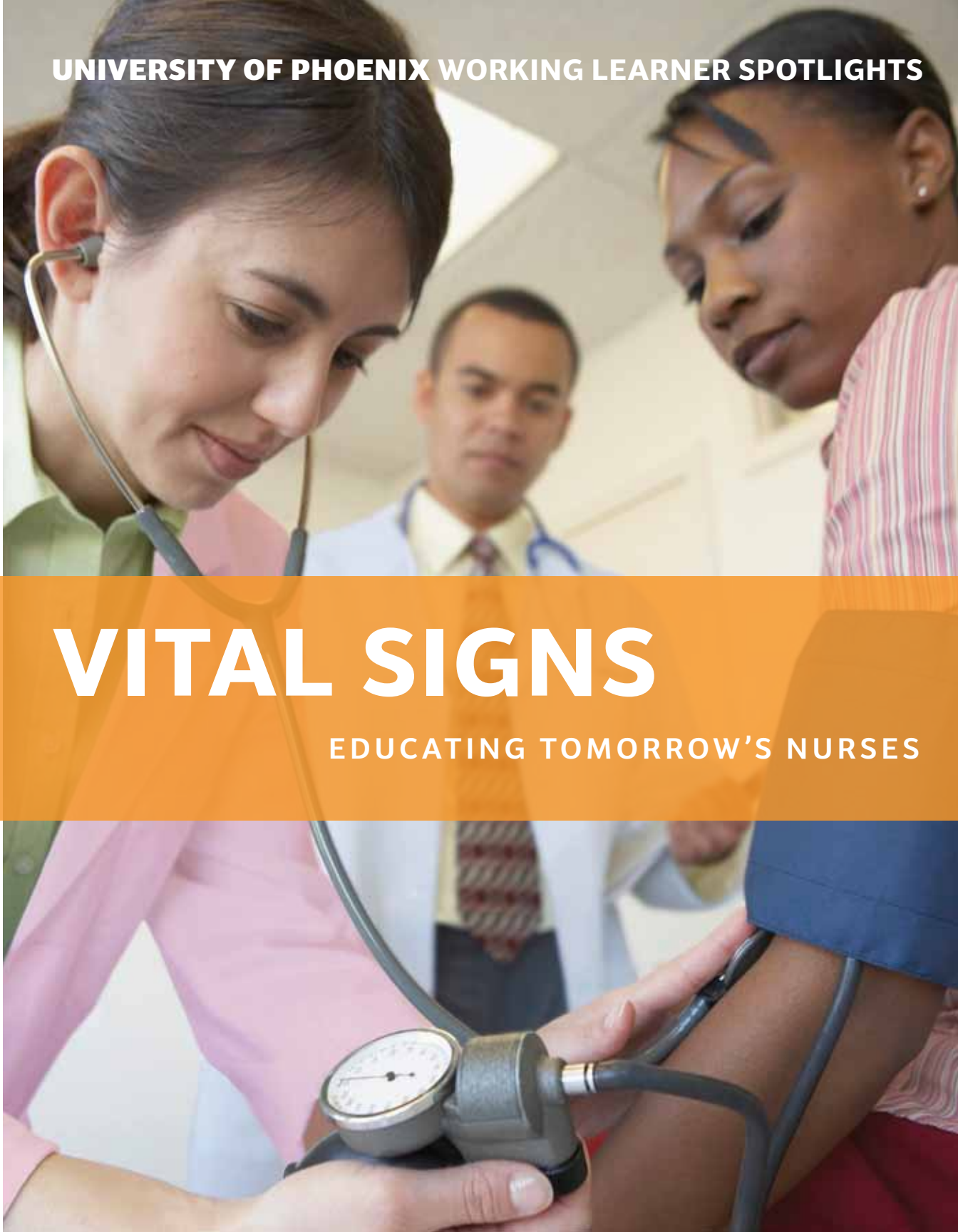


UNIVERSITY OF PHOENIX WORKING LEARNER SPOTLIGHTS

VITAL SIGNS

EDUCATING TOMORROW'S NURSES



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Educating Tomorrow's Nurses

PREFACE	<i>by William Pepicello, Ph.D. President, University of Phoenix</i>	5
INTRODUCTION	Vital Signs: Nursing in Transition	7
PART I: CHALLENGES AND CHANGES IN THE NURSING FIELD		11
CHAPTER 1	Nursing Shortage and Patient Safety	13
CHAPTER 2	Nursing in a Diverse Society	23
CHAPTER 3	Technology Transforms Nursing Practice	37



PART II: DEGREES AND CAREER PATHS FOR THE 21ST-CENTURY NURSE	47
CHAPTER 4 The Changing Market for Nursing Degrees	49
CHAPTER 5 Nurses with Advanced Degrees	63
CHAPTER 6 Educating Tomorrow's Nurses	81
CONCLUSION: SUPPORTING WORKING LEARNER NURSES	97
ENDNOTES	99
REFERENCES	104
ACRONYMS AND ABBREVIATIONS	109
ACKNOWLEDGMENTS	111

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The University of Phoenix Knowledge Network produces publications on University of Phoenix working learners and the larger nontraditional student population they represent. With over 30 years of experience as an innovator and leader in higher education for working adults, the University of Phoenix is in a unique position to share real-life stories of working learners' challenges and accomplishments and to share best practices for serving this large and growing population. By presenting facts, figures, and students' perspectives, the University of Phoenix Knowledge Network promotes a deeper understanding of how working learners contribute to the workforce and society.

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PREFACE

By William Pepicello, Ph.D.

President, University of Phoenix

Nurses are everyday heroes: hardworking men and women who use their knowledge, skills, and sensitivity to alleviate patients' pain and anxiety, empower them to manage their health, and console them and their families in times of crisis. Yet nurses' role is often misunderstood and the work they do underappreciated. The public tends to view nurses either as angels at the bedside—nurturing but modestly educated—or as the drudges of the healthcare system, who toil at routine duties while doctors perform all the complex and exciting tasks of curing diseases and saving lives.

In fact, nursing is an intellectually demanding career that requires both a talent for caring and a high degree of technical skill. Hospital nurses practice in a technologically sophisticated workplace, drawing upon such disciplines as biochemistry, physics, psychology, epidemiology, management, finance, sociology, and information technology. Other nurses, especially those with advanced degrees, work in fields such as nurse consulting, nursing informatics, and nursing research, where they contribute to the field through leadership and the production of new knowledge.

Misconceptions about the value of nurses' work have contributed to the serious nursing shortage the United States now faces. The American Association of Colleges of Nursing predicts the nation will require 250,000 new nurses over the next 10 to 15 years,¹ but not enough nurses are graduating to fill that need. The shortage has left many hospitals understaffed, and nurses dangerously stressed and overworked, with serious implications for patients' health. Ninety-five percent of hospital RNs says they lack sufficient time and staff to maintain high standards of patient safety, detect complications early, and collaborate with colleagues.²

Today's nurses also require higher levels of education than they now possess. Nursing has become an increasingly complex profession over the past few decades. Hospital patients are sicker and require more sophisticated treatments than in the past. Technology has reshaped most aspects of healthcare, from drug delivery to patient monitoring to medical records. The patient population has become more culturally and linguistically diverse. In addition, nurses are now taking on the roles once held by physicians. No longer “doctors’ handmaidens,” nurses now perform most aspects of primary care. Researchers and nursing organizations, therefore, recommend nurses hold at least a bachelor’s degree: The Robert Wood Johnson Foundation, for example, advocates that 80% of America’s nurses hold BSN degrees by 2020.³

Educators, policymakers, and healthcare administrators must work together to alleviate both the nursing shortage and the shortfall in American nurses’ education. One solution is to make it easier for nurses—many of whom are adults with work and family responsibilities—to earn degrees. Many institutions of higher education have met this challenge by offering online and conveniently scheduled on-site programs that enable nurses to fit education into their busy lives, and I am proud to say University of Phoenix is one of them. We strive to make academic, emotional, and social support systems available to our nursing students—as we do for all our students. The University of Phoenix has long recognized that working learners—whether launching a first career or returning to school later in life—can benefit from belonging to a community of caring faculty, advisors, and classmates.

This book explores some of the ways educators can best shape a new generation of nurses. It discusses current trends in the healthcare workforce, delineates the many educational and career paths nurses choose, and specifies the ways in which well-educated nurses contribute to the well-being of their patients, the medical community, and our nation as a whole. The book also contains compelling stories of real nurses and nursing students who provide a glimpse into the many facets of this demanding and rewarding occupation. My hope is that it fosters a deeper appreciation for current and future nurses, and for the educators who are preparing them to excel.

Phoenix, Arizona
February 2011

INTRODUCTION

Vital Signs: Nursing in Transition

Nursing has changed dramatically over the past several decades. Fifty years ago, nurses wore white dresses, caps, and nylons. Most of them were trained in hospital diploma programs, where they lived in dormitories on site and performed such tasks as sterilizing syringes and bleaching linens. By the 1980s and early 1990s, most nurses wore scrubs and held university degrees, but their jobs were still very different from those of today's nurses. They inhabited a workplace without computers, documented patients' progress on handwritten charts, and cared for people who were much less sick.

In the 21st century, many social and cultural factors have converged to make nurses' jobs more complex, high-stakes, and intellectually challenging. Technology alone has radically altered the types of tasks nurses perform. They now manage medical equipment and devices ranging from the simple (blood-pressure cuffs) to the sophisticated (dialysis machines and ICU monitoring devices), and they use computers to keep patients' records, track their medications, and evaluate them remotely through videoconferencing.

Nurses also have assumed many of the hospital responsibilities that once belonged to physicians. Most doctors now spend little time on the hospital floor aside from diagnosing patients' conditions. Instead, nurses administer and monitor these treatments, using their clinical judgment to administer medications and therapies as needed. As nurses have inherited more primary care functions, nurses' aides perform the more basic tasks that nurses once handled, such as bathing patients and making beds.

In addition, hospitalized patients are more acutely ill than they were decades ago, leading to the saying that "the ICU patient of the 1970s is the patient who would be sent home today."¹ "Twenty years ago, patients would stay in the hospital for three or four days just to have tests," says Angie Strawn, MSN, RN, Associate Dean of the College of Nursing

at University of Phoenix. “That doesn’t happen anymore. Now, patients undergo diagnostic testing on an outpatient basis.” The acuity of today’s patients requires nurses to manage multiple, complex technologies and to remain vigilant for subtle changes in their conditions.

Combining Education with Empathy

With such dramatic changes taking place in healthcare, nurses need more education than ever to maintain a safe level of patient care. Yet they can be licensed to deliver care with less higher education than other professions, and many hold only an associate’s degree in nursing (ADN). Nursing scholars and organizations urge nurses to obtain bachelor’s degrees; the Robert Wood Johnson Foundation and the Institute of Medicine recommend that 80% of RNs have four-year degrees by 2020.²

“An associate’s degree gives nursing students two years of solid education and allows them to practice as safe and technically competent nurses,” Strawn says. “However, students can only learn so much in two years.” An ADN, she notes, provides solid preparation for hospital-based acute care delivery, but a bachelor of science in nursing (BSN) degree enables nurses to treat patients in the facilities where much of America’s aging and chronically ill populations will be cared for (senior citizens’ residences, hospices, and community treatment centers). “The BSN degree at University of Phoenix covers content areas that are not addressed at the associate’s level,” Strawn notes, “such as family and community nursing, management and leadership, global health and epidemiology, and it places a greater focus than the ADN does on nursing theory, nursing research, and evidence-based practice.” Ideally, she says, the ADN would mark the beginning of a nurse’s educational journey, one that would soon lead to a bachelor’s degree and even beyond.

In the popular imagination, nurses are known for their caring qualities, but nurses must also possess technical aptitude, critical thinking skills, and knowledge. Nursing is a hybrid profession—one that demands mastery of the “hard” skills of science, technology, and proficiency in medical procedures, as well as the “soft” communication skills of nurturing and comforting the sick. A general science background of the kind gained in high school is no longer sufficient preparation for nurses: They must be conversant in normal and pathological physiology, biochemistry, physics, microbiology, pharmacology, and genomics.

Nurses also require deeper humanistic skills. They must write, speak, communicate clearly, and adapt their diction, tone, and comportment to different audiences. Nurses need to be able to explain conditions and treatments in lay terms to patients and their families, provide emotional support when necessary, and advocate for patients, presenting scientific and clinical evidence for given courses of treatment. They must also set aside preconceptions and respond with respect and empathy to patients from various cultures, who may hold unfamiliar beliefs about illness and treatment. Plus, as the Robert Wood Johnson Foundation and the Institute of Medicine recommend, nurses today must be prepared to take leadership roles to better represent their patients and to shape healthcare policy.³

In addition, nurses must be savvy scholars. They must digest large amounts of information, from symptoms to drugs to diseases to the Latin names of bones, blood vessels, and microbes, simply to be licensed to practice—but their learning cannot stop there. They need to remain up to date with technologies, procedures, policies, and medical and nursing research (which grows exponentially in volume each year). Nurses must be lifelong learners, capable of accessing research findings, evaluating them, and putting them into practice.

Overview

This book will address the many ways higher education can make America's nurses safer, more skillful, and better equipped to provide excellent patient care. Part I considers current problems and issues in nursing.

Chapter 1 delves into the nursing shortage and its serious implications for the nation's health. It also examines the related issue of patient safety, and outlines how higher education can help prepare greater numbers of highly adept nurses to meet future demands for safer, higher-quality care.

Chapter 2 examines diversity in both the nursing and patient populations. Although today's patients are culturally diverse, most nurses are White females. Educators, however, have devised innovative strategies to increase the numbers of men and minorities enrolling in nursing programs, and are working to ensure that nurses are culturally competent.

Chapter 3 discusses the technological revolution in healthcare and some of the more important technologies nurses use on the job, such as electronic medical records and telemedicine systems. It also describes how technology is changing nursing education through innovative online courses and clinical simulation labs.

Part II of this book covers nursing education:

Chapter 4 focuses on the degrees that provide a pathway to licensure: the associate's degree and the bachelor's of science in nursing. It highlights the many reasons why nurses should obtain a baccalaureate degree—for example, to deepen their knowledge, skill levels, and safety.

Chapter 5 explores the varied careers—such as nurse practitioner, nurse informativist, nurse researcher, nurse executive, and nurse consultant—available to nurses with advanced degrees, and addresses the nursing faculty shortage.

Chapter 6 discusses the efforts of University of Phoenix and other institutions to develop and champion best practices for nursing education.

PART I

**CHALLENGES AND CHANGES
IN THE NURSING FIELD**



1

Nursing Shortage and Patient Safety

EXECUTIVE SUMMARY

The U.S. is facing a severe nursing shortage. Over 135,000 unfilled RN positions exist in the U.S., and that number may climb to 260,000 over the next 10 to 15 years.

The nursing shortage has serious implications for health. Some hospitals have responded to the shortage by assigning too many patients to one nurse or requesting mandatory overtime, which can lead to stress, fatigue, burnout, workplace injuries, and high turnover rates among nurses. Overextended nurses are less likely to notice patient safety issues and more likely to make errors.

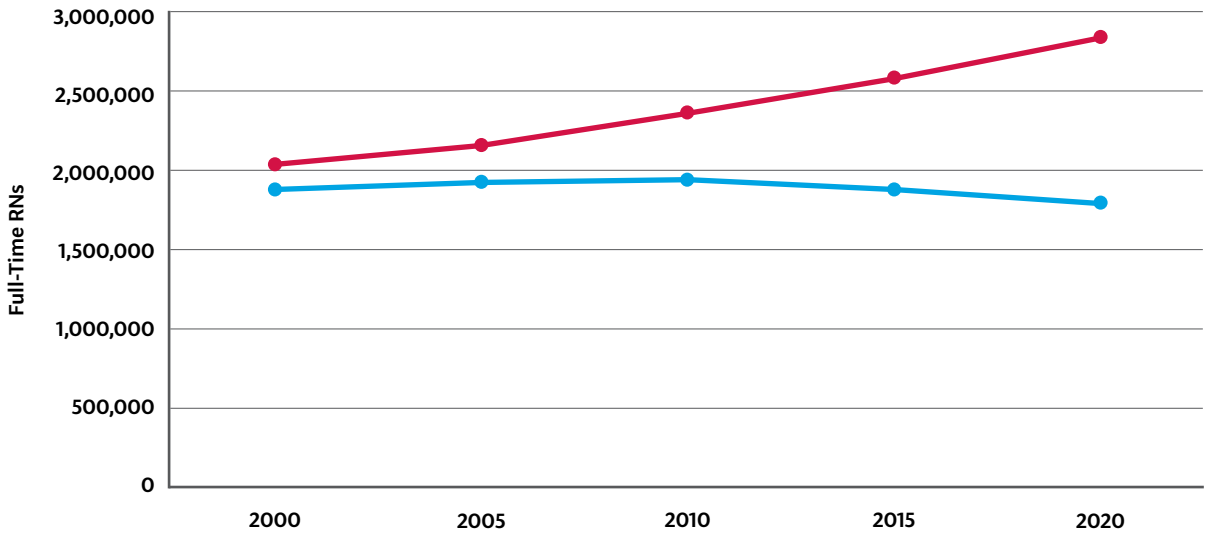
The nursing shortage is partly caused by the aging of the large baby boomer generation. Nurses belonging to this generation—about 25% of RNs—are nearing retirement at the same time that more elderly and chronically ill patients are seeking medical attention. Many nursing faculty members are retiring as well, and universities are not preparing enough nurses with doctorates to replace them.

At Risk: Nurses and Patients

As the frontline healthcare providers who spend the most hands-on time with patients, registered nurses (RNs) are uniquely positioned to detect unsafe conditions and prevent medical problems in the healthcare setting. But the solution to one problem is beyond their reach: the shortage of qualified nurses. The American Health Care Association reported in 2007 and 2008 that over 135,000 unfilled RN positions exist in U.S. hospitals and clinics—a national vacancy rate of 8.1%.¹ The problem is only getting worse: Estimates of demand for full-time RNs over the next 10 to 15 years range from 260,000 to 1 million.²

The nursing shortage contributes to nurses' rates of burnout and workplace injury, and also carries serious implications for quality of care. Fatigued and overextended nurses, forced to reduce their time with each patient as caseloads rise, can lose their clinical focus, miss early signs of complications, or even commit errors. Without a surge in nursing education and hiring, the burdens on the current workforce—and the possible hazards to patients—will likely grow more severe.

Projected Supply and Demand of Full-Time Registered Nurses



SUPPLY	1,890,700	1,942,500	1,941,200	1,886,100	1,808,000
DEMAND	2,001,500	2,161,300	2,347,000	2,569,800	2,842,900

Source: U.S. Health Resources and Services Administration, <http://bhpr.hrsa.gov/healthworkforce/reports/behindrnprojections/4.htm>



Trends in the Nursing Field

Several trends in the nursing field have contributed to the staffing crisis:

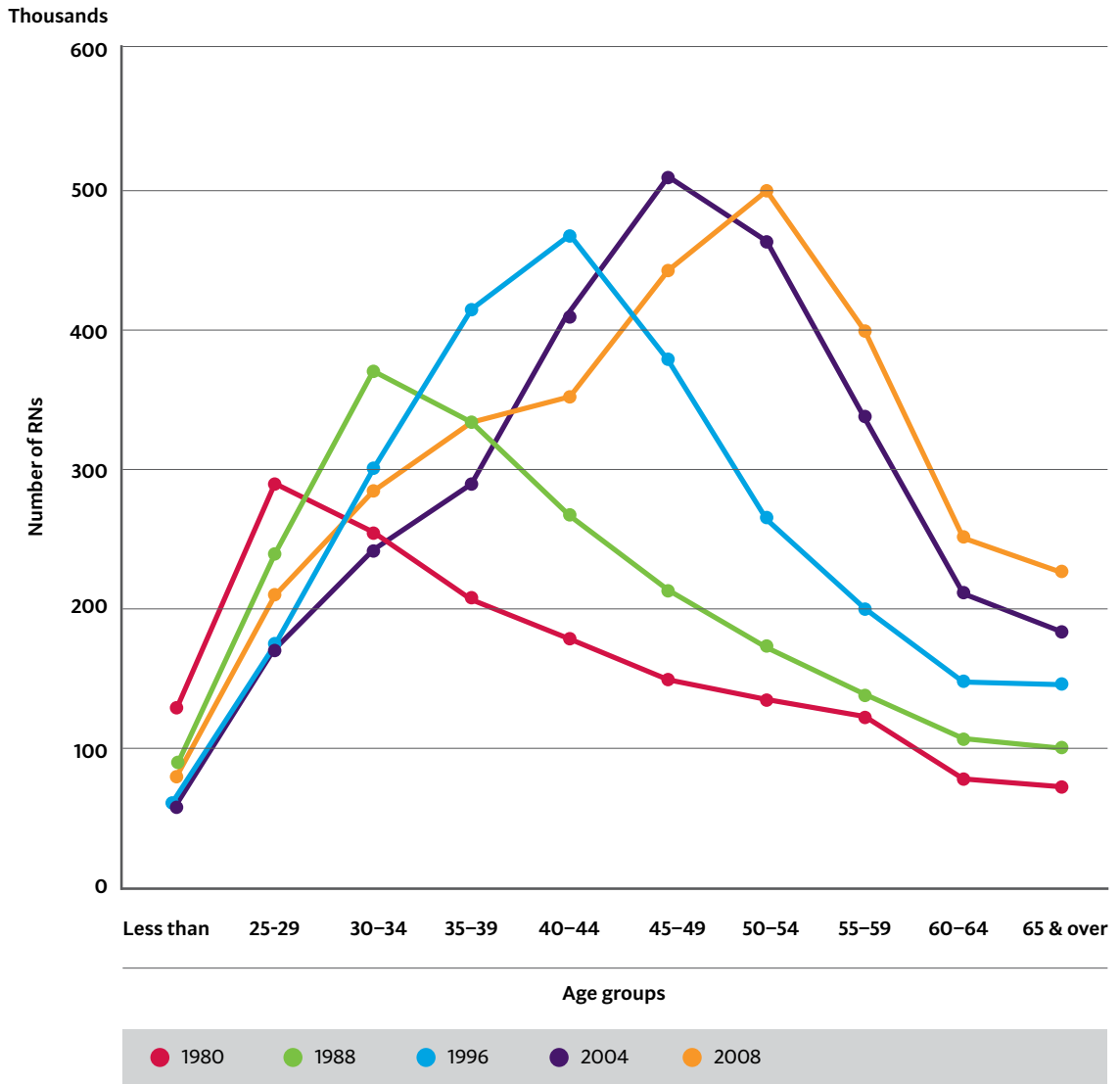
The nursing population is aging.

