

THE STATUS OF NURSING IN THE STATE OF DELAWARE:

A SECOND LOOK

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Abstract

The shortage of nurses in Delaware continues to have a negative impact on the health care delivery system. Nurses play a unique and central role and are the largest group of health care professionals in the country. This threatening crisis in nurse staffing has the potential to impact all aspects of health care in a negative manner. In October 2005, Wesley College, the Delaware Board of Nursing and the Delaware Health Care Commission entered into a partnership to replicate the study completed in 2000 by Mrs. Karen Panunto entitled, *The Status of Nursing in the State of Delaware*. The purpose of the replication was to determine if progress had been made in alleviating the nursing shortage.

Approximately 10,100 surveys were mailed and 7,029 were returned with a response rate of approximately 70%. The survey questions included variables for demographic data, employment data, profession activity data, salary data and an opportunity for comments on nursing practice. Statistical results from this study show that 64% of nurses in the State of Delaware do not intend to be practicing in the next 10 to 29 years. Since the 2000 study, there was only a 2% increase in the number of young nurses entering the profession; also experienced nurses are diminishing in numbers in Delaware. There were four major areas that nurse's comments leaned toward: wages, lack of value, working conditions and workload. According to the analyzed data there was an increase in salary from the 2000 study, however, nurses continue to indicate that this as a point of dissatisfaction.

The trends noted in the data can enable the State of Delaware to develop long range plans that could circumvent the threatening increased nursing shortage. Trending of data from the 2000 study to the 2005 study shows very minimal positive improvement and highlights continual declines in the nursing shortage. It would be important to follow trending with another study in 5 years. This study could focus on the loss of nursing manpower, the nursing educator shortage, lack of sites for clinical experiences and other issues.

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Chapter 1

Introduction

The experts are now predicting a severe shortage of professional nurses nationally, ranging from 400,000 to as many as 1 million, by the year 2020. Currently the growing shortage of nurses is creating a real threat for hospitals, long-term care facilities, nursing schools and others that provide timely access to quality care. Registered Nurses are essential to many dimensions of health care well beyond direct patient care. There are many reasons for the decrease in professional nursing positions. Contributing factors appear to be age, salaries, insufficient nursing faculty and decreased enrollment in nursing programs (Bednash, 2000; Buerhaus, Staiger & Auerbach, 2000; Curran, 1999).

This research serves as a follow-up to the study that was done in 2000, “The Status of Nursing in the State of Delaware”, by Karen Panunto. In an attempt to further comprehend the current picture of the status of nursing in Delaware, a follow-up study conducted by the Delaware Health Care Commission’s Nursing Implementation Committee, in collaboration with Wesley College Department of Nursing and the Delaware Board of Nursing was initiated. The original survey questionnaire was redesigned and some additions made that were not on the initial questionnaire. The study continues to focus on the nurses in the State of Delaware and to delve further into statistical information that would help us better understand what issues Delaware will likely endure in the nursing shortage period.

Throughout this report the term *nurse* refers to registered nurse (RN).

The Delaware Board of Nursing estimates that there are approximately 12,050 registered nurses licensed in the State of Delaware. There were 10,100 surveys mailed to licensed registered nurses with a return of 7,029 completed surveys. This 69.5% return rate is a significant voluntary return rate for this study. Also significant to this study were findings relative to the ages of the nurses, race, gender, enrollment in a nursing education program, employment status, if practicing in Delaware, years of anticipated practice, educational levels, area of practice, advanced licensure and salaries. As the nursing shortage evolves, this study's data serves as evidence of the status of nursing in the state of Delaware.

Chapter II

Review of the Literature

Nurses play a unique and central role in the health care delivery system and are the largest group of health care professionals in the country. While there are approximately 2.8 million nurses in the United States, it is clear that the number of nurses cannot meet current and projected workforce needs. The shortage affects all geographic areas and all health care providers. According to the Joint Commission of Accreditation of Health Care Organizations, there are more than 126,000 unfilled nursing positions in health care facilities throughout the country. The Center for Health Workforce Studies notes that 45 states cite a shortage of nurses. Estimates have indicated that by the year 2010 the shortage may be as high as 450,000 nurses (Aiken et al, 2001).

Nurses are generally the central source of care and support for people at the most vulnerable times of their life. Nearly everyone's health care experience involves the contributions afforded by a trained and dedicated nurse. Nursing is noted as being one of the most trusted professions. From birth to death people are cared for by professional, knowledgeable, supportive and comforting nurses. This threatening crisis in nurse staffing has the potential to impact all aspects of health care in a negative manner.

Certain aspects of this crisis started in the 1980's when Medicare and insurance reimbursement cutbacks led hospital administrators to lay off nurses and other health care employees. At this point nurses began to leave the hospitals for less stressful and sometimes more lucrative jobs; a trend which has continued. These changes also left higher acuity patients, requiring a higher level of nursing skills in the hospitals. These

patients also have mandated shorter lengths of stay than in the past, compressing the delivery of care to a frenetic pace. These changes have turned hospitals into large intensive care units (Carpenter, 2000) and greatly increased the stress level for nurses.

Nationally, hospital nurses are among the least satisfied workers. A survey done in 1999 noted that 40 percent of hospital nurses were dissatisfied with their jobs (Aiken et al, 2002). The National Opinion Research Center surveyed all Americans and found only 10 percent of professional workers and 15 percent of all workers reported job dissatisfaction.

