

## Nursing Shortage Fact Sheet

The United States is in the midst of a nursing shortage that is expected to intensify as baby boomers age and the need for health care grows. Compounding the problem is the fact that nursing colleges and universities across the country are struggling to expand enrollment levels to meet the rising demand for nursing care.

The **American Association of Colleges of Nursing** (AACN) is concerned about the nursing shortage and is working with schools, policy makers, kindred organizations, and the media to bring attention to this health care crisis. AACN is working to enact legislation, identify strategies, and form collaborations to address the nursing shortage. To keep stakeholders abreast of current statistics related to the shortage, this fact sheet has been developed along with a companion Web resource: [www.aacn.nche.edu/Media/shortageresource.htm](http://www.aacn.nche.edu/Media/shortageresource.htm).

### Current and Projected Shortage Indicators

- In the January/February 2007 issue of *Health Affairs*, Dr. David I. Auerbach and colleagues estimated that the U.S. shortage of registered nurses (RNs) will increase to 340,000 by the year 2020. Though this is significantly less than earlier projections for a shortfall of 800,000 RNs which was made back in 2000, the study authors note that the nursing shortage is still expected to increase by three times the current rate over the next 13 years. The study is titled “Better Late Than Never: Workforce Supply Implications of Late Entry into Nursing.” <http://content.healthaffairs.org/cgi/content/abstract/26/1/178>
- Based on finding from the *Nursing Management Aging Workforce Survey* released in July 2006 by the Bernard Hodes Group, 55% of surveyed nurses reported their intention to retire between 2011 and 2020. The majority of those surveyed were nurse managers. [www.amnhealthcare.com/news.asp?ArticleID=15444](http://www.amnhealthcare.com/news.asp?ArticleID=15444)
- In April 2006, officials with the Health Resources and Services Administration (HRSA) released projections that the nation's nursing shortage would grow to more than one million nurses by the year 2020. In the report titled *What is Behind HRSA's Projected Supply, Demand, and Shortage of Registered Nurses?*, analysts show that all 50 states will experience a shortage of nurses to varying degrees by the year 2015. <http://bhpr.hrsa.gov/healthworkforce/reports/behindrnprojections/index.htm>
- According to a report released by the American Hospital Association in April 2006, U.S. hospitals need approximately 118,000 RNs to fill vacant positions nationwide. This translates into a national RN vacancy rate of 8.5%. The report, titled *The State of America's Hospitals – Taking the Pulse*, also found that 49% of hospital CEOs had more difficulty recruiting RNs in 2005 than in 2004. [www.ahapolicyforum.org/ahapolicyforum/reports](http://www.ahapolicyforum.org/ahapolicyforum/reports)

- According to the latest projections from the U.S. Bureau of Labor Statistics published in the November 2005 *Monthly Labor Review*, more than 1.2 million new and replacement nurses will be needed by 2014. Government analysts project that more than 703,000 new RN positions will be created through 2014, which will account for two-fifths of all new jobs in the health care sector. [www.bls.gov/opub/mlr/2005/11/art5full.pdf](http://www.bls.gov/opub/mlr/2005/11/art5full.pdf)
- According to a report published in November 2004 as a Web exclusive of *Health Affairs*, Dr. Peter Buerhaus and colleagues found that “despite the increase in employment of nearly 185,000 hospital RNs since 2001, there is no empirical evidence that the nursing shortage has ended. To the contrary, national surveys of RNs and physicians conducted in 2004 found that a clear majority of RNs (82%) and doctors (81%) perceived shortages where they worked.” [www.healthaffairs.org](http://www.healthaffairs.org)

## **Contributing Factors Impacting the Nursing Shortage**

### **Enrollment in schools of nursing is not growing fast enough to meet the projected demand for nurses over the next ten years.**

Though AACN reported a 7.6% enrollment increase in entry-level baccalaureate programs in nursing in 2006, this increase is not sufficient to meet the projected demand for nurses. HRSA officials state that “to meet the projected growth in demand for RN services, the U.S. must graduate approximately 90 percent more nurses from US nursing programs.” [www.aacn.nche.edu/IDS](http://www.aacn.nche.edu/IDS) and <http://bhpr.hrsa.gov/healthworkforce/reports/behindrnprojections/index.htm>.