About 25% of RNs are in their 50s; the average age of an RN is about 44.5 years.³ Retirement looms for many: In a *Nursing Management* survey, 55% of nurses said they planned to retire between 2011 and 2020.⁴

Nursing school enrollment is not growing quickly enough to stem the shortfall.

Enrollments in nursing school have waxed and waned over the past 15 years, dipping in the mid- to late-1990s and rebounding in the 2000s.⁵ Though enrollments in BSN programs grew by 3.6% in 2009, this increase is still not large enough to meet the demand for nurses.⁶ One reason for nursing's decline in popularity is the greater range of career options open to women now versus the 1960s and 1970s, when many of today's older nurses joined the field. Women born in 1975, for instance, were 40% less likely to have entered the nursing field than those born in 1955.⁷

Age Distribution of the Registered Nurse Population, 1980–2008



Source: U.S. Health Resources and Services Administration, 1980–2008 National Sample Survey of Registered Nurses, <http://bhpr.hrsa.gov/healthworkforce/rnsurvey/2008/nssrn2008.pdf>

Nursing is physically and emotionally demanding work.

Nurses stay on their feet for hours at a time. They perform heavy manual tasks such as lifting and moving patients—making nurses vulnerable to career-ending orthopedic injuries. Their work weeks often span nights, weekends, and holidays. They absorb the stress of caring for extremely ill patients and comforting distraught family members.

Cost controls lead hospitals to reduce staff, introduce mandatory overtime, and discharge less-acute patients earlier—a practice that has boosted the percentage of critically ill patients in nurses' caseloads⁸ and contributed to job dissatisfaction and burnout.⁹ The average RN turnover rate remains high, at 13.9%.¹⁰ In a *Nursing Economic\$* survey, 98% of nurses said staffing shortages were the cause of increased stress, 93% said they lowered patient care quality, and 93% claimed that staffing deficits led nurses to leave the profession.¹¹

Baby boomers will become geriatric patients.

The rising healthcare needs of the aging baby boom generation will further drive demand for new nurses, and will stretch the resources of those already in the profession. Between 2010 and 2020, the over-65 population will rise by 54%,¹² but the ratio of caregivers to elderly patients is expected to decrease by 40%.¹³

Nursing schools need more qualified faculty.

The Council on Physician and Nurse Supply estimates that to end the shortage, 30,000 additional nurses will need to enter the workforce each year—30% more than are now graduating from nursing programs.¹⁴ Although potential students are interested in entering the field, nursing schools cannot enroll them all. In 2008, 49,948 qualified applicants were turned *away* from U.S. nursing schools due to faculty shortages, budget constraints, and insufficient classroom and clinical space.¹⁵

Overcoming the nursing faculty shortage will be particularly difficult. In 2009, colleges and universities reported a 6.6% nursing-faculty vacancy rate. Rigorous educational qualifications bar many nursing professionals from these positions; a doctoral degree is required or preferred for 90.6% of them.¹⁶ As with the nursing shortage, the faculty deficit is linked to an aging cohort: Forty-eight percent of nurse educators are age 55 and older, and half of them expect to retire over the next 10 years.¹⁷



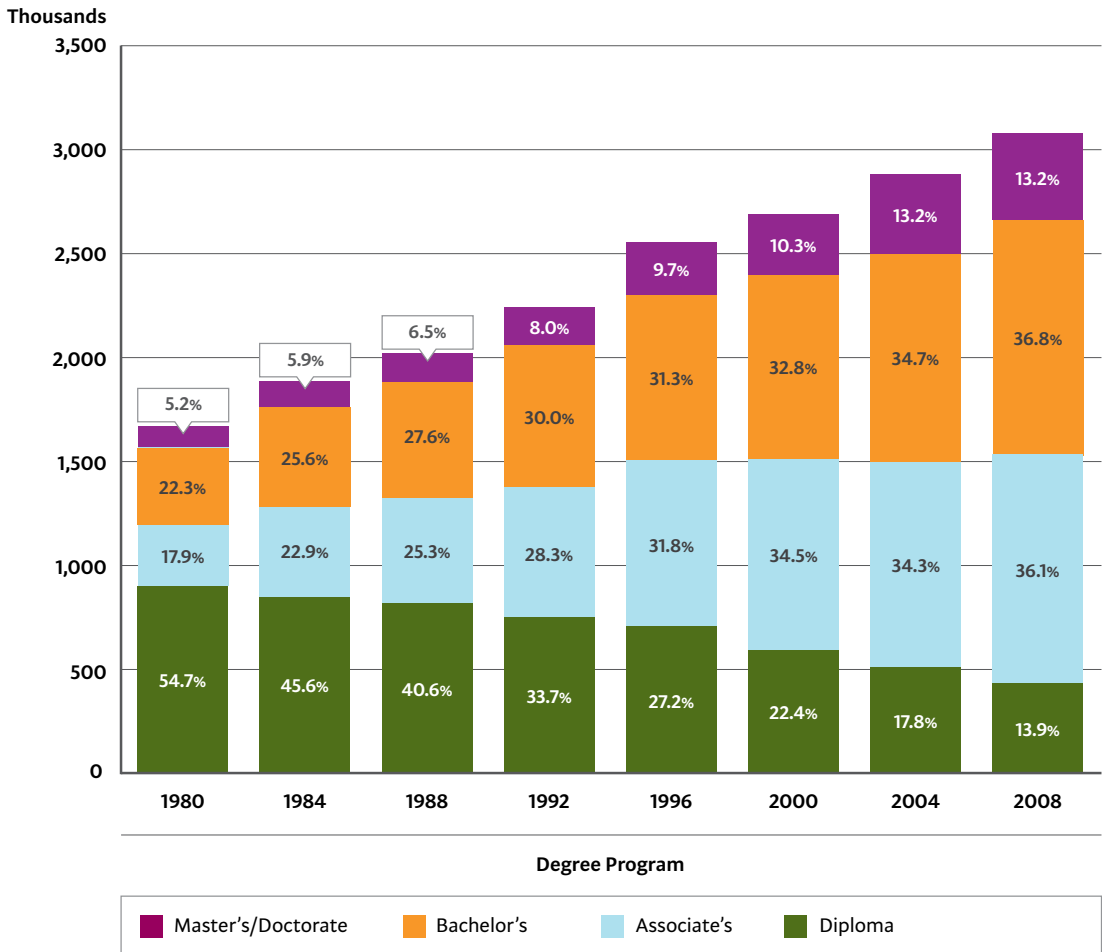
Help Wanted: Qualified Nurses

Nurse staffing has been an ongoing challenge, says Francine Nelson, Ph.D., RN, Campus College Chair for Nursing and Health at the University of Phoenix School of Advanced Studies. “When I went to nursing school, the country was in a nursing shortage. It seems to be a problem that periodically raises its head.” Like many societal issues, the problem varies in severity depending on the location and economic climate. “The shortage is more prevalent in some parts of the country than others,” says University of Phoenix nursing faculty member Ruth Grendell, DNSc, RN. There should be more job openings for nurses in the future, Grendell says: “With the baby boomers becoming senior citizens, nurses who specialize in chronic diseases and geriatrics will be in great demand.”

The Nursing Shortage: A Health Hazard for Patients

In 1999, the U.S. Institute of Medicine reported that nearly 100,000 people were dying annually in America due to preventable medical errors.¹⁸ These findings caused a national uproar and spurred a new healthcare initiative: the patient safety movement. Since then, hospitals, clinics, and healthcare providers across the country have worked to build feasible solutions for improving patient safety and reducing mistakes. Although American nurses have been in the vanguard of this battle—leading research into the underlying causes of medical mistakes and developing solutions—insufficient nurse staffing hampers these efforts.

Highest Nursing or Nursing-Related Education Achievement, 1980–2008



Note: The totals in each bar may not equal the estimated numbers for registered nurses in each survey year due to incomplete information provided by respondents and the effects of rounding. Only those who provided nursing education information are included in the calculations used for this figure.

Source: U.S. Health Resources and Services Administration, 1980–2008 National Sample Survey of Registered Nurses, <http://bhpr.hrsa.gov/healthworkforce/rnsurvey/2008/nssrn2008.pdf>

The Joint Commission, a nonprofit organization that accredits U.S. hospitals and health-care programs and sets performance and safety standards for medical services, found that low nursing-staff levels were a contributing factor in 24% of deaths and injuries in hospitals.¹⁹ A scheduling increase of one additional patient per nurse, according to one scholarly study, led to a 7% increase in the odds of patients' dying within 30 days of admission, and a 7% increase in the odds of death following complications such as shock or pneumonia.²⁰ By contrast, separate research determined that an increase in the hours of RN care that patients received was associated with improved outcomes, such as shorter hospital stays and lower rates of urinary tract infections, upper gastrointestinal tract bleeding, pneumonia, and fatal complications (such as shock or cardiac arrest).²¹

Nurses As Safety Advocates

Nurses are often in the best position to make hospitals safer, according to recent research. One Canadian study found that training nurse leaders to be sensitive to patients' safety can help foster a safety-driven culture in care settings, resulting in fewer medical errors.²² The Robert Wood Johnson Foundation reported that increasing efficiency (by improving teamwork and communications) while reducing the time nurses spend away from the bedside on administrative tasks can lead to safety improvements.²³

Nurses can translate clinical experience into lifesaving programs by noticing patient risks and establishing procedures to prevent them. The career of retired nurse practitioner Sally James, ANP-C, CNS Psych-C, demonstrates one nurse's commitment to patient safety. She spearheaded many safety initiatives in over 30 years of practice with the U.S. Army Medical Corps and the Veterans Health Administration. While caring for psychiatric patients, James helped implement safety protocols such as the use of calming techniques to reduce the need for restraints and seclusion of agitated patients. "Because nurses see and treat patients on a daily basis, they are most likely to identify risk factors and prevent safety hazards from escalating or occurring in the first place," she says.²⁴

One incident from James's career dramatically illustrates how a quick-thinking and well-trained nurse can prevent serious medical errors. "One day, I was making rounds of the neurology patients," she recalls. "When I entered the room of a patient with a high bleeding injury, I discovered a resident physician had left after placing a tourniquet on the patient's arm and failed to remove it. The patient's arm may have needed to be amputated had I not happened to visit him at just that moment."²⁵

Improving working conditions for all hospital staff—especially nurses—is one of the most important factors in improving patient safety, according to Teri Wicker, Ph.D., RN, Director of Emergency Services at Yuma Regional Medical Center in Arizona. “If the nurse isn’t safe, then the patients won’t be safe,” she says. “When nurses are overworked, when units are short-staffed, when there are too many shift changes and handoffs—that’s when errors happen.” Wicker also observes that more patients’ families are becoming involved in their care, a trend that has led to greater patient safety. “In the past, hospitals operated by strict rules that they imposed on all patients, without considering the patients as individuals,” she says. “We used to shoo families away and impose our rules, but that was part of the problem. Now we highly encourage families to be at the bedside to serve as advocates for their loved ones who are vulnerable.”

“When nurses are overworked, when units are short-staffed, when there are too many shift changes and handoffs—that’s when errors happen.”

Nurses in fully staffed hospitals will be freer to research and solve vital safety issues, such as the 250,000 cardiac catheter-related bloodstream infections that occur annually. Recognizing the strain these infections place on patients, staff, bed space, and budgets, a team of clinicians at Sutter Roseville Medical Center in Roseville, California rose to the challenge. The team, responsible for inserting and maintaining peripherally inserted central catheters (PICCs), launched a campaign to improve PICC line safety. Nurses researched the procedures and training that maximize safety, combined these processes into a therapeutic protocol, and trained managers and physician partners to encourage support and compliance. As a result, the PICC team cut patients’ infection rates to zero for two years running, while the number of PICCs during that period rose nearly 300%.²⁶

Because PICC line infections, along with other preventable, hospital-acquired complications and injuries, ceased to be eligible for Medicare reimbursement in 2009, evidence-based initiatives to reduce such medical errors are crucial to hospital finances. Nurses enduring extended shifts or an ever-rising patient population, however, will not have the time or energy to critically examine their workplaces for such cost-cutting, life-saving opportunities. The American healthcare system, and the overall well-being of its citizens, will benefit from increased awareness among hospital managers and healthcare policymakers of the value of sufficient nurse staffing and broader educational opportunities.



2

Nursing in a Diverse Society



EXECUTIVE SUMMARY

America's population has become increasingly diverse due to growth in minority populations and a rise in immigration. The majority of nurses, however, are still Caucasian (83%) and female (92%). A rise in the number of ethnically diverse nurses could help alleviate the disparities in healthcare outcomes between whites and minorities.

Minorities and men may be reluctant to enter nursing because they lack nurses of their own ethnicity or gender as role models, and because nurses are stereotypically viewed as nurturing, feminine White women. Educators have successfully recruited more men and minorities into nursing programs by implementing mentoring programs, working closely with local communities, and positioning nursing as a career for former military personnel.

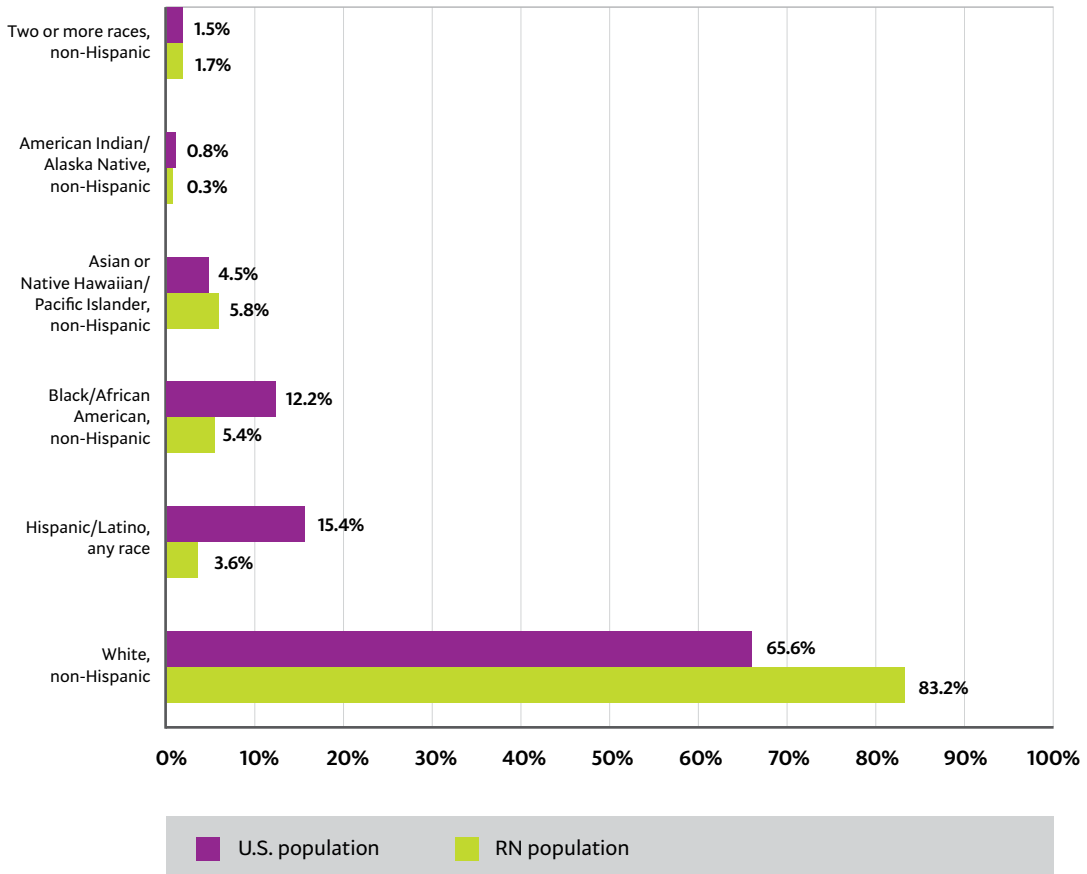
Today's nurses need to be culturally competent, or sensitive towards their patients' culture and beliefs regarding illness, treatment, privacy, and the body. Holistic nurses—proponents of a branch of nursing which attends to patients' spiritual and emotional well-being as well as their medical conditions—often use non-Western and alternative medical practices, such as massage, aromatherapy, and breathing and relaxation techniques, as part of their treatment repertoire.

The Changing Face of America's Patients

America's nurses serve a population whose ethnic and cultural heritage is becoming more diverse each year. As immigration further varies the already broad range of patients' racial and geographical backgrounds, nurses will encounter a wider range of attitudes toward healing and medical practice. In contrast, the demographic spectrum of U.S. nurses—mostly White and female—has remained relatively static.

This disparity carries hidden opportunity. Efforts to diversify the nation's nursing workforce could result in hiring more nurses from underrepresented ethnic groups to help relieve the nursing shortage. Training nurses to tailor their clinical work to cultural differences can help foster greater healthcare compliance rates among racial-minority patients and recent immigrants. Increasing acceptance of holistic medical therapies can

Distribution of Registered Nurses and the U.S. Population, by Racial/Ethnic Background



Source: U.S. Health Resources and Services Administration, 2008 National Sample Survey of Registered Nurses, <http://bhpr.hrsa.gov/healthworkforce/rnsurvey/2008/nssrn2008.pdf>

help nurses address the full range of medical beliefs that their patients bring to care settings. Nursing schools have launched programs to recruit more students of color, male learners, and instructors with the same ethnic and gender diversity as their students. These efforts converge in nursing education.

Unequal Medical Care Is a Rising Risk

Almost 4 million people immigrated to the U.S. in the 1990s, and over 6.8 million arrived during the years 2000-2009.¹ Thirty-five percent of Americans report that they belong to a minority group,² and that percentage is expected to grow to 42.3% by 2025.³ By 2050, the Census Bureau predicts, Whites will no longer be the majority.⁴ These demographic changes affect every sector of society, including healthcare. Medical organizations and professionals are under more pressure than ever to address disparities in healthcare outcomes among Americans of different racial backgrounds.

Medical organizations and professionals are under more pressure than ever to address disparities in healthcare outcomes among Americans of different racial backgrounds.

A landmark 2003 Institute of Medicine (IOM) report revealed these disparities in stark detail. The IOM found that racial-minority patients received lower-quality healthcare than Whites, even when controlling for factors like insurance and income differences. Racial-minority patients were less likely than Whites to receive heart medication, bypass surgery, dialysis, or kidney transplants, and more likely to have limbs amputated due to complications from diabetes.⁵ Later studies found still more racial disparities: People of color experience higher mortality rates than Whites for heart disease, HIV/AIDS, diabetes, and leukemia.⁶ One report estimated that race-related differences in the quality of healthcare cost the United States \$229 billion between 2003 and 2006.⁷

Nurses Need Cultural Competence

Today's nurses must be culturally competent: informed and sensitive to the core beliefs of the major ethnic groups they treat. This competence involves more than surmounting the occasional language barrier. With immigration accelerating, nurses will more

frequently encounter patients whose beliefs about illness and medicine differ considerably from the disease-based model that has traditionally been taught in nursing school. Nurses and other healthcare providers who have been trained to treat diseases through drugs, surgeries, and other strictly somatic, or physical, interventions now increasingly face the challenge to care for the entire patient—body, mind, and spirit.