At the same time, the population is aging and placing more demands on the health care system both in numbers and in health care needs. Consumers are better educated and more assertive; requesting care that involves intensive support from nurses such as diagnostic procedures, surgeries and transplants. These factors lead to an increasing overall demand on the health care system and especially the skills of a well trained nurse.

Additionally the nursing profession is also aging and retiring at twice the rate of other occupations. Nationally the average age of a nurse is 43.3 years old. By the year 2010, projections indicate the average age of a working nurse will be 50 years old (U.S. Bureau of Labor Statistics, 2005). As this group approaches retirement age, far too few candidates are coming forward to fill their ranks.

The nursing profession is also facing a shortage of nursing faculty to train new nursing candidates. The National League for Nursing in 2006 stated there are 1,390 unfilled faculty positions nationwide. *Nursing Educator 2006* noted three critical trends: the increase in part-time faculty, the aging of the faculty population, and the large number

of nurse faculty who are not prepared at the doctoral level. The outcome of the faculty shortage will have a major influence on the nursing shortage. The National League for Nursing estimated in 2005 that 147,500 qualified applicants were turned away from nursing programs due to the faculty shortage.

An increasing number of nurses are seeking employment outside of nursing. Thirty-five percent more nurses worked in non-nursing jobs in 2000 than in 1992 (Spratley et al, 2001). Additionally, vacancy rates do not reveal other contributing factors such as turnover which affects a hospital's ability to maintain adequate staffing levels to properly care for the patients. Nationally, hospitals average 21 percent turnover rates in acute care settings (HSM Group, Ltd., 2002). This turnover rate costs the hospital high replacement expenses. In turn this creates a vicious cycle where monies are spent on recruitment and replacement activities instead of creating positive work environments that value and reward employees and ultimately support safe, high quality care. The most important fact is research that suggests the paramount cost of a high turnover rate is related to higher patient mortality rates (Kosel & Olivo, 2002).

Nurses (56%) are leaving their current employment for jobs that are less stressful and less physically demanding according to a study done by Peter D. Hart Research Associates in April of 2001. Hospital nurses across the United States report low staffing levels that make it impossible to provide safe and effective patient care (Aiken et al, 2002). Also nurses are now expected to do tasks that were once the responsibility of those with fewer skills and less training. Only 29 percent of nurses thought their administration paid attention to and acknowledged their concerns. Salaries and

opportunities were also lacking; only 57 percent said their salaries were adequate and only 32 percent acknowledged advancement opportunities. Verbal abuse was another problem cited by 50 percent of the nurses (Aiken et al, 2002).

But through it all, nurses acknowledge that caring for patients and their families is a great reward; the true essence of nursing. If changes were made (increased staffing, reduced and streamlined paperwork and fewer administrative duties), 74 percent of those nurses surveyed said they would stay at their current job (Hart, 2001). Press Ganey and Associates report a well known correlation between employee satisfaction and patient satisfaction. Additionally improved quality measures are seen when hospital retention levels are high (Kosel & Olivo, 2002).

The Robert Wood Johnson Foundation's research on the nursing shortage equates this threatening potential as the making of *the perfect storm*. The issues cited in this review have the potential to create a calamitous course that could tremendously affect the American health system in a negative way. Specific initiatives could change the course and safeguard the future.

This study can enlighten the Delaware Health Care Commission and the Delaware Board of Nursing and all involved in workplace development to therefore develop programs and initiatives to ward off the potential increasing shortage of nurses in the state of Delaware. Since this is a follow up study, trends and long range projections can be developed to ensure the safety of Delaware citizens who need the aid of a qualified nurse. Nurses are the central source of care and support in the health care system; the potential of an increasing shortage could have an affect on everyone's wellbeing.

Chapter III

Methodology

This study is a partnership among Wesley College, the Delaware Board of Nursing and the Delaware Health Care Commission. This is a modified replication of a study completed in 2000 “*The Status of Nursing in the State of Delaware*” by Mrs. Karen Panunto. The purpose of the current study is to compare and trend the data from the 2000 study while taking a look at the status of the nursing profession in Delaware today.

The investigators conducted a non-experimental quantitative study with qualitative self-reporting data with a researcher designed tool. The original study included quantitative data only. The decision to include qualitative data was based on the need to determine some thoughts and attitudes about the nursing role.

The Delaware State Board of Nursing mailed a survey along with each renewal application to registered nurses over a period of several months. One group of nurses was missed during the renewal process due to the start date of the survey. These nurses were mailed a survey at a later date, separate from the licensure application. Surveys were mailed in May and September. The Delaware State Board of Nursing reports that there are 12,050 registered nurses in the state of Delaware. Seven thousand twenty nine surveys were completed and returned during the study period.

The Delaware Health Care Commission provided assistance with collection of surveys, finances, and consultant services for the study. The survey consisted of 17 questions requiring 24 objective responses and one area for qualitative comments relating

to the nursing profession. The questions included demographic data, employment data, professional activity data, salary information and comments. (See attachment D)

Registered nurses were informed of the purpose of the replication study along with the information that completion of the survey was optional. The surveys were returned in a pre-addressed postage paid envelope. The nurses were informed that the study did not interfere with the license renewal process in any way. The surveys were completed on a voluntary basis and confidentiality was maintained as nurses were not asked to reveal their identity on the questionnaire. Questionnaires were separated from license renewal forms prior to the researchers receiving the questionnaire. Voluntary consent was ascertained by the fact that the nurse completed the questionnaire.

