.8% | 45.5% |
| | **Total** | **22** | **61.1%** | **100.0%** |
| Missing | Not Applicable | 1 | 2.8% | |
| | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **14** | **38.9%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**33. How would you rate your satisfaction with the time available for patient education at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 7 | 19.4% | 31.8% |
| | Neither Satisfied Nor Dissatisfied | 8 | 22.2% | 36.4% |
| | Satisfied | 4 | 11.1% | 18.2% |
| | Very Satisfied | 3 | 8.3% | 13.6% |
| | **Total** | **22** | **61.1%** | **100.0%** |
| Missing | Not Applicable | 1 | 2.8% | |
| | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **14** | **38.9%** | |
| **Total** | | **36** | **100.0%** | |

Appendix B:
Frequency Tables

| Ambulatory Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **34. How would you rate your satisfaction with your involvement in policy and management decisions at your primary facility?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Very Dissatisfied | 1 | 2.8% | 4.5% |
| | Dissatisfied | 7 | 19.4% | 31.8% |
| | Neither Satisfied Nor Dissatisfied | 6 | 16.7% | 27.3% |
| | Satisfied | 6 | 16.7% | 27.3% |
| | Very Satisfied | 2 | 5.6% | 9.1% |
| | **Total** | **22** | **61.1%** | **100.0%** |
| | | | | |
| Missing | Not Applicable | 1 | 2.8% | |
| | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **14** | **38.9%** | |
| **Total** | | **36** | **100.0%** | |

| Ambulatory Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **35. How would you rate your satisfaction with the opportunities to use your skills at your primary facility?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Very Dissatisfied | 1 | 2.8% | 4.3% |
| | Dissatisfied | 2 | 5.6% | 8.7% |
| | Neither Satisfied Nor Dissatisfied | 3 | 8.3% | 13.0% |
| | Satisfied | 13 | 36.1% | 56.5% |
| | Very Satisfied | 4 | 11.1% | 17.4% |
| | **Total** | **23** | **63.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **13** | **36.1%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**36. How would you rate your satisfaction with the opportunities to learn new skills at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 2 | 5.6% | 8.7% |
| | Dissatisfied | 3 | 8.3% | 13.0% |
| | Neither Satisfied Nor Dissatisfied | 4 | 11.1% | 17.4% |
| | Satisfied | 11 | 30.6% | 47.8% |
| | Very Satisfied | 3 | 8.3% | 13.0% |
| | **Total** | **23** | **63.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **13** | **36.1%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**37. How would you rate your satisfaction with the opportunities for continuing education at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 6 | 16.7% | 27.3% |
| | Neither Satisfied Nor Dissatisfied | 5 | 13.9% | 22.7% |
| | Satisfied | 8 | 22.2% | 36.4% |
| | Very Satisfied | 3 | 8.3% | 13.6% |
| | **Total** | **22** | **61.1%** | **100.0%** |
| | | | | |
| Missing | Not Applicable | 1 | 2.8% | |
| | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **14** | **38.9%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**38. How would you rate your satisfaction with the quality of patient care at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 1 | 2.8% | 4.3% |
|  | Dissatisfied | 3 | 8.3% | 13.0% |
|  | Neither Satisfied Nor Dissatisfied | 5 | 13.9% | 21.7% |
|  | Satisfied | 9 | 25.0% | 39.1% |
|  | Very Satisfied | 5 | 13.9% | 21.7% |
|  | **Total** | **23** | **63.9%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | No Answer | 1 | 2.8% |  |
|  | **Total** | **13** | **36.1%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**39. How would you rate your satisfaction with the feeling that your work is important at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 2 | 5.6% | 8.7% |
|  | Neither Satisfied Nor Dissatisfied | 2 | 5.6% | 8.7% |
|  | Satisfied | 6 | 16.7% | 26.1% |
|  | Very Satisfied | 13 | 36.1% | 56.5% |
|  | **Total** | **23** | **63.9%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | No Answer | 1 | 2.8% |  |
|  | **Total** | **13** | **36.1%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**40. How would you rate your satisfaction with other issues at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Satisfied | 2 | 5.6% | 66.7% |
|  | Not Applicable | 1 | 2.8% | 33.3% |
|  | **Total** | **3** | **8.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | No Answer | 21 | 58.3% |  |
|  | Total | 33 | 91.7% |  |
| Total |  | 36 | 100.0% |  |

**Ambulatory Out-of-State Questionnaire**

**41. How would you rate the statement "Generally speaking, I am very satisfied with nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Disagree | 6 | 16.7% | 25.0% |
| | Neither Agree Nor Disagree | 5 | 13.9% | 20.8% |
| | Agree | 8 | 22.2% | 33.3% |
| | Strongly Agree | 5 | 13.9% | 20.8% |
| | **Total** | **24** | **66.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**42. How would you rate the statement "I frequently think of quitting nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 6 | 16.7% | 25.0% |
| | Disagree | 4 | 11.1% | 16.7% |
| | Neither Agree Nor Disagree | 7 | 19.4% | 29.2% |
| | Agree | 3 | 8.3% | 12.5% |
| | Strongly Agree | 4 | 11.1% | 16.7% |
| | **Total** | **24** | **66.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**43. How would you rate the statement "I am generally satisfied with the kind of work I do in nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Disagree | 3 | 8.3% | 13.0% |
| | Neither Agree Nor Disagree | 3 | 8.3% | 13.0% |
| | Agree | 10 | 27.8% | 43.5% |
| | Strongly Agree | 7 | 19.4% | 30.4% |
| | **Total** | **23** | **63.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | No Answer | 1 | 2.8% | |
| | **Total** | **13** | **36.1%** | |
| **Total** | | **36** | **100.0%** | |

Appendix B:
Frequency Tables

**Ambulatory Out-of-State Questionnaire**

**44. How would you rate the statement "Most people on this job are satisfied with nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | 2.8% | 4.2% |
| | Disagree | 4 | 11.1% | 16.7% |
| | Neither Agree Nor Disagree | 9 | 25.0% | 37.5% |
| | Agree | 8 | 22.2% | 33.3% |
| | Don't Know | 2 | 5.6% | 8.3% |
| | **Total** | **24** | **66.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**45. How would you rate the statement "People in this job often think of quitting nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | 2.8% | 4.2% |
| | Disagree | 9 | 25.0% | 37.5% |
| | Neither Agree Nor Disagree | 7 | 19.4% | 29.2% |
| | Agree | 2 | 5.6% | 8.3% |
| | Strongly Agree | 2 | 5.6% | 8.3% |
| | Don't Know | 3 | 8.3% | 12.5% |
| | **Total** | **24** | **66.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**46. I would not leave nursing.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 6 | 16.7% | 25.0% |
| | Not Checked | 18 | 50.0% | 75.0% |
| | **Total** | **24** | **66.7%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing because I feel burned out from nursing.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 8 | 22.2% | 33.3% |
| | Not Checked | 16 | 44.4% | 66.7% |
| | **Total** | **24** | **66.7%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing because I feel unsupported as a nurse.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 11 | 30.6% | 45.8% |
| | Not Checked | 13 | 36.1% | 54.2% |
| | **Total** | **24** | **66.7%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing because I am concerned with the quality of care.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 12 | 33.3% | 50.0% |
| | Not Checked | 12 | 33.3% | 50.0% |
| | **Total** | **24** | **66.7%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing for a better salary outside nursing.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 6 | 16.7% | 25.0% |
| | Not Checked | 18 | 50.0% | 75.0% |
| | **Total** | **24** | **66.7%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

Appendix B:
Frequency Tables

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing for better management support.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 2 | 5.6% | 8.3% |
|  | Not Checked | 22 | 61.1% | 91.7% |
|  | **Total** | **24** | **66.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | **Total** | **12** | **33.3%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing for better advancement opportunities.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 3 | 8.3% | 12.5% |
|  | Not Checked | 21 | 58.3% | 87.5% |
|  | **Total** | **24** | **66.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | **Total** | **12** | **33.3%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing because I am concerned with delegation to unlicensed assistive personnel.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 9 | 25.0% | 37.5% |
|  | Not Checked | 15 | 41.7% | 62.5% |
|  | **Total** | **24** | **66.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | **Total** | **12** | **33.3%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing because I feel overworked.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 9 | 25.0% | 37.5% |
|  | Not Checked | 15 | 41.7% | 62.5% |
|  | **Total** | **24** | **66.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | **Total** | **12** | **33.3%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing because I am concerned with injury to patients.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 5 | 13.9% | 20.8% |
|  | Not Checked | 19 | 52.8% | 79.2% |
|  | **Total** | **24** | **66.6%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | **Total** | **12** | **33.3%** |  |
| **Total** |  |  |  |  |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing because I need more autonomy.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 4 | 11.1% | 16.7% |
|  | Not Checked | 20 | 55.5% | 83.3% |
|  | **Total** | **24** | **66.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | **Total** | **12** | **33.3%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing because I need more respect.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 6 | 16.7% | 25.0% |
|  | Not Checked | 18 | 50.0% | 75.0% |
|  | **Total** | **24** | **66.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | **Total** | **12** | **33.3%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**46. I would leave nursing because I plan to retire.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 4 | 11.1% | 16.7% |
|  | Not Checked | 20 | 55.5% | 83.3% |
|  | **Total** | **24** | **66.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% |  |
|  | **Total** | **12** | **33.3%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

### 46. I would leave nursing for a better work schedule outside nursing.

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 3 | 8.3% | 12.5% |
| | Not Checked | 21 | 58.3% | 87.5% |
| | **Total** | **24** | **66.7%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

### 46. I would leave nursing because I am concerned with injury to self.

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 3 | 8.3% | 12.5% |
| | Not Checked | 21 | 58.3% | 87.5% |
| | **Total** | **24** | **66.7%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

### 46. I would leave nursing because I seek more challenging work.

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 1 | 2.8% | 4.2% |
| | Not Checked | 23 | 63.9% | 95.8% |
| | **Total** | **24** | **66.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

### 46. I would leave nursing for some other reason.

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Not Checked | 24 | 66.7% | 100.0% |
| | **Total** | **24** | **66.7%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 12 | 33.3% | |
| | **Total** | **12** | **33.3%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**50. What is your marital status?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Married or Cohabitating | 29 | 80.5% | 80.6% |
|  | Single | 5 | 13.9% | 13.9% |
|  | Widowed | 2 | 5.6% | 5.6% |
|  | **Total** | **36** | **100.0%** | **100.0%** |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**51. What is the highest level of education your spouse or partner has completed?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | High School Grad or GED | 4 | 11.1% | 13.8% |
|  | Some College or Associates Degree | 8 | 22.2% | 27.6% |
|  | Bachelors Degree | 13 | 36.1% | 44.8% |
|  | Graduate or Professional Degree | 4 | 11.1% | 13.8% |
|  | **Total** | **29** | **80.5%** | **100.0%** |
| Missing | Skip | 7 | 19.4% |  |
|  | **Total** | **7** | **19.4%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**52. Was your spouse or partner employed during the reference period?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 22 | 61.1% | 78.6% |
|  | No | 6 | 16.7% | 21.4% |
|  | **Total** | **28** | **77.8%** | **100.0%** |
| Missing | Skip | 7 | 19.4% |  |
|  | No Answer | 1 | 2.8% |  |
|  | **Total** | **8** | **22.2%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**55. Do you have dependents living in your house?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | No | 22 | 61.1% | 61.1% |
|  | Yes | 14 | 38.9% | 38.9% |
|  | **Total** | **36** | **100.0%** | **100.0%** |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

### 56. Do you provide care for your parents or your spouse/partner's parents?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 8 | 22.2% | 22.2% |
| | No | 28 | 77.8% | 77.8% |
| | **Total** | **36** | **100.0%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

### 58. What was the total pre-tax income in your household in the past 12 months?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Less than $20,000 | 1 | 2.8% | 3.0% |
| | $30,000 to $39,999 | 1 | 2.8% | 3.0% |
| | $40,000 to $49,999 | 2 | 5.6% | 6.1% |
| | $50,000 to $59,999 | 3 | 8.3% | 9.1% |
| | $60,000 to $69,999 | 2 | 5.6% | 6.1% |
| | $70,000 to $79,999 | 4 | 11.1% | 12.1% |
| | $80,000 to $99,999 | 11 | 30.6% | 33.3% |
| | $100,000 to $124,999 | 2 | 5.6% | 6.1% |
| | $125,000 to $149,999 | 4 | 11.1% | 12.1% |
| | $150,000 to $199,999 | 1 | 2.8% | 3.0% |
| | $200,000 or more | 2 | 5.6% | 6.1% |
| | **Total** | **33** | **91.6%** | **100.0%** |
| Missing | No Answer | 3 | 8.3% | |
| | **Total** | **3** | **8.3%** | |
| **Total** | | **36** | **99.9%** | |

[a]Total does not equal 100.0% due to rounding.

**Ambulatory Out-of-State Questionnaire**

### 60. Of the following reasons, which one best describes why you live in your current community?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Existing Job | 4 | 11.1% | 11.1% |
| | Spouse or Partner Job | 11 | 30.6% | 30.6% |
| | Cost of Living/Affordable Housing | 3 | 8.3% | 8.3% |
| | Proximity to Natural Amenities | 3 | 8.3% | 8.3% |
| | Proximity to Family | 6 | 16.7% | 16.7% |
| | Other | 6 | 16.7% | 16.7% |
| | Multiple Reasons Chosen | 3 | 8.3% | 8.3% |
| | **Total** | **36** | **100.0%** | **100.0%** |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**61. How much do you agree or disagree with the following statement: "I am tied to this community and cannot leave."**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Agree | 6 | 16.7% | 17.1% |
| | Agree | 5 | 13.9% | 14.3% |
| | Neither Agree Nor Disagree | 11 | 30.6% | 31.4% |
| | Disagree | 3 | 8.3% | 8.6% |
| | Strongly Disagree | 10 | 27.8% | 28.6% |
| | **Total** | **35** | **97.2%** | **100.0%** |
| | | | | |
| Missing | No Answer | 1 | 2.8% | |
| | **Total** | **1** | **2.8%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**62. How would you rate your current community for economic opportunities?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 5 | 13.9% | 14.3% |
| | Dissatisfied | 7 | 19.4% | 20.0% |
| | Neither Satisfied Nor Dissatisfied | 8 | 22.2% | 22.9% |
| | Satisfied | 9 | 25.0% | 25.7% |
| | Very Satisfied | 5 | 13.9% | 14.3% |
| | Don't Know | 1 | 2.8% | 2.9% |
| | **Total** | **35** | **97.2%** | **100.0%** |
| | | | | |
| Missing | No Answer | 1 | 2.8% | |
| | **Total** | **1** | **2.8%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**63. How would you rate your current community for proximity to family?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 8.3% | 8.6% |
| | Dissatisfied | 7 | 19.4% | 20.0% |
| | Neither Satisfied Nor Dissatisfied | 4 | 11.1% | 11.4% |
| | Satisfied | 13 | 36.1% | 37.1% |
| | Very Satisfied | 8 | 22.2% | 22.9% |
| | **Total** | **35** | **97.2%** | **100.0%** |
| | | | | |
| Missing | No Answer | 1 | 2.8% | |
| | **Total** | **1** | **2.8%** | |
| **Total** | | **36** | **100.0%** | |

Appendix B:
Frequency Tables

**Ambulatory Out-of-State Questionnaire**

### 64. How would you rate your current community for cost of living?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 5 | 13.9% | 14.3% |
|  | Dissatisfied | 6 | 16.7% | 17.1% |
|  | Neither Satisfied Nor Dissatisfied | 11 | 30.6% | 31.4% |
|  | Satisfied | 11 | 30.6% | 31.4% |
|  | Very Satisfied | 2 | 5.6% | 5.7% |
|  | **Total** | **35** | **97.2%** | **100.0%** |
|  |  |  |  |  |
| Missing | No Answer | 1 | 2.8% |  |
|  | **Total** | **1** | **2.8%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

### 65. How would you rate your current community for rural character?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 2 | 5.6% | 5.7% |
|  | Neither Satisfied Nor Dissatisfied | 6 | 16.7% | 17.1% |
|  | Satisfied | 16 | 44.4% | 45.7% |
|  | Very Satisfied | 10 | 27.8% | 28.6% |
|  | Don't Know | 1 | 2.8% | 2.9% |
|  | **Total** | **35** | **97.2%** | **100.0%** |
|  |  |  |  |  |
| Missing | No Answer | 1 | 2.8% |  |
|  | **Total** | **1** | **2.8%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

### 66. How would you rate your current community for urban character?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 5 | 13.9% | 14.3% |
|  | Dissatisfied | 3 | 8.3% | 8.6% |
|  | Neither Satisfied Nor Dissatisfied | 9 | 25.0% | 25.7% |
|  | Satisfied | 11 | 30.6% | 31.4% |
|  | Very Satisfied | 2 | 5.6% | 5.7% |
|  | Don't Know | 5 | 13.9% | 14.3% |
|  | **Total** | **35** | **97.2%** | **100.0%** |
|  |  |  |  |  |
| Missing | No Answer | 1 | 2.8% |  |
|  | **Total** | **1** | **2.8%** |  |
| **Total** |  | **36** | **100.0%** |  |

## Ambulatory Out-of-State Questionnaire

### 67. How would you rate your current community for housing?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 9 | 25.0% | 25.7% |
|  | Dissatisfied | 5 | 13.9% | 14.3% |
|  | Neither Satisfied Nor Dissatisfied | 5 | 13.9% | 14.3% |
|  | Satisfied | 10 | 27.8% | 28.6% |
|  | Very Satisfied | 5 | 13.9% | 14.3% |
|  | Don't Know | 1 | 2.8% | 2.9% |
|  | **Total** | **35** | **97.2%** | **100.0%** |
| Missing | No Answer | 1 | 2.8% |  |
|  | **Total** | **1** | **2.8%** |  |
| **Total** |  | **36** | **100.0%** |  |

## Ambulatory Out-of-State Questionnaire

### 68. How would you rate your current community for public safety services?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 2 | 5.6% | 5.7% |
|  | Dissatisfied | 5 | 13.9% | 14.3% |
|  | Neither Satisfied Nor Dissatisfied | 10 | 27.8% | 28.6% |
|  | Satisfied | 13 | 36.1% | 37.1% |
|  | Very Satisfied | 5 | 13.9% | 14.3% |
|  | **Total** | **35** | **97.2%** | **100.0%** |
| Missing | No Answer | 1 | 2.8% |  |
|  | **Total** | **1** | **2.8%** |  |
| **Total** |  | **36** | **100.0%** |  |

## Ambulatory Out-of-State Questionnaire

### 69. How would you rate your current community in terms of parks and recreation/natural amenities?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 1 | 2.8% | 2.9% |
|  | Dissatisfied | 3 | 8.3% | 8.6% |
|  | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 20.0% |
|  | Satisfied | 14 | 38.9% | 40.0% |
|  | Very Satisfied | 10 | 27.8% | 28.6% |
|  | **Total** | **35** | **97.2%** | **100.0%** |
| Missing | No Answer | 1 | 2.8% |  |
|  | **Total** | **1** | **2.8%** |  |
| **Total** |  | **36** | **100.0%** |  |

**Ambulatory Out-of-State Questionnaire**

**70. How would you rate your current community in terms of education (K-12)?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 8.3% | 8.8% |
| | Dissatisfied | 5 | 13.9% | 14.7% |
| | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 20.6% |
| | Satisfied | 8 | 22.2% | 23.5% |
| | Very Satisfied | 3 | 8.3% | 8.8% |
| | Don't Know | 8 | 22.2% | 23.5% |
| | **Total** | **34** | **94.4%** | **100.0%** |
| Missing | No Answer | 2 | 5.6% | |
| | **Total** | **2** | **5.6%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**71. How would you rate your current community in terms of access to post-secondary education, including continuing education?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 4 | 11.1% | 11.4% |
| | Dissatisfied | 8 | 22.2% | 22.9% |
| | Neither Satisfied Nor Dissatisfied | 8 | 22.2% | 22.9% |
| | Satisfied | 7 | 19.4% | 20.0% |
| | Very Satisfied | 5 | 13.9% | 14.3% |
| | Don't Know | 3 | 8.3% | 8.6% |
| | **Total** | **35** | **97.2%** | **100.0%** |
| Missing | No Answer | 1 | 2.8% | |
| | **Total** | **1** | **2.8%** | |
| **Total** | | **36** | **100.0%** | |

## Ambulatory Out-of-State Questionnaire

**72. How would you rate your current community in terms of day care services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 4 | 11.1% | 11.8% |
| | Dissatisfied | 4 | 11.1% | 11.8% |
| | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 20.6% |
| | Satisfied | 2 | 5.6% | 5.9% |
| | Very Satisfied | 1 | 2.8% | 2.9% |
| | Don't Know | 16 | 44.4% | 47.1% |
| | **Total** | **34** | **94.4%** | **100.0%** |
| Missing | No Answer | 2 | 5.6% | |
| | **Total** | **2** | **5.6%** | |
| **Total** | | **36** | **100.0%** | |

## Ambulatory Out-of-State Questionnaire

**73. How would you rate your current community in terms of medical care services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 19.4% | 20.6% |
| | Dissatisfied | 7 | 19.4% | 20.6% |
| | Neither Satisfied Nor Dissatisfied | 6 | 16.7% | 17.6% |
| | Satisfied | 12 | 33.3% | 35.3% |
| | Very Satisfied | 1 | 2.8% | 2.9% |
| | Don't Know | 1 | 2.8% | 2.9% |
| | **Total** | **34** | **94.4%** | **100.0%** |
| Missing | No Answer | 2 | 5.6% | |
| | **Total** | **2** | **5.6%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**74. How would you rate your current community in terms of mental care services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 19.4% | 20.6% |
| | Dissatisfied | 9 | 25.0% | 26.5% |
| | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 20.6% |
| | Satisfied | 7 | 19.4% | 20.6% |
| | Very Satisfied | 2 | 5.6% | 5.9% |
| | Don't Know | 2 | 5.6% | 5.9% |
| | **Total** | **34** | **94.4%** | **100.0%** |
| | | | | |
| Missing | No Answer | 2 | 5.6% | |
| | **Total** | **2** | **5.6%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**75. How would you rate your current community in terms of retail shopping?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 19.4% | 20.6% |
| | Dissatisfied | 11 | 30.6% | 32.4% |
| | Neither Satisfied Nor Dissatisfied | 7 | 19.4% | 20.6% |
| | Satisfied | 8 | 22.2% | 23.5% |
| | Very Satisfied | 1 | 2.8% | 2.9% |
| | **Total** | **34** | **94.4%** | **100.0%** |
| | | | | |
| Missing | No Answer | 2 | 5.6% | |
| | **Total** | **2** | **5.6%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**76. How would you rate your current community in terms of restaurants/entertainment?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 19.4% | 20.6% |
| | Dissatisfied | 10 | 27.8% | 29.4% |
| | Neither Satisfied Nor Dissatisfied | 8 | 22.2% | 23.5% |
| | Satisfied | 7 | 19.4% | 20.6% |
| | Very Satisfied | 2 | 5.6% | 5.9% |
| | **Total** | **34** | **94.4%** | **100.0%** |
| | | | | |
| Missing | No Answer | 2 | 5.6% | |
| | **Total** | **2** | **5.6%** | |
| **Total** | | **36** | **100.0%** | |