### **A shortage of nursing school faculty is restricting nursing program enrollments.**

- According to AACN’s report on *2006-2007 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing*, U.S. nursing schools turned away 42,866 qualified applicants from baccalaureate and graduate nursing programs in 2006 due to insufficient number of faculty, clinical sites, classroom space, clinical preceptors, and budget constraints. Almost three quarters (71.0%) of the nursing schools responding to the 2006 survey pointed to faculty shortages as a reason for not accepting all qualified applicants into their programs. [www.aacn.nche.edu/IDS](http://www.aacn.nche.edu/IDS)
- According to a study by the Southern Regional Board of Education (SREB) in February 2002, a serious shortage of nursing faculty was documented in 16 states and the District of Columbia. Survey findings show that the combination of faculty vacancies (432) and newly budgeted positions (350) points to a 12% shortfall in the number of nurse educators needed. Unfilled faculty positions, projected retirements, and the shortage of students being prepared for the faculty role pose a threat to nursing education over the next five years. [www.sreb.org](http://www.sreb.org)

### **The total population of registered nurses is growing at a slow rate.**

According to the latest *National Sample Survey of Registered Nurses*, the total RN population has increased at every 4-year interval in which the survey has been taken since 1980. Although the total RN population increased from 2,696,540 in 2000 to 2,909,357 in 2004, this increase (7.9%) was comparatively low considering growth between earlier report intervals (i.e. the RN population grew 14.2% between 1992 and 1996). In 2004, an estimated 83.2% of RNs were employed in nursing. <http://bhpr.hrsa.gov/healthworkforce/reports/rnpopulation/preliminaryfindings.htm>

### **With fewer new nurses entering the profession, the average age of the RN is climbing.**

- According to the 2004 *National Sample Survey of Registered Nurses* released in February 2007 by the federal Division of Nursing, the average age of the RN population in March 2004 was 46.8 years of age, up from 45.2 in 2000. The RN population under the age of 30 dropped from 9.0% of the nursing population in 2000 to 8.0% in 2004.

<http://bhpr.hrsa.gov/healthworkforce/reports/rnpopulation/preliminaryfindings.htm>

### **Changing demographics signal a need for more nurses to care for our aging population.**

- According to the July 2001 report, *Nursing Workforce: Emerging Nurse Shortages Due to Multiple Factors* (GAO-01-944), a serious shortage of nurses is expected in the future as demographic pressures influence both supply and demand. The future demand for nurses is expected to increase dramatically as the baby boomers reach their 60s and beyond. [www.gao.gov](http://www.gao.gov)
- According to a May 2001 report, *Who Will Care for Each of Us?: America's Coming Health Care Crisis*, released by the Nursing Institute at the University of Illinois College of Nursing, the ratio of potential caregivers to the people most likely to need care, the elderly population, will decrease by 40% between 2010 and 2030. Demographic changes may limit access to health care unless the number of nurses and other caregivers grows in proportion to the rising elderly population. <http://www.uic.edu/nursing/nursinginstitute/policy/finalreports/finalreport.pdf>

### **Job burnout and dissatisfaction are driving nurses to leave the profession.**

- In the March-April 2005 issue of *Nursing Economic\$*, Dr. Peter Buerhaus and colleagues found that more than 75% of RNs believe the nursing shortage presents a major problem for the quality of their work life, the quality of patient care, and the amount of time nurses can spend with patients. Looking forward, almost all surveyed nurses see the shortage in the future as a catalyst for increasing stress on nurses (98%), lowering patient care quality (93%) and causing nurses to leave the profession (93%). [www.medscape.com/viewpublication/785\\_index](http://www.medscape.com/viewpublication/785_index)
- According to a study in the October 2002 *Journal of the American Medical Association*, nurses reported greater job dissatisfaction and emotional exhaustion when they were responsible for more patients than they can safely care for. Researcher Dr. Linda Aiken concluded that “failure to retain nurses contributes to avoidable patient deaths.” [www.nursing.upenn.edu/news/detail.asp?t=2&id=23](http://www.nursing.upenn.edu/news/detail.asp?t=2&id=23)
- According to a study published by Dr. Linda Aiken and colleagues in the May/June 2001 issue of *Health Affairs*, more than 40% of nurses working in hospitals reported being dissatisfied with their jobs. The study indicates that 1 out of every 3 hospital nurses under the age of 30 are planning to leave their current job in the next year. [www.healthaffairs.org](http://www.healthaffairs.org)

### **High nurse turnover and vacancy rates are affecting access to health care.**

- In March 2005, the Bernard Hodes Group released the results of a national poll of 138 health care recruiters and found that the average RN turnover rate was 13.9%, the vacancy rate was 16.1% and the average RN cost-per-hire was \$2,821. [www.hodes.com](http://www.hodes.com)