Three graduate students from the MSN program at Wesley College coded and entered the quantitative data into the 1999 Statistical Program for the Social Sciences and qualitative data was also coded and analyzed by hand. They were provided assistance with the statistical findings and analysis from three graduate faculty members.

Chapter IV

Results/Discussion

In October 2005, Wesley College, the Delaware Board of Nursing and the Delaware Health Care Commission entered into a partnership to replicate the study completed in 2000 by Mrs. Karen Panunto entitled, *The Status of Nursing in the State of Delaware*. The purpose of the replication was to determine if progress had been made in alleviating the nursing shortage. With the follow-up report (trending of data and development of long range projections) the status of nursing in Delaware can now be viewed with a more directed goal.

Three graduate students in the MSN program at Wesley College (Paula Smallwood, Shari Thomassen and Cheryl Watson) supervised by three graduate faculty members (Dr. Robert Contino, Dr. Lucille Gambardella, and Mrs. Karen Panunto) were the principle investigators in this research endeavor. The Delaware Health Care Commission assisted with finances, survey collection, and consultative services. The Delaware Board of Nursing provided the opportunity for the surveys to be mailed with licensure renewal packets. Data was collected from the 7,029 surveys that were returned.

The survey questions included variables for demographic data, employment data, professional activity data, salary data, and an opportunity for comments on nursing practice. Data was manually coded and entered into the 1999 Statistical Program for the Social Science (SPSS) for statistical findings and analysis. Approximately 10,100 surveys were mailed and 7,029 were returned with a response rate of approximately 70%.

This high rate of response by nurses indicated a high level of interest in the status of nursing in Delaware. The population of the final sample size used for conducting this study was 5,854 nurses currently working in the state of Delaware. This number represents 83% of completed questionnaires.

Quantitative Results

The ages of the nurses who responded ranged from 21-81 years old. The median age was 44.1 years old with the largest group of nurses in the 40-49 year old range representing (31%). This is followed by 50-59 year old (26%) and 30-39 year old (24%). The previous study in 2000 also had the largest group in the 40-49 year old range (36%) followed by the 30-39 year old range (27%), the 50-59 year old range (22%) and the older than 60 year old group (6%). The current analysis indicated a 5% decrease in the 40-49 year old age group; however, a 3% decrease in the 30-39 year old age group and a 4% increase in the 50-59 year old age group are troubling. In addition, only 12% of nurses are in the 20-29 year old age range, an increase of only 3% since the 2000 study. Also, there was a 3% increase in the 60 years and older group. (See Table I)

Table I
Age

| | Frequency | Valid Percent |
|-------------------|-----------|---------------|
| 20-29 years | 671 | 12 |
| 30-39 years | 1375 | 24 |
| 40-49 years | 1789 | 31 |
| 50-59 years | 1485 | 26 |
| 60-69 years | 442 | 8 |
| 70 years and over | 49 | 1 |
| Total | 5811 | 100.0 |
| Missing | 43 | |
| Total | 5854 | |

*Missing indicates the number of nurses who did not respond to this question.

Responses indicate that an overwhelming number of nurses (87%) in the state of Delaware are white/non-Hispanic. This number is down from the 2000 study where it was 92%. The next largest group was black/non-Hispanic at 8% which was an increase from 2000 when it was 6%. Asia/Pacific Islanders are at 2% statistically unchanged from the last survey, and Hispanic is 1% which is up 0.4% from 2000. One can surmise that the diversity of the workforce of nurses has improved slightly since 2000, although there needs to be creative ideas adopted for better recruitment and retention of non-white nurses throughout the state. Interestingly, the Delaware statistics nearly mirror the national statistics for white/non-Hispanic but are above the national averages for black (5%) and below for Asian/Pacific Islanders (3%) and Hispanic (2%). (See Table II)

Table II
Race/Ethnic Group

| | Frequency | Valid Percent |
|-----------------------------------|-----------|---------------|
| White/non-Hispanic | 5067 | 87 |
| Black/non-Hispanic | 452 | 8 |
| Asian/Pacific Islander | 134 | 2 |
| Hispanic | 64 | 1 |
| Multiracial | 45 | 1 |
| Other | 43 | 1 |
| American Indian/Alaskan Native | 20 | 0.3 |
| Total | 5825 | 100.0 |
| Missing | 29 | |
| Total | 5854 | |

*Missing indicates the number of nurses who did not response to this question.

The data indicated that 6% of the nurses are male, an increase from 4.5% in the 2000 survey. The shortage of nurses, the improved salaries, and the targeted recruitment

of males through the Johnson & Johnson campaign may have influenced the increased percentage of males. Females continue to dominate the profession at 94%.