Cultural competence entails understanding how patients' cultural backgrounds affect their healthcare decisions. Patients' ethnic traditions may influence their choices of who will accompany them to the hospital or clinic, who will make medical decisions for them, what kind of treatment they prefer, and who their primary caregivers will be when they leave the facility. Among some Native American peoples, for instance, elders act as healthcare advisors and healers.⁸ Asians, African Americans, and Latinos may wish to care for older adults at home rather than placing them in a nursing home.⁹ Female patients from Middle Eastern or predominantly Muslim countries may prefer not to be alone in a room with a male staff member. Nurses must acquaint themselves with the dominant beliefs and practices of their local immigrant and indigenous populations to be able not only to treat illness, but to provide culturally congruent care for the patient's whole being.

Joan Vien, RN, MSN, gives an example of how nurses can accommodate patients of different cultures. In the southeastern Massachusetts hospital where she practices, she sees many Portuguese immigrants. "The Portuguese are very family-oriented," she says. "When a family member is sick, many members of the extended family will want to visit the patient." Sometimes, she says, a patient may be tired and not want to receive visitors, but may be concerned about hurting the family's feelings. In such cases, the nurse may need to intervene politely and suggest the family postpone visits until the patient is feeling better.¹⁰

Her hospital, Vien says, has several Portuguese interpreters on staff, and she and her colleagues have learned some basic Portuguese—words that are useful in a hospital setting, such as *pain, hot, cold, bed, bathroom, X-ray*, and the names of body parts—to better communicate with patients. The hospital's phone company, Vien notes, also provides free interpreting services for patients who speak languages that the hospital staff does not.

Cultural differences can also lead to misunderstandings, causing stress for patients and caregivers alike. "Some Southeast Asian patients who come to my hospital practice *coining*," Vien says. Coining, she explains, is a form of traditional medicine in which heated

coins are placed on the skin to release a humor called wind and restore the body to balance. “Nurses would see the red marks left by coining, assume the patients were being abused, and want to call the authorities.”¹¹

Education Improves Nurses’ Cultural Competence

Nursing schools, hospitals, and professional organizations are providing nurses with the education and guidance they will need to treat the more diverse 21st-century patient population. In 2000, the U.S. Office of Minority Health released national standards for culturally and linguistically appropriate services.¹² These standards include increasing efforts to recruit minority staff members, training staff about cultural differences, providing interpreters to patients at no extra cost, and using signage and patient handouts in the languages most suitable to the community.

Educators can also provide greater personal leadership as part of this drive to increase cultural competency. A 2001 study by the American Association of Colleges of Nursing (AACN) found that racism and discrimination were rarely addressed in nursing courses.¹³ Faculty can lead class discussions of ethnic and racial issues to help remedy these omissions. The AACN also recommends increasing instruction about the historical, political, and socioeconomic factors that contribute to disease.¹⁴ At University of Phoenix, BSN students take a course on vulnerable populations that investigates issues such as disparities in healthcare outcomes for patients of different ethnic backgrounds and socioeconomic status.

Nursing schools can tap governmental and private-institute resources to facilitate these efforts. For instance, the Cultural Competence Project helps nursing educators spread awareness of ethnic and racial health inequality throughout the nursing and academic communities. Funded by a U.S. Department of Health and Human Services grant, this joint project of the University of Michigan–Flint and Madonna University of Livonia, Michigan provides “online and face-to-face educational offerings for nurses to enhance their cognitive, affective, and psychomotor cultural competencies and develop their skills in addressing individuals, groups, and communities that are diverse, with special emphasis on those at risk for health disparities.”¹⁵

Nurse educators who matriculate according to Cultural Competence Project guidelines can receive official certification in the emerging field of *transcultural nursing*. This quali-

Highest Education of Registered Nurses Employed in Nursing, by Race/Ethnicity

	Bachelor's degree (percent)	Master's or doctorate degree (percent)	Total (percent)
Nursing and nursing-related			
White, non-Hispanic	35.0	13.4	48.4
Black/African American, non-Hispanic	37.9	14.6	52.5
Hispanic/Latino, any race	41.0	10.5	51.5
Asian, non-Hispanic	67.3	8.3	75.6
Total	37.3	13.0	50.3
Nursing and non-nursing			
White, non-Hispanic	39.2	14.5	53.7
Black/African American, Non-Hispanic	41.5	16.7	58.1
Hispanic/Latino, any race	45.6	11.0	56.6
Asian, non-Hispanic	70.0	10.6	80.6
Total	41.4	14.3	55.6

Source: U.S. Health Resources and Services Administration, 2008 National Sample Survey of Registered Nurses, <http://bhpr.hrsa.gov/healthworkforce/rnsurvey/2008/nssrn2008.pdf>

fication, according to the Transcultural Nursing Society, is designed “to provide nurses and other healthcare professionals with the knowledge base necessary to ensure cultural competence in practice, education, research, and administration.”¹⁶ The society’s goal is to produce a set of best practices and a body of academic work that will help nurses more effectively address diverse patient backgrounds and medical beliefs.

Many non-Western therapies such as acupuncture, acupressure, reiki, and Ayurvedic medicine are already well known to Americans. With increased exposure to the health and wellness traditions of non-Western countries and religions, Americans have become more accepting of alternative or complementary medicine; 45% have used some form of alternative therapy themselves.

Holistic Nursing: Healing the Patient’s Body, Mind, and Spirit

As a result of culturally inclusive education and a more expansive range of treatment options, nurses have begun to incorporate complementary and alternative methods into their care. Holistic practice, a subspecialty of nursing, aims to treat not just patients’ bodies, but their mental, spiritual, and emotional selves as well. Holistic nurses may use such techniques as healing touch, guided imagery, aromatherapy, massage, nutritional and lifestyle counseling, and breathing and relaxation techniques to improve patients’ well-being.¹⁷ Holistic nurses may even view themselves as role models for healthy behavior, believing that their attitude and personal presence can affect their ability to care for patients. Holistic nurses may purposefully practice self-care and try to maintain a state of exemplary physical, mental, and spiritual health.¹⁸

Though some medical professionals are skeptical of its efficacy, the American Nurses Association officially recognized holistic nursing as a nursing specialty in 2006.¹⁹ The American Holistic Nurses Association received national accreditation as a provider and approver of nursing continuing education in 1997,²⁰ and issues holistic nursing certification through its governing body, the American Holistic Nurses Certification Corporation.²¹

Cancer care is one area where healthcare providers often integrate complementary medicine. In Wisconsin, the Waukesha Memorial Regional Cancer Center program offers consultations regarding holistic options, and provides reiki and guidance on stress reduction.²² Instituted after an executive-level examination of holistic practice,



Waukesha’s program is intended to ease the nausea, stress, and pain associated with cancer treatment and chemotherapy. Waukesha’s nurses also provide guidance on the use of patient “healing kits” that contain meditation instructions, relaxing CDs, and essential oils.²³

Nursing Still Lacks Ethnic and Gender Diversity

Most industries today are concerned about maintaining a diverse and gender-balanced workforce, and nursing is no exception. Although the U.S. population has become increasingly diverse, the nursing profession has not: Only 16.8% of nurses are members of minority groups,²⁴ and only 7.9% are men.²⁵

This lack of diversity carries serious implications for the field and for healthcare outcomes by limiting nurses’ ability to care for patients of varying ethnicities. Patients often feel more comfortable receiving care from healthcare providers who share their ethnic background. Nurses of different ethnicities may increase the profession’s overall capacity to deliver comprehensive care.

Gender of Registered Nurses, by Graduation Cohort

	Graduated before 2001 (percent)	Graduated 2001–2004 (percent)	Graduated 2005–2008 (percent)
Male	5.9	9.1	9.8
Female	94.1	90.9	90.2

Source: U.S. Health Resources and Services Administration, 2008 National Sample Survey of Registered Nurses, <http://bhpr.hrsa.gov/healthworkforce/rnsurvey/2008/nssrn2008.pdf>

The lack of diversity among nurses also suggests that nursing schools are disproportionately attracting students from one segment of the population: White women. Successfully portraying nursing as a more appealing career to men and minority women—who together comprise over two-thirds of the U.S. population—could contribute significantly to alleviating the nursing shortage.

To increase the numbers of men and minorities who enter nursing, educators need to start early, says Angie Strawn, MSN, RN, Associate Dean of the College of Nursing at University of Phoenix. “We need to plant seeds at an early age,” she says. “Educators can collaborate with school systems to reach K-12 students through health fairs, career days, and role modeling. Male nurses, for example, could come in and speak to young students about what nursing is like from their perspective.” Another way educators can help diversify the nursing workforce, she says, is “to ensure that students whose first language is not English, or who come from disadvantaged backgrounds, succeed in school. Educators can offer them such resources as tutoring and remediation in math, writing, and English. We need to not only recruit students from underrepresented populations, but help them build the skills they need to be successful.”

Barriers to Recruitment

One reason so few men and racial minorities enter the nursing profession may be that they lack prominent role models. Only around 10% of nursing faculty members are minorities,²⁶ and only 3.5% are men,²⁷ making it difficult for students to find advisors who share their backgrounds. Debunking stereotypes about nursing may also help the field attract a more diverse talent base. One survey found, for instance, that 62% of high school students thought nursing was a low-paying field, even though nurses' salaries are comparatively high,²⁸ particularly for nurses with advanced degrees.

“It’s especially important that male and minority students earn advanced degrees, as there are very few male or minority nursing faculty.”

“I encourage all my undergraduates to continue on to earn master’s degrees, and I encourage my MSN students to pursue doctorates,” says Jean Pickus, MSN, RN, Regional Director of Academic Affairs at University of Phoenix. “It’s especially important that male and minority students earn advanced degrees, as there are very few male or minority nursing faculty. University of Phoenix faculty members mentor master’s and doctoral students. Yet we educators need to do even more mentoring, especially for male and minority students.”

The image of nursing as a woman’s profession also influences some prospective male nurses, who may worry about being viewed as effeminate or homosexual if they choose nursing as a career.²⁹ In the educational environment, male nursing students have faced discrimination from female instructors, and encounter challenges in becoming well-rounded practitioners, such as not having equal access to clinical training in sensitive areas like obstetrics.³⁰ Patients sometimes assume that all men who enter the examination room are doctors.³¹ Smaller cultural markers, like the use of “she” in nursing texts and official nursing organization communications,³² or designating all the restrooms at nursing conventions to be women-only, also convey a message of exclusion that hinders men’s enrollment, or leads them to quit nursing.³³

The story of Elias Provencio-Vasquez, Ph.D., MS, RN, Dean of the University of Texas at El Paso and the first Latino nursing school dean in the country, provides a powerful stereotype-busting example to nurses of nontraditional backgrounds, especially those

seeking faculty positions.³⁴ The son of Mexican immigrants, Provencio-Vasquez befriended the nurses at the hospital where he worked as a dishwasher. Inspired by their stories, he earned an associate's degree, returned to the hospital as a nurse, and rose through the academic ranks, ultimately receiving the first nursing doctoral degree ever earned by a Latino.

Provencio-Vasquez credits the male *and* female nursing mentors who guided his efforts, and as a thought leader for nursing diversity, he understands the impact of his high-profile post within the university. "I never thought that having faculty or people that look like you would make a difference, but it does," he says. "If you see faculty who you can identify with, that does make a difference."³⁵

Educational Partnerships Can Close the Diversity Gap

To meet the culturally appropriate healthcare needs of an expanding population, young men and members of racial-minority groups need to understand the financial, spiritual, and social benefits of the nursing profession. Through state and federal programs, partnerships with private foundations, and consultation with community organizations that serve minority groups directly, nursing schools and educators are successfully depicting nursing as open to all men and women who have a passion for patient care and improving the nation's health.

Many educational institutions are beginning to employ nursing-school outreach strategies as multiple paths of influence.

- The Oregon Health and Science University (OHSU) in Ashland instituted a nursing-faculty-designed program that cast nursing students as mentors. The mentors paired up with Hispanic middle-school students who had a high dropout risk. The pairs provided health screenings at elementary schools and senior centers and visited the OHSU nursing labs. Eight of the nine middle-schoolers achieved higher GPAs, and all of them gained new respect for nursing as a viable future profession.³⁶
- The University of Nebraska College of Nursing pursued a multipart public-education campaign, including hiring a designated recruiter of minority students, revising its marketing materials to depict more men and minority nurses, distributing information at Native American reservations and community events, and targeting job fairs



and minority nursing conventions. These efforts led to a 77% increase in male admissions and a 43% increase in minority admissions.³⁷

- East Carolina University of Greenville, North Carolina received grant money from a state nursing center to partner with nearby military bases for a civilian-nursing awareness campaign. Noting that nearly 30% of nurses in the U.S. military are men, and that many hold post-baccalaureate degrees, the program administrators hoped to encourage more enlisted male nurses to consider a transition to civilian nursing careers, including faculty-nursing educational tracks.³⁸
- The Harambee Nursing Center in Louisville, Kentucky combines public-health improvement, role modeling, and efforts to boost nurses' cultural competence. Through the center, students and faculty from the University of Louisville School of Nursing provide a variety of community-health programs to a low-income African American neighborhood. Students absorb a greater understanding of the population's specific health challenges, and the university gathers data about how best to attract African American students and young adults to its nursing programs. In turn, community members have received mentoring about health professions, have entered

medical-assistant programs with educational tracks to nursing degrees, and have pledged to pass their training along within their communities.³⁹

Such outreach initiatives are leading to change: Over the years 2004–2008, the percentages of male and minority nurses both rose. In 2004, 5.8% of RNs were male, but in 2008 that percentage rose to 7.9%. Males comprised 10% of students in BSN programs in 2008.⁴⁰ Almost 17% of nurses were from minority groups in 2008, compared to 12.2% in 2004.⁴¹ By continuing to measure the effects of these programs, nursing organizations and educators will have a greater voice in advising how staffing, funds, and research should be directed to find better solutions to America’s nursing-diversity gap.



3

Technology Transforms Nursing Practice

EXECUTIVE SUMMARY

Technology has profoundly changed healthcare delivery. As nurses are the primary users of many forms of new healthcare technology, it is important that educators help them develop technological literacy.

Electronic medical records (EMRs), which allow healthcare providers to track patients' conditions electronically in real time, are replacing paper charts in some medical facilities. EMRs have been shown to reduce medical errors and the amount of time nurses spend charting. They have been slow to gain popularity in the U.S. because vendors use incompatible formats, making it impossible for healthcare facilities using different vendors to exchange records.

Online education allows nurses to earn degrees without having to take time off from work to attend classes. The online format enables nurses to complete coursework whenever it is convenient for them.

Some nursing programs, including the LPN/LVN-to-BSN program at University of Phoenix, use sophisticated simulations to teach students clinical skills in a risk-free environment. The simulations use lifelike manikins that can speak, "cry," "breathe," and demonstrate vital signs, and which can be programmed to mimic a variety of medical conditions.

From Bedside Clipboards to Tablet Computers

The digital revolution of the past two decades has had a profound impact on healthcare, affecting everything from diagnosing illness and monitoring patients to record keeping and the education of medical professionals. Physicians and nurse practitioners examine patients miles away over webcams, nurses reduce medical errors by scanning barcodes on medications and patients' wristbands, and electronic mobile devices are displacing paper as the charting medium of choice. Online classes have granted nurses more freedom to fit continuing education and coursework for higher degrees into their hectic schedules.

As the healthcare staff most often providing care to patients, nurses are likewise the most frequent users—and sometimes the earliest adopters—of a facility’s medical technology. The rapid evolution of healthcare technology has been partly a response to the acute nursing shortage, as nurse managers—struggling to supplement understaffed units and relieve overworked RNs—have adopted these technologies to improve departmental efficiency and workflow. Today’s nursing programs must prepare students to be confident and proficient users of technology.

Electronic Medical Records Improve Efficiency

Of the technical advances now available, mobile devices and electronic medical records (EMRs) will likely have the greatest impact on nurses’ working lives. Some hospitals, clinics, and doctors’ offices are now using EMRs and electronic charts instead of paper documents. Nurses can access records via handheld computers and update patients’ information on the spot as medical events occur.

As the healthcare staff most often providing care to patients, nurses are likewise the most frequent users—and sometimes the earliest adopters—of a facility’s medical technology.

EMRs offer several advantages over paper records. The use of EMRs reduces medical errors caused by poor charting skills or illegible handwriting, require no physical storage space, and are far less time-consuming for nurses to update. “Electronic medical records mean [nurses] don’t have to carry around a paper chart at all times, then enter information into that chart at the end of their shift, when they’re often exhausted and their memories aren’t clear,” says Kathee Laffoon, MSN/Ed, RNC, PHN, a labor and delivery nurse with 27 years of experience, and Program Manager and Clinical Coordinator of the LPN/LVN-to-BSN program at the University of Phoenix Modesto, California campus. “When patient documentation can be done in real time at the bedside, nurses can spend more bedside time with patients because they aren’t spending hours charting at the nurses’ station.”

Many clinical studies have found that electronic charting can improve outcomes and decrease administrative costs. Researchers at LDS Hospital in Salt Lake City, Utah found that proper use of a well-designed bedside charting system significantly reduced

medication errors.¹ In addition, Little Company of Mary Hospital in suburban Chicago was able to improve patient chart quality and care delivery, and reduce administrative costs, in its neonatal intensive care unit by implementing digital bedside charting.²

EMRs can simplify healthcare record keeping, but they have yet to gain widespread popularity. The hardware and software they require is still relatively new and prohibitively expensive, making healthcare providers reluctant to become early adopters.³ Staff resistance to learning new procedures has also been a barrier to the adoption of bedside charting technologies.⁴ (Educators can alleviate this problem by introducing the use of EMRs in nursing programs, as University of Phoenix’s College of Nursing does.) A more serious obstacle is the fact that, unlike most developed nations, the United States currently lacks a standard record format or delivery system for EMRs.

“The main problem with EMRs is that most EMR vendors offer competing and closed formats,” says University of Phoenix graduate Jane Kleinman, MA, RN, a nurse educator with Medical Simulation Design, and an expert in healthcare information technologies. “My private M.D. uses a different EMR in her office from the ones used in the hospital she works in, and neither my doctor nor my hospital could provide any of my EMR information to an emergency room during a critical event in another city 50 miles away.” By contrast, in nations like France, Canada, the United Kingdom, and Japan, which have government-mandated universal EMR standards, medical information can be sent from one provider to another with a few simple keystrokes.

Telemedicine: Bringing Healthcare to the Underserved

The combination of “smart” mobile telecommunications devices, social-networking platforms, and even virtual-reality systems has revolutionized the way people, businesses, and institutions communicate. These innovations have reached the medical industry through the new field of *telemedicine*: the delivery of healthcare services using communications technology. Nurses are now extending their caregiving influence far beyond their clinical facilities. They monitor patients’ visible symptoms via webcams, interpret data transmitted by remote monitoring devices, consult physicians and confer with fellow RNs about care strategies, and even call emergency codes while hundreds of miles from the patient.



“Telemedicine is one of the most exciting developments in healthcare, and it’s going to grow in importance as that technology develops,” says Teri M. Chenot, Ed.D, RN, Chair of the College of Nursing at the University of Phoenix North Florida campus. “Even right now, radiologists can have a diagnostic image beamed to them from anywhere in the world to review. Patients can have biometrics collected at one site and have them sent electronically to another site for analysis. Through video conferencing technology, patients in rural areas can be ‘seen’ by specialists in big cities, without having to travel.”

One of the main reasons to develop telemedicine is to improve accessibility and continuity of care, especially in underserved rural areas. University of Phoenix recently partnered with Barrow Neurological Institute in Phoenix, Arizona to develop telemedicine technologies and protocols that will improve post-stroke care for the state’s rural patients.

“Telemedicine is one of the most exciting developments in healthcare, and it’s going to grow in importance as that technology develops.”

“Arizona is a state where a notable proportion of the indigenous population can go from cradle to grave without ever seeing a doctor,” says Shez Partovi, M.D., a radiologist and

telemedicine expert with the Barrow Neurological Institute. “It’s a state with a large underserved population, many of whom live in remote areas out in the desert. We wanted to develop a way to serve that population where they live, and telemedicine—or ‘remote care,’ as I prefer to call it—is a way to do that.”⁵

The project developers followed a two-part strategy. “The first phase involved increased treatment of remote-care patients via webcam,” Dr. Partovi explains. “The second phase expanded this technology into a virtual exam room that uses a high-fidelity video wall, which is almost like an *Alice in Wonderland* mirror through which the patient and provider each get to see into another space far away. This results in an actual life-sized remote care experience.”⁶

“University of Phoenix provided a \$250,000 grant to develop this facility as part of its mission to provide education and improved quality of life to underserved populations. With remote care, we want to move electrons, not atoms,” says Dr. Partovi. “This way, we can provide state-of-the-art care to people in isolated areas without the burden or expense of moving patients long distances unnecessarily.”⁷

“Most people don’t distinguish between banking online, on their smartphone, or at a physical bank branch. It’s all still banking to them. We need to cultivate the same mindset around telemedicine.”