**Ambulatory Out-of-State Questionnaire**

**77. If given the opportunity, how likely would you be to move away from your current community?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Likely | 8 | 22.2% | 22.9% |
| | Likely | 9 | 25.0% | 25.7% |
| | Neither Likely Nor Unlikely | 3 | 8.3% | 8.6% |
| | Unlikely | 5 | 13.9% | 14.3% |
| | Very Unlikely | 8 | 22.2% | 22.9% |
| | Don't Know | 2 | 5.6% | 5.7% |
| | **Total** | **35** | **97.2%** | **100.0%** |
| | | | | |
| Missing | No Answer | 1 | 2.8% | |
| | **Total** | **1** | **2.8%** | |
| **Total** | | **36** | **100.0%** | |

## Frequencies for Hospital and Long-Term Care Survey, Nurses Working in-State During First and Second Quarter 2007

Frequency Missing = 917

### Hospital and Long-Term Care in-State Questionnaire

**1. What was your employment status as of the reference date?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Employed Full-Time | 1,449 | 76.2% | 76.4% |
|  | Employed Part-Time | 390 | 20.5% | 20.6% |
|  | Retired | 16 | 0.8% | 0.8% |
|  | Not Working Outside Home | 25 | 1.3% | 1.3% |
|  | Volunteer | 1 | 0.1% | 0.1% |
|  | Employed, Not in Nursing | 15 | 0.8% | 0.8% |
|  | **Total** | **1,896** | **99.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | No Answer | 5 | 0.3% |  |
|  | **Total** | **5** | **0.3%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

### Hospital and Long-Term Care in-State Questionnaire

**2a. Which of the following best describes the title of your primary nursing job?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Nurse Educator | 46 | 2.4% | 2.5% |
|  | Administration/Management | 217 | 11.4% | 11.8% |
|  | Quality Assurance/Risk Management | 27 | 1.4% | 1.5% |
|  | Direct Patient Care | 1,432 | 75.3% | 78.0% |
|  | Infection Control | 13 | 0.7% | 0.7% |
|  | Case Manager/Utilization Review | 26 | 1.4% | 1.4% |
|  | Other | 68 | 3.6% | 3.7% |
|  | Multiple Responses Chosen | 8 | 0.4% | 0.4% |
|  | **Total** | **1,837** | **96.6%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | No Answer | 9 | 0.5% |  |
|  | **Total** | **64** | **3.4%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

| Hospital and Long-Term Care in-State Questionnaire | | | |
|---|---|---|---|
| **2a. If your primary nursing job is direct patient care, what kind of direct patient care do you provide?** | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Cardiac Care | 53 | 2.8% | 3.7% |
| | Renal/Urology | 9 | 0.5% | 0.6% |
| | Neurology | 18 | 0.9% | 1.3% |
| | Pediatrics | 20 | 1.1% | 1.4% |
| | General Surgery | 185 | 9.7% | 12.8% |
| | General Medicine/Family Practice | 205 | 10.8% | 14.2% |
| | Cancer Care | 25 | 1.3% | 1.7% |
| | Orthopedics | 11 | 0.6% | 0.8% |
| | Respiratory | 2 | 0.1% | 0.1% |
| | Mental Health | 47 | 2.5% | 3.3% |
| | Women's Health | 4 | 0.2% | 0.3% |
| | Obstetrics/Neonatal | 176 | 9.3% | 12.2% |
| | Emergency Room | 144 | 7.6% | 10.0% |
| | Corrections | 3 | 0.2% | 0.2% |
| | Allergies/Asthma | 1 | 0.1% | 0.1% |
| | Rehab | 13 | 0.7% | 0.9% |
| | Anesthesia | 6 | 0.3% | 0.4% |
| | Assisted Living/LTC | 215 | 11.3% | 14.9% |
| | Home Health Care | 51 | 2.7% | 3.5% |
| | CCU/ICU | 60 | 3.2% | 4.2% |
| | PACU | 27 | 1.4% | 1.9% |
| | Med-Surg | 44 | 2.3% | 3.1% |
| | Float Pool | 40 | 2.1% | 2.8% |
| | Infusion/IV | 9 | 0.5% | 0.6% |
| | Life Flight | 3 | 0.2% | 0.2% |
| | Urgent Care | 1 | 0.1% | 0.1% |
| | Public Health | 1 | 0.1% | 0.1% |
| | Other | 67 | 3.5% | 4.7% |
| | **Total** | **1,440** | **75.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 398 | 20.9% | |
| | No Answer | 8 | 0.4% | |
| | **Total** | **461** | **24.2%** | |
| **Total** | | **1,901** | **99.9%** | |

aTotal does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

**2b. Are you a nurse practitioner?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Not a Nurse Practitioner | 1,774 | 93.3% | 97.8% |
|  | Nurse Anesthetist | 13 | 0.7% | 0.7% |
|  | Family Nurse Practitioner | 15 | 0.8% | 0.8% |
|  | Other | 11 | 0.6% | 0.6% |
|  | **Total** | **1,813** | **95.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 31 | 1.6% |  |
|  | **Total** | **88** | **4.6%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**4. Which of the following best describes your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Ambulatory Healthcare | 178 | 9.4% | 9.7% |
|  | Hospitals | 1,285 | 67.6% | 70.1% |
|  | Long-Term Care | 338 | 17.8% | 18.4% |
|  | Other | 33 | 1.7% | 1.8% |
|  |  | **1,834** | **96.5%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 10 | 0.5% |  |
|  |  | **67** | **3.5%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**6. Do you plan to leave employment with your primary facility within the next 12 months?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 302 | 15.9% | 16.4% |
|  | No | 1,534 | 80.7% | 83.6% |
|  | **Total** | **1,836** | **96.6%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 8 | 0.4% |  |
|  | **Total** | **65** | **3.4%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**7. If you answered YES to planning to leave in the next 12 months, what is your primary reason for leaving?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Taking Another Job in Healthcare | 119 | 6.3% | 39.9% |
| | Taking Another Job Outside Healthcare | 8 | 0.4% | 2.7% |
| | Family Status Change | 12 | 0.6% | 4.0% |
| | Relocating | 75 | 3.9% | 25.2% |
| | Continuing Education | 15 | 0.8% | 5.0% |
| | Retiring | 33 | 1.7% | 11.1% |
| | Other | 36 | 1.9% | 12.1% |
| | **Total** | **298** | **15.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 1,534 | 80.7% | |
| | No Answer | 14 | 0.7% | |
| | **Total** | **1,603** | **84.3%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**8. When do you plan to retire from your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | More Than 1 Year But Less Than 3 | 121 | 6.4% | 6.8% |
| | More Than 3 Years But Less Than 5 | 151 | 7.9% | 8.5% |
| | More Than 5 Years | 924 | 48.6% | 52.1% |
| | Don't Know | 578 | 30.4% | 32.6% |
| | **Total** | **1,774** | **93.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 33 | 1.7% | |
| | No Answer | 39 | 2.1% | |
| | **Total** | **127** | **6.7%** | |
| **Total** | | **1,901** | **100.0%** | |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care in-State Questionnaire**

**9. Do you plan to continue working as a nurse after retiring from your primary facility?**

|       |                                | Frequency | % | Valid % |
|-------|--------------------------------|-----------|--------|---------|
| Valid | Yes                            | 407       | 21.4%  | 23.0%   |
|       | No                             | 374       | 19.7%  | 21.1%   |
|       | Don't Know                     | 990       | 52.1%  | 55.9%   |
|       | **Total**                      | **1,771** | **93.1%** | **100.0%** |
|       |                                |           |        |         |
| Missing | Skip, Not Employed in Nursing | 55      | 2.9%   |         |
|       | Skip                           | 3         | 0.2%   |         |
|       | No Answer                      | 72        | 3.8%   |         |
|       | **Total**                      | **130**   | **6.8%** |        |
| **Total** |                            | **1,901** | **100.0%** |     |

**Hospital and Long-Term Care in-State Questionnaire**

**10. If you have a second job, is it in nursing?**

|       |                                | Frequency | % | Valid % |
|-------|--------------------------------|-----------|--------|---------|
| Valid | Yes                            | 267       | 14.0%  | 15.2%   |
|       | No                             | 1,410     | 74.2%  | 80.0%   |
|       | Second Job Not in Nursing      | 85        | 4.5%   | 4.8%    |
|       | **Total**                      | **1,762** | **92.7%** | **100.0%** |
|       |                                |           |        |         |
| Missing | Skip, Not Employed in Nursing | 55      | 2.9%   |         |
|       | Skip                           | 3         | 0.2%   |         |
|       | No Answer                      | 81        | 4.3%   |         |
|       | **Total**                      | **139**   | **7.3%** |        |
| **Total** |                            | **1,901** | **100.0%** |     |

**Hospital and Long-Term Care in-State Questionnaire**

**11. Which of the following best describes the position title of your secondary nursing job?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Direct Patient Care | 203 | 10.7% | 75.2% |
| | Administration/Management | 8 | 0.4% | 3.0% |
| | Case Manager/Utilization Review | 7 | 0.4% | 2.6% |
| | Nurse Educator | 21 | 1.1% | 7.8% |
| | Infection Control | 2 | 0.1% | 0.7% |
| | Researcher/Consultant | 1 | 0.1% | 0.4% |
| | Nurse Practitioner | 5 | 0.3% | 1.9% |
| | Other | 22 | 1.2% | 8.1% |
| | Don't Know | 1 | 0.1% | 0.4% |
| | **Total** | **270** | **14.2%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 1,493 | 78.5% | |
| | No Answer | 83 | 4.4% | |
| | **Total** | **1,631** | **85.8%** | |
| **Total** | | **1,901** | **99.9%**[a] | |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

**12. Which of the following best describes your secondary work environment?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Ambulatory Healthcare | 69 | 3.6% | 25.5% |
| | Hospitals | 110 | 5.8% | 40.6% |
| | Long-Term Care | 38 | 2.0% | 14.0% |
| | Other | 53 | 2.8% | 19.6% |
| | Don't Know | 1 | 0.1% | 0.4% |
| | **Total** | **271** | **14.2%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 1,492 | 78.4% | |
| | No Answer | 83 | 4.4% | |
| | **Total** | **1,630** | **85.7%** | |
| **Total** | | **1,901** | **99.9%**[a] | |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

### 13. What is the length of your typical scheduled shift at your primary job?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | 8 hours | 531 | 27.9% | 29.7% |
|  | 12 hours | 876 | 46.1% | 49.0% |
|  | Both 8 and 12 hours | 119 | 6.3% | 6.7% |
|  | Other | 263 | 13.8% | 14.7% |
|  | **Total** | **1,789** | **94.1%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 55 | 2.9% |  |
|  | **Total** | **112** | **5.9%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

### 14. Do you have an on-call requirement for your primary job?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 889 | 46.8% | 49.8% |
|  | No | 897 | 47.2% | 50.2% |
|  | **Total** | **1,786** | **93.9%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 58 | 3.1% |  |
|  | **Total** | **115** | **6.0%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

### 15. During the reference period did you work on-call time and why?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | I did not work on-call time | 496 | 26.1% | 49.9% |
|  | Called in for single procedure | 103 | 5.4% | 10.4% |
|  | Called in for entire shift | 234 | 12.3% | 23.6% |
|  | Other | 160 | 8.4% | 16.1% |
|  | **Total** | **993** | **52.2%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 56 | 2.9% |  |
|  | Skip | 787 | 41.4% |  |
|  | No Answer | 65 | 3.4% |  |
|  | **Total** | **908** | **47.7%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

| Hospital and Long-Term Care in-State Questionnaire | | | | |
|---|---|---|---|---|
| **16. During the reference period did you have unscheduled shift changes from your regularly scheduled shift at the request or direction of your supervisor?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | No | 1,421 | 74.8% | 79.6% |
| | Yes, once | 254 | 13.4% | 14.2% |
| | Yes, twice | 72 | 3.8% | 4.0% |
| | Other | 38 | 2.0% | 2.1% |
| | **Total** | **1,785** | **93.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 59 | 3.1% | |
| | **Total** | **116** | **6.1%** | |
| **Total** | | **1,901** | **100.0%** | |

| Hospital and Long-Term Care in-State Questionnaire | | | | |
|---|---|---|---|---|
| **17. Which of the following best describes why you worked extra hours?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | I wanted to help out when the unit was understaffed | 599 | 31.5% | 45.3% |
| | I wanted extra money | 183 | 9.6% | 13.9% |
| | I wanted time off on another day | 25 | 1.3% | 1.9% |
| | I felt pressured by manager, supervisor, or other staff | 97 | 5.1% | 7.3% |
| | I was required (mandated) to work | 259 | 13.6% | 19.6% |
| | Other | 158 | 8.3% | 12.0% |
| | **Total** | **1,321** | **69.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 7 | 0.4% | |
| | No Answer | 518 | 27.2% | |
| | **Total** | **580** | **30.5%** | |
| **Total** | | **1,901** | **99.9%**[a] | |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

**18. In the past year, has the amount of mandatory unscheduled overtime required of you:**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Increased | 351 | 18.5% | 20.0% |
|  | Remained about the same | 482 | 25.4% | 27.5% |
|  | Decreased | 86 | 4.5% | 4.9% |
|  | Not Applicable | 834 | 43.9% | 47.5% |
|  | Don't Know | 1 | 0.1% | 0.1% |
|  | **Total** | **1,754** | **92.2%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
|  | Skip | 2 | 0.1% | |
|  | No Answer | 90 | 4.7% | |
|  | **Total** | **147** | **7.7%** | |
| **Total** |  | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**19. Do you think that overtime hours are fairly assigned in your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 1,221 | 64.2% | 75.5% |
|  | No | 393 | 20.7% | 24.3% |
|  | Don't Know | 3 | 0.2% | 0.2% |
|  | **Total** | **1,617** | **85.0%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
|  | Skip | 3 | 0.2% | |
|  | No Answer | 226 | 11.9% | |
|  | **Total** | **284** | **14.9%** | |
| **Total** |  | **1,901** | **100.0%** | |

## Hospital and Long-Term Care in-State Questionnaire

### 20. How would you rate your overall satisfaction with your primary facility?

|         |                                   | Frequency | %      | Valid % |
|---------|-----------------------------------|-----------|--------|---------|
| Valid   | Very Dissatisfied                 | 49        | 2.6%   | 2.7%    |
|         | Dissatisfied                      | 228       | 12.0%  | 12.6%   |
|         | Neither Satisfied Nor Dissatisfied | 392      | 20.6%  | 21.6%   |
|         | Satisfied                         | 904       | 47.5%  | 49.8%   |
|         | Very Satisfied                    | 243       | 12.8%  | 13.4%   |
|         | **Total**                         | **1,816** | **95.5%** | **100.0%** |
|         |                                   |           |        |         |
| Missing | Skip, Not Employed in Nursing     | 55        | 2.9%   |         |
|         | Skip                              | 2         | 0.1%   |         |
|         | No Answer                         | 28        | 1.5%   |         |
|         | **Total**                         | **85**    | **4.5%** |        |
| **Total** |                                 | **1,901** | **100.0%** |       |

## Hospital and Long-Term Care in-State Questionnaire

### 21. How would you rate your satisfaction with your base salary at your primary facility?

|         |                                   | Frequency | %      | Valid % |
|---------|-----------------------------------|-----------|--------|---------|
| Valid   | Very Dissatisfied                 | 125       | 6.6%   | 6.8%    |
|         | Dissatisfied                      | 428       | 22.5%  | 23.4%   |
|         | Neither Satisfied Nor Dissatisfied | 397      | 20.9%  | 21.7%   |
|         | Satisfied                         | 673       | 35.4%  | 36.8%   |
|         | Very Satisfied                    | 206       | 10.8%  | 11.3%   |
|         | Not Applicable                    | 1         | 0.1%   | 0.1%    |
|         | **Total**                         | **1,830** | **96.2%** | **100.0%** |
|         |                                   |           |        |         |
| Missing | Skip, Not Employed in Nursing     | 55        | 2.9%   |         |
|         | Skip                              | 2         | 0.1%   |         |
|         | No Answer                         | 14        | 0.7%   |         |
|         | **Total**                         | **71**    | **3.7%** |        |
| Total   |                                   | 1,901     | 100.0% |         |

**Hospital and Long-Term Care in-State Questionnaire**

**22. How would you rate your satisfaction with the salary range for your position at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 136 | 7.2% | 7.4% |
| | Dissatisfied | 488 | 25.7% | 26.7% |
| | Neither Satisfied Nor Dissatisfied | 425 | 22.4% | 23.3% |
| | Satisfied | 596 | 31.4% | 32.6% |
| | Very Satisfied | 161 | 8.5% | 8.8% |
| | Not Applicable | 21 | 1.1% | 1.1% |
| | **Total** | **1,827** | **96.1%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 17 | 0.9% | |
| | **Total** | **74** | **3.9%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**23. How would you rate your satisfaction with the employee benefits at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 183 | 9.6% | 10.0% |
| | Dissatisfied | 366 | 19.3% | 20.1% |
| | Neither Satisfied Nor Dissatisfied | 442 | 23.3% | 24.2% |
| | Satisfied | 579 | 30.4% | 31.8% |
| | Very Satisfied | 170 | 8.9% | 9.3% |
| | Not Applicable | 82 | 4.3% | 4.5% |
| | Don't Know | 1 | 0.1% | 0.1% |
| | **Total** | **1,823** | **95.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 21 | 1.1% | |
| | **Total** | **78** | **4.1%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**24. How would you rate your satisfaction with the skill of RNs where you work?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 37 | 1.9% | 2.0% |
|  | Dissatisfied | 188 | 9.9% | 10.3% |
|  | Neither Satisfied Nor Dissatisfied | 400 | 21.0% | 21.9% |
|  | Satisfied | 791 | 41.6% | 43.2% |
|  | Very Satisfied | 391 | 20.6% | 21.4% |
|  | Not Applicable | 23 | 1.2% | 1.3% |
|  | **Total** | **1,830** | **96.2%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 14 | 0.7% |  |
|  | **Total** | **71** | **3.7%** |  |
| **Total** |  | **1,901** | **99.9%**[a] |  |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

**25. How would you rate your satisfaction with the adequacy of RN staffing where you work?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 143 | 7.5% | 7.8% |
|  | Dissatisfied | 445 | 23.4% | 24.3% |
|  | Neither Satisfied Nor Dissatisfied | 459 | 24.1% | 25.1% |
|  | Satisfied | 557 | 29.3% | 30.5% |
|  | Very Satisfied | 200 | 10.5% | 10.9% |
|  | Not Applicable | 25 | 1.3% | 1.4% |
|  | **Total** | **1,829** | **96.2%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 15 | 0.8% |  |
|  | **Total** | **72** | **3.8%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**26. How would you rate your satisfaction with the adequacy of clerical support services at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 144 | 7.6% | 7.9% |
| | Dissatisfied | 393 | 20.7% | 21.5% |
| | Neither Satisfied Nor Dissatisfied | 509 | 26.8% | 27.9% |
| | Satisfied | 597 | 31.4% | 32.7% |
| | Very Satisfied | 155 | 8.2% | 8.5% |
| | Not Applicable | 27 | 1.4% | 1.5% |
| | **Total** | **1,825** | **96.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 19 | 1.0% | |
| | **Total** | **76** | **4.0%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**27. How would you rate your satisfaction with the non-nursing tasks required of you at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 139 | 7.3% | 7.7% |
| | Dissatisfied | 358 | 18.8% | 19.7% |
| | Neither Satisfied Nor Dissatisfied | 553 | 29.1% | 30.5% |
| | Satisfied | 519 | 27.3% | 28.6% |
| | Very Satisfied | 106 | 5.6% | 5.8% |
| | Not Applicable | 140 | 7.4% | 7.7% |
| | Don't Know | 1 | 0.1% | 0.1% |
| | **Total** | **1,816** | **95.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 28 | 1.5% | |
| | **Total** | **85** | **4.5%** | |
| **Total** | | **1,901** | **100.0%** | |

## Hospital and Long-Term Care in-State Questionnaire

**28. How would you rate your satisfaction with the amount of paperwork required of you at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 301 | 15.8% | 16.4% |
|  | Dissatisfied | 592 | 31.1% | 32.3% |
|  | Neither Satisfied Nor Dissatisfied | 497 | 26.1% | 27.1% |
|  | Satisfied | 387 | 20.3% | 21.1% |
|  | Very Satisfied | 45 | 2.4% | 2.5% |
|  | Not Applicable | 9 | 0.5% | 0.5% |
|  | **Total** | **1,831** | **96.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 13 | 0.7% |  |
|  | **Total** | **70** | **3.7%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

## Hospital and Long-Term Care in-State Questionnaire

**29. How would you rate your satisfaction with your physical work environment?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 66 | 3.5% | 3.6% |
|  | Dissatisfied | 233 | 12.3% | 12.7% |
|  | Neither Satisfied Nor Dissatisfied | 486 | 25.6% | 26.5% |
|  | Satisfied | 835 | 43.9% | 45.6% |
|  | Very Satisfied | 208 | 10.9% | 11.4% |
|  | Not Applicable | 4 | 0.2% | 0.2% |
|  | **Total** | **1,832** | **96.4%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 12 | 0.6% |  |
|  | **Total** | **69** | **3.6%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care in-State Questionnaire**

