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***Fact Sheet:***

**Creating a More Highly Qualified Nursing Workforce**

Quality patient care hinges on having a well educated nursing workforce. Research has shown that lower mortality rates, fewer medication errors, and positive outcomes are all linked to nurses prepared at the baccalaureate and graduate degree levels. The **American Association of Colleges of Nursing** (AACN) is committed to working collaboratively to create a more highly qualified nursing workforce since education enhances both clinical competency and care delivery. This fact sheet looks at today's nursing workforce; highlights research connecting education to outcomes; and outlines the capacity of four-year colleges to enhance the level of nursing education in the U.S.

**Snapshot of Today's Nursing Workforce**

- According to the *2004 National Sample Survey of Registered Nurses* conducted by the Health Resources and Services Administration (HRSA), nursing is the nation's largest health care profession with more than 2.9 million registered nurses (RNs) nationwide. Of all licensed RNs, 2.42 million or 83.2% are employed in nursing.
- The sample survey also shows that 47.2% of the RN workforce holds a baccalaureate or graduate degree while 33.7% earned an associate degree and 17.5% a diploma in nursing. From 2000 to 2004, the number of nurses pursuing baccalaureate degrees increased by 12.9% while those pursuing graduate degrees increased by 37.0%. The majority of nurses who received graduate degrees in nursing entered the profession in baccalaureate programs. Only 4.3% of associate degree graduates complete graduate-level nursing degree programs.
- Graduates of entry-level nursing programs (baccalaureate degree, associate degree and diploma) sit for the NCLEX-RN<sup>®</sup> licensing examination. The fact that new nurses pass the licensing exam at the same rate does not mean that all entry-level nurses are equally prepared for practice. The NCLEX tests for *minimum technical competency* for safe entry into basic nursing practice. Passing rates *should* be high across all programs preparing new nurses. This exam does not test for differences between graduates of different programs, measure performance over time, or test for all of the knowledge and skills developed through a baccalaureate program.
- The National Advisory Council on Nurse Education and Practice (NACNEP), policy advisors to Congress and the Secretary for Health and Human Services on nursing issues, has urged that at least two-thirds of the nurse workforce hold baccalaureate or higher degrees in nursing by 2010.
- In March 2005, the American Organization of Nurse Executives (AONE) released a statement calling for all for registered nurses to be educated in baccalaureate programs in an effort to adequately prepare clinicians for their challenging and complex roles. AONE's statement, titled *Practice and Education Partnership for the Future*, represents the view of nursing's practice leaders and a desire to create a more highly educated nursing workforce in the interest of improving patient safety and providing enhanced nursing care.

## Research Linking Nursing Education to Patient Outcomes

AACN and other authorities believe that education has a strong impact on a nurse's ability to practice, and that patients deserve the best educated nursing workforce possible. A growing body of research reinforces this belief and shows a connection between baccalaureate education and lower mortality rates.

- In an article published in *Health Services Research* in August 2008 that examined the effect of nursing practice environments on outcomes of hospitalized cancer patients undergoing surgery, Dr. Christopher Friese and colleagues found that nursing education level was significantly associated with patient outcomes. Nurses prepared at the baccalaureate-level were linked with lower mortality and failure-to-rescue rates. The authors conclude that "moving to a nurse workforce in which a higher proportion of staff nurses have at least a baccalaureate-level education would result in substantially fewer adverse outcomes for patients."
- In a study released in the May 2008 issue of the *Journal of Nursing Administration*, Dr. Linda Aiken and her colleagues confirmed the findings from their landmark 2003 study (see below) which show a strong link between RN education level and patient outcomes. The noted nurse researchers found that every 10% increase in the proportion of BSN nurses on the hospital staff was associated with a 4% decrease in the risk of death.
- In the January 2007 *Journal of Advanced Nursing*, a study of 46,993 patients conducted by researchers at the University Toronto found that hospitals with higher proportions of baccalaureate-prepared nurses tended to have lower 30-day mortality rates. The findings indicated that a 10% increase in the proportion of baccalaureate prepared nurses was associated with 9 fewer deaths for every 1,000 discharged patients.
- In a study published in the March/April 2005 *Nursing Research*, Dr. Carole Estabrooks and her colleagues at the University of Alberta found that baccalaureate prepared nurses have a positive impact on mortality rates following an examination of more than 18,000 patient outcomes at 49 Canadian hospitals. This study, *The Impact of Hospital Nursing Characteristics on 30-Day Mortality*, confirmed the findings from Dr. Aiken's landmark study from 2003.
- In a study published in the September 24, 2003 *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. A 10% increase in the proportion of nurses holding BSN degrees decreased the risk of patient death and failure to rescue by 5%.

For more information on the link between nursing education and patient outcomes, see <http://www.aacn.nche.edu/Media/FactSheets/ImpactEdNP.htm>.

## Moving Towards a More Highly Educated Nursing Workforce

AACN stands ready to work with the larger nursing community and representatives from associate degree and diploma programs to expand awareness of degree completion options, facilitate the establishment of articulation agreements, and enhance the educational preparation of the nursing workforce.

- In the July/August 2009 issue of *Health Affairs*, Dr. Linda Aiken and colleagues call for adapting federal funding mechanisms (i.e. Title VIII and Medicare) to focus on preparing more nurses at the baccalaureate and higher degree levels. This policy emphasis is needed to adequately address the growing need for faculty and nurses to serve in primary care and other advanced practice roles. The researchers reported that new nurses prepared in BSN programs are significantly more likely to

complete the graduate level education needed to fill nursing positions where job growth is expected to be the greatest. <http://content.healthaffairs.org>

- More than 620 RN-to-Baccalaureate programs are available nationwide, including more than 390 programs that are offered at least partially online. These programs build on the education provided in diploma and associate degree programs and prepare graduates for a broader scope of practice. In addition, 160 RN-to-Master's degree programs are available which cover the baccalaureate content missing in the other entry-level programs as well as graduate level course work.
- Articulation agreements support education mobility and facilitate the seamless transfer of academic credit between associate degree and baccalaureate nursing programs. In addition to hundreds of individual agreements between community colleges and four-year schools, statewide articulation agreements exist in many areas including Florida, Connecticut, Arkansas, Texas, Iowa, Maryland, South Carolina, Idaho, Alabama, and Nevada to facilitate educational advancement. See <http://www.aacn.nche.edu/Media/FactSheets/AA.htm>.

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