Partovi believes telemedicine will gain popularity as people become more comfortable with it. “It’s not about reinventing the wheel, it’s about leveraging the technology we already have to support local, community-based care wherever and whenever possible,” he says. “Take banking, for example. Most people don’t distinguish between banking online, on their smartphone, or at a physical bank branch. It’s all still banking to them. We need to cultivate the same mindset around telemedicine.”⁸

Online Courses for Time-Strapped Nurses

New technologies have also transformed nursing education. Online classes have become increasingly popular with nurses, as work shifts prevent many nurses from attending classes on campus. Nurses often work unpredictable, round-the-clock schedules, which can make it difficult to attend classes at set times. Those who live in rural areas are often



excluded from higher education because of the distance, time, and expense involved in traveling to a traditional college. “Online programs allow nurses to stay in their communities and continue to serve as they develop their skills,” says Marilyn Klakovich, DNSc, RN, NEA-BC, a University of Phoenix nursing faculty member.

Klakovich did not always advocate online learning. “I was once very skeptical about online education,” she notes. “Teaching at University of Phoenix was my first experience and, after my first class, I was sold.” The opportunity for in-depth discussion and learning in the online environment is one reason Klakovich prefers teaching online. “In a traditional classroom, when an instructor asks a question the response needs to be immediate,” she says. “However, with our asynchronous online model, students have time to think about their response. They can look at the material in a more in-depth manner and internalize it. Or they can do independent research before responding.” Another advantage to online classes, she says, is their asynchronous discussion format, which allows nurses to log on when it fits their schedules and continue their conversations beyond the limitations of the traditional classroom.

“Online learning has come a long way over the years,” says Jean Pickus, MSN, RN, Regional Director of Academic Affairs at University of Phoenix. “People were skeptical of online education; they didn’t believe it could be rigorous and high-quality. Today, attitudes towards online education have changed. Almost every college and university offers some components of their programs online. Providing online education has become the norm and not the exception.”

Simulations Enable Risk-Free Practice

In nursing, even a small error can inflict grave bodily harm. To reduce accidental injuries and errors and lower the risk to patients during nurse training, many teaching hospitals, colleges, and universities use high-fidelity manikins—lifelike patient constructs that can cry, talk, sweat, cough, and breathe, and even have blood and bodily fluids—to simulate the scenarios students will encounter in their nursing careers. Unlike lecture-based teaching, high-fidelity simulations enable students to practice hands-on clinical techniques and apply theoretical knowledge as though they were treating real patients. Simulations give students a chance to refine their behavioral skills and test their clinical instincts. Developing these competencies in a clinically risk-free environment helps train nurses to improve patient outcomes in the actual healthcare setting. Johns Hopkins University, Emory University, the University of Michigan, and the University of Texas at Austin now offer manikin simulators as learning aids.

In 2009, University of Phoenix opened an immersive learning center that uses high-fidelity manikins to mimic the stresses and dilemmas nurses face on the job. The center features four “adults,” one “baby,” and an “infant,” each with different functionality; a control room where lab technicians and faculty members can control the manikins’ responses; a fully equipped hospital bed; live or recorded video monitoring; and an observation room.

The immersive center tests a variety of nursing skills and promotes hands-on experience. For example, in the lab, a student may encounter the following scenario: Twenty-four hours after hip surgery, a patient with a history of schizophrenia is confused, acting out, and incontinent, causing the nursing assistant to become frustrated. Meanwhile, a case manager from the facility is demanding an update on the patient. This scenario forces students to make multiple decisions and prioritize responses, and builds their collaboration, management, and communication skills.

Because safety is paramount to the nursing profession, the lab technician and faculty facilitator monitoring the situation can program the manikin to illustrate the consequences of any mistakes the student makes. If a student administers the wrong amount of medicine, for instance, the “patient” could go into cardiac arrest or die. The range of real-life medical procedures, and the opportunity the simulator gives students to reflect upon their actions, puts the center on par with simulators used by the military, the airline industry, police departments, and NASA.

Nursing faculty are sometimes skeptical about the value of clinical training that does not involve living, breathing patients. “Faculty sometimes doubt that simulations can have much educational value,” says Kristy Chambers, MSN, RN, a University of Phoenix graduate and cofounder of Medical Simulation Design (see the following section). “But they are immediately converted once they experience the overwhelmingly positive response learners have, and can see that performance gaps can be identified and corrected in a peer-driven, proactive, objective manner.”

Nurse Zanza Kruer, a graduate of the University of Phoenix LPN/LVN-to-BSN program, says the simulations made her more comfortable around patients. “I was impressed with the manikins’ lifelike reactions, such as tears, tongue swelling, vital response, and speech,” she says. “The simulation program allowed us [nursing students] to learn about high-risk patients in a less stressful environment.”

JANE KLEINMAN, MA, RN, AND KRISTY CHAMBERS, MSN, RN

Bringing Simulation Technology to Fellow Nurses

Things have come full circle for University of Phoenix graduates Jane Kleinman and Kristy Chambers. Their company, Medical Simulation Design, recently received a contract from University of Phoenix to develop the nursing-simulation curriculum for its LPN/LVN-to-BSN program.

Kleinman, an RN with a master’s degree in organizational management, and Chambers, an RN who received an MSN from University of Phoenix, met five years ago while working in the field of high-fidelity simulation development. They both believed that simulation was a powerful technology with great potential, but that it was not well understood.

“We saw that administrators and educators had little concept of how to implement simulation technology,” Chambers says. Combining their experience as nurse educators and curriculum developers, she and Kleinman formed Medical Simulation Design to address that need.

Kleinman and Chambers have published outcomes research derived from high-fidelity simulations, and their work has been used in academic educational models applied to medicine. Institutions that have used Medical Simulation Design’s work in their own curricula include the National League of Nursing, the American Academy of Pediatrics, and the Loma Linda University Medical Simulation Center. The women are gratified to see their work benefiting a whole new generation of nurses.

PART II **DEGREES AND CAREER PATHS
FOR THE 21ST-CENTURY NURSE**



4

The Changing Market for Nursing Degrees

EXECUTIVE SUMMARY

Three different pathways lead into the nursing field. A student can take a training program at a vocational school or community college and become a licensed practical nurse (LPN); earn an associate's degree (ADN) or graduate from a hospital diploma program and be certified as a registered nurse (RN); or receive RN certification after completing a four-year bachelor of science in nursing (BSN) degree.

BSN-prepared nurses have better safety records and patient care outcomes than LPNs or ADNs. Fewer patient deaths occur in hospitals where more RNs hold BSN degrees, and BSNs commit fewer medical errors than LPNs and ADNs.

Only 47% of RNs hold bachelor's degrees or higher. Many policymakers and major nursing organizations, including the National Advisory Council on Nurse Education and Practice, the American Association of Colleges of Nursing, and the American Nurses Association, recommend that the majority of nurses hold BSN degrees.

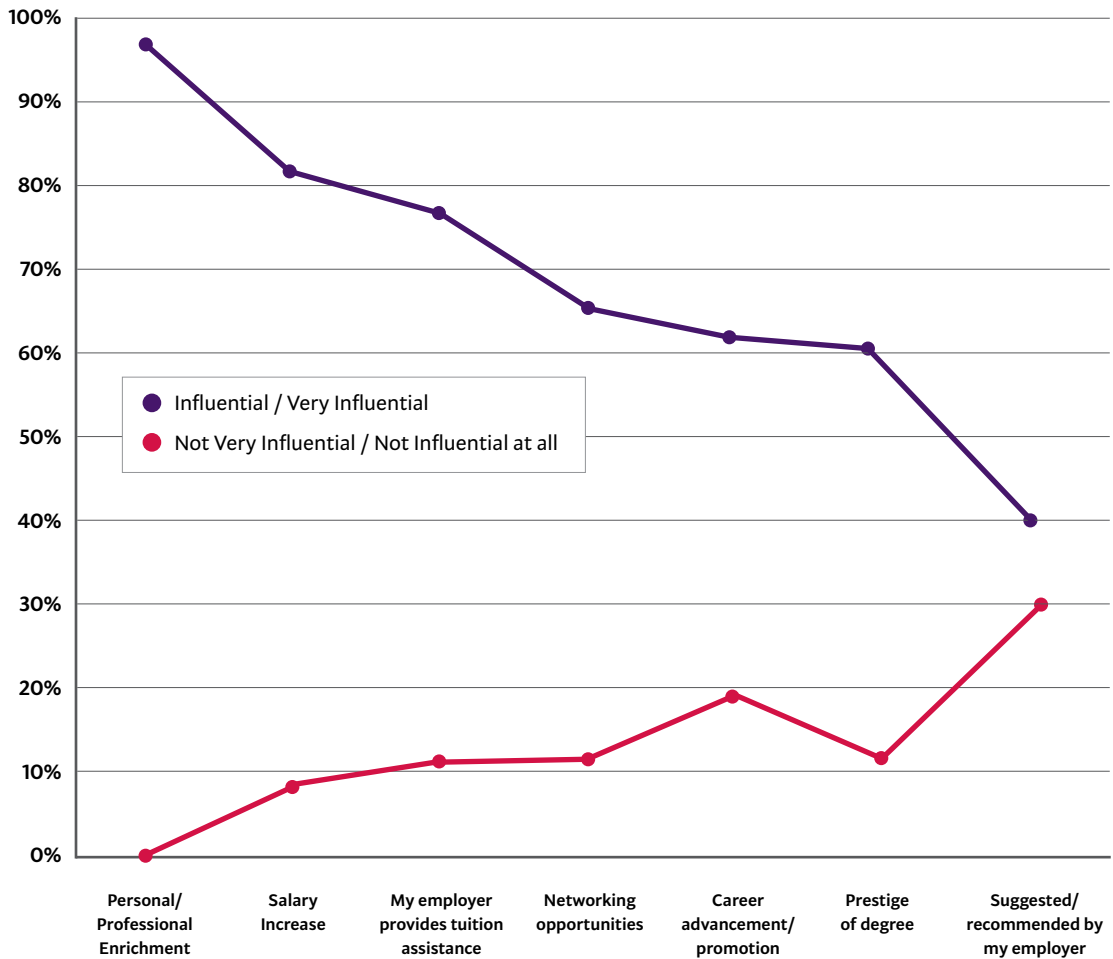
Hospitals now prefer to hire RNs. The number of LPNs in hospitals fell 47% between 1984 and 2005. The majority of job openings for LPNs will be in nursing care facilities and home health care settings.

Higher Education, More Qualified Nurses

Three educational pathways lead into the nursing field. Students interested in the profession can take a 12- to-18-month training program at a vocational school or community college and become a licensed practical nurse (LPN), earn an associate's degree (ADN) or graduate from a hospital diploma program and become certified as a registered nurse (RN), or receive RN certification after completing a four-year bachelor of science in nursing (BSN) degree.

As nursing has become more technologically complex, and as older and more acutely ill Americans have required more sophisticated care and longer inpatient stays, health-care facilities increasingly prefer to hire RNs who hold BSN degrees. Major nursing organizations, policymakers, and governmental advisory boards are also recommending that the BSN become the new educational standard for RNs. LPNs and other nurses

Internal and External Motivators for Pursuing a BSN



Source: Adapted from "What Are Working Nurses Looking For in B.S.N. and M.S.N. Degree Programs?" by Eduventures, 2007, <http://www.eduventures.com/private/papers/what-are-working-nurses-looking-for-in-b-s-n-and-m-s-n-degree-programs-oh-e-custom-research-report>. Copyright 2007 by Eduventures.

who lack BSN degrees may need to continue their education to remain competitive in the healthcare industry.

Nursing Degrees

Nurses serve America's patients across a broad spectrum of care settings: from hospitals to doctors' offices, from long-term care facilities to patients' homes, from schools to combat zones. Some nurses with advanced degrees may not treat patients at all; instead, they work as consultants, researchers, executives, and nurse educators. Nurses may also specialize in areas such as mental health, dietary science, oncology, pediatrics, and emergency care. Nursing professionals can be divided into four broad categories:

RNs provide direct patient care, such as administering medications, therapies, and treatments; assisting with operations and handling emergency room and trauma cases; using medical machinery ranging from IVs to ventilators; performing diagnostic tests and analyzing results; and recording patients' medical histories and symptoms, among many other tasks. They also hold hospital-management roles, ranging from head nurse or unit manager to director, vice president, or chief of nursing. To become an RN, a student must graduate from an approved nursing program and pass a national licensing exam called the National Council Licensure Examination (NCLEX-RN). An RN must hold at least an associate's degree in nursing (ADN), though many possess BSN degrees, and a small number hold diplomas awarded by three-year hospital programs. Sixty percent of RNs work in hospitals.¹

RNs are the largest group of healthcare workers; 2.6 million were employed in 2008. RN employment is expected to grow 22% over the next 10 years due to demographic changes, technological advances, and increased emphasis on preventive care. Most of this growth will take place at physicians' offices, home-health centers, nursing-care facilities (nursing homes, hospices, and specialty clinics), and nurse staffing agencies, rather than at hospitals.²

Advanced Practice RNs (APRNs) are RNs who hold master's degrees and work in four practice categories: clinical nurse specialists (nurses who provide patient care and consultations in a specific area, such as psychiatric health), certified registered nurse anesthetists (in some states), certified nurse midwives, and nurse practitioners. The latter category comprises specialty-care providers who offer healthcare in specialized areas

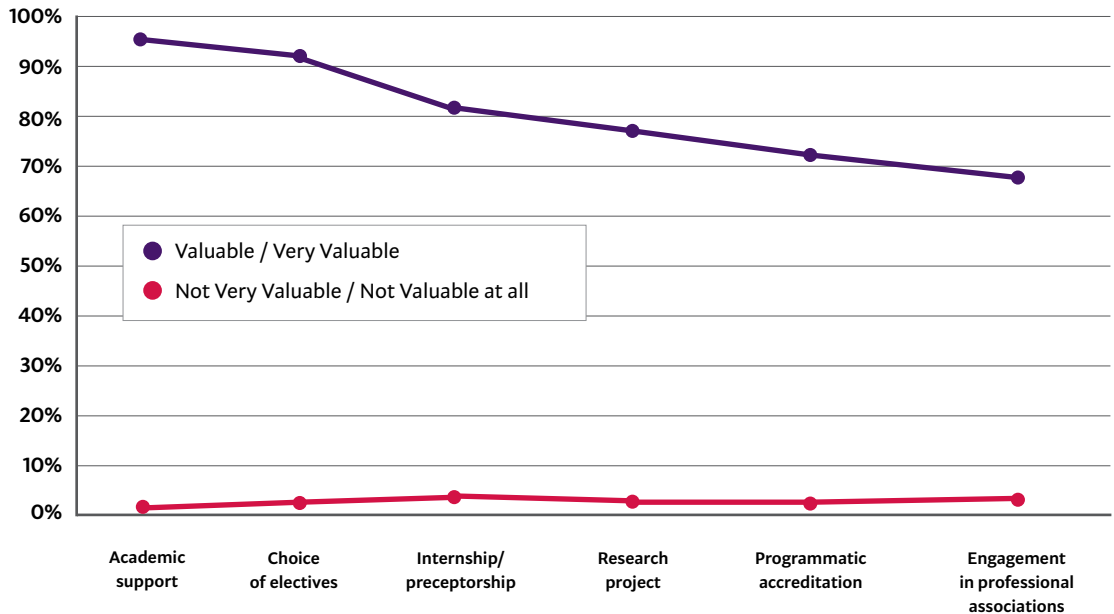


such as family or adult practice, women’s health, pediatrics, acute care, and geriatrics. State regulations govern APRNs’ educational requirements, licensing procedures, scope of practice, and ability to prescribe medication.³ In certain states, NPs are fully independent and legally permitted to assess and diagnose conditions and prescribe medication, including narcotics, while in others, they must work under the supervision of a physician.

LPNs, known as *licensed vocational nurses* in some states, provide basic bedside care, such as measuring and recording patients’ vital signs; giving injections; monitoring catheters; dressing wounds; and assisting with bathing and hygiene. They work under the direction of RNs or physicians. LPNs must complete an approved training program through a community college or vocational/technical school, and then pass the LPN version of the NCLEX (NCLEX-PN) to become licensed. In 2008, 753,000 LPNs were employed, and that number is expected to grow 21% by 2018. Twenty-eight percent of LPNs work in nursing-care facilities, 25% in hospitals, and 12% in physicians’ offices.⁴

Nurse aides perform routine care activities such as dressing, feeding, and bathing patients under the direction of nursing staff. Most states require that aides be certified by the Board of Nursing, and aides employed by companies that receive Medicare or Medicaid funds must complete 75 hours of training.⁵ In 2009, 1.4 million nurse aides were employed, most of them by nursing homes or home health agencies.⁶

Academic Components Valuable for RN-to-BSN Degree Programs



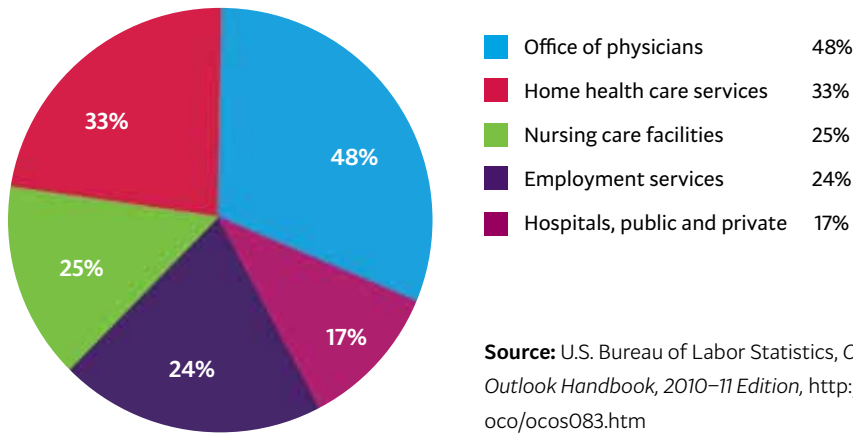
Source: Adapted from “What Are Working Nurses Looking For in B.S.N. and M.S.N. Degree Programs?” by Eduventures, 2007, <http://www.eduventures.com/private/papers/what-are-working-nurses-looking-for-in-b-s-n-and-m-s-n-degree-programs-ohe-custom-research-report>. Copyright 2007 by Eduventures.

The Growing Preference for BSNs

Nurses, patients, and the healthcare system all benefit from a highly educated nursing workforce. BSN programs in particular can enhance nurses’ roles as caregivers, because they introduce innovative techniques and theories not covered in most LPN programs, sharpen critical thinking skills, and produce better-informed healthcare providers.

“There will always be a high demand and need for bedside nurses of any educational level to care for patients,” says Pam Fuller, Ed.D., MN, RN, Dean of the University of

Projected RN Job Growth by Industry, 2008–2018



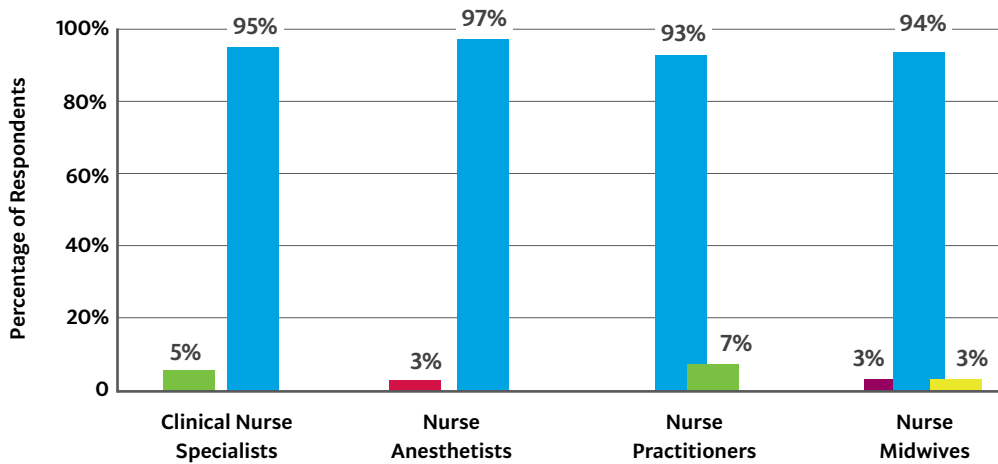
Source: U.S. Bureau of Labor Statistics, *Occupational Outlook Handbook, 2010–11 Edition*, <http://www.bls.gov/oco/ocos083.htm>

Phoenix College of Nursing. “However, many hospital administrators, including chief nurse executives, are beginning to prefer the BSN-prepared RN, and are making hiring decisions accordingly.”

Nurses, patients, and the healthcare system all benefit from a highly educated nursing workforce.

