

**THE HOSPITAL NURSING WORKFORCE  
IN NEW YORK:  
FINDINGS FROM A SURVEY OF  
HOSPITAL REGISTERED NURSES**

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## **Preface**

This report presents findings from a survey of registered nurses working in hospitals primarily located in the greater New York City metropolitan area. The survey was conducted by the Center for Health Workforce Studies and was designed to help key stakeholders to better understand the state's hospital nursing workforce.

This report was prepared by the Center for Health Workforce Studies at the School of Public Health, University at Albany, State University of New York by Sandra McGinnis and Robert Martiniano. The Center's mission is to provide timely, accurate data and conduct policy relevant research about the health workforce. The views expressed in this report are those of the Center for Health Workforce Studies and do not necessarily represent positions or policies of the School of Public Health, the University at Albany, or Health Research, Inc.

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## Executive Summary

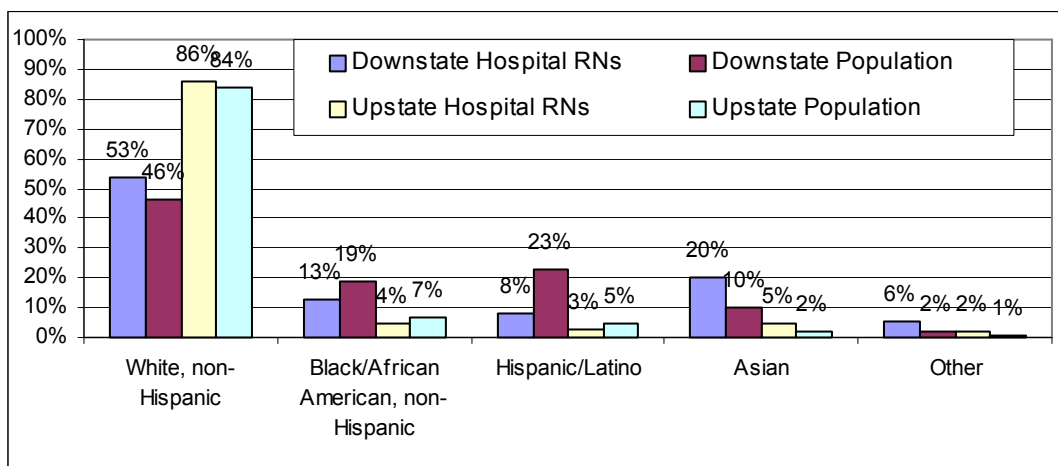
Registered nursing is the largest single health profession in New York and the state's hospitals are the major employer of registered nurses (RNs). Hospitals and other health providers in the state are reporting increasing difficulties recruiting and retaining RNs. The current shortage of RNs is likely to worsen as the nursing workforce rapidly ages and an increasing number of nursing education programs across the state report turning away qualified applicants, citing lack of capacity to admit additional students. There is growing concern about the adequacy of the supply of RNs in New York to meet demand for them in the delivery of health services.

In order to better understand the hospital RN workforce, the Center for Health Workforce Studies (the Center) in collaboration with the SEIU 1199 Employment, Training, and Job Security Program, the Greater New York Hospital Association (GNYHA), the New York Academy of Medicine, and the Delta Pi Chapter of Sigma Theta Tau conducted a survey of RNs working in hospitals primarily located in the greater New York City metropolitan area. The survey collected basic demographic data on RNs as well as information about employment, job satisfaction, training needs, and future plans. The survey began in June 2006 and continued through August 2007. As of September 6, 2007, more than 5,007 RNs responded to the survey, representing an estimated 100 hospitals.

### I. Demographics

- The RNs who responded to the survey were overwhelmingly female, with a median age of 46.
- New York State hospital RNs were considerably more racially and ethnically diverse than hospital RNs nationwide, but at the same time they were less diverse than the state's population.

**Figure 1. Race/Ethnicity of Hospital RNs, New York, 2006/2007 and the Population Upstate New York and Downstate New York, 2006**



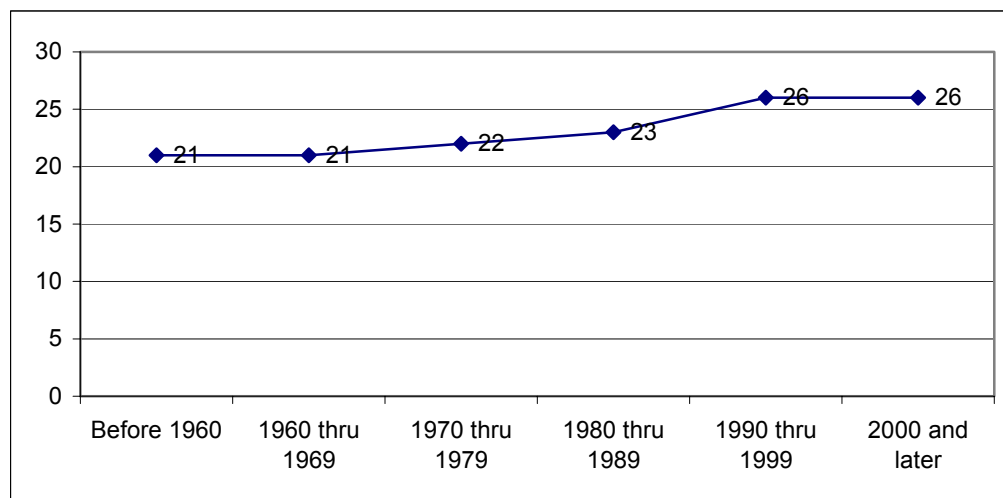
Source: U.S. Bureau of the Census, 2006

- Nearly one in five (20%) New York (NY) hospital RNs were trained overseas; much higher than the nationwide percentage (3.7%). About half of these NY hospital RNs were trained in the Philippines and half were trained in another foreign country, as shown in Figure 6. Foreign-trained RNs represented 22% of hospital RNs downstate, but only 6% of hospital RNs upstate.
- Much of the racial/ethnic diversity among NY hospital RNs is due to the presence of foreign-trained nurses – accounting for more than 10% of Black/African-American RNs, nearly 80% of Asian RNs, and more than one-quarter of those reporting their race/ethnicity as “Other.”

## II. **Educational Background**

- Most NY hospital RNs began their careers with either a nursing diploma or an associate degree in nursing (20% and 36%, respectively), although many entered nursing through a baccalaureate program (43%).
- A majority of NY hospital RNs, however, currently hold a bachelor’s degree (47%) or an advanced degree (18%) as their highest nursing degree.
- The median age at which RNs first graduated from their initial nursing education program has been rising steadily in recent decades, from age 21 prior to 1960 up to age 26 since 1990.

**Figure 2. Median Age at Initial Graduation, by Year of Initial Graduation**

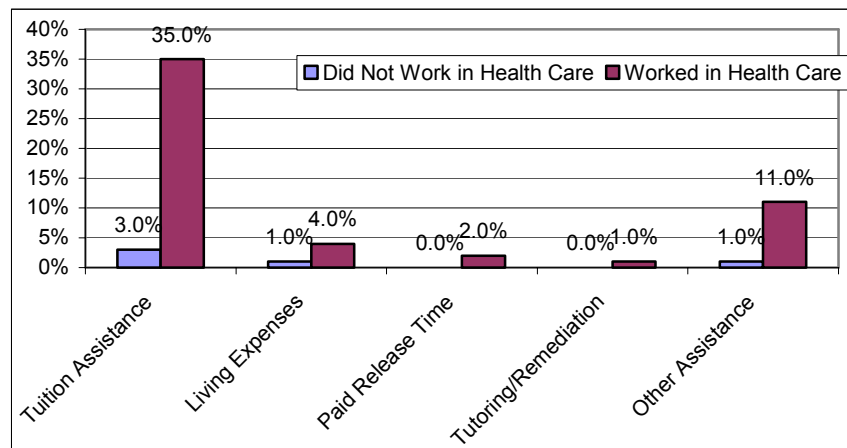


- Slightly more than one-third (36.6%) of RNs reported that they were employed in health care immediately prior to their basic RN education. The most common previous job was another type of nursing job – either a nursing aide or licensed practical nurse (LPN).
  - Experience in health care was a much greater avenue into registered nursing for underrepresented minorities than for non-Hispanic Whites and Asians. Fifty-one percent of Black/African-American and 50% of Hispanic/Latino hospital RNs

reported that they were working in health care immediately prior to starting their initial RN education program, compared to 35% of Whites and 23% of Asians.

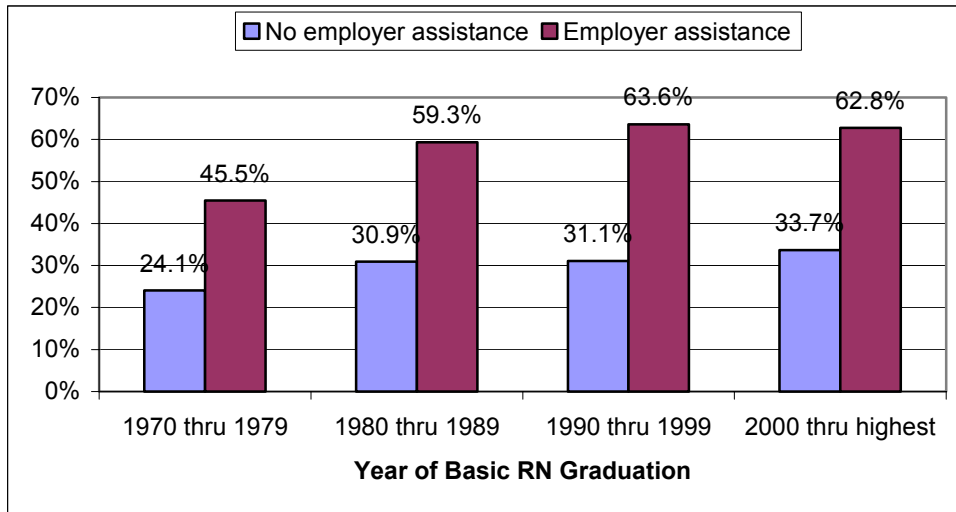
- There has been a striking trend towards higher percentages of RN graduates moving into the field from other health care jobs. Only 8% of those graduating before 1960 worked in health care before entering their initial RN education program, compared to 51% of those graduating in 2000 or later.
- Overall, 20% of RNs reported receiving tuition assistance, 2% reported receiving money towards living expenses, 1% reported receiving paid release time, and 1% reported receiving tutoring or remediation. Six percent reported receiving some other form of assistance. This varied according to whether or not they worked in health care during their basic RN training, however, as shown below in Figure 4.
- Assistance towards an RN's basic RN education most commonly came from the RN's employer (8%), college or nursing program (7%), family (6%), or an education fund (4%). Two percent of RNs reported assistance from a union. Seven percent reported assistance from some other source.

**Figure 3. Percent Receiving Selected Assistance With Initial Nursing Education by Employment in Health Care During Initial Nursing Education**



- Among RNs working in hospitals immediately prior to obtaining their basic RN education, those who reported receiving assistance from their employer toward completing their nursing education were almost twice as likely to still be working for that employer (61.0%) as those who did not receive assistance from their employer while students (31.2%).

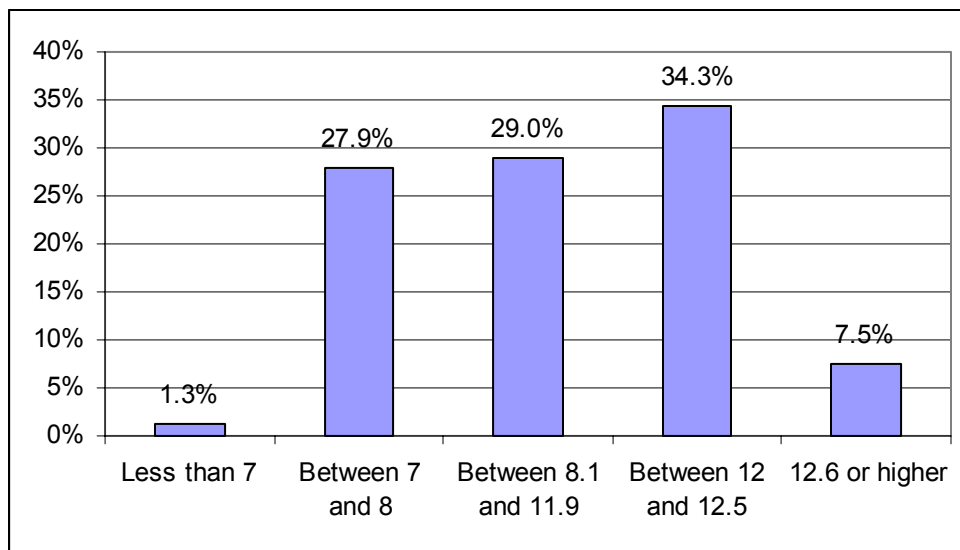
**Figure 4. Percent of Nurses Employed in Hospitals Prior to Their Basic RN Training Who Are Still Working for Employer, by Whether or Not They Received Employer Assistance**



**III. Current Practice**

- The majority of hospital RNs worked for one employer in one facility. Yet, 22% had two or more employers.
- The “standard” eight-hour workday was clearly not found among hospital RNs. Nearly 42% reported working 12 or more hours per day, and another 29% worked more than eight but less than 12 hours. Overall, only 29% of hospital RNs averaged eight or fewer hours per day.

**Figure 5. Average Hours Worked Per Day, NY Hospital RNs**

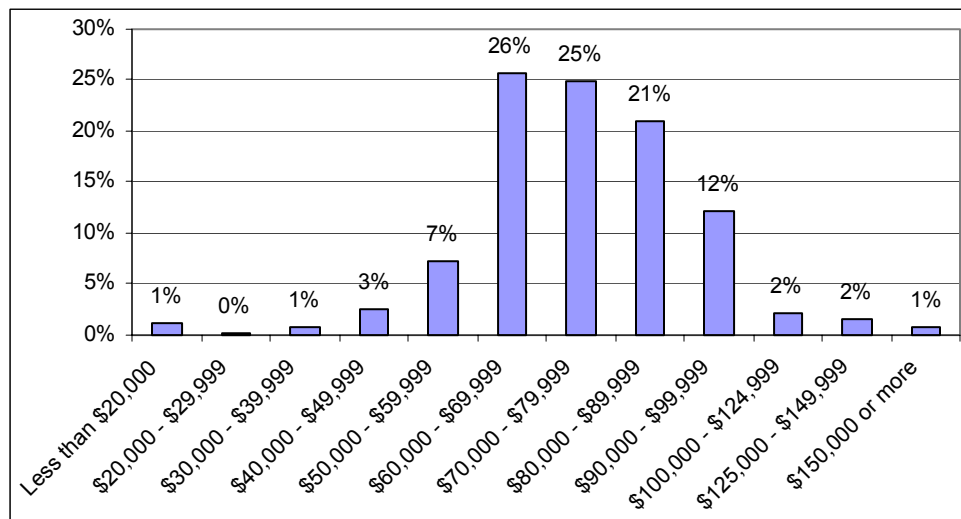


- Nearly half of NY hospital RNs reported that they did not work any overtime, and many of those who did work overtime reported working less than five overtime hours per week. Thirty percent of NY hospital RNs worked more than five overtime hours per week.
- A majority of the hospital RNs responding to this survey worked primarily day shifts (71%), while 18% reported working nights and 6% reported working evenings. A very small number reported rotating between different shifts.
- The majority of NY hospital RNs (57%) reported that they typically worked both weekdays and weekends, while 42% worked primarily weekdays. Only 1% said they typically worked weekends.
- The vast majority of NY hospital RNs (88.1%) worked full time, while 11.9% worked part time. More than two-thirds of RNs who worked part time (67.9%) reported that they did so because family or personal commitments limited their available time to work.

### Salary

- The majority of full-time NY hospital RNs (72%) earned between \$60,000 and \$89,999, although 12% earned less and 17% earned more. The median salary was about \$75,000, but this varied between upstate and downstate hospitals. RNs in upstate hospitals earned a median of \$62,263, while RNs in downstate hospitals earned a median of \$77,218.

**Figure 6. Annual Gross Salary of Full-Time Hospital RNs (Excluding Overtime)**



- Racial/ethnic differences in salary were found that were not accounted for by years worked as an RN. Non-Hispanic White RNs in downstate hospitals earned more than their minority counterparts at almost every level of experience. Similar findings existed for foreign-trained versus U.S.-trained RNs. Median earnings for U.S.-trained RNs outstripped those for foreign-trained RNs at almost every level of experience.



## **New Nurses**

- Nearly 15% of the respondents had entered nursing in the past five years. RNs who graduated in the last five years (new RNs) were likely to report that their orientation program always or usually included working with preceptors (83.6%) and that they were always or usually treated as a colleague by their peers (83.7%). They weren't as likely to agree that their nursing education always or usually adequately prepared them for their job (73.0%).
- There was wide variation in terms of the length of classroom and clinical orientation reported by new RNs. Although nearly one in five reported orientations of longer than 12 weeks, almost as many reported orientations of less than five weeks.
- New RNs most commonly reported they worked with three or more preceptors during their orientation (48.3%), but also that they worked with no mentors (33.9%) or one mentor (27.0%).
- The perspectives of experienced RNs (RNs with more than five years of nursing experience) differed substantially from the perspectives of new RNs.
  - Experienced RNs were much more negative about the preparation received by new RNs. More than one in five experienced RNs (22.2%) reported that the time spent with new RNs usually or always detracted from their ability to give quality patient care, and only 15.7% reported that they usually or always felt they had been adequately prepared to serve as preceptors.

## **Job Titles, Practice Area, and Mobility**

- The majority of survey respondents were staff nurses (69%). Approximately one in ten (9%) were nurse managers.
  - Nursing title depended much on education level, with the majority of nurse educators and executive staff holding advanced nursing degrees and the majority of nurse managers holding at least a bachelor's degree in nursing.
  - Similarly, there was a clear relationship between nursing title and years experience as an RN.
- There was a tendency for minority and foreign-trained RNs to be less likely than non-Hispanic White and U.S.-trained RNs to move beyond staff nurse positions. Once educational attainment and years experience were accounted for, however, the only group that experiences substantially less upward mobility in nursing was Asians.
- The most common areas of practice reported by respondents in the study were adult medical and surgical and adult critical care, followed by ambulatory/outpatient.
- Nearly half of the RNs in the study (46.7%) indicated more time with their current employer than in their current position, implying that they had changed positions within the facility since being hired. Nearly two-thirds had changed employers since becoming an RN (65.3%).

- The likelihood an RN had changed jobs in the past year declined substantially the longer she had been working as an RN.

### **Job Satisfaction**

- Asian and Hispanic/Latino RNs felt significantly more supported in their work environment and were more satisfied with their compensation package and work schedule than non-Hispanic White and Black/African-American RNs, despite that Asians perceived more physical risk and were more frequently mandated to work overtime.
- The relationship between RN age and satisfaction with both supportive work environment and compensation package was curvilinear – RNs ages 45-54 felt the least supported and were least satisfied with their compensation package.
- RNs trained in the Philippines reported the highest support, the most satisfaction with their compensation package, and the most satisfaction with their work schedule; although they were more likely to perceive risks to their physical safety and reported the greatest concerns about workload and most frequent mandatory overtime.
- RNs in unionized hospitals felt more supported than those in non-unionized hospitals and were more positive about their compensation package.
- RNs in downstate hospitals felt more supported than those in upstate hospitals and were more positive about their compensation package. On the other hand, RNs in upstate hospitals perceived less risk to their physical safety, were more satisfied with their work schedules, and reported less frequent mandatory overtime.
- RNs in private hospitals felt more supported than those in public hospitals, perceived less physical risk, less concern about workload, and less mandatory overtime.
- Those working in hospitals located in primary care health professional shortage areas (HPSAs) felt less supported than other RNs, perceived greater physical risk, and were more concerned about workload.
- Full-time RNs were more satisfied with their compensation package than part-time RNs, but part-time RNs were more satisfied with their work schedules.
- Staff nurses were significantly less positive about their compensation than advanced practice nurses or executive staff (3.43 versus 3.64 and 3.71<sup>1</sup>), and perceived more physical risk than RNs in other job titles.

### **Change in Nursing Practice in Past Year**

Respondents were asked about the extent to which 11 aspects of their job had changed in the past year on the unit(s) where they usually worked.

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<sup>1</sup> Staff nurses vs. APNs p<=.000; staff nurses vs. executive staff p=.004.

**Table 1. Reported Changes in Nursing Practice in Past Year**

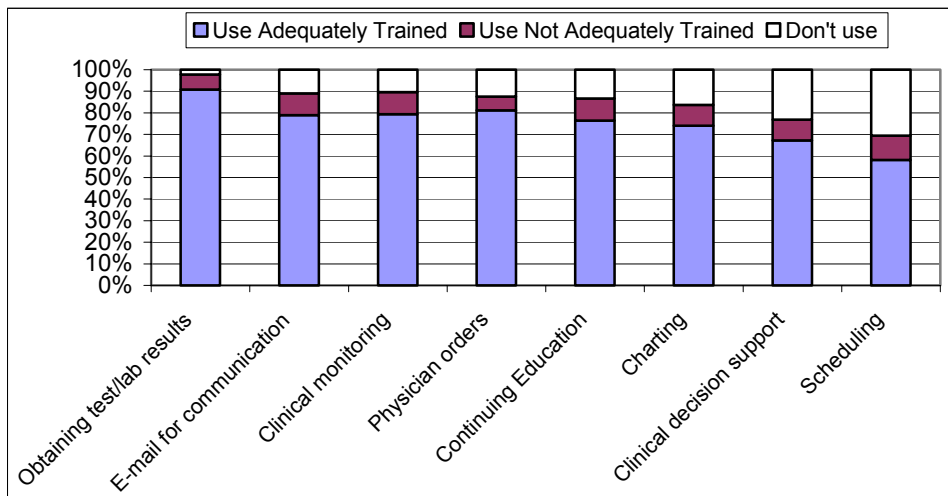
	Decreased	No Change	Increased
Patient Turnover	7.3%	34.4%	58.3%
Patient Acuity	2.5%	28.6%	68.9%
Adverse Patient Events	23.5%	57.1%	19.5%
Number of Patients per RN	10.1%	46.7%	43.2%
RN Turnover	8.1%	41.2%	50.6%
Mandatory Overtime	19.9%	60.0%	20.1%
Number of Foreign-trained RNs	8.5%	59.1%	32.4%
Use of RNs from Temp Agencies	19.8%	31.3%	49.0%
Need for Second Language Skills	2.3%	40.3%	57.4%
Adequacy of Staffing	39.7%	39.8%	20.5%
Voluntary Overtime	11.8%	42.7%	45.5%

#### IV. Training Needs

##### Computer Technology

Respondents were asked if they used computers for eight tasks in their day-to-day work, if they had been adequately trained in using computers for those tasks, and if the use of computer technology for those tasks helped them provide better quality care. Most of these tasks can be divided into patient care and non-patient care functions. Patient care functions included charting, clinical monitoring, physician orders, and obtaining lab/test results. Non-patient care functions included scheduling, continuing education, and e-mail for communication. Clinical decision support did not clearly fall into either of these categories.

**Figure 7. Use of Computer Technology and Adequacy of Training**



## **Use of Computer Technology**

- RNs with bachelor's degrees were more likely to use all forms of information technology (IT) than those with associate degrees or diplomas, although this may be related to differences in job title. Nurses with graduate degrees were similarly significantly more likely than those with bachelor's degrees to use IT for clinical decision support and non-patient care functions (although not for patient care functions).
- RNs working in hospitals located in a HPSA used significantly more patient care IT and non-patient care IT than other RNs, and were more likely to report using IT for clinical decision support.
- Those working in unionized hospitals used significantly more patient care IT and were more likely to use IT for clinical decision support, but used significantly less non-patient care IT.
- RNs in downstate hospitals used more of both forms of IT than RNs in upstate hospitals. RNs working in public hospitals used significantly more of both forms of IT than those working in private hospitals.
- RNs working the day shift were less likely than those working night shifts to use IT for patient care functions, but were more likely to use IT for non-patient care functions (perhaps because many non-clinical job titles, such as executive staff or nurse researchers, were more likely to work days).
- The most uses of IT for patient care were reported by advanced practice nurses, followed by staff nurses and nurse unit management, while the most uses of IT for non-patient care were reported by executive staff, nurse unit management, and nurse educators and researchers. Staff nurses used the least computer technology for non-patient care.

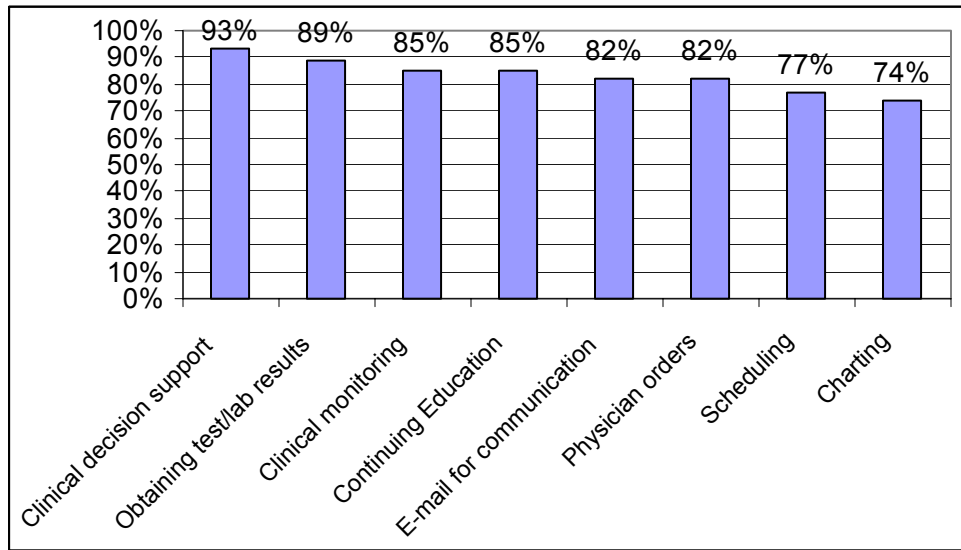
## **Adequacy of Computer Technology Training**

- Despite using more IT, RNs working in public hospitals reported that they were adequately trained on only 83% of the IT they reported using, compared to 91% of RNs working in private hospitals ( $p=.002$ ).
- Those working in HPSAs also rated their training as less adequate than other RNs (.88 versus .91 for patient care IT [ $p=.004$ ]; .82 versus .86 for non-patient care IT [ $p=.006$ ]; and .65 versus .72 for clinical decision support [ $p=.001$ ]).

## **Contribution of Computer Technology to Better Quality Care**

Seventy-one percent of RNs agreed that all types of patient care computer technology they used helped them to provide better quality care, and 72% of RNs agreed that all of the types of non-patient care computer technology they used helped them to provide better quality care. A striking 93% of those who used clinical decision support believed that this helped them to provide better quality care.

**Figure 8. Percent of RNs Agreeing That Computer Technology Helps Them to Provide Quality Patient Care, by Type of Technology**

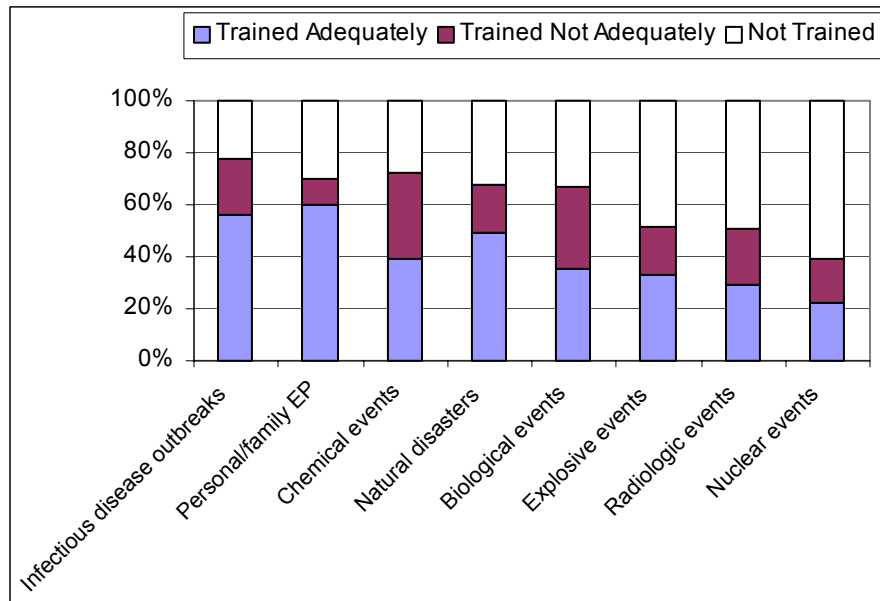


Male RNs had more positive feelings than their female counterparts about the computer technology they used for patient care (.85 versus .82,  $p=.029$ ). Positive feelings about the computer technology used decreased with RN age for both patient care and non-patient care IT (although not for clinical decision support).

### **Emergency Preparedness (EP) Training**

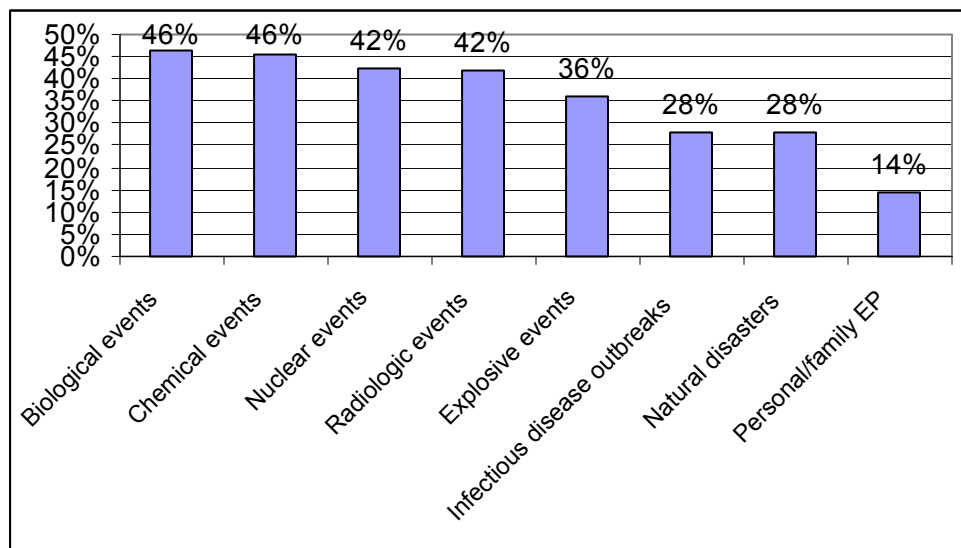
Training in disease outbreaks, personal and family EP, and chemical events was most common, while many fewer RNs had received training in EP for explosive, radiologic, or nuclear events.

**Figure 9. Receipt and Adequacy of Emergency Preparedness Training by Type**



- Training in preparation for biological or chemical events was most likely to be considered adequate by those who received such training (both 46%), while 28% of those who received training in infectious disease outbreaks or natural disasters and 14% of those who received personal or family EP training reported that this training was adequate.

**Figure 10. Percent of Those Trained Who Feel Adequately Prepared**

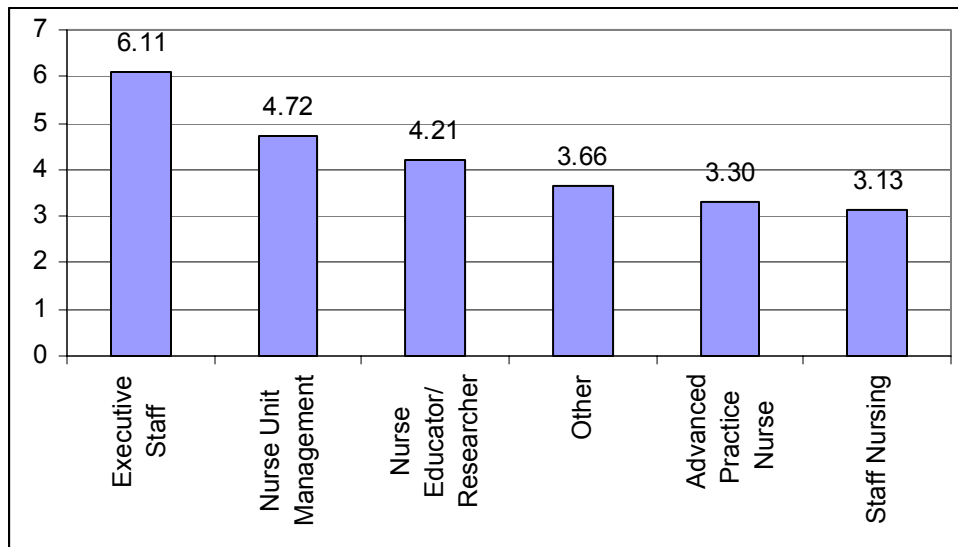


- There was a significant and negative correlation between hospital bed size and breadth of EP training. While RNs working in hospitals with fewer than 750 beds tended to receive

training in 3.66 to 3.70 EP topics, those in hospitals with 750 beds or larger only averaged EP training in 2.93 topics.

- RNs working in hospitals located in HPSAs also received less EP training than others – 3.09 versus 3.59 topics ( $p \leq .000$ ). Those who worked in union hospitals received more training on average than those in non-union hospitals (3.54 versus 3.36,  $p = .049$ ), and those in public hospitals received much more than those in private hospitals (4.65 versus 3.36,  $p \leq .000$ ).
- Full-time employees received significantly more of the training types than part-time employees (3.49 versus 3.15,  $p = .011$ ). RNs working primarily nights received significantly fewer of the training types than those working either primarily days or primarily evenings (3.06 versus 3.51 [ $p = .001$ ] and 3.77 [ $p = .006$ ], respectively). RNs working primarily weekdays received more training types than those working both weekdays and weekends (3.72 versus 3.27,  $p \leq .000$ ).
- RNs working in emergency departments received the most types of training on average (5.07), while those in obstetrics received the fewest (2.88). Only emergency departments were significantly different from other departments, however.
- Executive staff received by far the most types of EP training, followed by nursing unit management. Staff nurses received the least.

**Figure 11. Average Number of Topics in Which EP Training Was Received, by Job Title Group**



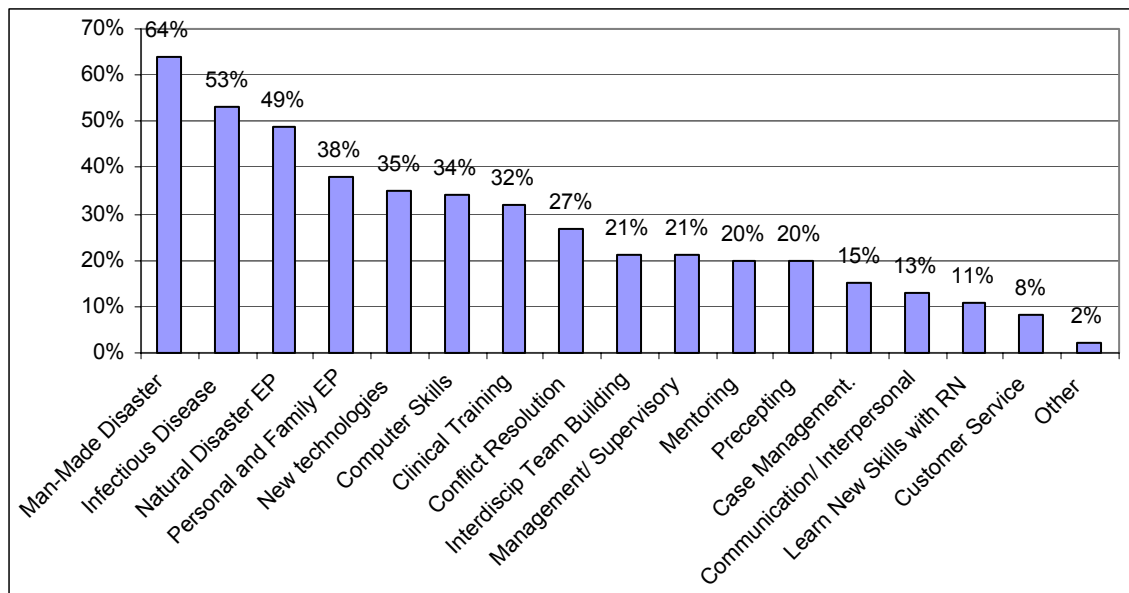
- Overall adequacy of EP training was another matter. Forty-four percent of RNs felt that they were adequately prepared for all types of emergencies in which they had been trained, but 30% did not feel adequately prepared for any of the types of emergencies in which they had been trained. Average reported adequacy of training was 57%. Despite this variation, there were few statistically significant predictors of training adequacy.

- Staff nurses were significantly less likely to define their training as adequate than were advanced practice nurses (APNs) or executive staff (0.54 versus 0.69 [p<=.000] and 0.70 [p=.005], respectively).

### Need for Additional Training

The areas in which RNs reported needing additional training varied widely, from 64% reporting a need for additional training in man-made disasters and 53% reporting a need for additional training in infectious disease, to 11% reporting a need to work with a qualified RN to learn new skills and just 8% reporting a need for additional customer service training.

**Figure 12. Percent of RNs Reporting Need for Additional Training, by Training Area**

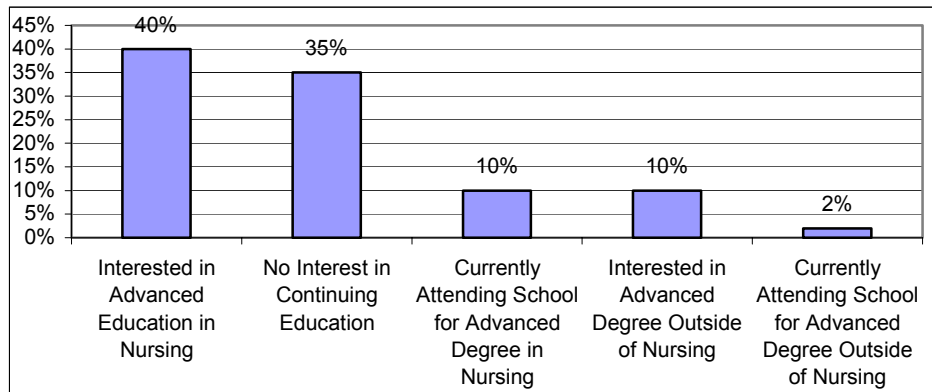


### Plans to Continue Education

Only 35% of RNs who responded to the survey reported that they had no interest in continuing their education. Forty percent were interested in advanced education in nursing, and 10% were interested in advanced education outside of nursing. Ten percent were currently attending school for an advanced degree in nursing, while 2% were currently attending school for an advanced degree outside of nursing.

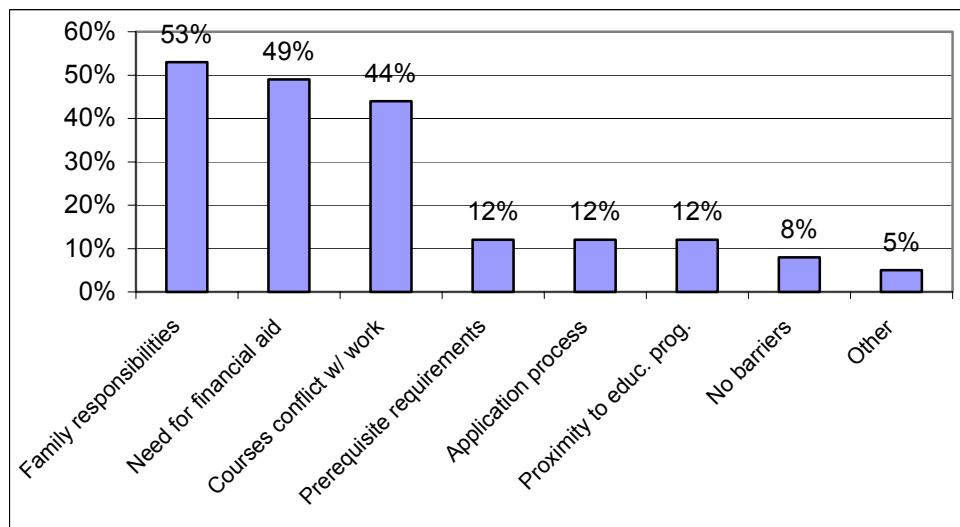


**Figure 13. Future Educational Plans of Hospital RNs**



The barriers to pursuing advanced education in nursing most commonly cited by RNs were family responsibilities (53%), need for financial aid (49%), and conflict between course and work schedules (44%).

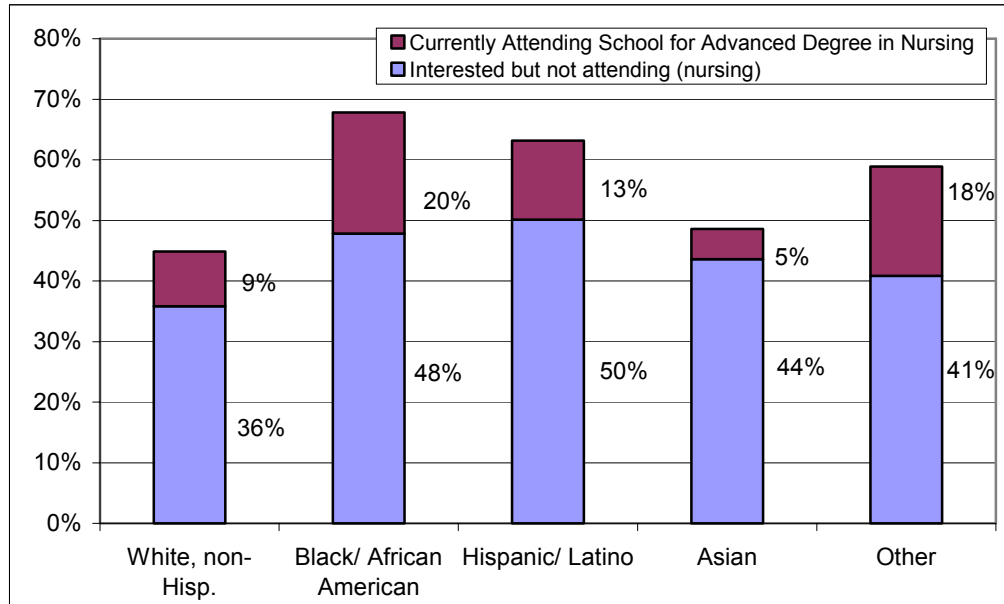
**Figure 14. Barriers to Pursuing Advanced Education in Nursing (Those Interested But Not Attending)**



- Of the 10% of RNs who reported they were currently attending school for an advanced degree in nursing, 60% were in master's programs, while 34% were in bachelor's programs, 2% were in post-master's certificate programs, and 4% were in doctoral programs.
- Both interest and attendance in advance education in nursing declined with RN age. The decline was proportional, however. The percentage of those interested who were actually attending was not significantly related to RN age.

- Interest in advanced education did not vary much by race/ethnicity, but current attendance did. Black/African-American RNs were most likely to be currently attending school (a significant 20%).

**Figure 15. Interest and Attendance in Advanced Nursing Education, by Race/Ethnicity**



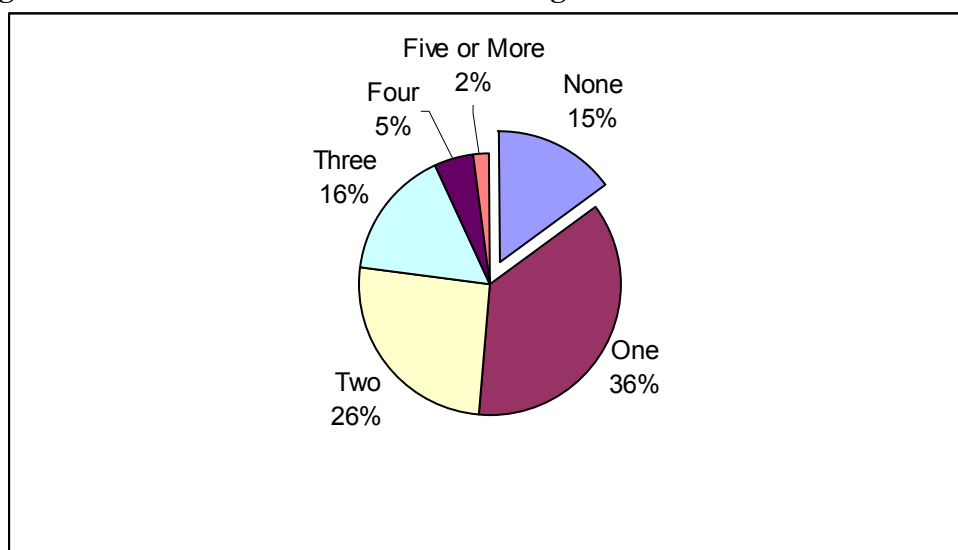
Note: For interested but not attending, White vs. Black,  $p \leq .000$ ; White vs. Hispanic,  $p \leq .000$ ; White vs. Asian,  $p = .001$ . For attending, White vs. Black,  $p \leq .000$ ; White vs. Asian,  $p = .001$ ; White vs. Other,  $p = .001$ ; Black vs. Hispanic,  $p = .026$ ; Black vs. Asian,  $p \leq .000$ ; Asian vs. Other,  $p \leq .000$ .

- Philippine-trained RNs were much less likely to be pursuing advanced education than their counterparts trained in the U.S. and other foreign countries, and were also much less likely to be attending as a percentage of those interested.
- RNs working in unionized hospitals were more likely than their counterparts in non-unionized hospitals to be both interested in attending school for an advanced nursing degree (41% versus 38%,  $p = .018$ ) and to be actually attending school (11% versus 9%,  $p = .005$ ).
- Similarly, RNs working in upstate hospitals were more likely than their downstate counterparts to be interested (41% versus 33%,  $p \leq .000$ ) and to be actually attending (11% versus 7%,  $p \leq .000$ ).
- Those in public hospitals were more likely than those in private hospitals to be interested in attending (46% versus 40%,  $p = .046$ ), but were less likely to be actually attending (6% versus 11%,  $p \leq .000$ ). Put another way, 22% of those in private hospitals with any interest in continuing their nursing education were enrolled in a program, compared to only 12% of those in public hospitals who were interested.

## Barriers

- Respondents were asked about barriers to pursuing advanced education in nursing, including courses conflict with work schedule, prerequisite requirements, application process, proximity to a nursing education program, need for financial aid, family responsibilities, and other.
- Only 15% of respondents who answered the question indicated they had no barriers to pursuing advanced education. More than one-third reported only one barrier, and another 26% reported two barriers. About one-quarter of respondents (23%) reported three or more barriers. The mean for all RNs was 1.66 barriers.