**30. How would you rate your satisfaction with the level of personal safety at the facility where you work?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 54 | 2.8% | 3.0% |
| | Dissatisfied | 148 | 7.8% | 8.1% |
| | Neither Satisfied Nor Dissatisfied | 359 | 18.9% | 19.6% |
| | Satisfied | 893 | 47.0% | 48.8% |
| | Very Satisfied | 373 | 19.6% | 20.4% |
| | Not Applicable | 2 | 0.1% | 0.1% |
| | **Total** | **1,829** | **96.2%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 15 | 0.8% | |
| | **Total** | **72** | **3.8%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**31. How would you rate your satisfaction with your work schedule at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 44 | 2.3% | 2.4% |
| | Dissatisfied | 164 | 8.6% | 9.0% |
| | Neither Satisfied Nor Dissatisfied | 324 | 17.0% | 17.8% |
| | Satisfied | 850 | 44.7% | 46.6% |
| | Very Satisfied | 436 | 22.9% | 23.9% |
| | Not Applicable | 5 | 0.3% | 0.3% |
| | **Total** | **1,823** | **95.9%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 21 | 1.1% | |
| | **Total** | **78** | **4.1%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**32. How would you rate your satisfaction with the amount of overtime assigned at your primary place of employment?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 43 | 2.3% | 2.3% |
| | Dissatisfied | 178 | 9.4% | 9.7% |
| | Neither Satisfied Nor Dissatisfied | 484 | 25.5% | 26.4% |
| | Satisfied | 529 | 27.8% | 28.9% |
| | Very Satisfied | 168 | 8.8% | 9.2% |
| | Not Applicable | 426 | 22.4% | 23.3% |
| | Don't Know | 2 | 0.1% | 0.1% |
| | **Total** | **1,830** | **96.2%** | **100.0%** |
| | | | | |
| Missing | Skip | 57 | 3.0% | |
| | No Answer | 14 | 0.7% | |
| | **Total** | **71** | **3.7%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**33. How would you rate your satisfaction with job security at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 64 | 3.4% | 3.5% |
| | Dissatisfied | 145 | 7.6% | 7.9% |
| | Neither Satisfied Nor Dissatisfied | 335 | 17.6% | 18.3% |
| | Satisfied | 786 | 41.3% | 42.9% |
| | Very Satisfied | 495 | 26.0% | 27.0% |
| | Not Applicable | 9 | 0.5% | 0.5% |
| | **Total** | **1,834** | **96.4%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 10 | 0.5% | |
| | **Total** | **67** | **3.5%** | |
| **Total** | | **1,901** | **100.0%** | |

**Appendix B:**
**Frequency Tables**

**Hospital and Long-Term Care in-State Questionnaire**

**34. How would you rate the opportunities for advancement at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 141 | 7.4% | 7.7% |
| | Dissatisfied | 319 | 16.8% | 17.4% |
| | Neither Satisfied Nor Dissatisfied | 544 | 28.6% | 29.7% |
| | Satisfied | 563 | 29.6% | 30.7% |
| | Very Satisfied | 216 | 11.4% | 11.8% |
| | Not Applicable | 49 | 2.6% | 2.7% |
| | **Total** | **1,832** | **96.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 12 | 0.6% | |
| | **Total** | **69** | **3.6%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**35. How would you rate your satisfaction with support from the nurses with whom you work at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 68 | 3.6% | 3.7% |
| | Dissatisfied | 174 | 9.2% | 9.5% |
| | Neither Satisfied Nor Dissatisfied | 291 | 15.3% | 15.9% |
| | Satisfied | 788 | 41.4% | 43.0% |
| | Very Satisfied | 494 | 26.0% | 27.0% |
| | Not Applicable | 17 | 0.9% | 0.9% |
| | **Total** | **1,832** | **96.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 12 | 0.6% | |
| | **Total** | **69** | **3.6%** | |
| **Total** | | **1,901** | **100.0%** | |

| Hospital and Long-Term Care in-State Questionnaire | | | | |
|---|---|---|---|---|
| **36. How would you rate your satisfaction with support from your nursing administration at your primary facility?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Very Dissatisfied | 259 | 13.6% | 14.2% |
| | Dissatisfied | 412 | 21.7% | 22.6% |
| | Neither Satisfied Nor Dissatisfied | 404 | 21.3% | 22.1% |
| | Satisfied | 482 | 25.4% | 26.4% |
| | Very Satisfied | 236 | 12.4% | 12.9% |
| | Not Applicable | 34 | 1.8% | 1.9% |
| | **Total** | **1,827** | **96.1%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 17 | 0.9% | |
| | **Total** | **74** | **3.9%** | |
| **Total** | | **1,901** | **100.0%** | |

| Hospital and Long-Term Care in-State Questionnaire | | | | |
|---|---|---|---|---|
| **37. How would you rate your satisfaction with interactions with physicians at your primary facility?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Very Dissatisfied | 47 | 2.5% | 2.6% |
| | Dissatisfied | 178 | 9.4% | 9.7% |
| | Neither Satisfied Nor Dissatisfied | 440 | 23.1% | 24.1% |
| | Satisfied | 879 | 46.2% | 48.1% |
| | Very Satisfied | 263 | 13.8% | 14.4% |
| | Not Applicable | 22 | 1.2% | 1.2% |
| | **Total** | **1,829** | **96.2%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 15 | 0.8% | |
| | **Total** | **72** | **3.8%** | |
| **Total** | | **1,901** | **99.9%[a]** | |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

**38. How would you rate your satisfaction with interactions with other non-nursing staff at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 17 | 0.9% | 0.9% |
| | Dissatisfied | 96 | 5.0% | 5.2% |
| | Neither Satisfied Nor Dissatisfied | 404 | 21.3% | 22.1% |
| | Satisfied | 1,064 | 56.0% | 58.1% |
| | Very Satisfied | 241 | 12.7% | 13.2% |
| | Not Applicable | 8 | 0.4% | 0.4% |
| | **Total** | **1,830** | **96.2%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 14 | 0.7% | |
| | **Total** | **71** | **3.7%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**39. How would you rate your satisfaction with interactions with traveling agency staff at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 25 | 1.3% | 1.4% |
| | Dissatisfied | 72 | 3.8% | 4.0% |
| | Neither Satisfied Nor Dissatisfied | 403 | 21.2% | 22.2% |
| | Satisfied | 610 | 32.1% | 33.6% |
| | Very Satisfied | 116 | 6.1% | 6.4% |
| | Not Applicable | 591 | 31.1% | 32.5% |
| | **Total** | **1,817** | **95.5%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 20 | 1.1% | |
| | Don't Know | 7 | 0.4% | |
| | **Total** | **84** | **4.4%** | |
| **Total** | | **1,901** | **99.9%**[a] | |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

**40. How would you rate your satisfaction with patient interactions at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 0.4% | 0.4% |
|  | Dissatisfied | 21 | 1.1% | 1.1% |
|  | Neither Satisfied Nor Dissatisfied | 129 | 6.8% | 7.1% |
|  | Satisfied | 856 | 45.0% | 46.8% |
|  | Very Satisfied | 770 | 40.5% | 42.1% |
|  | Not Applicable | 45 | 2.4% | 2.5% |
|  | **Total** | **1,828** | **96.1%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 16 | 0.8% |  |
|  | **Total** | **73** | **3.8%** |  |
| **Total** |  | **1,901** | **99.9%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**41. How would you rate your satisfaction with the time available for patient education at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 95 | 5.0% | 5.2% |
|  | Dissatisfied | 393 | 20.7% | 21.5% |
|  | Neither Satisfied Nor Dissatisfied | 454 | 23.9% | 24.8% |
|  | Satisfied | 629 | 33.1% | 34.4% |
|  | Very Satisfied | 173 | 9.1% | 9.5% |
|  | Not Applicable | 83 | 4.4% | 4.5% |
|  | **Total** | **1,827** | **96.1%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 17 | 0.9% |  |
|  | **Total** | **74** | **3.9%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**42. How would you rate your satisfaction with your involvement in policy and management decisions at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 186 | 9.8% | 10.2% |
| | Dissatisfied | 400 | 21.0% | 21.9% |
| | Neither Satisfied Nor Dissatisfied | 564 | 29.7% | 30.8% |
| | Satisfied | 475 | 25.0% | 26.0% |
| | Very Satisfied | 154 | 8.1% | 8.4% |
| | Not Applicable | 50 | 2.6% | 2.7% |
| | **Total** | **1,829** | **96.2%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 15 | 0.8% | |
| | **Total** | **72** | **3.8%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**43. How would you rate your satisfaction with the opportunities to use your skills at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 49 | 2.6% | 2.7% |
| | Dissatisfied | 137 | 7.2% | 7.5% |
| | Neither Satisfied Nor Dissatisfied | 287 | 15.1% | 15.7% |
| | Satisfied | 942 | 49.5% | 51.5% |
| | Very Satisfied | 411 | 21.6% | 22.5% |
| | Not Applicable | 4 | 0.2% | 0.2% |
| | **Total** | **1,830** | **96.2%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 14 | 0.7% | |
| | **Total** | **71** | **3.7%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**44. How would you rate your satisfaction with the opportunities to learn new skills at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 95 | 5.0% | 5.2% |
| | Dissatisfied | 264 | 13.9% | 14.4% |
| | Neither Satisfied Nor Dissatisfied | 380 | 20.0% | 20.8% |
| | Satisfied | 742 | 39.0% | 40.6% |
| | Very Satisfied | 340 | 17.9% | 18.6% |
| | Not Applicable | 7 | 0.4% | 0.4% |
| | **Total** | **1,828** | **96.1%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 16 | 0.8% | |
| | **Total** | **73** | **3.8%** | |
| **Total** | | **1,901** | **99.9%[a]** | |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

**45. How would you rate your satisfaction with the opportunities for continuing education at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 110 | 5.8% | 6.0% |
| | Dissatisfied | 319 | 16.8% | 17.4% |
| | Neither Satisfied Nor Dissatisfied | 385 | 20.3% | 21.0% |
| | Satisfied | 656 | 34.5% | 35.8% |
| | Very Satisfied | 352 | 18.5% | 19.2% |
| | Not Applicable | 9 | 0.5% | 0.5% |
| | **Total** | **1,831** | **96.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 13 | 0.7% | |
| | **Total** | **70** | **3.7%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**46. How would you rate your satisfaction with the quality of patient care at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 48 | 2.5% | 2.6% |
| | Dissatisfied | 154 | 8.1% | 8.4% |
| | Neither Satisfied Nor Dissatisfied | 290 | 15.3% | 15.9% |
| | Satisfied | 879 | 46.2% | 48.1% |
| | Very Satisfied | 446 | 23.5% | 24.4% |
| | Not Applicable | 12 | 0.6% | 0.7% |
| | **Total** | **1,829** | **96.2%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 15 | 0.8% | |
| | **Total** | **72** | **3.8%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**47. How would you rate your satisfaction with the feeling that your work is important at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 60 | 3.2% | 3.3% |
| | Dissatisfied | 112 | 5.9% | 6.1% |
| | Neither Satisfied Nor Dissatisfied | 224 | 11.8% | 12.3% |
| | Satisfied | 777 | 40.9% | 42.5% |
| | Very Satisfied | 653 | 34.4% | 35.7% |
| | Not Applicable | 2 | 0.1% | 0.1% |
| | **Total** | **1,828** | **96.1%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 16 | 0.8% | |
| | **Total** | **73** | **3.8%** | |
| **Total** | | **1,901** | **100.0%** | |

**Appendix B:
Frequency Tables**

**Hospital and Long-Term Care in-State Questionnaire**

**48. How would you rate your satisfaction with other issues at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 62 | 3.3% | 37.1% |
| | Dissatisfied | 23 | 1.2% | 13.8% |
| | Neither Satisfied Nor Dissatisfied | 7 | 0.4% | 4.2% |
| | Satisfied | 8 | 0.4% | 4.8% |
| | Very Satisfied | 16 | 0.8% | 9.6% |
| | Not Applicable | 51 | 2.7% | 30.5% |
| | **Total** | **167** | **8.8%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 4 | 0.2% | |
| | No Answer | 1,675 | 88.1% | |
| | **Total** | **1,734** | **91.2%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**49. How would you rate the statement "Generally speaking, I am very satisfied with nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 37 | 1.9% | 2.1% |
| | Disagree | 220 | 11.6% | 12.3% |
| | Neither Agree Nor Disagree | 292 | 15.4% | 16.4% |
| | Agree | 825 | 43.4% | 46.3% |
| | Strongly Agree | 408 | 21.5% | 22.9% |
| | Don't Know | 1 | 0.1% | 0.1% |
| | **Total** | **1,783** | **93.8%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 61 | 3.2% | |
| | **Total** | **118** | **6.2%** | |
| **Total** | | **1,901** | **100.0%** | |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care in-State Questionnaire**

### 50. How would you rate the statement "I frequently think of quitting nursing"?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 499 | 26.2% | 28.0% |
| | Disagree | 518 | 27.2% | 29.1% |
| | Neither Agree Nor Disagree | 320 | 16.8% | 18.0% |
| | Agree | 286 | 15.0% | 16.1% |
| | Strongly Agree | 146 | 7.7% | 8.2% |
| | Don't Know | 11 | 0.6% | 0.6% |
| | **Total** | **1,780** | **93.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 64 | 3.4% | |
| | **Total** | **121** | **6.4%** | |
| **Total** | | **1,901** | **99.9%**[a] | |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

### 51. How would you rate the statement "I am generally satisfied with the kind of work I do in nursing"?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 29 | 1.5% | 1.6% |
| | Disagree | 98 | 5.2% | 5.5% |
| | Neither Agree Nor Disagree | 258 | 13.6% | 14.6% |
| | Agree | 951 | 50.0% | 53.6% |
| | Strongly Agree | 436 | 22.9% | 24.6% |
| | Don't Know | 1 | 0.1% | 0.1% |
| | **Total** | **1,773** | **93.2%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 71 | 3.7% | |
| | **Total** | **128** | **6.7%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

### 52. How would you rate the statement "Most people on this job are satisfied with nursing"?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 90 | 4.7% | 5.0% |
| | Disagree | 404 | 21.3% | 22.7% |
| | Neither Agree Nor Disagree | 539 | 28.3% | 30.2% |
| | Agree | 590 | 31.0% | 33.1% |
| | Strongly Agree | 92 | 4.8% | 5.2% |
| | Don't Know | 68 | 3.6% | 3.8% |
| | **Total** | **1,783** | **93.8%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 61 | 3.2% | |
| | **Total** | **118** | **6.2%** | |
| **Total** | | **1,901** | **99.9%**[a] | |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

### 53. How would you rate the statement "People in this job often think of quitting nursing"?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 159 | 8.4% | 8.9% |
| | Disagree | 442 | 23.3% | 24.8% |
| | Neither Agree Nor Disagree | 487 | 25.6% | 27.3% |
| | Agree | 402 | 21.1% | 22.5% |
| | Strongly Agree | 156 | 8.2% | 8.7% |
| | Don't Know | 137 | 7.2% | 7.7% |
| | **Total** | **1,783** | **93.8%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 61 | 3.2% | |
| | **Total** | **118** | **6.2%** | |
| **Total** | | **1,901** | **99.9%**[a] | |

[a]Total does not equal 100.0% due to rounding.

Appendix B:
Frequency Tables

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would not leave nursing.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 523 | 27.5% | 29.3% |
|  | Not Checked | 1,264 | 66.5% | 70.7% |
|  | **Total** | **1,787** | **94.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 57 | 3.0% |  |
|  | **Total** | **114** | **6.0%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing because I feel burned out from nursing.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 561 | 29.5% | 31.4% |
|  | Not Checked | 1,226 | 64.5% | 68.6% |
|  | **Total** | **1,787** | **94.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 57 | 3.0% |  |
|  | **Total** | **114** | **6.0%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing because I feel unsupported as a nurse.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 525 | 27.6% | 29.4% |
|  | Not Checked | 1,262 | 66.4% | 70.6% |
|  | **Total** | **1,787** | **94.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 57 | 3.0% |  |
|  | **Total** | **114** | **6.0%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

Appendix B:
Frequency Tables

## Hospital and Long-Term Care in-State Questionnaire

### 54. I would leave nursing because I am concerned with the quality of care.

|       |                              | Frequency | %      | Valid % |
|-------|------------------------------|-----------|--------|---------|
| Valid | Checked                      | 434       | 22.8%  | 24.3%   |
|       | Not Checked                  | 1,353     | 71.2%  | 75.7%   |
|       | **Total**                    | **1,787** | **94.0%** | **100.0%** |
|       |                              |           |        |         |
| Missing | Skip, Not Employed in Nursing | 55      | 2.9%   |         |
|       | Skip                         | 2         | 0.1%   |         |
|       | No Answer                    | 57        | 3.0%   |         |
|       | **Total**                    | **114**   | **6.0%** |       |
| **Total** |                          | **1,901** | **100.0%** |     |

## Hospital and Long-Term Care in-State Questionnaire

### 54. I would leave nursing for a better salary outside nursing.

|       |                              | Frequency | %      | Valid % |
|-------|------------------------------|-----------|--------|---------|
| Valid | Checked                      | 307       | 16.1%  | 17.2%   |
|       | Not Checked                  | 1,480     | 77.8%  | 82.8%   |
|       | **Total**                    | **1,787** | **94.0%** | **100.0%** |
|       |                              |           |        |         |
| Missing | Skip, Not Employed in Nursing | 55      | 2.9%   |         |
|       | Skip                         | 2         | 0.1%   |         |
|       | No Answer                    | 57        | 3.0%   |         |
|       | **Total**                    | **114**   | **6.0%** |       |
| **Total** |                          | **1,901** | **100.0%** |     |

## Hospital and Long-Term Care in-State Questionnaire

### 54. I would leave nursing for better management support.

|       |                              | Frequency | %      | Valid % |
|-------|------------------------------|-----------|--------|---------|
| Valid | Checked                      | 325       | 17.1%  | 18.2%   |
|       | Not Checked                  | 1,462     | 76.9%  | 81.8%   |
|       | **Total**                    | **1,787** | **94.0%** | **100.0%** |
|       |                              |           |        |         |
| Missing | Skip, Not Employed in Nursing | 55      | 2.9%   |         |
|       | Skip                         | 2         | 0.1%   |         |
|       | No Answer                    | 57        | 3.0%   |         |
|       | **Total**                    | **114**   | **6.0%** |       |
| **Total** |                          | **1,901** | **100.0%** |     |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing for better advancement opportunities.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 109 | 5.7% | 6.1% |
|  | Not Checked | 1,678 | 88.3% | 93.9% |
|  | **Total** | **1,787** | **94.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 57 | 3.0% |  |
|  | **Total** | **114** | **6.0%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing because I am concerned with delegation to unlicensed assistive personnel.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 169 | 8.9% | 9.5% |
|  | Not Checked | 1,618 | 85.1% | 90.5% |
|  | **Total** | **1,787** | **94.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 57 | 3.0% |  |
|  | **Total** | **114** | **6.0%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing because I feel overworked.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 523 | 27.5% | 29.3% |
|  | Not Checked | 1,264 | 66.5% | 70.7% |
|  | **Total** | **1,787** | **94.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 57 | 3.0% |  |
|  | **Total** | **114** | **6.0%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing because I am concerned with injury to patients.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 147 | 7.7% | 8.2% |
|  | Not Checked | 1,640 | 86.3% | 91.8% |
|  | **Total** | **1,787** | **94.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 57 | 3.0% |  |
|  | **Total** | **114** | **6.0%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing because I need more autonomy.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 106 | 5.6% | 5.9% |
|  | Not Checked | 1,681 | 88.4% | 94.1% |
|  | **Total** | **1,787** | **94.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 57 | 3.0% |  |
|  | **Total** | **114** | **6.0%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing because I need more respect.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 369 | 19.4% | 20.6% |
|  | Not Checked | 1,418 | 74.6% | 79.4% |
|  | **Total** | **1,787** | **94.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% |  |
|  | Skip | 2 | 0.1% |  |
|  | No Answer | 57 | 3.0% |  |
|  | **Total** | **114** | **6.0%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing because I plan to retire.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 381 | 20.0% | 21.3% |
| | Not Checked | 1,406 | 74.0% | 78.7% |
| | **Total** | **1,787** | **94.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 57 | 3.0% | |
| | **Total** | **114** | **6.0%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing for a better work schedule outside nursing.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 337 | 17.7% | 18.9% |
| | Not Checked | 1,450 | 76.3% | 81.1% |
| | **Total** | **1,787** | **94.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 57 | 3.0% | |
| | **Total** | **114** | **6.0%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing because I am concerned with injury to self.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 194 | 10.2% | 10.9% |
| | Not Checked | 1,593 | 83.8% | 89.1% |
| | **Total** | **1,787** | **94.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 57 | 3.0% | |
| | **Total** | **114** | **6.0%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing because I seek more challenging work.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 61 | 3.2% | 3.4% |
| | Not Checked | 1,726 | 90.8% | 96.6% |
| | **Total** | **1,787** | **94.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 57 | 3.0% | |
| | **Total** | **114** | **6.0%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**54. I would leave nursing for some other reason.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 163 | 8.6% | 9.1% |
| | Not Checked | 1,624 | 85.4% | 90.9% |
| | **Total** | **1,787** | **94.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 55 | 2.9% | |
| | Skip | 2 | 0.1% | |
| | No Answer | 57 | 3.0% | |
| | **Total** | **114** | **6.0%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**58. What is your marital status?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Married or Cohabitating | 1,508 | 79.3% | 79.8% |
| | Single | 129 | 6.8% | 6.8% |
| | Divorced | 200 | 10.5% | 10.6% |
| | Widowed | 52 | 2.7% | 2.8% |
| | **Total** | **1,889** | **99.3%** | **100.0%** |
| | | | | |
| Missing | No Answer | 12 | 0.6% | |
| | **Total** | **12** | **0.6%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**59. What is the highest level of education your spouse or partner has completed?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Less Than High School | 33 | 1.7% | 2.2% |
| | High School Grad or GED | 283 | 14.9% | 18.7% |
| | Some College or Associates Degree | 604 | 31.8% | 39.9% |
| | Bachelors Degree | 345 | 18.1% | 22.8% |
| | Graduate or Professional Degree | 210 | 11.0% | 13.9% |
| | Other | 37 | 1.9% | 2.4% |
| | **Total** | **1,512** | **79.5%** | **100.0%** |
| | | | | |
| Missing | Skip | 371 | 19.5% | |
| | No Answer | 18 | 0.9% | |
| | **Total** | **389** | **20.4%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**60. Was your spouse or partner employed during the reference period?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 1,295 | 68.1% | 85.7% |
| | No | 216 | 11.4% | 14.3% |
| | **Total** | **1,511** | **79.5%** | **100.0%** |
| | | | | |
| Missing | Skip | 372 | 19.6% | |
| | No Answer | 18 | 0.9% | |
| | **Total** | **390** | **20.5%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**63. Do you have dependents living in your house?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | No | 917 | 48.2% | 48.7% |
| | Yes | 967 | 50.9% | 51.3% |
| | **Total** | **1,884** | **99.1%** | **100.0%** |
| | | | | |
| Missing | No Answer | 17 | 0.9% | |
| | **Total** | **17** | **0.9%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

