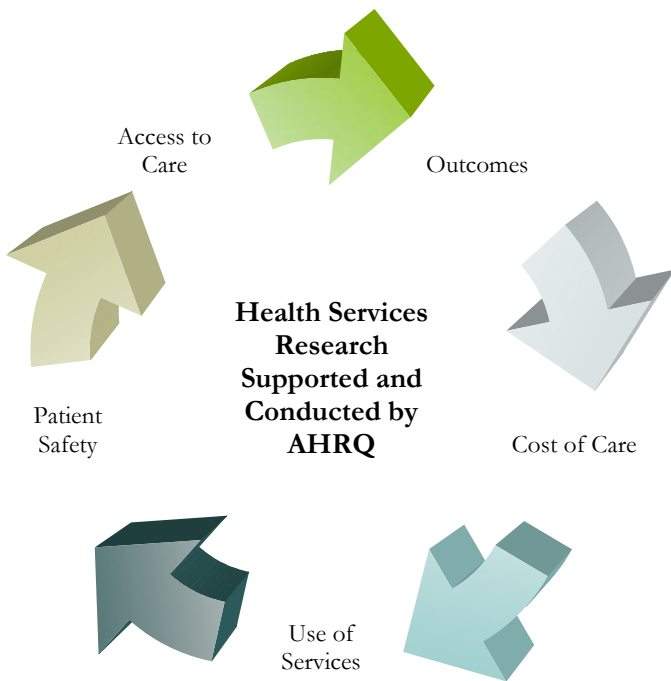


The Agency for Healthcare Research and Quality (AHRQ) is the nation’s lead federal agency on healthcare quality. It supports and conducts health systems research that examines the way health care is delivered, focusing on improving healthcare quality, reducing costs, addressing patient safety and medical errors, and increasing access to services. AHRQ research has presented the scientific evidence demonstrating that inefficient work processes, overwhelming work loads, extended work hours, and poor workplace designs create obstacles to providing safe, cost-effective, and high quality healthcare services. Through partnerships with the public and private sectors, AHRQ translates their research findings into effective healthcare practice and policy. The outcomes of AHRQ-supported research ensure a safer, more efficient healthcare system for both providers and patients.

AHRQ research differs from the research conducted by its sister agency, the National Institutes of Health (NIH). While NIH supports biomedical research that improves health care by focusing on disease cause, cure, and prevention, AHRQ supports research from a systems perspective, which entails collecting evidence-based information on healthcare outcomes. AHRQ research findings are used daily by patients, clinicians, health system decision makers, and public policymakers to guide and evaluate healthcare delivery systems and patient care. The research supported and conducted by AHRQ not only improves the quality of healthcare services, but also helps people make more informed decisions about their health care.

The Role of Nursing Research at AHRQ



Nurses are the sentinels of patient safety, and their knowledge base offers critical insight into transforming the current quality standards in the healthcare system. The Institute of Medicine (IOM) reported in 2004, “how we are cared for by nurses affects our health, and sometimes can be a matter of life and death...in caring for us all, nurses are indispensable to our safety.” (*Keeping Patients Safe: Transforming the Work Environment of Nurses*, pg. 2-3).

The nursing research conducted at AHRQ provides strategies and policy options to healthcare systems that are coping with patient safety and quality of care issues created by insufficient nurse staffing. In a March 2007 Evidence Report titled *Nurse Staffing and Quality of Patient Care*, AHRQ investigated how nurse work hours and nurse-to-patient ratios were associated with specific patient outcomes in acute care hospitals. Additionally, the report noted factors that influence nurse staffing policies and nurse staffing strategies that improved patient outcomes. This AHRQ report found that increased nurse staffing levels were associated with lower hospital-related mortality, failure to rescue, and other patient outcomes.

AHRQ Funding

For FY 2009, the President requested an \$8.9 million cut in AHRQ funding. If this decrease were to be enacted by Congress, the significant research, particularly for nursing, would derail further progress in AHRQ’s ability to improve patient safety measures and quality care standards in the nation’s healthcare delivery system.

FY 2008	President’s FY 2009 Budget	President’s FY 2009 Budget (+/-) FY 2008
\$334.56 mil	\$325.66 mil	-\$8.9 mil

Additional Funding Will Support Critical Nursing Research

In order to improve patient safety, additional research is needed on the nursing work environment to:

- Identify the impacts of unit-level nurse workload on poor patient outcomes including pressure sores and use of restraints.
- Provide safer workplace designs. Research is necessary to compare different layouts of nursing units and patient rooms to create a safer work environment.
- Determine the effects of nurse staffing levels on patient outcomes. This includes understanding the effects of nurse fatigue, from extended work hours, on patient safety.
- Continually collect data to measure the effects of interventions aimed to improve patient safety.

Studies by AHRQ Show Nursing Care Affects Patient Safety

Keeping Patients Safe: Transforming the Work Environment was published in November 2003 by the IOM and funded by AHRQ. This report calls for substantial changes in the work environment of nurses in order to protect patients, including changes in how nurse staffing levels are established and mandatory limits on nurses' work hours. Despite the growing body of evidence that better nurse staff levels result in safer patient care, nurses in some healthcare facilities may be overburdened with up to 12 patients to care for per shift. Long work hours pose one of the most serious threats to patient safety, because fatigue slows reaction time, diminishes attention to detail, and contributes to errors.

Also supported by AHRQ, *To Err is Human* (IOM, 2000) estimated that as many as 98,000 people die each year as a result of a medical error, making medical errors the eighth leading cause of death in this country. Each year, 7,000 people are estimated to die from medication errors alone. Preventing medical errors goes further than identifying unsafe practitioners. It requires identifying and understanding the sources of errors and making systems changes that can prevent these errors from occurring in the future. The report noted that nurses are the healthcare providers most likely to intercept medication errors before they reach the patient and result in an adverse event.

Additionally, AHRQ's study of hospital nurse staffing and working conditions shows its direct impact on quality of care and patient safety. While there is an increase in the number of complex, hospitalized patients, there has been no corresponding increase in the number of available nurses. AHRQ research has noted that the quality of health care is directly linked to nurse staffing levels revealing that **low numbers of nurses on staff were associated with higher rates of serious complications** such as pneumonia, upper gastrointestinal bleeds, shock, cardiac arrest, and infection.

Another AHRQ study found that by **employing a greater proportion of more highly educated nurses reduced the mortality and failure to rescue rates** from life-threatening complications. 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% increase in the proportion of nurses holding a baccalaureate nursing degree decreased the risk of patient death and failure to rescue by 5%.

AHRQ's Portfolio of Work

Bioterrorism
Data Development
Chronic Care Management
Socio-Economics of Healthcare
Informatics
Long-term Care
Pharmaceutical Outcomes
Prevention
Training
Quality/Safety of Patient Care
Organizational Support

For more information, contact the American Association of Colleges of Nursing, One Dupont Circle, Suite 530, Washington, DC 20036

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Updated March 12, 2008