**Figure 16. Number of Barriers To Pursuing Advanced Education in Nursing**

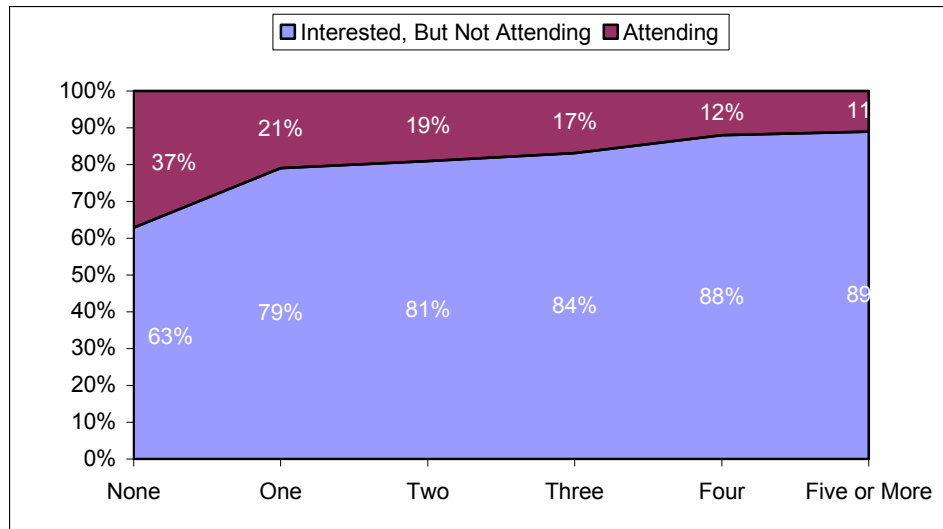


- Hispanic/Latino and Asian RNs reported more barriers to advancing their education than White and Black/African-American RNs (1.86 and 1.85 versus 1.63 and 1.58, respectively)<sup>2</sup>. RNs trained in the Philippines reported more barriers than other RNs (1.96 versus 1.66 for U.S.-trained RNs and 1.51 for RNs trained in other foreign countries [both  $p \leq .000$ ]).
- Reported barriers peaked during the 35-44 age range, consistent with the ages when women are most likely to be caring for dependent children and/or aging parents.
- RNs working in hospitals located in HPSAs reported more barriers on average than others (1.84 versus 1.61,  $p \leq .000$ ). Full-time RNs averaged more barriers than part-time RNs (1.67 versus 1.55,  $p = .037$ ).
- It was clear that perceived barriers exerted an impact on the likelihood that an RN who was interested in advancing their education would do so. Among those who were interested in advanced nursing education and who perceived no barriers, almost 40%

<sup>2</sup> White vs. Hispanic,  $p = .028$ ; White vs. Asian,  $p = .001$ ; Black vs. Hispanic,  $p = .026$ ; Black vs. Asian,  $p = .005$ .

were enrolled. This fell to little more than one in ten among those RNs who perceived four or more barriers.

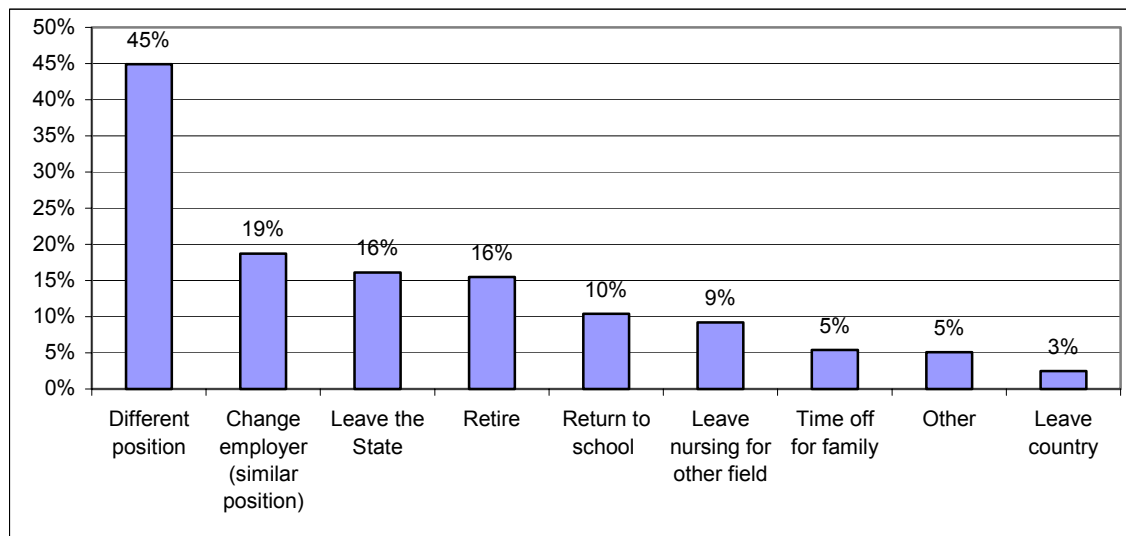
**Figure 17. Interest Versus Attendance in Advanced Nursing Education, by Number of Perceived Barriers (Those Interested or Attending Only)**



## V. *Future Plans*

- Three-quarters of RNs reported no plans to leave their current nursing position within the next three years, and only 5% planned to leave within the next six months.
- The most commonly given plan, among those who planned to leave, was to look for a different position (45%). This could be with a different employer or with their current employer.
- The second most commonly cited plan was to take a similar position with a different employer (19%).
- Overall, less than half of those who planned to leave their current position (39%, or 10% of all hospital RNs) had plans that would remove them indefinitely from the nursing workforce in New York within the next three years (e.g., retire, take a job outside of nursing, or leave the state or country).

**Figure 18. Plans After Leaving Current Nursing Position (Only Those Planning To Leave Within Three Years)**



Note: Sum exceeds 100% because responses were not mutually exclusive.

### Departures From the Field of Nursing

- Overall, only 2% of hospital RNs planned to take a job outside of nursing within the next three years. Remarkably few variables were significantly associated with departure plans, but this may be a result of the limited statistical power associated with the relatively small number of respondents who planned to depart nursing.
- Those who planned to leave the field reported:
  - less satisfaction with their compensation package (2.96 versus 3.47,  $p \leq .000$ );
  - more physical risk (2.93 versus 2.45,  $p \leq .000$ );
  - more time constraints (3.68 versus 3.37,  $p \leq .000$ );
  - greater increases in patient-related demands (0.53 versus 0.38,  $p \leq .000$ );
  - less support from their employer (2.86 versus 3.53,  $p \leq .000$ );
  - less satisfaction with their work schedule (3.49 versus 3.97,  $p \leq .000$ ); and
  - greater decreases in staffing adequacy (-0.39 versus -0.19,  $p = .009$ ).

### Retirements

- Overall, 4% of RNs planned to retire within the next three years. Retirement plans were clearly related to RN age, as shown below, and age only appeared to become a factor among RNs age 55 and older.

- Older RNs working in public hospitals were much more likely to report retirement plans than those in private hospitals (35% versus 19%,  $p=.010$ ). Satisfaction and work environment variables appeared to have little impact on retirement plans.

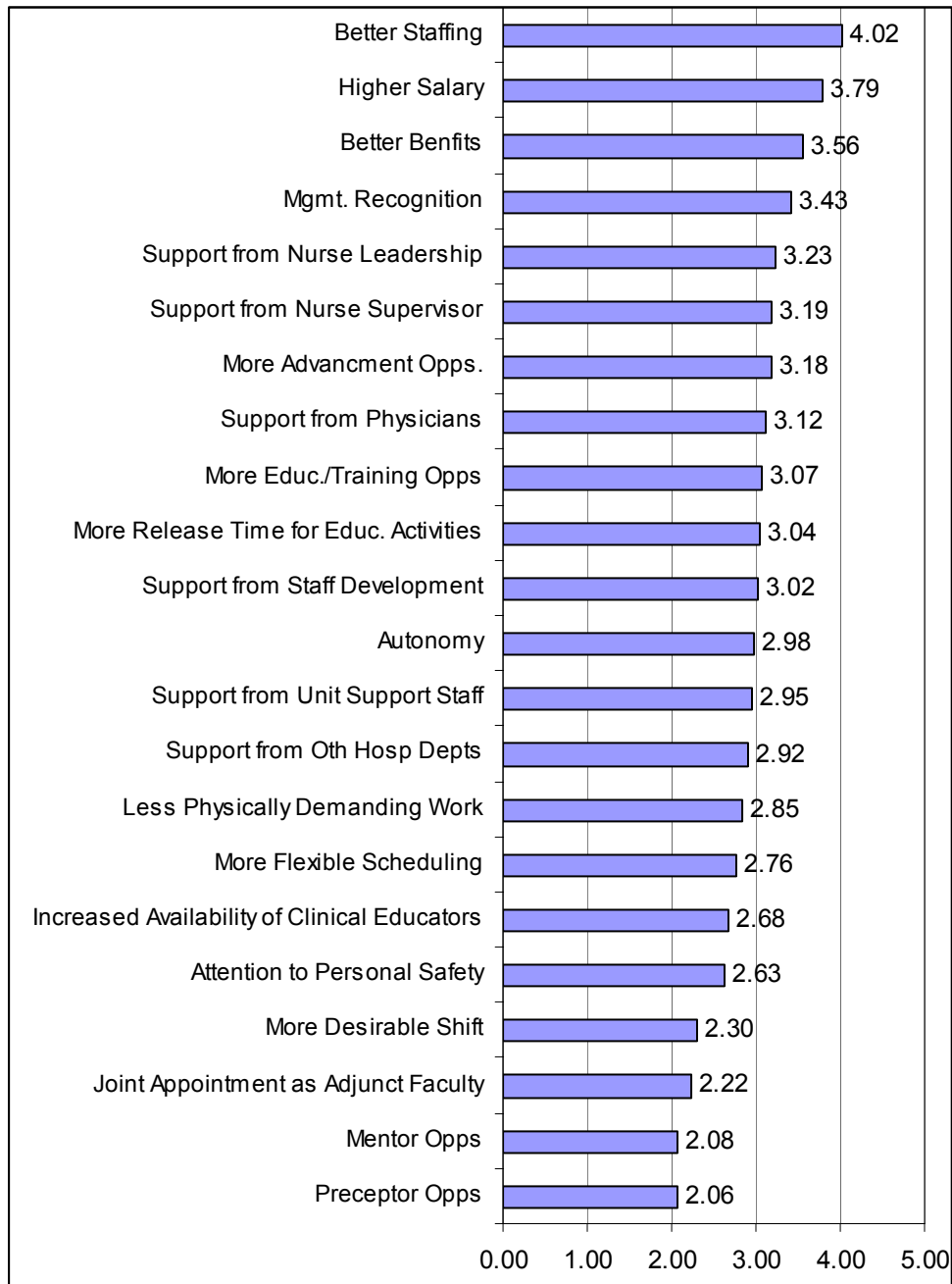
### **Changing Employers**

- Five percent of hospital RNs planned to change employers within three years to accept a similar position to the one they currently hold.
- RNs who planned to change employers felt less supported (3.54 and 3.11,  $p\leq.000$ ), were less satisfied with their compensation (3.28 versus 3.47,  $p=.001$ ), and perceived more time constraints (3.53 versus 3.37,  $p=.007$ ). They were also less satisfied with their work schedules (3.65 versus 3.97,  $p\leq.000$ ).
- They were more likely to report declines in staffing adequacy (-0.33 versus -0.19,  $p=.008$ ), and perceived much greater increases in patient-related demands (0.45 versus 0.38,  $p=.008$ ).

### **Encouraging Nurses to Remain In Current Nursing Position**

The survey asked RNs about 22 areas in which improvements could encourage them to stay in their current position. Figure 19, below, illustrates the responses of RNs who reported plans to leave their current position in the next three years. The variable with the most potential to encourage RNs to remain in their current position was better staffing, followed by higher salary, better benefits, and more recognition from management.

**Figure 19. Mean Responses to Items That Could Encourage RNs to Remain in Their Current Nursing Position for Longer (1=Rarely; 5=Always)**



## Introduction

Registered nursing represents the largest single health profession in New York and the state's hospitals are the major employer of registered nurses (RNs). Hospitals, nursing homes, home health agencies, and other health providers in the state and across the nation are reporting increasing difficulties recruiting and retaining RNs. The current shortage of RNs is likely to worsen as the nursing workforce rapidly ages and an increasing number of nursing education programs across the state report turning away qualified applicants, citing lack of capacity to admit additional students. There is growing concern about the adequacy of the supply of RNs in New York to meet demand for them in the delivery of health services.

In order to better understand the hospital RN workforce, the Center for Health Workforce Studies (the Center) in collaboration with the SEIU 1199 Employment, Training, and Job Security Program, the Greater New York Hospital Association (GNYHA), the New York Academy of Medicine, and the Delta Pi Chapter of Sigma Theta Tau conducted a survey of RNs working in hospitals primarily located in the greater New York City metropolitan area. The survey collected basic demographic data on RNs as well as information about employment, job satisfaction, training needs, and future plans. The survey began in June 2006 and continued through September 2007.

## Data and Methods

Participating hospitals were recruited by the GNYHA. The survey was targeted to all RNs employed by a hospital, including those in outpatient clinics and in non-clinical titles. Participating hospitals were sent paper copies of the survey as well as a link to the online version of the instrument. The hospitals were responsible for encouraging RN participation and were sent suggested language to include in an announcement of the survey to their RNs. As an incentive for completing a survey, any RN who responded had the option of entering into a random drawing for a \$50 gift certificate from either Macy's or Barnes and Noble.

Hospitals began to participate in the survey in June 2006 and all data were collected and entered by September 2007. Participating hospitals made the survey available to their RNs -- either online or on paper -- for about six to eight weeks. The survey was confidential and anonymous for the RNs respondents and it took about 15 minutes to complete. As of September 6, 2007, there were more than 5,007 responses representing an estimated 100 different hospitals (74% online and 26% on paper).



The table below shows that participating hospitals varied by ownership (public versus private), location (upstate versus downstate), union status, and location in a primary care health professional shortage area.

**Table 1. Selected Characteristics of Participating Hospitals (N=100)**

Public hospitals	14%
Located upstate	22%
Unionized	61%
In a primary care shortage area	23%

### **Limitations**

An important limitation to the generalizability of survey results is the potential for self-selection bias, both among the hospitals and the respondents. Participating hospitals may have been those more concerned with and invested in addressing nursing workforce issues. Survey responses may have reflected hospital RN reactions to the culture of a participating hospital rather than New York's hospital RN population as a whole. There may also have been systematic response bias among RNs, i.e., those with specific concerns or issues being more likely to respond. Furthermore, response rates varied by assigned shift and RNs who worked different shifts may have differed demographically and educationally and have different perceptions about the quality of their work life. These potential biases, and the small sample size used in this preliminary report, limit the ability to generalize survey findings to all New York (NY) hospital RNs.

Another important limitation in the sample is that no public hospitals outside of the New York City area participated. This is not surprising given that there are relatively few public hospitals in upstate New York, but it complicates public and private comparisons because the private hospitals include both upstate and downstate hospitals, while the public hospitals are all downstate.

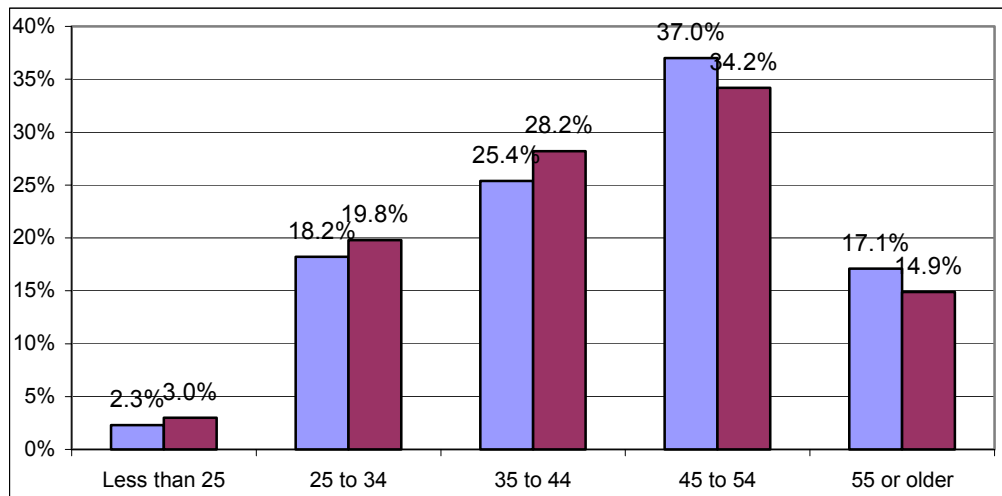
## Results

### I. Demographics

Full-time RNs were 7.9% male and 92.1% female (compared to 93% female nationally).

The hospital RNs who responded to the survey had a median age of 46, compared to 44 nationwide in 2004. This varied, however, between downstate and upstate RNs (45 versus 47, respectively). Overall, the age distribution of hospital RNs in the survey varied little from that of their counterparts nationwide.

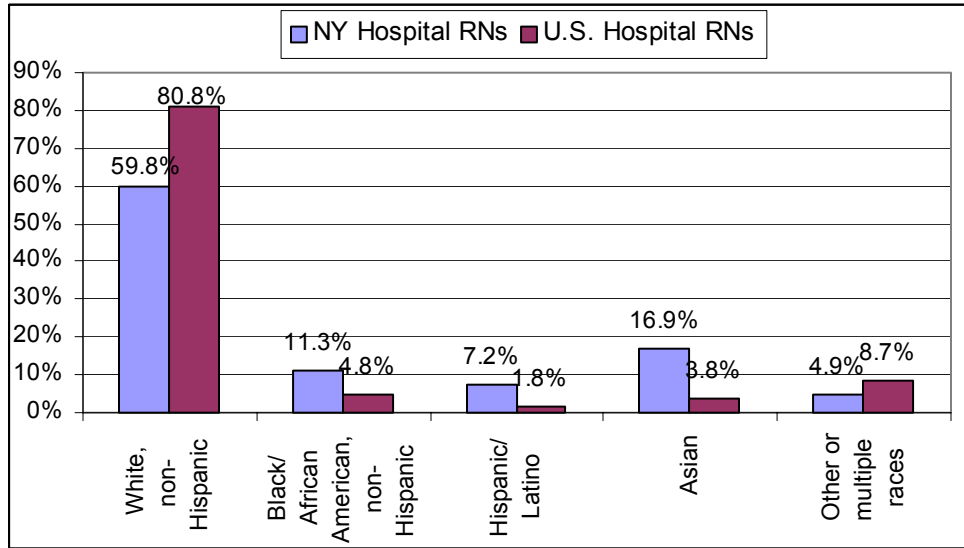
**Figure 1. Age Distribution of NY Hospital RNs, 2006/2007 and Nationwide, 2004**



Source: National Sample Survey of Registered Nurses, 2004

NY hospital RNs were considerably more diverse than hospital RNs nationwide, but at the same time they were less diverse than the state population.

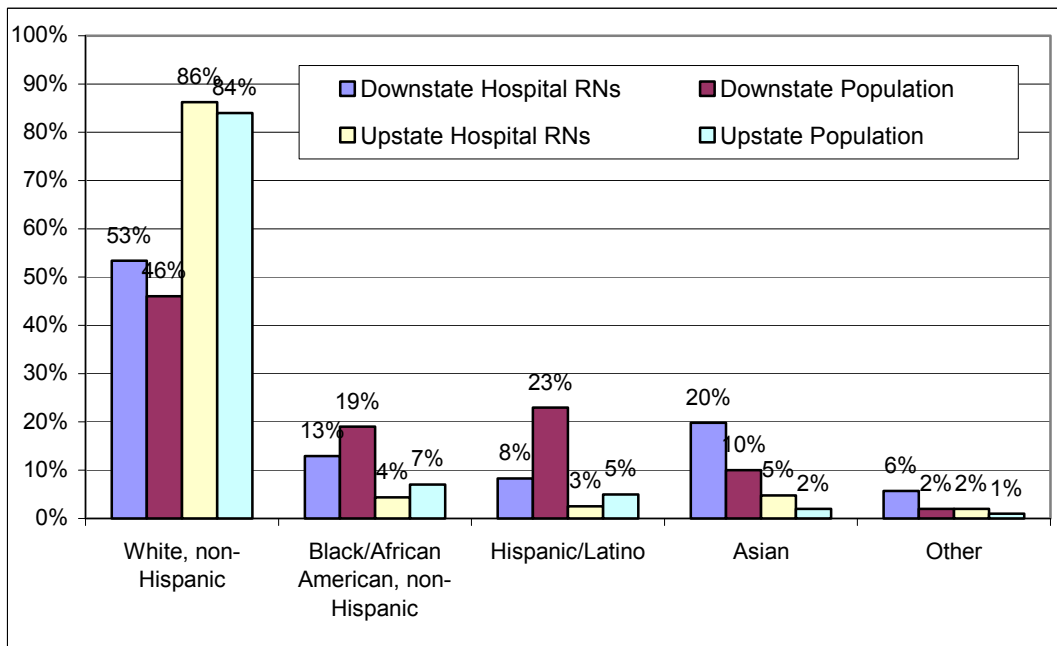
**Figure 2. Race/Ethnicity of NY Hospital RNs, 2006/2007 and Nationwide, 2004**



Source: National Sample Survey of Registered Nurses  
 Note: Excludes the 6.7% who did not report race/ethnicity.

Not surprisingly, NY hospital RNs downstate were more diverse than hospital RNs upstate, reflecting the population. Nonetheless, hospital nurses upstate appeared to reflect the upstate population more closely than hospital nurses downstate reflected the downstate population.

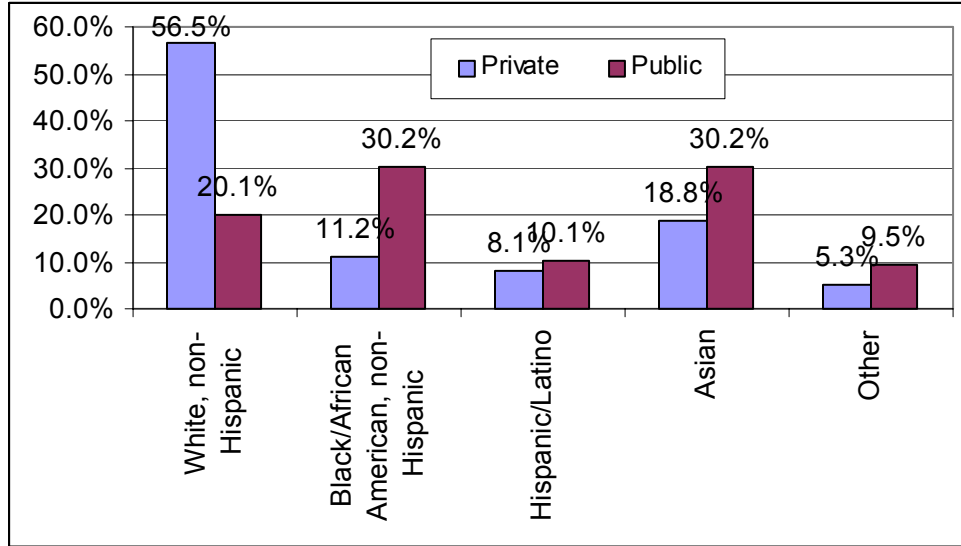
**Figure 3. Race/Ethnicity of Hospital RNs, New York, 2006/2007 and the Population Upstate New York and Downstate New York, 2006**



Source: U.S. Bureau of the Census, 2006

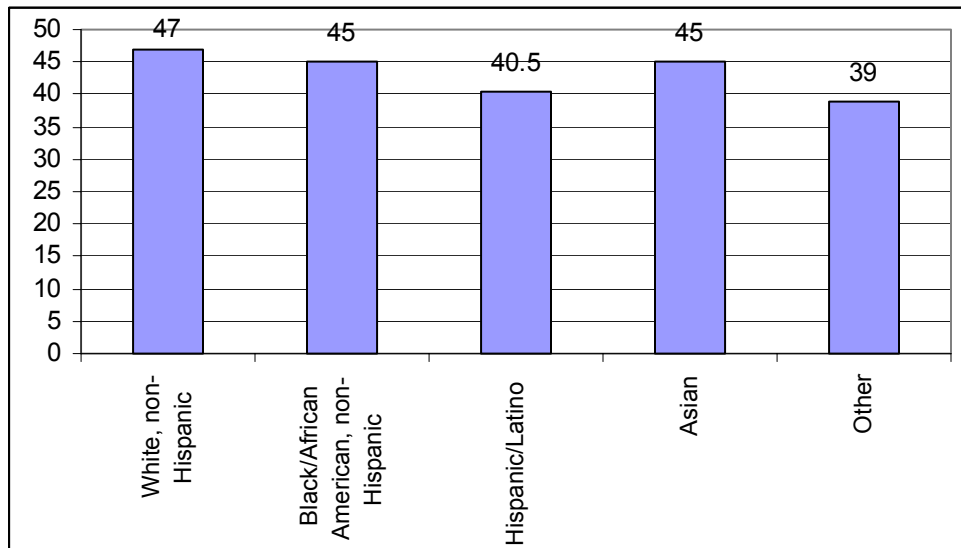
The RN workforce in public hospitals was more diverse than in private hospitals. Part of this was due to the fact that all of the public hospitals in the sample were downstate, but even when the comparison was restricted to downstate hospitals the differences were significant, as illustrated in Figure 4.

**Figure 4. Race/Ethnicity of RNs in Public and Private Hospitals Downstate**



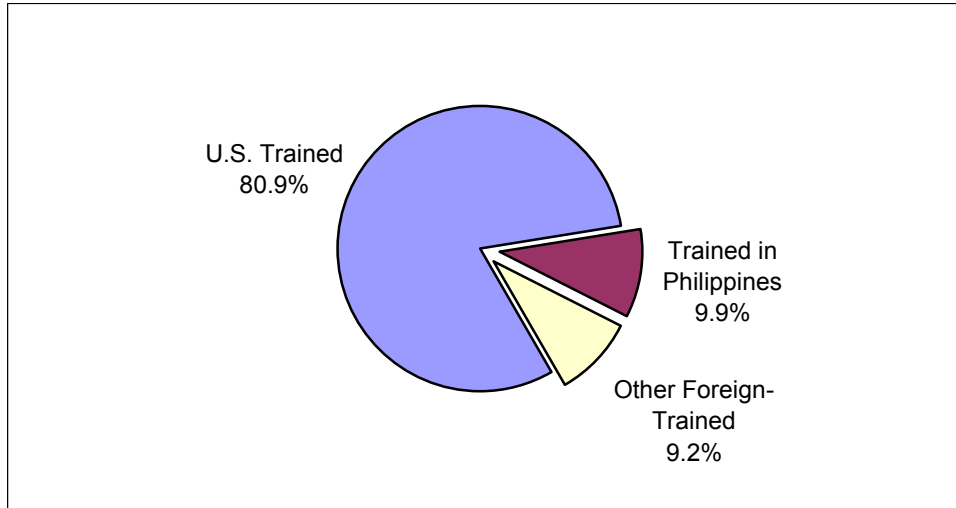
Hospital RNs from racial/ethnic minority groups were younger, on average, than non-Hispanic White RNs. While Black/African-American and Asian RNs were only slightly younger, with a median age of 45 (versus 47), Hispanic/Latino RNs were much younger, with a median age of only 40.5. Those identifying as “Other” were the youngest, with a median age of 39.

**Figure 5. Median Age by Race/Ethnicity**



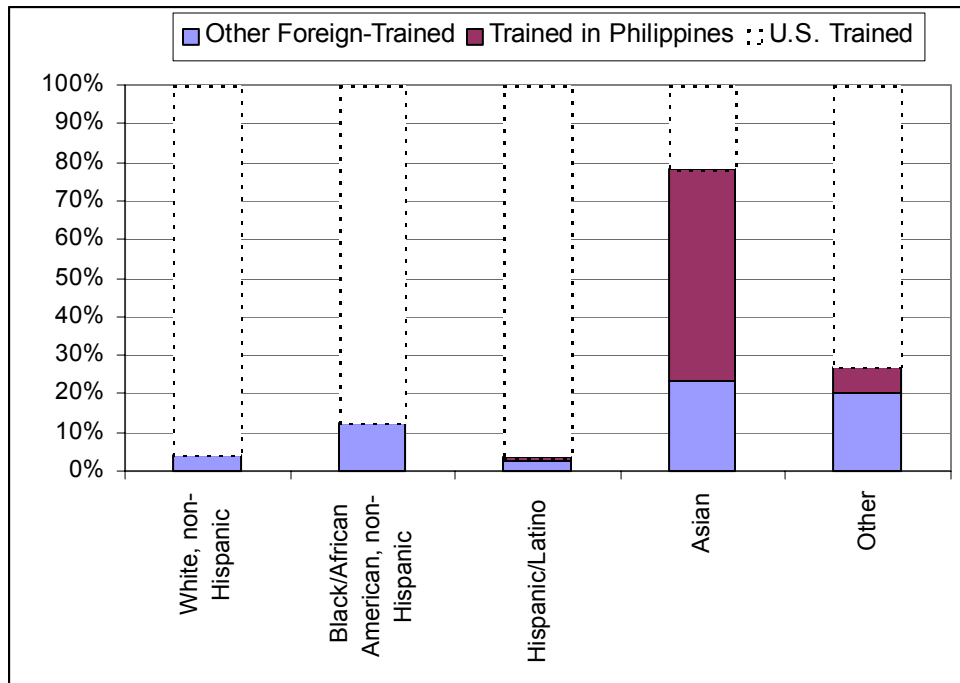
Nearly one in five NY hospital RNs (20%) were trained overseas; much higher than the 3.7% nationwide. About half of these were trained in the Philippines and half were trained in another foreign country, as shown in Figure 6. Foreign-trained RNs represented 22% of hospital RNs downstate, but only 6% of hospital RNs upstate.

**Figure 6. Location of Initial Nursing Program, NY Hospital RNs**



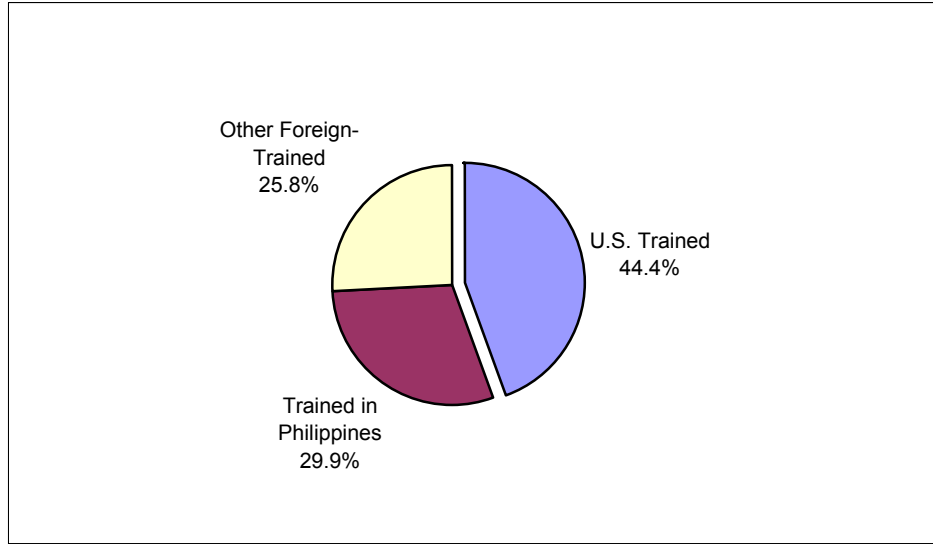
Much of the racial/ethnic diversity among NY hospital RNs was due to the presence of foreign-trained nurses who accounted for more than 10% of Black/African-American RNs, nearly 80% of Asian RNs, and more than one-quarter of those reporting their race/ethnicity as “Other.”

**Figure 7. Location of Training by Race/Ethnicity**



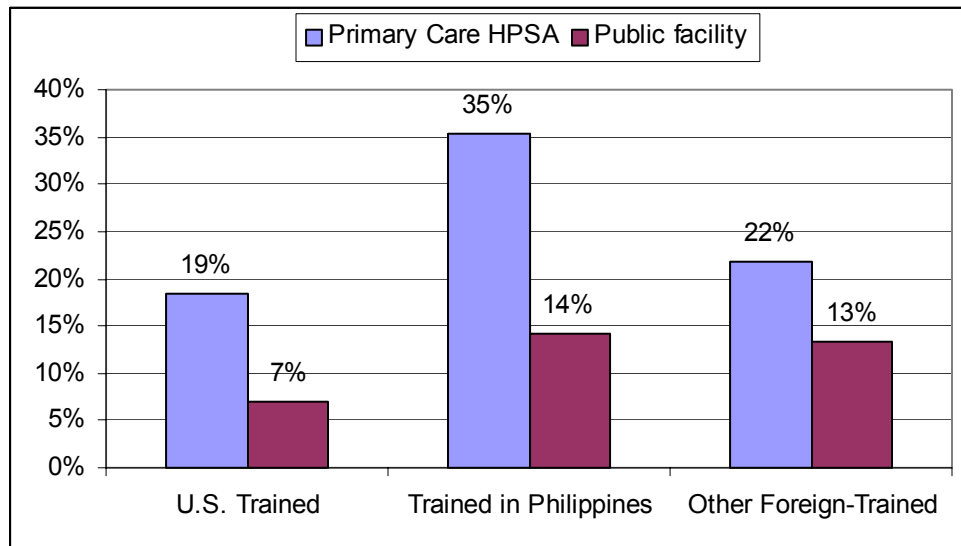
It is important to note that foreign-born RNs were an even larger percentage of NY hospital RNs than foreign-trained. Nearly one-third (31.2%) of the respondents were born in a country other than the U.S., but almost half of the foreign-born RNs were U.S. trained.

**Figure 8. Location of Basic RN Training for Foreign-Born RNs**



Not only were foreign-trained hospital RNs (especially those trained in the Philippines) more likely than their U.S.-trained counterparts to work in public hospitals, they were also more likely to work in hospitals located in a primary care HPSA.

**Figure 9. Location in a Primary Care HPSA or a Public Hospital by Location of Training**

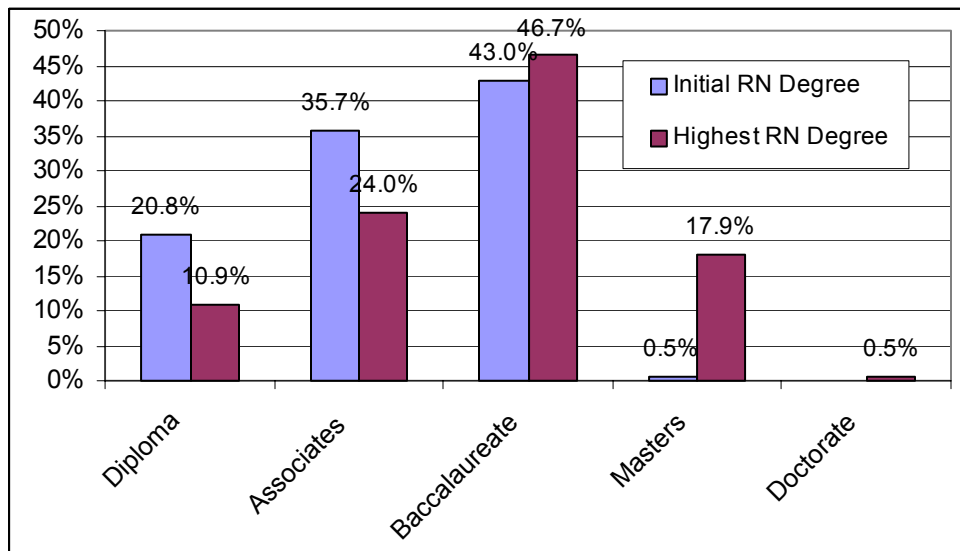


## II Educational Background

Most NY hospital RNs began their careers with either a nursing diploma or an associate degree in nursing (20% and 36%, respectively), although many entered nursing through a baccalaureate program (43%). NY hospital RNs were more likely than their counterparts nationwide to have an initial bachelor's degree (34% nationwide), and less likely to have an initial associate degree in nursing (47% nationwide).

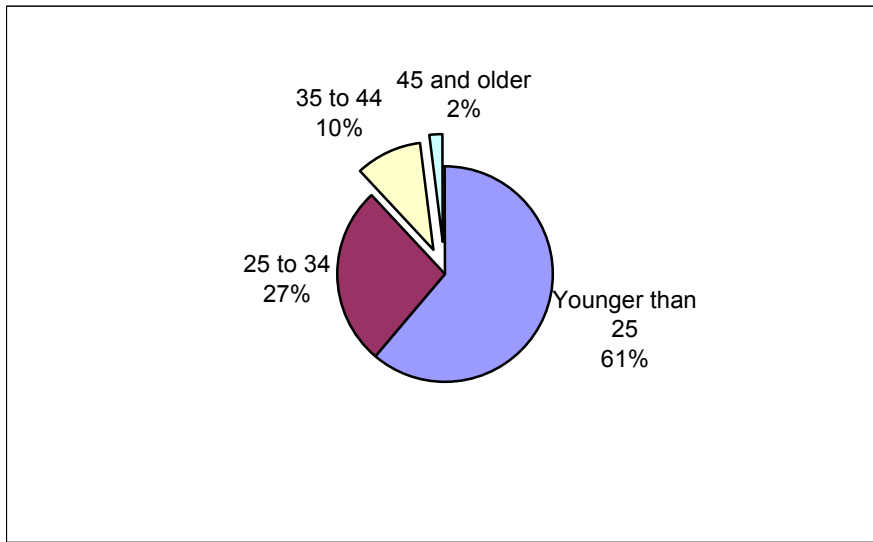
A majority, however, hold a bachelor's degree (47%) or an advanced degree (18%) as their highest nursing degree. This was substantially higher than the comparable numbers for hospital nurses nationwide, where 39% held a bachelor's degree and 9% held an advanced degree as their highest educational level in nursing. It was unclear whether these were real differences, or whether RNs with baccalaureate or advanced degrees were more likely to complete the hospital RN survey than RNs without those credentials.

**Figure 10. Distribution of Initial and Highest RN Degrees**



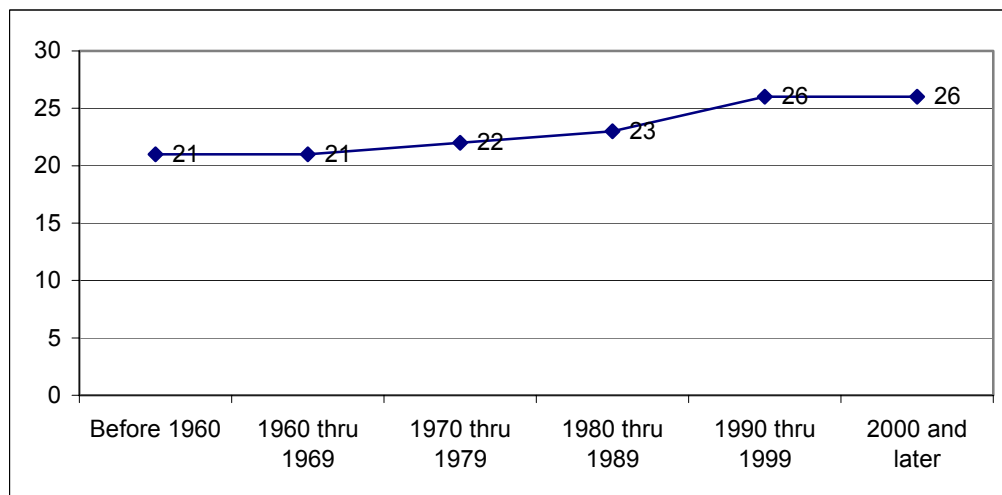
Most hospital RNs received their initial nursing education at relatively young ages – 61% were younger than age 25, and another 27% were between ages 25 and 34. On the other hand, however, 12% were age 35 or older when they entered nursing.

**Figure 11. Age at Initial Nursing Graduation**



The median age at which RNs first graduated from their initial nursing education program has been rising steadily in recent decades, from age 21 prior to 1960 up to age 26 since 1990.

**Figure 12. Median Age at Initial Graduation, by Year of Initial Graduation**

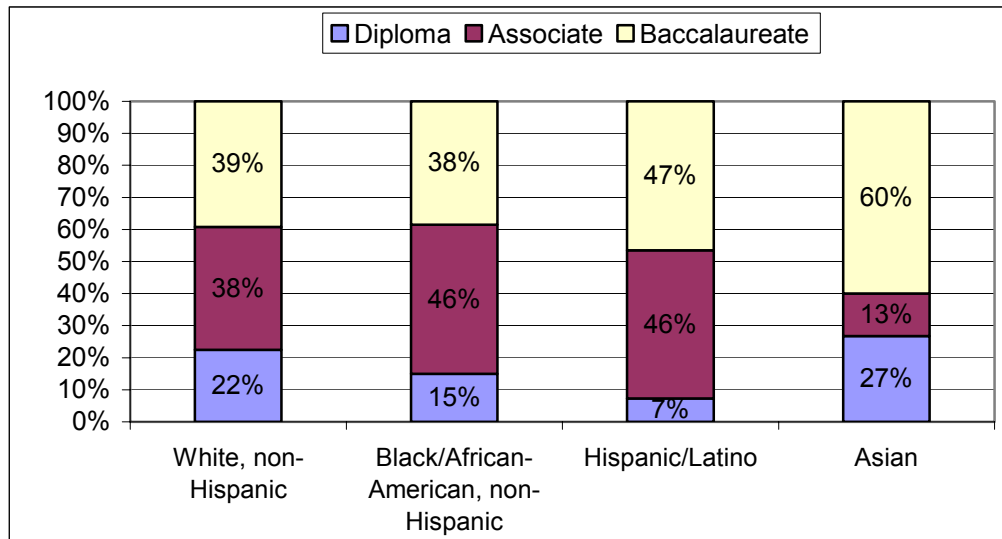


The ADN degree was a more common route of entry for Blacks/African-Americans and Hispanics/Latinos than for non-Hispanic Whites or Asians. Asian RNs were more likely than any other group to have entered nursing with a bachelor's degree, but this was due in large part to the percentage of Asian nurses trained in the Philippines, where the bachelor's degree is the only degree offered. Hispanics/Latinos were also more likely than other groups to enter nursing with a



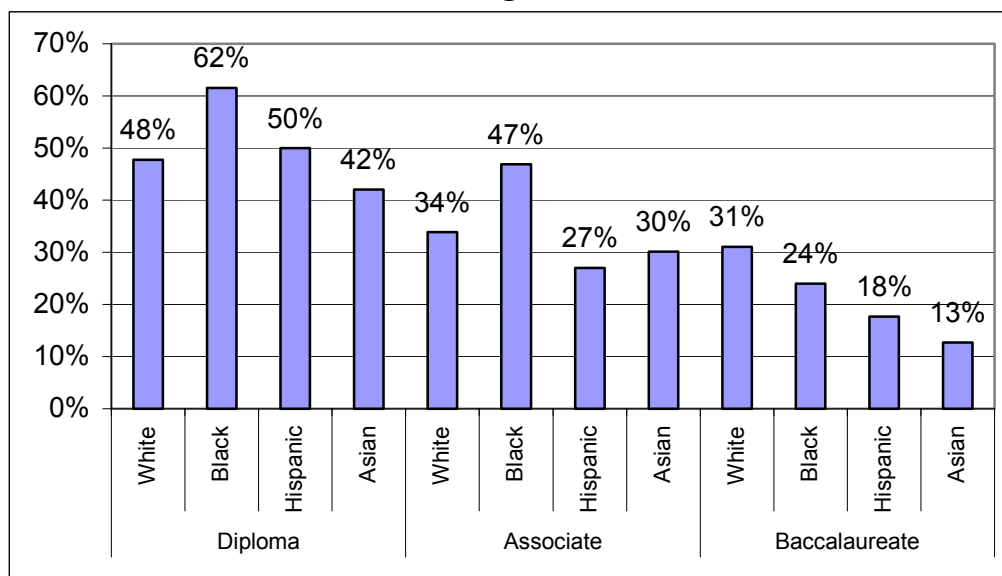
bachelor's degree (probably due in part to the very small percentage that entered nursing when diploma programs were prevalent).

**Figure 15. Initial Nursing Degree by Race/Ethnicity**



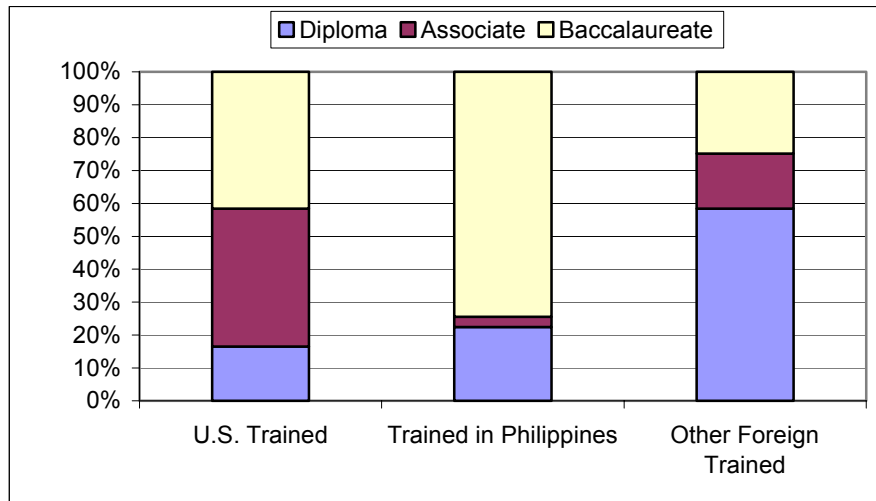
It was interesting to note that of those starting their career with a diploma or associate degree, Black/African-American RNs were most likely to have received an advanced degree compared to other groups (62% of Black/African-American diploma nurses and 47% of Black/African-American associate degree nurses). Among those starting with a bachelor's degree, however, non-Hispanic Whites were most likely to go on to a more advanced degree.

**Figure 16. Percent Earning Higher Nursing Degree by Race/Ethnicity and Initial Nursing Degree**



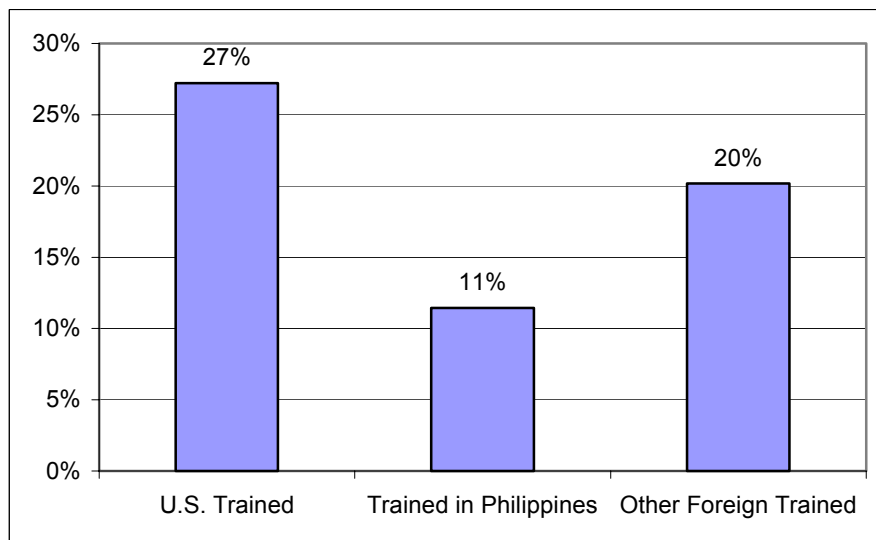
Nurses trained in the Philippines were overwhelmingly likely to have received a bachelor’s degree as their initial nursing degree. Associate degrees were more common among U.S.-trained RNs than among nurses trained outside the U.S. The majority of nurses trained in a country other than the U.S. or Philippines reported having a diploma as their entry-level credential. Some respondents, however, may have misunderstood the phrase “RN diploma program” to mean their RN license. It was not clear what percentage of respondents might have erroneously reported earning an RN diploma.

**Figure 17. Initial Nursing Degree by Location of Initial Training**



Among bachelor’s-entry RNs, those trained overseas (especially in the Philippines) were much less likely than their U.S.-trained counterparts to go on to attain an advanced degree.