- According to a February 2002 report on health workforce shortages prepared by First Consulting Group for the American Hospital Association and other trade groups, the average nurse vacancy rate in U.S. hospitals was 13%. Over one in seven hospitals reported a severe RN vacancy rate of more than 20%. High vacancy rates were measured across rural and urban settings and in all regions of the country. Survey respondents indicated that a shortage of personnel is contributing to emergency department overcrowding and ambulance diversions. [www.aha.org](http://www.aha.org)

## Impact of Nurse Staffing on Patient Care

**Many recent studies point to the connection between adequate levels of registered nurse staffing and safe patient care.**

- Published in the March 2006 issue of *Nursing Economic\$*, a comprehensive analysis of several national surveys on the nursing workforce found that majority of nurses reported that the RN shortage is negatively impacting patient care and undermining the quality of care goals set by the Institute of Medicine and the National Quality Forum. [www.medscape.com/viewarticle/525650](http://www.medscape.com/viewarticle/525650)
- In an article published in the September/October 2005 issue of *Nursing Economic\$*, Dr. Peter Buerhaus and associates found that the majority of RNs (79%) and Chief Nursing Officers (68%) believe the nursing shortage is affecting the overall quality of patient care in hospitals and other settings, including long-term care facilities, ambulatory care settings, and student health centers. Most hospital RNs (93%) report major problems with having enough time to maintain patient safety, detect complications early, and collaborate with other team members. [www.medscape.com/viewpublication/785\\_index](http://www.medscape.com/viewpublication/785_index)
- In November 2004, results from the National Survey on Consumers' Experiences with Patient Safety and Quality Information were released and found that 40% of Americans think the quality of health care has worsened in the last five years. Consumers reported that the most important issues affecting medical error rates are workload, stress or fatigue among health professionals (74%); too little time spent with patients (70%); and too few nurses (69%). This survey was sponsored by the Kaiser Family Foundation, the Agency for Healthcare Research and Quality and the Harvard School of Public Health. [www.kff.org/kaiserpolls/pomr111704pkg.cfm](http://www.kff.org/kaiserpolls/pomr111704pkg.cfm)
- In March 2004, the Agency for Healthcare Research and Quality issued a synthesis of nursing research studies that details the impact that staffing levels, staff mix, and education levels have on patient outcomes. The report, titled *Research in Action: Hospital Nurse Staffing and Availability of Care*, cited studies showing that hospitals with lower nurse staffing levels and fewer registered nurses compared with licensed practical nurses or nurses' aides tend to have higher rates of poor patient outcomes. [www.ahrq.gov/research/nursestaffing/nursestaff.htm](http://www.ahrq.gov/research/nursestaffing/nursestaff.htm)
- A shortage of nurses prepared at the baccalaureate level may be affecting health care quality and patient outcomes. In a study published September 24, 2003 in the *Journal of the American Medical Association*, Dr. Linda Aiken and her colleagues at the University of Pennsylvania identified a clear link between higher levels of nursing education and better patient outcomes. This extensive study found that surgical patients have a "substantial survival advantage" if treated in hospitals with higher proportions of nurses educated at the baccalaureate or higher degree level. In hospitals, a 10 percent increase in the proportion of nurses holding BSN degrees decreased the risk of patient death and failure to rescue by 5 percent. <http://jama.ama-assn.org>

- A survey reported in the December 12, 2002 issue of the *New England Journal of Medicine* found that 53% of physicians and 65% of the public cited the shortage of nurses as a leading cause of medical errors. Overall, 42% of the public and more than a third of U.S. doctors reported that they or their family members have experienced medical errors in the course of receiving medical care. <http://content.nejm.org>
- According to a study published in the October 23/30, 2002 issue of the *Journal of the American Medical Association*, more nurses at the bedside could save thousands of patient lives each year. Nurse researchers at the University of Pennsylvania determined that patients who have common surgeries in hospitals with high nurse-to-patient ratios have an up to 31% increased chance of dying. Funded by the National Institute for Nursing Research, the study found that every additional patient in an average hospital nurse's workload increased the risk of death in surgical patients by 7%. Having too few nurses may actually cost more money given the high costs of replacing burnt-out nurses and caring for patients with poor outcomes. [www.nursing.upenn.edu/news/detail.asp?t=2&id=23](http://www.nursing.upenn.edu/news/detail.asp?t=2&id=23)
- In *Health Care at the Crossroads*, a report released in August 2002 by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the authors found that a shortage of nurses in America's hospitals is putting patient lives in danger. JCAHO examined 1,609 hospital reports of patient deaths and injuries since 1996 and found that low nursing staff levels were a contributing factor in 24% of the cases. [www.jcaho.org](http://www.jcaho.org)
- According to a study published in the *New England Journal of Medicine* in May 2002, a higher proportion of nursing care provided by RNs and a greater number of hours of care by RNs per day are associated with better outcomes for hospitalized patients. This extensive study was conducted by Drs. Jack Needleman and Peter Buerhaus. <http://content.nejm.org>