### 64. Do you provide care for your parents or your spouse/partner's parents?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 226 | 11.9% | 12.0% |
|  | No | 1,661 | 87.4% | 88.0% |
|  | **Total** | **1,887** | **99.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | No Answer | 14 | 0.7% |  |
|  | **Total** | **14** | **0.7%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

### 66. What was the total pre-tax income in your household in the past 12 months?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Less than $20,000 | 13 | 0.7% | 0.7% |
|  | $20,000 to $29,000 | 25 | 1.3% | 1.4% |
|  | $30,000 to $39,999 | 105 | 5.5% | 6.0% |
|  | $40,000 to $49,999 | 164 | 8.6% | 9.4% |
|  | $50,000 to $59,999 | 181 | 9.5% | 10.4% |
|  | $60,000 to $69,999 | 195 | 10.3% | 11.2% |
|  | $70,000 to $79,999 | 206 | 10.8% | 11.8% |
|  | $80,000 to $99,999 | 326 | 17.1% | 18.7% |
|  | $100,000 to $124,999 | 291 | 15.3% | 16.7% |
|  | $125,000 to $149,999 | 125 | 6.6% | 7.2% |
|  | $150,000 to $199,999 | 69 | 3.6% | 4.0% |
|  | $200,000 or more | 44 | 2.3% | 2.5% |
|  | **Total** | **1,744** | **91.7%** | **100.0%** |
|  |  |  |  |  |
| Missing | No Answer | 157 | 8.3% |  |
|  | **Total** | **157** | **8.3%** |  |
| **Total** |  | **1,901** | **99.9%**[a] |  |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care in-State Questionnaire**

**68. Of the following reasons, which one best describes why you live in your current community?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Existing Job | 360 | 18.9% | 19.2% |
| | Proximity to School or Work | 43 | 2.3% | 2.3% |
| | Spouse or Partner Job | 424 | 22.3% | 22.6% |
| | Cost of Living/Affordable Housing | 90 | 4.7% | 4.8% |
| | Proximity to Cultural Amenities | 4 | 0.2% | 0.2% |
| | Proximity to Natural Amenities | 171 | 9.0% | 9.1% |
| | Proximity to Family | 467 | 24.6% | 24.9% |
| | Other | 168 | 8.8% | 8.9% |
| | Multiple Reasons Chosen | 152 | 8.0% | 8.1% |
| | **Total** | **1,879** | **98.9%** | **100.0%** |
| | | | | |
| Missing | No Answer | 22 | 1.1% | |
| | **Total** | **22** | **1.1%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**69. How much do you agree or disagree with the following statement: "I am tied to this community and cannot leave."**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Agree | 235 | 12.4% | 12.4% |
| | Agree | 453 | 23.8% | 24.0% |
| | Neither Agree Nor Disagree | 468 | 24.6% | 24.8% |
| | Disagree | 419 | 22.0% | 22.2% |
| | Strongly Disagree | 315 | 16.6% | 16.7% |
| | **Total** | **1,890** | **99.4%** | **100.0%** |
| | | | | |
| Missing | No Answer | 11 | 0.6% | |
| | **Total** | **11** | **0.6%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**71. How would you rate your current community for economic opportunities?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 154 | 8.1% | 8.4% |
| | Dissatisfied | 419 | 22.0% | 22.8% |
| | Neither Satisfied Nor Dissatisfied | 576 | 30.3% | 31.4% |
| | Satisfied | 534 | 28.1% | 29.1% |
| | Very Satisfied | 134 | 7.0% | 7.3% |
| | Don't Know | 20 | 1.1% | 1.1% |
| | **Total** | **1,837** | **96.6%** | **100.0%** |
| Missing | No Answer | 64 | 3.4% | |
| | **Total** | **64** | **3.4%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**72. How would you rate your current community for proximity to family?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 237 | 12.5% | 13.0% |
| | Dissatisfied | 250 | 13.2% | 13.7% |
| | Neither Satisfied Nor Dissatisfied | 299 | 15.7% | 16.3% |
| | Satisfied | 495 | 26.0% | 27.0% |
| | Very Satisfied | 544 | 28.6% | 29.7% |
| | Don't Know | 5 | 0.3% | 0.3% |
| | **Total** | **1,830** | **96.2%** | **100.0%** |
| Missing | No Answer | 71 | 3.7% | |
| | **Total** | **71** | **3.7%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**73. How would you rate your current community for cost of living?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 228 | 12.0% | 12.4% |
| | Dissatisfied | 443 | 23.3% | 24.1% |
| | Neither Satisfied Nor Dissatisfied | 467 | 24.6% | 25.4% |
| | Satisfied | 587 | 30.9% | 32.0% |
| | Very Satisfied | 110 | 5.8% | 6.0% |
| | Don't Know | 1 | 0.1% | 0.1% |
| | **Total** | **1,836** | **96.5%** | **100.0%** |
| Missing | No Answer | 65 | 3.4% | |
| | **Total** | **65** | **3.4%** | |
| **Total** | | **1,901** | **100.0%** | |

## Hospital and Long-Term Care in-State Questionnaire

**74. How would you rate your current community for rural character?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 25 | 1.3% | 1.4% |
|  | Dissatisfied | 95 | 5.0% | 5.2% |
|  | Neither Satisfied Nor Dissatisfied | 371 | 19.5% | 20.3% |
|  | Satisfied | 903 | 47.5% | 49.3% |
|  | Very Satisfied | 415 | 21.8% | 22.7% |
|  | Don't Know | 23 | 1.2% | 1.3% |
|  | **Total** | **1,832** | **96.3%** | **100.0%** |
| Missing | No Answer | 69 | 3.6% |  |
|  | **Total** | **69** | **3.6%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

## Hospital and Long-Term Care in-State Questionnaire

**75. How would you rate your current community for urban character?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 105 | 5.5% | 5.9% |
|  | Dissatisfied | 287 | 15.1% | 16.2% |
|  | Neither Satisfied Nor Dissatisfied | 661 | 34.8% | 37.3% |
|  | Satisfied | 492 | 25.9% | 27.8% |
|  | Very Satisfied | 95 | 5.0% | 5.4% |
|  | Don't Know | 130 | 6.8% | 7.3% |
|  | **Total** | **1,770** | **93.1%** | **100.0%** |
| Missing | No Answer | 131 | 6.9% |  |
|  | **Total** | **131** | **6.9%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

## Hospital and Long-Term Care in-State Questionnaire

**76. How would you rate your current community for housing?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 238 | 12.5% | 13.0% |
|  | Dissatisfied | 370 | 19.5% | 20.2% |
|  | Neither Satisfied Nor Dissatisfied | 443 | 23.3% | 24.2% |
|  | Satisfied | 612 | 32.2% | 33.5% |
|  | Very Satisfied | 154 | 8.1% | 8.4% |
|  | Don't Know | 12 | 0.6% | 0.7% |
|  | **Total** | **1,829** | **96.2%** | **100.0%** |
| Missing | No Answer | 72 | 3.8% |  |
|  | **Total** | **72** | **3.8%** |  |
| **Total** |  | **1,901** | **100.0%** |  |

**Hospital and Long-Term Care in-State Questionnaire**

**77. How would you rate your current community for public safety services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 37 | 1.9% | 2.0% |
| | Dissatisfied | 139 | 7.3% | 7.6% |
| | Neither Satisfied Nor Dissatisfied | 624 | 32.8% | 34.1% |
| | Satisfied | 862 | 45.3% | 47.2% |
| | Very Satisfied | 132 | 6.9% | 7.2% |
| | Don't Know | 34 | 1.8% | 1.9% |
| | **Total** | **1,828** | **96.1%** | **100.0%** |
| | | | | |
| Missing | No Answer | 73 | 3.8% | |
| | **Total** | **73** | **3.8%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**78. How would you rate your current community in terms of parks and recreation/natural amenities?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 27 | 1.4% | 1.5% |
| | Dissatisfied | 110 | 5.8% | 6.0% |
| | Neither Satisfied Nor Dissatisfied | 297 | 15.6% | 16.2% |
| | Satisfied | 888 | 46.7% | 48.3% |
| | Very Satisfied | 510 | 26.8% | 27.8% |
| | Don't Know | 5 | 0.3% | 0.3% |
| | **Total** | **1,837** | **96.6%** | **100.0%** |
| | | | | |
| Missing | No Answer | 64 | 3.4% | |
| | **Total** | **64** | **3.4%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**79. How would you rate your current community in terms of education (K-12)?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 46 | 2.4% | 2.5% |
| | Dissatisfied | 106 | 5.6% | 5.8% |
| | Neither Satisfied Nor Dissatisfied | 378 | 19.9% | 20.7% |
| | Satisfied | 761 | 40.0% | 41.7% |
| | Very Satisfied | 274 | 14.4% | 15.0% |
| | Don't Know | 262 | 13.8% | 14.3% |
| | **Total** | **1,827** | **96.1%** | **100.0%** |
| | | | | |
| Missing | No Answer | 74 | 3.9% | |
| | **Total** | **74** | **3.9%** | |
| **Total** | | **1,901** | **100.0%** | |

| Hospital and Long-Term Care in-State Questionnaire | | | |
|---|---|---|---|
| **80. How would you rate your current community in terms of access to post-secondary education, including continuing education?** | | | |
| | | **Frequency** | **%** | **Valid %** |

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 107 | 5.6% | 5.8% |
| | Dissatisfied | 274 | 14.4% | 14.9% |
| | Neither Satisfied Nor Dissatisfied | 443 | 23.3% | 24.1% |
| | Satisfied | 726 | 38.2% | 39.6% |
| | Very Satisfied | 223 | 11.7% | 12.2% |
| | Don't Know | 62 | 3.3% | 3.4% |
| | **Total** | **1,835** | **96.5%** | **100.0%** |
| | | | | |
| Missing | No Answer | 66 | 3.5% | |
| | **Total** | **66** | **3.5%** | |
| **Total** | | **1,901** | **100.0%** | |

| Hospital and Long-Term Care in-State Questionnaire | | | |
|---|---|---|---|
| **81. How would you rate your current community in terms of day care services?** | | | |

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 184 | 9.7% | 10.2% |
| | Dissatisfied | 261 | 13.7% | 14.4% |
| | Neither Satisfied Nor Dissatisfied | 390 | 20.5% | 21.5% |
| | Satisfied | 187 | 9.8% | 10.3% |
| | Very Satisfied | 47 | 2.5% | 2.6% |
| | Don't Know | 743 | 39.1% | 41.0% |
| | **Total** | **1,812** | **95.3%** | **100.0%** |
| | | | | |
| Missing | No Answer | 89 | 4.7% | |
| | **Total** | **89** | **4.7%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**82. How would you rate your current community in terms of medical care services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 101 | 5.3% | 5.5% |
| | Dissatisfied | 254 | 13.4% | 13.8% |
| | Neither Satisfied Nor Dissatisfied | 435 | 22.9% | 23.7% |
| | Satisfied | 802 | 42.2% | 43.6% |
| | Very Satisfied | 237 | 12.5% | 12.9% |
| | Don't Know | 10 | 0.5% | 0.5% |
| | **Total** | **1,839** | **96.7%** | **100.0%** |
| Missing | No Answer | 62 | 3.3% | |
| | **Total** | **62** | **3.3%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**83. How would you rate your current community in terms of mental care services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 214 | 11.3% | 11.7% |
| | Dissatisfied | 366 | 19.3% | 20.0% |
| | Neither Satisfied Nor Dissatisfied | 467 | 24.6% | 25.5% |
| | Satisfied | 392 | 20.6% | 21.4% |
| | Very Satisfied | 77 | 4.1% | 4.2% |
| | Don't Know | 318 | 16.7% | 17.3% |
| | **Total** | **1,834** | **96.4%** | **100.0%** |
| Missing | No Answer | 67 | 3.5% | |
| | **Total** | **67** | **3.5%** | |
| **Total** | | **1,901** | **100.0%** | |

# Retention of Nurses in Wyoming

## Hospital and Long-Term Care in-State Questionnaire

### 84. How would you rate your current community in terms of retail shopping?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 308 | 16.2% | 16.8% |
| | Dissatisfied | 573 | 30.1% | 31.2% |
| | Neither Satisfied Nor Dissatisfied | 459 | 24.1% | 25.0% |
| | Satisfied | 417 | 21.9% | 22.7% |
| | Very Satisfied | 67 | 3.5% | 3.7% |
| | Don't Know | 11 | 0.6% | 0.6% |
| | **Total** | **1,835** | **96.5%** | **100.0%** |
| | | | | |
| Missing | No Answer | 66 | 3.5% | |
| | **Total** | **66** | **3.5%** | |
| **Total** | | **1,901** | **100.0%** | |

## Hospital and Long-Term Care in-State Questionnaire

### 85. How would you rate your current community in terms of restaurants/ entertainment?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 233 | 12.3% | 12.7% |
| | Dissatisfied | 565 | 29.7% | 30.8% |
| | Neither Satisfied Nor Dissatisfied | 450 | 23.7% | 24.5% |
| | Satisfied | 488 | 25.7% | 26.6% |
| | Very Satisfied | 93 | 4.9% | 5.1% |
| | Don't Know | 7 | 0.4% | 0.4% |
| | **Total** | **1,836** | **96.6%** | **100.0%** |
| | | | | |
| Missing | No Answer | 65 | 3.4% | |
| | **Total** | **65** | **3.4%** | |
| **Total** | | **1,901** | **100.0%** | |

**Hospital and Long-Term Care in-State Questionnaire**

**86. If given the opportunity, how likely would you be to move away from your current community?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Likely | 380 | 20.0% | 20.1% |
| | Likely | 525 | 27.6% | 27.8% |
| | Neither Likely Nor Unlikely | 238 | 12.5% | 12.6% |
| | Unlikely | 256 | 13.5% | 13.6% |
| | Very Unlikely | 424 | 22.3% | 22.5% |
| | Don't Know | 64 | 3.4% | 3.4% |
| | **Total** | **1,887** | **99.2%** | **100.0%** |
| | | | | |
| Missing | No Answer | 14 | 0.7% | |
| | **Total** | **14** | **0.7%** | |
| **Total** | | **1,901** | **99.9%**[a] | |

[a]Total does not equal 100.0% due to rounding.

## Frequencies for Hospital and Long-Term Care Survey, Nurses Working Out-of-State During First and Second Quarter 2007

Frequency Missing = 76

| Hospital and Long-Term Care Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **1. What was your employment status as of the reference date?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Employed Full-Time | 31 | 41.3% | 41.9% |
| | Employed Part-Time | 10 | 13.3% | 13.5% |
| | Retired | 15 | 20.0% | 20.3% |
| | Not Working Outside Home | 16 | 21.3% | 21.6% |
| | Volunteer | 1 | 1.3% | 1.4% |
| | Employed, Not in Nursing | 1 | 1.3% | 1.4% |
| | **Total** | **74** | **98.6%** | **100.0%** |
| | | | | |
| Missing | No Answer | 1 | 1.3% | |
| | **Total** | **1** | **1.3%** | |
| **Total** | | **75** | **100.0%** | |

| Hospital and Long-Term Care Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **2a. Which of the following best describes the title of your primary nursing job?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Nurse Educator | 1 | 1.3% | 2.4% |
| | Administration/Management | 5 | 6.7% | 12.2% |
| | Direct Patient Care | 34 | 45.3% | 82.9% |
| | Other | 1 | 1.3% | 2.4% |
| | **Total** | **41** | **54.6%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 1 | 1.3% | |
| | **Total** | **34** | **45.3%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**2a. If your primary nursing job is direct patient care, what kind of direct patient care do you provide?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Cardiac Care | 1 | 1.3% | 2.9% |
|  | Neurology | 1 | 1.3% | 2.9% |
|  | Pediatrics | 2 | 2.7% | 5.9% |
|  | General Surgery | 3 | 4.0% | 8.8% |
|  | General Medicine/Family Practice | 9 | 12.0% | 26.5% |
|  | Cancer Care | 1 | 1.3% | 2.9% |
|  | Mental Health | 2 | 2.7% | 5.9% |
|  | Obstetrics/Neonatal | 1 | 1.3% | 2.9% |
|  | Emergency Room | 3 | 4.0% | 8.8% |
|  | Corrections | 1 | 1.3% | 2.9% |
|  | Allergies/Asthma | 1 | 1.3% | 2.9% |
|  | Assisted Living/LTC | 2 | 2.7% | 5.9% |
|  | CCU/ICU | 4 | 5.3% | 11.8% |
|  | PACU | 2 | 2.7% | 5.9% |
|  | Other | 1 | 1.3% | 2.9% |
|  | **Total** | **34** | **45.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
|  | Skip | 8 | 10.7% | |
|  | **Total** | **41** | **54.7%** | |
| **Total** |  | **75** | **99.9%**[a] | |

[a]Total does not equal 100.0% due to rounding.

**Hospital and Long-Term Care Out-of-State Questionnaire**

**2b. Are you a nurse practitioner?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Not a Nurse Practitioner | 37 | 49.3% | 90.2% |
|  | Nurse Anesthetist | 1 | 1.3% | 2.4% |
|  | Family Nurse Practitioner | 2 | 2.7% | 4.9% |
|  | Other | 1 | 1.3% | 2.4% |
|  | **Total** | **41** | **54.6%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
|  | No Answer | 1 | 1.3% | |
|  | **Total** | **34** | **45.3%** | |
| **Total** |  | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**4. Which of the following best describes your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Ambulatory Healthcare | 13 | 17.3% | 31.7% |
|  | Hospitals | 24 | 32.0% | 58.5% |
|  | Long-Term Care | 2 | 2.7% | 4.9% |
|  | Other | 2 | 2.7% | 4.9% |
|  | **Total** | **41** | **54.6%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 1 | 1.3% |  |
|  | **Total** | **34** | **45.3%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**6. Do you plan to leave employment with your primary facility within the next 12 months?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 13 | 17.3% | 32.5% |
|  | No | 27 | 36.0% | 67.5% |
|  | **Total** | **40** | **53.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 2 | 2.7% |  |
|  | **Total** | **35** | **46.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**7. If you answered YES to planning to leave in the next 12 months, what is your primary reason for leaving?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Taking Another Job in Healthcare | 3 | 4.0% | 23.1% |
|  | Relocating | 1 | 1.3% | 7.7% |
|  | Continuing Education | 1 | 1.3% | 7.7% |
|  | Other | 8 | 10.7% | 61.5% |
|  | **Total** | **13** | **17.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | Skip | 27 | 36.0% |  |
|  | No Answer | 2 | 2.7% |  |
|  | **Total** | **62** | **82.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 8. When do you plan to retire from your primary facility?

|         |                                    | Frequency | %      | Valid % |
|---------|------------------------------------|-----------|--------|---------|
| Valid   | More Than 1 Year But Less Than 3   | 2         | 2.7%   | 5.1%    |
|         | More Than 3 Years But Less Than 5  | 4         | 5.3%   | 10.3%   |
|         | More Than 5 Years                  | 17        | 22.7%  | 43.6%   |
|         | Don't Know                         | 16        | 21.3%  | 41.0%   |
|         | **Total**                          | **39**    | **52.0%** | **100.0%** |
|         |                                    |           |        |         |
| Missing | Skip, Not Employed in Nursing      | 33        | 44.0%  |         |
|         | No Answer                          | 3         | 4.0%   |         |
|         | **Total**                          | **36**    | **48.0%** |         |
| **Total** |                                  | **75**    | **100.0%** |       |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 9. Do you plan to continue working as a nurse after retiring from your primary facility?

|         |                                | Frequency | %      | Valid % |
|---------|--------------------------------|-----------|--------|---------|
| Valid   | Yes                            | 8         | 10.7%  | 20.5%   |
|         | No                             | 7         | 9.3%   | 17.9%   |
|         | Don't Know                     | 24        | 32.0%  | 61.5%   |
|         | **Total**                      | **39**    | **52.0%** | **100.0%** |
|         |                                |           |        |         |
| Missing | Skip, Not Employed in Nursing  | 33        | 44.0%  |         |
|         | No Answer                      | 3         | 4.0%   |         |
|         | **Total**                      | **36**    | **48.0%** |         |
| **Total** |                              | **75**    | **100.0%** |       |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 10. If you have a second job, is it in nursing?

|         |                                | Frequency | %      | Valid % |
|---------|--------------------------------|-----------|--------|---------|
| Valid   | Yes                            | 10        | 13.3%  | 25.6%   |
|         | No                             | 28        | 37.3%  | 71.8%   |
|         | Second Job Not in Nursing      | 1         | 1.3%   | 2.6%    |
|         | **Total**                      | **39**    | **52.0%** | **100.0%** |
|         |                                |           |        |         |
| Missing | Skip, Not Employed in Nursing  | 33        | 44.0%  |         |
|         | No Answer                      | 3         | 4.0%   |         |
|         | **Total**                      | **36**    | **48.0%** |         |
| **Total** |                              | **75**    | **100.0%** |       |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care Out-of-State Questionnaire**