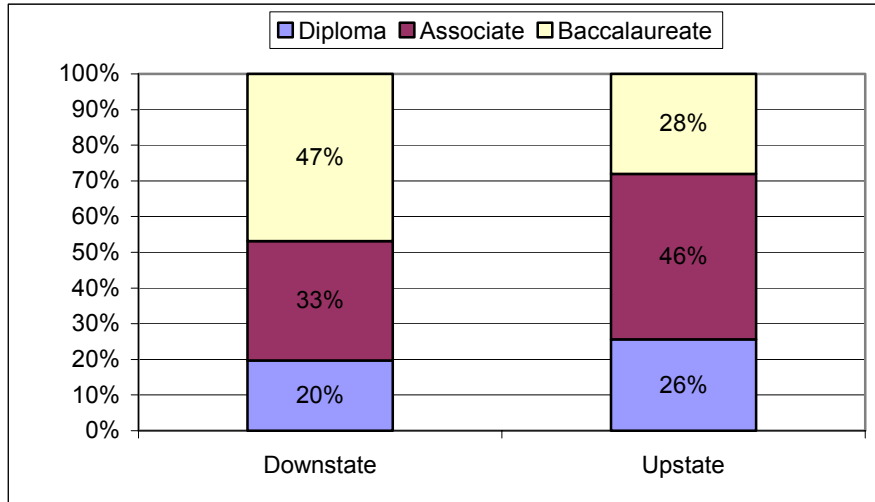
**Figure 18. Percent of Initial Bachelor’s Degree Graduates Who Earned Advanced Nursing Degree, by Location of Initial Nursing Degree**



The likelihood of furthering one’s education beyond the entry-level degree increased with age, which was to be expected given that older RNs generally had more years in nursing in which they had the opportunity to take additional coursework. Older age at initial nursing graduation, however, was associated with a reduced likelihood of earning an additional nursing degree. This was also to be expected, given that older entrants into nursing had fewer expected years left in nursing in which to benefit from having a higher degree. Furthermore, older entrants into nursing were more likely to be second-career professionals who already held degrees in other fields.

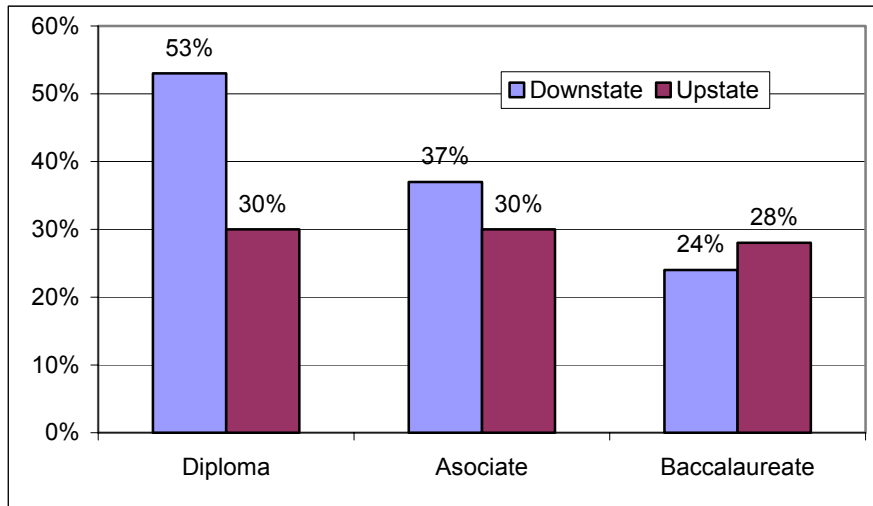
Figure 19 illustrates that RNs in downstate hospitals were more likely to have entered nursing with a bachelor’s degree than RNs in upstate hospitals.

**Figure 19. Initial Degree by Employment Location**



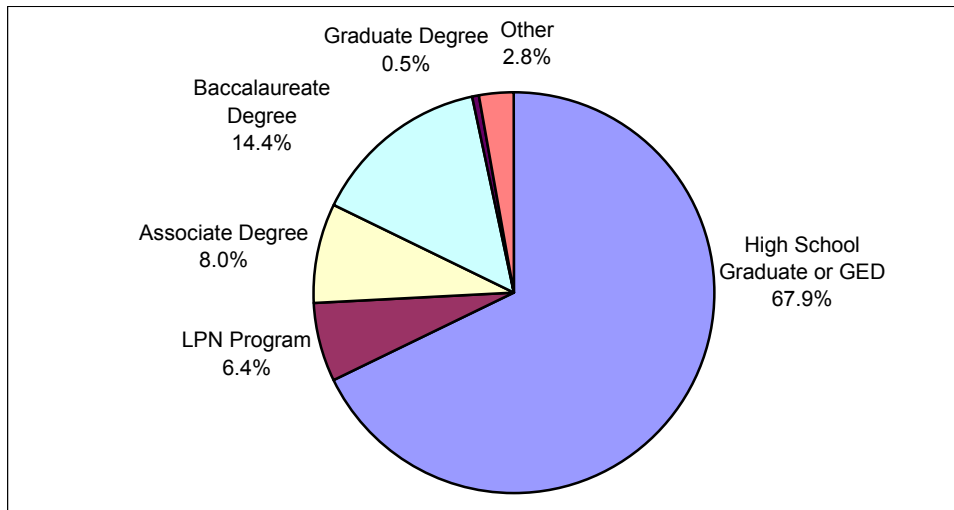
RNs working downstate who entered nursing with diploma or associate degrees were also more likely than their counterparts upstate to go on to earn an additional nursing degree. On the other hand, RNs working upstate who entered nursing with a baccalaureate degree were slightly more likely than those working downstate to have earned an additional degree, as shown in Figure 20.

**Figure 20. Percent Earning Additional Nursing Degree by Employment Location and Initial Nursing Degree**



More than two-thirds of NY hospital RNs entered their basic RN training with only a high school diploma. Six percent had completed an LPN program, 8% an associate degree, and 14% a baccalaureate degree.

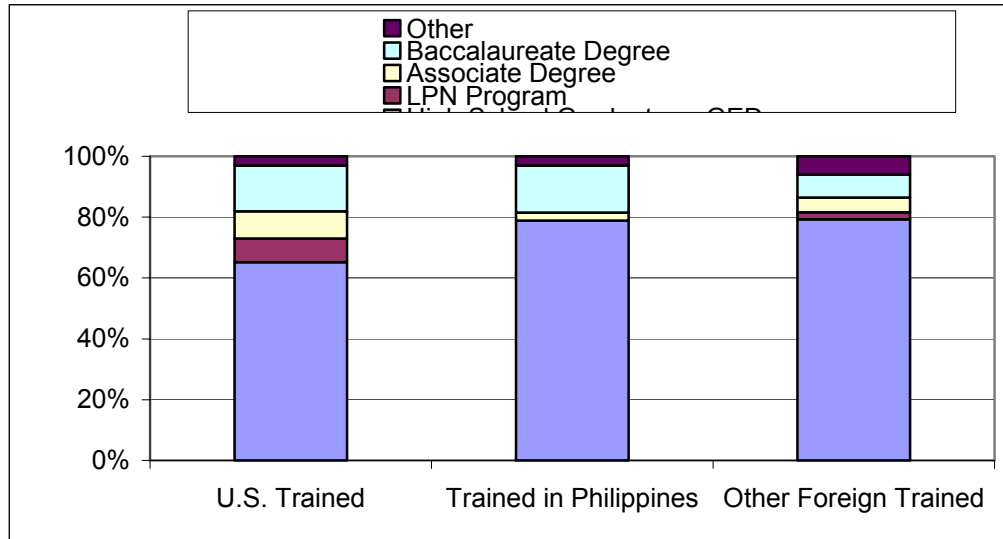
**Figure 21. Highest Level of Education Prior to Basic RN Training**



Asians were most likely to report entering their initial RN education program with a high school diploma (74% versus 68% of non-Hispanic Whites, 63% of Blacks/African-Americans, and 59% of Hispanics/Latinos). Blacks/African-Americans were the most likely to have completed an LPN program when they entered their RN program (12% versus 10% of Hispanics/Latinos, 6% of non-Hispanic Whites, and less than 1% of Asians), while Hispanics/Latinos were most likely

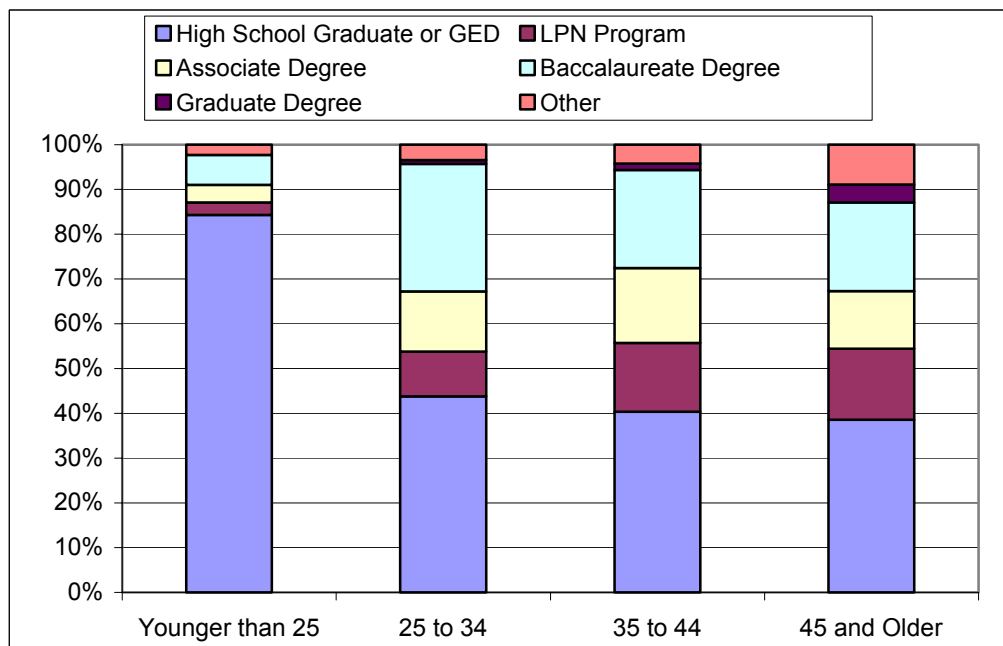
to already have an associate degree (14% compared to 9% of non-Hispanic Whites, 8% of Blacks/African-Americans, and 4% of Asians).

**Figure 22. Highest Level of Education Prior to Basic RN Training by Location of Initial RN Training**



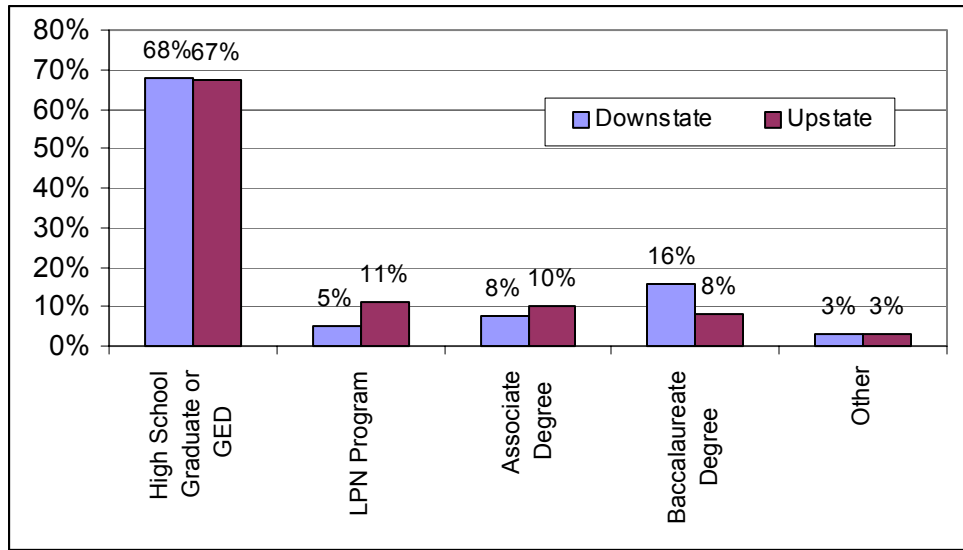
Older RN entrants were more likely to have previous education beyond a high school diploma than their counterparts younger than age 25.

**Figure 23. Highest Level of Education Prior to Basic RN Training by Age at Initial Graduation**



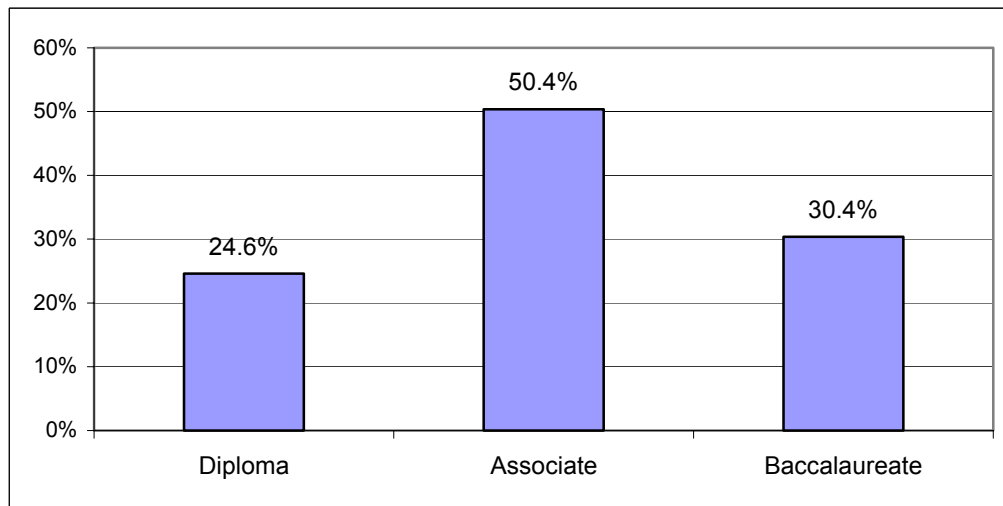
RNs working in downstate hospitals were about half as likely as those working upstate to enter their RN program with an LPN credential, and twice as likely to enter with a bachelor's degree.

**Figure 24. Highest Level of Education Prior to Basic RN Training by Employment Location**



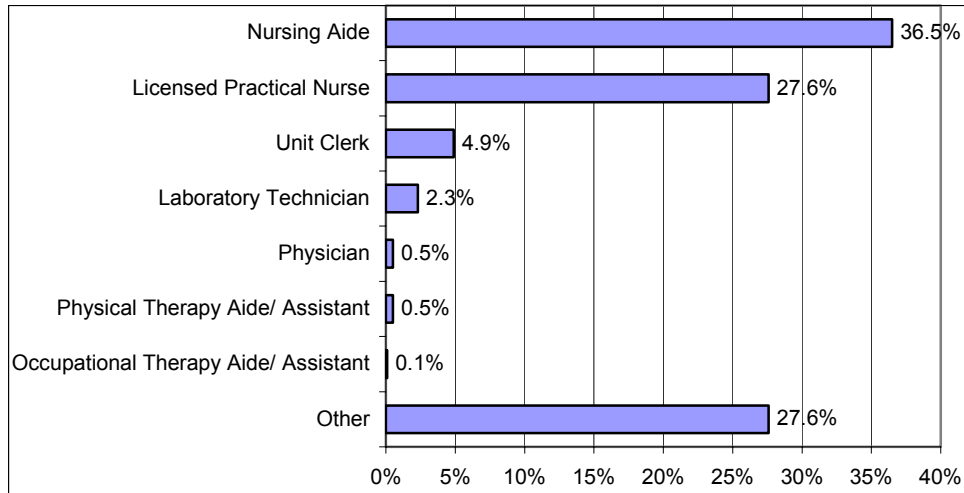
Just over one-third (36.6%) of RNs reported they were employed in health care immediately prior to their basic RN education. Prior health care employment was more common among graduates of associate degree programs, and less common among graduates of diploma programs, as shown below in Figure 25.

**Figure 25. Percent Employed in Health Care Immediately Prior to Starting Basic RN Education, by Initial RN Degree**



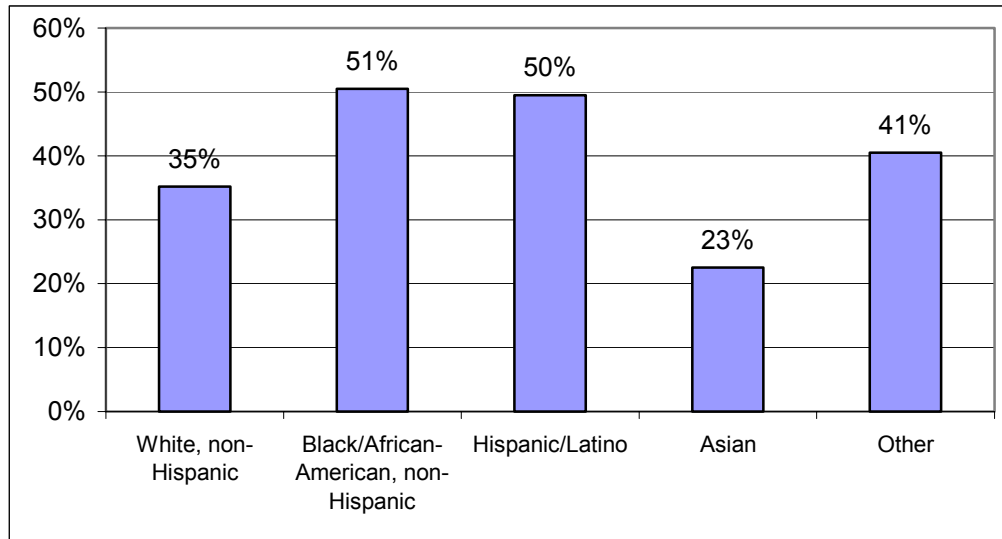
The most common previous job was another type of nursing job – either a nursing aide or LPN. More than one-quarter of those who previously worked in health care indicated “other.”

**Figure 26. Title of Health Care Job Immediately Prior to Starting Basic RN Education**



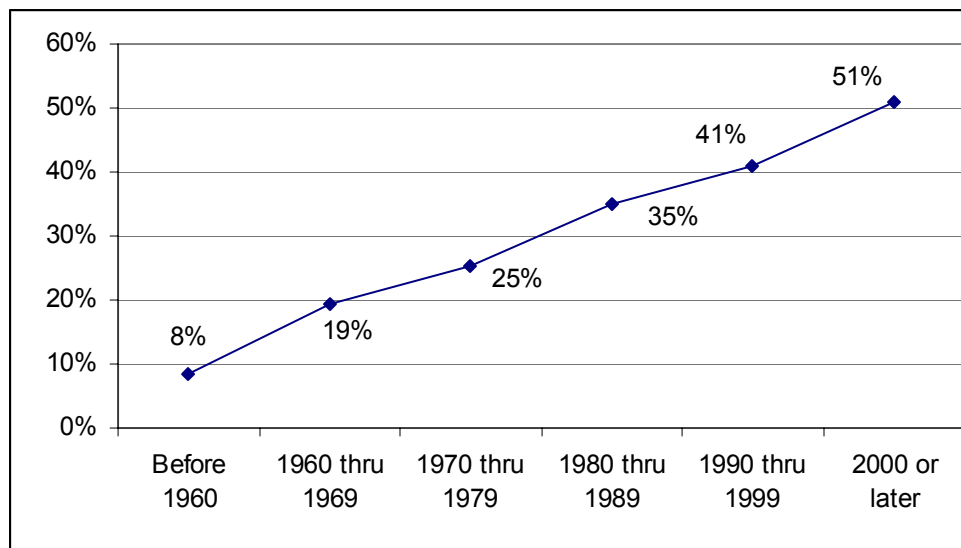
It appears that experience in health care was a much greater avenue into registered nursing for underrepresented minorities than for non-Hispanic Whites and Asians. Fifty-one percent of Black/African-American and 50% of Hispanic/Latino hospital RNs report they were working in health care immediately prior to starting their initial RN education program, compared to 35% of Whites and 23% of Asians. Relatively few foreign-trained RNs (17% of those trained in the Philippines and 23% of those trained in other foreign countries) entered their RN program from a health care job, compared to 41% of U.S.-trained RNs. RNs working in upstate hospitals were also more likely than their downstate counterparts to have worked in health care before their RN training (45% versus 35%).

**Figure 27. Percent Employed in Health Care Immediately Prior to Starting Basic RN Education, by Race/Ethnicity**



There has been a striking trend towards higher percentages of RN graduates moving into the field from other health care jobs. Only 8% of those graduating before 1960 worked in health care before entering their initial RN education program, compared to 51% of those graduating in 2000 or later. It was also worth noting that over half of those who graduated their initial nursing program at age 25 or older had been working in health care (compared to 26% of those graduating before age 25).

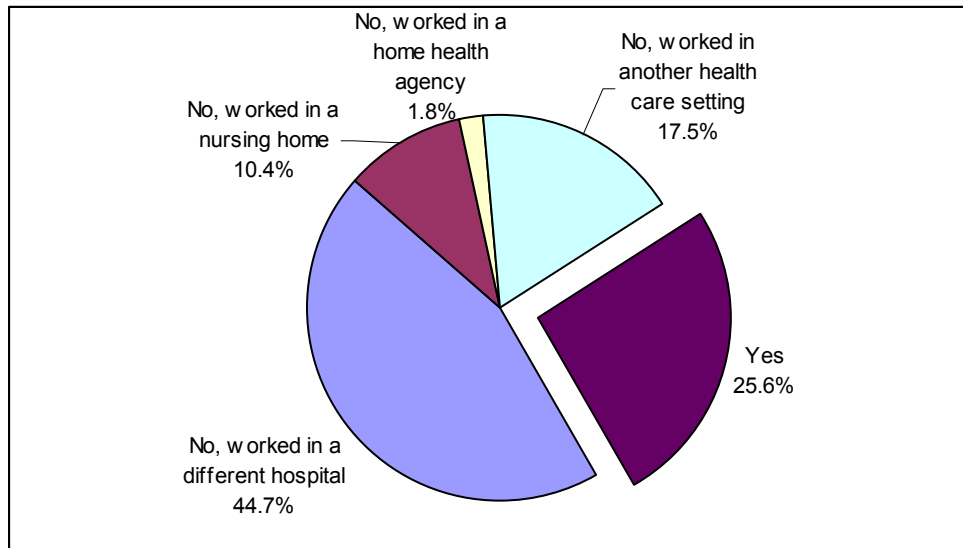
**Figure 28. Percent Employed in Health Care Immediately Prior to Starting Basic RN Education, by Race/Ethnicity**





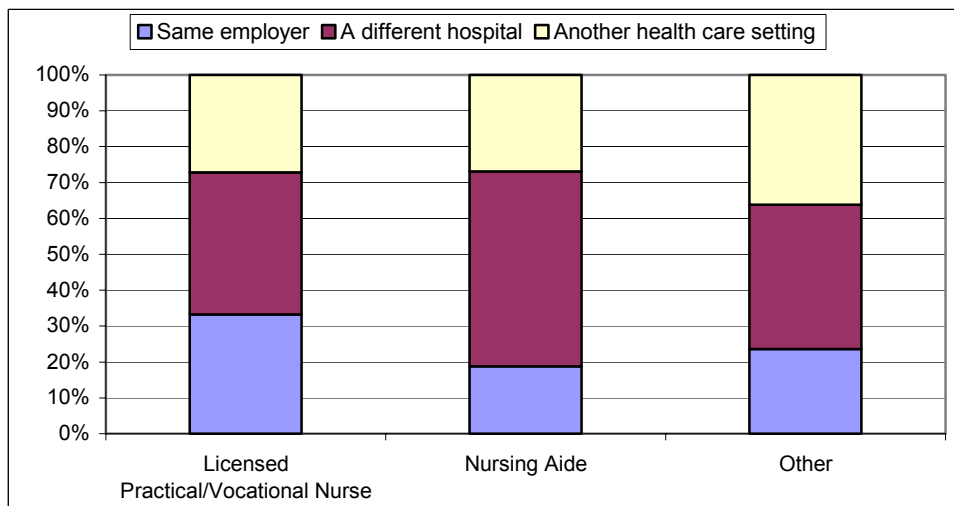
Nearly one-quarter of those with previous health care experience still worked for the same employer they worked for before becoming an RN, while almost half worked for a different hospital before becoming an RN.

**Figure 29. Do You Still Work for the Same Employer?**



Those who had been LPNs before becoming RNs were more likely to still work for the same employer.

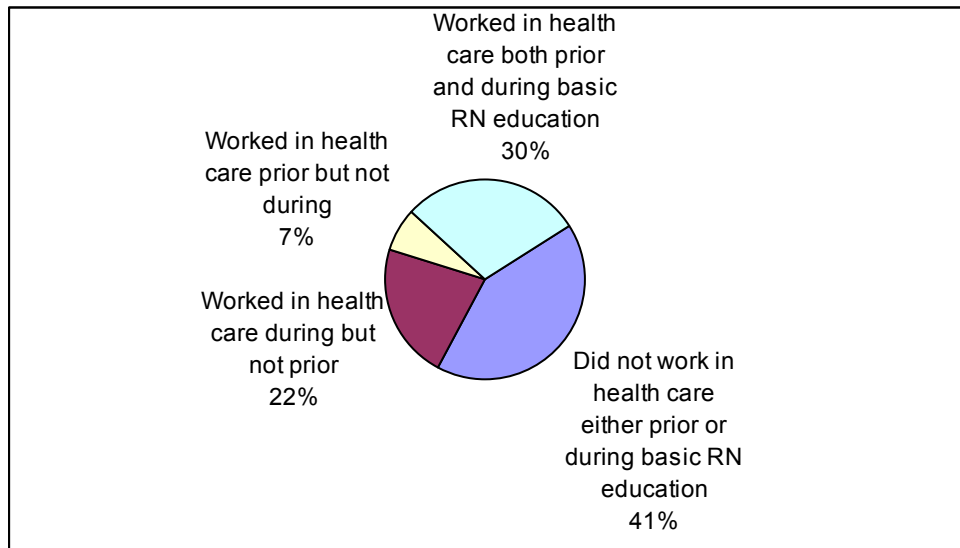
**Figure 30. Pre-RN Employment by Pre-RN Job Title**



Working in health care while completing one's initial nursing degree was more common than working in health care before starting one's initial nursing degree, with over half (52.3%) reporting that they did so. Overall, slightly less than one-third of RNs worked in health care both prior to and during their basic nursing education, and slightly less than one-quarter worked in health care during but not prior to their basic nursing education. More than one in four did not work in health care until completing their RN education (Figure 31).

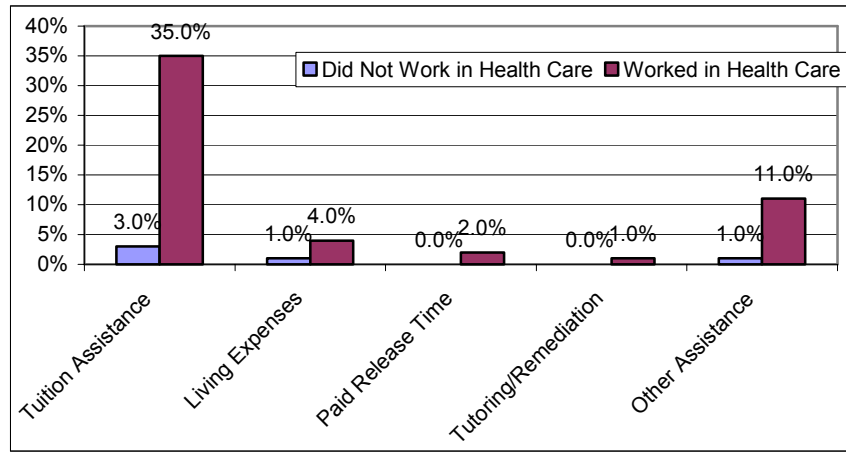
There were fewer demographic differences in terms of who worked in health care while completing their initial RN education, but those who entered at the associate level were more likely to report working while earning their degree (60%) compared to those who entered at either the diploma or baccalaureate level (49% and 47%, respectively).

**Figure 31. Health Care Experience Prior To and During Initial RN Education**



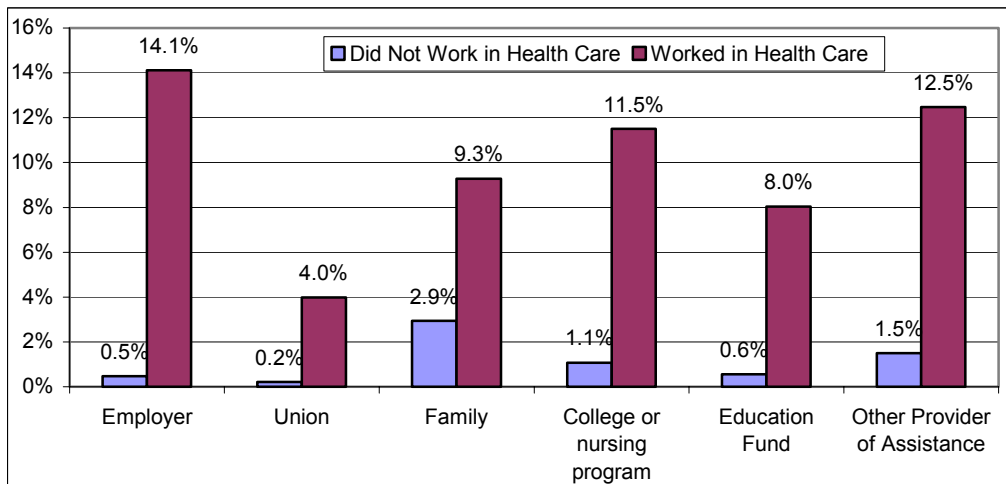
Overall, 20% of RNs reported receiving tuition assistance, 2% reported receiving money towards living expenses, 1% reported receiving paid release time, and 1% reported receiving tutoring or remediation. Six percent reported receiving some other form of assistance. This varied, however, according to whether or not they worked in health care during their basic RN training, as shown below in Figure 32.

**Figure 32. Percent Receiving Selected Assistance With Initial Nursing Education by Employment in Health Care During Initial Nursing Education**



Assistance towards one’s basic RN education most commonly came from one’s employer (8%), college or nursing program (7%), family (6%), or an education fund (4%). Two percent of RNs reported assistance from a union. Seven percent reported assistance from some other source. Again, this varied by health care employment status. Nursing students employed in health care were more likely to report receiving assistance from all sources (including family) than those not employed in health care during their basic RN education.

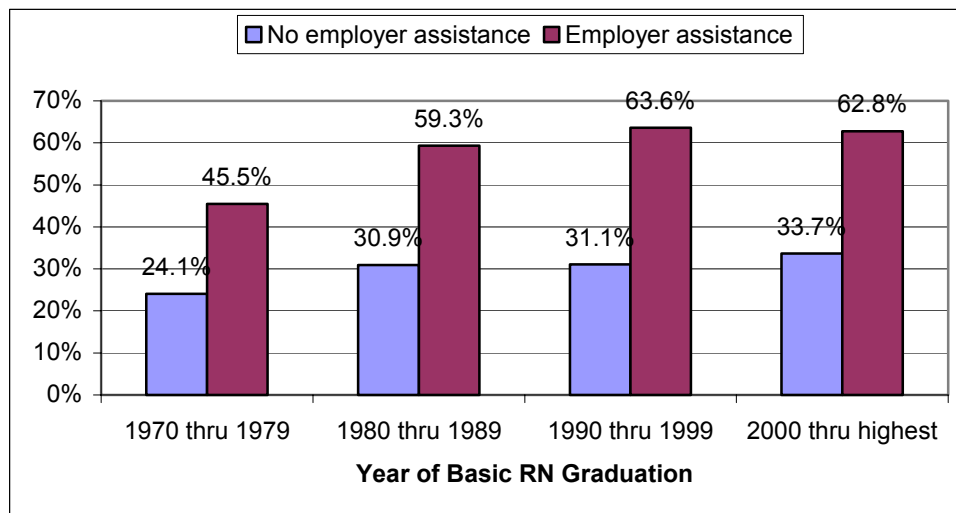
**Figure 33. Sources of Education Assistance by Health Care Employment During Initial RN Education**



Among RNs working in hospitals immediately prior to obtaining their basic RN education, those who reported receiving assistance from their employer toward completing their nursing education were almost twice as likely to still be working for that employer (61.0%) as those who

did not receive assistance from their employer while students (31.2%). Assistance from one's employer has become more common in recent cohorts of graduates, but time of graduation did not explain this relationship. The figure below shows that even among nurses who graduated in the 1970s, those who received employer assistance were nearly twice as likely to be still working for the same employer as those who did not receive such assistance (45.5% versus 24.1%). Those still working for their pre-RN employer were no more or less likely to be working for a unionized hospital than respondents overall, suggesting that unionization was not the mechanism that explains this higher retention rate.

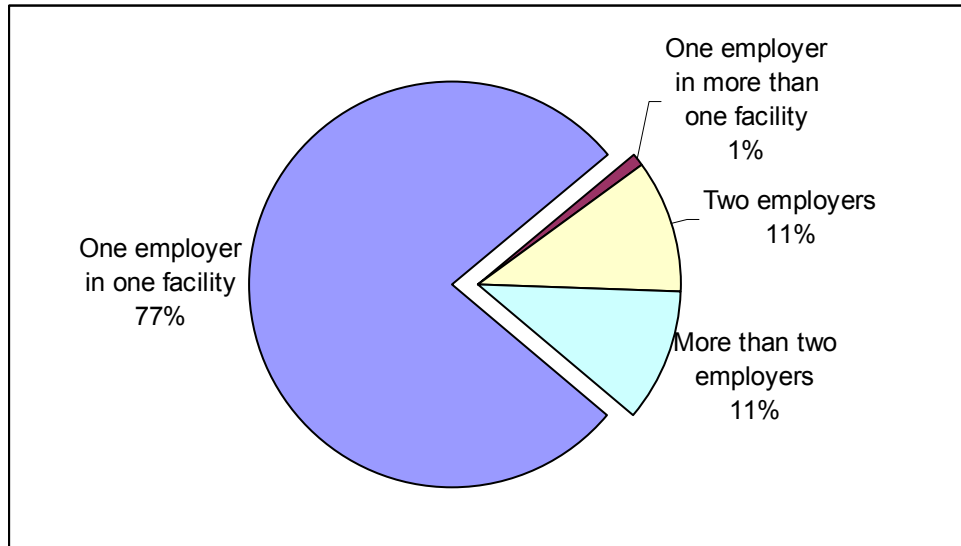
**Figure 34. Percent of Nurses Employed in Hospitals Prior to Their Basic RN Training Who Are Still Working for Employer, by Whether or Not They Received Employer Assistance**



### III. Current Practice

The majority of hospital RNs worked for one employer in one facility. Still, 22% had two or more employers. RNs trained in the Philippines were more likely to work for only one employer in one facility (89%) than either U.S.-trained or other foreign-trained RNs (77% and 78%, respectively).

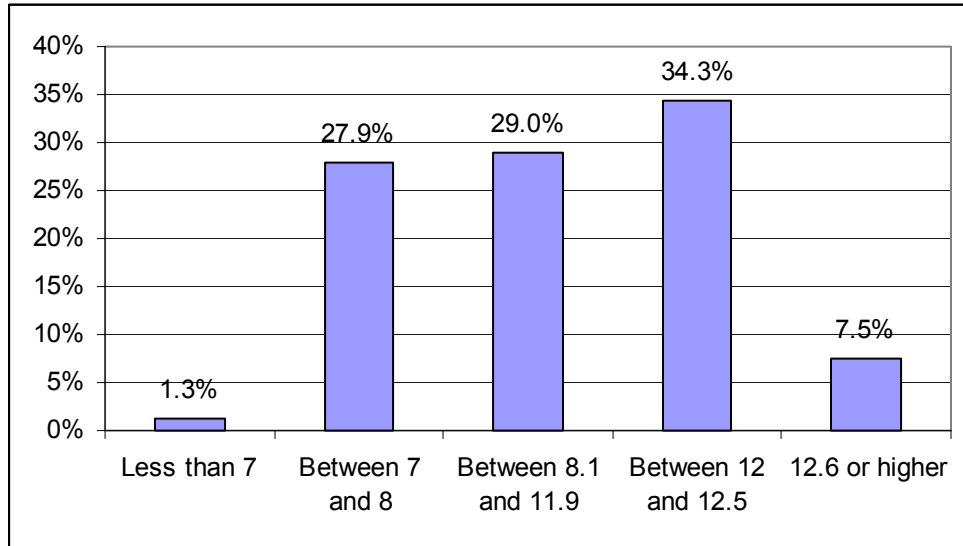
**Figure 35. Number of Employers and Work Sites, NY Hospital RNs**



#### Work Schedules

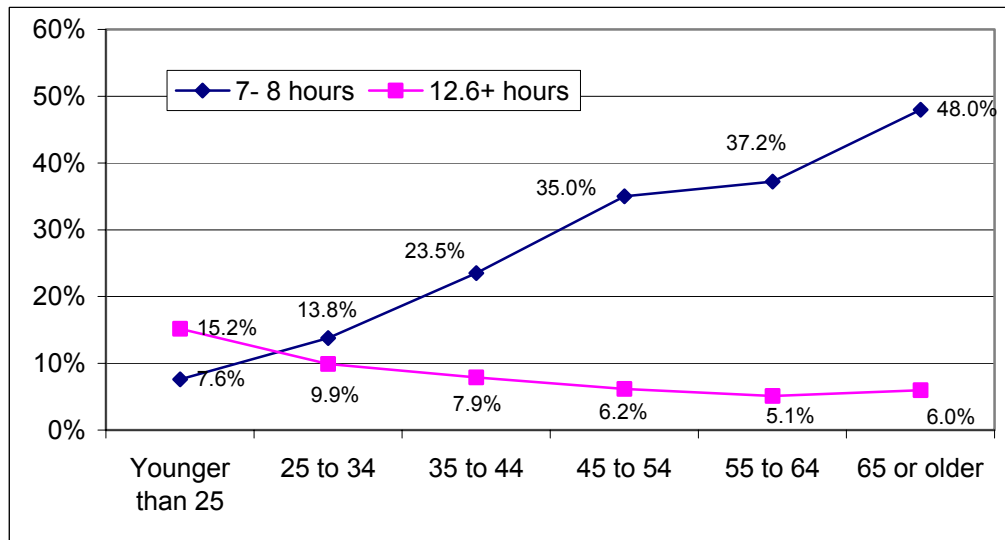
The “standard” eight-hour workday was clearly not found among NY hospital RNs. Nearly 42% reported working 12 or more hours per day, and another 29% worked more than eight but less than 12 hours. Overall, only 29% of hospital RNs averaged eight or fewer hours per day.

**Figure 36. Average Hours Worked Per Day, NY Hospital RNs**



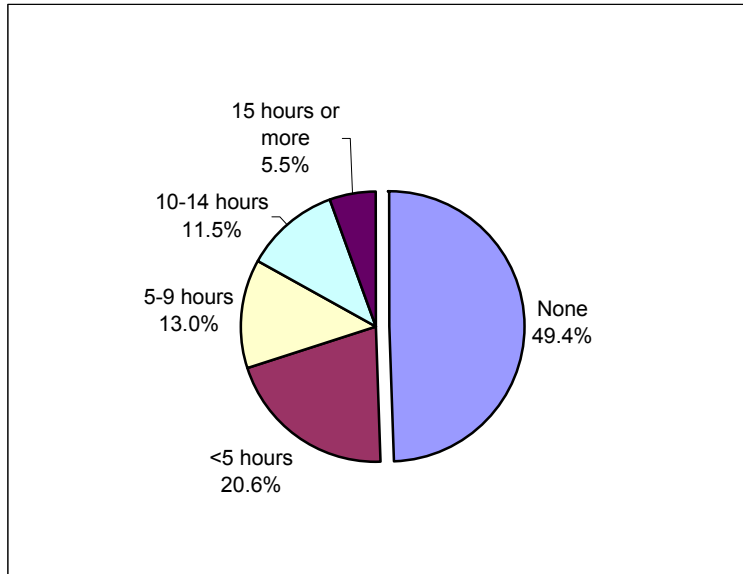
Interestingly, RNs trained in the Philippines were more likely than RNs trained in the U.S. to work shifts of seven to eight hours per day (36% versus 27%). U.S.-trained RNs were more likely than their counterparts trained in the Philippines or other foreign countries to work shifts of more than twelve-and-a-half hours (8% versus 4% and 5%, respectively). Some of this may be related to age differences, however. As shown below, RNs were more likely to work shorter shifts as they aged, and less likely to work the longest shifts.

**Figure 37. Percent of RNs Working Short and Long Shifts, by Age**



Nearly half of NY hospital RNs reported that they did not work any overtime. Many of those who did work overtime reported working less than five overtime hours per week. Thirty percent of NY hospital RNs worked more than five overtime hours per week.

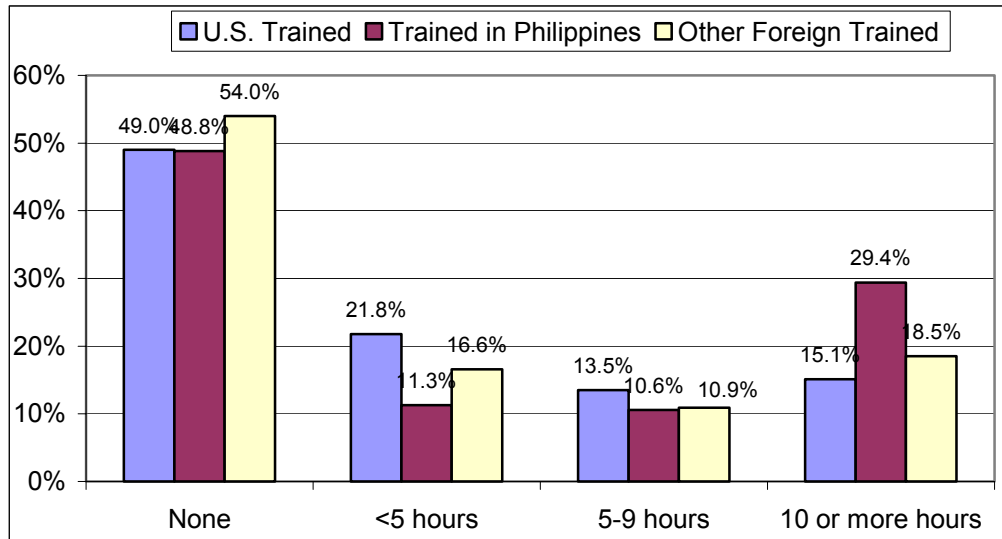
**Figure 38. Average Overtime Hours Worked Per Week**



Philippines-trained RNs averaged the most overtime hours (5.8), followed by other foreign-trained RNs (4.1). U.S.-trained RNs worked the fewest overtime hours (3.7)<sup>3</sup>. There were also differences by hospital sponsorship, with RNs in public hospitals averaging 5.2 hours of overtime per week compared to 4.0 hours among those in private hospitals. Those in downstate hospitals averaged more overtime than those in upstate hospitals (4.1 versus 3.4 hours).

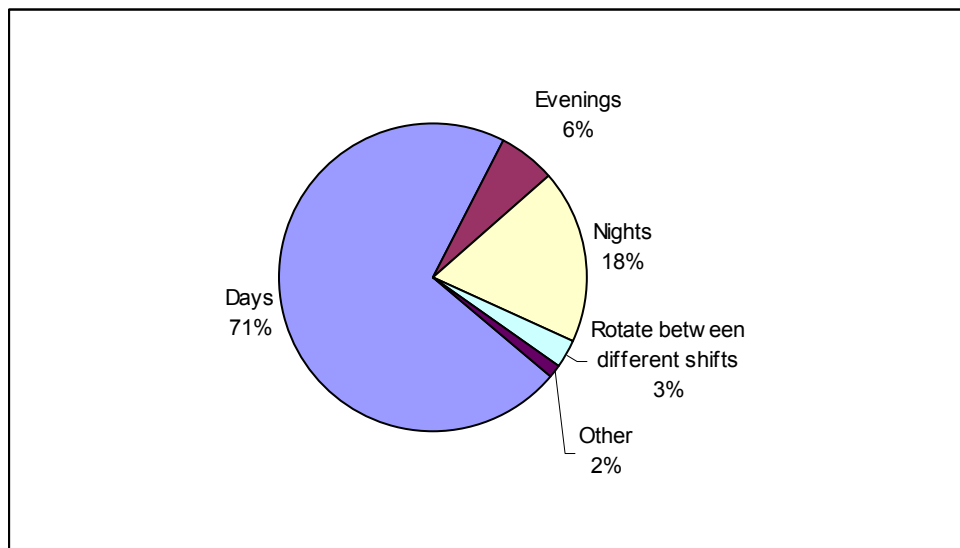
<sup>3</sup> It should be noted, however, that RNs trained in the Philippines averaged the shortest regular shift, while U.S.-trained RNs averaged the longest.

**Figure 39. Average Overtime Hours Worked Per Week, by Location of Basic Nursing Education**



A majority of the NY hospital RNs responding to this survey worked primarily day shifts (71%), while 18% reported working nights, and 6% reported working evenings. A very small number reported rotating between different shifts. Philippine-trained RNs were more likely than other RNs to work nights (25.7% versus 17.2% for U.S. trained RNs, and 17.6% for other foreign-trained RNs).

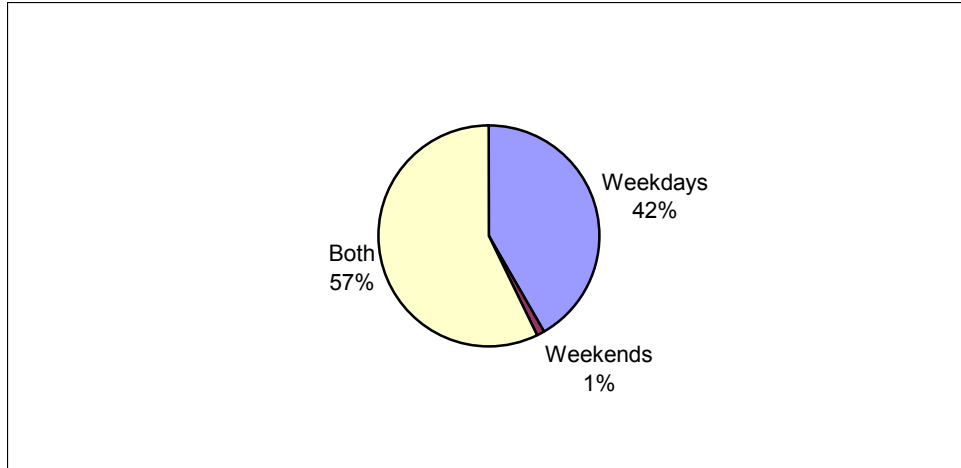
**Figure 40. Shift Usually Worked, NY Hospital RNs**





The majority of hospital RNs (57%) reported that they typically worked both weekdays and weekends, while 42% worked primarily weekdays. Only 1% said they typically worked weekends.