## Strategies to Address the Nursing Shortage

- Many statewide initiatives are underway to address both the shortage of RNs and nurse educators. For example, Tennessee Governor Philip Bredesen and state health officials launched a campaign in January 2007 to raise \$1.4 million in funding for a scholarship program to help RNs earn graduate degrees needed to teach nursing, titled the Graduate Nursing Loan Forgiveness Program. In November 2006, Illinois Governor Rod R. Blagojevich opened the Illinois Center for Nursing which is responsible for assessing the current supply and demand for nurses in Illinois and developing a strategic plan to ensure that the state can educate, recruit and retain nurses. For details on these state initiatives and others, see <http://www.aacn.nche.edu/Media/PartnershipsResource.htm>. For links to state nursing workforce reports, see <http://www.aacn.nche.edu/Media/NsgWrkFrcReps.htm>.
- Nursing colleges and universities are also forming strategic partnerships and seeking private support to help expand student capacity and strengthen the nursing workforce. For example, Blue Cross and Blue Shield of Florida donated \$600,000 in funding to both the University of North Florida and the University of Florida in an effort to address critical issues in nursing education. The State of Florida matched each gift at \$420,000. In September 2005, the Osteopathic Heritage Society awarded almost \$1 million in funding to five Columbus, Ohio area schools of nursing to recruit more faculty and equip more training facilities. In June 2005, Georgia Baptist College of

Nursing is partnering with Piedmont Healthcare in Atlanta to help recruit, educate and ultimately place more nurses in the health system and the community at large. For more details on these and similar initiatives, see <http://www.aacn.nche.edu/Media/PartnershipsResource.htm>.

- In July 2005, Reps. Nita Lowey (D-NY), Peter King (R-NY), and Lois Capps (D-CA), introduced the Nurse Education, Expansion and Development (NEED) Act (H.R. 3569) to assist schools of nursing in increasing the number of students and faculty. The bill calls for capitation grants for schools to hire new and retain current faculty, purchase educational equipment, enhance audiovisual and clinical laboratories, expand infrastructure, or recruit students. Sens. Jeff Bingaman (D-NM) and John Cornyn (R-TX) also introduced the Nurse Faculty Education Act (S. 1575) to increase the number of doctorally-prepared nurses serving as faculty. Grant funding would be used by schools to hire new or retain existing faculty, purchase educational resources, and support transition into the faculty role. [www.aacn.nche.edu/Government](http://www.aacn.nche.edu/Government)
- In June 2005, the U.S. Department of Labor (DOL) awarded more than \$12 million in grant-funding through the **President's High Growth Job Training Initiative**, \$3 million of which will help to address the nurse faculty shortage. In total, the DOL has committed \$43 million to the health care workforce through the High-Growth program. Details on all grant-funded programs are posted at <http://www.doleta.gov/BRG/Indprof/Health.cfm>.
- In 2002, the **Nurse Reinvestment Act** (P.L. 107-205) expanded existing law in Nursing Workforce Development (Title VIII, Public Health Service Act) to create new and expanded programs targeted to resolving the nursing shortage. Every year Congress must fund these programs through the appropriations process to maintain or expand the Nurse Faculty Loan Program, Nurse Scholarship Program, and other critical nursing education programs. [www.aacn.nche.edu/Media/shortageresource.htm#legislation](http://www.aacn.nche.edu/Media/shortageresource.htm#legislation)
- Two national media campaigns have been launched to help polish the image of nursing. **Nurses for a Healthier Tomorrow** is a coalition of 44 nursing and health care organizations working together to raise interest in nursing careers. The coalition has conducted nationwide focus groups; secured over \$600,000 in sponsorship; launched a Web site; created a televised public service announcement, and designed print ads that can be downloaded for free from the Web. In February 2002, Johnson & Johnson launched the **Campaign for Nursing's Future**, a multimedia initiative to promote careers in nursing that includes television commercials, a recruitment video, a Web site, brochures, and other visuals. [www.nursesource.org](http://www.nursesource.org) and [www.discovernursing.com](http://www.discovernursing.com)

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