**11. Which of the following best describes the position title of your secondary nursing job?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Direct Patient Care | 6 | 8.0% | 60.0% |
|  | Nurse Educator | 1 | 1.3% | 10.0% |
|  | Other | 3 | 4.0% | 30.0% |
|  | **Total** | **10** | **13.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | Skip | 29 | 38.7% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **65** | **86.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**12. Which of the following best describes your secondary work environment?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Ambulatory Healthcare | 2 | 2.7% | 20.0% |
|  | Hospitals | 6 | 8.0% | 60.0% |
|  | Other | 2 | 2.7% | 20.0% |
|  | **Total** | **10** | **13.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | Skip | 29 | 38.7% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **65** | **86.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**13. What is the length of your typical scheduled shift at your primary job?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | 8 hours | 14 | 18.7% | 35.9% |
|  | 12 hours | 17 | 22.7% | 43.6% |
|  | Both 8 and 12 hours | 2 | 2.7% | 5.1% |
|  | Other | 6 | 8.0% | 15.4% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 14. Do you have an on-call requirement for your primary job?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 15 | 20.0% | 38.5% |
|  | No | 24 | 32.0% | 61.5% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 15. During the reference period did you work on-call time and why?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | I did not work on-call time | 12 | 16.0% | 66.7% |
|  | Called in for single procedure | 2 | 2.7% | 11.1% |
|  | Called in for entire shift | 2 | 2.7% | 11.1% |
|  | Other | 2 | 2.7% | 11.1% |
|  | **Total** | **18** | **24.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | Skip | 21 | 28.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **57** | **76.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 16. During the reference period did you have unscheduled shift changes from your regularly scheduled shift at the request or direction of your supervisor?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | No | 32 | 42.7% | 84.2% |
|  | Yes, once | 5 | 6.7% | 13.2% |
|  | Yes, twice | 1 | 1.3% | 2.6% |
|  | **Total** | **38** | **50.6%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 4 | 5.3% |  |
|  | **Total** | **37** | **49.3%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Appendix B:**
**Frequency Tables**

**Hospital and Long-Term Care Out-of-State Questionnaire**

**17. Which of the following best describes why you worked extra hours?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | I wanted to help out when the unit was understaffed | 7 | 9.3% | 25.0% |
| | I wanted extra money | 7 | 9.3% | 25.0% |
| | I wanted time off on another day | 1 | 1.3% | 3.6% |
| | I felt pressured by manager, supervisor, or other staff | 3 | 4.0% | 10.7% |
| | I was required (mandated) to work | 3 | 4.0% | 10.7% |
| | Other | 7 | 9.3% | 25.0% |
| | **Total** | **28** | **37.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 14 | 18.7% | |
| | **Total** | **47** | **62.7%** | |
| **Total** | | | | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**18. In the past year, has the amount of mandatory unscheduled overtime required of you:**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Increased | 6 | 8.0% | 15.4% |
| | Remained about the same | 8 | 10.7% | 20.5% |
| | Decreased | 1 | 1.3% | 2.6% |
| | Not Applicable | 24 | 32.0% | 61.5% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**19. Do you think that overtime hours are fairly assigned in your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 24 | 32.0% | 72.7% |
| | No | 9 | 12.0% | 27.3% |
| | **Total** | **33** | **44.0%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 9 | 12.0% | |
| | **Total** | **42** | **56.0%** | |
| **Total** | | **75** | **100.0%** | |

Appendix B:
Frequency Tables

| Hospital and Long-Term Care Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **20. How would you rate your overall satisfaction with your primary facility?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Very Dissatisfied | 4 | 5.3% | 10.0% |
| | Dissatisfied | 5 | 6.7% | 12.5% |
| | Neither Satisfied Nor Dissatisfied | 3 | 4.0% | 7.5% |
| | Satisfied | 22 | 29.3% | 55.0% |
| | Very Satisfied | 6 | 8.0% | 15.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

| Hospital and Long-Term Care Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **22. How would you rate your satisfaction with your base salary at your primary facility?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Very Dissatisfied | 1 | 1.3% | 2.5% |
| | Dissatisfied | 12 | 16.0% | 30.0% |
| | Neither Satisfied Nor Dissatisfied | 5 | 6.7% | 12.5% |
| | Satisfied | 18 | 24.0% | 45.0% |
| | Very Satisfied | 4 | 5.3% | 10.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care Out-of-State Questionnaire**

**22. How would you rate your satisfaction with the salary range for your position at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 4.0% | 7.5% |
|  | Dissatisfied | 12 | 16.0% | 30.0% |
|  | Neither Satisfied Nor Dissatisfied | 7 | 9.3% | 17.5% |
|  | Satisfied | 14 | 18.7% | 35.0% |
|  | Very Satisfied | 4 | 5.3% | 10.0% |
|  | **Total** | **40** | **53.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 2 | 2.7% |  |
|  | **Total** | **35** | **46.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**23. How would you rate your satisfaction with the employee benefits at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 4 | 5.3% | 10.0% |
|  | Dissatisfied | 8 | 10.7% | 20.0% |
|  | Neither Satisfied Nor Dissatisfied | 6 | 8.0% | 15.0% |
|  | Satisfied | 14 | 18.7% | 35.0% |
|  | Very Satisfied | 3 | 4.0% | 7.5% |
|  | Not Applicable | 5 | 6.7% | 12.5% |
|  | **Total** | **40** | **53.3%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 2 | 2.7% |  |
|  | **Total** | **35** | **46.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 24. How would you rate your satisfaction with the skill of RNs where you work?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 2 | 2.7% | 5.0% |
| | Dissatisfied | 4 | 5.3% | 10.0% |
| | Neither Satisfied Nor Dissatisfied | 5 | 6.7% | 12.5% |
| | Satisfied | 18 | 24.0% | 45.0% |
| | Very Satisfied | 8 | 10.7% | 20.0% |
| | Not Applicable | 3 | 4.0% | 7.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 25. How would you rate your satisfaction with the adequacy of RN staffing where you work?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 5 | 6.7% | 12.5% |
| | Dissatisfied | 3 | 4.0% | 7.5% |
| | Neither Satisfied Nor Dissatisfied | 9 | 12.0% | 22.5% |
| | Satisfied | 11 | 14.7% | 27.5% |
| | Very Satisfied | 9 | 12.0% | 22.5% |
| | Not Applicable | 3 | 4.0% | 7.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

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**Hospital and Long-Term Care Out-of-State Questionnaire**

**26. How would you rate your satisfaction with the adequacy of clerical support services at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 4.0% | 7.5% |
| | Dissatisfied | 6 | 8.0% | 15.0% |
| | Neither Satisfied Nor Dissatisfied | 7 | 9.3% | 17.5% |
| | Satisfied | 12 | 16.0% | 30.0% |
| | Very Satisfied | 8 | 10.7% | 20.0% |
| | Not Applicable | 4 | 5.3% | 10.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

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**Hospital and Long-Term Care Out-of-State Questionnaire**

**27. How would you rate your satisfaction with the non-nursing tasks required of you at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 5 | 6.7% | 12.5% |
| | Dissatisfied | 5 | 6.7% | 12.5% |
| | Neither Satisfied Nor Dissatisfied | 11 | 14.7% | 27.5% |
| | Satisfied | 10 | 13.3% | 25.0% |
| | Very Satisfied | 5 | 6.7% | 12.5% |
| | Not Applicable | 4 | 5.3% | 10.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**28. How would you rate your satisfaction with the amount of paperwork required of you at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 6 | 8.0% | 15.0% |
| | Dissatisfied | 7 | 9.3% | 17.5% |
| | Neither Satisfied Nor Dissatisfied | 9 | 12.0% | 22.5% |
| | Satisfied | 13 | 17.3% | 32.5% |
| | Very Satisfied | 5 | 6.7% | 12.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**29. How would you rate your satisfaction with your physical work environment?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 4.0% | 7.5% |
| | Dissatisfied | 3 | 4.0% | 7.5% |
| | Neither Satisfied Nor Dissatisfied | 11 | 14.7% | 27.5% |
| | Satisfied | 17 | 22.7% | 42.5% |
| | Very Satisfied | 6 | 8.0% | 15.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**30. How would you rate your satisfaction with the level of personal safety at the facility where you work?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 1 | 1.3% | 2.5% |
| | Dissatisfied | 4 | 5.3% | 10.0% |
| | Neither Satisfied Nor Dissatisfied | 6 | 8.0% | 15.0% |
| | Satisfied | 20 | 26.7% | 50.0% |
| | Very Satisfied | 9 | 12.0% | 22.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**31. How would you rate your satisfaction with your work schedule at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 1 | 1.3% | 2.5% |
| | Dissatisfied | 4 | 5.3% | 10.0% |
| | Neither Satisfied Nor Dissatisfied | 5 | 6.7% | 12.5% |
| | Satisfied | 23 | 30.7% | 57.5% |
| | Very Satisfied | 7 | 9.3% | 17.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

| Hospital and Long-Term Care Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **32. How would you rate your satisfaction with the amount of overtime assigned at your primary place of employment?** | | | | |
| | | **Frequency** | **%** | Valid % |
| Valid | Dissatisfied | 6 | 8.0% | 15.0% |
| | Neither Satisfied Nor Dissatisfied | 9 | 12.0% | 22.5% |
| | Satisfied | 7 | 9.3% | 17.5% |
| | Very Satisfied | 8 | 10.7% | 20.0% |
| | Not Applicable | 10 | 13.3% | 25.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

| Hospital and Long-Term Care Out-of-State Questionnaire | | | | |
|---|---|---|---|---|
| **33. How would you rate your satisfaction with job security at your primary facility?** | | | | |
| | | **Frequency** | **%** | **Valid %** |
| Valid | Very Dissatisfied | 2 | 2.7% | 5.0% |
| | Dissatisfied | 3 | 4.0% | 7.5% |
| | Neither Satisfied Nor Dissatisfied | 10 | 13.3% | 25.0% |
| | Satisfied | 15 | 20.0% | 37.5% |
| | Very Satisfied | 10 | 13.3% | 25.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**34. How would you rate the opportunities for advancement at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 4 | 5.3% | 10.0% |
| | Dissatisfied | 6 | 8.0% | 15.0% |
| | Neither Satisfied Nor Dissatisfied | 13 | 17.3% | 32.5% |
| | Satisfied | 9 | 12.0% | 22.5% |
| | Very Satisfied | 5 | 6.7% | 12.5% |
| | Not Applicable | 3 | 4.0% | 7.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**35. How would you rate your satisfaction with support from the nurses with whom you work at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 4.0% | 7.5% |
| | Dissatisfied | 1 | 1.3% | 2.5% |
| | Neither Satisfied Nor Dissatisfied | 11 | 14.7% | 27.5% |
| | Satisfied | 12 | 16.0% | 30.0% |
| | Very Satisfied | 11 | 14.7% | 27.5% |
| | Not Applicable | 2 | 2.7% | 5.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**36. How would you rate your satisfaction with support from your nursing administration at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 6 | 8.0% | 15.4% |
| | Dissatisfied | 7 | 9.3% | 17.9% |
| | Neither Satisfied Nor Dissatisfied | 10 | 13.3% | 25.6% |
| | Satisfied | 7 | 9.3% | 17.9% |
| | Very Satisfied | 6 | 8.0% | 15.4% |
| | Not Applicable | 3 | 4.0% | 7.7% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**37. How would you rate your satisfaction with interactions with physicians at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 1 | 1.3% | 2.5% |
| | Dissatisfied | 6 | 8.0% | 15.0% |
| | Neither Satisfied Nor Dissatisfied | 8 | 10.7% | 20.0% |
| | Satisfied | 16 | 21.3% | 40.0% |
| | Very Satisfied | 9 | 12.0% | 22.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

| Hospital and Long-Term Care Out-of-State Questionnaire | | | |
|---|---|---|---|

**38. How would you rate your satisfaction with interactions with other non-nursing staff at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 1 | 1.3% | 2.5% |
| | Dissatisfied | 3 | 4.0% | 7.5% |
| | Neither Satisfied Nor Dissatisfied | 7 | 9.3% | 17.5% |
| | Satisfied | 19 | 25.3% | 47.5% |
| | Very Satisfied | 9 | 12.0% | 22.5% |
| | Not Applicable | 1 | 1.3% | 2.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

| Hospital and Long-Term Care Out-of-State Questionnaire | | | |
|---|---|---|---|

**39. How would you rate your satisfaction with interactions with traveling agency staff at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 2 | 2.7% | 5.0% |
| | Neither Satisfied Nor Dissatisfied | 3 | 4.0% | 7.5% |
| | Satisfied | 14 | 18.7% | 35.0% |
| | Very Satisfied | 3 | 4.0% | 7.5% |
| | Not Applicable | 18 | 24.0% | 45.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**40. How would you rate your satisfaction with patient interactions at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 1 | 1.3% | 2.5% |
| | Neither Satisfied Nor Dissatisfied | 3 | 4.0% | 7.5% |
| | Satisfied | 17 | 22.7% | 42.5% |
| | Very Satisfied | 19 | 25.3% | 47.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**41. How would you rate your satisfaction with the time available for patient education at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 4.0% | 7.5% |
| | Dissatisfied | 8 | 10.7% | 20.0% |
| | Neither Satisfied Nor Dissatisfied | 9 | 12.0% | 22.5% |
| | Satisfied | 12 | 16.0% | 30.0% |
| | Very Satisfied | 7 | 9.3% | 17.5% |
| | Not Applicable | 1 | 1.3% | 2.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**42. How would you rate your satisfaction with your involvement in policy and management decisions at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 9.3% | 17.5% |
|  | Dissatisfied | 5 | 6.7% | 12.5% |
|  | Neither Satisfied Nor Dissatisfied | 8 | 10.7% | 20.0% |
|  | Satisfied | 13 | 17.3% | 32.5% |
|  | Very Satisfied | 5 | 6.7% | 12.5% |
|  | Not Applicable | 2 | 2.7% | 5.0% |
|  | **Total** | **40** | **53.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 2 | 2.7% |  |
|  | **Total** | **35** | **46.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**43. How would you rate your satisfaction with the opportunities to use your skills at your primary facility?**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 2 | 2.7% | 5.0% |
|  | Dissatisfied | 2 | 2.7% | 5.0% |
|  | Neither Satisfied Nor Dissatisfied | 10 | 13.3% | 25.0% |
|  | Satisfied | 18 | 24.0% | 45.0% |
|  | Very Satisfied | 8 | 10.7% | 20.0% |
|  | **Total** | **40** | **53.3%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 2 | 2.7% |  |
|  | **Total** | **35** | **46.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

## Hospital and Long-Term Care Out-of-State Questionnaire

**44. How would you rate your satisfaction with the opportunities to learn new skills at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 2 | 2.7% | 5.0% |
| | Dissatisfied | 10 | 13.3% | 25.0% |
| | Neither Satisfied Nor Dissatisfied | 8 | 10.7% | 20.0% |
| | Satisfied | 12 | 16.0% | 30.0% |
| | Very Satisfied | 8 | 10.7% | 20.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

## Hospital and Long-Term Care Out-of-State Questionnaire

**45. How would you rate your satisfaction with the opportunities for continuing education at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 4 | 5.3% | 10.0% |
| | Dissatisfied | 10 | 13.3% | 25.0% |
| | Neither Satisfied Nor Dissatisfied | 11 | 14.7% | 27.5% |
| | Satisfied | 6 | 8.0% | 15.0% |
| | Very Satisfied | 8 | 10.7% | 20.0% |
| | Not Applicable | 1 | 1.3% | 2.5% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**46. How would you rate your satisfaction with the quality of patient care at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---:|---:|---:|
| Valid | Very Dissatisfied | 3 | 4.0% | 7.5% |
| | Dissatisfied | 4 | 5.3% | 10.0% |
| | Neither Satisfied Nor Dissatisfied | 4 | 5.3% | 10.0% |
| | Satisfied | 21 | 28.0% | 52.5% |
| | Very Satisfied | 8 | 10.7% | 20.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**47. How would you rate your satisfaction with the feeling that your work is important at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---:|---:|---:|
| Valid | Very Dissatisfied | 3 | 4.0% | 7.5% |
| | Dissatisfied | 2 | 2.7% | 5.0% |
| | Neither Satisfied Nor Dissatisfied | 4 | 5.3% | 10.0% |
| | Satisfied | 19 | 25.3% | 47.5% |
| | Very Satisfied | 12 | 16.0% | 30.0% |
| | **Total** | **40** | **53.3%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 2 | 2.7% | |
| | **Total** | **35** | **46.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**48. How would you rate your satisfaction with other issues at your primary facility?**

| | | Frequency | % | Valid % |
|---|---|---:|---:|---:|
| Valid | Very Dissatisfied | 2 | 2.7% | 5.7% |
| | Not Applicable | 1 | 1.3% | 2.9% |
| | Skip, Not Employed in Nursing | 32 | 42.7% | 91.4% |
| | **Total** | **35** | **46.6%** | **100.0%** |
| | | | | |
| Missing | No Answer | 40 | 53.3% | |
| | **Total** | **40** | **53.3%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**49. How would you rate the statement "Generally speaking, I am very satisfied with nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 2.7% | 5.1% |
| | Disagree | 7 | 9.3% | 17.9% |
| | Neither Agree Nor Disagree | 11 | 14.7% | 28.2% |
| | Agree | 11 | 14.7% | 28.2% |
| | Strongly Agree | 8 | 10.7% | 20.5% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**50. How would you rate the statement "I frequently think of quitting nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 10 | 13.3% | 25.6% |
| | Disagree | 10 | 13.3% | 25.6% |
| | Neither Agree Nor Disagree | 7 | 9.3% | 17.9% |
| | Agree | 8 | 10.7% | 20.5% |
| | Strongly Agree | 4 | 5.3% | 10.3% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care Out-of-State Questionnaire**

**51. How would you rate the statement "I am generally satisfied with the kind of work I do in nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | 1.3% | 2.6% |
| | Disagree | 2 | 2.7% | 5.1% |
| | Neither Agree Nor Disagree | 8 | 10.7% | 20.5% |
| | Agree | 22 | 29.3% | 56.4% |
| | Strongly Agree | 6 | 8.0% | 15.4% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | | | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**52. How would you rate the statement "Most people on this job are satisfied with nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 4 | 5.3% | 10.3% |
| | Disagree | 8 | 10.7% | 20.5% |
| | Neither Agree Nor Disagree | 11 | 14.7% | 28.2% |
| | Agree | 14 | 18.7% | 35.9% |
| | Strongly Agree | 2 | 2.7% | 5.1% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**53. How would you rate the statement "People in this job often think of quitting nursing"?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 2.7% | 5.1% |
| | Disagree | 12 | 16.0% | 30.8% |
| | Neither Agree Nor Disagree | 10 | 13.3% | 25.6% |
| | Agree | 8 | 10.7% | 20.5% |
| | Strongly Agree | 5 | 6.7% | 12.8% |
| | Don't Know | 2 | 2.7% | 5.1% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would not leave nursing.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 7 | 9.3% | 17.9% |
| | Not Checked | 32 | 42.7% | 82.1% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing because I feel burned out from nursing.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 11 | 14.7% | 28.2% |
| | Not Checked | 28 | 37.3% | 71.8% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing because I feel unsupported as a nurse.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 10 | 13.3% | 25.6% |
|  | Not Checked | 29 | 38.7% | 74.4% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing because I am concerned with the quality of care.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 13 | 17.3% | 33.3% |
|  | Not Checked | 26 | 34.7% | 66.7% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing for a better salary outside nursing.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 9 | 12.0% | 23.1% |
|  | Not Checked | 30 | 40.0% | 76.9% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **66** | **88.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing for better management support.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 7 | 9.3% | 17.9% |
|  | Not Checked | 32 | 42.7% | 82.1% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing for better advancement opportunities.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 4 | 5.3% | 10.3% |
|  | Not Checked | 35 | 46.7% | 89.7% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing because I am concerned with delegation to unlicensed assistive personnel.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 4 | 5.3% | 10.3% |
|  | Not Checked | 35 | 46.7% | 89.7% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 54. I would leave nursing because I feel overworked.

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 9 | 12.0% | 23.1% |
| | Not Checked | 30 | 40.0% | 76.9% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 54. I would leave nursing because I am concerned with injury to patients.

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 1 | 1.3% | 2.6% |
| | Not Checked | 38 | 50.7% | 97.4% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 54. I would leave nursing because I need more autonomy.