The greatest number of nurses in Delaware has practiced nursing ten years or less (35%), which is an increase from 28% in 2000. Twenty four percent have practiced from 11 to 20 years. This is a decrease from 32% in 2000, which could indicate that nurses have left nursing practice or moved out of the state. The number of nurses practicing 21 to 30 years is currently 24%, a slight decrease from 26% in the 2000 study. The analysis indicates that experienced nurses are diminishing in number in the state of Delaware. However, the less than ten years of practice category has increased a meaningful 7% which could indicate an increase in the number of new nurse graduates. (See Table III)

Table III
Years in Nursing

| | Frequency | Valid Percent |
|----------------|-----------|---------------|
| ≤ 10 | 2045 | 35 |
| 11-20 | 1390 | 24 |
| 21-30 | 1386 | 24 |
| 31-40 | 746 | 13 |
| > 40 | 224 | 4 |
| Total | 5791 | 100.0 |
| Missing | 63 | |
| Total | 5854 | |

*Missing indicates the number of nurses who did not respond to this question.

The highest percentage (37%) of nurses in Delaware hold a Bachelor of Science in Nursing Degree, the second highest (32%) hold an Associates Degree in Nursing while the Diploma program is the third at 17%. A Master of Science in Nursing Degree is held by 14% of nurses followed by 0.5% of nurses who are doctorate prepared. Compared to

the 2000 survey, more nurses are seeking a college degree verses a diploma program in preparation for a nursing career. (See Table IV)

Table IV
Education

| | Frequency | Valid Percent |
|----------------|-----------|---------------|
| BSN | 2187 | 37 |
| ADN | 1840 | 32 |
| Diploma | 983 | 17 |
| MSN | 800 | 14 |
| Doctorate | 30 | 0.5 |
| Total | 5840 | 100.0 |
| Missing | 14 | |
| Total | 5854 | |

*Missing indicates the number of nurses who did not respond to this question.

The current findings indicate that 10% of nurses in the state of Delaware are enrolled in a continuing nursing education program. This percentage has declined slightly from the 11% of nurses who were enrolled in the 2000 study.

Data indicates that 85% of the nurses who responded live in Delaware. Of that number 53% live in New Castle County, 14% live in Kent County, 19% live in Sussex County and 15% did not respond to this question. The nurses that work in Delaware and reside in other states include: 12% live in Pennsylvania, 4% live in New Jersey, 0.5% live in Maryland and the remaining 3% live in other states. There is no data to compare these findings with from the previous study.

The current employment status of the nurses who responded to the survey revealed that 98% are currently employed in nursing. Those employed in a field other than nursing is 0.5%, those seeking employment is 0.4%, those temporarily not working and not looking for a job 0.5%, those temporarily not working and looking for a job is

0.1%. In addition, retired nurses who have no plans to return to work is 0.5%. Again, this question was not posed in the 2000 survey. (See Table V)

Table V
Employment Status

| | Frequency | Valid Percent |
|---|-----------|---------------|
| Employed in Nursing | 5710 | 98.0 |
| Seeking Nursing Job | 24 | 0.4 |
| Employed in field other than nursing | 27 | 0.5 |
| Retired, no plans to return to work | 29 | 0.5 |
| Temporarily not working and not looking | 31 | 0.5 |
| Temporarily not working and looking | 3 | 0.1 |
| Total | 5824 | 100.0 |
| Missing | 30 | |
| Total | 5854 | |

*Missing indicates the number of nurses who did not respond to this question.

Of the nurses licensed in Delaware, 85% work in Delaware and 15% work in other states. Questions could be raised as to why 15% of nurses do not work in Delaware. Recruitment of the 1,061 nurses who are licensed in Delaware but working in other states could be a starting point to help alleviate the Delaware nursing shortage. Of the 85% who work in Delaware, 50% work 40 hours or more per week. This indicates there is an even split between full time and part time nurses. Health care facilities may want to look at ways to encourage part time nurses to increase their hours, which could also help to diminish the nursing shortage.

Currently 50% of nurses work at least 40 hours a week; in the 2000 survey 66% worked at least 40 hours a week. A possible explanation of the decrease noted may be

attributed to the number of nurses who work weekend incentive programs which is basically full time pay for working weekend hours only. Also in the qualitative data, nurses indicated relevant areas of dissatisfaction with practice; this could possibly explain the change in status from full time to part time.

The data indicated that 64% of nurses who responded to the survey do not intend to be practicing within the next 10 to 29 years. Additionally, 23% stated that they intend on working less than 10 years. Only 14% of nurses intend to be practicing 30 or more years from now. There is a significant shortage on the horizon if these nurses are not replaced. This question was not posed in the 2000 study. (See Table VI)

Table VI
Anticipated Years of Practice

| | Frequency | Valid Percent |
|----------------|-----------|---------------|
| 0-9 | 1236 | 23 |
| 10-19 | 1827 | 34 |
| 20-29 | 1652 | 30 |
| 30-39 | 628 | 12 |
| ≥40 | 108 | 2 |
| Total | 5451 | 100.0 |
| Missing | 403 | |
| Total | 5854 | |

*Missing indicates the number of nurses who did not respond to this question.