**Figure 41. Days Usually Worked, NY Hospital RNs**

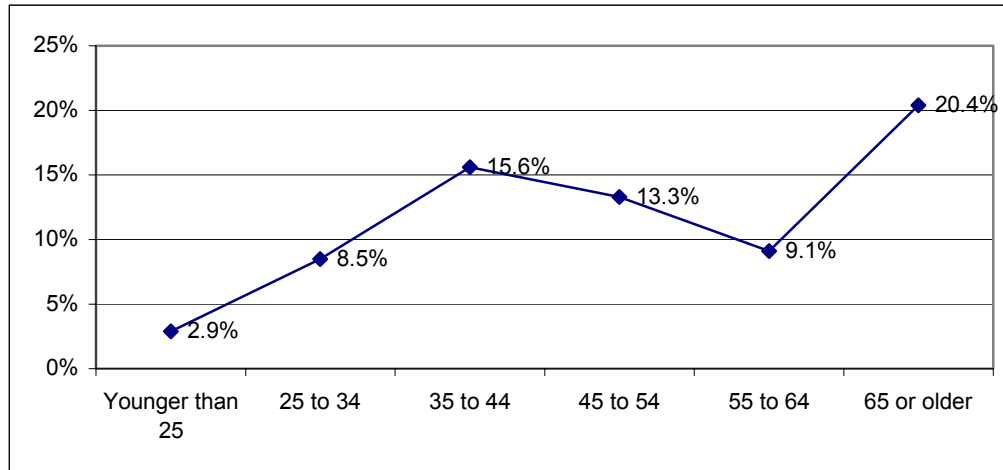


The vast majority of hospital RNs (88.1%) worked full time, while 11.9% worked part time. RNs who worked day or night shifts were more likely to work full time (88.4% and 90.0%, respectively) than those who worked evenings or rotated between shifts (82.4% and 78.8%, respectively). More than two-thirds of RNs who worked part time (67.9%) reported that they did so because family or personal commitments limited their available time to work. A few (14.1%) said that their position was only available part time, and a very small number reported that full time work was too demanding (3.6%). The remainder (14.4%) cited other reasons.

Female RNs were more likely to be part time than male RNs (12.6% versus 4.7%), and non-Hispanic White RNs were more likely to be part time (17.0%) than Black/African-American, Hispanic/Latino, or Asian RNs (4.4%, 7.8%, and 3.8%, respectively). Foreign-trained RNs were almost all full time (96.7% of Philippine trained and 95.5% of other foreign trained), compared to 86.2% of U.S. trained.

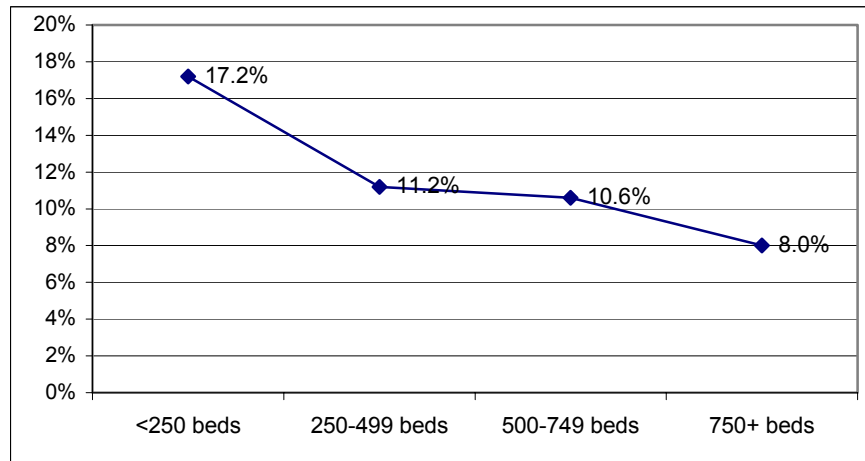
The percentage of RNs working part time was low among the youngest nurses, and reached a peak between ages 35 and 44 (the years when nurses may be most likely to be raising families). Then the percentage working part time declined once more until age 65. RNs age 65 and older had the highest rate of working part time (20% compared to 15% of those age 35 to 44).

**Figure 40. Percent RNs Working Part Time, by Age**



A hospital's characteristics were also related to RN part time work. RNs in public hospitals were much less likely to work part time than their counterparts in private hospitals (2.2% versus 10.7%). Those working in upstate hospitals were also substantially more likely to be working part time than those in downstate hospitals (21.6% versus 9.6%). Finally, the likelihood of working part time decreased as hospital bed size decreased, as shown below in Figure 41.

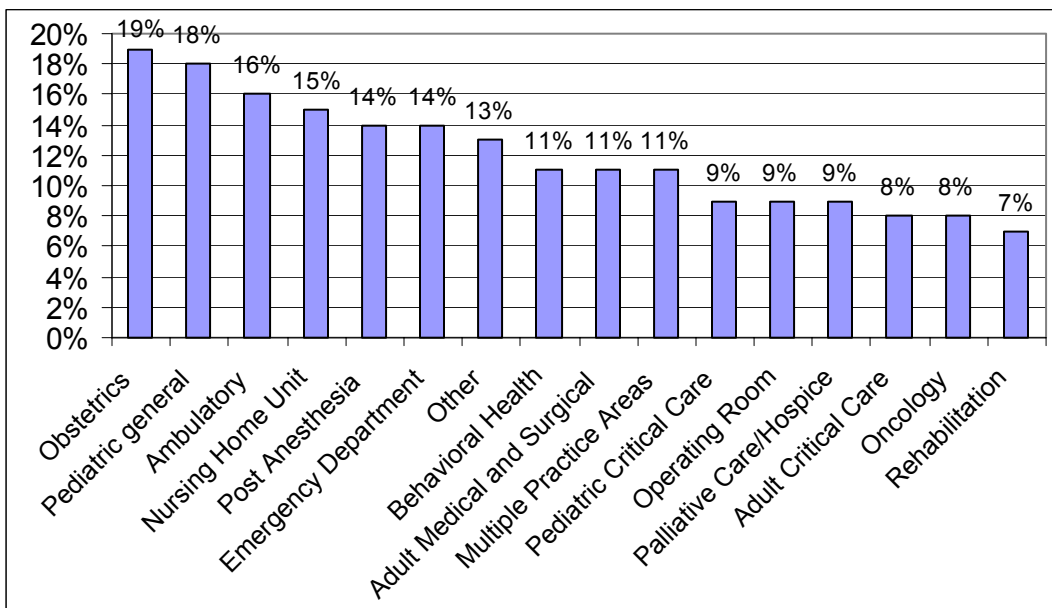
**Figure 41. Percent of RNs Part Time, by Facility Bed Size**



Married RNs were more likely to work part time (16.2%) than those who were not married (4.4%) or formerly married (6.4%). Those with children younger than age 6 in the home were more likely to work part time (21.2% if they had only children younger than age 6, and 22.3% if they had children both younger and older than age 6) compared to those with only older children (14.0%) or no children (7.1%) in the home. Those who reported being the primary caregiver to a dependent adult were actually slightly less likely to work part time than those who did not report this (9.4% versus 12.4%).

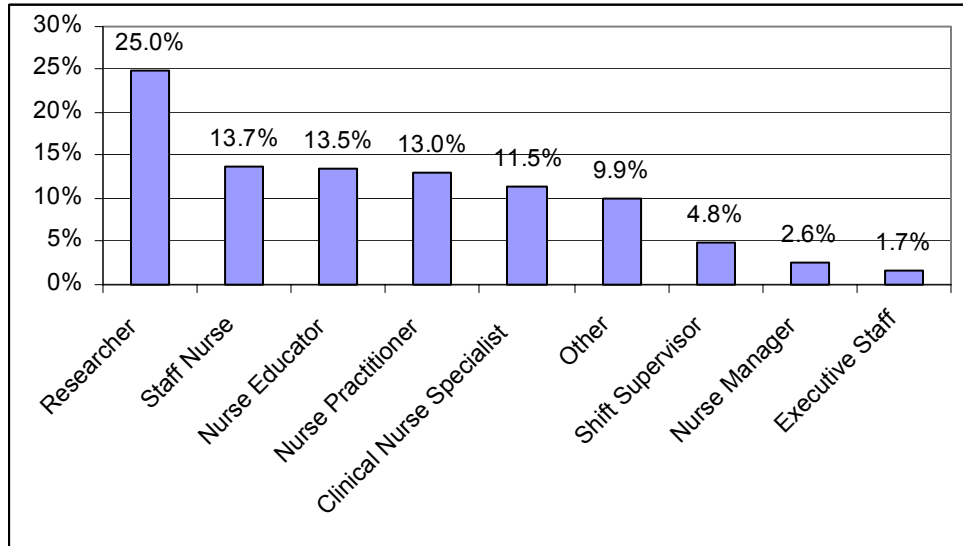
There was wide variation in the percentage of RNs working part time by the type of unit in which they worked. Obstetrical and general pediatric units had the highest rates of nurses working part time (19% and 18%, respectively), followed by outpatient departments and nursing home units. Few nurses in adult critical care, oncology, or rehabilitation units worked part time (8%, 8%, and 7%, respectively).

**Figure 42. Percentage of RNs Working Part Time, by Unit**



There were also some sharp differences in the percentage of RNs working part time by job title. Researchers were more likely to work part time (25%), followed by staff nurses, and nurse educators (both 14%). Nurse managers and executive staff were unlikely to work part time (3% and 2%, respectively).

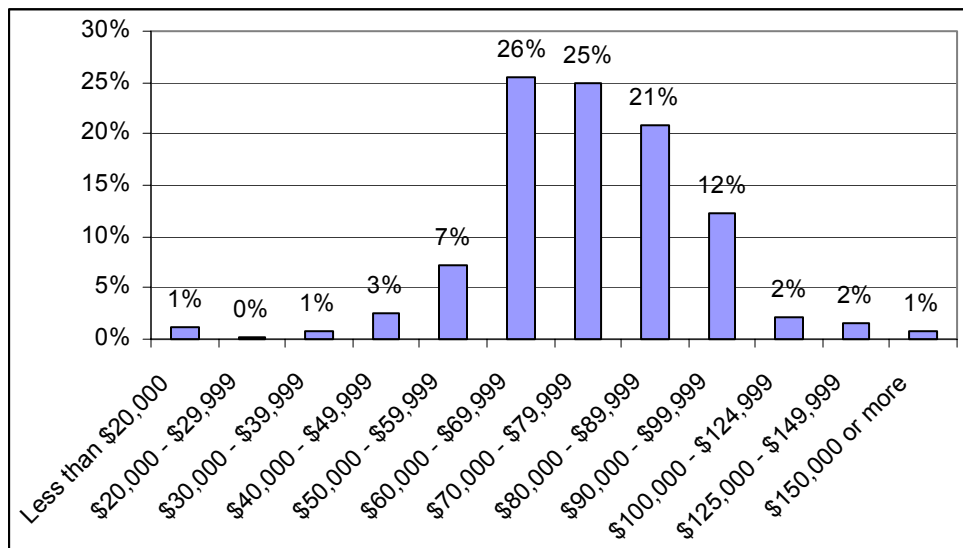
**Figure 43. Percentage of RNs Working Part-Time, by Job Title**



### Salary

The majority of full-time hospital RNs (72%) earned between \$60,000 and \$89,999, although 12% earned less than this and 17% earned more. The median salary was about \$75,000, but this varied between upstate and downstate hospitals. RNs in upstate hospitals earned a median of \$62,263, while RNs in downstate hospitals earned a median of \$77,218.

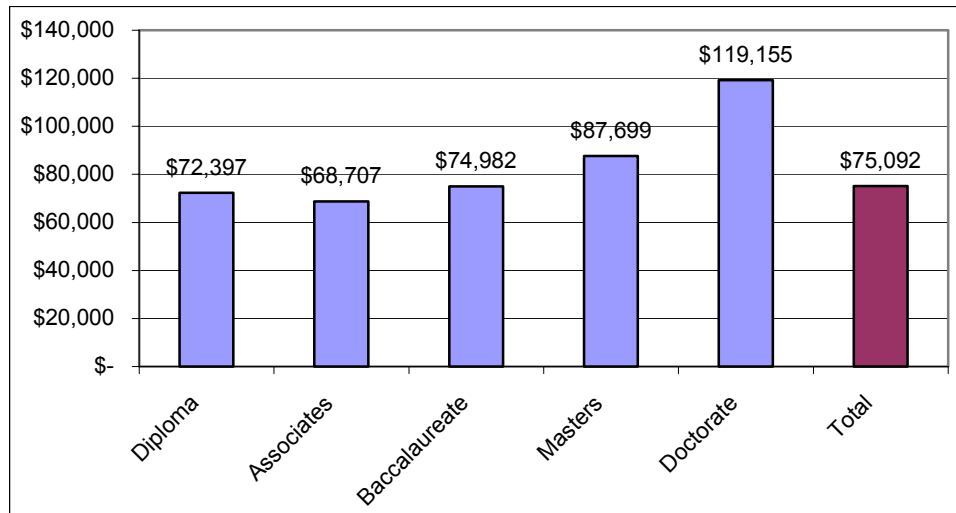
**Figure 44. Annual Gross Salary of Full-Time Hospital RNs (Excluding Overtime)**



RNs with baccalaureate degrees earned more than those with associate degrees, but, interestingly, so did diploma nurses. RNs with associate degrees were most likely to be in staff

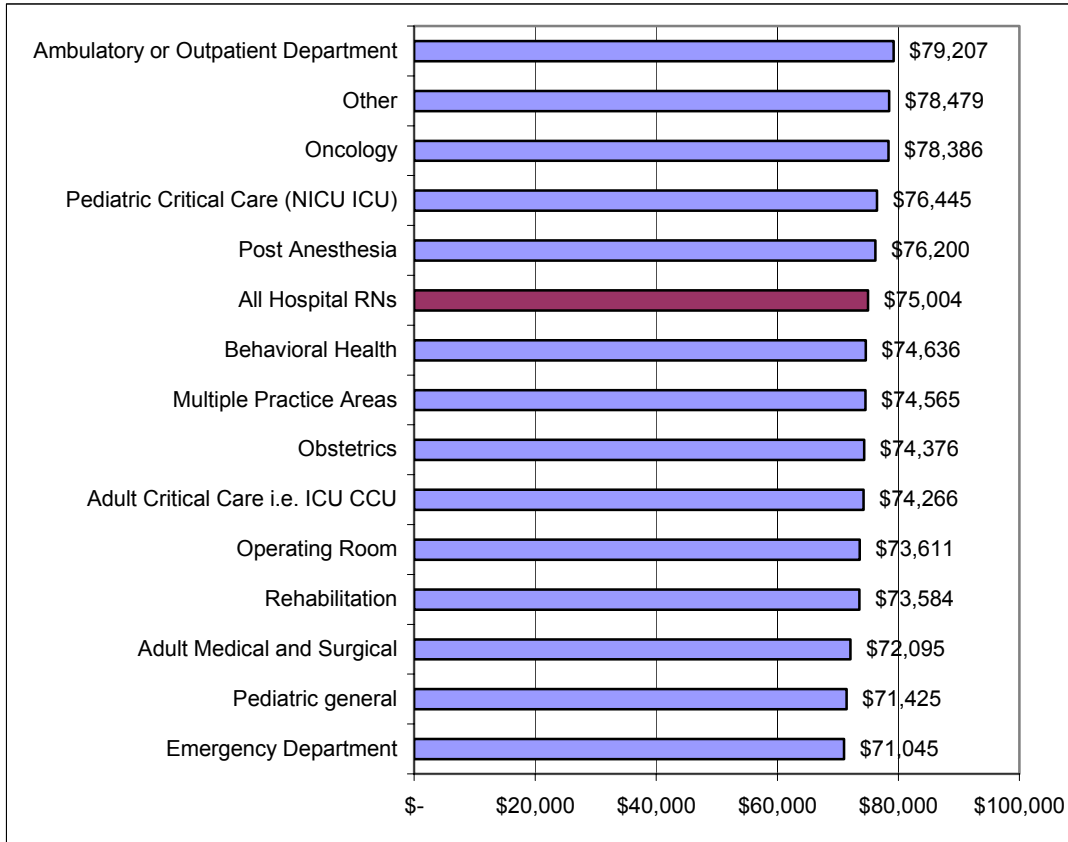
nurse titles, which may explain their lower earnings. The latter finding was likely to be a result of the diploma nurses having the most experience on average. Salaries went up substantially for master's-prepared RNs, and even more for doctorate-prepared RNs, as shown in Figure 45.

**Figure 45. Median Annual Gross Salary of Full-Time Hospital RNs (Excluding Overtime), by Highest Nursing Degree**



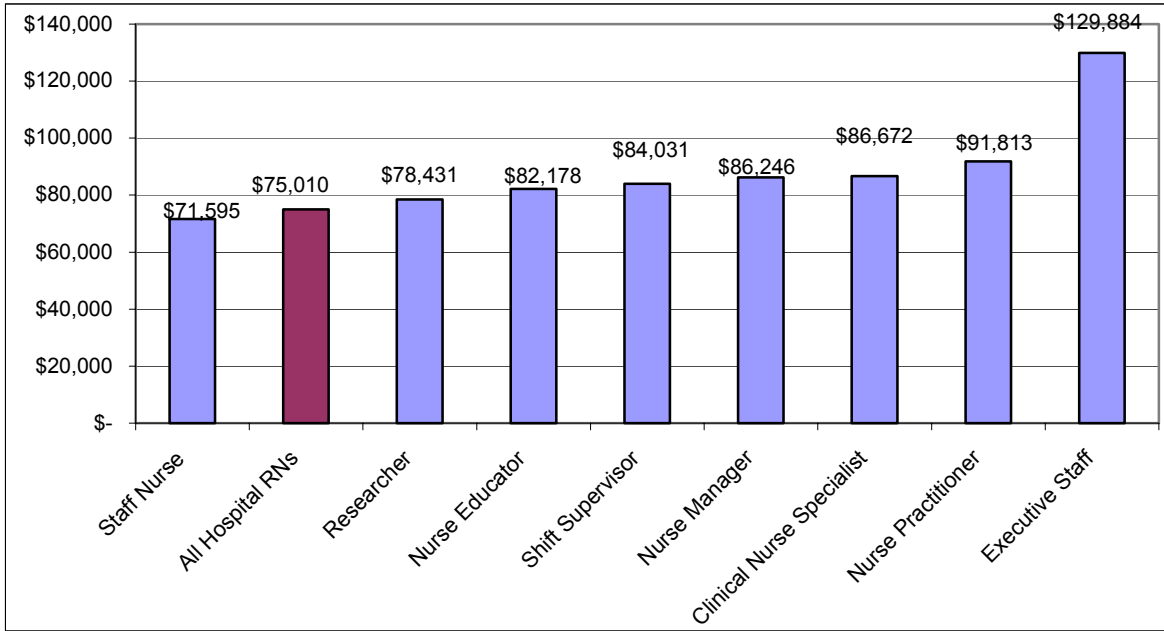
There were some salary differences by current RN practice area, but these differences were moderate, ranging from a low median salary of about \$71,000 in emergency departments to a high median salary of \$79,000 in outpatient departments.

**Figure 46. Median Annual Gross Salary of Full-Time Hospital RNs (Excluding Overtime), by Current RN Practice Area**



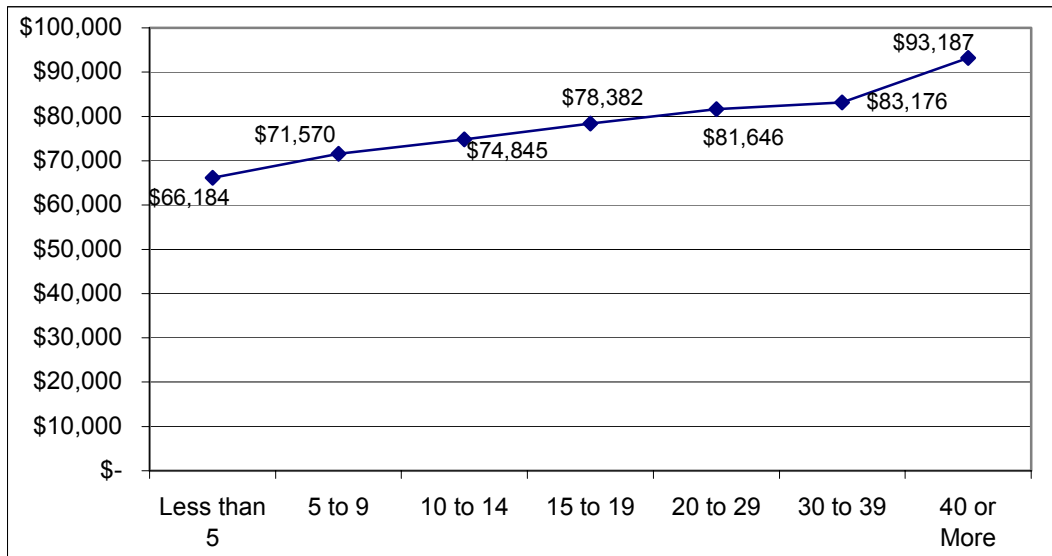
Job title, on the other hand, was strongly associated with median salary. Executive staff earned the most on average, followed by nurse practitioners and clinical nurse specialists. Staff nurses earned the least on average, as shown in Figure 47.

**Figure 47. Median Annual Gross Salary of Full-Time Hospital RNs (Excluding Overtime), by Current RN Position**



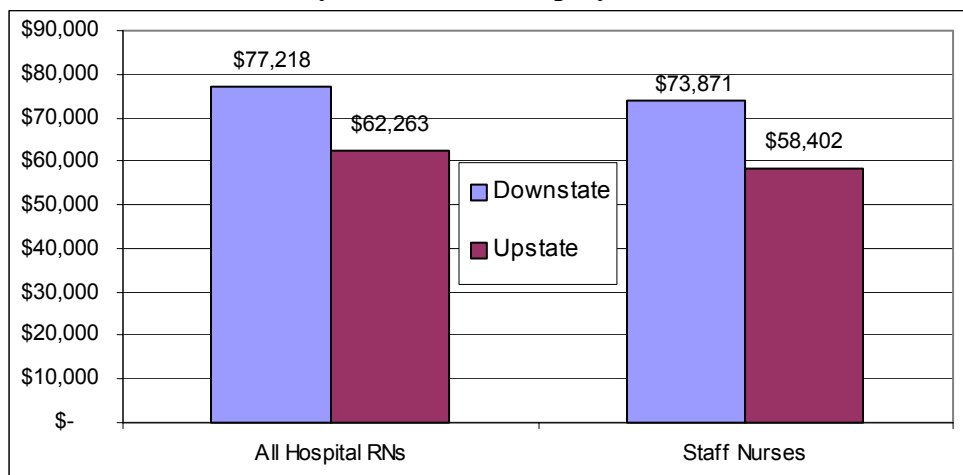
Median salaries rose steadily with years worked as an RN. Although new RNs earned a median salary of only \$66,000 per year, the most experienced RNs earned a median salary of \$93,000.

**Figure 48. Median Annual Gross Salary of Full-Time Hospital RNs (Excluding Overtime), by Years Worked as an RN**



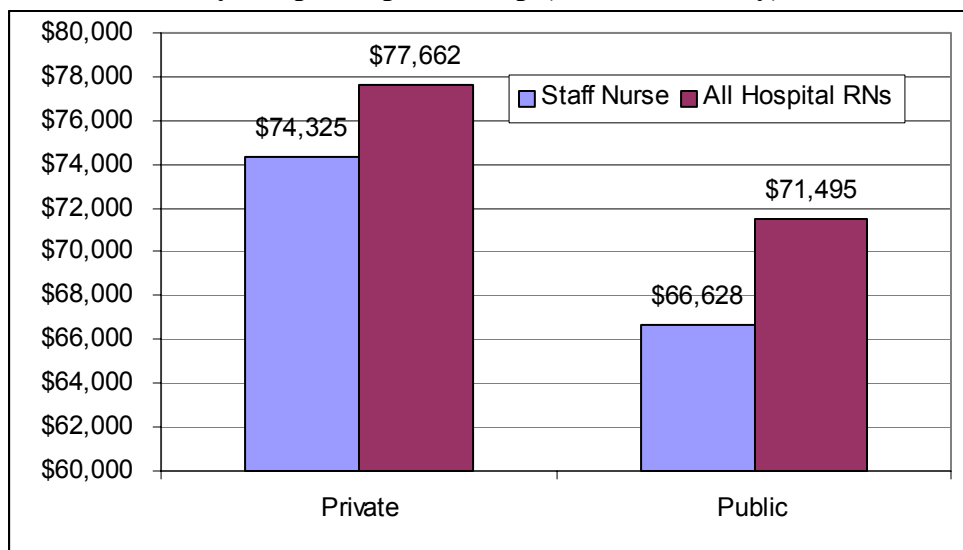
Again, hospital characteristics explained some salary differentials. RNs in downstate hospitals earned more on average than those in upstate hospitals – a median of \$77,218 downstate compared to \$62,263 upstate for RNs in all positions. The difference was comparable for staff nurses – a median of \$73,871 downstate versus \$58,402 upstate.

**Figure 49. Median Annual Gross Salary of Full-Time Hospital RNs (Excluding Overtime), by Location of Employment**



There were also differences between RN salaries in public and private hospitals. All public hospitals in the study were located downstate, so the comparison by sponsorship was made only for downstate hospitals. The average RN in a private hospital downstate earned a median salary of \$77,662, compared to \$71,495 for an RN in a public hospital. The average staff nurse in a private hospital earned a median salary of \$74,325, compared to \$66,628 in a public hospital.

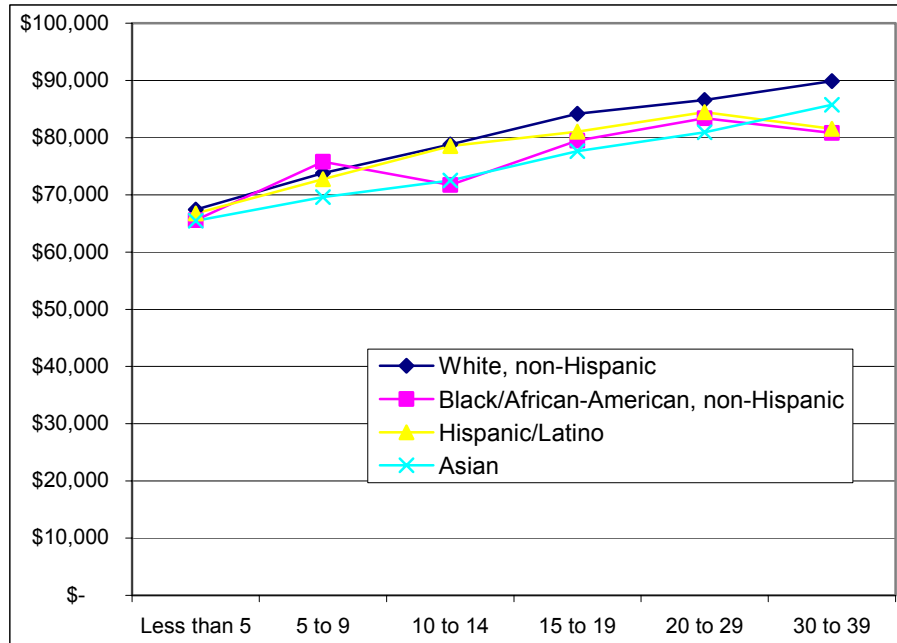
**Figure 50. Median Annual Gross Salary of Full-Time Hospital RNs (Excluding Overtime), by Hospital Sponsorship (Downstate Only)**





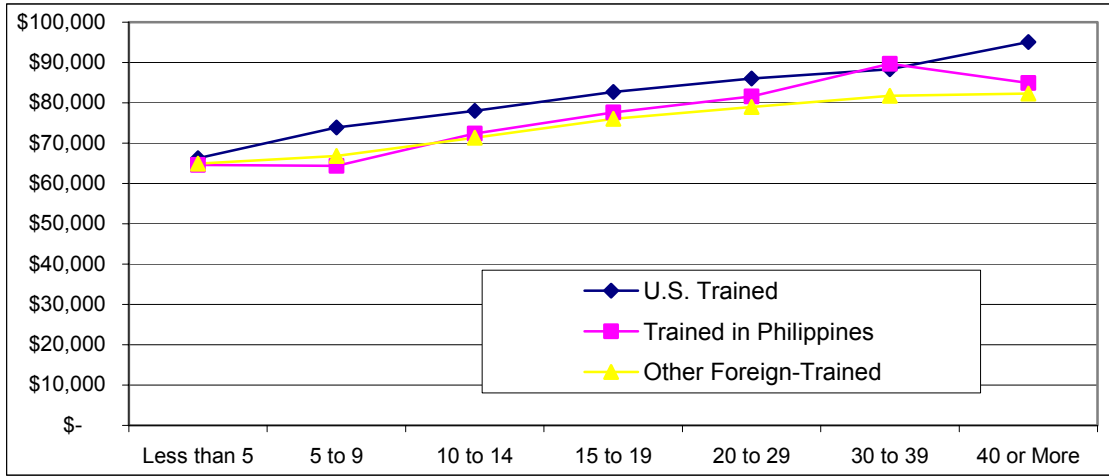
Some salary differences were also associated with the demographic characteristics of RNs, particularly race/ethnicity and training location. The racial/ethnic differences were not accounted for by years worked as an RN. As shown below in Figure 51, non-Hispanic White RNs in downstate hospitals earned more than their minority counterparts at almost every level of experience.

**Figure 50. Median Annual Gross Salary of Full-Time Hospital RNs (Excluding Overtime), by Race/Ethnicity (Downstate Only)**



Similar findings existed for foreign-trained versus U.S.-trained RNs. As shown in Figure 51, median earnings for U.S.-trained RNs outstripped those for foreign-trained RNs at almost every level of experience.

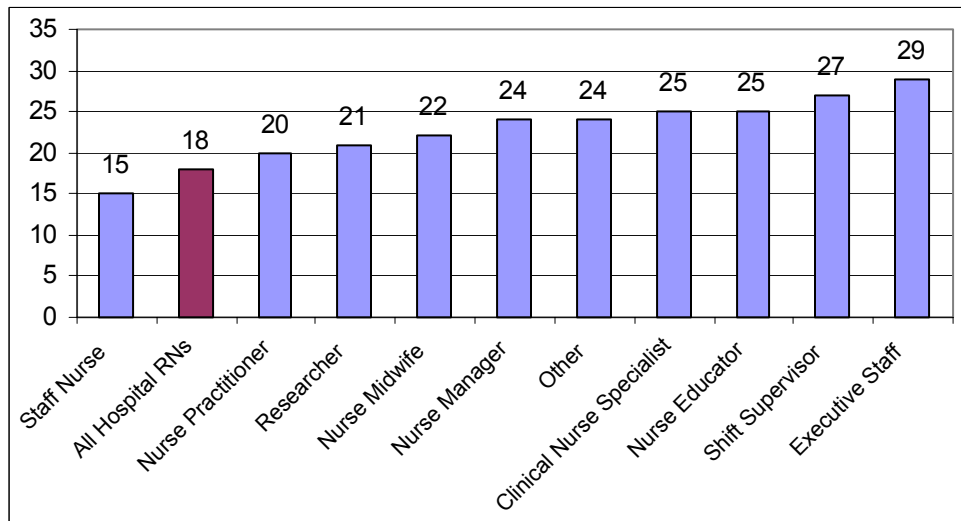
**Figure 51. Median Annual Gross Salary of Full-Time Hospital RNs (Excluding Overtime), by Location of Initial Nursing Education (Downstate Only)**



### Years Experience

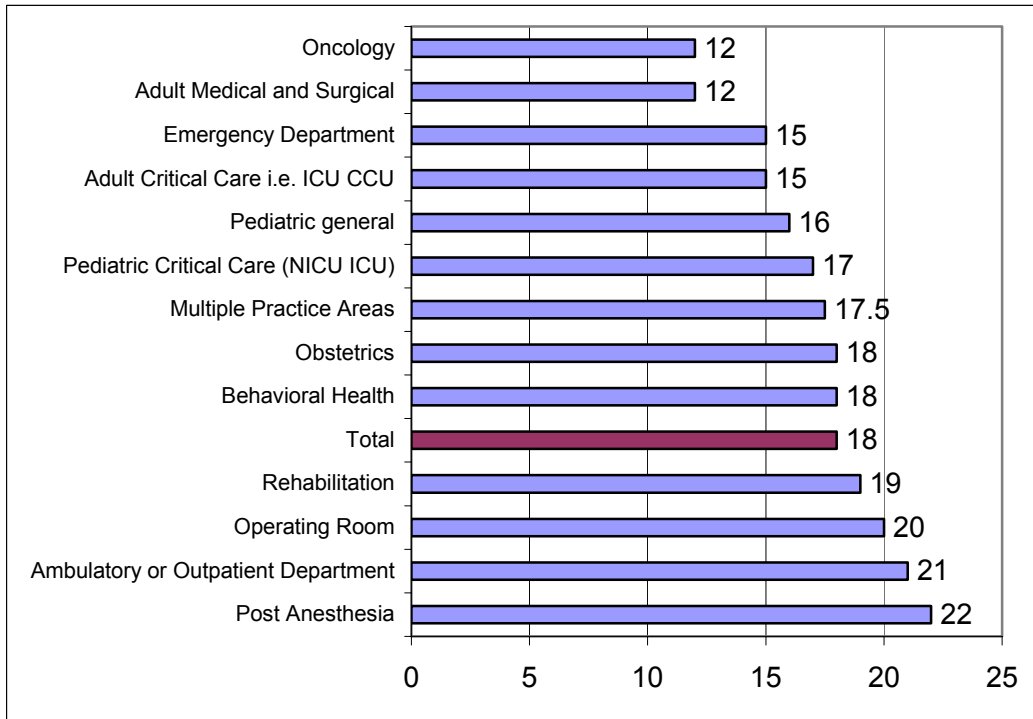
As RNs accumulated more experience, they were likely to move out of staff nurse positions. Staff RNs had a median of only 15 years experience, compared to 24 for nurse managers, 27 for shift supervisors, and 29 for executive staff.

**Figure 52. Median Years Worked as a RN, by Current RN Position**



Years worked as a RN also varied by current RN practice area. RNs working in oncology, adult medical-surgical units, and emergency departments had the least years of experience on average, while those working in ambulatory and post-anesthesia units had the most.

**Figure 53. Median Years Worked as a RN, by Current RN Practice Area**



RNs working in upstate hospitals had more years of experience on average (a median of 21 years) than RNs working in downstate hospitals (a median of 17 years). RNs trained in the Philippines had the most years of experience on average (23), followed by those trained in other foreign countries (20), while U.S.-trained RNs averaged 17 years of experience.

Non-Hispanic White and Asian RNs had more experience on average (20 and 19 years, respectively) than Black/African-American and Hispanic/Latino RNs (15 and 10 years, respectively). Female RNs averaged 19 years in nursing, compared to 11.5 for male RNs. These figures may reflect increasing racial/ethnic and gender diversity in nursing entrants and greater attrition among Black/African-American, Hispanic/Latino, and male RNs.

### Special Section: New Nurses

Nearly 15% of the RNs responding to the survey entered nursing in the past five years. These new RNs were asked a special module of questions related to their training and practice experiences. It should be noted that new RNs were more likely than experienced RNs to be Black/African-American (14.0% versus 10.8%), Hispanic/Latino (12.9% versus 6.1%), male (10.6% versus 7.4%), and U.S.-trained (94.2% versus 78.8%). They were also more likely to be working in downstate hospitals (88.6% versus 79.4%), more likely to be working in unionized hospitals (60.8% versus 54.4%), and hospitals with 750 or more beds (40.8% versus 28.1%).

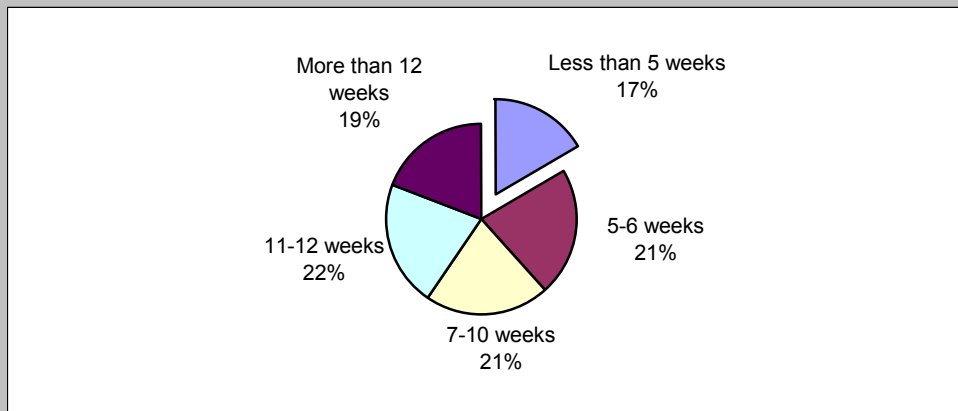
RNs who graduated in the last five years were likely to report that their orientation program always or usually included working with preceptors (83.6%) and that they were always or usually treated as a colleague by their peers (83.7%). These new RNs weren't as likely to agree that their nursing education always or usually adequately prepared them for their job (73.0%), and fewer than half agreed that working with foreign-trained RNs always or usually strengthened their understanding of the needs of culturally diverse patients (47.8%).

**Table 1. Responses of New RNs to Questions About Training and Practice Experiences**

	Always	Usually	Sometimes	Rarely	Never
Orientation Program Included Working with Preceptors	47.6%	36.0%	11.9%	3.9%	0.6%
Treated as a Colleague by my Peers	43.3%	40.4%	13.7%	2.0%	0.6%
Level of Supervision During Orientation was Appropriate	41.2%	39.3%	14.0%	4.4%	1.1%
Supported at Work by my Supervisor	38.5%	37.1%	16.1%	5.5%	2.8%
Orientation Program Included Working with Mentors	37.9%	33.6%	16.6%	8.1%	3.8%
Hospital Provided Adequate Orientation	35.5%	45.2%	14.7%	4.2%	0.4%
Nursing Education Adequately Prepared for Job as RN	26.8%	46.2%	23.5%	2.8%	0.7%
Working with Foreign-trained RNs strengthened my Understanding of Needs of Culturally Diverse Patients	20.6%	27.2%	27.1%	19.5%	5.6%

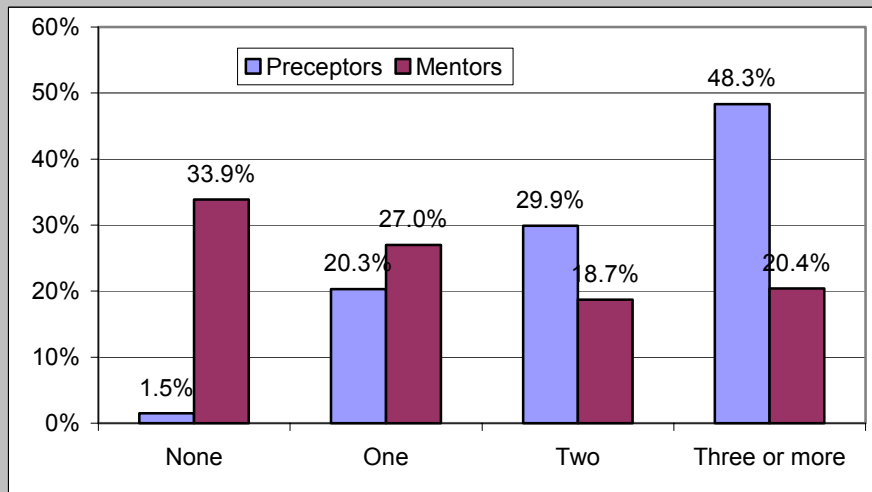
There was tremendous variation in terms of the length of classroom and clinical orientation reported by new RNs. Even though nearly one in five reported orientations of longer than 12 weeks, almost as many reported orientations of less than five weeks, as shown in Figure 54.

**Figure 54. Length of Classroom and Clinical Orientation (in weeks)**



New RNs most commonly reported that they worked with three or more preceptors during their orientation (48.3%), but also, that they worked with no mentors (33.9%) or just one mentor (27.0%).

**Figure 55. Number of Preceptors and Mentors Worked With During Orientation**

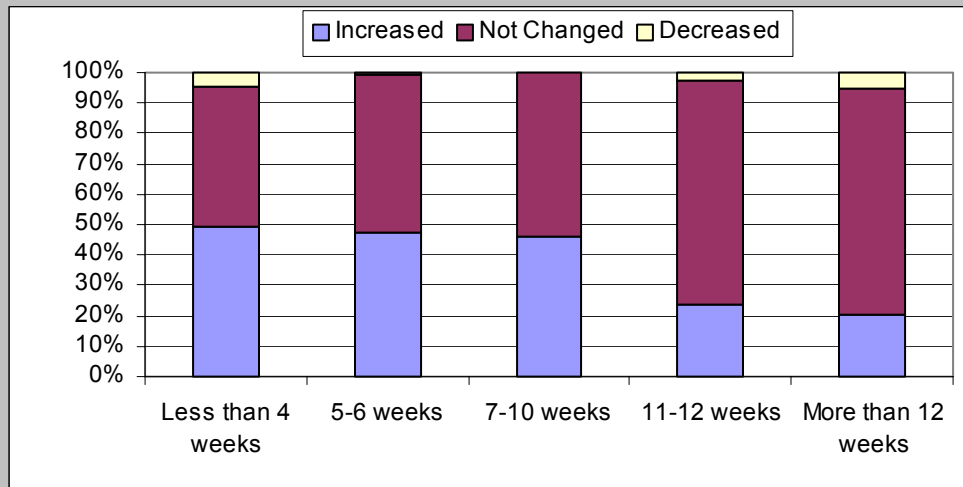


Length of orientation was associated with nurses' assessment of whether the hospital provided adequate orientation<sup>4</sup> and their report of whether the orientation program included working with preceptors<sup>5</sup>. The critical threshold for believing that orientation should be increased appeared to be 11-12 weeks, with nearly 50% of new RNs with orientations of less than 11-12 weeks reporting that they thought orientation should be increased. It was worth noting, however, that nearly one in four new RNs with an 11-12 week orientation (23.5%) reported that the orientation program should be longer, as did more than one in five (20.7%) of those whose orientation program was more than 12 weeks.

<sup>4</sup> Pearson's  $r = .082$ ;  $p < .030$ .

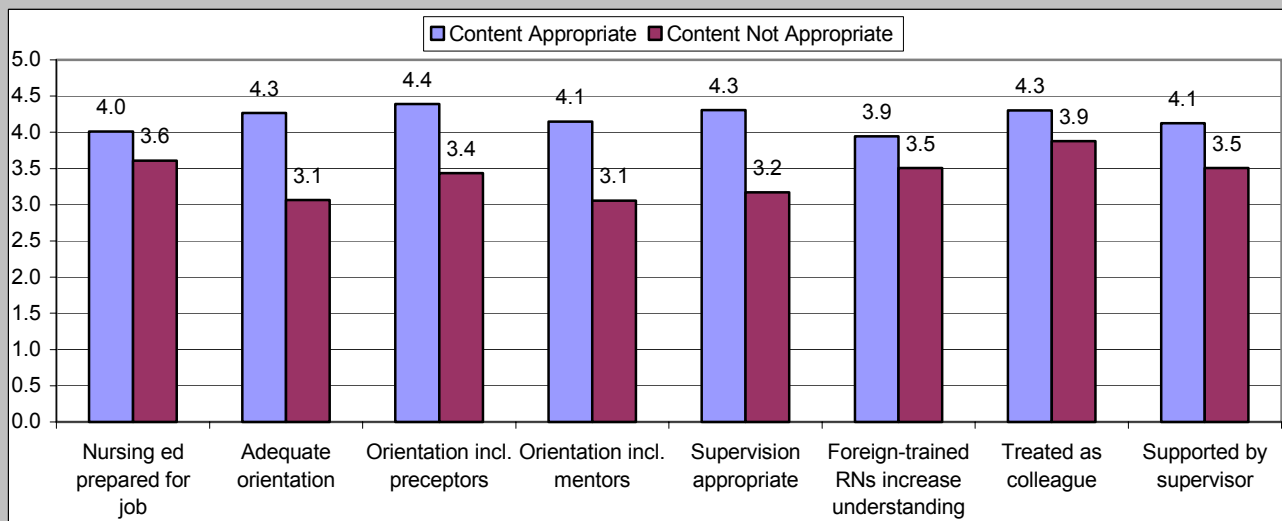
<sup>5</sup> Pearson's  $r = 0.90$ ;  $p < .018$

**Figure 56. Assessment of Whether Length of Orientation Program Should Be Changed, by Length of Orientation**



The vast majority of new RNs reported that the content of the hospital’s orientation was appropriate (87.4%), although 12.6% reported that the content was not appropriate. Opinions about content being appropriate were significantly related to agreement with all statements about the hospital’s orientation program.

**Figure 57. Mean Reported Agreement with Statements About Orientation and Practice Experiences, by Evaluation of Orientation Content**



Hospital characteristics were also related to evaluations of orientation and practice experiences among new RNs. New RNs upstate were more likely to say that the level of supervision in their orientation was usually or always appropriate than their counterparts downstate (86.1% versus 79.2%), but less likely to say that working with foreign-trained RNs usually or always increased their understanding of the needs of culturally diverse populations (25.6% versus 35.2%).

New RNs in public and private hospitals differed substantially in their assessments of whether the level of supervision in their orientation was usually or always appropriate. Eighty-one percent of new RNs in private hospitals agreed with this statement, compared to only 59.6% of new RNs in public hospitals.

Interestingly, new associate-level RNs were more likely than their baccalaureate-level counterparts to indicate that their nursing education program adequately prepared them for the job of being an RN (80% versus 65.8%).

As shown in Table 2, the perspectives of experienced RNs differed substantially from the perspectives of new RNs. Experienced RNs were much more negative about the preparation received by new RNs, and less positive about working with foreign-trained RNs. Furthermore, more than one in five experienced RNs (22.2%) reported that the time spent with new RNs usually or always detracted from their ability to give quality patient care, and only 15.7% reported that they usually or always felt they had been adequately prepared to serve as preceptors.

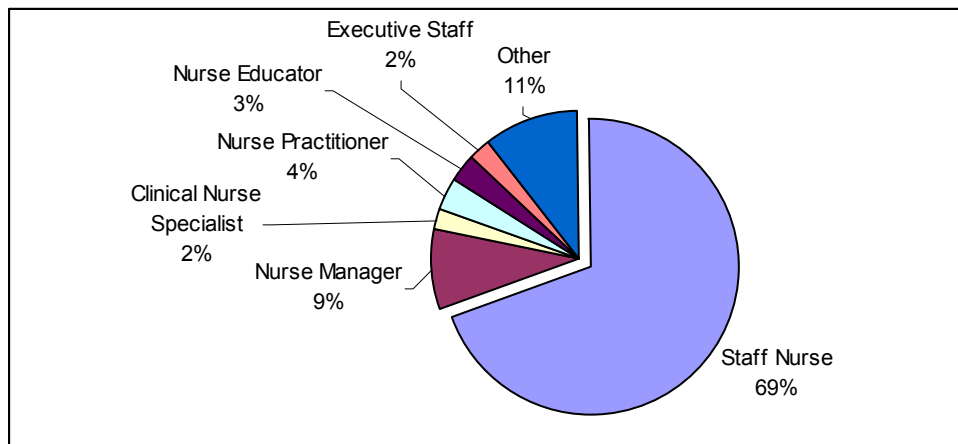
**Table 2. Percent of New RNs and Experienced RNs Agreeing That the Following Statements Are Usually or Always True**

	New RNs	Experienced RNs
Nursing Education Adequately Prepared New RNs to Work in Hospital	73.0%	45.8%
Hospital Provided Adequate Orientation to New RNs	80.7%	70.5%
Hospital Effectively Uses Preceptors During Orientation	83.6%	76.8%
Hospital Effectively Uses Mentors During Orientation	71.5%	48.7%
Working with Foreign-trained RNs strengthened by Understanding of Needs of Culturally Diverse Patients	47.8%	36.2%

### Job Titles and Mobility

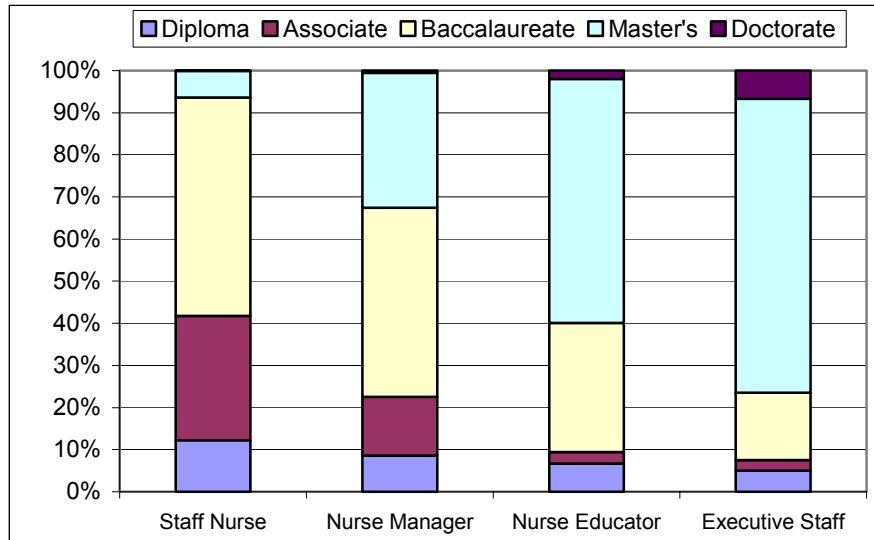
As shown below in Figure 58, the majority of survey respondents were staff nurses (69%). Approximately one in ten (9%) were nurse managers.