Research has shown that nurses with BSNs achieve better clinical results than those with ADN. One study of the effects of nurse education levels on patient outcomes determined that “each 10% increase in the proportion of nurses with BSN was associated with a 4% decrease in risk of death. By extension, the odds of patients dying in hospitals in which 60% of the nurses held BSN versus hospitals in which 20% (or 40% fewer) of the nurses were BSN prepared would be lower by 15%.”⁷ The study concludes that hospitals could expect 3.9 fewer deaths per 1,000 admissions, and 19.2% fewer deaths from complications among surgical patients, if they doubled the proportion of BSNs to overall nursing staff.⁸ Further research shows that RNs prepared at the associate’s degree and hospital-diploma levels have a significantly higher risk of committing medication errors and procedural violations compared to BSNs.⁹

2009 Education Level by Nursing Profession (Part 1)

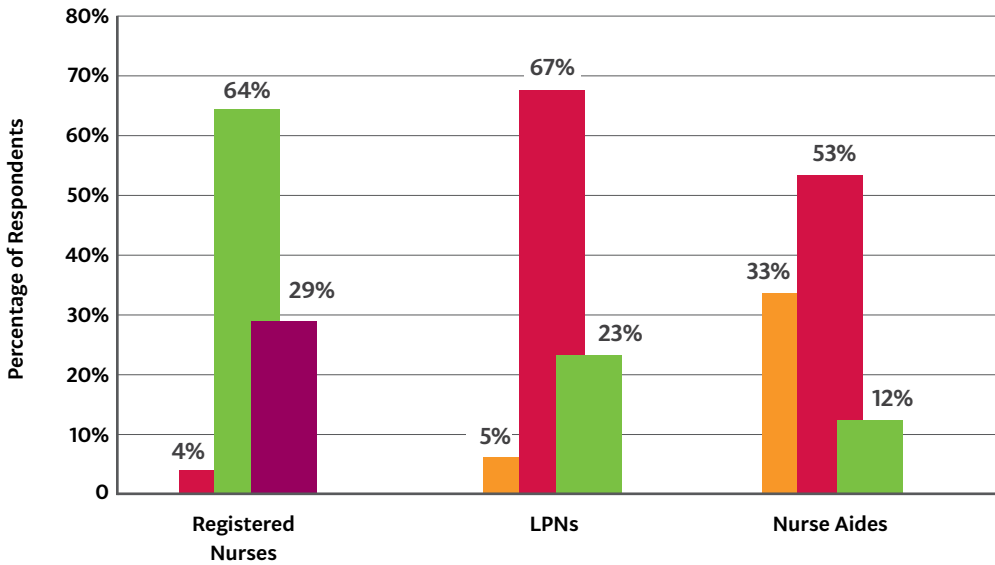


- Some College, No Degree
- Associate's Degree
- Bachelor's Degree
- Master's Degree
- Doctoral Degree

Note: 0% of respondents said they had less than some college experience.

Source: O*Net OnLine, 2010, <http://online.onetcenter.org>

2009 Education Level by Nursing Profession (Part 2)



- High School Diploma or Equivalent
- Some College (No degree)
- Associate's Degree
- Bachelor's Degree

Note: 0% of respondents said they had higher than a bachelor's degree.

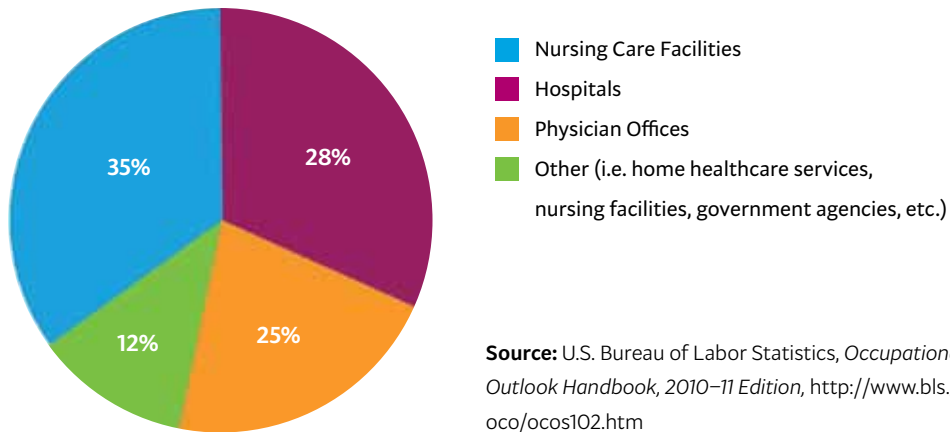
Source: O*Net OnLine, 2010, <http://online.onetcenter.org>

Less than half (47.2%) of current RNs hold bachelor's or higher degrees,¹⁰ but that percentage may soon rise. Policymakers, researchers, and nursing organizations are recognizing the importance of academic qualifications, and are advising more nurses to obtain BSNs:

- The National Advisory Council on Nurse Education and Practice, a governmental panel that researches nursing education, practice, and workforce issues, advised in its most recent report that the U.S. Congress, Department of Health and Human Services, and the U.S. Department of Education “should work with U.S. nursing programs to support the goal of having all registered nurses prepared at the [BSN] or higher degree level to improve quality and safety in healthcare in the United States.”¹¹ Researchers and learning institutions, the report suggests, should collaborate to help ADN nurses smoothly resume their education, and to train more nursing faculty to meet the demand.¹²
- In a joint statement, the American Association of Colleges of Nursing, the American Nurses Association, the American Organization of Nurse Executives, and the National League of Nursing urged wider acquisition of BSN degrees among the nursing workforce to meet projected staffing and educational needs. “A more highly educated nursing profession is no longer a preferred future,” the statement reads. “It is a necessary future in order to meet the nursing needs of the nation and to deliver effective and safe care.”¹³ A Robert Wood Johnson Foundation report recommends that 80% of America’s nurses hold a BSN by 2020.¹⁴
- New York and New Jersey legislators have proposed bills that would require all graduates of ADN and diploma programs to obtain their BSNs within 10 years of initial licensure.¹⁵ The nurses associations of both states support the bills, and they specify that the intent is not to displace or discredit other educational paths to nursing. Rather, says Karen Ballard, MA, RN, the president of the New York State Nurses Association, “this bill starts nurses on a career path that encourages them to keep pace with advances in technology and in turn, gives us a better prepared workforce.”¹⁶

Hospitals also prefer BSNs because they do not require as much orientation time as ADNs, says Julia A. Smith, Ph.D., RN, CNS, Director of Academic Affairs at the University of Phoenix School of Advanced Studies. “The employers who hire BSNs find value in the education and the knowledge that these RNs possess,” states Smith. Highly educated

Distribution of 753,600 LPN Jobs by Sector, as of 2008



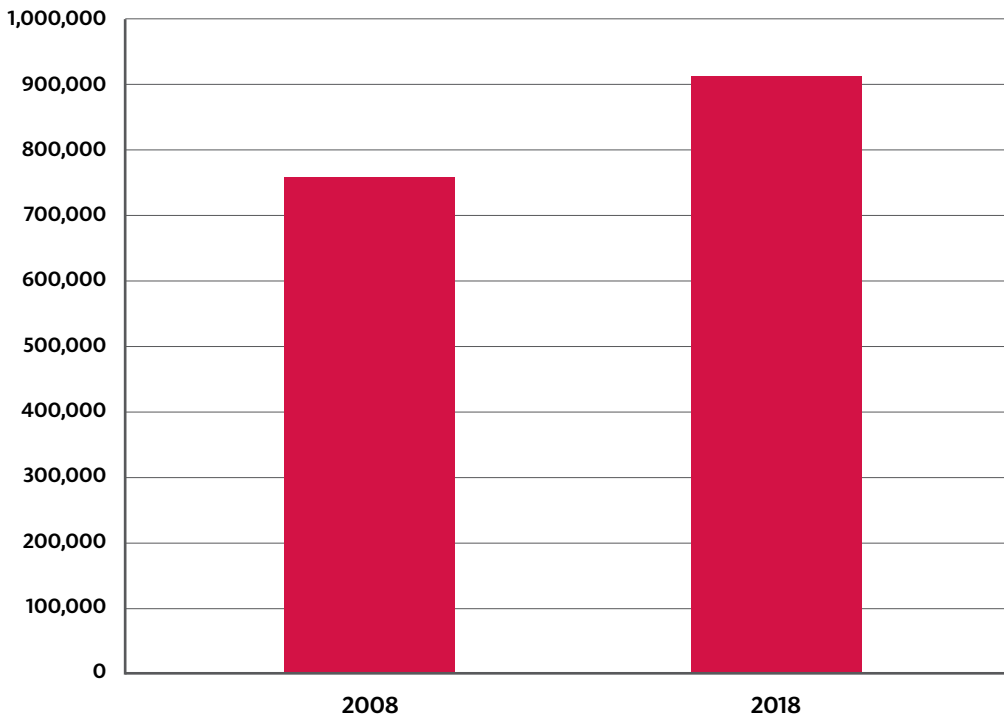
nurses, she points out, can more effectively analyze and communicate data to physicians and administrators. They are also better able to explain conditions, treatment options, and resources to patients and their families, she says, which improves patients’ long-term wellness prospects.

Hospitals Are Hiring Fewer LPNs

As hospitals hire more RNs and BSNs, LPNs’ employment opportunities may dwindle. The majority of job openings for LPNs through 2018 will occur in nursing care facilities and home health care settings.¹⁷ Employment rates for LPNs in hospitals, by contrast, plummeted over the past 20 years, according to the labor union United Nurses of America (UNA).¹⁸ The union calculates that the number of LPNs in hospitals between 1984 and 2005 fell 47% overall, or by 153,000.¹⁹ “This means that of the 602,000 LPNs employed in 1984, [a total of] 325,080 worked in hospitals. By 2005, out of approximately 700,000 LPNs employed, only 171,270 were working in hospitals.”²⁰ UNA attributes this decline to nursing staff cuts and hospitals’ preference for hiring RNs.²¹

LPNs who earn RN or BSN certifications can broaden their career horizons. Although the majority of ADN-only nurses work in clinical settings (hospitals, physicians’ offices, and

National LPN Projected Employment to 2018



Source: U.S. Bureau of Labor Statistics, *Occupational Outlook Handbook, 2010–11 Edition*, <http://www.bls.gov/oco/ocos102.htm>

nursing homes), nurses with higher degrees can find positions in nonclinical settings, such as insurance companies, educational services, and government or social service agencies, that offer greater responsibility and higher salaries.

“There is a place for LPNs in long-term care, skilled nursing facilities where patients are medically stable, but LPNs are not always prepared to take care of critically ill patients in a hospital setting,” says nurse manager Shelly Van Vianen, RN, BSM, CRRN, who works in the acute rehabilitation unit at Scottsdale Healthcare in Arizona.²² LPNs are being phased out throughout her hospital and especially on her floor due to the severity of

patients' conditions. Her hospital, she adds, is likely to continue its pattern of only hiring RNs and other advanced-degree nurses in the near future.

GEORGE FRISBIE, MSN, BSN, RN

A Degree Grants Deeper Nursing Insight

University of Phoenix graduate George Frisbie earned his BSN degree to become eligible for management positions at his workplace, but learned that the achievement was more than just a means to impress prospective employers. Frisbie, an emergency room nurse, says education changed his whole approach to patient care. "When I started nursing with an ADN degree, I got into the "treat 'em and street 'em" mindset—the belief that I just needed to take care of the immediate problem that the patients were there to have treated," he says. Earning a BSN through the 41-credit RN-to-BSN program at the University of Phoenix, Frisbie notes, provided him with the nursing theories and problem-solving skills he needed to treat patients' underlying health problems, not just their symptoms.

Frisbie, who also earned a MSN from University of Phoenix, says the BSN program helps nurses like him to think beyond the more confined ADN approach to nursing. "I thought I was approaching nursing in a holistic manner with an ADN, but I didn't have all the tools necessary to assess the patients' needs," he says.

Now working as a travel nurse and a nursing instructor at Boise State University, and pursuing his nursing doctorate online at University of Phoenix, Frisbie adds that his desire to advance in the nursing field kept him motivated throughout his studies. "I started my education at University of Phoenix because I got tired of people looking at me and saying, 'You're just an ADN nurse.' I was a very good nurse regardless of my education, but now nobody can say I am 'just' anything. I am working to be the best I can be."

CARLENE BALDOSSER, BSN, RN

Rising to a New Challenge Through Education

Many LPNs are returning to school to earn their BSN degrees, but few have had as much experience as Carlene Baldosser. She worked as an LPN for 26 years before her longtime boss, nurse manager Shelly Van Vianen, convinced her to pursue a BSN degree. "I was pushing Carlene to go back to school because she had such a high level of intelligence and

a talent for nursing that I felt I was watching her waste away because of her LPN position's limitations," says Van Vianen.²³

After continuous encouragement, and with the financial and emotional support of her unit and the hospital, an emboldened Baldosser graduated from the University of Phoenix LPN/LVN-to-BSN program. She subsequently passed the NCLEX-RN, and started her first day as a BSN-prepared RN on her familiar hospital floor.

"I can honestly say that since I received my [RN] license, I feel like I finally fit in somewhere," Baldosser says. She remains proud of having practiced as an LPN for so long, because it provided her with the insight and foundation she needed to become an RN. "I love patient care, and I feel that as an LPN I make an impact every day. But I knew there was more that I could, and can, do as a RN."

Baldosser says that she felt she had the skills of an RN due to her years of experience, but that she had lacked the confidence and legal authority to put those skills to good use until she pursued a BSN. She recognized how her limits as an LPN further burdened the floor RNs, because they had to take on extra patients while supervising her and other LPNs. That frustration is now gone, Baldosser says with relief.

Van Vianen notes that Baldosser's RN qualification allows the unit to better incorporate her into its overall mission to provide acute patient care. "Carlene's always had strong nursing skills, but I've watched her confidence, critical thinking skills, and leadership grow with every class she took," says Van Vianen, who unabashedly claims she cried with pride more than Baldosser did when her colleague passed the state license board exam.²⁴

Van Vianen's goals for her new BSN nurse include giving Baldosser the responsibility of becoming a training admission coordinator (a preceptor or mentor for pregraduate nurses) and joining various hospital committees, such as patient-care education and pharmacy. Van Vianen has also assigned Baldosser the research projects that will help expand the unit's medical knowledge—and, possibly, facilitate its best practices.



5

Nurses with Advanced Degrees

EXECUTIVE SUMMARY

Demand is growing for nurses with advanced degrees. Earning advanced degrees opens up many career opportunities for nurses, including those who no longer want to work in direct patient care settings.

Nurse practitioners (NPs) perform many of the same duties as physicians, including examining patients, diagnosing medical conditions, and prescribing courses of treatment. Studies have shown that, in many settings, NPs can provide the same quality of care as physicians at a lower cost.

Nurse informaticists use information technology to analyze and interpret health-care data. This relatively new field is growing rapidly.

Nurse executives hold administrative positions in healthcare facilities.

Nurse consultants advise lawyers, companies, and other institutions on medical issues. They are often more cost-effective than physician consultants.

Ph.D.-prepared nurses often go into academia or nursing research. The nursing faculty shortage is preventing colleges and universities from accepting many qualified applicants. Nursing researchers create valuable new knowledge about patient care and contribute to the professionalization of the nursing field.

Careers Beyond the Hospital Floor

Due to rapid changes in healthcare and society, nurses require deeper education than ever before, and nurses with advanced degrees have become all the more valuable. According to Pamela Fuller, Ed.D., MN, RN, Dean of the College of Nursing at University of Phoenix, advanced-degree nurses are playing an ever-larger role in healthcare. “Technology is booming in healthcare,” she says, “and there is a high demand for skilled nurses who can combine the technology of healthcare delivery with the medical records and systems that support nursing practice. In light of the millions of uninsured people in

the nation who will obtain health insurance under President Obama’s plan, there will be an enormous need for primary care practitioners—not just physicians, but also advanced practice nurses such as nurse practitioners. The nation will need thousands of new, highly educated practitioners as these changes unfold.” Nurses with advanced degrees are also needed as nursing faculty to help relieve the nursing shortage by training a new generation of nurses.

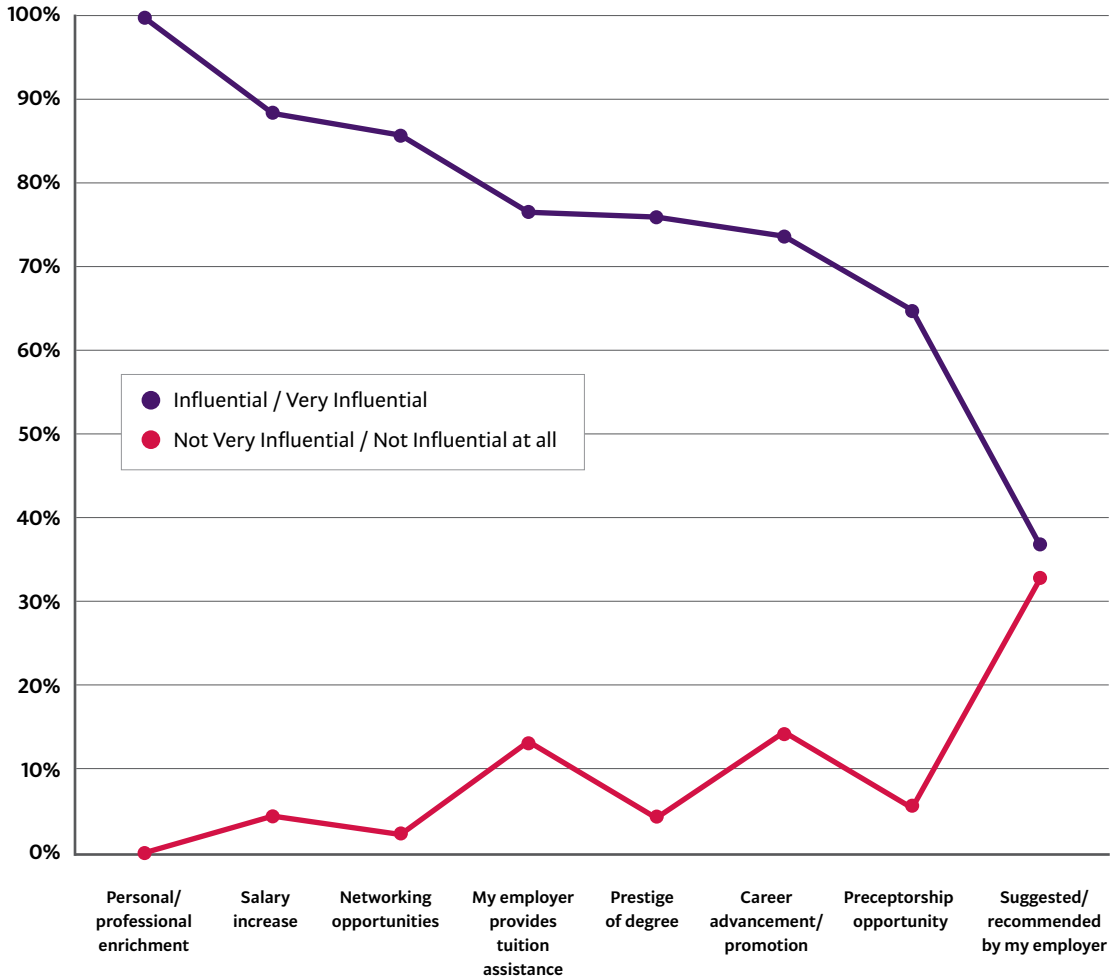
Some of the fastest-growing and most in-demand careers for nurses with advanced degrees—including nurse practitioner, informaticist, executive, consultant, faculty member, and researcher—offer greater intellectual challenges than floor nursing. Many also represent ideal opportunities for nurses who find floor nursing physically demanding. “Floor nurses have to do emergency procedures that require physical strength, such as lifting and moving patients, and they are on their feet most of the day,” notes Charlotte Saylor, MBA, MA, Vice President of Strategic Development in Healthcare at University of Phoenix. “As nurses age, they often want to move away from direct patient care and go into some other area of nursing. They might become nurse consultants or nurse experts; they might work for an insurance company as nurse specialists or as advisors to a pharmaceutical company, move into higher levels of administration or management, or go into nursing education.” A BSN is the minimum requirement for the positions Saylor names, but a master of science in nursing (MSN) degree is preferred; for nursing education, a doctorate is the prerequisite.

Some of the fastest-growing and most in-demand careers for nurses with advanced degrees—including nurse practitioner, informaticist, executive, consultant, faculty member, and researcher—offer greater intellectual challenges than floor nursing.