The largest number of nurses in Delaware (53%) practice in a hospital setting. This number has increased from the 2000 study when 40% practiced in a hospital setting. Other areas of significant findings were that 8% practiced in long term care which was up from 5% in 2000, 4% in school health which was down from 5% in 2000, 2% in nursing education which was 1% in 2000 and 4% in home health which is down from 7% in 2000. Some of the changes in practice areas may be due to changing demographics and

insurance regulation. Also, hospitals are noted to have the highest pay and benefits. (See

Table VII)

Table VII
Practice Setting

| | Frequency | Valid Percent |
|-------------------------|-------------|---------------|
| Hospital | 3038 | 53 |
| Clinic | 118 | 2 |
| Home Health | 245 | 4 |
| MD Office | 277 | 5 |
| Public/Community Health | 119 | 2 |
| Occupational Health | 68 | 1 |
| Ambulatory Care | 176 | 3 |
| Insurance Company | 80 | 1 |
| Long Term Care | 440 | 8 |
| Nursing Education | 108 | 2 |
| School Health | 233 | 4 |
| Other | 407 | 7 |
| Multiple Setting | 481 | 8 |
| Total | 5790 | 100.0 |
| Missing | 64 | |
| Total | 5854 | |

*Missing indicates the number of nurses who did not respond to this question.

Direct patient care is provided by 87% of the responding nurses while 13% indicate that they do not directly care for patients. The vast majority of nurses provide direct patient care. In the qualitative data nurses cited patient care as the true essence of nursing. This area was not assessed in the 2000 survey.

The primary role of the nurse in the state of Delaware is a staff/general duty nurse which is 52%, with team leader or charge nurse/head nurse/nurse manager following at 12%. Data indicated that 4% are administration/faculty or administration/supervisor, 2% case management, 2% utilization review, 1% research/consultant and 1% infection control. Advanced Practice Nurses constitute 6% of the role mix, while 9% indicated other as an option. (See Table VIII)

Table VIII
Primary Role

| | Frequency | Valid Percent |
|--|-----------|---------------|
| Staff/General Duty | 3009 | 52 |
| Team Leader/Charge Nurse/ Nurse Manager/Head Nurse | 708 | 12 |
| Other | 524 | 9 |
| Multiple Roles | 371 | 6 |
| Advance Practice Nurse | 366 | 6 |
| Faculty/Nursing Dept. Admin./Supervisor | 247 | 4 |
| Educator | 204 | 4 |
| D/C Planner or Case Manager | 127 | 2 |
| Utilization Review/ Outcomes | 87 | 2 |
| Researcher/Consultant | 77 | 1 |
| QA/Infection Control | 57 | 1 |
| Total | 5777 | 100.0 |
| Missing | 77 | |
| Total | 5854 | |

*Missing indicates the number of nurses who did not respond to this question.

Advanced Practice Nursing licensure is held by 6% of Delaware nurses. In the 2000 survey 7% held an Advanced Practice Nursing license. Of those now licensed as an Advanced Practice Nurse: 48% are Certified Registered Nurse Anesthetists, 38% are Nurse Practitioners, 8% are Clinical Nurse Specialists, and 6% Certified Nurse Midwives. (See Table IX)

Table IX
Area of Specialty in Advanced Practice Nursing

| | Frequency | Valid Percent |
|---|-----------|---------------|
| Clinical Nurse Specialist | 17 | 8 |
| Nurse Practitioner | 82 | 38 |
| Certified Registered Nurse Anesthetist | 104 | 48 |
| Certified Nurse Midwife | 12 | 6 |
| Total | 215 | 100.0 |
| Missing | 55 | |
| Total | 270 | |

*Missing indicates the number of nurses who did not respond to this question.

Currently 58% of Advanced Practice Nurses have prescriptive authority and 42% do not. Within the total nurse population 5% of Advanced Practice Nurses have prescriptive authority; this statistic was 4% in the 2000 study. This is a slight increase in Advanced Practice Nurses with this selective scope of practice.

Nurses thirty six percent belong to a professional organization, conversely, 64% do not. The types of organizations varied widely from Delaware Nurses Association to specialty organizations to honor societies. The top five professional organizations listed on the surveys were: Delaware Nurses Association, American Nurses Association, Emergency Nurses Association, American Association of Critical Care Nurses and Sigma Theta Tau Honor Society.

The highest response rate (34%) noted nurse's hourly wage as \$25.01 to \$30.00 per hour; the highest response rate (43%) in 2000 noted nurse's hourly wage as \$20.01 to \$25.00 per hour. Additionally, 26% earn \$30.01 to \$35.00 per hour. Two nurses reported making \$10.00 or less per hour while at the other end of the scale one nurse reported making \$200.00 per hour. This demonstrates the lack of consistency in nursing wages.

(See Table X)

The yearly salary of a nurse can range from a low of \$2,500 for part time employment to a high of \$275,000 for one respondent. Analysis of data indicated that 66% of nurses reported earning greater than \$50,000; in the 2000 study 27% was in this wage category. Even with this 39% increase since 2000, nurses indicated salary as a point of dissatisfaction. This dissatisfaction arises from a lack of financial reward for the nursing profession given the amount of education and responsibility in caring for the health and welfare of others. (See Table XI)

Salaries were not divided into part time or full time categories. Some nurses reported working two hours per week versus others who reported working 80 hours per week. Additionally, salaries were not separated into nurse categories (Staff Nurse, Advance Practice Nurse or Administrator for an example). According to U.S. Department of Labor (2005), the average hourly wage for a nurse is \$27.35; this survey indicated an average hourly wage of \$30.95.