**Figure 58. Current Primary Nursing Position**



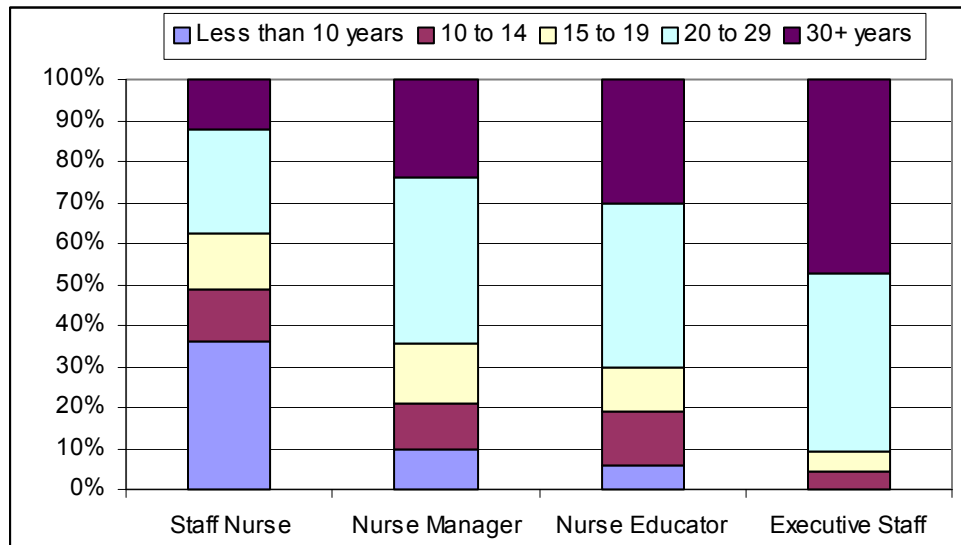
Nursing title depended a great deal on education level, with the majority of nurse educators and executive staff holding advanced nursing degrees and the majority of nurse managers holding at least a bachelor's degree in nursing.

**Figure 59. Current Primary Nursing Position by Highest Nursing Degree**



Similarly, there was a clear relationship between nursing title and years experience as an RN.

**Figure 60. Current Primary Nursing Position by Years Worked as an RN**

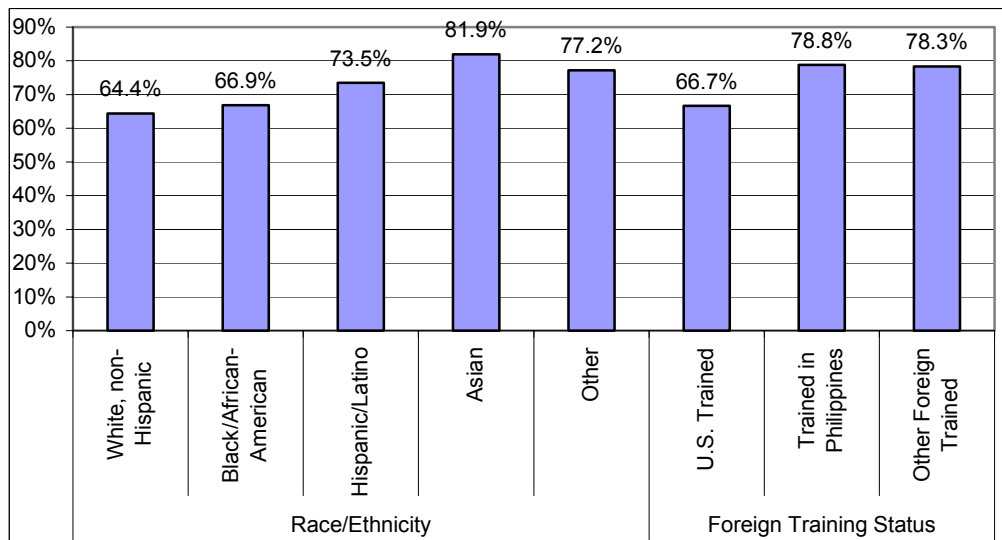


There was a tendency for minority and foreign-trained RNs to be less likely than non-Hispanic White and U.S.-trained RNs to move beyond staff nurse positions. As shown in Figure 61, Asian



RNs were most likely to still be staff nurses, followed by Hispanic/Latino RNs. Foreign-trained RNs from both the Philippines and other foreign countries were more likely to be staff nurses than RNs trained in the U.S.

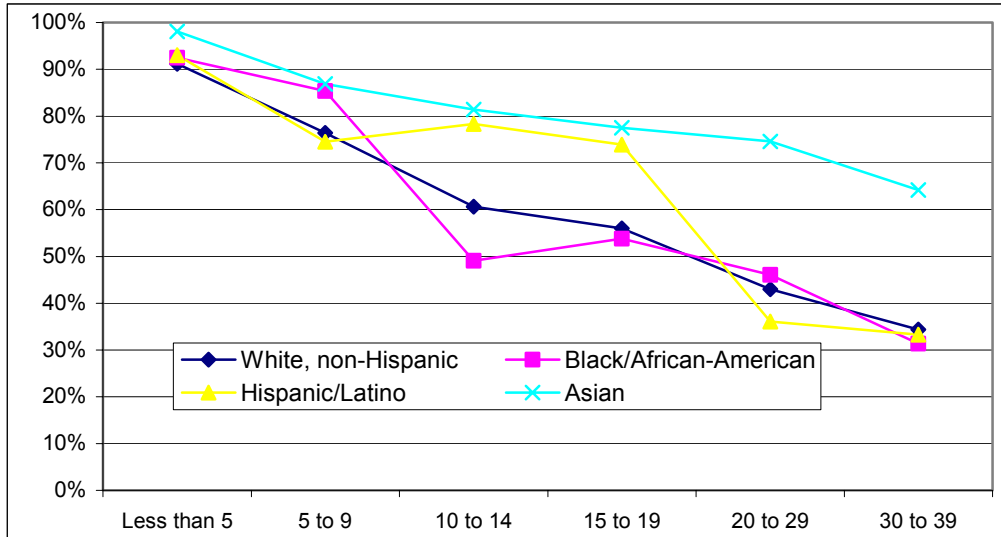
**Figure 61. Percent of Hospital RNs Who Were Staff Nurses, by Race/Ethnicity and Location of Initial Nursing Education**



Once educational attainment and years experience were accounted for, however, the only group that experienced substantially less upward mobility in nursing was Asians (see Figure 62). Although Hispanic/Latino RNs lagged behind White and Black/African-American RNs in mid-career in their level of mobility, by 20 years in the profession the three groups showed relatively similar levels of mobility. Asian RNs, however, were still more likely than not to remain in staff nurse positions (64% even after 30 years in the profession). This may relate to a lesser likelihood among Asian RNs of earning a master's degree (10.8% compared to 21.5% among non-Hispanic Whites and 20.9% among Blacks/African-Americans). Even among RNs with a master's degree, however, Asian RNs were somewhat more likely than non-Hispanic Whites to be in staff nurse positions, despite comparable average years of experience (26.3% versus 20.3%). Blacks/African-Americans with master's degrees were also more likely than their White counterparts to be in staff nurse positions (29.4%), but they were much more likely to be recent entrants into nursing, which could explain the difference<sup>6</sup>.

<sup>6</sup> There were too few minority RNs with master's degrees to break out master's-prepared RNs by years of experience in order to explicitly investigate this hypothesis.

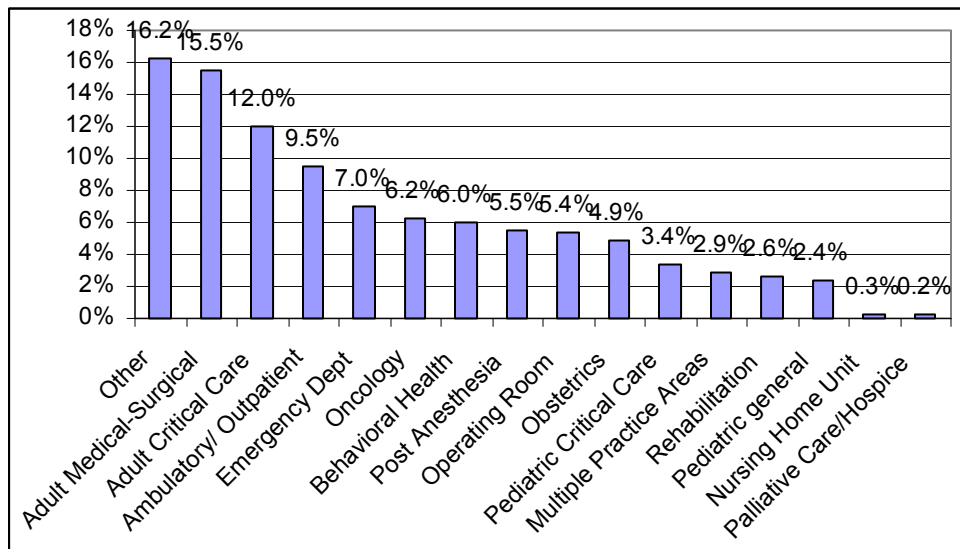
**Figure 62. Percent of Hospital RNs Who Were Staff Nurses, by Race/Ethnicity and Years Worked as a RN**



**Nursing Practice Area**

The most common areas of practice reported by RNs in the study were adult medical and surgical and adult critical care, followed by ambulatory/outpatient. Generally RNs moved into their current area of practice from another position in the same area of practice or from a position in an adult medical/surgical unit.

**Figure 63. Practice Area of Current Primary Nursing Position**

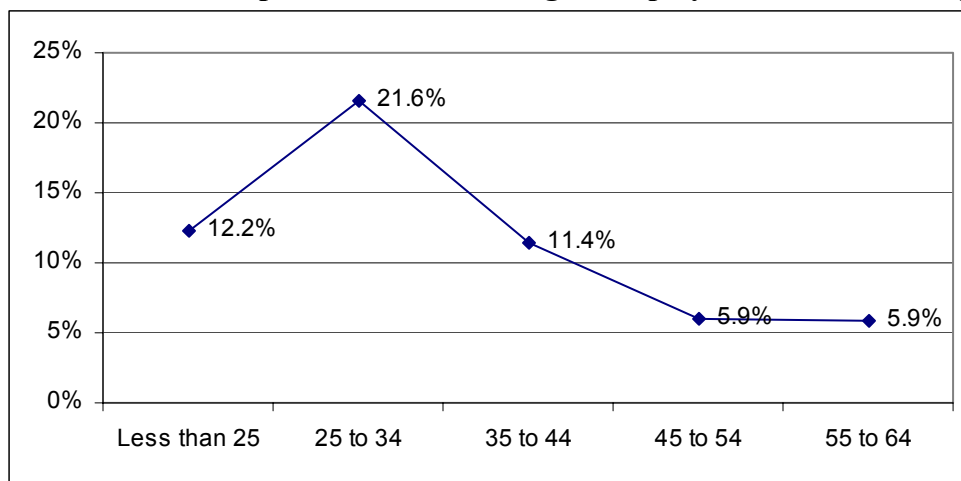


## Changes in Employment

Nearly half of the RNs in the study (46.7%) indicated more time with their current employer than in their current position, implying that they had changed positions within the facility since being hired. Almost two-thirds had changed employers since becoming an RN (65.3%).

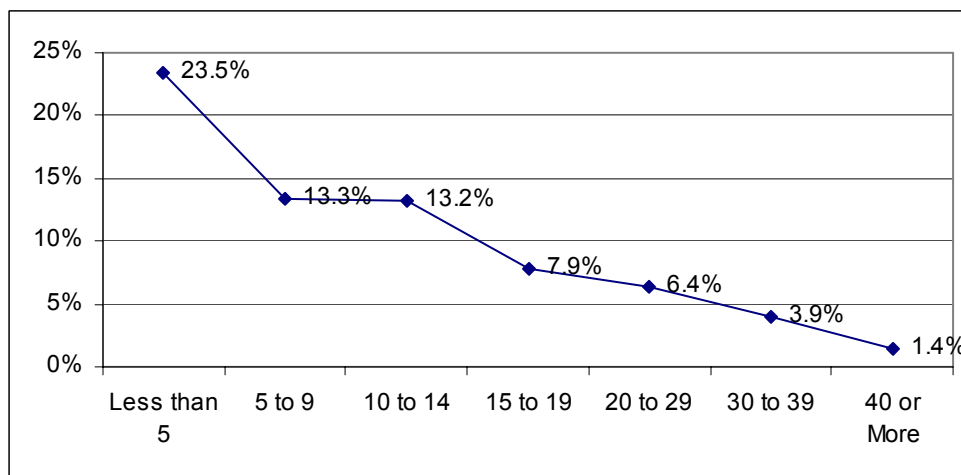
Of those who had changed employers, 15.6% did so within the last year (10.2% of all hospital RNs). These recent job-changers did not differ from other RNs in terms of their highest nursing degree, race/ethnicity, gender, or location of initial training. They were, however, more likely to be between the ages 25-34. In fact, nearly 22% of RNs in this age group had changed employers within the past year, compared to only about 6% of those between the ages 45-64.

**Figure 64. Percent Hospital RNs Who Changed Employers in Past Year, by Age**



The likelihood an RN had changed jobs in the past year declined substantially the longer she or he had been working as an RN.

**Figure 65. Percent Hospital RNs Who Changed Employers in Past Year, by Years Worked as a RN**



## Job Satisfaction

RNs were asked to indicate their level of agreement with 15 statements about different aspects of their work. These statements can be classified into four different topical areas: supportive work environment, compensation package, physical risk, and time pressures. There were also two statements that did not “load” statistically with any other statements: I am satisfied with my work schedule, and I am mandated to work overtime hours.

### Supportive Work Environment

Statements related to having a supportive work environment included: I am treated as a valued employee by my employer, My employer provides opportunities for continuing education, My employer provides opportunities for advancement; The quality of my work life is better than it was a year ago; and I go home feeling satisfied that I provided quality patient care. The average supportive work environment score was 3.52 on a scale of 1 to 5.

**Table 3. Frequencies for Components of Supportive Work Environment**

	Never	Rarely	Sometimes	Usually	Always
I am treated as a valued employee by my employer	5.3%	13.5%	29.4%	33.9%	17.9%
My employer provides opportunities for continuing education	2.4%	9.3%	23.4%	37.1%	27.8%
My employer provides opportunities for advancement	4.3%	15.4%	29.5%	31.7%	19.0%
The quality of my work life is better than it was a year ago	10.1%	17.2%	33.6%	28.0%	11.2%
I go home feeling satisfied that I provided quality patient care	1.7%	6.4%	27.3%	46.8%	17.8%

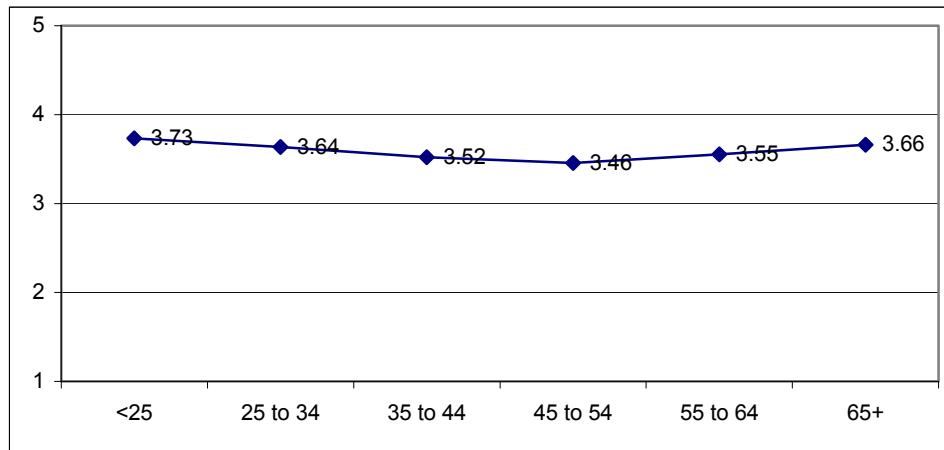
### Demographic Characteristics

Asian and Hispanic/Latino RNs felt significantly more supported than non-Hispanic White and Black/African-American RNs (3.72 and 3.66 versus 3.50 and 3.46, respectively)<sup>7</sup>. The relationship between RN age and feelings of being supported was a curvilinear one, with RNs age 45-54 feeling the least supported<sup>8</sup>. A similar relationship was found for years worked as an RN, with RNs with less than five years experience reporting significantly more support than any other group.

<sup>7</sup> Asian vs. White  $p \leq .000$ ; Asian vs. Black  $p \leq .000$ ; Hispanic vs. White  $p \leq .000$ ; Hispanic vs. Black  $p = .046$ .

<sup>8</sup> RNs between the ages 45-54 were only significantly different from the youngest nurses ( $<25$   $p = .007$ ; 25-34  $p \leq .000$ ), although there was also a significant difference between those in the 25-34 and 35-44 age groups ( $p = .017$ ).

**Figure 66. Feelings of Being Supported, by RN Age**



RNs trained in the Philippines reported the highest support (3.82) while those trained in other foreign countries or the U.S. reported feeling less supported (3.58 and 3.48, respectively)<sup>9</sup>. Educational attainment was not related to perceptions of support, but those who were currently attending school for an advanced degree in nursing felt significantly more supported than others (3.60 versus 3.51;  $p=.013$ ).

### **Hospital Characteristics**

Nurses in unionized hospitals felt significantly more supported than those in non-unionized hospitals, while those in downstate hospitals felt significantly more supported than those in upstate hospitals (3.54 versus 3.49;  $p=.030$ ). Those working in private hospitals felt more supported than those working in public hospitals (3.57 versus 3.48;  $p=.036$ ), and those working in hospitals located in primary care HPSAs felt less supported than those not working in shortage areas (3.55 versus 3.44;  $p\leq.000$ ).

### **Employment Characteristics**

Staff nurses felt significantly less supported than nurse managers or advanced practice nurses (3.47 versus 3.69 and 3.63), and full-time RNs felt significantly more supported than part-time RNs (3.53 versus 3.41), and those who had changed employers in the past year felt significantly more supported than those who had not (3.74 versus 3.49;  $p\leq.000$ ).

### **Compensation Package**

Statements related to satisfaction with one's compensation package included: I am satisfied with my pay; I have adequate retirement benefits; I have adequate health care benefits; and I have adequate paid time off. The average satisfaction with compensation score was 3.46 on a scale of 1 to 5.

<sup>9</sup> Philippines vs. U.S.  $p\leq.000$ ; other foreign trained vs. U.S.  $p=.028$ ; other foreign trained vs. Philippines  $p\leq.000$ .

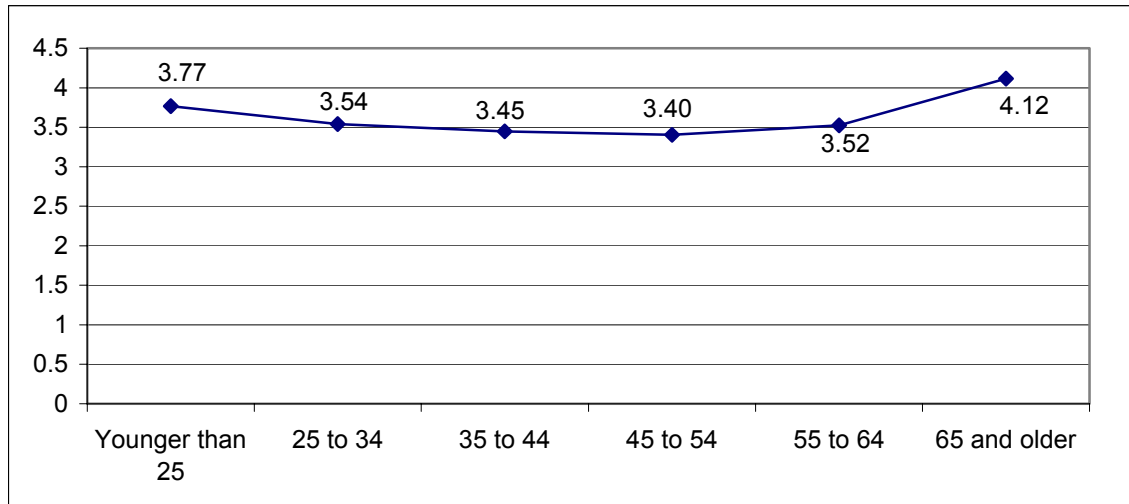
**Table 4. Frequencies for Components of Satisfaction with Compensation**

	Never	Rarely	Sometimes	Usually	Always
Pay	6.8%	12.9%	24.9%	42.8%	12.6%
Retirement Benefits	15.6%	19.7%	23.9%	30.9%	9.9%
Health Care Benefits	4.6%	8.9%	23.4%	43.9%	19.3%
Paid Time Off	3.8%	6.8%	19.2%	47.7%	22.4%

**Demographic Characteristics**

A curvilinear relationship between evaluations of an RN’s compensation package and age was found and was similar to that seen for evaluations of supportive work environment. Those RNs between the ages 45-54 were the least satisfied with their compensation package.

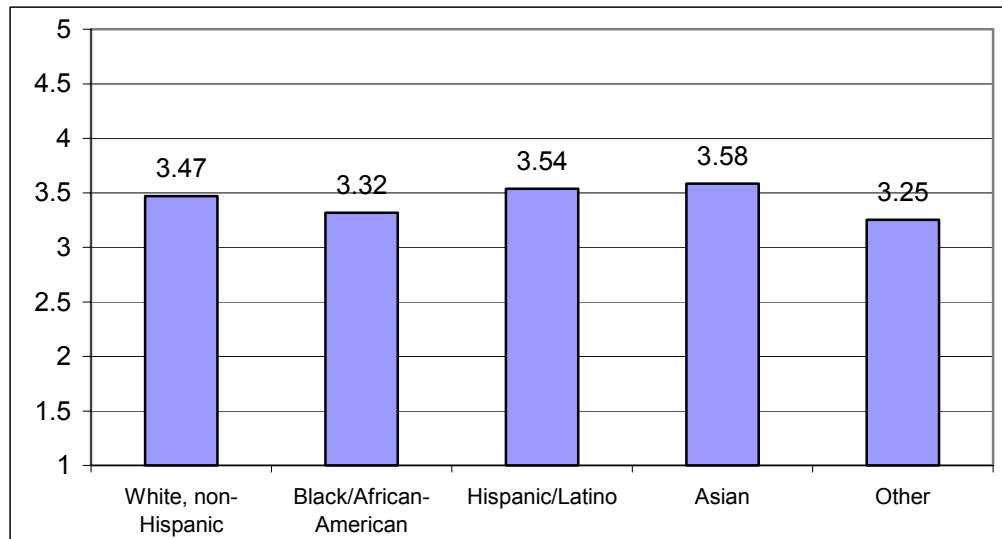
**Figure 67. Evaluations of Compensation Package, by RN Age**



Note: Younger than 35 vs. 35-44, p=.002; 25-34 vs. 65 and older, p<=.000; 45-54 vs. younger than 25, p<=.000; 45-54 vs. 35-34, p=.002; 45-54 vs. 55-64, p=.016; 45-54 vs. 65 and older, p<=.000; 55-64 vs. 65 and older, p<=.000.

There were also a number of differences by race/ethnicity. Once again, Asians and Hispanics/Latinos were the most satisfied with their compensation packages, while Whites and Blacks/African-Americans were the least satisfied. This time, however, the difference between White and Black/African-American RNs was also statistically significant, with Black/African-American RNs being the least positive about their compensation.

**Figure 68. Evaluations of Compensation Package, by Race/Ethnicity**



Note: White vs. Black,  $p=.002$ ; White vs. Asian,  $p=.008$ ; White vs. Other,  $p=.002$ ; Black vs. Hispanic,  $p=.002$ ; Black vs. Asian,  $p<=.000$ ; Hispanic vs. Other,  $p=.001$ ; Asian vs. Other,  $p<=.000$ .

Once again, RNs trained in the Philippines were significantly more satisfied with their compensation package (3.64) than other foreign-trained RNs (3.47) or U.S.-trained RNs (3.44)<sup>10</sup>.

### **Hospital Characteristics**

RNs in unionized hospitals were more positive about their compensation packages than those in non-unionized hospitals (3.49 versus 3.43,  $p=.016$ ), and those in downstate hospitals were significantly more positive than those in upstate hospitals (3.50 versus 3.28,  $p<=.000$ ). Interestingly, the differences between RNs in public and private hospitals were not statistically significant.

### **Employment Characteristics**

Full-time RNs were significantly more satisfied with their compensation package than part-time RNs (3.47 versus 3.35,  $p=.001$ ). Staff nurses were significantly less positive about their compensation than advanced practice nurses or executive staff (3.43 versus 3.64 and 3.71<sup>11</sup>), although this was hardly surprising.

### **Physical Risk**

There were two questions that related to perceptions of physical risk or danger. These were: I am concerned about the potential of being a victim of physical violence while at work, and I am concerned about the risk of injury or infection while at work. The average physical risk score was 2.46 on a scale of 1 to 5.

<sup>10</sup> Philippines vs. other foreign trained  $p=.005$ ; Philippines vs. U.S. trained  $p<=.000$

<sup>11</sup> Staff nurses vs. APNs  $p<=.000$ ; staff nurses vs. executive staff  $p=.004$ .

**Table 5. Frequencies for Components of Perception of Physical Risk**

	Never	Rarely	Sometimes	Usually	Always
Potential of Physical Violence	39.9%	28.2%	20.8%	5.7%	5.4%
Risk of Injury or Infection	14.5%	25.4%	35.4%	12.8%	12.0%

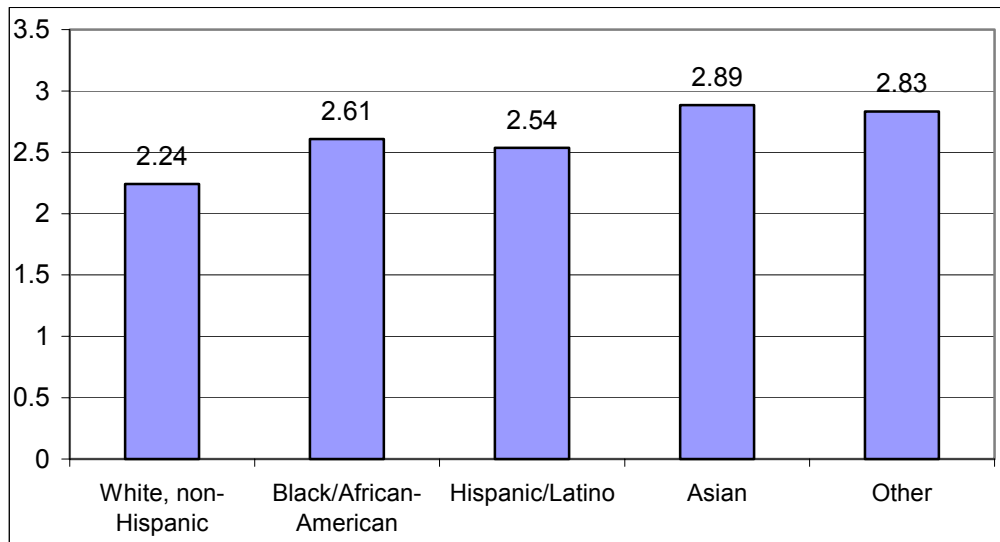
### Demographic Characteristics

Interestingly, male RNs perceived a greater risk than female RNs (2.77 versus 2.43,  $p \leq .000$ ), although this may be due to differences in employment characteristics.

Philippine-trained RNs reported a greater perception of physical risk than their counterparts trained in the U.S. or in other foreign countries (3.03 versus 2.37 and 2.62, respectively). U.S.-trained RNs perceived the lowest risk among all RNs<sup>12</sup>.

Similarly, Figure 69 shows that Asian RNs reported a greater perception of risk than other groups (2.89), while non-Hispanic White RNs reported the least perceived risk (2.24). This may be related to hospital and employment characteristics such as location and shift worked, as described below.

**Figure 69. Perceptions of Physical Risk by Race/Ethnicity**



Note: White vs. Black,  $p \leq .000$ ; White vs. Hispanic,  $p \leq .000$ ; White vs. Asian,  $p \leq .000$ ; White vs. Other,  $p \leq .000$ ; Black vs. Asian,  $p \leq .000$ ; Hispanic vs. Asian,  $p \leq .000$ ; Hispanic vs. Other,  $p = .006$ .

### Hospital Characteristics

RNs working in downstate hospitals perceived greater risk than those working in upstate hospitals (2.48 versus 2.38,  $p \leq .000$ ), and those working in public hospitals perceived greater risk than those working in private hospitals (3.04 versus 2.42,  $p \leq .000$ ). Those working in hospitals in primary care HPSAs (likely to be a proxy for poverty) also perceived greater risk than those working in other hospitals (2.60 versus 2.41,  $p \leq .000$ ).

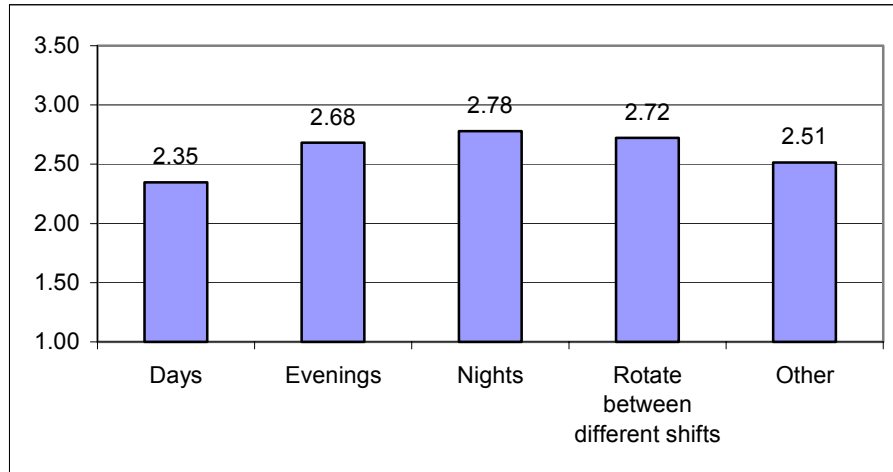
<sup>12</sup> Philippine vs. U.S.,  $p \leq .000$ ; Philippine vs. other foreign trained,  $p \leq .000$ ; U.S. vs. other foreign trained,  $p \leq .000$ .



## Employment Characteristics

RNs working primarily the day shift had the lowest perception of risk, while those primarily working nights or rotating shifts had the highest.

**Figure 70. Perceptions of Physical Risk by Shift Worked**



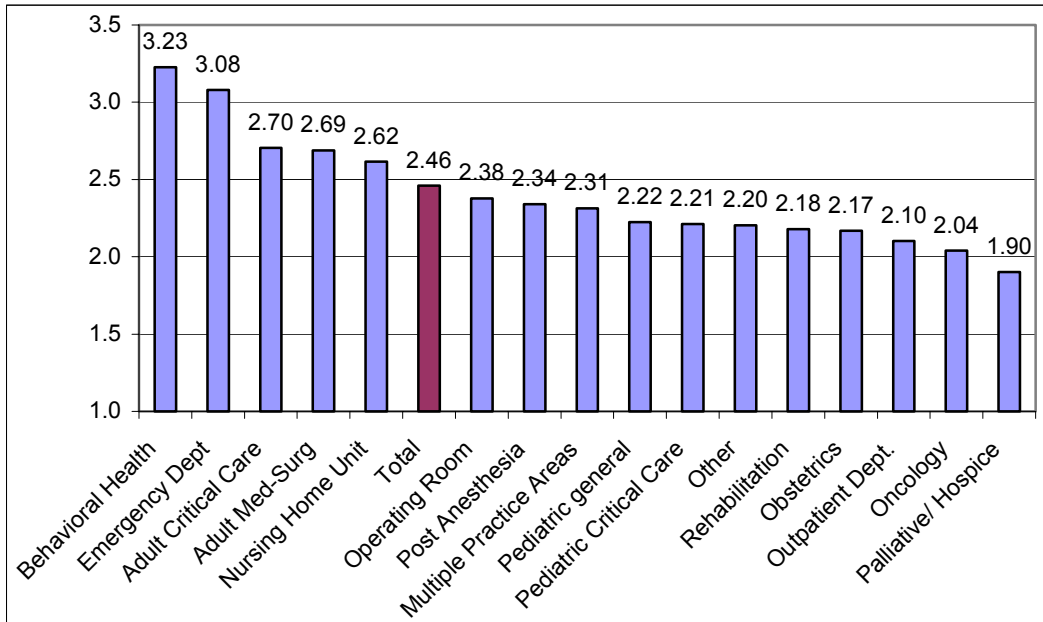
Note: Days vs. evening, days vs. nights, and days vs. rotating shifts  $p < .000$ .

Similarly, those working primarily weekdays had lower perceptions of risk than those working either primarily weekends or both weekdays and weekends (2.10 versus 2.83 and 2.71, respectively)<sup>13</sup>.

Current practice area was strongly related to perceptions of physical risk. Not surprisingly, the highest risk was perceived by RNs working in behavioral health and the emergency department. RNs working in oncology and palliative care/hospice units perceived the lowest risk.

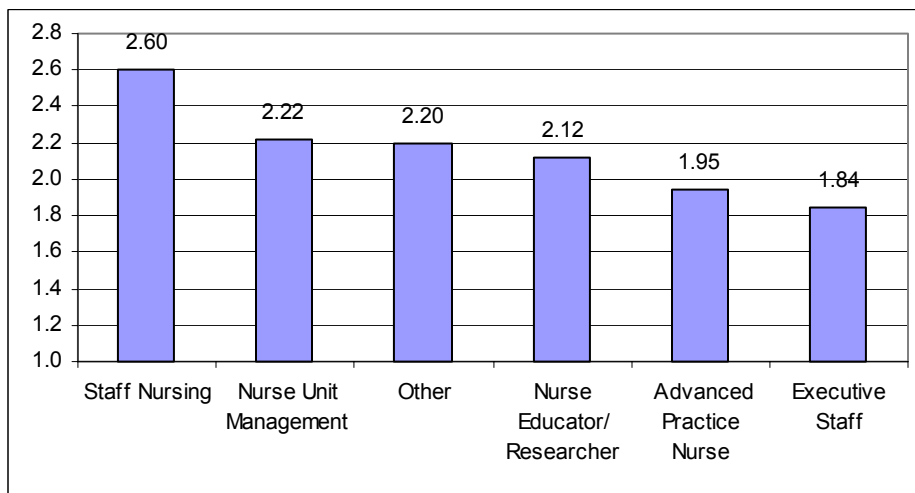
<sup>13</sup> Weekdays vs. weekends,  $p < .000$ ; weekdays vs. both,  $p < .000$ .

**Figure 71. Perceptions of Physical Risk by Current Area of Practice**



As expected, staff nurses perceived much greater risk than RNs working in other titles, with APNs and executive staff perceiving the least physical risk.

**Figure 72. Perceptions of Physical Risk by Current Title**



### Concern About Workload

There were two questions that related to concern about workload: On most days I have more work than I can manage and The amount of paperwork I am required to do interferes with the time I need to give quality patient care. The average score for concern about workload was 3.38.

**Table 6. Frequencies for Components of Concern About Workload**

	Never	Rarely	Sometimes	Usually	Always
More work than I can manage	2.3%	15.1%	43.5%	25.2%	13.9%
Paperwork interferes with patient care	5.2%	13.4%	37.3%	24.1%	20.0%

### Demographic Characteristics

Concern about workload was generally not related to the demographic characteristics of RNs. The exception was training location. RNs trained in the Philippines reported higher levels of time constraint than either U.S.-trained or other foreign-trained RNs (3.51 versus 3.36 and 3.36, respectively<sup>14</sup>).

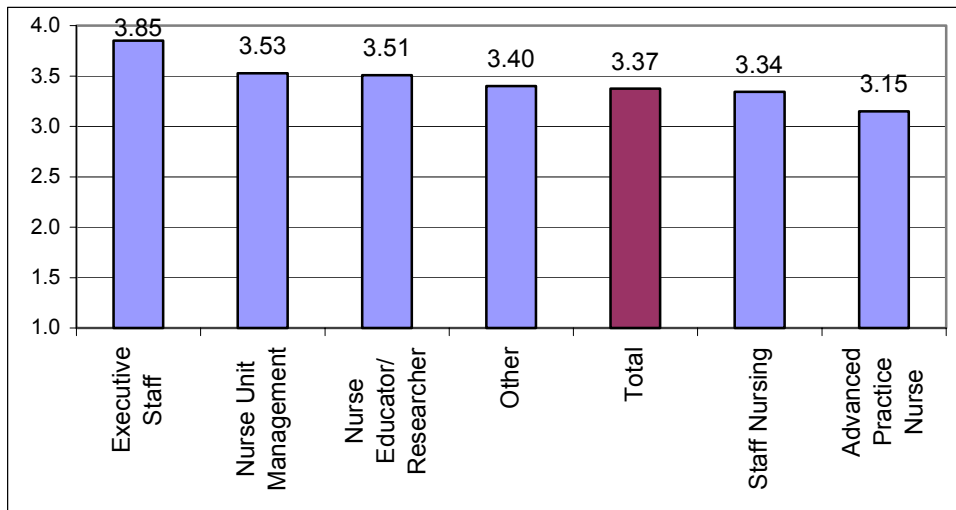
### Hospital Characteristics

RNs working in hospitals in primary care HPSAs reported significantly higher concern about workload than other RNs (3.51 versus 3.33,  $p \leq .000$ ), and those in public hospitals also reported significantly higher concern about workload than those working in private hospitals (3.55 versus 3.35,  $p \leq .000$ ).

### Employment Characteristics

Although concern about workload was unquestionably an issue for staff nurses, executive staff followed by nursing unit management reported the greatest levels of concern about workload. Advanced practice nurses reported the lowest level of concern about workload.

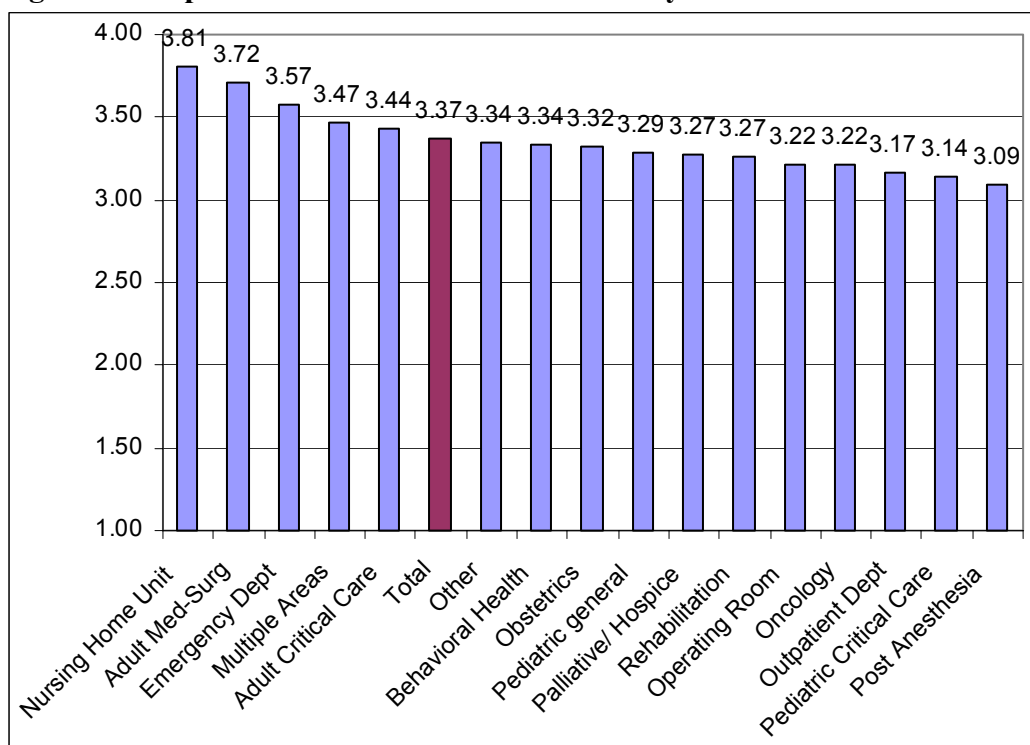
**Figure 73. Reported Concern About Workload by Current RN Title**



<sup>14</sup> Philippine vs. U.S. trained,  $p = .003$ ; Philippine vs. other foreign trained,  $p = .047$ .

RNs on certain types of units reported more concern about workload than others, particularly nursing home units, adult medical-surgical units, emergency departments, and adult critical care. RNs working in post-anesthesia, pediatric critical care units and outpatient/ambulatory departments reported the lowest levels of concern about workload.

**Figure 74. Reported Concern About Workload by Current RN Practice Area**



### Satisfaction with Work Schedule

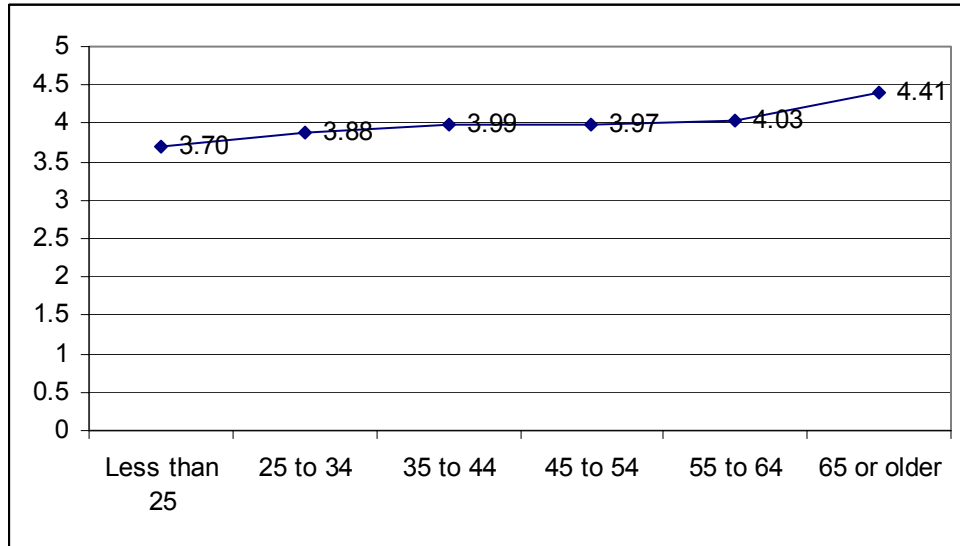
RNs were asked on the survey to indicate their agreement with the statement: I am satisfied with my work schedule.

### Demographic Characteristics

Asian RNs were significantly more satisfied with their work schedule than non-Hispanic White RNs (4.07 versus 3.97,  $p=.010$ ). Non-Hispanic Black/African-American RNs were significantly less satisfied (3.80) than either Asian or White RNs (both  $p<=.000$ ). RNs trained in the Philippines were significantly more satisfied than their counterparts trained either in the U.S. or other foreign countries (4.17 versus 3.93 and 4.01, respectively;  $p \leq .000$  and  $p=.005$ ).

Single/never married RNs were significantly less satisfied with their work schedules than either married/partnered or previously married RNs (3.84 versus 4.00 and 3.99, respectively; both  $p \leq .000$ ). Satisfaction with work schedule appeared to steadily increase with age, as shown below in Figure 75.

**Figure 75. Average Satisfaction with Work Schedule (Scale of 1 to 5), by RN Age**



**Hospital Characteristics**

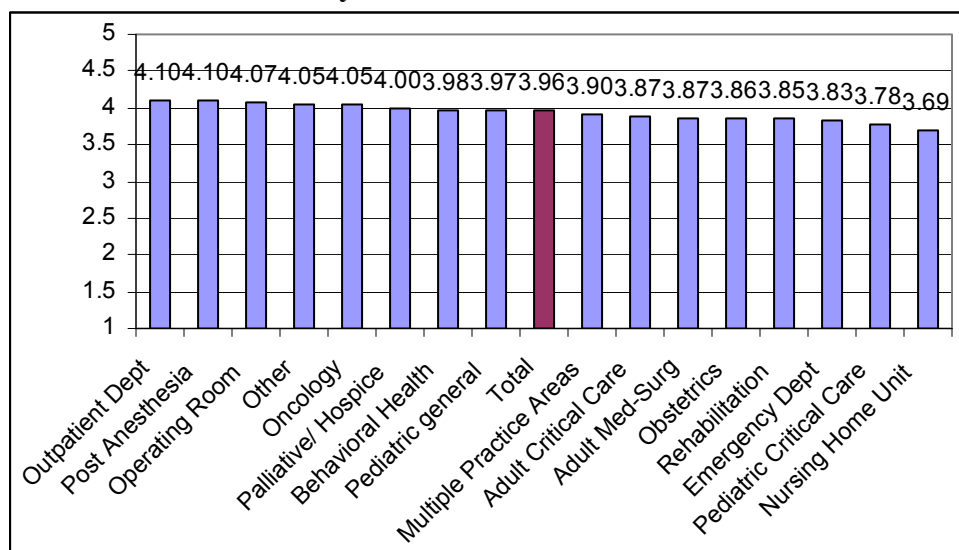
RNs working in upstate hospitals were much more satisfied with their work schedules than those working in downstate hospitals (4.01 versus 3.94,  $p=.012$ ). RNs in the largest hospitals (750 or more beds) were significantly more satisfied with their work schedules than RNs in the smallest hospitals (3.99 in hospitals with fewer than 250 beds,  $p=.028$ ; 4.02 in hospitals with 250-499 beds,  $p=.004$ ).

**Employment Characteristics**

RNs who worked primarily days were significantly more satisfied than those working primarily evenings, nights, or rotating shifts (4.01 versus 3.84,  $p=.002$ ; 3.79,  $p<=.000$ ; and 3.79,  $p=.011$ , respectively). RNs working mostly weekdays were much more satisfied than those working both weekdays and weekends (4.09 versus 3.86,  $p<=.000$ ). Part-time RNs were more satisfied than those working full-time (4.03 versus 3.94,  $p=.007$ ).