Nurse Practitioners

Nurse practitioners (NPs) are advanced practice nurses who provide many of the same healthcare services as physicians do, including writing prescriptions.¹ They perform physical examinations, order and interpret diagnostic studies (lab tests, CAT scans, bone density scans), treat physical and mental conditions, and can serve as a patient’s primary healthcare provider. In most states, NPs are nationally certified in an area of specialty,

Internal and External Motivators for Pursuing an MSN



Source: Adapted from "What Are Working Nurses Looking For in B.S.N. and M.S.N. Degree Programs?" by Eduventures, 2007, <http://www.eduventures.com/private/papers/what-are-working-nurses-looking-for-in-b-s-n-and-m-s-n-degree-programs-ohe-custom-research-report>. Copyright 2007 by Eduventures.

such as family health, women’s health, pediatrics, or acute care, and are licensed through state nursing boards.² Research indicates that NPs can provide the same quality of care as physicians³ at significant cost savings.⁴

Demand for NPs is growing as the shortage of primary care doctors increases. The Patient Protection and Affordable Care Act may provide new opportunities for NPs, as it includes provisions for increased funding for nurse-managed health clinics to help meet the healthcare needs of the roughly 32 million Americans expected to obtain health insurance as a result of the law’s passage.⁵

GAIL BROWN, MSN, CNP, RN

Saving Women’s Lives Through Charity

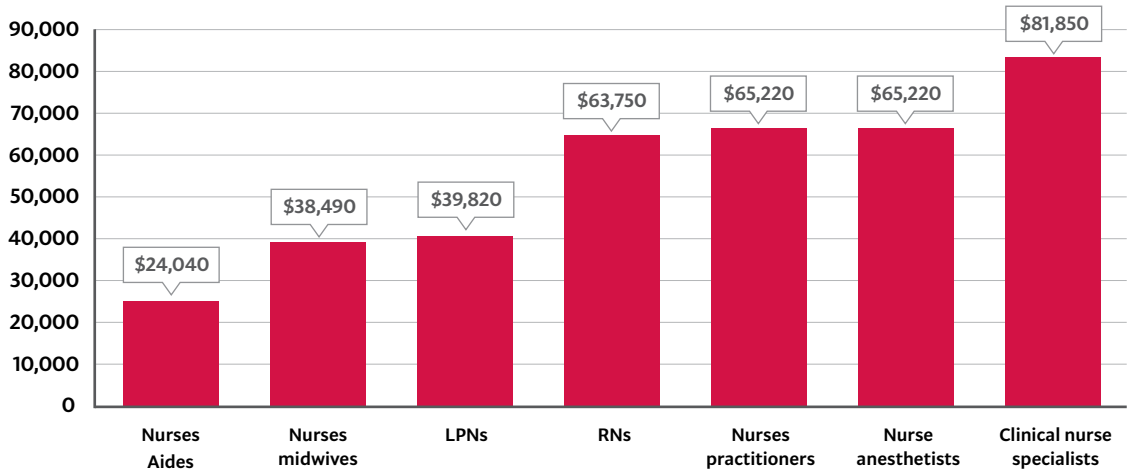
Certified nurse practitioner Gail Brown, a University of Phoenix graduate and 2009 recipient of its Spirit of Education Award, puts her education to use for women’s health. A labor and delivery nurse, Brown works for several charity women’s wellness clinics offered by St. Joseph’s Hospital and Medical Center of Phoenix, Arizona. She believes many low-income, uninsured women die prematurely due to lack of care. “It doesn’t sit well with me. No woman should have to die early because she could not obtain the proper access to preventative care that could give her an early diagnosis of breast or cervical cancer,” says Brown, who provides 1,500 annual free cancer screenings through the hospital’s women’s wellness centers.

A former flight nurse, Brown works in the hospital’s cancer center and its obstetrics and gynecology department, which offer additional charity programs, including a monthly mobile women’s health clinic that has helped thousands of uninsured women since its 1993 launch. Thanks to that mobile clinic, which operates only 12.5 days of each year, Brown calculates that more than 200 free screenings have resulted in abnormal mammogram diagnoses, enabling St. Joseph’s to help prolong women’s lives through biopsies, cancer support, and medical treatments.

“It was life-changing for me to be able to become a nurse practitioner,” says Brown, who had initially received a B.A. in design, but who then pursued nursing after giving birth to her first child. “It was at that time that I learned what my true passion in life was, which was to serve the underserved women in my community.” Brown says she remains confident in the future of women’s healthcare as the nation takes new steps to increase access

Median Annual Nursing Salaries by Profession, 2009

Salary \$US



Source: O*Net OnLine, 2010, <http://online.onetcenter.org>

to health insurance. At the very least, she can see her and her colleagues' efforts improving the lives of women who would otherwise not have access to care. "These women are alive and they're seeing their children grow up. They're taking better care of themselves and spreading the word about the preventative health care we offer them," Brown says. "It's truly about the seed you plant."

Nursing Informatics

Nurse informaticists combine IT skills and clinical expertise to use emerging health-care technologies, such as electronic medical records and sophisticated information-management systems, to interpret a wealth of patient care and outcomes data. Marc A. Magill, MS, an informatics expert with the Veterans Health Administration and a University of Phoenix faculty member, defines *informatics* as "the study and practice of combining information technology with applications in support of the provision of health care. These applications may include automation of the medical record, order entry and results reporting, bar code medication administration, and telemedicine."

“Today’s clinical informatics is much deeper than the simple analytics that was being done ten years ago,” says David Harrell, Ph.D., FACHE, Director of Strategic Development in Healthcare at the University of Phoenix. “Clinical informatics is essential to practicing real evidence-based medicine, which in turn is essential to improving healthcare quality.” Indeed, contemporary clinical informatics is a critical component of the quality-benchmarking initiatives that arose from the national patient safety movement. Multi-stakeholder organizations supporting this movement—such as the Leapfrog Group, the National Quality Forum, private health insurers, and the federal government (via the Center for Medicare and Medicaid Services)—stress that quantifying best practices by analyzing local, regional, and national patient data is crucial to improving the quality of healthcare while reducing its cost.

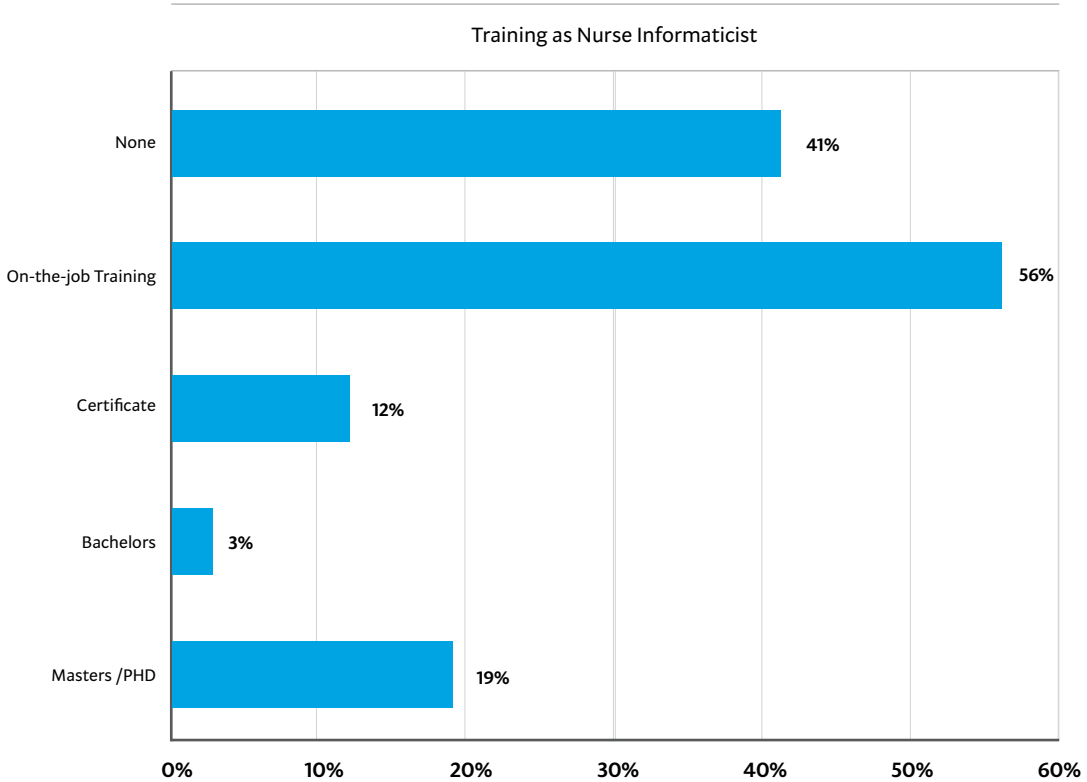
Nurse informaticists work as systems analysts for hospitals, as research and development specialists with corporations, and as nursing faculty in academia. The field is growing rapidly due to healthcare’s increasing dependence on technology and its advance toward more efficient and cost-effective medical services.⁶ “In the next five to 10 years, I believe the future of the field of healthcare informatics will include aggressive implementation of technology applications designed to improve healthcare outcomes and evidence-based practice,” says Magill. “Opportunities for healthcare informatics careers will continue to increase as the field evolves.”

Most nursing programs still do not offer courses in informatics, even though almost all nurses will encounter information technology on the job. “Healthcare informatics is critical for every student of nursing, no matter what career path he or she plans to enter,” says Glenda Meskin, MSN, RN, CCM, a University of Phoenix faculty member with informatics expertise. “Nurses need to know how to obtain reliable information not only for themselves but for patients. They also need to be educated on how the use of technology increases patient safety and provides tools to measure patient outcomes.”

Nurse Executives

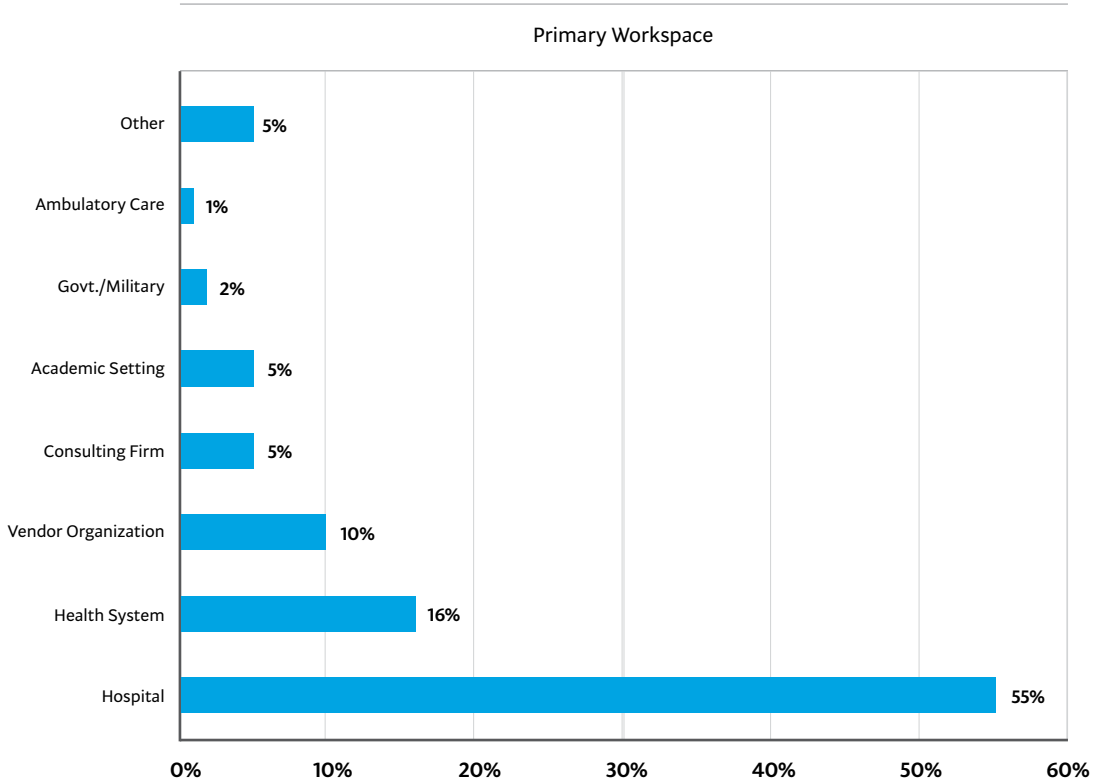
When many people hear the word *executive*, they picture an MBA-holding businessperson carrying a briefcase—not a nurse. In reality, many nurses occupy top-level executive positions in the United States today, both inside and outside the healthcare industry. Although the most common executive-level position for nurses is chief nursing officer (CNO) of hospitals and healthcare systems, nurses have also become chief operating officers, chief

Level of Formal Informatics Training Obtained by Working Nurse Informaticists, 2007



Source: Adapted from Healthcare Information and Management Systems Society, 2007. *2007 HIMSS health informatics survey*, <http://www.himss.org/content/files/surveyresults/2007NursingInformatics.pdf>

Primary Workplaces of Surveyed U.S. Nurse Informaticists, 2007



Source: Adapted from Healthcare Information and Management Systems Society, 2007. *2007 HIMSS health informatics survey*, <http://www.himss.org/content/files/surveyresults/2007NursingInformatics.pdf>



financial officers, and presidents or chief executive officers (CEOs). Nurses work as management advisors for top consulting firms like McKinsey and PricewaterhouseCoopers as “turnaround specialists” tasked with revamping troubled healthcare organizations; as legal subject matter experts assisting healthcare malpractice attorneys or insurance companies; and as entrepreneurs.

Although nurses were once not a frequent presence in past hospital boardrooms, that situation has changed. Greater focus on high-profile issues like patient safety, evidence-based practice guidelines, and clinical quality improvement has helped put a spotlight on executive-level nursing positions such as the CNO. A recent survey conducted by the American College of Healthcare Executives and the American Organization of Nurse Executives found that the relationship between CNOs and CEOs at hospitals and healthcare organizations is strong, with more than 90% of those surveyed reporting that each views the other as essential to organizational success. The survey also found that 75% of CNOs reported directly to their hospitals’ CEOs, whereas more than 90% of CNOs surveyed stated they were the chief respondent to physician issues and complaints within their hospitals.⁷

“I’ve hired many nurses to serve in top executive positions in my career,” says Harrell, a healthcare executive and consultant with more than 40 years of experience in healthcare

“Nurses who have moved away from the bedside and have gone into nursing management have the potential to become top executives.”

administration. “I’ve even hired a nurse to serve as CEO of a healthcare system, who continues to perform that role today. Nurses can make very strong leaders.”

Harrell says that the nurses who enter executive management combine clinical expertise and advanced education with management experience. “Nurses who have moved away from the bedside and have gone into nursing management have the potential to become top executives,” he states. In his experience, nurses serving in leadership roles usually hold advanced degrees in nursing, business, healthcare management, or a combination of these disciplines. He recommends that nurses who want to move into management earn a master’s of health administration (MHA) as well as an MSN.

Saylor also stresses the importance of graduate-level education for nurses seeking executive careers. “The nursing Ph.D. programs at the University of Phoenix are largely focused on academia and research, while our various master’s-level programs in nursing, business, and healthcare administration are very suitable for executive-level careers,” she says. “We also are seeing aspiring nurse executives complete our Doctor of Management in Organizational Leadership degree program, our Doctor of Health Administration program, and our MSN/MBA dual-degree program. Our MSN/MBA combined program is very demanding, and it takes longer to complete than some of our doctoral degrees.”

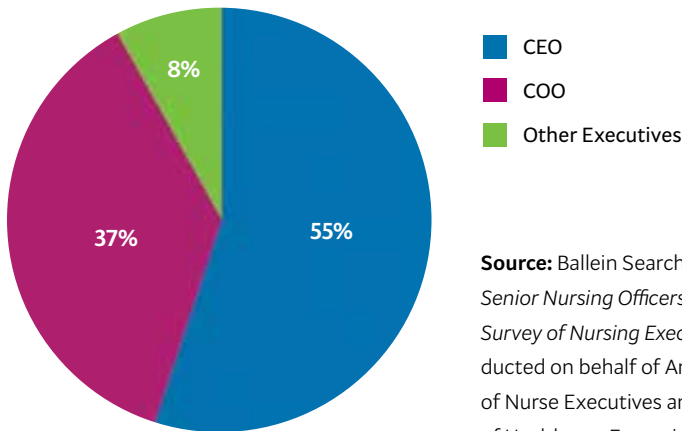
Saylor especially recommends the MSN/MBA program to aspiring nurse executives because it gives students an in-depth understanding of clinical topics as well as business issues unique to the healthcare industry. Ideal MSN/MBA students, she says, are “individuals who are committed to developing skills in advanced nursing practice as well as learning what it’s like to be in a boardroom.”

CAROLE PEET, MBA, MSN, BSN, RN

Combining Clinical Experience With Leadership Training

Carole Peet, President of St. Anthony Hospital in Gig Harbor, Washington, is one example of a floor nurse who expanded her administrative and management skills to become a top nurse executive. “As president, I have accountability for the facility’s outcomes,”

Personnel to Whom Chief Nursing Officers Report



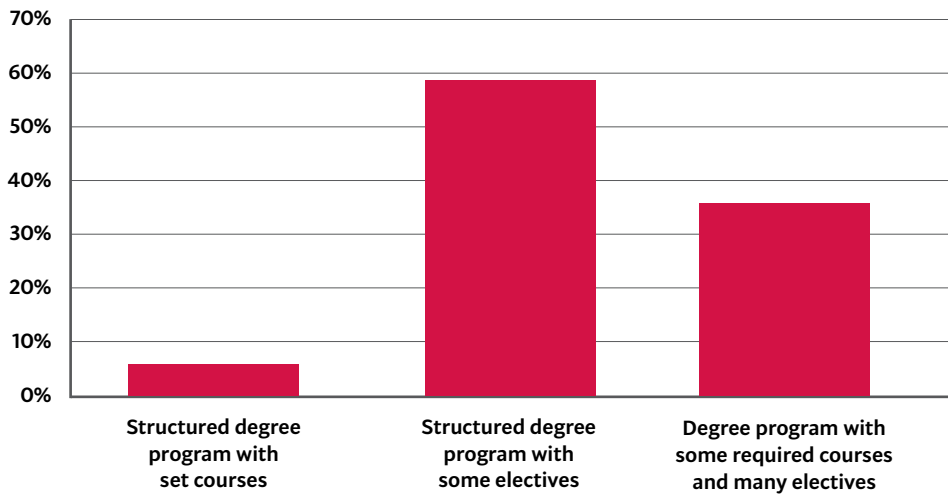
Source: Ballein Search Partners, 2004. *Why Senior Nursing Officers Matter: A National Survey of Nursing Executives*. (Survey conducted on behalf of American Organization of Nurse Executives and American College of Healthcare Executives).

says Peet. “My role is to lead the organization in creating a positive experience for our patients, physicians, and employees and producing best possible health outcomes for our patients.”

Like many nurse executives, Peet began her career as a floor RN. She went on to hold a variety of leadership roles, including charge nurse, director of nursing, and manager of various hospital departments, before she was recruited to act as president of St. Anthony, a new hospital which she operationalized and opened in 2009. In 2001, while working as assistant administrator of patient care services, Peet completed an MBA in healthcare management at University of Phoenix. “Earning an MBA was an important component of my continued knowledge and professional success,” she says. “Obtaining the degree allowed me to expand my knowledge base related to business management, and opened the door for further promotion within the executive team of healthcare. The MBA gave me the knowledge and skill set I needed to lead people who worked outside of nursing and clinical operations.”

Peet recommends that any working nurse who wants to develop an executive career path seek additional education. “A strong educational background at a postgraduate level is one of the most important stepping stones to the executive track,” she says.

Preferred MSN Degree Program Structures



Source: Adapted from “What Are Working Nurses Looking For in B.S.N. and M.S.N. Degree Programs?” by Eduventures, 2007, <http://www.eduventures.com/private/papers/what-are-working-nurses-looking-for-in-b-s-n-and-m-s-n-degree-programs-ohe-custom-research-report>. Copyright 2007 by Eduventures.

Nurse Consultants

Some nurse executives work as consultants, using their clinical expertise and specialized knowledge to advise clients in healthcare and other fields. Many nurse consultants are self-employed or work for small firms, and serve the legal, business, or healthcare sectors.

Legal nurse consultants provide clinical expertise and analysis in healthcare-related legal cases, such as medical malpractice or workers’ compensation suits. They educate clients, attorneys, judges, and juries about the medical facts of legal cases, and review scientific literature for the definitive clinical evidence that will benefit their clients’ positions. They can advise either side of a legal case—helping attorneys advocate either for patients in malpractice cases, for example, or for the doctors or healthcare institutions who are being sued—or assist judges and mediators as neutral, third-party experts.⁸ Legal nurse consultants also offer insight to lawmakers drafting healthcare legislation and government accreditation regulators writing healthcare policy.

Law firms and judicial entities used to rely solely upon physicians for clinical expertise and advice, but this proved expensive. In the 1980s, they learned that nurse consultants could provide expert consultation every bit as well as physicians, at a fraction of the cost.⁹ Nurses' consulting opportunities grew as the legal field became aware of the cost savings and strong knowledge base they provided, and nursing consulting is now a popular sub-vocation with a bright future. Of the more than 1.1 million attorneys currently practicing law in the United States, 25% handle medically related cases, for which legal nurse consultants increasingly will be needed.¹⁰

Corporate nurse consultants provide clinical and business advisory services to corporate America. They may assist software companies in developing healthcare information technology, help test and promote new drugs at pharmaceutical manufacturers, or design employee wellness plans with human resources departments. Organizations that commonly employ internal and external nurse consultants include health insurers, drug and medical device makers, and healthcare technology companies. Corporate nurse consultants also work to improve occupational health and safety. They develop and deploy ergonomically designed workspaces, craft policies that reduce workplace accidents, and even offer on-site nursing care for large employers. Some corporate nurse consultants work within the educational sphere, developing curricula for nursing programs or continuing-education programs for healthcare facilities.