Table X
Hourly Wages

| | Frequency | Valid Percent |
|----------------|-----------|---------------|
| ≤\$10.00/hour | 2 | 0 |
| \$10.01-\$15 | 23 | 1 |
| \$15.01-\$20 | 130 | 3 |
| \$20.01-\$25 | 710 | 18 |
| \$25.01-\$30 | 1385 | 34 |
| \$30.01-\$35 | 1065 | 26 |
| \$35.01-\$40 | 407 | 10 |
| >\$40/hour | 346 | 9 |
| Total | 4068 | 100.0 |
| Missing | 1786 | |
| Total | 5854 | |

*Missing indicates the nurses who did not respond to this question.

Table XI
Yearly Wages

| | Frequency | Valid Percent |
|-------------------|-----------|---------------|
| ≤\$10,000 | 7 | 0.2 |
| \$10,001-\$20,000 | 74 | 2 |
| \$20,001-\$30,000 | 142 | 4 |
| \$30,001-\$40,000 | 294 | 9 |
| \$40,001-\$50,000 | 659 | 19 |
| \$50,001-\$60,000 | 939 | 28 |
| \$60,001-\$70,000 | 633 | 19 |
| >\$70,000 | 649 | 19 |
| Total | 3397 | 100.0 |
| Missing | 2457 | |
| Total | 5854 | |

*Missing indicates the nurses who did not respond to this question.

Qualitative Results

The qualitative component of this study attempted to determine the emotional climate in the Delaware nursing population during this time of shortage and increased demands in the workplace. Approximately 40% of the nurses responding to the survey provided written comments in addition to the standard questions asked. The overall tone of the responses were split into positive and negative comments that covered broad based categories of salaries, workload, value of nursing, working conditions and how nurses treat one another.

The largest cluster surrounded wages of the nurse. This seemed to be an enormous area of discontent which was frequently commented upon. The responses reflect that despite the increase in nursing wages since the 2000 study, wages are still too low throughout the state. This seemed to be based on the amount of responsibility nurses have in comparison to other professions. The comments surrounding low wages connected the poor salary compensation with the nursing shortages and the inability to

attract new nurses into the profession. Listed below are a few of the actual comments taken from the surveys relating to nurses salaries in the state of Delaware:

- Paramedics and electricians make more than nurses
- Not sure I will remain in nursing due to the low salary compared to other professions
- Nursing salaries are inappropriate
- We are underpaid, over worked and not valued
- Left hospital nursing due to low salary
- Wages need to increase for retention
- Compensation is causing staffing shortages
- Terrible low pay for nurses

The next largest cluster identified surrounded the lack of value for the nursing profession. Although nurses have long been identified as one of the most trusted professions, survey comments reflected that the nurses in the state of Delaware felt they are not valued or recognized enough. A frequent comment from the nurses who responded to the survey was “the respect and value deserved is not always received”. The actual comments below are taken directly from the surveys utilized for this study:

- Nurses are not valued
- Nursing is a profession that does not receive the recognition deserved
- I feel more abused than appreciated
- We are underpaid, overworked and not valued
- Retention is not important to facilities. We are not valued

Another cluster of discontent within the responses was the working conditions at various places of employment throughout the state. Survey comments reflected that the nurse patient ratio is too high, resulting in unsafe conditions for the nurse and the patient. Nurses are leaving hospital settings to seek safer work environments. Comments clustered around unsafe working conditions resulting in nurses leaving the profession and seeking a different career path. Comments below are responses from the survey relating to working conditions for the nurses in the state of Delaware:

- Nurse to patient ratio is too high with today's acuity; unsafe situation
- Something needs to be done about the nurse to patient ratio
- I left the hospital setting since the ratios were unsafe
- I took a \$10,000 pay cut due to unsafe situations
- Too much liability in hospital nursing
- 1100 students to one nurse is too much (school nursing)

The workload of the nurse was the fourth cluster identified in the qualitative data. Nurses in the state of Delaware commented on too much documentation and paperwork. The increased documentation and attention to paperwork is taking away from the time spent with the patient. Nurses' responses connected burnout to the increased demand for paperwork. The comments below relate to the workload and are actual responses from the nurses who responded to the survey:

- Too much documentation
- Too much documentation and not enough time to spend with my patient
- There is too much paperwork

- Increased documentation causing nurses to burn out quicker
- I left nursing due to the increased demands and paper work

An interesting group of comments centered on the issue that nurses do not treat each other as professionals and in many cases are not helpful to new nurses that enter the field. Further, it was noted that there are “too many nurses in nursing for the money and security, not for helping patients”. This sentiment adds to the workplace environment issues that many nurses cited as a reason to seek employment elsewhere. Finally, a small percentage (less than 1%) of those commenting noted that non-nurses do too many nursing tasks and have too much input into the nursing role. This might be the result of the nursing shortage and the need to utilize more unlicensed assistive personnel in the workplace setting. The negative sentiments are somewhat balanced with the positive comments made by about 20% of the nurses responding in this qualitative section.

Overall, the nurses in Delaware want to see some improvement within the profession. Comments reflected that in order to entice new nurses and retain them, the profession needs to be more attractive. Although the four clusters surrounded the areas of discontent there were some positive responses. The comments below are responses from the actual surveys indicating some nurses love their profession, current position, and are sad to leave when the time warrants.