RNs working in outpatient/ambulatory departments, post-anesthesia units, and operating rooms were the most satisfied with their schedules, while those working in emergency departments, pediatric critical care units, and nursing home units were the least satisfied, as shown below in Figure 76. Staff nurses were significantly less satisfied than APNs (3.92 versus 4.11,  $p=.001$ ).

**Figure 76. Average Satisfaction with Work Schedule (Scale of 1 to 5), by Current Practice Area**



### Mandated to Work Overtime Hours

#### Demographic Characteristics

Asian RNs reported significantly more frequently mandated overtime than non-Hispanic White RNs (2.01 versus 1.86,  $p=.005$ ), although they were also more likely than other RNs to work seven to eight hour shifts. Similarly, foreign-trained RNs from both the Philippines and other countries report more mandated overtime than U.S-trained RNs (2.10 and 2.09 versus 1.86, both  $p\leq.000$ ).

#### Hospital Characteristics

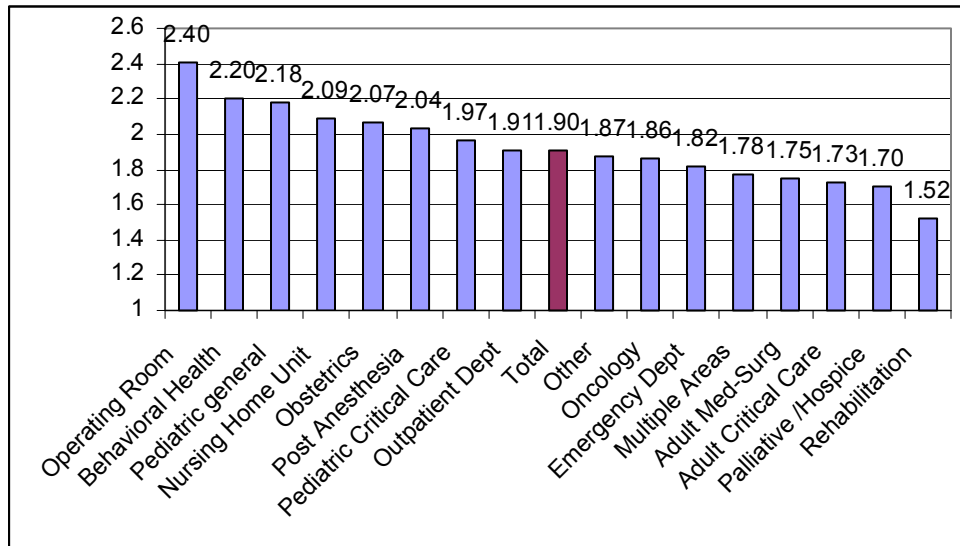
RNs working in downstate hospitals reported significantly more mandated overtime than those in upstate hospitals (1.94 versus 1.77,  $p\leq.000$ ), while those in public hospitals reported significantly more than those in private hospitals (2.27 versus 1.90,  $p\leq.000$ ).

#### Employment Characteristics

RNs who worked primarily the evening shift reported significantly more mandated overtime than those working primarily days or nights (2.17 versus 1.90 [ $p=.001$ ] and 1.82 [ $p\leq.000$ ]). Those working primarily weekdays reported more mandatory overtime than those working both weekends and weekdays (1.95 versus 1.87,  $p=.038$ ).

RNs in the following practice areas reported the most mandatory overtime: operating room, behavioral health, general pediatrics, and nursing home units. RNs on rehabilitation units, palliative care/hospice units, adult critical care units, and adult medical-surgical units reported the least, as shown in Figure 77.

**Figure 77. Average Frequency of Mandated Overtime (Scale of 1 to 5) by Current Practice Area**



### Extent of Change in Nursing Practice in Past Year

RNs responding to the survey were also asked about the extent to which 11 aspects of their job had changed in the past year on the unit(s) where they usually worked. Nine of the 11 items could be categorized into two topical areas: work environment and staffing. Changes in voluntary overtime and adequacy of staffing did not statistically “load” with any other item.

#### Changes in Work Environment

The following items were related to a respondent’s work environment: patient turnover, patient acuity, adverse patient events, number of patients per RN, and RN turnover. On a scale of –1 to 1, with 0 being no change, demands of the work environment changed by 0.38 points on average.

**Table 7. Frequencies for Components of Change in Work Environment**

	Decreased	No Change	Increased
Patient Turnover	7.3%	34.4%	58.3%
Patient Acuity	2.5%	28.6%	68.9%
Adverse Patient Events	23.5%	57.1%	19.5%
Number of Patients per RN	10.1%	46.7%	43.2%
RN Turnover	8.1%	41.2%	50.6%

## Demographic Characteristics

Once again, the only demographic characteristic that appeared significantly related to perceptions of increased demands in the work environment was location of initial RN training. RNs educated in the U.S. perceived significantly more increased work environment demands than those educated either in the Philippines or other foreign countries (0.39 versus 0.35 and 0.30)<sup>15</sup>.

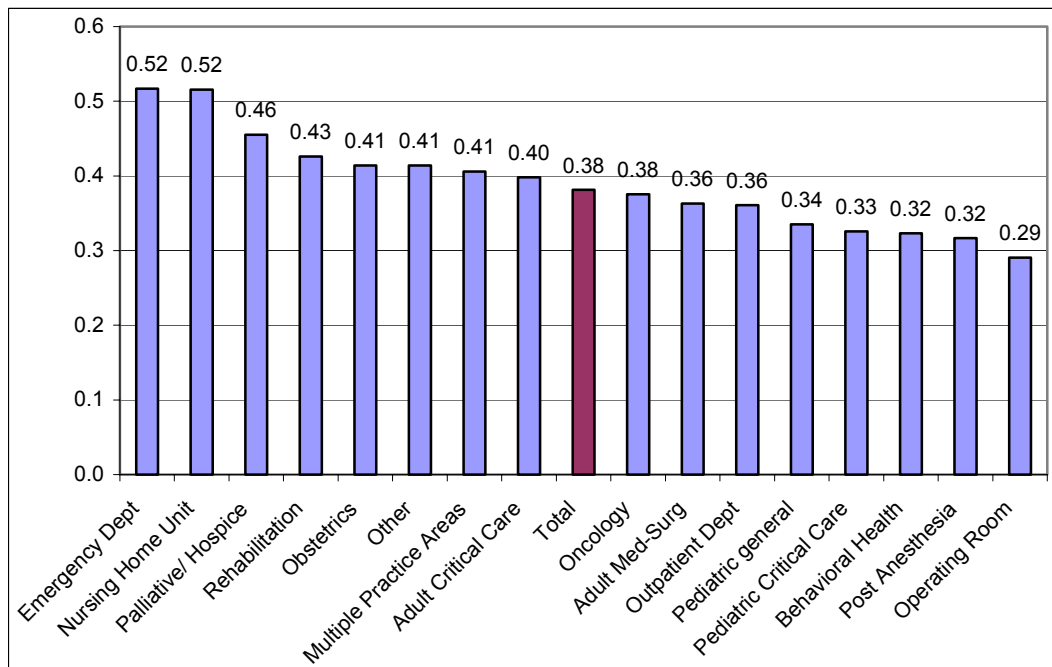
## Hospital Characteristics

RNs in private hospitals perceived a greater increase in demands in their work environment than those working in public hospitals (0.38 versus 0.31,  $p=.005$ ). RNs working in HPSAs, however, reported much greater increases in demands than those not working in HPSAs (0.43 versus 0.36,  $p\leq.000$ ). Those working in upstate hospitals reported significantly more increase in work environment demands than those working in downstate hospitals (0.41 versus 0.37,  $p=.006$ ).

## Employment Characteristics

Employment characteristics were also generally unrelated to perceptions of increased demands in the work environment. The notable exception was current RN practice area. As shown below in Figure 78, RNs working in emergency departments, nursing home units, and palliative care/hospice units reported the greatest increase in demands in the work environment, while those in behavioral health, post-anesthesia units, and operating rooms reported more moderate increases.

**Figure 78. Mean Change in Patient Demands Score (Scale of -1 to +1)**



<sup>15</sup> U.S. vs. Philippine,  $p=.039$ ; U.S. vs. other foreign-trained,  $p\leq.000$ .



### Change in Staffing Patterns

The following items were related to staffing patterns: mandatory overtime, number of foreign-trained RNs, use of RNs from temp agencies, and need for second language skills. Average score for reported change in these staffing factors was 0.32.

**Table 8. Frequencies for Components of Change in Staffing Patterns**

	Decreased	No Change	Increased
Mandatory Overtime	19.9%	60.0%	20.1%
Number of Foreign-trained RNs	8.5%	59.1%	32.4%
Use of RNs from Temp Agencies	19.8%	31.3%	49.0%
Need for Second Language Skills	2.3%	40.3%	57.4%

### Demographic Characteristics

U.S.-trained RNs perceived greater increases in these four staffing patterns than RNs trained in the Philippines or other foreign countries (0.34 versus 0.25 and 0.25)<sup>16</sup>. Non-Hispanic White RNs perceived greater increases in these staffing patterns than either non-Hispanic Black/African-American or Asian RNs (0.35 versus 0.28 and 0.27, respectively)<sup>17</sup>.

### Hospital Characteristics

RNs working in hospitals located in HPSAs reported significantly greater increases in the four featured staffing patterns than those working in other hospitals (0.36 versus 0.31,  $p \leq .000$ ). Those who were not unionized reported greater increases in these four staffing patterns than those who were (0.35 versus 0.30,  $p \leq .000$ ). RNs working in upstate hospitals perceived a greater increase than those working in downstate hospitals (0.42 versus 0.30,  $p \leq .000$ ).

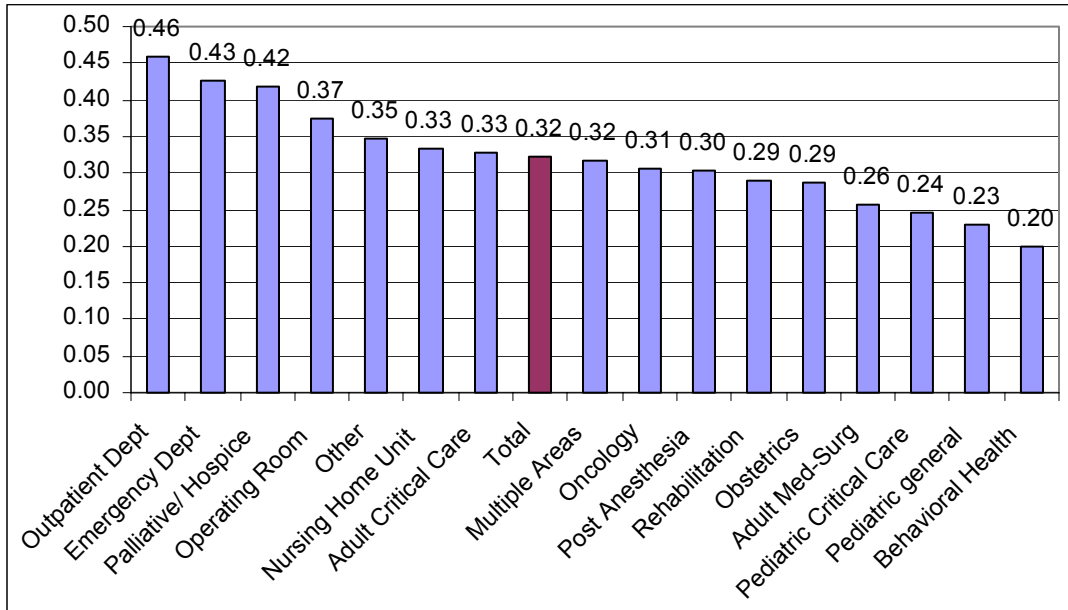
### Employment Characteristics

There was a great deal of variation in reported changes in staffing patterns by type of unit. RNs working in outpatient/ambulatory departments, emergency departments, and palliative care/hospice units reported the greatest increases in the four staffing patterns, while RNs in pediatric critical care, general pediatrics, and behavior health reported the smallest increases.

<sup>16</sup> U.S. vs. Philippine,  $p \leq .000$ ; U.S. vs. other foreign trained,  $p \leq .000$ .

<sup>17</sup> White vs. Black,  $p = .004$ ; White vs. Asian,  $p \leq .000$ .

**Figure 79. Mean Change in Staffing Patterns Score (Scale of -1 to +1)**



### Adequacy of Staffing

RNs were asked if adequacy of staffing had decreased, not changed, or increased in the past year on the unit where they usually work.

#### Demographic Characteristics

Although RNs overall tended to report decreases in the adequacy of staffing, Asian RNs reported less of a decrease on average than non-Hispanic White RNs (-0.10 versus -0.22,  $p=.001$ ). Similarly, RNs trained in the Philippines reported less of a decrease in staffing adequacy on average than U.S.-trained RNs (-0.10 versus -0.21,  $p=.011$ ).

#### Hospital Characteristics

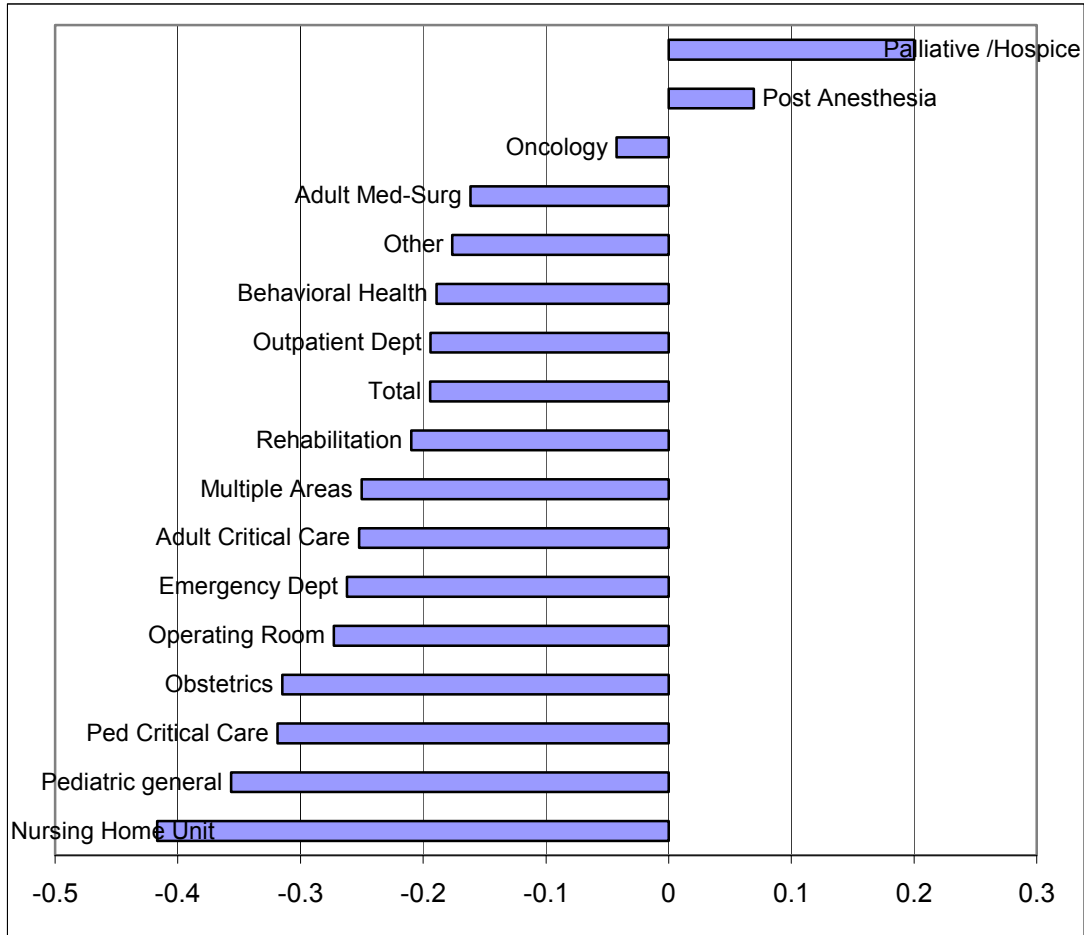
RNs working in upstate hospitals reported a dramatically greater decrease in staffing adequacy than their counterparts downstate (-0.31 versus -0.16,  $p\leq.000$ ).

#### Employment Characteristics

RNs working primarily night shifts reported greater decreases in staffing adequacy over the course of the past year than those working primarily day shifts (-0.25 versus -0.17,  $p=.042$ ), and those who worked both weekends and weekdays reported greater decreases than those working primarily weekdays (-0.24 versus -0.12,  $p\leq.000$ ).

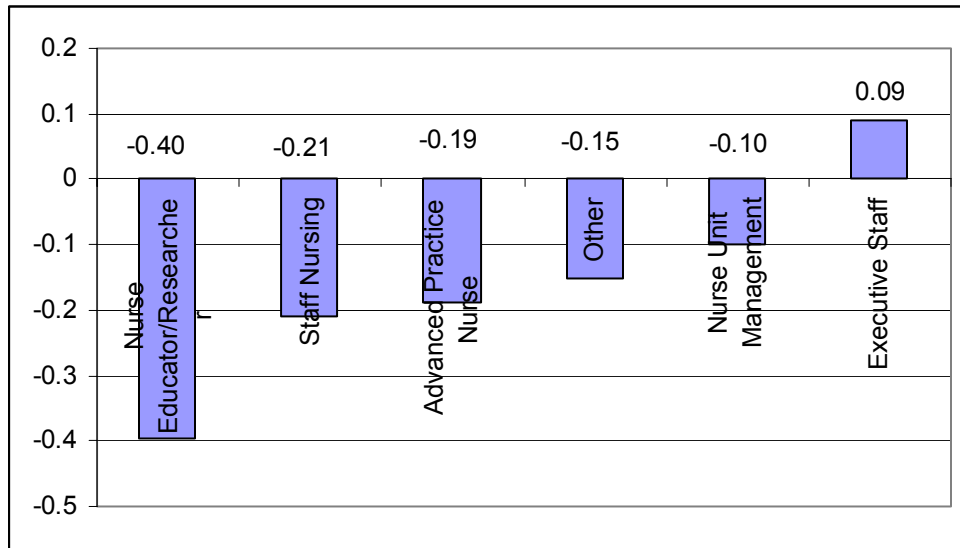
The greatest decreases in staffing adequacy were reported by RNs working in nursing home units, general pediatric units, and pediatric critical care units. RNs working in post-anesthesia units and palliative care/hospice units actually reported average increases in adequacy of staffing in the past year.

**Figure 80. Mean Change in Staffing Adequacy (Scale of -1 to +1) by Current Practice Area**



Nursing educators and researchers reported the largest decreases in staffing adequacy, followed by staff nurses, while those in executive staff titles actually reported increases in staffing adequacy on average, as shown below in Figure 81.

**Figure 81. Mean Change in Staffing Adequacy (Scale of -1 to +1) by Current RN Position**



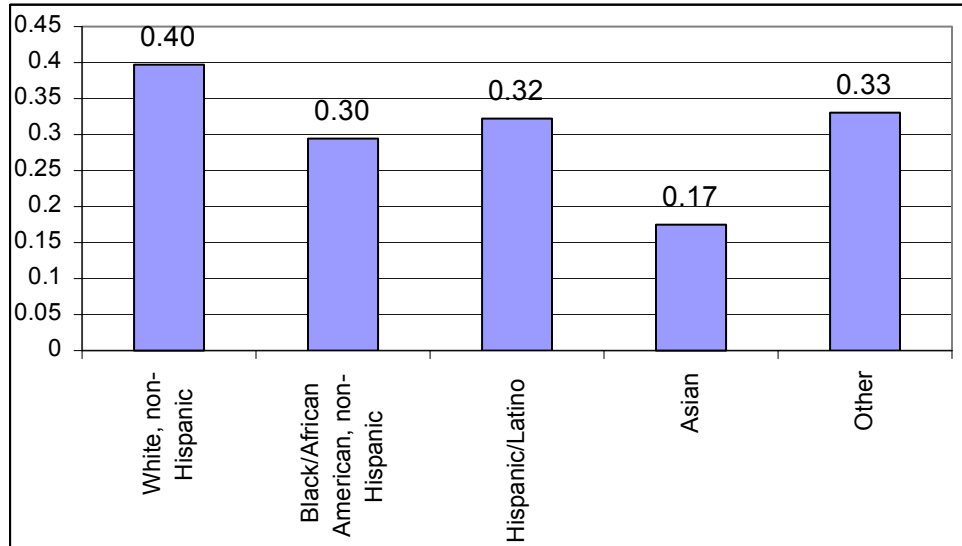
### Voluntary Overtime

RNs were asked if voluntary overtime had decreased, not changed, or increased in the past year on the unit where they usually work.

### Demographic Characteristics

Although RNs overall tended to report increases in voluntary overtime, Asian RNs reported less of an increase, on average, than RNs from any other racial/ethnic background (Figure 82). Non-Hispanic Whites reported the greatest increases in voluntary overtime. Similarly, RNs trained in the U.S. reported that their voluntary overtime had increased more on average than was reported by RNs trained either in the Philippines or other foreign countries (0.37 versus 0.16 and 0.21, respectively both  $p \leq .000$ ).

**Figure 82. Mean Change in Voluntary Overtime (Scale of -1 to +1) by RN Race/Ethnicity**



Note: Asian vs. White  $p \leq .000$ ; Asian vs. Black  $p = .030$ ; Asian vs. Hispanic  $p = .018$ ; Asian vs. Other  $p = .035$ , White vs. Black  $p = .036$ .

### **Hospital Characteristics**

RNs working in upstate hospitals reported greater increases in voluntary overtime than those working in downstate hospitals (0.44 versus 0.31,  $p \leq .000$ ).

### **Employment Characteristics**

RNs who worked primarily weekdays reported greater increases in voluntary overtime than those who worked both weekdays and weekends (0.37 versus 0.31,  $p = .044$ ). There were no significant differences by current practice area except that RNs working in emergency departments reported much greater increases in voluntary overtime (0.60) than RNs in almost any other department (generally 0.20 to 0.39).

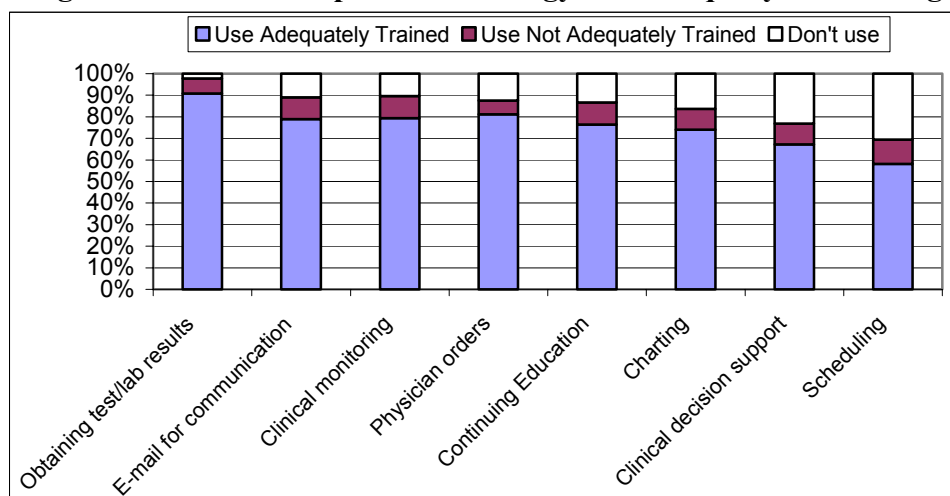
## IV. Training Needs

### Computer Technology

RN respondents were asked if they used computers for eight tasks in their day-to-day work, if they had been adequately trained in using computers for those tasks, and if the use of computer technology for those tasks helped them provide better quality care. The eight tasks were: charting, clinical monitoring, physician orders, scheduling, obtaining test/lab results, clinical decision support, continuing education, and e-mail for communication.

Figure 83 shows the percentage of RNs who reported they used computer technology and had been adequately trained for each task, those who used computer technology for the task but were not adequately trained, and those who do not use computer technology for the task.

**Figure 83. Use of Computer Technology and Adequacy of Training**



Most of these tasks can be divided into patient care and non-patient-care functions. Patient care functions included charting, clinical monitoring, physician orders, and obtaining lab/test results. Non-patient-care functions included scheduling, continuing education, and e-mail for communication. Clinical decision support did not clearly fall into either of these categories.

### Use of Computer Technology

#### Demographic Characteristics

RNs with bachelor's degrees were more likely to use all forms of technology than those with associate degrees or diplomas, although this may be related to differences in job title. RNs with graduate degrees were similarly significantly more likely than those with bachelor's degrees to use IT for clinical decision support and non-patient care functions (although not for patient care functions).

#### Hospital Characteristics

RNs working in hospitals located in HPSA areas used significantly more patient care IT and non-patient-care IT than those in non-HPSA hospitals, and were more likely to report using IT for

clinical decision support. Those working in unionized hospitals used significantly more patient care IT and were more likely to use IT for clinical decision support, but used significantly less non-patient care IT.

RNs in downstate hospitals used more of both forms of IT than RNs in upstate hospitals. RNs working in public hospitals used significantly more of both forms of IT than those working in private hospitals.

### Employment Characteristics

RNs working the day shift were less likely than those working night shifts to use IT for patient care functions, but were more likely to use IT for non-patient-care functions (perhaps because many non-clinical job titles, such as executive staff and nurse researchers, were more likely to work days). There were no big differences by shift in the use of IT for clinical decision support.

RNs working in rehabilitation units, pediatric critical care units, oncology units, and obstetrical units used the most patient care IT, while those in palliative care/hospice units, nursing home units, and operating rooms used the least.

Those in palliative care/hospice units, however, reported using the most non-patient care IT, followed by those in oncology units and ambulatory/outpatient units. Those in adult medical-surgical units, emergency departments, and obstetrical units reported using the least.

Clinical decision support was most likely to be used by RNs in oncology units (58%), rehabilitation units (48%), and ambulatory/outpatient units (41%). Those in post-anesthesia units, nursing home units, and operating rooms were least likely to use clinical decision support applications (27%, 23% and 17%, respectively).

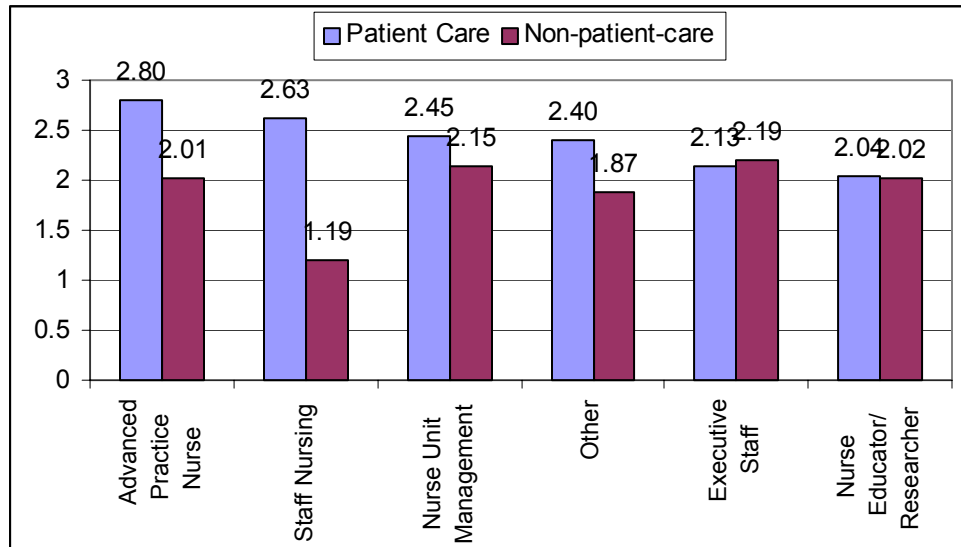
**Table 9. Average Use of Computer Technology by Current Practice Area**

	Pt care	Non-Pt Care	CDS
Oncology	3.02	2.07	0.58
Rehabilitation	3.09	1.21	0.48
Ambulatory or Outpatient Department	2.54	1.86	0.41
Palliative Care/Hospice	2.40	2.10	0.40
Other	2.21	1.65	0.36
Total	2.57	1.45	0.35
Behavioral Health	2.56	1.39	0.35
Adult Critical Care i.e. ICU CCU	2.86	1.25	0.34
Adult Medical and Surgical	2.45	1.20	0.33
Obstetrics	2.94	1.11	0.33
Pediatric Critical Care (NICU ICU)	3.08	1.30	0.32
Multiple Practice Areas	2.33	1.52	0.31
Pediatric general	2.82	1.45	0.31
Emergency Department	2.65	1.17	0.30
Post Anesthesia	2.68	1.37	0.27
Nursing Home Unit (long term care)	2.25	1.38	0.23
Operating Room	1.79	1.57	0.17

As shown in Figure 84, the most uses of technology for patient care were by advanced practice nurses, followed by staff nurses, and nurse unit management, while the most uses of technology

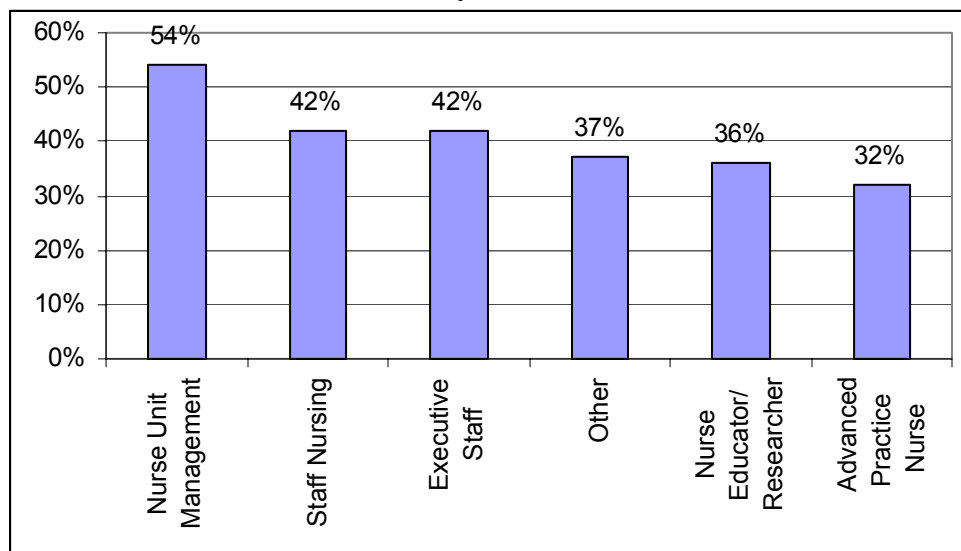
for non-patient care were by executive staff, nurse unit management, and nurse educators/researchers. Staff nurses used the least computer technology for non-patient care.

**Figure 84. Number of Patient Care and Non-Patient Care Tasks Performed with Computer Technology, by Job Title**



RNs working in nurse unit management were most likely to use computer technology for clinical decision support (54%), followed by staff nurses (42%), and executive staff (42%). APNs were least likely to use computer technology for clinical decision support (32%).

**Figure 85. Percent of RNs Using Computer Technology for Clinical Decision Support, by Title**





## **Adequacy of Computer Technology Training**

### **Demographic Characteristics**

No demographic characteristics were associated with ratings of the adequacy of training, except that master's educated RNs who use IT for clinical decision support were more likely than associate or bachelor's-level RNs to say that they were adequately trained to use this technology (77% versus 67% [p=.004] and 69% [p=.017], respectively).

### **Hospital Characteristics**

Despite using more IT, RNs working in public hospitals felt they had been adequately trained on a smaller percent of the IT they used compared to RNs working in private hospitals (.83 versus .91, p=.002). Those working in HPSAs also rated their training as less adequate than others (.88 versus .91 for patient care IT [p=.004]; .82 versus .86 for non-patient care IT [p=.006]; and .65 versus .72 for clinical decision support [p=.001]). RNs working in upstate hospitals were more positive than those working downstate about the adequacy of their training in patient care IT (.94 versus .89, p=.001), but less positive about the adequacy of their training in clinical decision support IT (.66 versus .71 [p=.039]), while there were no differences related to non-patient care IT.

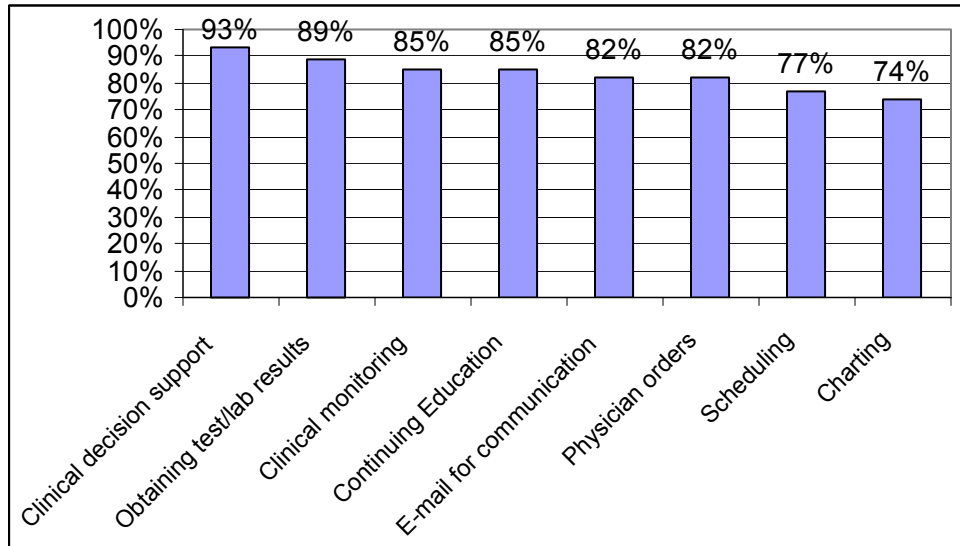
### **Employment Characteristics**

Although full-time/part-time status and shift worked were not related to perceived adequacy of training, those who worked primarily weekdays reported better training than those who worked both weekdays and weekends in patient care IT (.92 versus .89, p=.009), non-patient-care IT (.87 versus .83, p=.005), and clinical decision support (.74 versus .67, p<=.000). There were few differences by practice area or job title.

## **Contribution of Computer Technology to Better Quality Care**

Seventy-one percent of RNs agreed that all of the types of patient care computer technology they used helped them to provide better quality care, and 72% of RNs agreed that all of the types of non-patient care computer technology they used helped them to provide better quality care. Ratings for all types of computer technology are shown below in Figure 86. A notable 93% of those who used computers for clinical decision support believed that this helped them to provide better quality care.

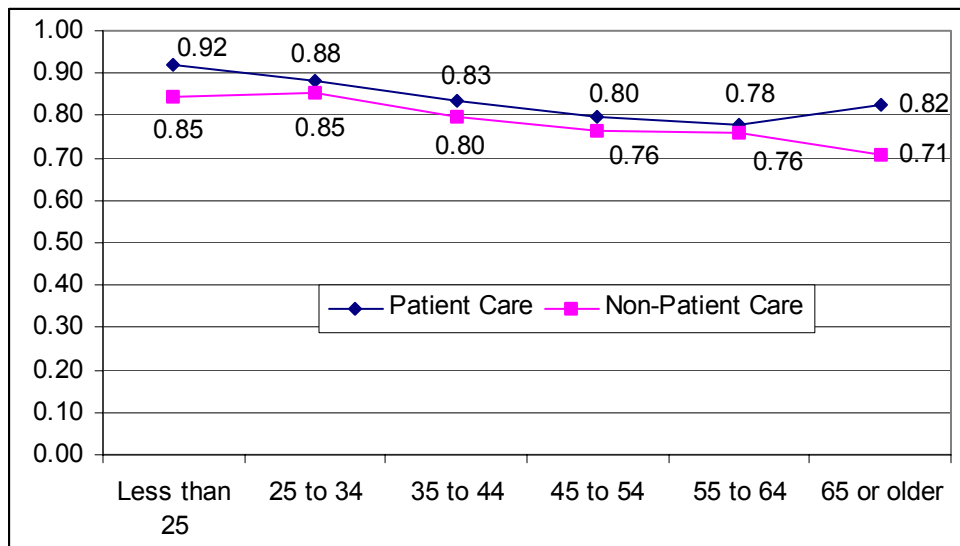
**Figure 86. Percent of RNs Agreeing That Computer Technology Helps Them to Provide Quality Patient Care, by Type of Technology**



### Demographic Characteristics

Men had significantly more positive feelings than women about the computer technology they used for patient care (.85 versus .82,  $p=.029$ ). Positive feelings about the computer technology used decreased with RN age up to age 55-64 for both patient care and non-patient care IT (although not for clinical decision support).

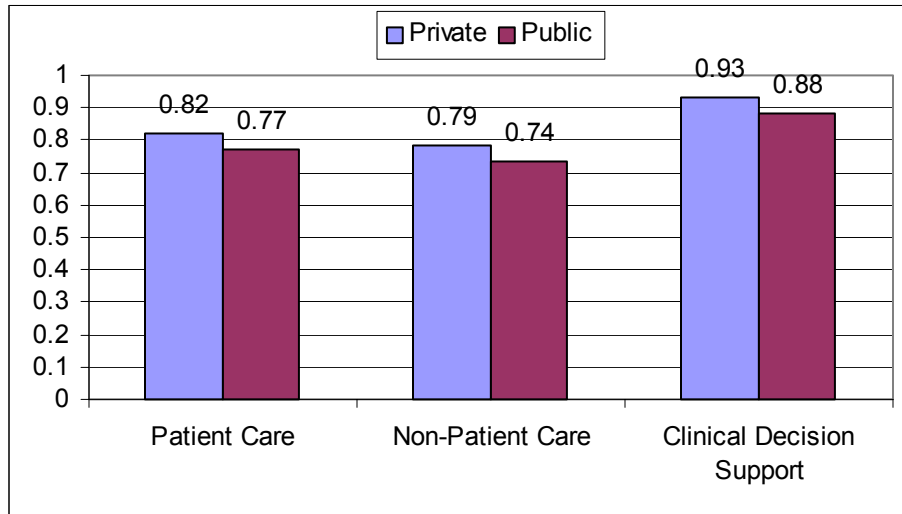
**Figure 87. Positive Feelings About Computer Technology Contributing To Better Quality Care, by RN Age**



### Hospital Characteristics

RNs working in hospitals located in HPSAs were less positive than other RNs about the computer technology they used for patient care (.79 versus .82,  $p=.002$ ). RNs working in private hospitals were more positive than those in public hospitals about all three kinds of computer technology.

**Figure 88. Positive Feelings About Computer Technology Contributing To Better Quality Care, by Public and Private Hospitals**



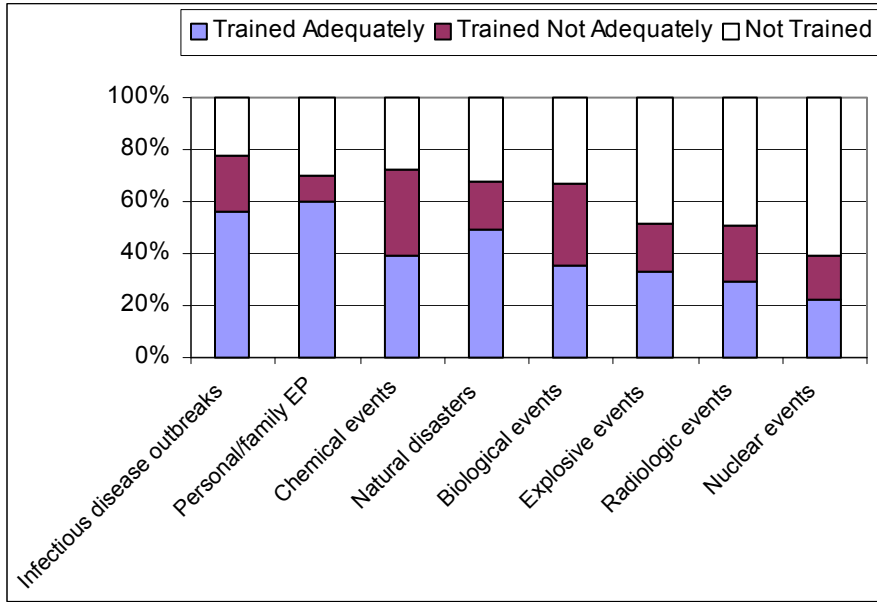
### Employment Characteristics

RNs working primarily weekdays were more positive about computer technology for non-patient care than those working both weekdays and weekends (.82 versus .75,  $p<=.000$ ). Title and practice area did not appear to influence feelings about computer technology, except that RNs working in oncology units were significantly more positive about computer technology for patient care than those working in many other areas.

### Emergency Preparedness (EP) Training

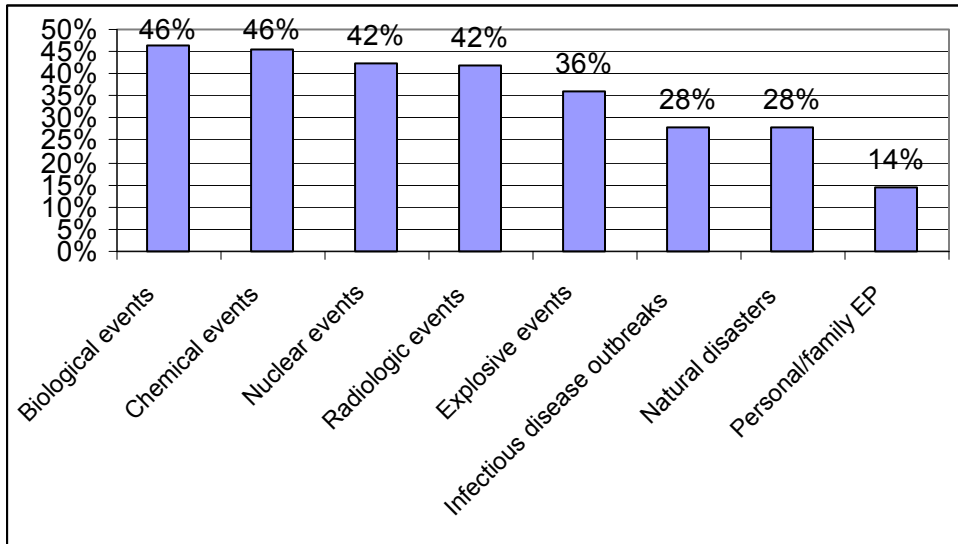
As shown in Figure 89, training in disease outbreaks, personal and family EP, and chemical events were most common, while many fewer RNs received training in explosive, radiologic, or nuclear events.

**Figure 89. Receipt and Adequacy of Emergency Preparedness Training by Type**



Training in preparation for biological or chemical events was most likely to be considered adequate by those who received such training (each 46%), while only 28% of those who received training in infectious disease outbreaks or natural disasters and only 14% of those who received personal or family EP training reported that this training was adequate.

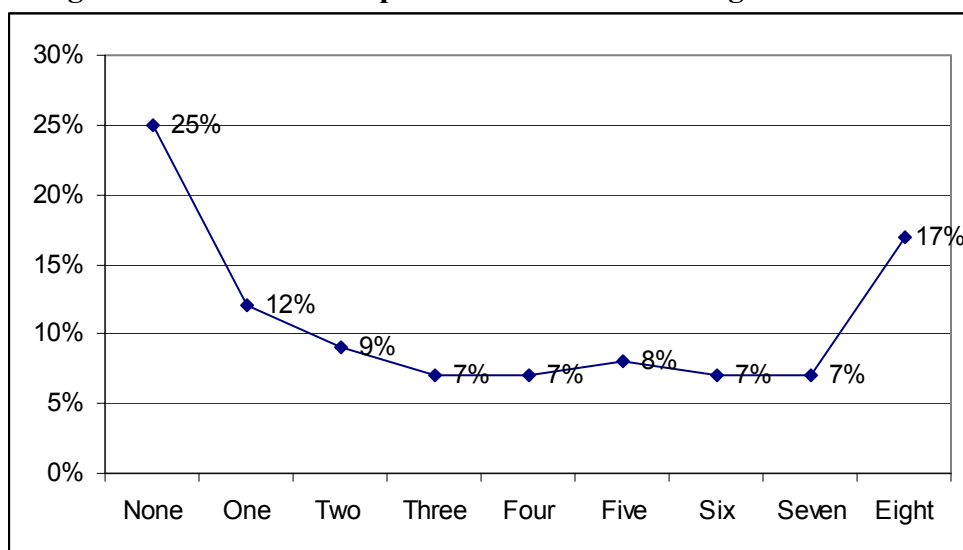
**Figure 90. Percent of Those Trained Who Feel Adequately Prepared**



### **Breadth of EP Training**

The breadth of topics for which RNs received EP training varied dramatically. One-quarter (25%) of RNs reported receiving EP training in none of the topics and 17% reported that they received EP training in all eight topics. The mean number of topics RNs reported they were trained in was 3.45.

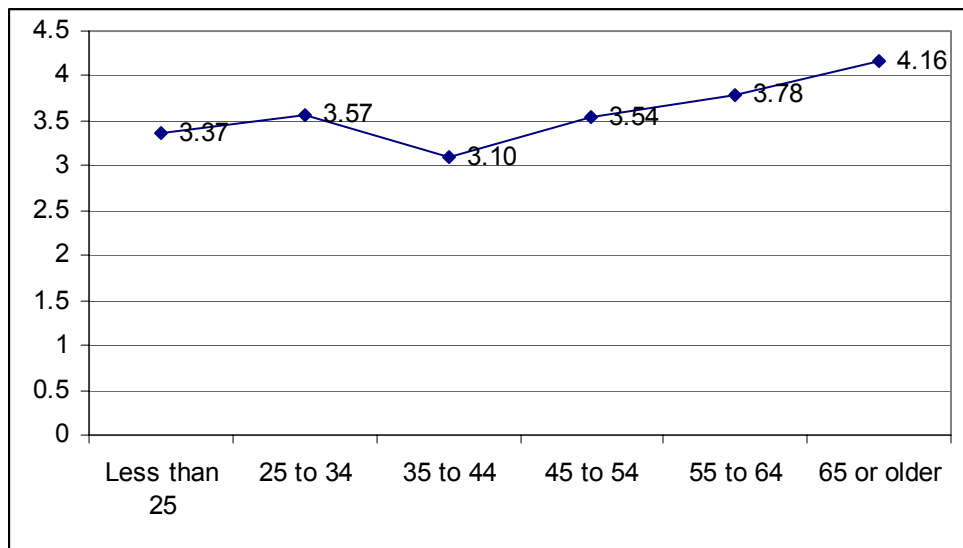
**Figure 91. Number of Topics in Which EP Training Was Received**



### **Demographic Characteristics**

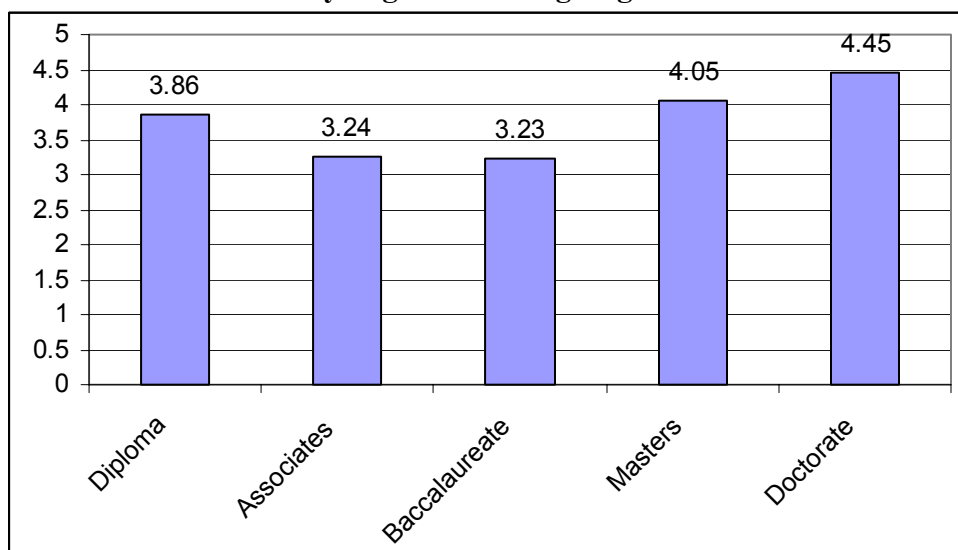
Hispanic/Latino RNs received significantly fewer forms of EP training than either White or Black RNs (2.97 versus 3.49 [p=.042] and 3.65 [p=.020]). Hispanic/Latino RNs were also younger on average, however, and there was a significant positive correlation between RN age and breadth of EP training (Figure 92).

