



---

*Statement Before the*

**House Appropriations Subcommittee  
on Labor, HHS, Education, and  
Related Agencies**

---

Reducing Health-care Associated Infections

*Statement of*

**Carolyn M. Clancy, M.D.**

*Director*

*Agency for Healthcare Research and Quality*

*U.S. Department of Health and Human Services*



*Agency for Healthcare Research and Quality*

*Advancing Excellence in Health Care* [www.ahrq.gov](http://www.ahrq.gov)

## **INTRODUCTION**

Mr. Chairman and member of the Committee, I want to thank you for inviting me to this important hearing on initiatives to improve and expand healthcare-associated infection prevention efforts.

As you may know, AHRQ's mission is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans. We do this by supporting research to improve the quality of health care, reduce its cost, improve patient safety, and address medical errors.

A major focus for us is to translate the findings of our research into practice and policy. We work closely with our partner agencies in the Department of Health and Human Services, such as Centers for Disease Control and Prevention (CDC) to achieve this objective.

AHRQ and CDC have been collaborating closely on the issue of healthcare-associated infections, taking advantage of the complementary strengths of the two agencies.

AHRQ's mission focuses on developing practical, evidence-based information that clinicians and health care organizations can use to improve care rapidly; this complements CDC's focus on public health and epidemiology. Together our investments will strengthen capacity in states and local communities.

Today, I would like to discuss with the Committee our work to reduce health-care associated infections. Before I proceed, I want to thank the Committee for their continued support of AHRQ's investments in helping to achieve this objective.

### **Healthcare-associated Infections**

Healthcare-associated infections, or HAIs, are a very serious issue in healthcare today. They have become the most common complication of hospital care. According to the CDC, nearly 2 million patients suffer from an HAI in U.S. hospitals each year, resulting in 99,000 deaths and it is estimated that healthcare-associated infections incur an estimated \$28 to \$33 billion in excess healthcare costs each year.<sup>1</sup>

Unfortunately, the news is full of stories about patients throughout the country who have contracted an HAI. These infections do not have boundaries and can affect people regardless of race, gender, or socioeconomic status

One of the most common infections is methicillin-resistant *Staphylococcus aureus* (MRSA). It is highly resistant to antibiotics, which makes it much more challenging to combat. CDC's data show that people are more likely to contract MRSA when they go into health care settings than any other way.

---

<sup>1</sup> Scott Rd. The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention, 2009. Division of Healthcare Quality Promotion, National Center for Preparedness, Detection, and Control of Infectious Diseases, Coordinating Center for Infectious Diseases, Centers for Disease Control and Prevention, February 2009.

About 85 percent of all invasive MRSA infections were contracted in health care settings. Of those, about two-thirds occurred in non-hospital settings, and about one third occurred during hospitalizations.

Data from AHRQ's Healthcare Utilization Project shows that the number of hospital stays to treat MRSA infections more than tripled after 2000, reaching 368,600 in 2005. Patients hospitalized for MRSA have longer hospital stays and are more likely to die than patients who don't have MRSA. These infections are especially common in intensive care units (ICUs). One of every 20 of the roughly 368,600 patients treated in U.S. hospitals in 2005 for MRSA died.

#### **AHRQ Research on the Prevention of Health-care Associated Infections**

Mr. Chairman, these statistics are alarming and quite concerning; however, the good news is that HAIs can be prevented and dramatically reduced.

AHRQ funded a research team at Johns Hopkins University that developed a program designed to implement CDC recommendations to reduce HAIs in the ICUs. This initiative, known as the "Keystone Project," reduced the rate of bloodstream infections from intravenous (IV) lines by two-thirds within 3 months in ICUs throughout Michigan. In addition, the average ICU decreased its infection rate from 4 percent to zero. Over 18 months, the program saved more than 1,500 lives and nearly \$200 million.

Keystone did this by employing a simple five-step checklist designed to prevent certain hospital infections. Among other things, the checklist reminds doctors to wash their hands and put on a sterile gown and gloves before putting intravenous lines into patients. One leader in critical care medicine described these results as one of the most important developments in a generation.

We are now funding an expanded project that will try to build on the success of the Keystone Project. Using a comprehensive unit-based patient safety program, the project is being implemented across 10 states to help prevent infections related to the use of central line catheters. Each state is asked to enroll at least 10 hospitals in the program. The new project aims to reduce the average rate of central line-associated blood infections in hospitals by 80 percent, from the national average of five infections per 1,000 days in which patients had a catheter placed to one infection for every 1,000 such days.

In other AHRQ efforts on HAIs, AHRQ is supporting five of our Accelerating Change and Transformation in Organizations and Networks (ACTION) partners to examine the barriers and challenges to reducing HAIs at 34 hospitals. Multidisciplinary teams at each hospital are in the process of collecting data on what barriers and challenges exist in fostering a culture of infection safety. From this study, the Agency plans to develop an HAI “toolkit,” to help health care organizations learn about how the HAI project participants implemented infection safety training, the challenges they faced, and how they addressed them.