Becoming a successful nurse consultant requires years of education and experience. Rosemary Goodyear, Ed.D., RNC, FNP, FAANP, a nurse consultant who has helped many schools implement and revise their nursing programs, says that any nurse considering a career in consulting first should spend several years in the trenches as a staff nurse in various capacities, then move up into management. She also suggests such nurses pursue a terminal degree and take on leadership positions in their workplaces or in professional nursing associations. "To be a good consultant, you must be a risk taker and leader and not someone who is satisfied with following along behind leaders," Goodyear says.¹¹

Options for Doctorates: Nurse Faculty and Research

Obtaining a doctoral degree requires great commitment on the part of an active nurse. Some schools, University of Phoenix among them, now offer online doctoral programs to help hardworking nurses achieve their goal of earning a Ph.D. "Expanding to [the highest] level of education addresses our nation's need for more doctorally prepared



nurse educators and researchers,” says University of Phoenix faculty member Marilyn Klakovich, DNSc, NEA-BC, RN, describing the university’s decision to launch a Ph.D. program in nursing. “By offering the program online, we are opening this level of education to nurses who wouldn’t be able to attend a traditional Ph.D. program.”

Nursing faculty are sorely needed. Many nursing professors, like their counterparts working in hospitals and other healthcare facilities, are approaching retirement age. Colleges and universities are struggling to hire doctorally prepared nursing faculty to replace those who retire. As the AACN reports, at least 814 faculty positions are vacant nationwide, and at least 80 more faculty are needed to meet growing student demand.¹² “We must increase the faculty population so we can meet future demand for nurses,” says Julia A. Smith, Ph.D., RN, CNS, Director of Academic Affairs at the University of Phoenix School of Advanced Studies. “Ph.D. programs like the one at University of Phoenix will prepare students to understand the theories of nursing education so they can apply their advanced knowledge and skills to expand the nation’s faculty pool.”

Doctorate-level nurses also work as researchers, examining the nation’s ever-evolving healthcare trends through advanced, evidence-based study. Experts believe evidence-based nursing must be a “core objective” of the industry “if nursing is to become a mature discipline.”¹³ With scientific research essentially standardizing nursing approaches, nurse researchers are becoming increasingly indispensable to the profession.

America’s expanding geriatric population presents nurse researchers with a key challenge: to provide the advanced healthcare solutions that will allow fewer nurses to treat more senior citizens, many of whom will require intensive treatment across longer life-spans. The reduced RN workforce, combined with rising demand from nursing homes and acute care facilities, will require researchers to develop more efficient delivery

systems to maximize overextended nurses' efforts. From streamlining data-gathering methods to designing better theoretical frameworks, nurse researchers will devise the integrated healthcare models and systematic interventions needed to treat the chronic diseases, disabilities, and other medical dependencies that would otherwise burden elderly patients and their caregivers.

Increased globalization has also increased the need for nursing research. Infectious diseases now move rapidly across borders, requiring nurses to explore deeper scientific solutions to improve community and world health. Communications technology is steadily erasing international boundaries by promoting the exchange of healthcare policies, laboratory data, and innovative practices. Globalization also paves the way for nurses working for research institutions to evaluate state and federal healthcare policies against international standards and anticipate demands on the worldwide nursing population.

“Preparing nurse researchers and faculty is essential to the overall advancement of the nursing profession,” Smith says. “Nurse researchers are responsible for conducting and interpreting healthcare research that will form the foundation for nursing practice and education in the future. Nursing faculty is charged with advancing the development and transformation of nursing education in the 21st century. Both nurse researchers and nurse faculty are necessary to relieve the current nursing shortage and improve healthcare quality and outcomes.”

FRANCINE NELSON, Ph.D., RN

Educational Leadership Through Military Experience

“Learning is a lifelong process,” says nursing faculty member Francine Nelson, Campus College Chair for Nursing and Health at the University of Phoenix School of Advanced Studies. Throughout her distinguished nursing career, she has had many opportunities to learn, teach, and perform research. She has served as a Navy nurse (retiring with the rank of commander), a nurse researcher, a clinical nurse specialist, the head of both a nursing research and emergency department, an investigator and surveyor for the state of Nebraska, and a faculty member at the University of Texas.

Nelson's career choice was rooted in her childhood experience. “As a young girl, I had a strong love for animals and felt deep sympathy towards wounded creatures,” she says.

My mother recognized my desire to soothe others' pain, and talked to me about what she thought a nurse should be." Nelson was inspired to join the military by hearing her father's stories about his tour of duty with the Coast Guard, and by visiting her uncle, an aviator, on the naval base where he worked. "Something deep-seated in my heart guided me toward a military career," Nelson says. "I'm the kind of person who cries when she hears 'The Star-Spangled Banner.'"

Nursing in the Navy gave Nelson valuable leadership experience. "In the military, we're both nurses and officers, and are trained to lead both military personnel and healthcare professionals," she explains. "When I worked in a civilian environment, I always found my military experience helped me approach physicians as peers. Nurses are sometimes intimidated by physicians, and in some settings there's conflict between them. In the military, though, you're on the same team and you have the same mission—to protect the health of active-duty members serving the country—and so that conflict disappears."

Nelson always enjoyed working with students and found, after she left teaching, that she missed it. She joined the faculty at University of Phoenix (where her daughter and son-in-law earned their degrees) so that she could teach online. "I knew online education was the future of adult learning," she says. Nelson completed the University of Phoenix faculty orientation, training, and mentorship process, which she found rigorous and challenging. "I was impressed by the quality of the training," she says. "I remember thinking, 'We should do this at brick-and-mortar schools.'"

After teaching numerous undergraduate research courses and learning firsthand how students applied their education to their clinical practice, Nelson accepted the challenge to chair the University of Phoenix doctoral programs in nursing and health. "As a long-time educator, researcher, and now as a higher education administrator, I can leverage my years of practitioner experience to help a new generation of nurse leaders contribute to the field," she says. "I enjoy meeting nursing students from all walks of life and sharing their passion to make a positive difference."

RUTH GRENDELL, DNSc, RN

Nursing As a Global Mission

"Nurses can work wonders just through personal contact," says University of Phoenix faculty member Ruth Grendell, a registered nurse who also holds a doctorate in nursing

science. With decades of nursing and teaching experience, Grendell has also touched the lives of nurses and patients around the world by participating in medical mission trips.

Grendell first became interested in nursing as a child. “The woman who babysat me when I was growing up was a Navy nurse. I was enthralled by what she had accomplished and all the places she had traveled to,” says Grendell, who graduated from a nursing diploma program at a hospital, earned a BSN at San Diego State University, and went on to work in a variety of staff and management positions in hospitals. Grendell also taught nursing at the University of San Diego, where she received her master’s and doctorate degrees. She has co-authored a nursing textbook, written several chapters in nursing texts, and authored a teacher’s manual.

A lifelong volunteer, Grendell has been part of 25 international medical missions. She helped immunize 5,000 children in one month in Uganda, taught in large auditoriums in cities in China, visited rural hospitals in India and Tibet, and bailed rainwater out of a boat on the Amazon River in Peru. “Most of these trips took place over Christmas break or during the summer, and I took students along,” Grendell says. “It’s a great experience for them as it gets them out of their comfort zone. They’re thrown into rough conditions—they’re sleeping on the floor, eating strange foods, and only taking a bath once a week. It makes them think.”

Grendell’s missions have given her the opportunity to observe the state of healthcare in different nations. “On some of these missions, we’d teach curriculum development programs in developing countries like India or former Communist countries like Russia, Romania, and Albania,” she says. “In India and other Third World countries, nurses are taught in hospitals. The nursing curriculum is at a very basic, almost nurses’-aide level, but there’s a movement to elevate nursing programs to something closer to a BSN level. We went to a rural hospital in India where we taught classes to students and instructed the staff. You could just see their eyes light up when they learned about anatomy and physiology and what caused different diseases and symptoms.”

Giving back to communities around the world has strengthened Grendell’s commitment to service, to leading by example, and to reaching beyond familiar environments to make a positive difference—a passion she hopes to cultivate in the next generation of nurses. “I was very fortunate to have those kinds of experiences,” Grendell says. “I never thought that my life would turn out this way.”



6

Educating Tomorrow's Nurses



EXECUTIVE SUMMARY

Many nursing students today are working adults with families who cannot afford to take time off in order to attend classes. Online courses and classroom-based programs that offer flexible scheduling can make it more feasible for these nurses to earn degrees.

Nursing students experience less stress and are less likely to drop out when they receive social support. Faculty mentors and cohort programs in which a group of nurses take classes together can provide such support.

Nursing students often are returning to school after several years' absence and may need tutoring services.

LPN/LVN-to-BSN programs, which are tightly focused on helping LPNs or LVNs earn BSN credentials, are an effective, streamlined way for LPNs and LVNs to earn bachelor's degrees.

Nursing curricula must constantly be updated in order to encompass the rapid changes that take place in the healthcare field. Curricula should include such topics as stress relief and financial management.

The Working Learner Nurse

Decades ago, most nursing students began degree programs directly after high school. Today, however, the “typical” nursing student may well be a woman in her late 20s or early 30s, raising children while working full-time—perhaps in a physically demanding role as an LPN or nurse’s aide. She may attend classes online and complete her coursework as time permits, possibly during her lunch break or when her children are sleeping.

Many nursing students meet the description of nontraditional students: the 73% of students enrolled in colleges and universities who are working adults.¹ Nontraditional students work part- or full-time while attending classes, live off campus, and finance their own education.² Many are married and have children. They tend to be older than the

Enrollment in Nursing and Nursing-Related Education Programs

Degree pursued	Number enrolled in 2008	Percent of those enrolled	Percent with more than 75 percent distance -based
Associate's	3,151	1.5	–
Bachelor's	90,553	44.5	49.1
Master's	94,205	46.3	41.5
Doctorate	13,479	6.6	35.0
Post-master's certificate	2,065	1.0	–
Total	203,453	100.0	44.3

Dash = too few cases to report estimated percent (fewer than 30 respondents).

Source: U.S. Health Resources and Services Administration, 2008 National Sample Survey of Registered Nurses, <http://bhpr.hrsa.gov/healthworkforce/rnsurvey/2008/nssrn2008.pdf>

residential 18- to 22-year-old college-goer, as are most nursing students; the average age of a new RN in 2003, for example, was 31.³

Nursing students who are working learners need to be extremely committed in order to fit education into their already busy lives. Not only must they contend with exams and papers like other students, but many also work as nurses or nurse assistants—both high-intensity, stressful jobs. As nurse and blogger Lois Turley puts it,

Nurses are short-handed, understaffed, and overworked. We are only an accidental needlestick or body fluid splash injury away from exposure to deadly diseases. We get aches and pains from lifting and tugging on people bigger than we are. We watch people die. We see families grieve. Often we work double shifts to meet the needs when staffing is overstretched. We are tired. Yet we love nursing—most days.⁴

Nurses work long and often irregular hours. In a 2007 study of new nurses published in the *American Journal of Nursing*, 51% said they had worked voluntary overtime, and 13% had worked *mandatory* overtime. Sixty-one percent had been assigned to a night, evening, or rotating shift, and 63% claimed their work interfered with their family lives at least four days per month.⁵ These nurses also reported significant amounts of job-related stress from other sources, such as verbal abuse on the job or injuries ranging from cuts and bruises to sprains and needlesticks.⁶ Though none of the nurses in the survey had been working longer than 18 months, 29% of them had already left their first job, many citing poor management and stress as the reasons.⁷ Stress is a major contributor to the nursing shortage: According to a national study, one in five new nurses quits within his or her first year of work.⁸

Best Practices for Nursing Education

With the nation in a nursing shortage, and with the profession becoming ever more complex, the onus is on nursing faculty to graduate a steady stream of well-prepared nurses. There are many ways to accommodate working learners' needs while providing them with up-to-date, highly relevant training. University of Phoenix suggests the following best practices:

Encourage mentoring. Research and anecdotal evidence suggest that nursing students and new nurses perform better when they have mentors. Students in one research project, for example, said that instructors had an even greater effect on their educational success than their families did. Faculty whom students identified as mentors were described as patient, accommodating, encouraging, open to questions, and tolerant of mistakes and the struggles of students not fluent in English.⁹ Hospitals using RN residency programs in which new nurses are paired with experienced mentors, such as Baptist Health South Florida in Miami, have found that the programs reduce new nurse turnover.¹⁰ Some nursing organizations, such as the Oncology Nursing Society, run their own mentoring programs, which students could be encouraged to join. Designers of nursing programs can also match younger students with more experienced ones who can provide advice and support.

At University of Phoenix, advanced-degree nursing students are paired with faculty mentors who guide them through important milestones in their academic career: the practicum (in the case of master's students) and the dissertation. The University's practi-

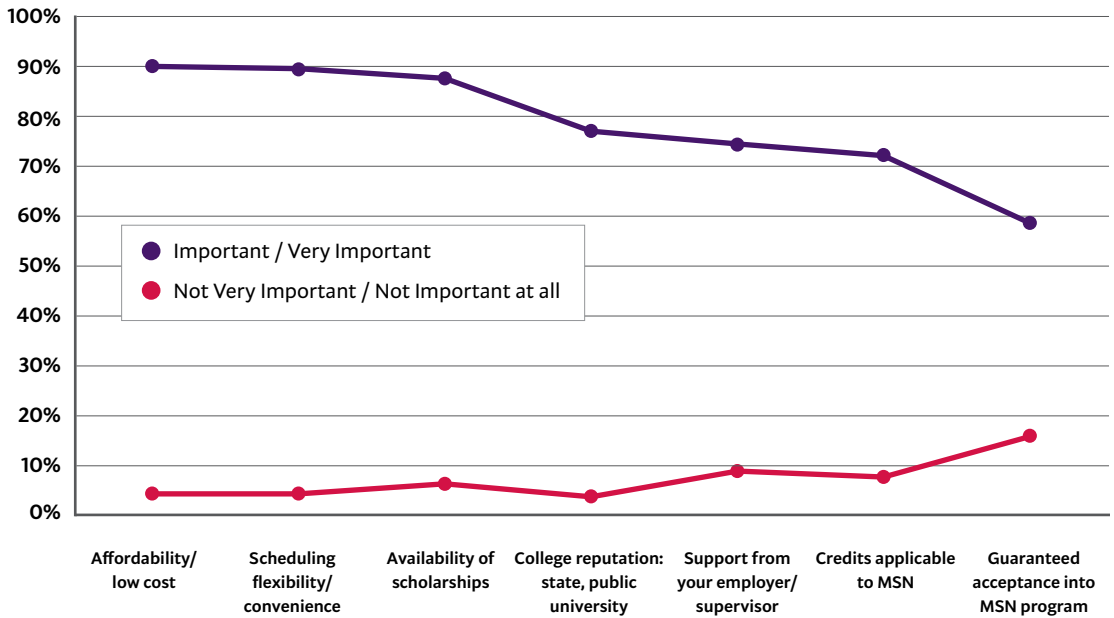


tioner faculty also serve as mentors. “The vast majority of our faculty are currently practicing, licensed nurses,” says Charlotte Saylor, MBA, MA, Vice President of Strategic Development in Healthcare at University of Phoenix. “They provide students with real-world examples of how nurses put learning into practice. That’s something University of Phoenix students see as adding true value to their learning experience.”

With the nation in a nursing shortage, and with the profession becoming ever more complex, the onus is on nursing faculty to graduate a steady stream of well-prepared nurses.

Continually refresh the curriculum to reflect changes in the field. Nursing educators must stay current with the latest developments in nursing practice, research, and technology, and incorporate such changes into nursing courses. Moreover, educators should create processes by which curricula can be expeditiously assessed and renewed. “At University of Phoenix, we strive to keep our curriculum highly relevant,” says Angie Strawn, MSN, RN, Associate Dean of the College of Nursing at University of Phoenix. “The faculty who help design our curriculum keep up-to-date with current and future trends in healthcare and the latest research findings. A key element of our curriculum is its focus on evidence-based practice: procedures that research has demonstrated to bring about the best outcomes for patients. We also frequently update our curriculum in order to respond to changes in healthcare such as the passage of a new healthcare reform bill.”

Factors Affecting RN-to-BSN Students' Choice of Degree Programs



Source: Adapted from "What Are Working Nurses Looking For in B.S.N. and M.S.N. Degree Programs?" by Eduventures, 2007, <http://www.eduventures.com/private/papers/what-are-working-nurses-looking-for-in-b-s-n-and-m-s-n-degree-programs-ohe-custom-research-report>. Copyright 2007 by Eduventures.

Promote peer and social support groups. Sharing problems and concerns with peers who have had similar life experiences can reduce nursing students' stress and feelings of isolation. According to one study, "Nurses within a positive, supportive environment may experience reduced stress, fewer health-related problems, and greater adherence to self-care practices such as regular use of stress-reduction techniques."¹¹ Minority nursing students reported in another study that belonging to formal and informal organizations (minority nursing-student organizations, study groups) improved their well-being, but all students can benefit from sharing experiences with peers.

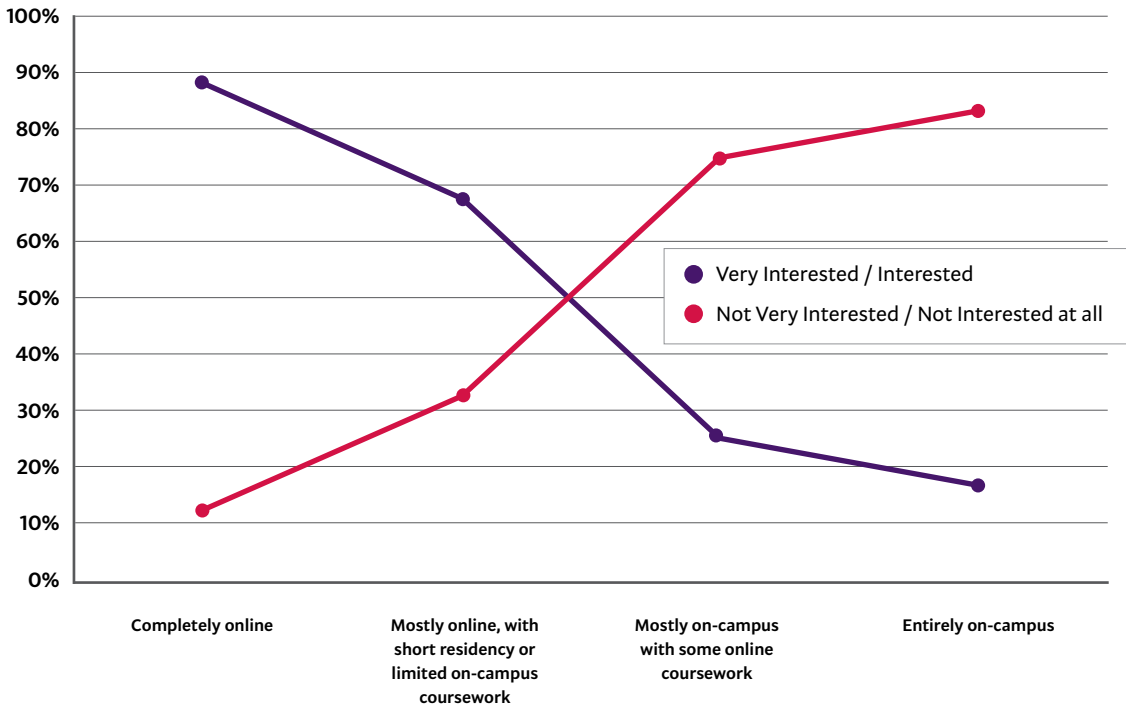
University of Phoenix offers a variety of resources to foster student-to-student networking and support, including a social media presence that encourages participation by learners, alumni, faculty, and staff. In the University of Phoenix online classroom, students use designated chat-room forums for casual conversation and team forums for group assignments. The University is currently expanding its chat feature, which enables students to connect with each other and faculty members through instant messaging. At campuses and learning centers, the University makes meeting spaces available where students can collaborate and build communities of practice.

In addition, the University of Phoenix cohort model, in which small groups of students matriculate through a series of classes together, provides students with a ready-made peer-support mechanism. "Students in cohorts often become very attached to one another and serve as a support group for each other," says nursing faculty member Ruth Grendell, DNSc, RN. "I taught one group who took several classes together. They became so close that even after graduating, they still meet once a month, and they still communicate with me by phone or email."

Provide flexibility in course scheduling. Nurses often work irregular hours, which can make it difficult for them to attend class or find time to study. They may benefit from online or hybrid-format classes that enable them to study and complete assignments around their work schedule.