**Figure 92. Average Number of Topics EP Training Was Received in, by RN Age**



There were also differences by highest degree, as shown in Figure 93. While those with graduate degrees received the broadest EP training on average, those with diplomas received more than those with associate or baccalaureate degrees. This was probably related to the fact that they were older and more experienced on average.

**Figure 93. Average Number of Topics in Which EP Training Was Received, by Highest Nursing Degree**



Note: Diploma vs. associates,  $p=.002$ ; diploma vs. bachelor's,  $p\leq.000$ ; master's vs. associates,  $p\leq.000$ ; master's vs. bachelor's,  $p\leq.000$ .

### Hospital Characteristics

There was a significant and negative correlation between hospital bed size and breadth of EP training. While RNs working in hospitals with fewer than 750 beds tended to receive training in 3.66 to 3.70 EP topics, those in hospitals with 750 beds or larger only averaged EP training in 2.93 topics.

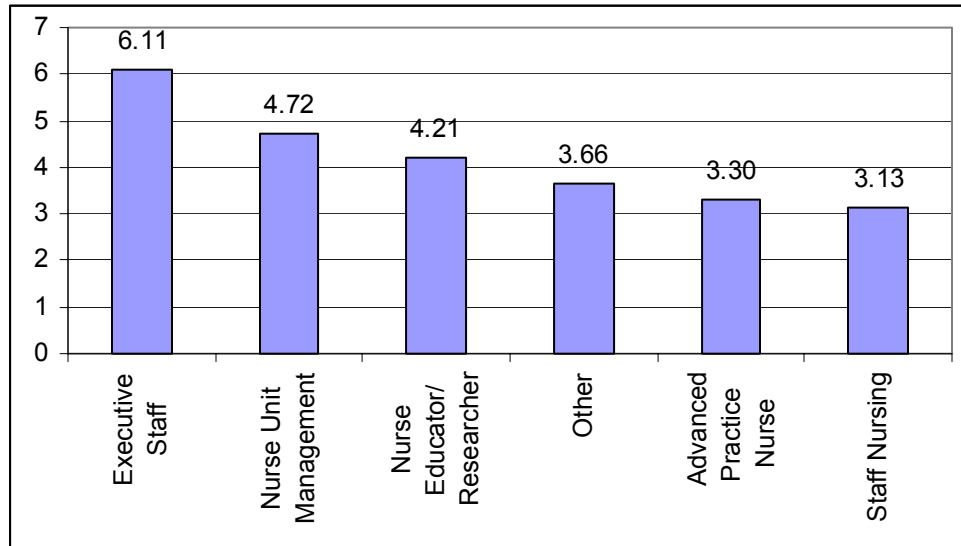
RNs working in hospitals located in HPSAs also received less EP training than others – 3.09 versus 3.59 topics ( $p\leq.000$ ). RNs who worked in union hospitals received more training on average than those in non-union hospitals (3.54 versus 3.36,  $p=.049$ ), and those in public hospitals received much more than those in private hospitals (4.65 versus 3.36,  $p\leq.000$ ).

### Employment Characteristics

Full-time RNs received significantly more of the training types than part-time RNs (3.49 versus 3.15,  $p=.011$ ). RNs working primarily nights received significantly fewer of the training types than those working either primarily days or primarily evenings (3.06 versus 3.51 [ $p=.001$ ] and 3.77 [ $p=.006$ ], respectively). RNs working primarily weekdays received more training types than those working both weekdays and weekends (3.72 versus 3.27,  $p\leq.000$ ).

RNs working in emergency departments received the most types of training on average (5.07), while those in obstetrics received the fewest (2.88). Only emergency departments were significantly different from other departments, however. There were clear and statistically significant differences between almost all job title groups. Executive staff received by far the most types of EP training, followed by nursing unit management. Staff nurses received the least.

**Figure 94. Average Number of Topics in Which EP Training Was Received, by Job Title Group**



### **Adequacy of EP Training**

Overall adequacy of EP training was another topic examined through the survey responses. Forty-four percent of RNs felt that they were adequately prepared for all types of emergencies in which they had been trained, but 30% did not feel adequately prepared for any of the types of emergencies in which they had been trained. Average reported adequacy of training was 57%. Despite this variation, there were few statistically significant predictors of training adequacy.

### **Demographic Characteristics**

Master's prepared RNs rated the adequacy of their training significantly higher than baccalaureate-prepared RNs (0.62 versus 0.56,  $p=.022$ ).

### **Hospital Characteristics**

RNs working in upstate hospitals rated the adequacy of their training higher than RNs working in downstate hospitals (0.61 versus 0.56,  $p=.007$ ).

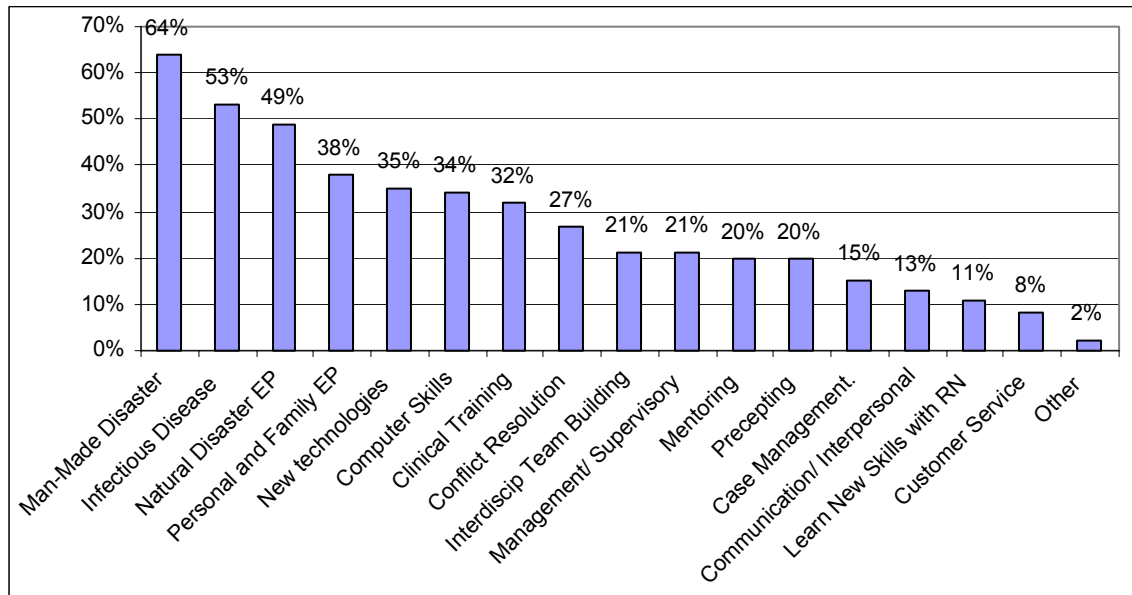
### **Employment Characteristics**

RNs working primarily weekdays defined their training as more adequate than those working both weekdays and weekends (0.60 versus 0.55,  $p=.004$ ). Staff RNs were significantly less likely to define their training as adequate than APNs or executive staff (0.54 versus 0.69 [ $p<=.000$ ] and 0.70 [ $p=.005$ ], respectively).

## Need for Additional Training

The areas in which RNs reported needing additional training varied widely, from 64% reporting a need for additional training in man-made disasters and 53% reporting a need for additional training in infectious disease, to 11% reporting a need to work with a qualified RN to learn new skills, and just 8% reporting a need for additional customer service training.

**Figure 95. Percent of RNs Reporting Need for Additional Training, by Training Area**



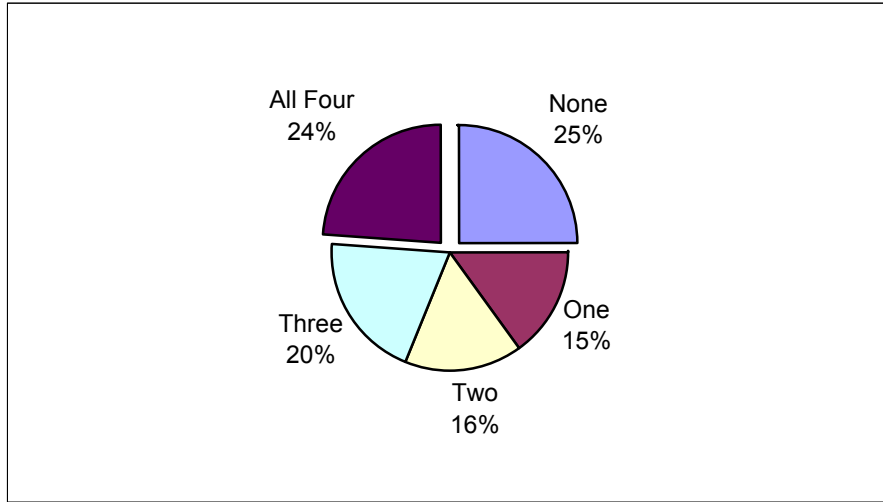
These training needs could be classified into four general areas: emergency preparedness, interpersonal skills, professional skills, and teaching. Two areas, case management and management/supervision/delegation, did not statistically load with any other area and stand alone.

### **Emergency Preparedness**

The four training types related to emergency preparedness were infectious disease outbreaks, man-made disaster preparedness, natural disaster emergency preparedness, and personal and family emergency preparedness. While one-quarter of RNs did not feel the need for additional training in any of these areas, almost as many (24%) felt a need for additional training in all four areas of EP. The average was 2.04.



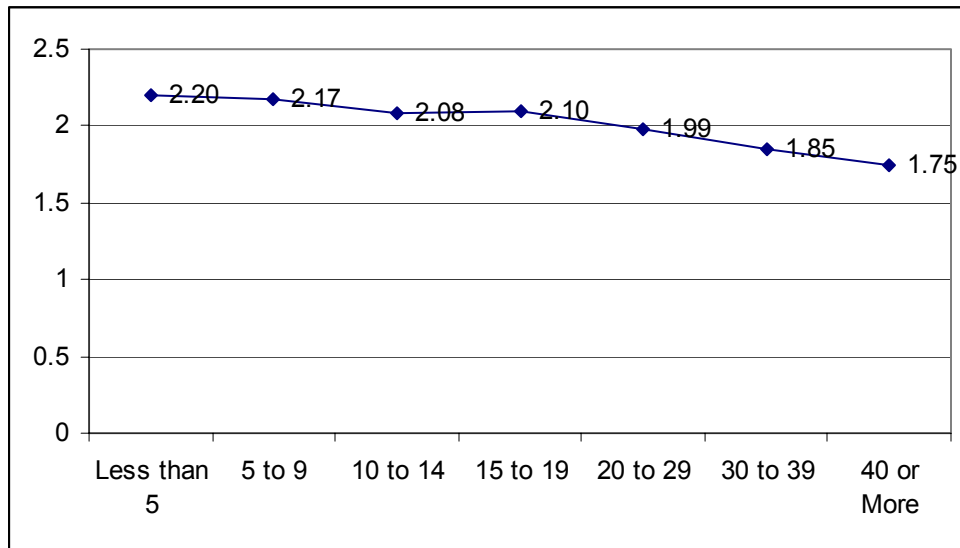
**Figure 96. Types of EP in Which Additional Training Needed**



**Demographic Characteristics**

RNs trained in the U.S. and Philippines reported greater need for additional EP training than those trained in other foreign countries (2.06 and 2.16 versus 1.80 [both  $p=.001$ ]). There was also a significant and negative correlation between years worked as an RN and reported need for EP training, as shown below in Figure 97.

**Figure 97. Reported Need for EP Training by Years Worked as an RN**



**Hospital Characteristics**

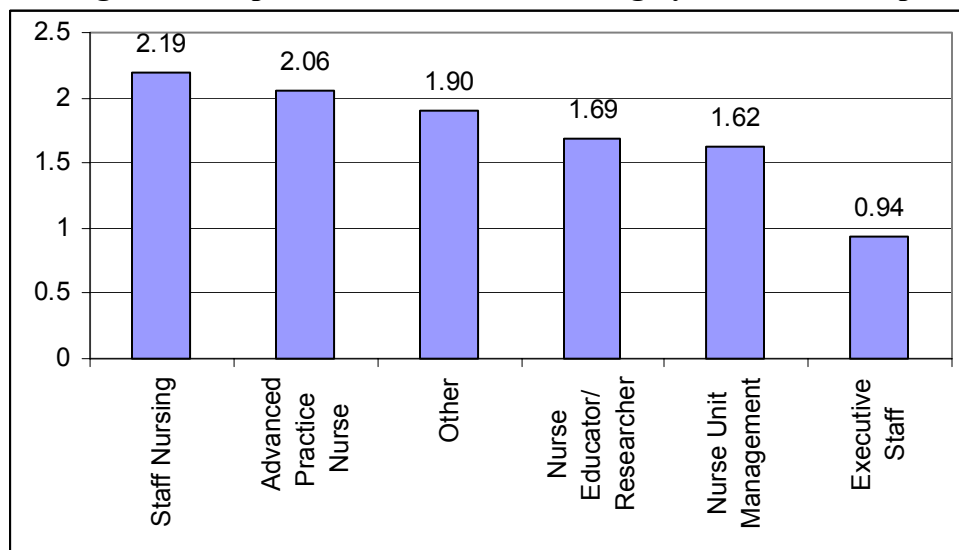
RNs working in hospitals located in HPSAs reported need for much more EP training compared to other RNs (2.22 versus 1.97,  $p<=.000$ ). RNs in unionized hospitals also reported a need for

more additional EP training than their non-unionized counterparts (2.08 versus 1.99,  $p=.032$ ). While there were no downstate versus upstate differences, RNs in private hospitals reported a greater need for EP training than those in public hospitals (2.05 versus 1.81,  $p=.003$ ).

### Employment Characteristics

RNs who worked primarily nights reported a greater need for additional EP training than those who worked primarily days (2.24 versus 2.01,  $p<=.000$ ), and those who worked both weekdays and weekends reported greater need for training than those who worked primarily weekdays (2.10 versus 1.96,  $p=.004$ ). There was little difference by current area of practice, but dramatic differences by job title groups. Staff nurses and APNs reported the greatest need for additional EP training, while executive staff and nurse unit management reported the least need. This was in inverse proportion to the breadth of EP training these groups have received (see Figure 94).

**Figure 99. Reported Need for EP Training by Job Title Group**

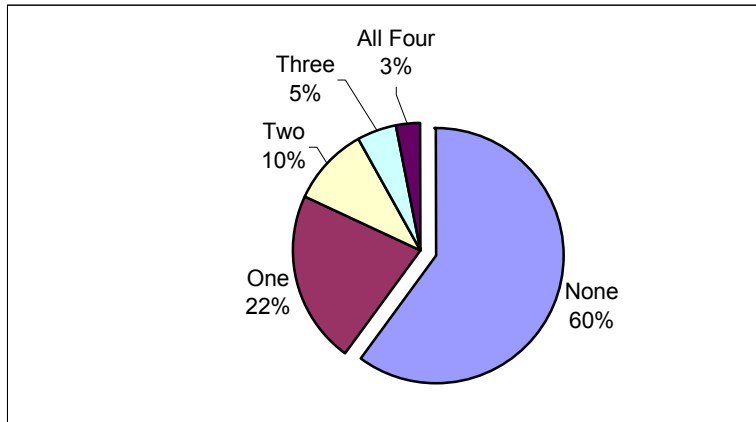


Note: Executive staff vs. all other groups,  $p<=.000$ ; staff nurse vs. nurse unit management; and vs. nurse educator/research,  $p<=.000$ ; staff nurse vs. other,  $p=.002$ ; APN vs. nurse unit management,  $p=.002$ .

### Interpersonal Skills

The four training types related to management/interpersonal skills were communication/interpersonal skills, conflict resolution, customer service, interdisciplinary team building, and management/supervisory/delegation. The majority of RNs (60%) did not feel a need for additional training in any of these areas. The average was 0.69.

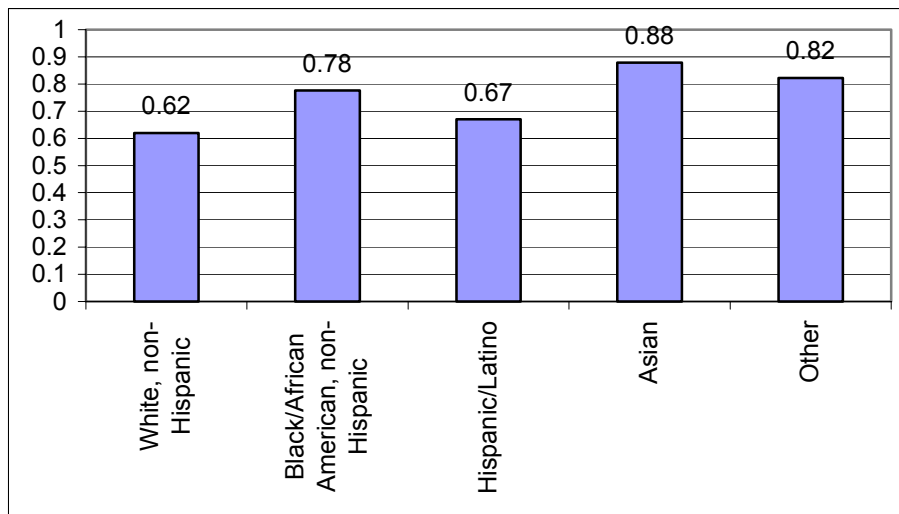
**Figure 100. Interpersonal Skill Areas in Which Additional Training Needed**



### Demographic Characteristics

Non-Hispanic White RNs reported significantly less need for interpersonal skills training than Black/African-American or Asian RNs, while Asian RNs reported significantly more need than Hispanic/Latino RNs. RNs trained in the Philippines reported greater need for additional training in interpersonal skills than those trained either in the U.S. or other foreign countries ( $p \leq .000$  and  $p = .026$ , respectively).

**Figure 101. Reported Need for Interpersonal Skills Training, by Race/Ethnicity**



Note: White vs. Black,  $p = .014$ ; White vs. Asian,  $p \leq .000$ ; Hispanic vs. Asian,  $p = .020$

### Hospital Characteristics

RNs working in hospitals located in HPSAs reported greater need for training in interpersonal skills than their counterparts in non-HPSA hospitals (2.22 versus 1.97,  $p \leq .000$ ). RNs in unionized hospitals reported greater need for interpersonal training than those in non-union

hospitals (0.76 versus 0.61,  $p \leq .000$ ), and those in downstate hospitals reported greater need for interpersonal skills training than those upstate hospitals (0.71 versus 0.61,  $p = .002$ ).

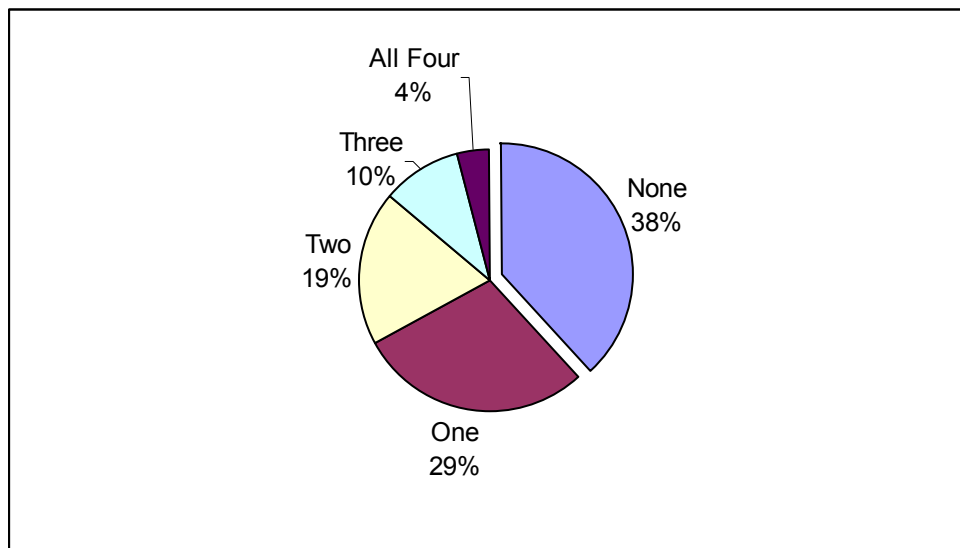
### **Employment Characteristics**

RNs working full time reported much greater need for interpersonal skills training than those working part time (0.72 versus 0.49,  $p \leq .000$ ). Nurse unit management reported the greatest need for additional training in interpersonal skills (.94), versus staff nurses (.68,  $p \leq .000$ ), executive staff (.55,  $p \leq .000$ ), APNs (.48,  $p = .004$ ), and nurse educator/researchers (.56,  $p = .001$ ). The difference between staff nurses and APNs was also statistically significant ( $p = .019$ ).

### **Professional Skills**

The four training types related to professional skills were clinical training, computer skills, use of new equipment/technologies, and additional work with a qualified RN to learn new skills. The average was 1.12, with 38% of RNs reporting no need for training in any of these areas.

**Figure 102. Professional Skill Areas in Which Additional Training Needed**



### **Demographic Characteristics**

Asian RNs reported greater need for additional training in professional skills (1.38) than non-Hispanic White (1.05,  $p \leq .000$ ), Black/African-American (1.12,  $p = .001$ ), or Hispanic/Latino RNs (1.08,  $p = .001$ ). RNs trained in the Philippines reported greater need for additional training in professional skills than those trained either in the U.S. (1.42 versus 1.07,  $p \leq .000$ ) or other foreign countries (1.20,  $p = .010$ ).

### **Hospital Characteristics**

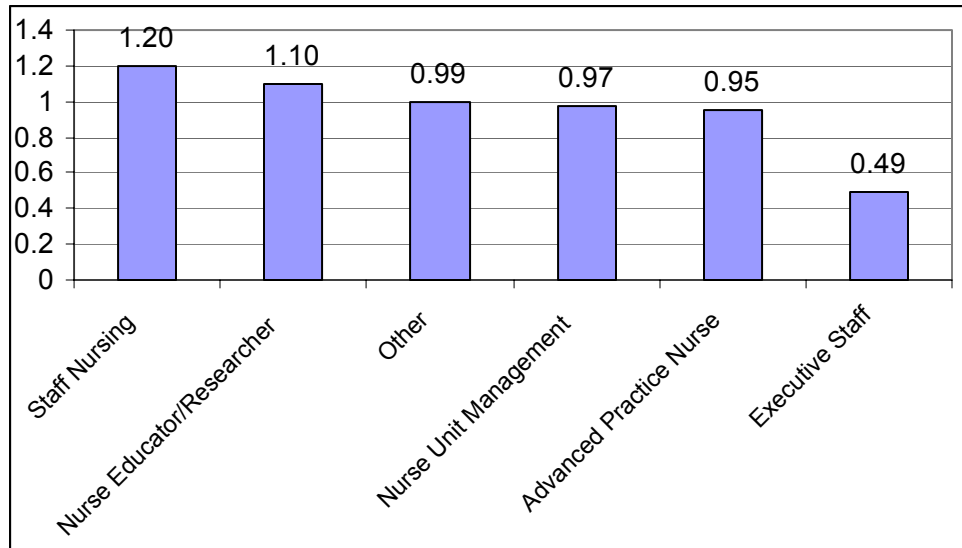
RNs working in hospitals located in HPSAs reported a greater need for additional training in professional skills compared to other RNs (1.24 versus 1.08,  $p \leq .000$ ).

### **Employment Characteristics**

RNs who worked primarily nights or evenings reported a greater need for additional training in professional skills (1.21 and 1.32 versus 1.08, [ $p = .014$  and  $p = .003$ , respectively]). Those who

worked primarily both weekdays and weekends reported greater need than those who worked primarily weekdays (1.17 versus 1.05,  $p=.001$ ). Staff nurses reported the greatest need for additional professional skills training, followed by nurse educators and researchers. APNs and executive staff reported the least need for additional professional skills training.

**Figure 103. Reported Need for Professional Skills Training, by Job Title Group**

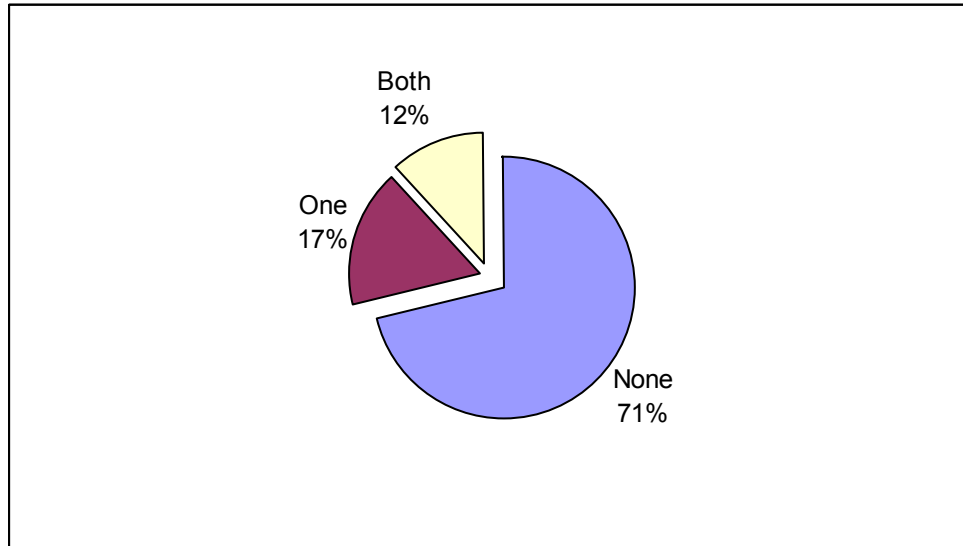


Note: Staff nurse vs. nurse unit management,  $p=.001$ ; staff nurse vs. APN,  $p=.004$ ; staff nurse vs. executive staff,  $p<=.000$ ; staff nurse vs. other,  $p=.003$ ; nurse unit management vs. executive staff,  $p=.001$ ; APN vs. executive staff,  $p=.003$ ; nurse educator/researcher vs. executive staff,  $p<=.000$ ; other vs. executive staff,  $p<=.000$ .

### **Teaching Skills**

The two types of training needs related to teaching were being a mentor and a preceptor. While 71% of RNs reported no need for training in either, 12% felt a need for training in both. The average was 0.40.

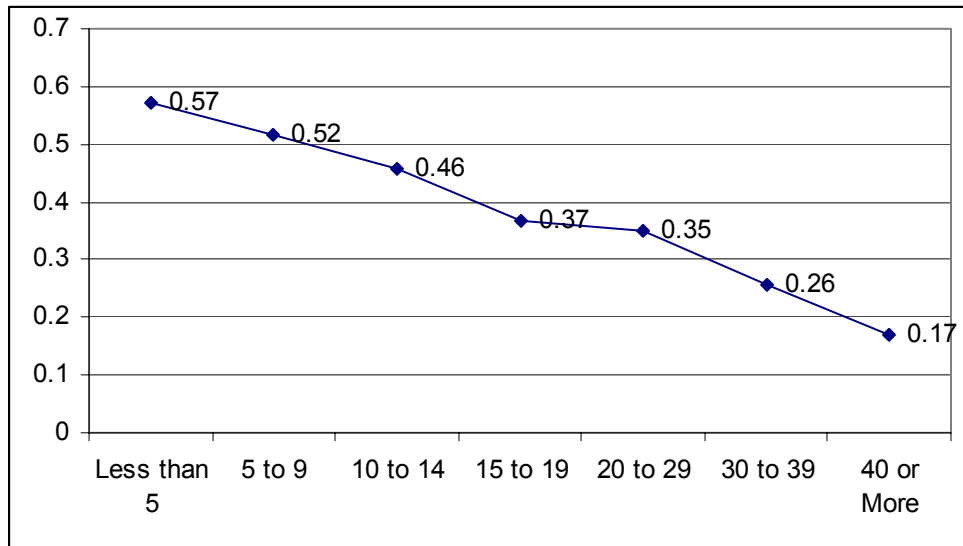
**Figure 104. Teaching Skills Areas in Which Additional Training Needed**



### Demographic Characteristics

Men reported more need for training in teaching skills than women (0.58 versus 0.39,  $p \leq .000$ ). Non-Hispanic White RNs reported less need for teaching skills than either Black/African-American or Asian RNs (0.36 versus 0.47 [ $p = .005$ ] and 0.46 [ $p = .004$ ]). There was a significant and negative correlation between years worked as an RN and reported need for teaching skills, as shown in Figure 105.

**Figure 105. Reported Needs for Additional Teaching Skills Training, by Years as an RN**



### Hospital Characteristics

RNs working in hospitals located in HPSAs reported a greater need for training in teaching skills than other RNs (.48 versus .37,  $p \leq .000$ ), and those in unionized hospitals reported a greater need than those in non-unionized hospitals (.43 versus .36,  $p \leq .000$ ). Finally, RNs in public hospitals reported greater need than those in private hospitals (.47 versus .39,  $p = .045$ ).

### Employment Characteristics

RNs who worked primarily nights reported a greater need for additional training in teaching skills compared to those who worked primarily days or evenings (.53 versus .37 [ $p \leq .000$ ] and .40 [ $p = .040$ ]). RNs who worked primarily both weekdays and weekends reported greater need than those who worked primarily weekdays (.47 versus .31,  $p \leq .000$ ). Staff nurses reported a greater need for additional training (.47) compared to nurse unit management (.30), APNs (.20), and executive staff (.14).<sup>18</sup>

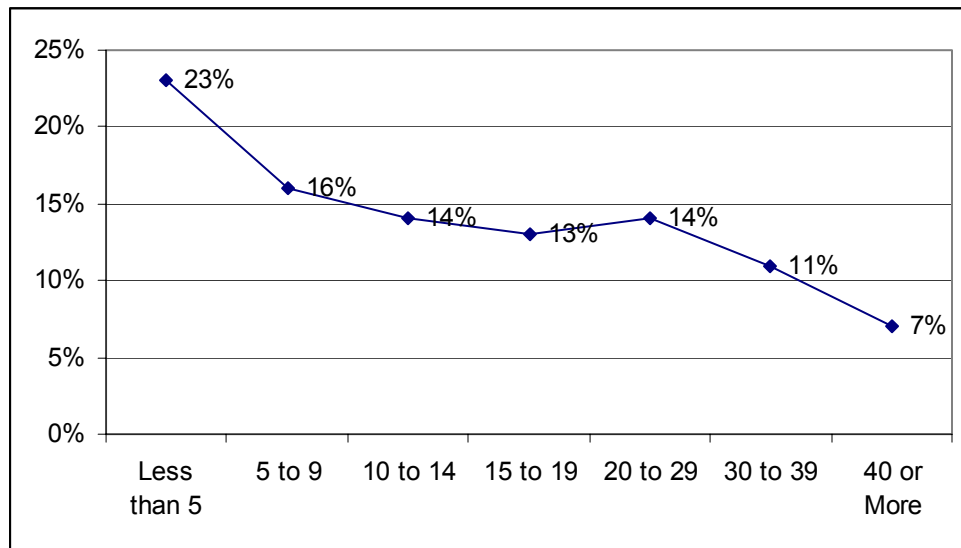
### Case Management

#### Demographic Characteristics

Men were more likely to report a need for training in case management than women (19% versus 14%,  $p = .024$ ). Non-Hispanic Whites were less likely to report a need for training in case management than either Black/African-American or Asian RNs (11% versus 21% and 21%, both  $p \leq .000$ ). RNs trained in the Philippines were more likely to report a need for case management training than U.S.-trained RNs (20% versus 14%,  $p \leq .000$ ).

There was a significant negative relationship between years worked as an RN and the perceived need for additional case management training, as shown below in Figure 106.

**Figure 106. Percent of RNs Reporting a Need for Additional Training in Case Management, by Years as an RN**



<sup>18</sup> All job title differences  $p \leq .000$ .

## Hospital Characteristics

RNs working in unionized hospitals were more likely to report needing additional training in case management than those working in non-unionized hospitals (18% versus 11%,  $p \leq .000$ ), and RNs working in downstate hospitals were more likely to report needing such training than those working in upstate hospitals (16% versus 10%,  $p \leq .000$ ). RNs working in public hospitals were more likely to report needing such training than those working in private hospitals (23% versus 15%,  $p = .001$ ).

## Employment Characteristics

Sixteen percent of full-time RNs reported a need for additional training in case management compared to 9% of part-time RNs ( $p \leq .000$ ). RNs working both weekdays and weekends were more likely to report a need for case management training (16% versus 12%,  $p \leq .000$ ). Differences by job title group were surprisingly limited. Staff nurses were more likely to report needing case management training than APNs or nurse educator/researchers (16% versus 9%; both  $p = .017$ ), but no other differences were statistically significant.

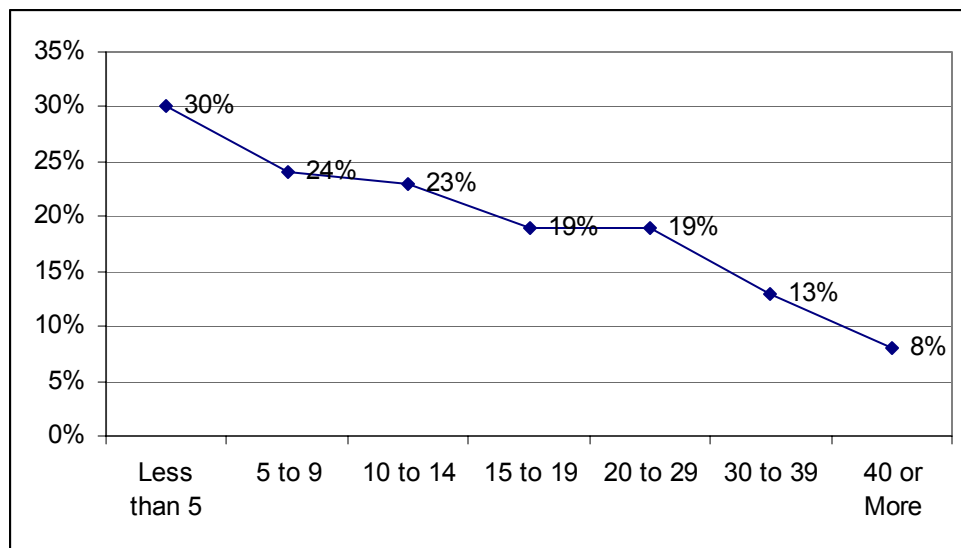
## Management/Supervisory/Delegation

### Demographic Characteristics

Male RNs were more likely to report a need for additional management training than female RNs (29% versus 20%). Non-Hispanic Whites were less likely to report a need for additional management training than Black/African-American or Asian RNs (18% versus 24% [ $p = .041$ ] and 24% [ $p = .008$ ]).

There was a significant negative relationship between years worked as an RN and the percent of RNs reporting a need for additional management training, as shown below in Figure 107.

**Figure 107. Percent of RNs Reporting a Need for Additional Training in Management/Supervisory/Delegation, by Years as an RN**





## Hospital Characteristics

Most differences by hospital characteristics were small in magnitude, but statistically significant. RNs working in hospitals located in HPSAs were more likely than others to report a need for additional management training (23% versus 20%,  $p=.008$ ), and those in unionized hospitals were more likely than those in non-unionized hospitals to report a need for additional management training (20% versus 22%,  $p=.048$ ). Those in public hospitals were more likely to report a need for such training than those in private hospitals (26% versus 21%,  $p=.027$ ).

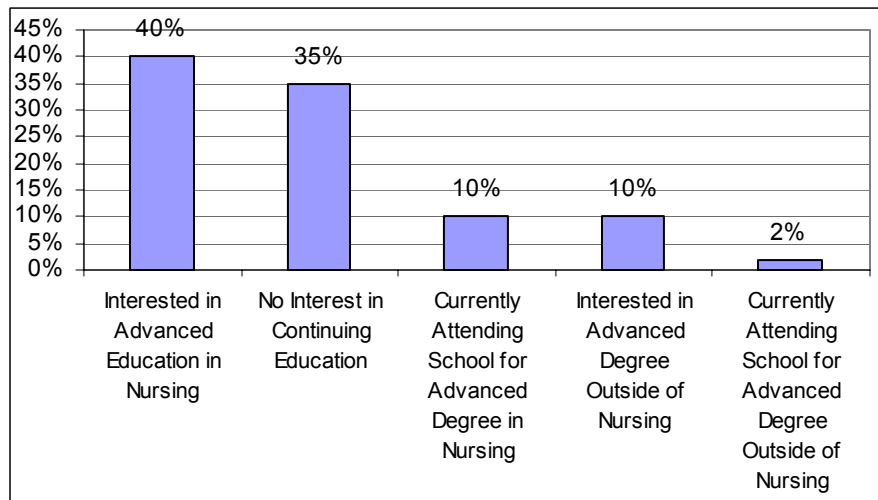
## Employment Characteristics

Full-time RNs were much more likely to report a need for additional management training than part-time RNs (22% versus 12%,  $p\leq.000$ ). Nurse unit management was most likely to report a need for such training (30%), compared to staff nurses (20%,  $p\leq.000$ ), APNs (16%,  $p\leq.000$ ); executive staff (9%,  $p\leq.000$ ).

## Plans to Continue Education

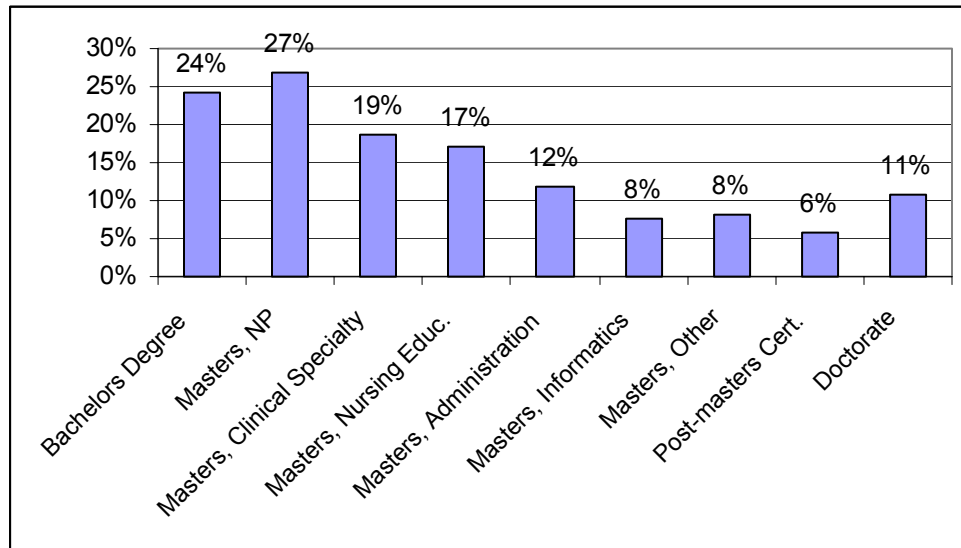
Only 35% of RNs who responded to the survey reported that they had no interest in continuing their education. Forty percent were interested in advanced education in nursing, and 10% were interested in advanced education outside of nursing. Ten percent were currently attending school for an advanced degree in nursing, while 2% were currently attending school for an advanced degree outside of nursing.

**Figure 108. Future Educational Plans of Hospital RNs**



Of the 39% of RNs in the study who reported they were interested in advanced education in nursing but who were not current attending school for such a degree, the most common degree cited was a master's degree to become a nurse practitioner (NP) (27%), followed by a bachelor's degree (24%), and a master's degree to become a clinical nurse specialist (19%). A large number were also interested in a master's degree in nursing education (17%).

**Figure 109. Nursing Degree(s) Interested In Pursuing (Those Interested But Not Attending)**



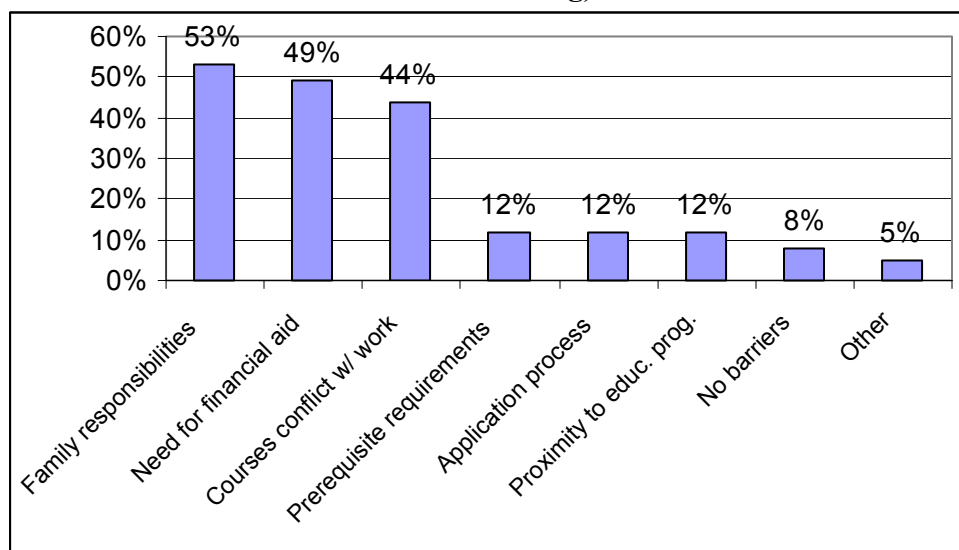
Interest in advance education varied by current educational attainment. As seen in Table 10, diploma nurses and associate degree nurses who wished to continue their education were most likely to aspire to a bachelor's degree, although almost half reported interest in a master's degree, too. Bachelor's degree RNs overwhelmingly were interested in a master's degree, while master's degree RNs were most likely to be interested in a doctorate (although 30% were interested in additional master's degrees and 29% were interested in a post-master's certificate).

**Table 10. Nursing Degree(s) Interested In Pursuing, by Current Highest Nursing Degree (Those Interested But Not Attending)**

	Bachelor's	Master's	Post-Master's	Doctorate
Diploma	61%	48%	0%	0%
Associate	73%	45%	2%	4%
Bachelor's	1%	89%	2%	4%
Master's	0%	30%	29%	55%

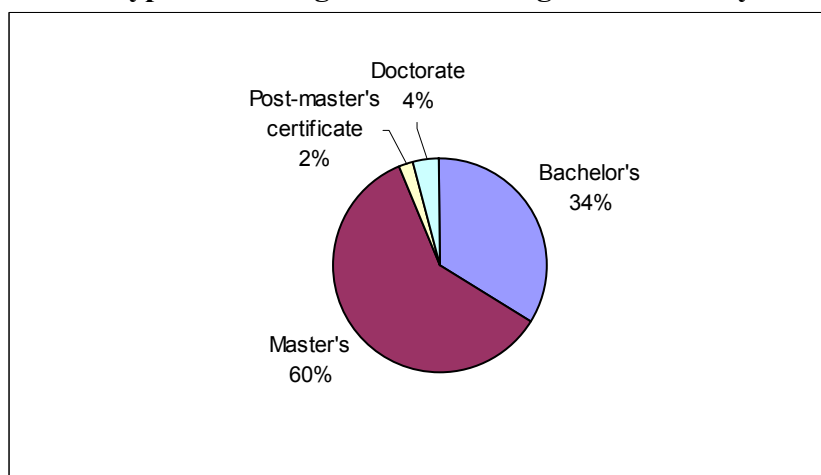
The barriers to pursuing advanced education in nursing that were most commonly cited by RNs interested by not attending school were family responsibilities (53%), need for financial aid (49%), and a conflict between course and work schedules (44%).

**Figure 110. Barriers to Pursuing Advanced Education in Nursing (Those Interested But Not Attending)**



Of the 10% of RNs who reported that they were currently attending school for an advanced degree in nursing, 60% were in master's programs, while 34% were in bachelor's programs, 2% were in post-master's certificate programs, and 4% were in doctoral programs.

**Figure 111. Type of Nursing Education Program Currently Attending**

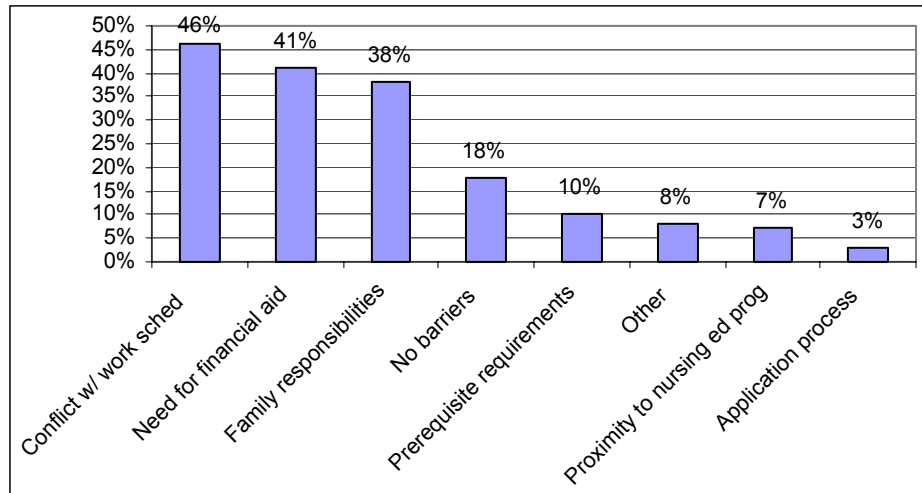


It was difficult to pinpoint the areas in which nurses were pursuing master's degrees because the question asked them to indicate all degrees that they were currently pursuing or were interested in pursuing. Many RNs who appeared to be enrolled in a master's program marked multiple areas, presumably including the one in which they were currently enrolled and others in which they had interest. Among RNs currently attending a master's in nursing program, 59% indicated nurse practitioner programs, 25% indicated nursing education programs, 15% indicated

administration programs, and 9% indicated clinical specialty training programs. Only 5% indicated informatics, and 6% indicated some other area of nursing.

Among RNs currently attending school for an advanced degree in nursing, the most commonly cited barrier was schedule conflict, followed by financial aid, and family responsibilities.