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 4 | 5.3% | 10.3% |
| | Not Checked | 35 | 46.7% | 89.7% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing because I need more respect.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 7 | 9.3% | 17.9% |
|  | Not Checked | 32 | 42.7% | 82.1% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing because I plan to retire.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 11 | 14.7% | 28.2% |
|  | Not Checked | 28 | 37.3% | 71.8% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing for a better work schedule outside nursing.**

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 7 | 9.3% | 17.9% |
|  | Not Checked | 32 | 42.7% | 82.1% |
|  | **Total** | **39** | **52.0%** | **100.0%** |
|  |  |  |  |  |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% |  |
|  | No Answer | 3 | 4.0% |  |
|  | **Total** | **36** | **48.0%** |  |
| **Total** |  | **75** | **100.0%** |  |

Appendix B:
Frequency Tables

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing because I am concerned with injury to self.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 5 | 6.7% | 12.8% |
| | Not Checked | 34 | 45.3% | 87.2% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing because I seek more challenging work.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 3 | 4.0% | 7.7% |
| | Not Checked | 36 | 48.0% | 92.3% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**54. I would leave nursing for some other reason.**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Checked | 5 | 6.7% | 12.8% |
| | Not Checked | 34 | 45.3% | 87.2% |
| | **Total** | **39** | **52.0%** | **100.0%** |
| | | | | |
| Missing | Skip, Not Employed in Nursing | 33 | 44.0% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **36** | **48.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**58. What is your marital status?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Married or Cohabitating | 58 | 77.3% | 81.7% |
| | Single | 3 | 4.0% | 4.2% |
| | Divorced | 8 | 10.7% | 11.3% |
| | Widowed | 2 | 2.7% | 2.8% |
| | **Total** | **71** | **94.7%** | **100.0%** |
| | | | | |
| Missing | No Answer | 4 | 5.3% | |
| | **Total** | **4** | **5.3%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**59. What is the highest level of education your spouse or partner has completed?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Less Than High School | 2 | 2.7% | 3.4% |
| | High School Grad or GED | 9 | 12.0% | 15.3% |
| | Some College or Associates Degree | 23 | 30.7% | 39.0% |
| | Bachelors Degree | 15 | 20.0% | 25.4% |
| | Graduate or Professional Degree | 9 | 12.0% | 15.3% |
| | Other | 1 | 1.3% | 1.7% |
| | **Total** | **59** | **78.6%** | **100.0%** |
| | | | | |
| Missing | Skip | 13 | 17.3% | |
| | No Answer | 3 | 4.0% | |
| | **Total** | **16** | **21.3%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**60. Was your spouse or partner employed during the reference period?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 40 | 53.3% | 70.2% |
| | No | 17 | 22.7% | 29.8% |
| | **Total** | **57** | **76.0%** | **100.0%** |
| | | | | |
| Missing | Skip | 13 | 17.3% | |
| | No Answer | 5 | 6.7% | |
| | **Total** | **18** | **24.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**63. Do you have dependents living in your house?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | No | 49 | 65.3% | 70.0% |
| | Yes | 21 | 28.0% | 30.0% |
| | **Total** | **70** | **93.3%** | **100.0%** |
| | | | | |
| Missing | No Answer | 5 | 6.7% | |
| | **Total** | **5** | **6.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**64. Do you provide care for your parents or your spouse/partner's parents?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Yes | 10 | 13.3% | 14.1% |
| | No | 61 | 81.3% | 85.9% |
| | **Total** | **71** | **94.7%** | **100.0%** |
| | | | | |
| Missing | No Answer | 4 | 5.3% | |
| | **Total** | **4** | **5.3%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**66. What was the total pre-tax income in your household in the past 12 months?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Less than $20,000 | 4 | 5.3% | 6.1% |
| | $20,000 to $29,000 | 3 | 4.0% | 4.5% |
| | $30,000 to $39,999 | 5 | 6.7% | 7.6% |
| | $40,000 to $49,999 | 5 | 6.7% | 7.6% |
| | $50,000 to $59,999 | 6 | 8.0% | 9.1% |
| | $60,000 to $69,999 | 6 | 8.0% | 9.1% |
| | $70,000 to $79,999 | 11 | 14.7% | 16.7% |
| | $80,000 to $99,999 | 6 | 8.0% | 9.1% |
| | $100,000 to $124,999 | 12 | 16.0% | 18.2% |
| | $125,000 to $149,999 | 3 | 4.0% | 4.5% |
| | $150,000 to $199,999 | 1 | 1.3% | 1.5% |
| | $200,000 or more | 4 | 5.3% | 6.1% |
| | **Total** | **66** | **88.0%** | **100.0%** |
| | | | | |
| Missing | No Answer | 9 | 12.0% | |
| | **Total** | **9** | **12.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**68. Of the following reasons, which one best describes why you live in your current community?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Existing Job | 9 | 12.0% | 12.9% |
| | Proximity to School or Work | 2 | 2.7% | 2.9% |
| | Spouse or Partner Job | 14 | 18.7% | 20.0% |
| | Cost of Living/Affordable Housing | 8 | 10.7% | 11.4% |
| | Proximity to Natural Amenities | 4 | 5.3% | 5.7% |
| | Proximity to Family | 18 | 24.0% | 25.7% |
| | Other | 12 | 16.0% | 17.1% |
| | Multiple Reasons Chosen | 3 | 4.0% | 4.3% |
| | **Total** | **70** | **93.3%** | **100.0%** |
| Missing | No Answer | 5 | 6.7% | |
| | **Total** | **5** | **6.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**69. How much do you agree or disagree with the following statement: "I am tied to this community and cannot leave."**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Strongly Agree | 6 | 8.0% | 8.5% |
| | Agree | 11 | 14.7% | 15.5% |
| | Neither Agree Nor Disagree | 13 | 17.3% | 18.3% |
| | Disagree | 17 | 22.7% | 23.9% |
| | Strongly Disagree | 24 | 32.0% | 33.8% |
| | **Total** | **71** | **94.7%** | **100.0%** |
| Missing | No Answer | 4 | 5.3% | |
| | **Total** | **4** | **5.3%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 71. How would you rate your current community for economic opportunities?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 10 | 13.3% | 14.3% |
| | Dissatisfied | 11 | 14.7% | 15.7% |
| | Neither Satisfied Nor Dissatisfied | 17 | 22.7% | 24.3% |
| | Satisfied | 19 | 25.3% | 27.1% |
| | Very Satisfied | 8 | 10.7% | 11.4% |
| | Don't Know | 5 | 6.7% | 7.1% |
| | **Total** | **70** | **93.3%** | **100.0%** |
| | | | | |
| Missing | No Answer | 5 | 6.7% | |
| | **Total** | **5** | **6.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 72. How would you rate your current community for proximity to family?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 10 | 13.3% | 14.5% |
| | Dissatisfied | 11 | 14.7% | 15.9% |
| | Neither Satisfied Nor Dissatisfied | 14 | 18.7% | 20.3% |
| | Satisfied | 19 | 25.3% | 27.5% |
| | Very Satisfied | 15 | 20.0% | 21.7% |
| | **Total** | **69** | **92.0%** | **100.0%** |
| | | | | |
| Missing | No Answer | 6 | 8.0% | |
| | **Total** | **6** | **8.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 73. How would you rate your current community for cost of living?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 4.0% | 4.3% |
| | Dissatisfied | 14 | 18.7% | 20.0% |
| | Neither Satisfied Nor Dissatisfied | 24 | 32.0% | 34.3% |
| | Satisfied | 28 | 37.3% | 40.0% |
| | Very Satisfied | 1 | 1.3% | 1.4% |
| | **Total** | **70** | **93.3%** | **100.0%** |
| | | | | |
| Missing | No Answer | 5 | 6.7% | |
| | **Total** | **5** | **6.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 74. How would you rate your current community for rural character?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Dissatisfied | 3 | 4.0% | 4.3% |
| | Neither Satisfied Nor Dissatisfied | 22 | 29.3% | 31.4% |
| | Satisfied | 32 | 42.7% | 45.7% |
| | Very Satisfied | 13 | 17.3% | 18.6% |
| | **Total** | **70** | **93.3%** | **100.0%** |
| | | | | |
| Missing | No Answer | 5 | 6.7% | |
| | **Total** | **5** | **6.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 75. How would you rate your current community for urban character?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 5 | 6.7% | 7.2% |
| | Dissatisfied | 9 | 12.0% | 13.0% |
| | Neither Satisfied Nor Dissatisfied | 27 | 36.0% | 39.1% |
| | Satisfied | 16 | 21.3% | 23.2% |
| | Very Satisfied | 4 | 5.3% | 5.8% |
| | Don't Know | 8 | 10.7% | 11.6% |
| | **Total** | **69** | **92.0%** | **100.0%** |
| | | | | |
| Missing | No Answer | 6 | 8.0% | |
| | **Total** | **6** | **8.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 76. How would you rate your current community for housing?

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 4 | 5.3% | 5.7% |
| | Dissatisfied | 9 | 12.0% | 12.9% |
| | Neither Satisfied Nor Dissatisfied | 20 | 26.7% | 28.6% |
| | Satisfied | 31 | 41.3% | 44.3% |
| | Very Satisfied | 6 | 8.0% | 8.6% |
| | **Total** | **70** | **93.3%** | **100.0%** |
| | | | | |
| Missing | No Answer | 5 | 6.7% | |
| | **Total** | **5** | **6.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**77. How would you rate your current community for public safety services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 2 | 2.7% | 2.9% |
| | Dissatisfied | 5 | 6.7% | 7.1% |
| | Neither Satisfied Nor Dissatisfied | 20 | 26.7% | 28.6% |
| | Satisfied | 35 | 46.7% | 50.0% |
| | Very Satisfied | 6 | 8.0% | 8.6% |
| | Don't Know | 2 | 2.7% | 2.9% |
| | **Total** | **70** | **93.3%** | **100.0%** |
| Missing | No Answer | 5 | 6.7% | |
| | **Total** | **5** | **6.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**78. How would you rate your current community in terms of parks and recreation/natural amenities?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 4.0% | 4.3% |
| | Dissatisfied | 6 | 8.0% | 8.6% |
| | Neither Satisfied Nor Dissatisfied | 10 | 13.3% | 14.3% |
| | Satisfied | 35 | 46.7% | 50.0% |
| | Very Satisfied | 15 | 20.0% | 21.4% |
| | Don't Know | 1 | 1.3% | 1.4% |
| | **Total** | **70** | **93.3%** | **100.0%** |
| Missing | No Answer | 5 | 6.7% | |
| | **Total** | **5** | **6.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**79. How would you rate your current community in terms of education (K-12)?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 4 | 5.3% | 5.8% |
| | Dissatisfied | 5 | 6.7% | 7.2% |
| | Neither Satisfied Nor Dissatisfied | 15 | 20.0% | 21.7% |
| | Satisfied | 23 | 30.7% | 33.3% |
| | Very Satisfied | 12 | 16.0% | 17.4% |
| | Don't Know | 10 | 13.3% | 14.5% |
| | **Total** | **69** | **92.0%** | **100.0%** |
| Missing | No Answer | 6 | 8.0% | |
| | **Total** | **6** | **8.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**80. How would you rate your current community in terms of access to post-secondary education, including continuing education?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 4 | 5.3% | 5.7% |
| | Dissatisfied | 10 | 13.3% | 14.3% |
| | Neither Satisfied Nor Dissatisfied | 15 | 20.0% | 21.4% |
| | Satisfied | 27 | 36.0% | 38.6% |
| | Very Satisfied | 9 | 12.0% | 12.9% |
| | Don't Know | 5 | 6.7% | 7.1% |
| | **Total** | **70** | **93.3%** | **100.0%** |
| Missing | No Answer | 5 | 6.7% | |
| | **Total** | **5** | **6.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**81. How would you rate your current community in terms of day care services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 3 | 4.0% | 4.3% |
| | Dissatisfied | 3 | 4.0% | 4.3% |
| | Neither Satisfied Nor Dissatisfied | 25 | 33.3% | 36.2% |
| | Satisfied | 7 | 9.3% | 10.1% |
| | Very Satisfied | 1 | 1.3% | 1.4% |
| | Don't Know | 30 | 40.0% | 43.5% |
| | **Total** | **69** | **92.0%** | **100.0%** |
| Missing | No Answer | 6 | 8.0% | |
| | **Total** | **6** | **8.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**82. How would you rate your current community in terms of medical care services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 11 | 14.7% | 15.7% |
| | Dissatisfied | 7 | 9.3% | 10.0% |
| | Neither Satisfied Nor Dissatisfied | 16 | 21.3% | 22.9% |
| | Satisfied | 30 | 40.0% | 42.9% |
| | Very Satisfied | 5 | 6.7% | 7.1% |
| | Don't Know | 1 | 1.3% | 1.4% |
| | **Total** | **70** | **93.3%** | **100.0%** |
| Missing | No Answer | 5 | 6.7% | |
| | **Total** | **5** | **6.7%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

**83. How would you rate your current community in terms of mental care services?**

| | | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 7 | 9.3% | 10.1% |
| | Dissatisfied | 12 | 16.0% | 17.4% |
| | Neither Satisfied Nor Dissatisfied | 14 | 18.7% | 20.3% |
| | Satisfied | 16 | 21.3% | 23.2% |
| | Very Satisfied | 2 | 2.7% | 2.9% |
| | Don't Know | 18 | 24.0% | 26.1% |
| | **Total** | **69** | **92.0%** | **100.0%** |
| Missing | No Answer | 6 | 8.0% | |
| | **Total** | **6** | **8.0%** | |
| **Total** | | **75** | **100.0%** | |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 84. How would you rate your current community in terms of retail shopping?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 14 | 18.7% | 20.0% |
|  | Dissatisfied | 22 | 29.3% | 31.4% |
|  | Neither Satisfied Nor Dissatisfied | 18 | 24.0% | 25.7% |
|  | Satisfied | 12 | 16.0% | 17.1% |
|  | Very Satisfied | 4 | 5.3% | 5.7% |
|  | **Total** | **70** | **93.3%** | **100.0%** |
| Missing | No Answer | 5 | 6.7% |  |
|  | **Total** | **5** | **6.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 85. How would you rate your current community in terms of restaurants/ entertainment?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Dissatisfied | 13 | 17.3% | 18.6% |
|  | Dissatisfied | 22 | 29.3% | 31.4% |
|  | Neither Satisfied Nor Dissatisfied | 13 | 17.3% | 18.6% |
|  | Satisfied | 18 | 24.0% | 25.7% |
|  | Very Satisfied | 4 | 5.3% | 5.7% |
|  | **Total** | **70** | **93.3%** | **100.0%** |
| Missing | No Answer | 5 | 6.7% |  |
|  | **Total** | **5** | **6.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

**Hospital and Long-Term Care Out-of-State Questionnaire**

### 86. If given the opportunity, how likely would you be to move away from your current community?

|  |  | Frequency | % | Valid % |
|---|---|---|---|---|
| Valid | Very Likely | 20 | 26.7% | 28.6% |
|  | Likely | 15 | 20.0% | 21.4% |
|  | Neither Likely Nor Unlikely | 7 | 9.3% | 10.0% |
|  | Unlikely | 10 | 13.3% | 14.3% |
|  | Very Unlikely | 17 | 22.7% | 24.3% |
|  | Don't Know | 1 | 1.3% | 1.4% |
|  | **Total** | **70** | **93.3%** | **100.0%** |
| Missing | No Answer | 5 | 6.7% |  |
|  | **Total** | **5** | **6.7%** |  |
| **Total** |  | **75** | **100.0%** |  |

# Appendix C: Factor Analysis Results

*Basically Speaking...*
# What's a Regression Model?

The *regression modeling* approach is useful when the goal is to learn how Y, the response variable, can be predicted from X, the covariate, or explanatory, variable. For example:
- X is a person's answer to Question 6: "Do you plan to leave employment with your primary facility within the next 12 months?" and Y is the person's age group.
- X is a person's answer to Question 6: "Do you plan to leave employment with your primary facility within the next 12 months?" and Y is whether the person went to high school in state or out of state.

The model is the mathematical formula used to calculate the likelihood that these various factors are correlated to the response variable, to a specific level of certainty.

## Proportional Reduction in Error

*Proportional reduction in error* is the increased accuracy (i.e., reduction in error) in predicting the characteristics of the sample on one variable that one obtains if the values of a second variable are known, compared with not knowing the second variable. For example, we know that 97% of persons who have out-of-state social security numbers went to high school out of state. Knowing this, the chances of error in the prediction are reduced. The proportional reduction of error is related to the association between the two variables.[1]

**Figure: Classification Table as a Measure of Model Accuracy (Predicted and Actual Responses to Question 6: "Do You Plan to Leave Employment With Your Primary Facility Within the Next 12 Months?")**

Accurately Predicted "Yes" Answers 60.6% of the Time

Accurately Predicted "No" Answers 86.7% of the Time

|  |  | Actual Response to Question 6 | | |
|---|---|---|---|---|
|  |  | Yes | No | |
| **Predicted Response to Question 6** | Yes | 40 | 26 | 66 |
|  | No | 265 | 1,730 | 1,995 |
|  |  | 305 | 1,756 | 2,061 |

1 Adapted from Fielding, J., and Gilbert, N. (2006). *Understanding social statistics (Glossary)* (2nd ed.). London: Sage Publications Ltd. Retrieved May 20, 2008, from http://www.soc.surrey.ac.uk/uss/glossary.html#P

# Factor Analysis

*by: Doug Leonard, Senior Economist*

Exploratory factor analysis allows us to "identify the number and nature of the underlying factors responsible for the covariation in the data" (Hatcher, 1994, p. 59). The purpose of exploratory factor analysis in this case is to distill common factors from a wide array of variables. In other words, when we wish to determine which of the scaled items explain the same construct (or do not), we employ factor analysis.

This appendix contains the detailed final factor analysis results. We began by processing all scaled items using the SAS System's PROC FACTOR. We set some additional procedure options prior to the factor analysis, one of which was maximum likelihood factor (ML) extraction and the second was oblique factor rotation. We chose ML factor extraction because it is believed to provide better parameter estimates than other methods (Hatcher, 1994, p. 77). Oblique rotation means a linear transformation is performed on the original factors and that correlation among factors is allowed (e.g., factors are related). The first task in reviewing the results is to decide how many factors to retain in the analysis. To do this, we used the scree test (Cattell, 1966) in addition to qualitatively assessing the value of each potential factor. This test involves viewing the scree plot (see page 278) in the factor analysis results. On this plot, we looked for a point of inflection (e.g., bend). All factors above the inflection point (in addition to those deemed necessary) were retained in the analysis.

Once we optimized the number of factors, we then determined which scaled items were grouped into each factor. To do this, we grouped all scaled items into a factor where a variable's score had an absolute value of 0.3 or greater (see Rotated Factor Pattern [Standardized Regression Coefficients] on pages 282 and 292). Table 4 (see Chapter 1, page 20) displays the factors and their underlying scaled items. We retained Family Proximity as a distinct factor because it did not load on the other factors and the literature review indicated its theoretical relevance. Note that we performed two factor analyses, the first on the satisfaction items and the second on the community scaled items. Each is shown in a separate section of the appendix (see pages 277-286 and 286-294). From these two table set s we grouped the scaled items into the factors displayed in Table 1.

With the factor groupings set, we then attempted to model (predict) respondent answers to question 6 (the variable PRIM_LV), "Do you plan to leave employment with your primary facility in the next 12 months?" Since our dependent variable had two outcomes (binary), the problem was well suited to binary logistic regression.

## References

Cattell, R.B. (1966). The scree test for the number of factors. *Multivariate Behavior Research, 1*, 245-276.

Hatcher, L. (1994). *A step-by-step approach to using SAS for factor analysis and structural equation modeling*. Cary, NC: SAS Institute.

# Factor Analysis Tables

*by: Doug Leonard, Senior Economist*

**Prior Communality Estimates: SMC**

| Salary | Range | Benefits | Skills | Clerical | Non_nurs | Paper | Safety |
|--------|-------|----------|--------|----------|----------|-------|--------|
| 0.74016638 | 0.74775098 | 0.26908557 | 0.36369435 | 0.39516360 | 0.35480214 | 0.26824388 | 0.38119112 |

| Sched | Jb_secure | Advance | Nrs_spt | Admin_spt | Physician | Stf_int | Patients |
|-------|-----------|---------|---------|-----------|-----------|---------|----------|
| 0.30780832 | 0.37831994 | 0.47178132 | 0.41670852 | 0.46549491 | 0.31876708 | 0.39677925 | 0.26809548 |

| Patient_ed | Use_skills | New_skills | Cont_ed | Pat_care | Import |
|------------|------------|------------|---------|----------|--------|
| 0.35257185 | 0.52419967 | 0.66140215 | 0.54986482 | 0.50954165 | 0.46102780 |

**Preliminary Eigenvalues: Total = 20.6776851  Average = 0.93989478**

| | Eigenvalue | Difference | Proportion | Cumulative |
|---|-----------|------------|------------|------------|
| 1 | 14.7472668 | 10.5715240 | 0.7132 | 0.7132 |
| 2 | 4.1757428 | 2.4038155 | 0.2019 | 0.9151 |
| 3 | 1.7719273 | 0.8605507 | 0.0857 | 1.0008 |
| 4 | 0.9113766 | 0.1720952 | 0.0441 | 1.0449 |
| 5 | 0.7392814 | 0.2515081 | 0.0358 | 1.0807 |
| 6 | 0.4877733 | 0.1263696 | 0.0236 | 1.1043 |
| 7 | 0.3614037 | 0.1896779 | 0.0175 | 1.1217 |
| 8 | 0.1717258 | 0.0984357 | 0.0083 | 1.1300 |
| 9 | 0.0732902 | 0.0323089 | 0.0035 | 1.1336 |
| 10 | 0.0409812 | 0.0468940 | 0.0020 | 1.1356 |
| 11 | -0.0059127 | 0.0579719 | -0.0003 | 1.1353 |
| 12 | -0.0638846 | 0.0652179 | -0.0031 | 1.1322 |
| 13 | -0.1291025 | 0.0159544 | -0.0062 | 1.1259 |
| 14 | -0.1450569 | 0.0386664 | -0.0070 | 1.1189 |
| 15 | -0.1837233 | 0.0298655 | -0.0089 | 1.1100 |
| 16 | -0.2135887 | 0.0483485 | -0.0103 | 1.0997 |
| 17 | -0.2619372 | 0.0208478 | -0.0127 | 1.0870 |
| 18 | -0.2827850 | 0.0396112 | -0.0137 | 1.0734 |
| 19 | -0.3223963 | 0.0148438 | -0.0156 | 1.0578 |
| 20 | -0.3372400 | 0.0635776 | -0.0163 | 1.0415 |
| 21 | -0.4008176 | 0.0558215 | -0.0194 | 1.0221 |
| 22 | -0.4566391 | | -0.0221 | 1.0000 |

4 factors will be retained by the NFACTOR criterion.