- It is great to be a nurse
- There are many opportunities
- I am sad to retire
- I retired and keep coming back; I love nursing

- I love my job

Although the majority of responses targeted the four areas identified above, there are nurses in Delaware who responded very positively. Some nurses responded they love nursing and would never leave the profession. Several respondents have retired and keep coming back to work since they enjoy nursing and think of it as part of their life not just a career.

Nurses who responded to this survey want a voice. Comments leaned towards addressing the four major areas of wages, lack of value, working conditions, and workload. Nurses want to see changes resulting in compensation equal to responsibility and liability, respect, improved working conditions, less documentation, and more available time to spend caring for the patient. Change is needed in order to keep and attract new nurses.

Chapter V

Summary

This study is the follow up to the 2000 study to determine the status of nursing in the state of Delaware. This report enables the Delaware Health Care Commission and the Delaware Board of Nursing and other workforce development constituents to see trends in the data and therefore develop long range projections. Over 10,000 surveys were mailed and 7,029 were completed and returned; obviously the nurses in Delaware desire to be heard.

All aspects of health care could be affected in a negative manner if the nursing shortage escalates. This study shows that 64% of nurses do not intend to be practicing within the next 10 to 29 years. A window of opportunity is provided for the state of Delaware to react and help aide in alleviating the potential increased nursing shortage on the horizon.

The median age of a Delaware nurse is 44.1 years old. According to the U.S. Bureau of Labor Statistics in 2005, the nursing profession is aging and retiring at twice the rate of other occupations. At this point, far too few candidates are coming forward to replace those that are leaving. The shortage of nursing faculty complicates this finding.

The typical nurse is a white/non-Hispanic female (87% white/non-Hispanic and female 94%). Recruitment of males and minorities is a potential way to improve nurses' numbers. Targeting career development, nursing scholarships and promoting a positive nursing image can enhance these endeavors. This is a potential area for future study.

The development of an aggressive nursing scholarship program is needed to attract students. Scholarships could be contingent upon gaining employment in the state of Delaware in order to satisfy the requirements. Additionally college loan abatement programs can be set up to attract new nurses educated in other states to seek Delaware employment. This type of program has been utilized for physicians for many years; college loans are forgiven for taking a job in a critical need area.

The National League of Nursing in 2006 noted a sizable shortage in nursing faculty. This creates a snowball affect; not enough faculty to educate potential nurses. In 2005, an estimated 150,000 qualified applicants nationally were turned away due to the faculty shortage. Support of the Faculty Loan Repayment Program could help to alleviate the faculty shortage. Additionally, inspiring nurses to become educators is a way to maintain the profession's nursing enrollments.

The availability of clinical sites for enrolled nursing students to get hands on nursing experience is very limited. Health care facilities need to collaborate with nursing educators to remedy this situation and explore other options. A critical component of a student nurse's education is the clinical experience.

Data indicated that 1,061 nurses who are licensed in Delaware are not employed in this state. Evaluation of this loss of nursing manpower in the Delaware health care workforce is an area for further research. The development of financial and/or benefit packages could draw these nurses back to Delaware.

The Delaware Board of Nursing could develop a photo essay which glorifies the profession of nursing; a picture tells a thousand words. This photo essay could travel around the state to school career fairs, college nights, scout troops and anywhere possible to inspire a child to become a nurse. Positive results have been seen from the Johnson and Johnson campaign which has inspired people to choose nursing as a career.

Considering Delaware's small size, the development of a Center for Nursing would be a positive step in supporting the profession. This could be a collaborative effort between nurses, nursing educators, health care facilities, the Delaware Board of Nursing, the Delaware Health Care Commission, the Delaware Nurses Association and any other interested group. This center could entail brain storming, problem solving, and support research ultimately promoting nursing.

The trends noted in the data can enable the state of Delaware to develop long range plans that could circumvent the threatening increased nursing shortage. Delaware nurses have responded in force to enable a set of plans to be developed which could secure everyone's wellbeing. Nursing is the most trusted profession; it is time to react to secure the health of all Delawareans.

The following is a survey that is being utilized in a joint research effort by Wesley College Division of Nursing and the Division on Legislation of the Delaware Nurses Association to determine the status of nursing in the state of Delaware. Voluntary completion of this form will assist in planning future nursing needs in the state. Please include with your re-licensure application. ****Lack of decision to complete this form in no way interferes with licensure renewal****

1. Age: _____
2. Race/Ethnic Group: _____
3. Gender: Male _____ Female _____
4. Marital Status: _____
5. Years in Nursing: _____
6. Highest Level of Education: _____
7. Are you currently enrolled in a nursing program? _____ If yes, where and for what degree? _____
8. Do you practice in Delaware? _____
If yes, which county? _____ Full or Part-time? _____
9. Practice area? _____
10. Are you licensed in another state in addition to Delaware? _____ If yes, which state(s)? _____
11. Do you hold an Advanced Practice Nursing License? _____
12. Specialty area of Advanced Practice: _____
13. Are you certified? _____ If yes, by whom? _____
14. Which of the following levels of certification do you currently hold?
1)Generalist _____ 2)Clinical Specialist _____
3)Nurse Practitioner _____ 4)Nursing Administrator _____
5)Other (please specify) _____
15. Do you have prescriptive authority? _____
16. Do you have admitting privileges? _____ If yes, which hospital(s)? _____
17. Are you a member of a professional organization? _ If yes, which one(s)? _____
18. *Optional*: Yearly wage: _____
Hourly wage: _____