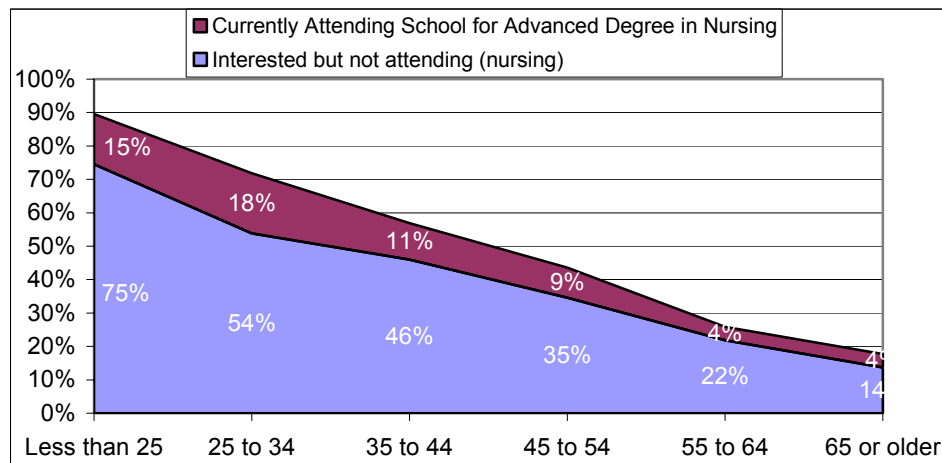
**Figure 115. Barriers Reported by RNs Currently Attending Nursing Degree Program Reporting**



### Demographic Characteristics

Both interest and attendance declined with RN age, as shown in Figure 116. The decline was proportional, however. The percentage of those interested who were actually attending was not significantly related to RN age.

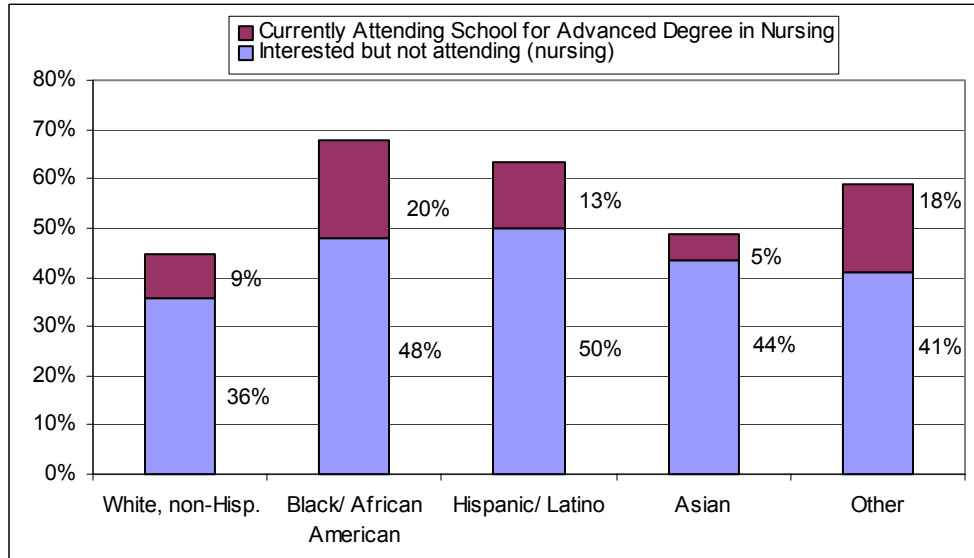
**Figure 116. Interest and Attendance in Advanced Nursing Education, by RN Age**



There were some significant racial/ethnic differences in the percentage of RNs who were interested in further education but not attending, and the percentage of those who were currently attending school. Non-Hispanic Whites were much less likely than any other group to be

interested but not attending, and were less likely than any group except Asians to be attending. Non-Hispanic Black/African-American RNs were most likely to be currently attending school (a notable 20%).

**Figure 117. Interest and Attendance in Advanced Nursing Education, by Race/Ethnicity**



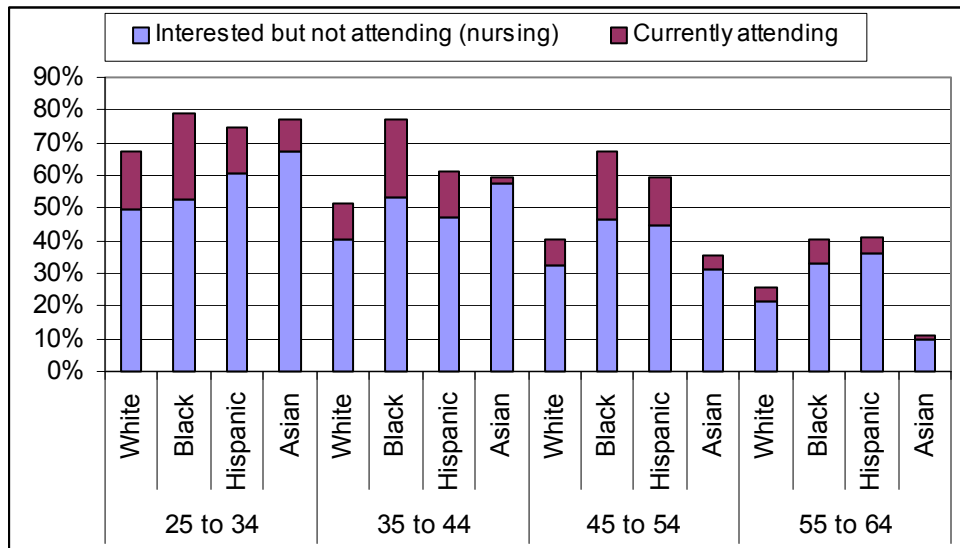
Note: For interested but not attending, White vs. Black,  $p \leq .000$ ; White vs. Hispanic,  $p \leq .000$ ; White vs. Asian,  $p = .001$ . For attending, White vs. Black,  $p \leq .000$ ; White vs. Asian,  $p = .001$ ; White vs. Other,  $p = .001$ ; Black vs. Hispanic,  $p = .026$ ; Black vs. Asian,  $p \leq .000$ ; Asian vs. Other,  $p \leq .000$ .

Some of the disparity was due to White and Asian RNs having less interest in attending school than Black/African-American or Hispanic/Latino RNs. Interest did not completely explain the disparity in attendance rates, however. Among those who were either attending or interested in attending, Blacks/African-Americans were more likely to be actually attending than Whites (29%), while Asians were less likely to be attending than any other group (10%)<sup>19</sup>. It was not clear why nine out of ten Asian RNs who would like to continue their education were not doing so, but it was notable that nearly one-third of Black/African-American RNs who would like to continue their education were in the process of realizing their goals.

Non-Hispanic White and Asian RNs tended to be older than their Black/African-American or Hispanic/Latino counterparts, but this also failed to explain the racial/ethnic differences. Figure 118 shows that Black/African-American and Hispanic/Latino RNs were more likely to be interested in and/or attending a nursing education program at almost all ages, and this effect became more pronounced at older ages.

<sup>19</sup> Non-Hispanic Whites and Hispanics/Latinos were both 21%.

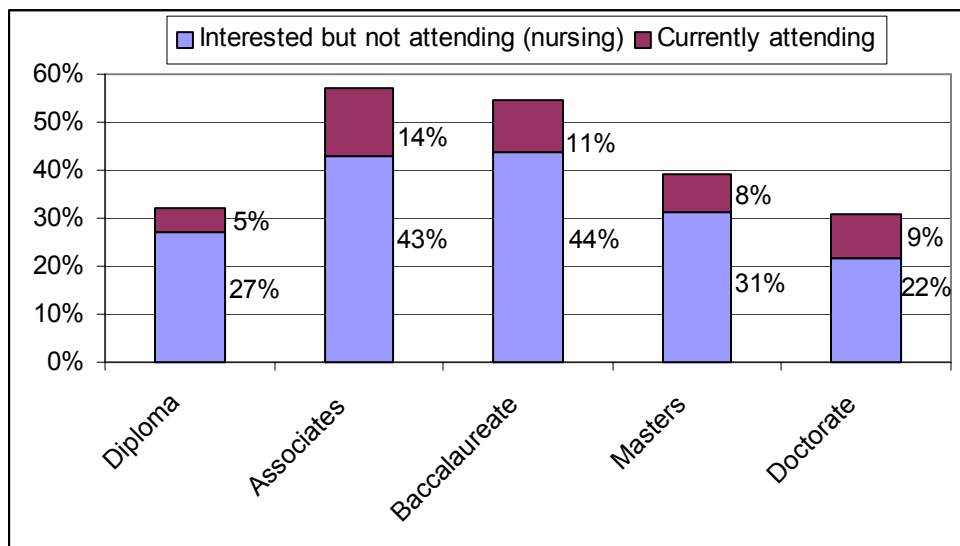
**Figure 118. Interest and Attendance in Advanced Nursing Education, by Race/Ethnicity and Age**



Note: Those under 25 and over 64 are not shown due to insufficient numbers when broken out by race/ethnicity.

RNs with associate or bachelor's degrees were most likely to be both interested and attending a nursing degree program. This was not surprising, since diploma nurses tended to be older and RNs who already had graduate degrees presumably had less to gain from earning an additional bachelor's degree. There were no significant differences by degree in the percentage of those who were interested who were actually attending.

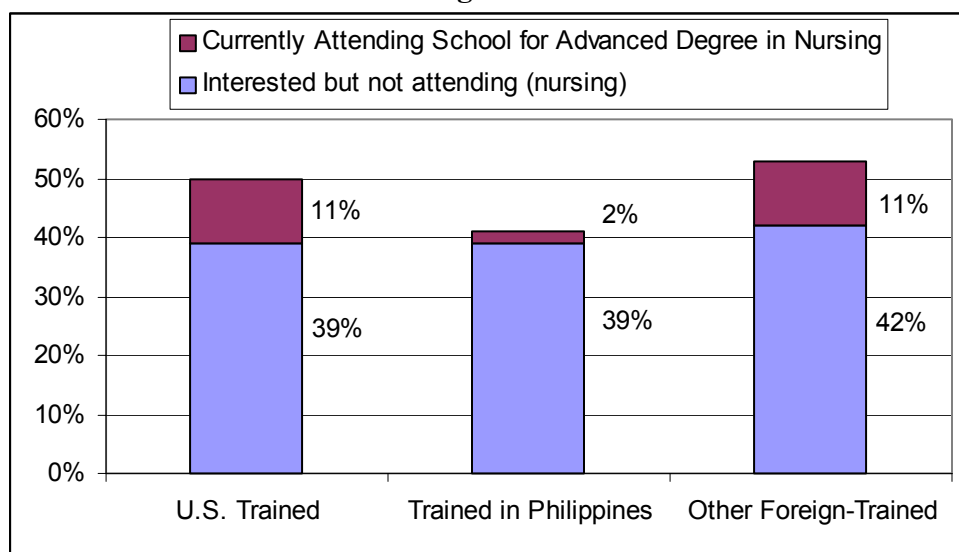
**Figure 119. Interest and Attendance in Advanced Nursing Education, by Highest Nursing Degree**



Note: For interested but not attending, associate vs. diploma, associate vs. master's, bachelor's vs. diploma, and bachelor's vs. master's all  $p \leq .000$ . For attending, diploma vs. associate,  $p \leq .000$ ; diploma vs. bachelor's,  $p = .002$ ; associate vs. bachelor's,  $p = .009$ ; associate vs. master's,  $p \leq .000$ .

A very interesting pattern emerged in regard to location of training. While there were no significant differences in the percentage of RNs who were interested but not attending, Philippine-trained RNs were much less likely to be attending than their counterparts trained in the U.S. or in other foreign countries. Furthermore, Philippine-trained RNs were much less likely to be attending as a percentage of those interested – only 2% of Philippine-trained RNs who were either interested or attending were attending, compared to 18% of U.S.-trained and foreign-trained RNs. Filipino RNs appeared to face more serious barriers than others in pursuing their educational goals.

**Figure 120. Interest and Attendance in Advanced Nursing Education, by Location of Initial Nursing Education**



Note: For attending, Philippines vs. U.S. and Philippines vs. other foreign-trained, both  $p \leq .000$ .

### Hospital Characteristics

RNs working in unionized hospitals were more likely than their counterparts in non-unionized hospitals to be both interested in attending school for an advanced nursing degree (41% versus 38%,  $p = .018$ ) and to be actually attending school (11% versus 9%,  $p = .005$ ). Similarly, RNs working in upstate hospitals were more likely than their downstate counterparts to be interested (41% versus 33%,  $p \leq .000$ ) and to actually attend (11% versus 7%,  $p \leq .000$ ).

Interestingly, those in public hospitals were more likely than those in private hospitals to be interested in attending (46% versus 40%,  $p = .046$ ), but were less likely to actually be attending (6% versus 11%,  $p \leq .000$ ). Put another way, 22% of those in private hospitals with any interest in continuing their nursing education were enrolled in a program, compared to only 12% of those in public hospitals who were interested.

### Employment Characteristics

Employment characteristics appeared not to be related to either interest in advanced nursing education or the pursuit of such education. The single exception was that full-time RNs were

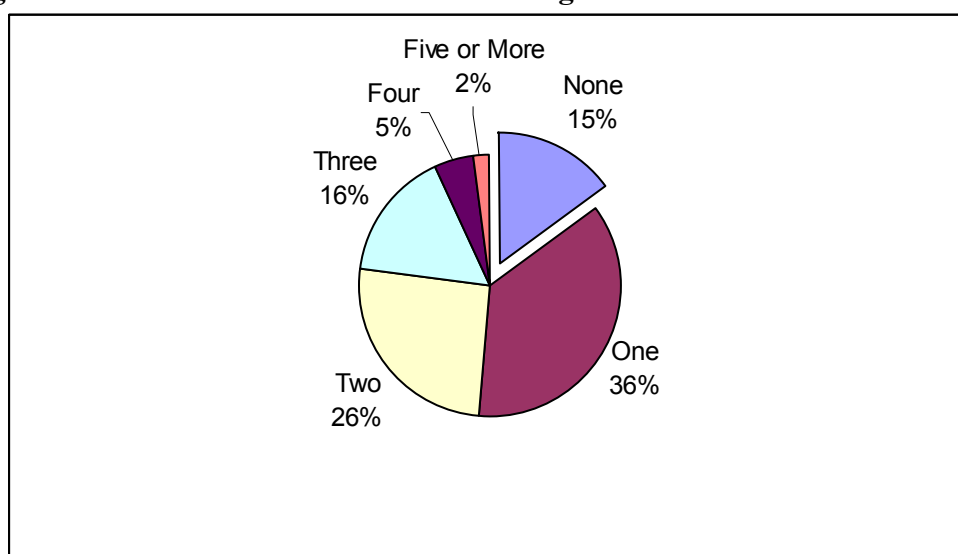
more likely than part-time RNs to be interested in further education (41% versus 29%,  $p \leq .000$ ) or to be attending an education program (11% versus 7%,  $p = .003$ ).

### Barriers to Advance Education

While 42% of respondents did not report any barriers to advanced education, only 10% of RNs indicated they had no barriers to advanced education. Most of the others did not mark any response to the question. This section will consider only respondents who marked at least one of the eight responses to the barriers question, including “None.”

As shown below in Figure 121, 15% of RNs who answered the question indicated they had no barriers to pursuing advanced education. More than one-third reported only one barrier, and another 26% reported two barriers. About one-quarter of respondents (23%) reported three or more barriers. The mean for all RNs was 1.66 barriers.

**Figure 121. Number of Barriers To Pursuing Advanced Education in Nursing**



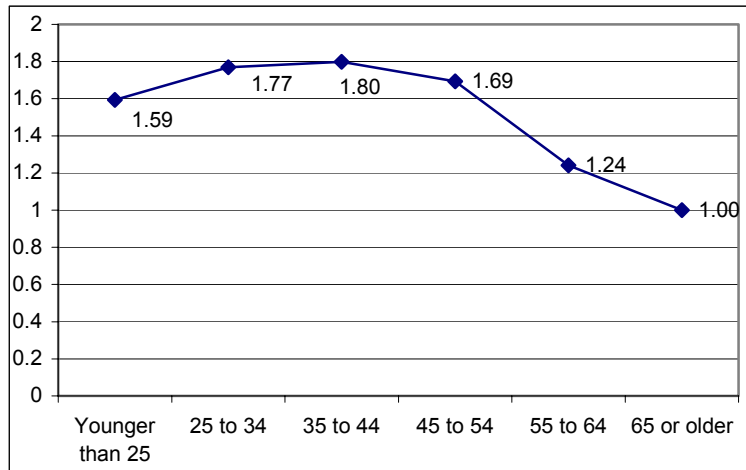
Men reported more barriers on average than women (1.84 versus 1.66,  $p = .014$ ). Hispanic/Latino and Asian RNs reported more barriers to advanced education than White and Black/African-American RNs (1.86 and 1.85 versus 1.63 and 1.58, respectively)<sup>20</sup>. RNs trained in the Philippines reported more barriers than other RNs (1.96 versus 1.66 for U.S.-trained RNs and 1.51 for RNs trained in other foreign countries [both  $p \leq .000$ ]).

RNs with no children at home reported fewer barriers than RNs with children of any age at home (1.57 versus 1.85 if all children were younger than age 6 [ $p = .001$ ], 1.88 if children were both older and younger than age 6 [ $p = .001$ ], and 1.72 if children were all age 6 or older [ $p = .005$ ]). RNs who were a primary caregiver to a dependent adult also reported significantly more barriers than those who were not (1.84 versus 1.64,  $p \leq .000$ ). Reported barriers peaked during the 35-44 age range, consistent with the ages when women are most likely to be caring for dependent children and/or aging parents.

<sup>20</sup> White vs. Hispanic,  $p = .028$ ; White vs. Asian,  $p = .001$ ; Black vs. Hispanic,  $p = .026$ ; Black vs. Asian,  $p = .005$ .



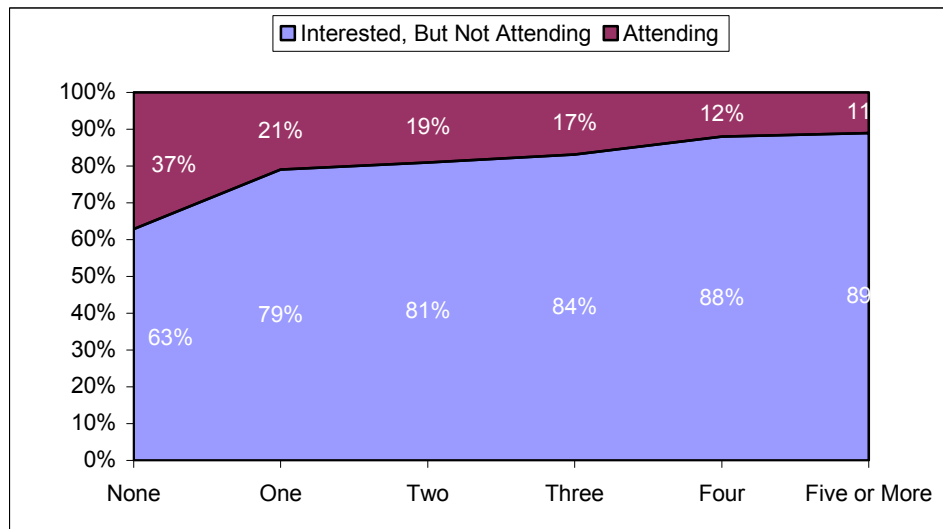
**Figure 122. Average Reported Barriers to Pursuing Advanced Education, by Age**



RNs working in hospitals located in HPSAs reported more barriers on average than other RNs (1.84 versus 1.61,  $p < .000$ ). Full-time RNs averaged more barriers than part-time RNs (1.67 versus 1.55,  $p = .037$ ). No other hospital or employment characteristics were significantly related to number of barriers.

It was clear that perceived barriers exerted an impact on the likelihood that an RN interested in advanced education would do so. Among RNs interested in advanced nursing education and who perceived no barriers, almost 40% were enrolled. This fell to little more than one in ten among those who perceived four or more barriers.

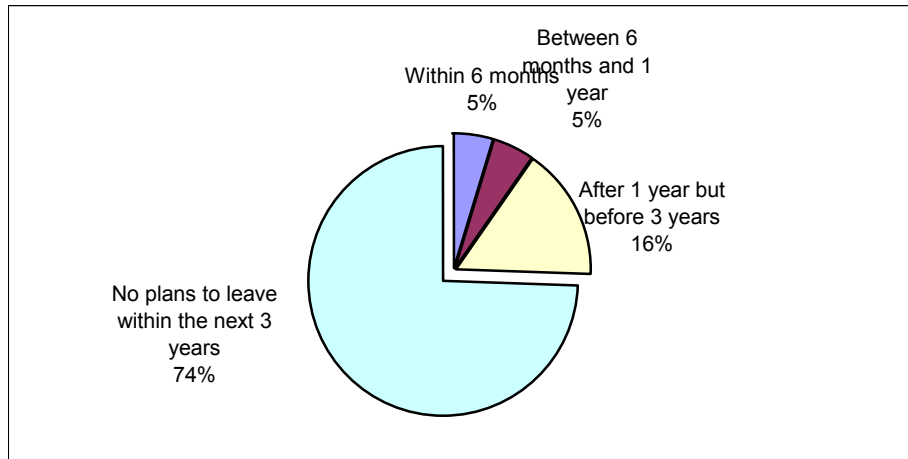
**Figure 123. Interest Versus Attendance in Advanced Nursing Education, by Number of Perceived Barriers (Those Interested or Attending Only)**



## V. Future Plans

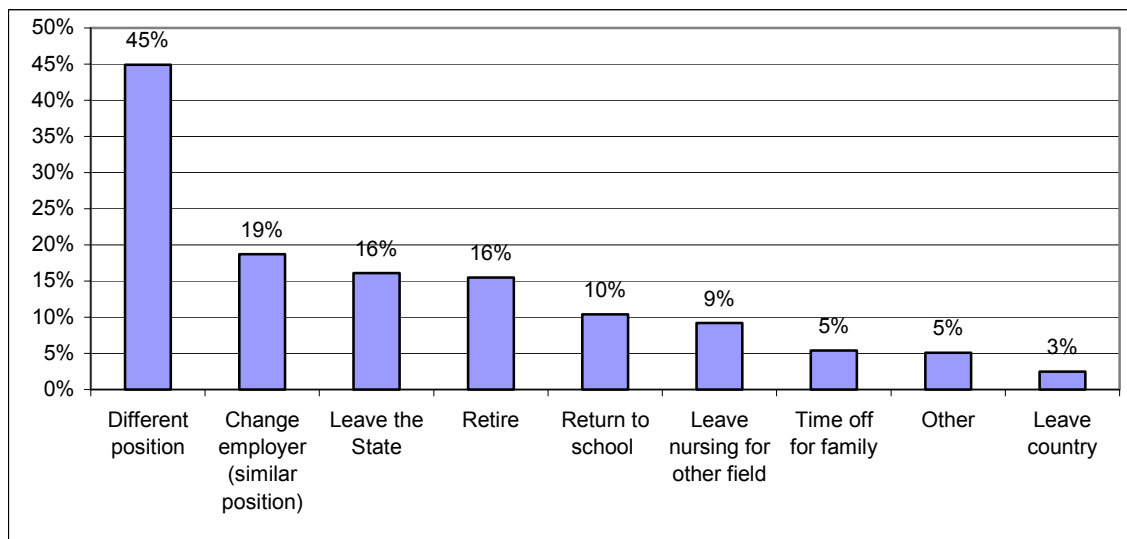
Three-quarters of RNs reported no plans to leave their current nursing position within the next three years, and only 5% planned to leave within the next six months.

**Figure 124. Timing of Planned Departure From Current Nursing Position**



The most commonly given plan, among those who planned to leave, was to look for a different position (45%). This could be with a different employer or with their current employer. The second most commonly cited reason was to take a similar position with a different employer (19%). Overall, less than half of RNs who planned to leave their current position (39%, or 10% of all hospital RNs) had plans that would remove them indefinitely from the nursing workforce in New York within the next three years (e.g., retire, take a job outside of nursing, or leave the state or country).

**Figure 125. Plans After Leaving Current Nursing Position (Only Those Planning To Leave Within Three Years)**



Note: Sum exceeds 100% because responses were not mutually exclusive.

## Departures From the Field of Nursing

Overall, only 2% of hospital RNs planned to take a job outside of nursing within the next three years. Remarkably few variables were significantly associated with departure plans, but this may be an artifact of the limited statistical power associated with the relatively small number of respondents who planned to depart nursing.

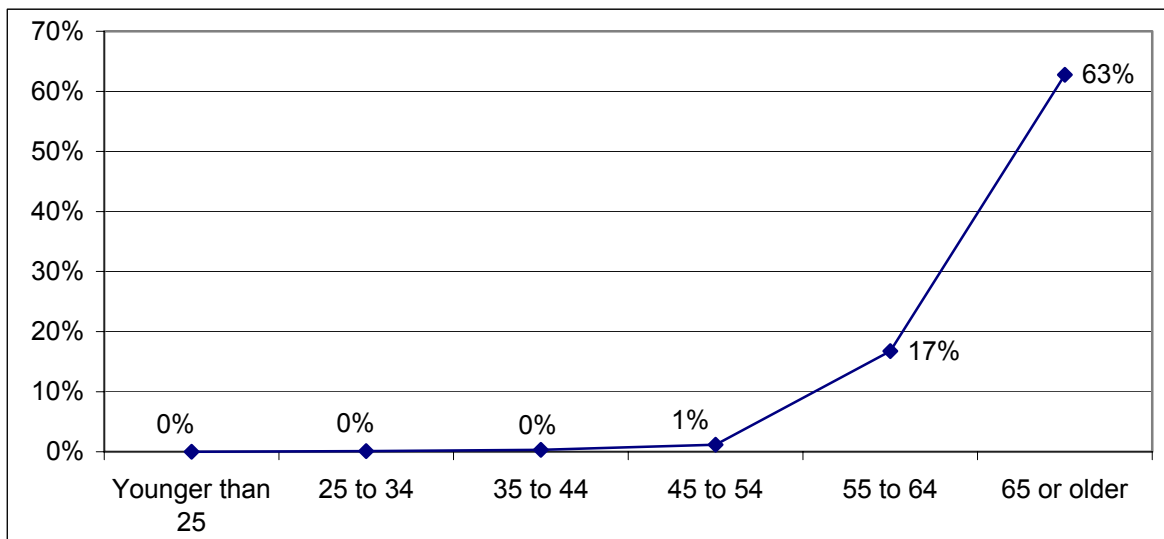
Male RNs were three times as likely as female RNs to plan to leave the field, however – 6% versus 2% ( $p=.001$ ). Age and years as an RN were not related to plans to leave the field, but never-married women were more likely to plan to leave than currently married or partnered women (3% versus 2%,  $p=.012$ ), and those with no children were more likely to plan to leave than those with children either all younger than age 6 or all age 6 or older (3% versus 1% [ $p=.030$ ] and 2% [ $p=.021$ ], respectively).

There were, however, significant associations with a number of satisfaction variables. Those RNs who planned to leave the field were significantly less satisfied with their compensation package (2.96 versus 3.47,  $p\leq.000$ ), perceived more physical risk (2.93 versus 2.45,  $p\leq.000$ ), reported more time constraints (3.68 versus 3.37,  $p\leq.000$ ), and reported greater increases in patient-related demand (0.53 versus 0.38,  $p\leq.000$ ). They felt less supported by their employer (2.86 versus 3.53,  $p\leq.000$ ). They were also less satisfied with their work schedule (3.49 versus 3.97,  $p\leq.000$ ) and reported greater decreases in staffing adequacy (-0.39 versus -0.19,  $p = .009$ ). Reported increases in employer/staffing demands, increases in voluntary overtime, and mandated overtime were not related to plans to leave the field.

### Retirements

Overall, 4% of RNs planned to retire within the next three years. Retirement plans were clearly related to RN age, as shown below, and only appeared to become a factor among RNs age 55 and older.

**Figure 126. Percent of RNs Reporting Plans to Retire in Next Three Years, by Age**



Due to this strong association, it was only worth looking at the predictors of retirement plans among RNs age 55 and older.

Older RNs working part time were more likely to report retirement plans than those working full time (32% versus 19%,  $p=.017$ ). Older RNs with no children in the home were more likely to report retirement plans (24%) than those with children still living at home (12%,  $p=.001$ ), and those who were a primary caregiver to a dependent adult were less likely to report retirement plans than those who were not (14% versus 21%,  $p=.030$ ). Older RNs working in public hospitals were much more likely to report retirement plans than those in private hospitals (35% versus 19%,  $p=.010$ ). Satisfaction and work environment variables appeared to have little impact on retirement plans.

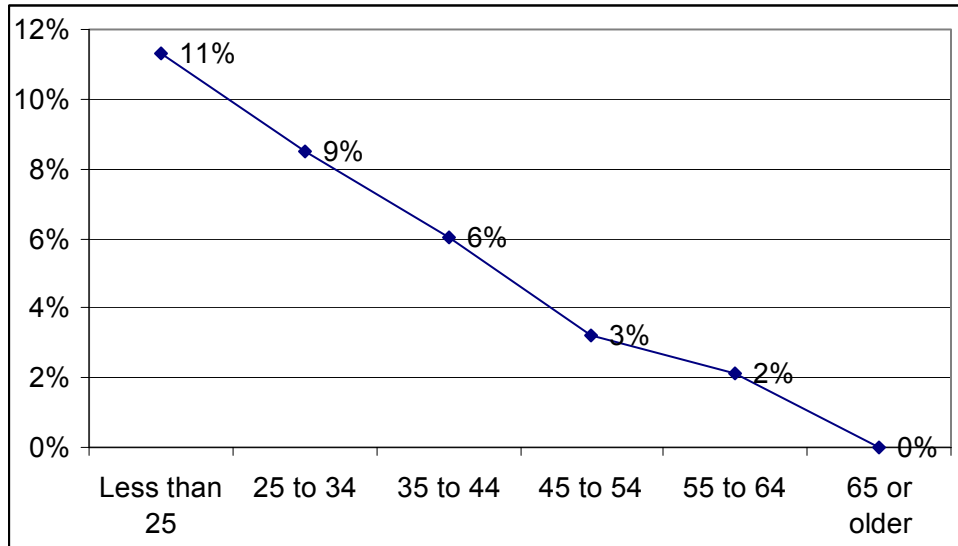
### **Changing Employers**

From the point of view of employers, their RNs' plans to look for nursing employment elsewhere are an important issue. Those who planned to look for a different type of position with a different employer cannot be distinguished in the survey from those who planned to look for a different type of position with their current employer. Those who planned to look for a similar type of position with a different employer, however, can be presumed to be unsatisfied with their current situation, and their data can provide important information about how to reduce hospital RN turnover.

Five percent of hospital RNs planned to change employers within three years to accept a similar position to the one they currently hold.

Men were more likely to report such plans than women (7% versus 5%,  $p=.031$ ), and U.S.-trained RNs were more likely to report such plans than those trained in the Philippines (5% versus less than 3%,  $p=.044$ ). Never-married RNs were more likely to plan to change employers than currently married women (6% versus 4%,  $p=.016$ ). The likelihood of changing employers declined dramatically with age, from 11% of the youngest RNs to virtually none of the oldest RNs. Similarly, RNs who entered the field in the past five years were much more likely than others to plan to change jobs (9% versus 4%), although this appears to be largely an age effect rather than an experience effect.

**Figure 127. Percent of RNs Planning To Seek a Similar Job with New Employer, by Age**



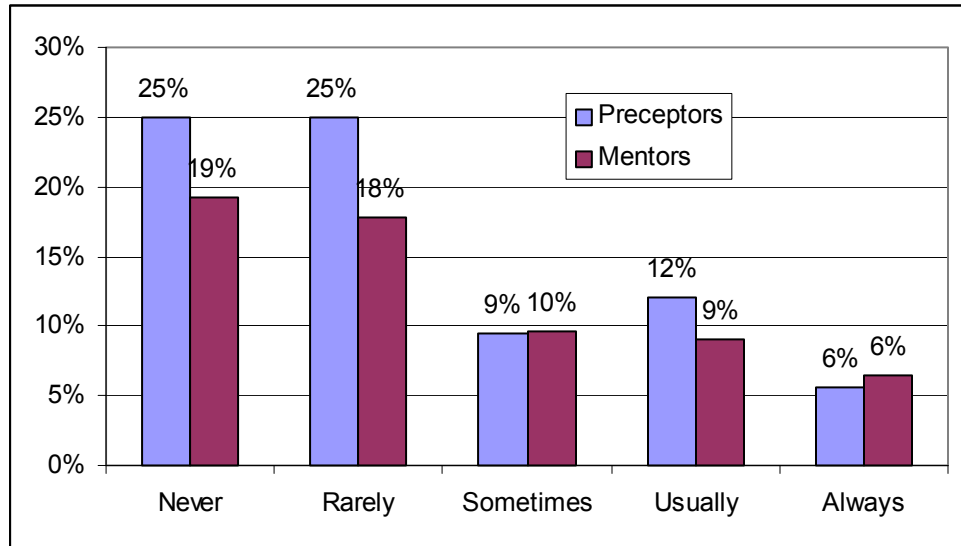
U.S.-trained RNs were more likely to plan to change employers than their Philippine-trained counterparts (5% versus less than 3%). RNs working in hospitals located in HPSAs were less likely to plan to change employers (3% versus 5%,  $p=.003$ ), which may reflect limited alternative employers in those areas. Similarly, downstate RNs were more likely than upstate RNs to plan to change employers (5% versus 3%,  $p=.013$ ).

RNs who planned to change employers felt less supported (3.54 and 3.11,  $p\leq.000$ ), were less satisfied with their compensation (3.28 versus 3.47,  $p=.001$ ), and perceived more time constraints (3.53 versus 3.37,  $p=.007$ ). They were also less satisfied with their work schedules (3.65 versus 3.97,  $p\leq.000$ ). Physical risk and mandatory overtime did not appear to enter their decisions. They were more likely to see declines in staffing adequacy (-0.33 versus -0.19,  $p=.008$ ) and perceived much greater increases in patient-related demands (0.45 versus 0.38,  $p=.008$ ).

### **New Nurse Turnover**

The plans of new RNs to leave their hospital were not related to how well they believed their nursing education prepared them or to the adequacy of their orientation at their current facility. They were, however, markedly less likely to plan to leave if their orientation program made frequent use of preceptors or mentors, as shown in Figure 128.

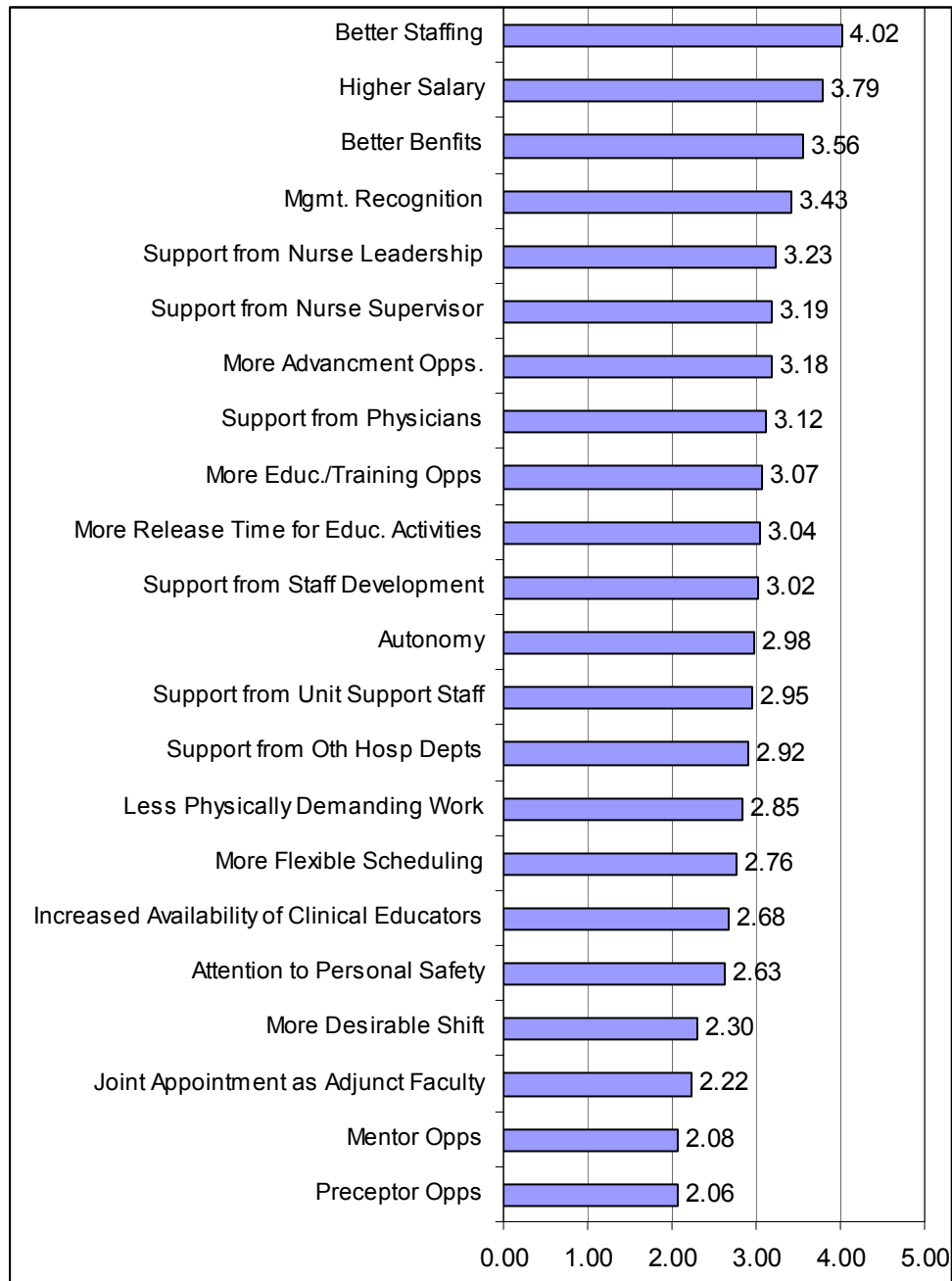
**Figure 128. Percent of New RNs Planning to Leave Their Hospital, by Frequency of Preceptors and Mentors Used in Orientation**



### **Encouraging Nurses to Remain In Current Nursing Position**

The survey asked RNs about 22 areas in which improvements would encourage them to stay in their current position. Figure 129 illustrates the responses of RNs who reported plans to leave their current position in the next three years. The variable with the most potential to encourage RNs to remain in their current position was better staffing, followed by higher salary, better benefits, and more recognition from management.

**Figure 129. Mean Responses to Items That Could Encourage RNs to Remain in Their Current Nursing Position for Longer (1=Rarely; 5=Always)**



Statistical factor analysis pointed to three factors related to changes that would encourage nurses to remain in their current nursing positions longer. These included better relationships, career development opportunities, and rewards. One change, better staffing, did not load with any of these three factors, and stands alone in analyses.

## **Relationships**

The variables related to relationships included: Encouraged to Stay Longer for More Supportive Working Relationships with Nurse Supervisor, Encouraged to Stay Longer for More Supportive Working Relationships with Physicians, Encouraged to Stay Longer for More Supportive Working Relationships with Unit Support Staff, Encouraged to Stay Longer for More Supportive Working Relationships with Nurse Leadership, Encouraged to Stay Longer for More Supportive Working Relationships with Staff Development, and Encouraged to Stay Longer for More Supportive Working Relationships With All Other Hospital Departments. Scores on this index ranged from 1 to 5, with a mean of 3.83 and a standard deviation of 1.07.

All statistics below are for RNs who reported plans to leave their current job within three years. No distinction was made between those who planned to retire, take a job in another field, or simply change employers.

## **Demographic Characteristics**

Non-Hispanic White RNs were not as encouraged to stay by more supportive relationships as other racial/ethnic groups<sup>21</sup>. RNs age 55-64 also reported being less encouraged to stay by more supportive relationships compared to RNs in the 25-34 and 35-44 age groups (3.40 versus 3.78 [p=.007] and 3.83 [p=.002], respectively). RNs trained in the Philippines reported being significantly more likely to stay for improved relationships than U.S.-trained RNs (4.19 versus 3.66, p=.003).

## **Hospital Characteristics**

RNs employed in hospitals located in HPSAs reported being significantly more likely to stay as a result of more supportive relationships (3.85 versus 3.66, p = .016). RNs working in unionized hospitals were significantly more encouraged to stay by more supportive relationships than those in non-unionized hospitals (3.77 versus 3.62, p=.030), and those in downstate hospitals were more encouraged to stay by more supportive relationships than those in upstate hospitals (3.74 versus 3.53, p=.029).

## **Employment Characteristics**

No characteristics of employment were associated with how much improved relationships would encourage RNs planning to leave their current jobs to stay.

## **Career Development and Improved Working Conditions**

The variables related to career development and improved working conditions included: Encouraged to Stay Longer for a More Desirable Shift, Encouraged to Stay Longer for Increased Availability of Clinical Educators on Unit, Encouraged to Stay Longer for Less Physically Demanding Work, Encouraged to Stay Longer for More Attention by Employer to Personal Safety Issues, Encouraged to Stay Longer for the Opportunity to Precept New RNs, Encouraged to Stay Longer for the Opportunity to Mentor New RNs, and Encouraged to Stay Longer for Joint Appointment as Adjunct Faculty. This scale also ranged from 1 to 5, with a mean value of 3.25 and a standard deviation of 1.11.

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<sup>21</sup> 3.53 vs. Black/African-American (3.81, p=.062); Hispanic/Latino (3.92, p=.017); Asian (4.04, p<=.000); and Other (4.10, p=.003).



## **Demographic Characteristics**

Non-Hispanic White RNs were less encouraged to stay for career development and improved working conditions than other racial/ethnic groups<sup>22</sup>. Both RNs trained in the Philippines and other foreign-trained RNs reported being significantly more encouraged to stay for career development and improved conditions than U.S.-trained RNs (3.83 and 3.54 versus 3.19,  $p \leq .000$  and  $p = .021$ , respectively).

## **Hospital Characteristics**

RNs employed in hospitals located in HPSAs were significantly more encouraged to stay for career development opportunities and improved working conditions (3.48 versus 3.17,  $p \leq .000$ ). RNs working in unionized hospitals were also significantly more encouraged to stay for career development opportunities and improved working conditions than those in non-unionized hospitals (3.31 versus 3.16,  $p = .023$ ).

## **Employment Characteristics**

There were no characteristics of employment that were associated with how much RNs with plans to leave were encouraged to stay in their current jobs by career development opportunities.

## **Rewards**

The variables related to Rewards were: Encouraged to Stay Longer for More Flexible Scheduling, Encouraged to Stay Longer for Higher Salary, Encouraged to Stay Longer for Better Benefits, Encouraged to Stay Longer for More Autonomy, Encouraged to Stay Longer for Recognition from Management, Encouraged to Stay Longer for More Educational/Training Opportunities, Encouraged to Stay Longer for More Release Time for Educational Opportunities, and Encouraged to Stay Longer for More Opportunities for Advancement/Promotions. This scale ranged from 1 to 5 in value, with a mean of 3.88 and a standard deviation of 1.01.

## **Demographic Characteristics**

Non-Hispanic White RNs were less encouraged to stay for increased rewards than other racial/ethnic groups<sup>23</sup>. RNs trained in the Philippines reported being significantly more encouraged to stay by increased rewards than U.S.-trained RNs (4.38 versus 3.84,  $p \leq .000$ ).

RNs age 55-64 reported being significantly less encouraged to stay for increased rewards compared to RNs in the 25-34 and 35-44 age groups (3.60 versus 3.94 [ $p = .005$ ] and 4.00 [ $p = .001$ ], respectively). RNs age 65 and older reported being significantly less encouraged to stay by increased rewards than those in any other age group except those age 55-64<sup>24</sup>.

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<sup>22</sup> 3.06 vs. Black/African-American (3.32,  $p = .076$ ); Hispanic/Latino (3.49,  $p = .003$ ); Asian (3.66,  $p \leq .000$ ); Other (3.66,  $p = .001$ ).

<sup>23</sup> 3.75 vs. Black/African-American (3.90,  $p = .976$ ); Hispanic/Latino (3.96,  $p = .648$ ); Asian (4.19,  $p \leq .000$ ); Other (4.18,  $p = .023$ ).

<sup>24</sup> 3.04 compared to 3.89 for those younger than age 25 ( $p = .018$ ); 3.94 for those age 25-34 ( $p = .001$ ); 4.00 for those age 35-44 ( $p = .001$ ); and 3.87 for those age 45-54 ( $p = .005$ ).

### Hospital Characteristics

RNs employed in hospitals located in HPSAs were significantly more encouraged to stay for increased rewards (4.00 versus 3.84,  $p = .015$ ).

### Employment Characteristics

There were no characteristics of employment that were associated with how much RNs with plans to leave were encouraged to stay in their current jobs for increased rewards.

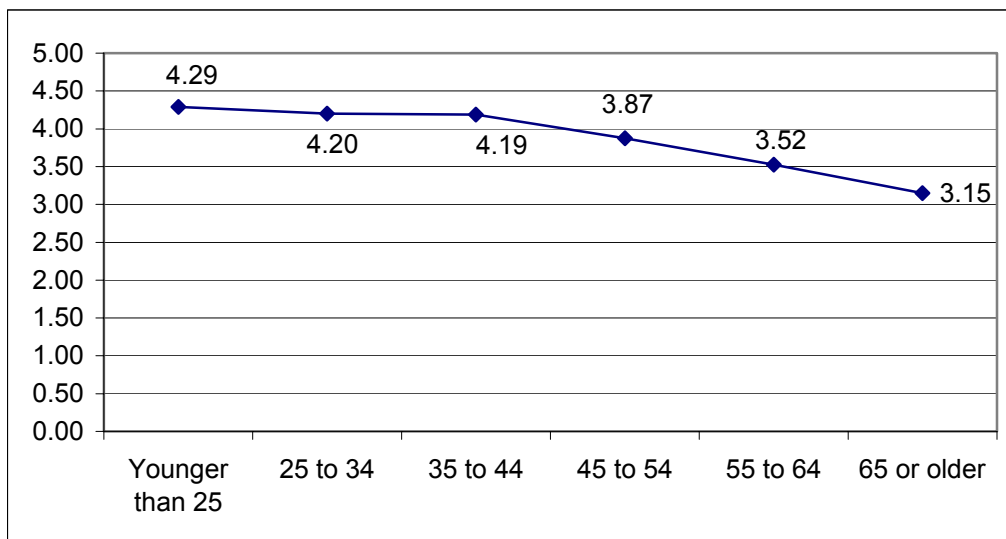
### Better Staffing

The average score for being encouraged to stay for better staffing was a 4.02 on a 5-point scale – the highest score of any composite or individual factor. Clearly, hospital RNs found inadequate staffing a major source of concern in their working lives.

### Demographic Characteristics

Non-Hispanic White RNs were significantly less encouraged to stay in their job for better staffing (3.88 versus 4.35,  $p = .003$ ). RNs trained in the Philippines were significantly more encouraged to stay for better staffing than U.S.-trained RNs (4.48 versus 3.98,  $p = .016$ ). RNs age 55-64 and 65 and older were less encouraged to stay for better staffing compared to RNs in the younger than 25, 25-34, and 35-44 age groups.

**Figure 130. How Much Encouraged to Stay by Better Staffing (Scale of 1-5)**



### Hospital Characteristics

RNs employed in hospitals located in HPSAs reported being significantly more encouraged to stay for better staffing (4.23 versus 3.95,  $p \leq .001$ ).

### Employment Characteristics

Staff nurses appeared to bear the brunt of inadequate staffing, as they reported being significantly more encouraged to stay in their current position for better staffing than their

counterparts in nursing unit management or executive staff positions (4.13 versus 3.63 [ $p=.003$ ] and 3.05 [ $p=.001$ ], respectively).

Night shift RNs reported being significantly more encouraged to stay in their current position for better staffing than day shift RNs (4.27 versus 3.94,  $p=.005$ ), indicating that night shift RNs may see inadequate staffing as a greater problem in their work.