**Scree Plot of Eigenvalues**

```
      ,
      ,
  16 ^
      ,
      ,          1
  14 ^
E     ,
i 12 ^
g     ,
e     ,
n 10 ^
v     ,
a     ,
l  8 '~
u     ,
e  6 ^
s     ,
      ,
   4 '~      2
      ,
   2 '~      3
      ,          4  5
   0 '~            6  7   8  9  0  1  2  3  4 5  7  8  9  0  1  2
      ,                                        6
      ,
  -2 '~
      ,
      ,
       0  1  2  3  4  5  6  7  8  9  10 11 12 13 14 15 16 17 18 19 20 21 22
                                    **Number**
```
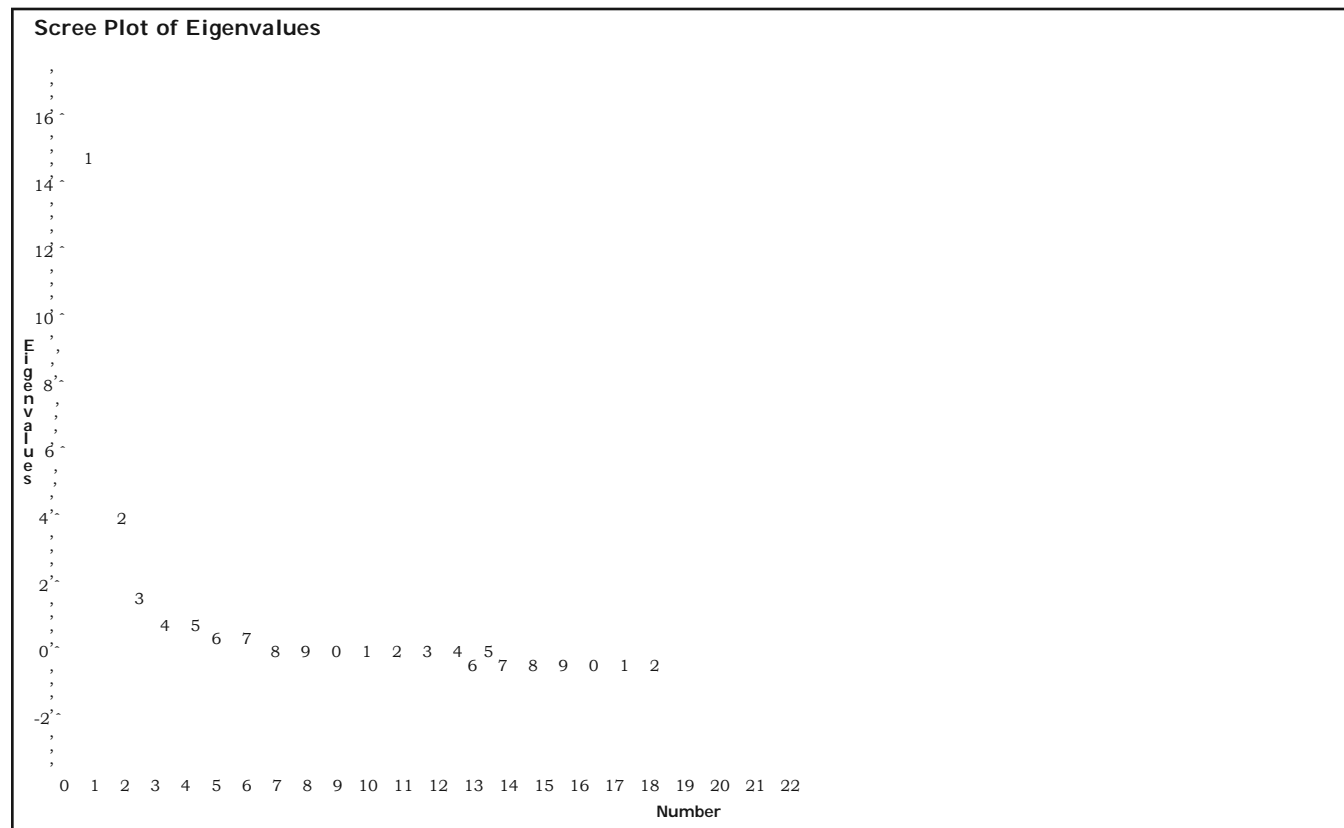
| Iteration | Criterion | Ridge | Change | Communalities | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Communalities | | | | | | | | |
| | | | | Communalities | | | | | | | | |
| 1 | 0.6656235 | 0.0000 | 0.1995 | 0.82593 | 0.88130 | 0.26634 | 0.34061 | 0.45653 | 0.46773 | 0.33406 | 0.40777 | 0.31309 | 0.34454 |
| | | | | 0.42701 | 0.43850 | 0.46264 | 0.27701 | 0.37643 | 0.22883 | 0.33376 | 0.52869 | 0.86086 | 0.57639 |
| | | | | 0.53902 | | | | | | | | | 0.48608 |
| 2 | 0.6575616 | 0.0000 | 0.0561 | 0.83702 | 0.87623 | 0.26041 | 0.34070 | 0.47078 | 0.48047 | 0.32853 | 0.40565 | 0.31263 | 0.35450 |
| | | | | 0.41228 | 0.43299 | 0.46741 | 0.26990 | 0.36847 | 0.22510 | 0.33487 | 0.54245 | 0.91695 | 0.55383 |
| | | | | 0.53208 | | | | | | | | | 0.48644 |
| 3 | 0.6570111 | 0.0000 | 0.0187 | 0.83322 | 0.88020 | 0.25946 | 0.33783 | 0.47396 | 0.48194 | 0.32906 | 0.40499 | 0.31317 | 0.35951 |
| | | | | 0.40933 | 0.43235 | 0.46886 | 0.26842 | 0.36703 | 0.22320 | 0.33421 | 0.54160 | 0.93567 | 0.54838 |
| | | | | 0.52890 | | | | | | | | | 0.48616 |
| 4 | 0.6569762 | 0.0000 | 0.0041 | 0.83439 | 0.87901 | 0.25913 | 0.33690 | 0.47441 | 0.48199 | 0.32975 | 0.40481 | 0.31343 | 0.36165 |
| | | | | 0.40908 | 0.43219 | 0.46933 | 0.26804 | 0.36673 | 0.22252 | 0.33432 | 0.54129 | 0.93978 | 0.54703 |
| | | | | 0.52722 | | | | | | | | | 0.48589 |
| 5 | 0.6569734 | 0.0000 | 0.0010 | 0.83376 | 0.87964 | 0.25906 | 0.33660 | 0.47451 | 0.48186 | 0.33006 | 0.40477 | 0.31355 | 0.36228 |
| | | | | 0.40910 | 0.43224 | 0.46947 | 0.26796 | 0.36664 | 0.22228 | 0.33441 | 0.54114 | 0.94074 | 0.54670 |
| | | | | 0.52668 | | | | | | | | | 0.48571 |

Convergence criterion satisfied.

**Significance Tests Based on 2,317 Observations**

| Test | DF | Chi-Square | Pr > ChiSq |
|------|----|-----------|-----------|
| H0: No common factors | 231 | 21309.8849 | <.0001 |
| HA: At least one common factor | | | |
| H0: 4 Factors are sufficient | 149 | 1514.4331 | <.0001 |
| HA: More factors are needed | | | |

| | |
|------|------|
| **Chi-Square without Bartlett's Correction** | 1521.5504 |
| **Akaike's Information Criterion** | 1223.5504 |
| **Schwarz's Bayesian Criterion** | 367.0941 |
| **Tucker and Lewis's Reliability Coefficient** | 0.8996 |

**Squared Canonical Correlations**

| Factor1 | Factor2 | Factor3 | Factor4 |
|---------|---------|---------|---------|
| 0.96432378 | 0.90462221 | 0.79598535 | 0.54196596 |

**Eigenvalues of the Weighted Reduced Correlation Matrix: Total = 41.5993445 Average = 1.89087929**

| | Eigenvalue | Difference | Proportion | Cumulative |
|----|-----------|-----------|-----------|-----------|
| 1 | 27.0298764 | 17.5452553 | 0.6498 | 0.6498 |
| 2 | 9.4846211 | 5.5830123 | 0.2280 | 0.8778 |
| 3 | 3.9016088 | 2.7183649 | 0.0938 | 0.9716 |
| 4 | 1.1832439 | 0.4630126 | 0.0284 | 1.0000 |
| 5 | 0.7202313 | 0.2529938 | 0.0173 | 1.0173 |
| 6 | 0.4672375 | 0.1124782 | 0.0112 | 1.0285 |
| 7 | 0.3547593 | 0.1479542 | 0.0085 | 1.0371 |
| 8 | 0.2068052 | 0.0795729 | 0.0050 | 1.0420 |
| 9 | 0.1272323 | 0.0457367 | 0.0031 | 1.0451 |
| 10 | 0.0814956 | 0.0727186 | 0.0020 | 1.0471 |
| 11 | 0.0087769 | 0.0126521 | 0.0002 | 1.0473 |
| 12 | -0.0038752 | 0.0151255 | -0.0001 | 1.0472 |
| 13 | -0.0190007 | 0.0751418 | -0.0005 | 1.0467 |
| 14 | -0.0941425 | 0.0160859 | -0.0023 | 1.0445 |
| 15 | -0.1102284 | 0.0186807 | -0.0026 | 1.0418 |
| 16 | -0.1289091 | 0.0284650 | -0.0031 | 1.0387 |
| 17 | -0.1573741 | 0.0203750 | -0.0038 | 1.0349 |
| 18 | -0.1777491 | 0.1160031 | -0.0043 | 1.0307 |
| 19 | -0.2937523 | 0.0128412 | -0.0071 | 1.0236 |
| 20 | -0.3065935 | 0.0191543 | -0.0074 | 1.0162 |
| 21 | -0.3257478 | 0.0234232 | -0.0078 | 1.0084 |
| 22 | -0.3491710 | | -0.0084 | 1.0000 |

# Retention of Nurses in Wyoming

**Factor Pattern**

|  |  | Factor1 |  | Factor2 |  | Factor3 |  | Factor4 |  |
|---|---|---|---|---|---|---|---|---|---|
| Salary | Salary | 59 | * | -68 | * | -14 |  | 4 |  |
| Range | Range | 61 | * | -70 | * | -13 |  | 0 |  |
| Benefits | Benefits | 43 | * | -23 |  | 13 |  | -9 |  |
| Skills | Skills | 47 | * | 7 |  | 29 |  | 18 |  |
| Clerical | Clerical | 46 | * | -2 |  | 41 | * | -31 | * |
| Non_nurs | Non_nurs | 44 | * | -6 |  | 33 | * | -42 | * |
| Paper | Paper | 34 | * | -11 |  | 30 |  | -34 | * |
| Safety | Safety | 52 | * | -1 |  | 37 | * | -3 |  |
| Sched | Sched | 45 | * | -7 |  | 33 | * | 2 |  |
| Jb_secure | Jb_secure | 49 | * | -4 |  | 31 | * | 17 |  |
| Advance | Advance | 63 | * | -4 |  | 10 |  | 6 |  |
| Nrs_spt | Nrs_spt | 52 | * | 6 |  | 31 | * | 24 |  |
| Admin_spt | Admin_spt | 57 | * | -4 |  | 38 | * | 0 |  |
| Physician | Physician | 38 | * | 6 |  | 34 | * | 6 |  |
| Stf_int | Stf_int | 46 | * | 1 |  | 39 | * | 1 |  |
| Patients | Patients | 34 | * | 4 |  | 31 | * | 12 |  |
| Patient_ed | Patient_ed | 49 | * | 2 |  | 27 |  | -14 |  |
| Use_skills | Use_skills | 68 | * | 24 |  | -6 |  | 11 |  |
| New_skills | New_skills | 87 | * | 37 | * | -20 |  | -3 |  |
| Cont_ed | Cont_ed | 73 | * | 13 |  | -3 |  | -3 |  |
| Pat_care | Pat_care | 56 | * | 8 |  | 41 | * | 19 |  |
| Import | Import | 58 | * | 7 |  | 31 | * | 23 |  |

Printed values are multiplied by 100 and rounded to the nearest integer.

*Indicates values greater than 0.3.

**Variance Explained by Each Factor**

| Factor | Weighted | Unweighted |
|---|---|---|
| Factor1 | 27.0298764 | 6.47650905 |
| Factor2 | 9.4846211 | 1.26407048 |
| Factor3 | 3.9016088 | 1.82186668 |
| Factor4 | 1.1832439 | 0.65674346 |

## Final Communality Estimates and Variable Weights

Total Communality: Weighted = 41.599350
Unweighted = 10.219190

| Variable | Communality | Weight |
|---|---|---|
| Salary | 0.83376506 | 6.0154055 |
| Range | 0.87964053 | 8.3086588 |
| Benefits | 0.25902416 | 1.3496350 |
| Skills | 0.33653529 | 1.5073950 |
| Clerical | 0.47449975 | 1.9029884 |
| Non_nurs | 0.48184732 | 1.9299814 |
| Paper | 0.33013980 | 1.4926634 |
| Safety | 0.40476547 | 1.6800287 |
| Sched | 0.31358587 | 1.4567701 |
| Jb_secure | 0.36245027 | 1.5680887 |
| Advance | 0.40915401 | 1.6923323 |
| Nrs_spt | 0.43226226 | 1.7613051 |
| Admin_spt | 0.46950401 | 1.8849162 |
| Physician | 0.26793800 | 1.3660392 |
| Stf_int | 0.36663373 | 1.5788853 |
| Patients | 0.22219680 | 1.2858041 |
| Patient_ed | 0.33445673 | 1.5024354 |
| Use_skills | 0.54116917 | 2.1793330 |
| New_skills | 0.94073679 | 16.8734647 |
| Cont_ed | 0.54668565 | 2.2060462 |
| Pat_care | 0.52654756 | 2.1127396 |
| Import | 0.48565144 | 1.9444282 |

## Oblique Transformation Matrix

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 1 | 0.15197461 | 0.66748959 | 0.30933276 | 0.10838879 |
| 2 | -0.0094243 | 0.73714217 | -1.0230331 | 0.02196437 |
| 3 | 1.04775082 | -0.8391062 | -0.3577938 | 0.38040743 |
| 4 | 1.06370806 | -0.2816467 | 0.13481343 | -1.1822035 |

## Inter-Factor Correlations

| | Factor1 | Factor2 | Factor3 | Factor4 |
|---|---|---|---|---|
| Factor1 | 100 * | 64 * | 40 * | 57 * |
| Factor2 | 64 * | 100 * | 39 * | 35 * |
| Factor3 | 40 * | 39 * | 100 * | 38 * |
| Factor4 | 57 * | 35 * | 38 * | 100 * |

Printed values are multiplied by 100 and rounded to the nearest integer.
*Indicates values greater than 0.3.

Appendix C:
Factor Analysis

**Rotated Factor Pattern (Standardized Regression Coefficients)**

|            |            | Factor1 | Factor2 | Factor3 | Factor4 |
|------------|------------|---------|---------|---------|---------|
| Salary     | Salary     | -1      | 0       | 93 *    | -4      |
| Range      | Range      | -4      | 1       | 95 *    | 1       |
| Benefits   | Benefits   | 11      | 4       | 31 *    | 20      |
| Skills     | Skills     | 56 *    | 7       | -1      | -5      |
| Clerical   | Clerical   | 17      | 4       | -3      | 57 *    |
| Non_nurs   | Non_nurs   | -3      | 9       | 2       | 67 *    |
| Paper      | Paper      | 0       | -1      | 7       | 55 *    |
| Safety     | Safety     | 44 *    | 3       | 4       | 23      |
| Sched      | Sched      | 43 *    | -3      | 10      | 15      |
| Jb_secure  | Jb_secure  | 58 *    | -1      | 11      | -3      |
| Advance    | Advance    | 27      | 29      | 21      | 3       |
| Nrs_spt    | Nrs_spt    | 66 *    | 6       | 2       | -10     |
| Admin_spt  | Admin_spt  | 48 *    | 4       | 8       | 21      |
| Physician  | Physician  | 47 *    | 0       | -6      | 10      |
| Stf_int    | Stf_int    | 49 *    | -1      | -1      | 18      |
| Patients   | Patients   | 49 *    | -3      | -3      | 2       |
| Patient_ed | Patient_ed | 21      | 15      | 2       | 32 *    |
| Use_skills | Use_skills | 16      | 65 *    | 0       | -8      |
| New_skills | New_skills | -11     | 103 *   | -4      | 6       |
| Cont_ed    | Cont_ed    | 4       | 62 *    | 10      | 11      |
| Pat_care   | Pat_care   | 72 *    | 4       | -2      | -1      |
| Import     | Import     | 66 *    | 11      | 3       | -10     |

Printed values are multiplied by 100 and rounded to the nearest integer.
*Indicates values greater than 0.3.

**Reference Axis Correlations**

|         | Factor1 | Factor2 | Factor3 | Factor4 |
|---------|---------|---------|---------|---------|
| Factor1 | 100 *   | -54 *   | -10     | -45 *   |
| Factor2 | -54 *   | 100 *   | -19     | 6       |
| Factor3 | -10     | -19     | 100 *   | -20     |
| Factor4 | -45 *   | 6       | -20     | 100 *   |

Printed values are multiplied by 100 and rounded to the nearest integer.
*Indicates values greater than 0.3.

| Reference Structure (Semipartial Correlations) | | Factor1 | | Factor2 | | Factor3 | | Factor4 | |
|---|---|---|---|---|---|---|---|---|---|
| Salary | Salary | -1 | | 0 | | 82 | * | -4 | |
| Range | Range | -3 | | 1 | | 84 | * | 0 | |
| Benefits | Benefits | 7 | | 3 | | 27 | | 16 | |
| Skills | Skills | 37 | * | 5 | | -1 | | -4 | |
| Clerical | Clerical | 11 | | 3 | | -2 | | 46 | * |
| Non_nurs | Non_nurs | -2 | | 7 | | 2 | | 53 | * |
| Paper | Paper | 0 | | -1 | | 6 | | 44 | * |
| Safety | Safety | 29 | | 2 | | 3 | | 18 | |
| Sched | Sched | 29 | | -2 | | 9 | | 12 | |
| Jb_secure | Jb_secure | 38 | * | -1 | | 9 | | -3 | |
| Advance | Advance | 18 | | 22 | | 18 | | 2 | |
| Nrs_spt | Nrs_spt | 44 | * | 5 | | 2 | | -8 | |
| Admin_spt | Admin_spt | 32 | * | 3 | | 7 | | 17 | |
| Physician | Physician | 31 | * | 0 | | -5 | | 8 | |
| Stf_int | Stf_int | 33 | * | -1 | | -1 | | 15 | |
| Patients | Patients | 33 | * | -3 | | -3 | | 1 | |
| Patient_ed | Patient_ed | 14 | | 11 | | 2 | | 26 | |
| Use_skills | Use_skills | 11 | | 49 | * | 0 | | -6 | |
| New_skills | New_skills | -7 | | 78 | * | -4 | | 5 | |
| Cont_ed | Cont_ed | 3 | | 46 | * | 8 | | 8 | |
| Pat_care | Pat_care | 48 | * | 3 | | -2 | | -1 | |
| Import | Import | 44 | * | 8 | | 3 | | -8 | |

Printed values are multiplied by 100 and rounded to the nearest integer.
*Indicates values greater than 0.3.

| Variance Explained by Each Factor Eliminating Other Factors | | |
|---|---|---|
| **Factor** | **Weighted** | **Unweighted** |
| **Factor1** | 2.7734603 | 1.57136264 |
| **Factor2** | 11.3057417 | 1.13810607 |
| **Factor3** | 10.1157990 | 1.52036771 |
| **Factor4** | 1.6341979 | 0.91100444 |

**Factor Structure (Correlations)**

|  |  | Factor1 | | Factor2 | | Factor3 | | Factor4 | |
|---|---|---|---|---|---|---|---|---|---|
| Salary | Salary | 34 | * | 34 | * | 91 | * | 30 | * |
| Range | Range | 35 | * | 35 | * | 94 | * | 34 | * |
| Benefits | Benefits | 37 | * | 29 | | 44 | * | 39 | * |
| Skills | Skills | 58 | * | 41 | * | 23 | | 30 | |
| Clerical | Clerical | 51 | * | 34 | * | 27 | | 67 | * |
| Non_nurs | Non_nurs | 42 | * | 32 | * | 30 | | 69 | * |
| Paper | Paper | 34 | * | 21 | | 27 | | 57 | * |
| Safety | Safety | 60 | * | 41 | * | 31 | * | 51 | * |
| Sched | Sched | 54 | * | 34 | * | 32 | * | 42 | * |
| Jb_secure | Jb_secure | 59 | * | 39 | * | 32 | * | 34 | * |
| Advance | Advance | 55 | * | 55 | * | 44 | * | 36 | * |
| Nrs_spt | Nrs_spt | 65 | * | 46 | * | 27 | | 31 | * |
| Admin_spt | Admin_spt | 65 | * | 45 | * | 37 | * | 53 | * |
| Physician | Physician | 51 | * | 32 | * | 17 | | 35 | * |
| Stf_int | Stf_int | 59 | * | 37 | * | 26 | | 46 | * |
| Patients | Patients | 47 | * | 28 | | 16 | | 28 | |
| Patient_ed | Patient_ed | 50 | * | 41 | * | 28 | | 50 | * |
| Use_skills | Use_skills | 54 | * | 73 | * | 29 | | 25 | |
| New_skills | New_skills | 57 | * | 97 | * | 33 | * | 34 | * |
| Cont_ed | Cont_ed | 54 | * | 72 | * | 39 | * | 39 | * |
| Pat_care | Pat_care | 72 | * | 49 | * | 28 | | 40 | * |
| Import | Import | 69 | * | 51 | * | 31 | * | 33 | * |

Printed values are multiplied by 100 and rounded to the nearest integer.
*Indicates values greater than 0.3.