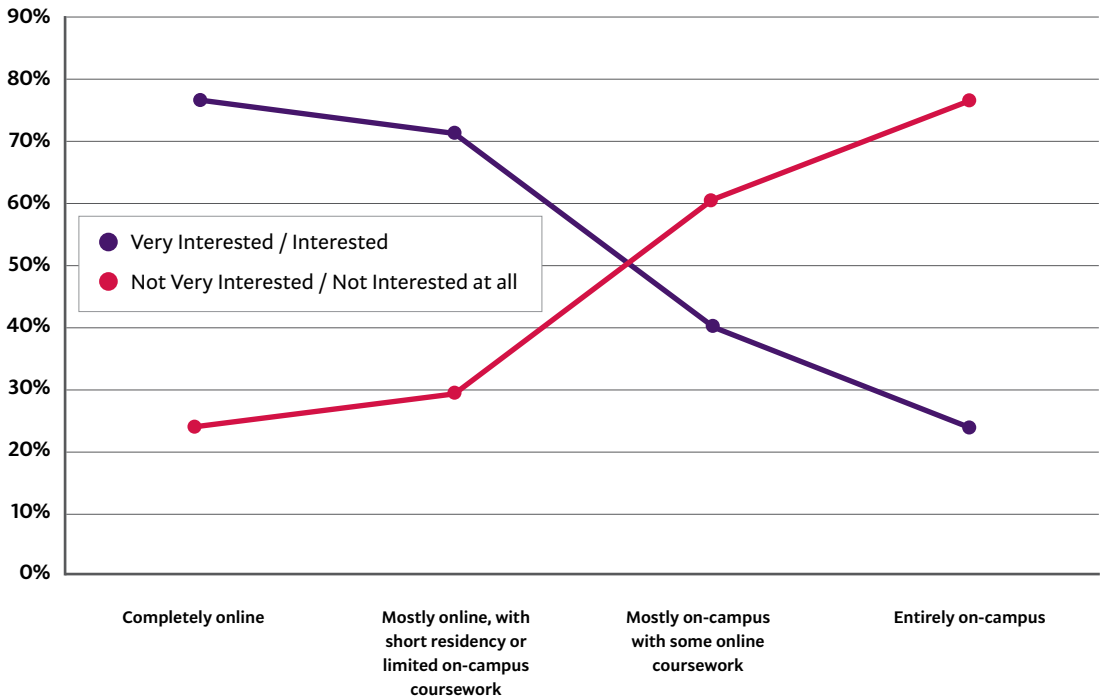
Online classes can lead faculty to use innovative teaching techniques. "One challenge I had when teaching online was not being able to read faces—something a nurse does naturally in the clinical setting," says University of Phoenix nursing faculty member Francine Nelson, Ph.D., RN, who serves as Campus College Chair for Nursing and teaches at the School of Advanced Studies. "I learned to read between the lines and ask questions—another nurses' old trick."

Delivery Mode Preferences for RN-to-BSN Degree Programs



Source: Adapted from "What Are Working Nurses Looking For in B.S.N. and M.S.N. Degree Programs?" by Eduventures, 2007, <http://www.eduventures.com/private/papers/what-are-working-nurses-looking-for-in-b-s-n-and-m-s-n-degree-programs-ohe-custom-research-report>. Copyright 2007 by Eduventures.

Delivery Mode Preferences for RN-to-MSN Degree Programs



Source: Adapted from "What Are Working Nurses Looking For in B.S.N. and M.S.N. Degree Programs?" by Eduventures, 2007, <http://www.eduventures.com/private/papers/what-are-working-nurses-looking-for-in-b-s-n-and-m-s-n-degree-programs-ohe-custom-research-report>. Copyright 2007 by Eduventures.

Online learning can have substantial advantages. “Online classes allow students to interact with classmates from all over the country and around the world, which is intellectually enriching,” Grendell says. “Within the first few days after a class starts, I find that students begin collaborating with one another and responding to each others’ posts. It’s interesting to draw out the more reticent students who are anxious about participating: I dialogue personally with them in the online forums to bring them out of their shells, and when they respond, I introduce new content. It changes the whole dynamic of the discussion.” Online courses also help students become more comfortable with technology—an essential trait in today’s technologically advanced workplaces.

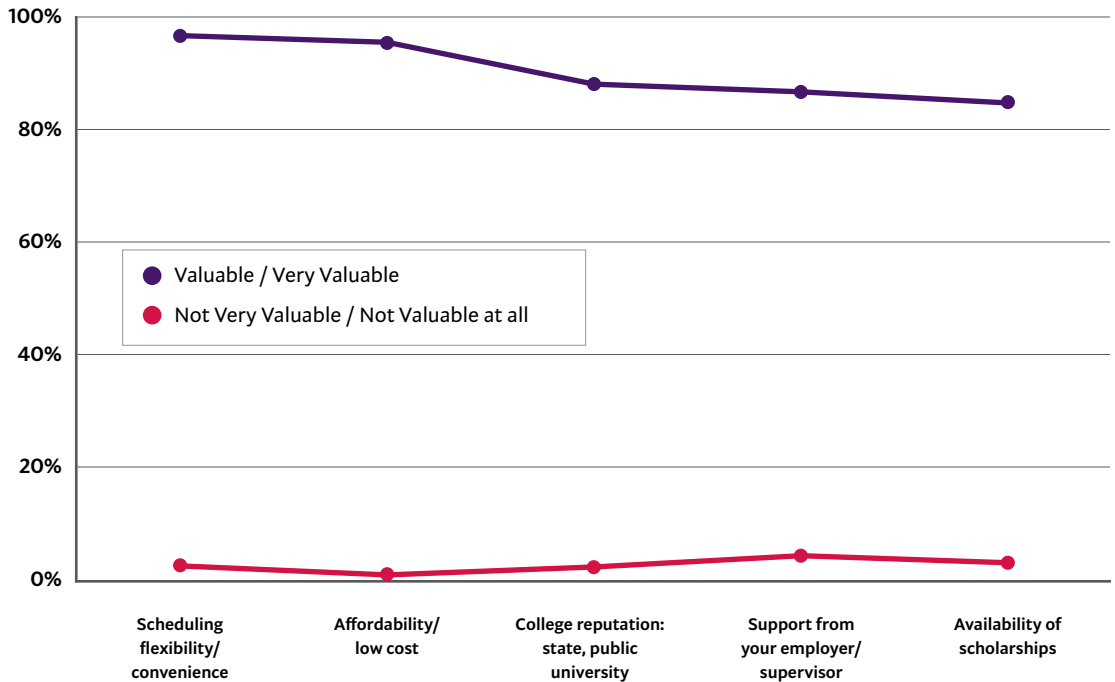
Nurses often work irregular hours, which can make it difficult for them to attend class or find time to study. They may benefit from online or hybrid-format classes that enable them to study and write papers around their work schedule.

Arrange for tutoring and/or study groups. Student nurses must digest a large body of information, ranging from the Latin names for bones and muscles, and the symptoms and treatments for numerous ailments, to the effects of and interactions between medications. Students, especially those for whom English is a second language, can benefit from tutoring and study groups to reinforce course content. In addition to a wide range of faculty-led and self-paced student workshops and tutoring, the University of Phoenix provides an online Center for Writing Excellence and a Center for Mathematics Excellence, both featuring a library of self-service tools and an array of faculty-provided support services.

Collaborative learning and knowledge sharing have been essential components of the University of Phoenix learning model since its inception. Students complete part of their coursework in learning teams that enhance development of content knowledge as well as leadership, followership, and teaming skills. The University continues to adapt its collaborative learning model to reflect 21st-century employers’ expectations that job seekers and employees demonstrate proficiency in teamwork.¹²

Introduce students to a wide variety of faculty. “When I was in nursing school, I often traveled to academic conferences and attended schools in five different states to get to know a variety of faculty, because that gives you a more well-rounded education,” Nelson

Factors Affecting RN-to-MSN Students' Choice of Degree Programs



Source: Adapted from “What Are Working Nurses Looking For in B.S.N. and M.S.N. Degree Programs?” by Eduventures, 2007, <http://www.eduventures.com/private/papers/what-are-working-nurses-looking-for-in-b-s-n-and-m-s-n-degree-programs-ohe-custom-research-report>. Copyright 2007 by Eduventures.

says. “You meet people who were trained in other regions and in other nursing specialties. I tell my University of Phoenix students they’re lucky to be able to learn from outstanding faculty from various areas of the United States and abroad who can teach them new ideas and techniques.”

Incorporate stress management into nursing programs. Though many stressors are endemic to the profession, nurses can adopt coping strategies such as improving time management and scheduling personal time.



Nursing programs should teach such coping mechanisms and include resources such as workshops to raise awareness of the harmful effects of stress. The University of Phoenix provides resources to help nursing students manage stress in multiple contexts—whether clinical, professional, or personal. For example, students in the BSN program learn about stress relief in the context of family, community, and chronic health issues. Topics that help students cope with tension in their own lives, such as time management, study skills, and transitioning to the role of student are covered in the introductory classes of all nursing programs. The social support nurses receive from their classmates can also help them cope with stress. “Many nurses find it helpful to meet face-to-face with other nurses who are going through similar experiences,” says Strawn. “Having a learning team they can meet with and talk to is what keeps many students motivated. At the same time, many nurses say they need to be able to go to school on their own time, in their own home, and attend class in the middle of the night, if they prefer. Students have different needs, and there’s a high demand for both campus-based and online courses.”

Require financial education. Today’s nurses need at least a basic understanding of balance sheets, finance, and business concepts. As America’s healthcare system struggles with skyrocketing costs and limited resources, financial management influences almost every aspect of nursing, including clinical and administrative functions at all levels of a healthcare organization. Midlevel nurse managers often have to justify expenditures and may need to present a business case to senior management for new hires. Nurse leaders

must also make their staff members aware of budget pressures, and coach them to alter their day-to-day nursing practices accordingly.

“It is extremely important for nurses to understand finances and accounting,” says Teri Chenot, Ed.D., RN, Campus College Chair for Nursing at the University of Phoenix North Florida campus. “Executive-level nurses make administrative budget decisions that impact nursing at all levels. That’s the obvious part. What’s not so obvious is the need for all nurses to directly participate in cost containment, whether it’s helping to reduce overtime or keeping better track of supplies. Cost containment in nursing should be accomplished at the team level, from the floor nurses on up.” Chenot recommends that nurses-in-training, especially those at the graduate level, complete at least one course in accounting or finance. University of Phoenix offers courses in healthcare economics and financial resource management in healthcare.

Nursing programs should teach coping mechanisms and include resources such as workshops to raise awareness of the harmful effects of stress.

Streamline pathways to higher levels of education. The Robert Wood Johnson Foundation and the Institute of Medicine recommend that nursing educators create “opportunities for seamless transition to higher degree programs.”¹³ They suggest educators adopt such strategies as online education, simulations, and consortium programs that create a direct path from the ADN to the BSN or MSN.¹⁴

LPN/LVN-to-BSN programs help LPNs and LVNs transition from a task-oriented role to a more professional nursing role. These programs prepare students to attain RN licensure and expand their scope of practice. The LPN/LVN-to-BSN program at University of Phoenix includes instruction in such areas as nursing theory, pharmacology, evidence-based practice, epidemiology and global health, healthcare policy, and nursing leadership. The program concludes with a capstone course which requires students to synthesize content and experience from all their previous courses. LPN/LVN-to-BSN students use sophisticated simulation technology in clinical laboratories (see Chapter 3).

University of Phoenix also offers a nursing bridge program for nurses who want to earn a master’s degree in nursing but hold a bachelor’s degree in an unrelated field. Nurses

in this program take four courses: the introductory course all MSN students take and courses on nursing theory, evidence-based practice, and health assessment and advocacy of vulnerable populations.

KATHERINE CHOLET, MSN, BSN, RN

Translating Coursework Into Safer Patient Outcomes

Education can make a nurse a better and safer care provider, Katherine Cholet believes—and she has the experience to prove it. Cholet began her career with an associate’s degree but continued moving up the educational ladder, receiving a BSN and an MSN from University of Phoenix before entering its nursing Ph.D. program in 2009.

Cholet, who works as a clinical education manager for a healthcare facility in rural Colorado, chose University of Phoenix because it gave her the opportunity to attend classes online. Otherwise, she says, she would have had to leave her remote location to earn her bachelor’s and master’s degrees. The University’s online library, Cholet notes, granted her access to up-to-date research and scholarly journals, sources that have helped her successfully pitch organizational changes to her facility’s board of directors.

“My education has enabled me to tell patients and families why we perform certain treatments and what theories lie behind them. It’s helped me earn patients’ trust.”

Cholet says her degrees have made her a safer nurse because they supplemented the technical skills she learned as an LPN with theoretical and clinical knowledge. She frequently implements key teachings from her University of Phoenix courses on the job. “Nursing as a profession is more than just coming in and finishing my shift,” Cholet says. “My BSN courses made me realize that I was able to reach beyond the bedside and ask for help, or offer patients resources that I think they need. My education has enabled me to tell patients and families why we perform certain treatments and what theories lie behind them. It’s helped me earn patients’ trust.” The MSN has also significantly enhanced her skills: Her master’s thesis helped her revamp her employer’s surgical department processes to effect a 10% cost savings per patient ratio strategy using American Society of PeriAnesthesia Nurses standards.

ZANZA KRUER, BSN, RN

Seizing Opportunities Amid Personal Difficulties

“Nursing is much more than blood, guts, needles, and strange smells,” says RN Zanza Kruer. As she can well attest, becoming a nurse takes years of hard work and dedication. But her path to becoming an RN was even more challenging than most. The career wasn’t one she had ever considered, even though she says “strangers often approached me asking if I was a nurse, saying I looked like a nurse.”

In fact, her life circumstances eventually led her to join the profession. At one point, when she was homeless and working three part-time jobs, she noticed that there were five pages of open nursing positions and nursing school opportunities in the local newspaper. She enrolled in a practical nursing program, graduated, and was able to find a job, but knew she couldn’t advance in her nursing career without an RN license. So Kruer enrolled at the University of Phoenix, ultimately receiving her BSN.

Kruer overcame many obstacles while pursuing the degree, such as caring for a needy and handicapped elderly family member and coping with a benign tumor growing in her hand. Strapped for time, she joined a nursing agency so she could more easily schedule her employment around her course hours. “My family and friends knew the importance of my degree and were patient when I had to prioritize classes or clinical time above everything else,” Kruer says. Earning her degree, she says, was worth the effort: “I love learning, research, and being able to effect change within my community.”

MICHELE PASTORIUS, MSN, RN

Fitting Online Coursework Into a Full Life

Early in her studies, University of Phoenix graduate Michele Pastorius connected her coursework with the adjustments she and her husband, Art, needed to make to balance work, life, and school. Michele’s *aha* moment came while studying psychologist Kurt Lewin’s model of change. She says that Lewin’s model, which she learned during a course titled *Creating Change Within Organizations*, applied to the way she and her spouse successfully integrated her online studies into their lives.

“As I was going through school studying the processes of change, we recognized that change was happening to us,” Michele says. She and Art both worked full-time, but even-

tually had to take opposing shifts. Art suddenly needed to adjust to having less free time with his wife while assuming responsibility for some of her household tasks. They had to take a moment to accept the change, the couple says, and work within its parameters. Lewin's model, Michele adds, "helped us see the need for change in our shared chores to run our house and maintain our loving relationship while I was in school."

Art notes that the effort to integrate Michele's study time into their home life was minimal, because he took comfort in knowing Michele was in the other room advancing her education while he watched a favorite TV show, rather than having her attend the closest traditional college campus, for which the round-trip travel alone would have taken two hours. "I know if she had pursued her education at a traditional campus, we would barely see each other because she would be at work and school all week and then on the weekends she would be reading and doing homework," explains Art.

Their already full lives were complicated further when Art suffered a heart attack, requiring Michele to care for him and take on his household duties while continuing her degree program. Art has since fully recovered, and Michele says, "He is a miracle man for putting up with me while I was getting my master's."

The couple persevered, however, and took part in the Four Corners Motorcycle Tour—a journey that took them to four sites in the "corners" of California, Washington, Maine, and Florida—when Michele finished her coursework. They timed their travels so Michele could make it to graduation in Phoenix, where she gave her husband the ultimate praise for supporting her during her University of Phoenix experience. Unbeknownst to Art, Michele prearranged to "share" her degree with him, and he was taken humbly aback when the graduation announcer called her name as it would appear on her MSN degree: "Michele Art Pastorius."

CONCLUSION: SUPPORTING WORKING LEARNER NURSES

The U.S. healthcare system is on the cusp of transformation. The Patient Protection and Affordable Care Act, signed into law by President Obama in 2010, will bring about the greatest change to American healthcare since the creation of Medicare and Medicaid in 1965.¹ It will increase access to healthcare on a grand scale by providing insurance to an estimated 32 million uninsured people.² To help caregivers cope safely with this influx of new patients, nursing faculty must make a concerted effort to educate more nurses to higher-than-ever levels of medical proficiency and academic achievement. Because registered nurses—at over 3 million strong—are the single largest group of healthcare professionals, and the group with which newly insured patients will have the most contact,³ improving nursing education would directly affect the quality as well as the quantity of services patients receive.

Pursuing nursing education can be a daunting endeavor. For many nursing students, education is only one of many responsibilities, including work and family commitments. Student nurses must master an extensive set of competencies (science, technology, psychology, sociology, and research methods, among others), but they cannot afford to take months or years off work to do so. Instead, institutions of higher education must innovate ways to help nurses fit high-quality, relevant education into their busy lives. The following principles can serve as a guide:

Convenience. Most of the LPNs seeking BSN degrees—and many BSNs who want to earn advanced degrees and become tomorrow’s nursing leaders, faculty, and researchers—already practice full-time. Online programs allow BSN students to study and participate in class at their own pace, without requiring that they commute to a physical classroom and arrange their schedules around class times. Hybrid programs, which combine online and classroom-based learning, and intensive on-campus programs, which only require one class meeting per week, are good options for nurses who prefer face-to-face education.

Support. Many nursing students reenter the classroom after an absence of several years—facing unfamiliar academic challenges that can provoke anxiety and self-doubt. The support and encouragement of caring faculty and staff can make the transition easier, as can the availability of such services as enrollment and academic advising, tutoring, and remediation. Nurses also benefit when they learn from practitioner faculty who are active in the nursing field. These faculty members know the stresses and satisfactions of nursing firsthand, and can serve as mentors and role models. Practitioner faculty bring their life experience into the classroom, and can illustrate concepts and theories with examples from their own careers.

Relevance. The rapid pace of research and technological innovation brings constant change to healthcare. Nursing curricula must be revamped frequently to match this evolution—a key challenge for nursing program designers and practitioner faculty, who see these changes occurring in the healthcare setting. The most current technologies should be used as learning platforms in classrooms. In addition, nursing students must develop the critical thinking, information processing, and research skills needed to absorb and apply new knowledge long after graduation.

Nursing students dedicate time in their very full schedules to satisfy a love for learning and to improve the standard of care they provide. Educators owe it to them to provide a fulfilling and high-quality learning experience. In the coming decades, both can make an invaluable contribution to the nation's health.

ENDNOTES

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ACRONYMS AND ABBREVIATIONS

AACN	American Association of Critical-Care Nurses
ACHE	American College of Healthcare Executives
ADN	Associate's degree in nursing
AFL-CIO	American Federation of Labor and Congress of Industrial Organizations
AFSCME	American Federation of State, County and Municipal Employees
ANA	American Nurses Association
ANP-C	Certified Advanced Nurse Practitioner
AONE	American Organization of Nurse Executives
APN	Advanced Practice Nurse
APRN	Advanced Practice Registered Nurse
BSN	Bachelor's of science in nursing
CCM	Certified Case Manager
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CNE	Certified Nurse Educator
CNO	Chief Nursing Officer
CNS Psych-C	Certified Clinical Nurse Specialist specializing in psychiatric care
CRNA	Certified Registered Nurse Anesthetist
CRRN	Certified Rehabilitation Registered Nurse
DNSc	Doctor of Nursing Science
Ed.D.	Doctor of Education
EMR	Electronic medical record
FAANP	Fellow of the American Academy of Nurse Practitioners
FACHE	Fellow of the American College of Healthcare Executives
FNP	Family Nurse Practitioner
IOM	Institute of Medicine
LPN	Licensed Practical Nurse

MBA	Master of Business Administration
MD	Doctor of Medicine
MHA	Master of Health Administration
MN	Master of Nursing
MSN	Master of Science in Nursing
MSN/Ed	Master of Science in Nursing in Education
NACNEP	National Advisory Council on Nurse Education and Practice
NCLEX-PN	National Council Licensure Examination-Practical Nurse
NCLEX-RN	National Council Licensure Examination-Registered Nurse
NEA-BC	Nurse Executive Advance-Board Certified
NP	Nurse Practitioner
Ph.D.	Doctor of Philosophy
PHN	Public Health Nurse
RN	Registered Nurse
RNC	Registered Nurse, Certified

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Nursing has changed dramatically over the past few decades. Today's nurses must operate sophisticated new technologies, perform tasks once undertaken by doctors, respond sensitively to a diverse and aging patient population, treat patients who are more acutely ill than those of years past—and contend with a serious nursing shortage that increases their workload and hampers their ability to provide safe and effective care. To meet the demands of such a complex and challenging healthcare field, educators must graduate more and better-prepared nurses: both the nurses with bachelor's degrees whom hospitals most prefer to hire and nurses with advanced degrees who can take on vital roles as nurse practitioners, educators, researchers, and executives. They must also meet the needs of the many adult nursing students who attend school while raising families and holding full-time jobs. This book offers valuable best practices for educating the skilled and knowledgeable nurses needed to relieve the nursing shortage and increase the standard of patient care.

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