**STATE OF DELAWARE
DELAWARE HEALTH CARE COMMISSION**

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JOSEPH A. LIEBERMAN, III, MD, MPH
VINCENT P. MECONI
DENNIS ROCHFORD
LOIS M. STUDE, RN

October 25, 2005

Dear Nursing Survey Participant:

Enclosed is a survey being used to determine the status of nursing in Delaware. We recognize that nursing is an integral and significant part of the State's health care system. This study will provide leaders and policy makers with a better understanding of the nursing population as they prepare for future nursing needs throughout Delaware. This research is being conducted by the Delaware Health Care Commission in collaboration with the Delaware Board of Nursing and Wesley College.

Please complete both sides of this form and return it to us in the enclosed postage-paid envelope. Your participation is greatly appreciated and we value your response. Please direct any questions or comments to Sarah McCloskey in the Health Care Commission office at (302) 744-1220.

Thank you for your contribution to this important research!

Sincerely,

A handwritten signature in cursive script that reads "Paula K. Roy".

Paula K. Roy
Executive Director

The Delaware Health Care Commission is an independent public body reporting to the Governor and the General Assembly working to promote accessible, affordable, quality health care for all Delawareans.



**State of Delaware
Delaware Health Care Commission**

This is a follow-up survey being used in a research effort to determine the status of nursing in Delaware. The survey is being conducted by the Delaware Health Care Commission's Nursing Implementation Committee, in collaboration with the Delaware Board of Nursing and Wesley College. The results will be compared to responses to the first survey of this nature, which was administered in 2001. Voluntary completion of this form will assist in planning for future nursing needs in the state. Thank you for your help!

| | | |
|-----|---|--|
| 1. | Age: _____ | |
| 2. | Race/Ethnic Group | <input type="checkbox"/> Hispanic <input type="checkbox"/> American Indian/Alaskan Native <input type="checkbox"/> Asian/Pacific Islander <input type="checkbox"/> White, not of Hispanic origin <input type="checkbox"/> Black, not of Hispanic Origin <input type="checkbox"/> Multi-racial <input type="checkbox"/> Other |
| 3. | Gender | <input type="checkbox"/> Male <input type="checkbox"/> Female |
| 4. | Years in nursing | _____ years |
| 5. | Highest Level of Nursing Education | <input type="checkbox"/> Diploma <input type="checkbox"/> Associate <input type="checkbox"/> Baccalaureate <input type="checkbox"/> Masters <input type="checkbox"/> Doctorate |
| 6. | Are you currently enrolled in a nursing education program? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7. | Do you live in Delaware? _____ (yes or no) | If yes, which county? _____ If no, which state? _____ |
| 8. | Check one options that describes your current employment status: | <input type="checkbox"/> employed in nursing <input type="checkbox"/> seeking nursing employment <input type="checkbox"/> employed in a field other than nursing <input type="checkbox"/> retired or with no plans to return to work <input type="checkbox"/> temporarily not working and not looking for a job |
| 9. | Do you practice nursing in Delaware? <input type="checkbox"/> Yes <input type="checkbox"/> No | Hours worked in a typical week for your primary nursing employer: _____ hours Zip code of primary employment setting: _____ |
| 10. | If you are currently employed in nursing, how many more years do you anticipate practicing? | _____ years |

Please complete the reverse side.

Attachment D

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| | | |
|-----|---|--|
| 11. | Which setting do you practice in? | <input type="checkbox"/> hospital <input type="checkbox"/> clinic <input type="checkbox"/> physician office <input type="checkbox"/> public/community health <input type="checkbox"/> occupational health <input type="checkbox"/> ambulatory care <input type="checkbox"/> insurance company <input type="checkbox"/> home health <input type="checkbox"/> long term care <input type="checkbox"/> nursing education <input type="checkbox"/> school health <input type="checkbox"/> Other (please specify): _____ |
| 12. | Does your primary nursing position involve providing direct care services to patients/families? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 13. | Check one position that best describes your role with your primary nursing employer | <input type="checkbox"/> staff/general duty nurse <input type="checkbox"/> quality assurance, infection control <input type="checkbox"/> discharge planner, case manager <input type="checkbox"/> utilization review, outcomes management, other insurance related roles <input type="checkbox"/> educator <input type="checkbox"/> researcher, consultant <input type="checkbox"/> nurse practitioner, certified nurse midwife, clinical nurse specialist, nurse anesthetist <input type="checkbox"/> faculty/nursing department administrator or supervisor <input type="checkbox"/> team leader/charge nurse, nurse manager or head nurse <input type="checkbox"/> Other (please specify): _____ |
| 14. | Do you hold an Advanced Practice Nursing License? | <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, what is your specialty area of Advanced Practice? _____ |
| 15. | Do you have prescriptive authority? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 16. | Are you a member of a professional organization? | <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, which organization(s): _____ _____ |
| 17. | Yearly wage: _____ Hourly wage: _____ | 18. Additional comments? _____ _____ _____ |

THANK YOU VERY MUCH!

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