**Variance Explained by Each Factor Ignoring Other Factors**

| Factor | Weighted | Unweighted |
|---|---|---|
| Factor1 | 17.4267007 | 6.40152659 |
| Factor2 | 24.2762415 | 4.86916547 |
| Factor3 | 17.2875127 | 3.61689624 |
| Factor4 | 9.8782155 | 4.01148376 |

**Final Communality Estimates and Variable Weights**

**Total Communality:**
**Weighted = 41.599350**
**Unweighted = 10.219190**

| Variable | Communality | Weight |
|---|---|---|
| Salary | 0.83376506 | 6.0154055 |
| Range | 0.87964053 | 8.3086588 |
| Benefits | 0.25902416 | 1.3496350 |
| Skills | 0.33653529 | 1.5073950 |
| Clerical | 0.47449975 | 1.9029884 |
| Non_nurs | 0.48184732 | 1.9299814 |
| Paper | 0.33013980 | 1.4926634 |
| Safety | 0.40476547 | 1.6800287 |
| Sched | 0.31358587 | 1.4567701 |
| Jb_secure | 0.36245027 | 1.5680887 |
| Advance | 0.40915401 | 1.6923323 |
| Nrs_spt | 0.43226226 | 1.7613051 |
| Admin_spt | 0.46950401 | 1.8849162 |
| Physician | 0.26793800 | 1.3660392 |
| Stf_int | 0.36663373 | 1.5788853 |
| Patients | 0.22219680 | 1.2858041 |
| Patient_ed | 0.33445673 | 1.5024354 |
| Use_skills | 0.54116917 | 2.1793330 |
| New_skills | 0.94073679 | 16.8734647 |
| Cont_ed | 0.54668565 | 2.2060462 |
| Pat_care | 0.52654756 | 2.1127396 |
| Import | 0.48565144 | 1.9444282 |

**Scoring Coefficients Estimated by Regression**

**Squared Multiple Correlations of the Variables with Each Factor**

| Factor1 | Factor2 | Factor3 | Factor4 |
|---|---|---|---|
| 0.87903565 | 0.95196014 | 0.92995208 | 0.75002948 |

Appendix C:
Factor Analysis

# Retention of Nurses in Wyoming

**Standardized Scoring Coefficients**

| | | Factor1 | Factor2 | Factor3 | Factor4 |
|---|---|---|---|---|---|
| Salary | Salary | 0.00176 | 0.01487 | 0.39173 | -0.03968 |
| Range | Range | -0.02845 | 0.01621 | 0.55211 | 0.04499 |
| Benefits | Benefits | 0.02044 | 0.00099 | 0.03043 | 0.06845 |
| Skills | Skills | 0.10283 | 0.01621 | 0.00048 | -0.01398 |
| Clerical | Clerical | 0.04648 | -0.00877 | 0.00244 | 0.27108 |
| Non_nurs | Non_nurs | 0.00242 | -0.01091 | 0.00954 | 0.31803 |
| Paper | Paper | 0.00546 | -0.01238 | 0.01081 | 0.20485 |
| Safety | Safety | 0.09189 | 0.00575 | 0.00727 | 0.10043 |
| Sched | Sched | 0.07704 | 0.00247 | 0.01189 | 0.05858 |
| Jb_secure | Jb_secure | 0.10889 | 0.01110 | 0.01297 | -0.00599 |
| Advance | Advance | 0.06125 | 0.02915 | 0.02653 | 0.00862 |
| Nrs_spt | Nrs_spt | 0.14078 | 0.02181 | 0.00368 | -0.03871 |
| Admin_spt | Admin_spt | 0.11273 | 0.00847 | 0.01433 | 0.10293 |
| Physician | Physician | 0.07869 | 0.00551 | -0.00375 | 0.03894 |
| Stf_int | Stf_int | 0.09597 | 0.00382 | 0.00169 | 0.07703 |
| Patients | Patients | 0.07643 | 0.00499 | -0.00158 | 0.00951 |
| Patient_ed | Patient_ed | 0.04375 | 0.00741 | 0.00521 | 0.12038 |
| Use_skills | Use_skills | 0.05911 | 0.07444 | 0.00330 | -0.05982 |
| New_skills | New_skills | -0.01346 | 0.80016 | -0.01155 | -0.03434 |
| Cont_ed | Cont_ed | 0.02928 | 0.06365 | 0.01906 | 0.03967 |
| Pat_care | Pat_care | 0.18370 | 0.02209 | -0.00100 | 0.00169 |
| Import | Import | 0.15582 | 0.02849 | 0.00629 | -0.04230 |

**Prior Communality Estimates: SMC**

| Econ_opp | Fam_prox | Cost_liv | Rural | Housing | Educ_k12_ | Post_sec |
|---|---|---|---|---|---|---|
| 0.18775115 | 0.05117283 | 0.34916385 | 0.15069987 | 0.38555944 | 0.20350486 | 0.24994455 |

| Daycare | Medical | Mental | Retail | Entertain |
|---|---|---|---|---|
| 0.15371753 | 0.34161697 | 0.32288126 | 0.55948712 | 0.53024060 |

| Preliminary Eigenvalues: Total = 5.79142715  Average = 0.48261893 | | | |
|---|---|---|---|
| | **Eigenvalue** | **Difference** | **Proportion** | **Cumulative** |
| 1 | 4.87857218 | 3.66885872 | 0.8424 | 0.8424 |
| 2 | 1.20971347 | 0.48417078 | 0.2089 | 1.0513 |
| 3 | 0.72554268 | 0.42456276 | 0.1253 | 1.1765 |
| 4 | 0.30097993 | 0.22402161 | 0.0520 | 1.2285 |
| 5 | 0.07695832 | 0.05286718 | 0.0133 | 1.2418 |
| 6 | 0.02409114 | 0.05509960 | 0.0042 | 1.2460 |
| 7 | -.03100846 | 0.08828046 | -0.0054 | 1.2406 |
| 8 | -.11928892 | 0.08017003 | -0.0206 | 1.2200 |
| 9 | -.19945896 | 0.08965738 | -0.0344 | 1.1856 |
| 10 | -.28911633 | 0.07539763 | -0.0499 | 1.1356 |
| 11 | -.36451397 | 0.05652996 | -0.0629 | 1.0727 |
| 12 | -.42104393 | | -0.0727 | 1.0000 |

2 factors will be retained by the PROPORTION criterion.
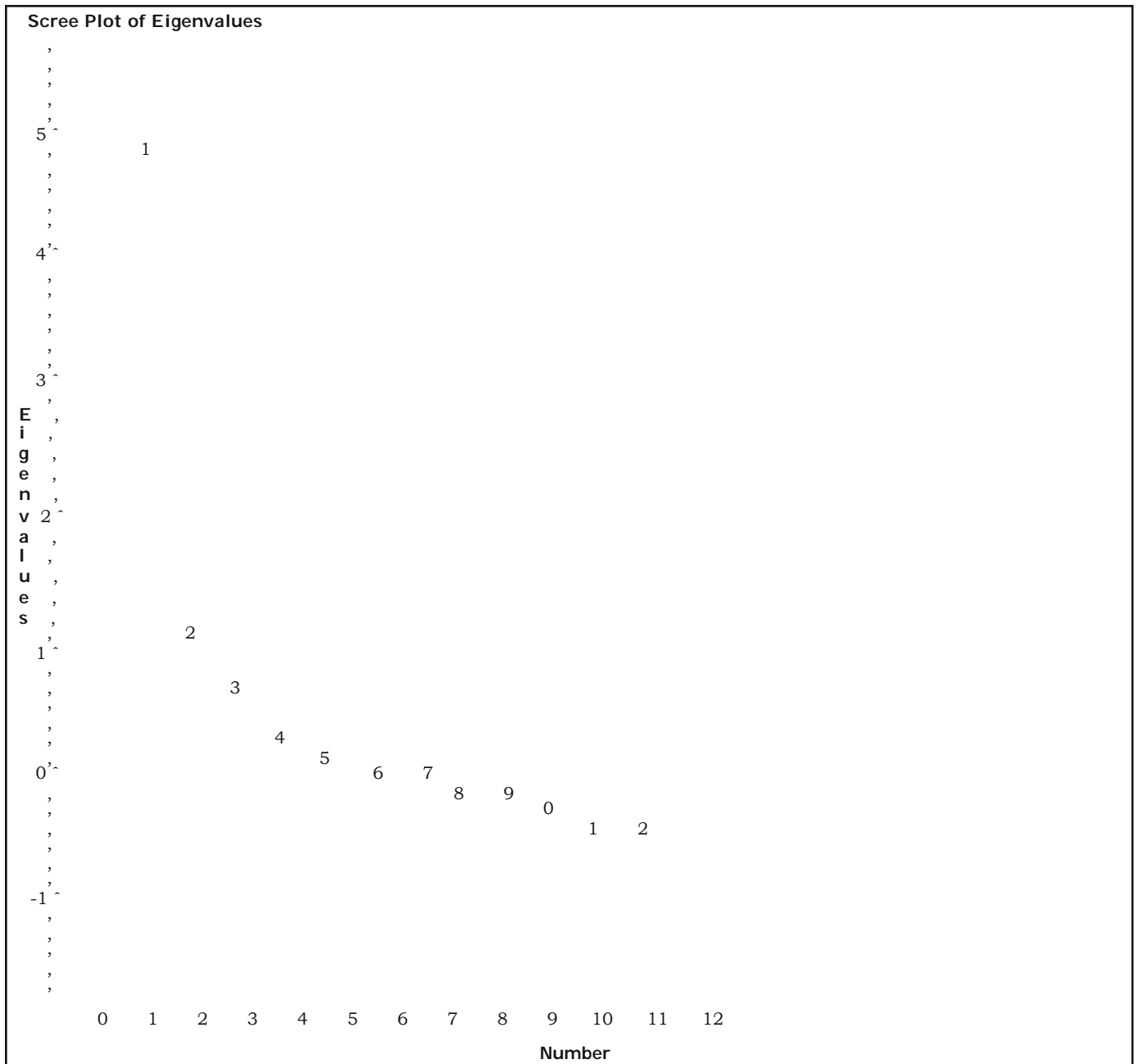
**Scree Plot of Eigenvalues**

| Iteration | Criterion | Ridge | Change | Communalities | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.4497041 | 0.0000 | 0.1298 | 0.20935 | 0.03857 | 0.44705 | 0.16900 | 0.50441 | 0.15935 | 0.21705 | 0.14008 | 0.30643 | 0.28093 | 0.62634 | 0.66008 |
| 2 | 0.4400663 | 0.0000 | 0.0475 | 0.20093 | 0.03646 | 0.48793 | 0.16164 | 0.52852 | 0.14181 | 0.19864 | 0.13155 | 0.27624 | 0.25827 | 0.67385 | 0.66820 |
| 3 | 0.4389708 | 0.0000 | 0.0239 | 0.19742 | 0.03586 | 0.49087 | 0.15806 | 0.54736 | 0.13435 | 0.19423 | 0.12739 | 0.26583 | 0.24959 | 0.66816 | 0.69207 |
| 4 | 0.4388291 | 0.0000 | 0.0132 | 0.19626 | 0.03539 | 0.50145 | 0.15746 | 0.54398 | 0.13269 | 0.19100 | 0.12683 | 0.26250 | 0.24717 | 0.68132 | 0.68208 |
| 5 | 0.4387915 | 0.0000 | 0.0101 | 0.19590 | 0.03547 | 0.49660 | 0.15665 | 0.55136 | 0.13157 | 0.19153 | 0.12598 | 0.26158 | 0.24628 | 0.67339 | 0.69218 |
| 6 | 0.4387721 | 0.0000 | 0.0075 | 0.19578 | 0.03528 | 0.50216 | 0.15689 | 0.54674 | 0.13168 | 0.19049 | 0.12628 | 0.26122 | 0.24616 | 0.68031 | 0.68465 |
| 7 | 0.4387602 | 0.0000 | 0.0061 | 0.19576 | 0.03540 | 0.49811 | 0.15653 | 0.55115 | 0.13134 | 0.19115 | 0.12591 | 0.26118 | 0.24602 | 0.67493 | 0.69075 |
| 8 | 0.4387526 | 0.0000 | 0.0049 | 0.19574 | 0.03529 | 0.50164 | 0.15677 | 0.54779 | 0.13153 | 0.19057 | 0.12617 | 0.26110 | 0.24607 | 0.67926 | 0.68586 |
| 9 | 0.4387476 | 0.0000 | 0.0039 | 0.19574 | 0.03537 | 0.49886 | 0.15654 | 0.55063 | 0.13135 | 0.19102 | 0.12594 | 0.26114 | 0.24601 | 0.67579 | 0.68977 |
| 10 | 0.4387444 | 0.0000 | 0.0032 | 0.19573 | 0.03530 | 0.50116 | 0.15671 | 0.54838 | 0.13148 | 0.19065 | 0.12612 | 0.26110 | 0.24605 | 0.67858 | 0.68661 |
| 11 | 0.4387423 | 0.0000 | 0.0025 | 0.19573 | 0.03536 | 0.49933 | 0.15657 | 0.55022 | 0.13137 | 0.19095 | 0.12597 | 0.26112 | 0.24601 | 0.67633 | 0.68914 |
| 12 | 0.4387410 | 0.0000 | 0.0020 | 0.19573 | 0.03531 | 0.50082 | 0.15668 | 0.54875 | 0.13146 | 0.19071 | 0.12609 | 0.26110 | 0.24604 | 0.67814 | 0.68710 |
| 13 | 0.4387401 | 0.0000 | 0.0016 | 0.19573 | 0.03535 | 0.49962 | 0.15659 | 0.54994 | 0.13138 | 0.19090 | 0.12600 | 0.26112 | 0.24602 | 0.67668 | 0.68874 |
| 14 | 0.4387396 | 0.0000 | 0.0013 | 0.19573 | 0.03532 | 0.50059 | 0.15666 | 0.54898 | 0.13144 | 0.19075 | 0.12607 | 0.26110 | 0.24603 | 0.67785 | 0.68742 |
| 15 | 0.4387392 | 0.0000 | 0.0011 | 0.19573 | 0.03534 | 0.49981 | 0.15660 | 0.54976 | 0.13139 | 0.19087 | 0.12601 | 0.26111 | 0.24602 | 0.67691 | 0.68848 |
| 16 | 0.4387389 | 0.0000 | 0.0009 | 0.19573 | 0.03532 | 0.50044 | 0.15665 | 0.54913 | 0.13143 | 0.19077 | 0.12606 | 0.26110 | 0.24603 | 0.67767 | 0.68763 |

Convergence criterion satisfied.

**Significance Tests Based on 2,317 Observations**

| Test | DF | Chi-Square | Pr > ChiSq |
|---|---|---|---|
| H0: No common factors | 66 | 6140.7293 | <.0001 |
| HA: At least one common factor | | | |
| H0: 2 Factors are sufficient | 43 | 1013.4139 | <.0001 |
| HA: More factors are needed | | | |

| Chi-Square without Bartlett's Correction | 1016.1194 |
|---|---|
| Akaike's Information Criterion | 930.1194 |
| Schwarz's Bayesian Criterion | 682.9542 |
| Tucker and Lewis's Reliability Coefficient | 0.7548 |

| Squared Canonical Correlations | |
|---|---|
| **Factor1** | **Factor2** |
| 0.86190424 | 0.66202770 |

**Eigenvalues of the Weighted Reduced Correlation Matrix:**
**Total = 8.20017338  Average = 0.68334778**

| | Eigenvalue | Difference | Proportion | Cumulative |
|---|---|---|---|---|
| 1 | 6.24135174 | 4.28252937 | 0.7611 | 0.7611 |
| 2 | 1.95882237 | 1.15721820 | 0.2389 | 1.0000 |
| 3 | 0.80160418 | 0.56195835 | 0.0978 | 1.0978 |
| 4 | 0.23964582 | 0.12622793 | 0.0292 | 1.1270 |
| 5 | 0.11341790 | 0.09506002 | 0.0138 | 1.1408 |
| 6 | 0.01835787 | 0.05736923 | 0.0022 | 1.1430 |
| 7 | -.03901135 | 0.05472063 | -0.0048 | 1.1383 |
| 8 | -.09373199 | 0.05928235 | -0.0114 | 1.1269 |
| 9 | -.15301434 | 0.06365315 | -0.0187 | 1.1082 |
| 10 | -.21666749 | 0.08511917 | -0.0264 | 1.0818 |
| 11 | -.30178666 | 0.06702802 | -0.0368 | 1.0450 |
| 12 | -.36881468 | | -0.0450 | 1.0000 |

**Factor Pattern**

| | | Factor1 | | Factor2 | |
|---|---|---|---|---|---|
| Econ_opp | Econ_opp | 44 | * | 8 | |
| Fam_prox | Fam_prox | 18 | | 7 | |
| Cost_liv | Cost_liv | 42 | * | 57 | * |
| Rural | Rural | 31 | * | 24 | |
| Housing | Housing | 48 | * | 57 | * |
| Educ_k12_ | Educ_k12_ | 35 | * | 10 | |
| Post_sec | Post_sec | 44 | * | 0 | |
| Daycare | Daycare | 34 | * | 9 | |
| Medical | Medical | 51 | * | 5 | |
| Mental | Mental | 50 | * | 1 | |
| Retail | Retail | 79 | * | -22 | |
| Entertain | Entertain | 76 | * | -33 | * |

Printed values are multiplied by 100 and rounded
to the nearest integer.
*Indicates values greater than 0.3.

**Variance Explained by Each Factor**

| Factor | Weighted | Unweighted |
|--------|----------|------------|
| Factor1 | 6.24135174 | 2.86854929 |
| Factor2 | 1.95882237 | 0.88941936 |

**Final Communality Estimates and Variable Weights**

Total Communality: Weighted = 8.200174
Unweighted = 3.757969

| Variable | Communality | Weight |
|----------|-------------|--------|
| Econ_opp | 0.19573237 | 1.24336409 |
| Fam_prox | 0.03533742 | 1.03661561 |
| Cost_liv | 0.50035551 | 2.00175197 |
| Rural | 0.15662225 | 1.18575137 |
| Housing | 0.54921906 | 2.21795036 |
| Educ_k12_ | 0.13140384 | 1.15131971 |
| Post_sec | 0.19084781 | 1.23574336 |
| Daycare | 0.12602334 | 1.14424459 |
| Medical | 0.26111377 | 1.35337177 |
| Mental | 0.24602648 | 1.32631556 |
| Retail | 0.67757007 | 3.10240213 |
| Entertain | 0.68771674 | 3.20134285 |

**Oblique Transformation Matrix**

| | 1 | 2 |
|---|---|---|
| 1 | 0.9028737 | 0.16604356 |
| 2 | -0.751152 | 1.16268645 |

**Inter-Factor Correlations**

| | Factor1 | Factor2 |
|---|---------|---------|
| **Factor1** | 100 * | 52 * |
| **Factor2** | 52 * | 100 * |

Printed values are multiplied by 100 and rounded to the nearest integer.
*Indicates values greater than 0.3.

**Rotated Factor Pattern (Standardized Regression Coefficients)**

|  |  | Factor1 |  | Factor2 |  |
|---|---|---|---|---|---|
| Econ_opp | Econ_opp | 33 | * | 16 | |
| Fam_prox | Fam_prox | 11 | | 11 | |
| Cost_liv | Cost_liv | -5 | | 73 | * |
| Rural | Rural | 10 | | 33 | * |
| Housing | Housing | 1 | | 74 | * |
| Educ_k12_ | Educ_k12_ | 24 | | 18 | |
| Post_sec | Post_sec | 39 | * | 8 | |
| Daycare | Daycare | 25 | | 16 | |
| Medical | Medical | 42 | * | 15 | |
| Mental | Mental | 44 | * | 10 | |
| Retail | Retail | 88 | * | -13 | |
| Entertain | Entertain | 93 | * | -25 | |

Printed values are multiplied by 100 and rounded to the nearest integer.
*Indicates values greater than 0.3.

**Reference Axis Correlations**

|  | Factor1 |  | Factor2 |  |
|---|---|---|---|---|
| Factor1 | 100 | * | -52 | * |
| Factor2 | -52 | * | 100 | * |

Printed values are multiplied by 100 and rounded to the nearest integer.
*Indicates values greater than 0.3.

**Reference Structure (Semipartial Correlations)**

|  |  | Factor1 |  | Factor2 |  |
|---|---|---|---|---|---|
| ECON_OPP | ECON_OPP | 28 | | 14 | |
| FAM_PROX | FAM_PROX | 9 | | 9 | |
| COST_LIV | COST_LIV | -4 | | 62 | * |
| RURAL | RURAL | 9 | | 28 | |
| HOUSING | HOUSING | 1 | | 63 | * |
| EDUC_K12_ | EDUC_K12_ | 20 | | 15 | |
| POST_SEC | POST_SEC | 33 | * | 7 | |
| DAYCARE | DAYCARE | 21 | | 13 | |
| MEDICAL | MEDICAL | 36 | * | 13 | |
| MENTAL | MENTAL | 37 | * | 8 | |
| RETAIL | RETAIL | 75 | * | -11 | |
| ENTERTAIN | ENTERTAIN | 79 | * | -22 | |

Printed values are multiplied by 100 and rounded to the nearest integer.
*Indicates values greater than 0.3.

**Variance Explained by Each Factor Eliminating Other Factors**

| Factor | Weighted | Unweighted |
|--------|----------|------------|
| Factor1 | 4.48964031 | 1.75786979 |
| Factor2 | 2.04441788 | 1.01470049 |

**Factor Structure (Correlations)**

| | | Factor1 | | Factor2 | |
|---|---|---|---|---|---|
| Econ_opp | Econ_opp | 42 | * | 34 | * |
| Fam_prox | Fam_prox | 16 | | 16 | |
| Cost_liv | Cost_liv | 34 | * | 71 | * |
| Rural | Rural | 28 | | 39 | * |
| Housing | Housing | 39 | * | 74 | * |
| Educ_k12_ | Educ_k12_ | 33 | * | 30 | * |
| Post_sec | Post_sec | 43 | * | 28 | |
| Daycare | Daycare | 33 | * | 29 | |
| Medical | Medical | 50 | * | 37 | * |
| Mental | Mental | 49 | * | 33 | * |
| Retail | Retail | 82 | * | 33 | * |
| Entertain | Entertain | 80 | * | 24 | |

Printed values are multiplied by 100 and rounded to the nearest integer.
*Indicates values greater than 0.3.

**Variance Explained by Each Factor Ignoring Other Factors**

| Factor | Weighted | Unweighted |
|--------|----------|------------|
| Factor1 | 6.15575623 | 2.74326816 |
| Factor2 | 3.71053381 | 2.00009886 |

**Final Communality Estimates and Variable Weights**

Total Communality:    Weighted = 8.200174
                        Unweighted = 3.757969

| Variable | Communality | Weight |
|---|---|---|
| Econ_opp | 0.19573237 | 1.24336409 |
| Fam_prox | 0.03533742 | 1.03661561 |
| Cost_liv | 0.50035551 | 2.00175197 |
| Rural | 0.15662225 | 1.18575137 |
| Housing | 0.54921906 | 2.21795036 |
| Educ_k12_ | 0.13140384 | 1.15131971 |
| Post_sec | 0.19084781 | 1.23574336 |
| Daycare | 0.12602334 | 1.14424459 |
| Medical | 0.26111377 | 1.35337177 |
| Mental | 0.24602648 | 1.32631556 |
| Retail | 0.67757007 | 3.10240213 |
| Entertain | 0.68771674 | 3.20134285 |

Scoring Coefficients Estimated by Regression

**Squared Multiple Correlations of the Variables with Each Factor**

| Factor1 | Factor2 |
|---|---|
| 0.85790928 | 0.74378453 |

**Standardized Scoring Coefficients**

| | | Factor1 | Factor2 |
|---|---|---|---|
| Econ_opp | Econ_opp | 0.06937 | 0.07308 |
| Fam_prox | Fam_prox | 0.02168 | 0.03388 |
| Cost_liv | Cost_liv | 0.06073 | 0.37013 |
| Rural | Rural | 0.03708 | 0.10732 |
| Housing | Housing | 0.08540 | 0.41963 |
| Educ_k12_ | Educ_k12_ | 0.04925 | 0.06559 |
| Post_sec | Post_sec | 0.07354 | 0.04909 |
| Daycare | Daycare | 0.04914 | 0.06049 |
| Medical | Medical | 0.09048 | 0.07990 |
| Mental | Mental | 0.08910 | 0.06248 |
| Retail | Retail | 0.36914 | 0.03678 |
| Entertain | Entertain | 0.38356 | -0.05613 |