Another AHRQ-supported study on HAIs was conducted by the Stanford-University of California, San Francisco Evidence-based Practice Center. The researchers recommended several strategies as worthy of future study and possibly wider implementation if an appropriate plan is in place to monitor their effectiveness and potential adverse effects. These include:

- Printed or electronic reminders with use of automatic stop orders to reduce unnecessary urethral catheterization.
- Printed or electronic reminders for improving adherence to recommendations for timing and duration of surgical antibiotic prophylaxis.
- Staff education, including use of video and Web-based interactive tutorials and checklists, to improve adherence to insertion practices for placement of central venous catheters.

From our limited studies on HAIs to date, we know that through proper training and an evolution to an infection safety culture, we can make great strides in reducing HAIs. This, of course, is just the tip of the iceberg given the vastness and complexity of our health care system. There is much more to be done.

### **AHRQ's Planned Investments for HAIs**

Mr. Chairman, we greatly appreciate the Committee's understanding of the grave problem of HAIs and your foresight in providing AHRQ with additional funds in FY 2009. We will use the funds to invest in evidence-based research to reduce the incidence of MRSA and other HAIs.

I am pleased to report that an interagency work group comprised of AHRQ, CDC, and Centers for Medicare and Medicaid Services has begun to develop potential projects that build on our efforts in FY2008 and address new, high priority issues.

These include:

- Reducing *Clostridium Difficile* infections in a regional collaborative of in-patient settings.
- Reducing the overuse of antibiotics by primary care clinicians treating patients in ambulatory and long-term care settings.
- Establishing a MRSA chlorhexidine study in a multi-hospital quality improvement environment.
- Improving measurement of surgical site infection risk stratification and outcome detection.
- Producing rapid national, regional, and state-level estimates of HAIs to evaluate the impact of interagency HAI initiatives.

- Reducing infections caused by carbapenem-resistant enterobacteriaceae (KPC-producing organisms) through application of recently-developed CDC/ HICPAC recommendations.

In addition, AHRQ plans to expand our work in reducing central-line bloodstream infections beyond the 10 states we recently funded. We will expand the number of hospitals in each participating state and increase the number of participating states by approximately 20 states. The FY 2009 appropriation offers the opportunity to make this initiative truly nationwide.

With this funding, we also will address other HAIs, including urinary tract infections and surgical site infections. AHRQ also will support research on ways to reduce HAIs in other health care settings, including hospital locations outside the ICU, dialysis centers, nursing homes, and ambulatory care settings.

### **Conclusion**

Mr. Chairman, thank you again for inviting me to discuss AHRQ's effort to improve and expand HAI prevention efforts nationwide. We are committed to continuing to work closely with our Departmental colleagues to improve the quality of health care in our nation, and to insure that the public and patients have access to the information that they need to make educated and informed



decisions about their health care. I appreciate this opportunity and look forward to answering any questions.

**Carolyn M. Clancy, M.D.**  
**Director, Agency for Healthcare Research and Quality**  
**U.S. Department of Health and Human Services**

Formatted: Font: (Default) Arial

Carolyn M. Clancy, M.D., was appointed Director of the Agency for Healthcare Research and Quality (AHRQ) on February 5, 2003. Prior to her appointment, Dr. Clancy served as the Agency's Acting Director and previously was Director of AHRQ's Center for Outcomes and Effectiveness Research.

Dr. Clancy, who is a general internist and health services researcher, is a graduate of Boston College and the University of Massachusetts Medical School. Following clinical training in internal medicine, Dr. Clancy was a Henry J. Kaiser Family Foundation Fellow at the University of Pennsylvania. She was also an assistant professor in the Department of Internal Medicine at the Medical College of Virginia before joining AHRQ in 1990.

Dr. Clancy holds an academic appointment at George Washington University School of Medicine (Clinical Associate Professor, Department of Medicine) and serves as Senior Associate Editor, *Health Services Research*. Dr. Clancy has served on multiple editorial boards and is currently on the board of the *Annals of Family Medicine*, *American Journal of Medical Quality*, and *Medical Care Research and Review*. She has published widely in peer reviewed journals and has edited or contributed to seven books. She is a member of the Institute of Medicine and was elected a Master of the American College of Physicians in 2004.

Her major research interests include improving health care quality and patient safety, and reducing disparities in care associated with patients' race, ethnicity, gender, income, and education. As Director, she launched the first annual report to the Congress on health care disparities and health care quality.

Dr. Clancy lives in the Maryland suburbs of Washington, D.C, with her husband, Bill. She enjoys jogging, movies, and spending time with her extended family, especially four nieces in Virginia.