

## **Agency for Healthcare Research and Quality (AHRQ): Efficiency of Health Care**

*To understand how therapeutics' safety and effectiveness may vary with aging and its associated healthcare needs. Improve knowledge of ways to influence the effectiveness and optimal use of therapeutics in older adults. Improve healthcare's organization and delivery of therapeutics in healthcare for older adults.*

### **Lead Agency:**

Agency for Healthcare Research and Quality (AHRQ)

### **Agency Mission:**

The mission of the Agency for Healthcare Research and Quality is to improve the safety, quality, effectiveness, and efficiency of health care for all Americans.

### **Principal Investigator:**

Anne Trontell, MD, MPH  
Program Director, Centers for Education and Research in Therapeutics (CERTs)  
Senior Advisor on Pharmaceutical Outcomes and Risk Management  
Center for Outcomes and Evidence  
Agency for Healthcare Research and Quality  
540 Gaither Road, Suite 6222  
Rockville, MD 20850

### **Partner Agencies:**

<b>Brigham and Women's Hospital</b>
<b>Duke University Medical Center</b>
<b>HMO Research Network</b>
<b>Rutgers, The State University of New Jersey</b>
<b>University of Alabama at Birmingham</b>
<b>University of Arizona CERT at The Critical Path Institute (C-Path)</b>
<b>University of Iowa</b>
<b>Cincinnati Hospital Children's Medical Center</b>
<b>University of Pennsylvania School of Medicine</b>
<b>University of Texas M.D. Anderson Cancer Center and Baylor College of Medicine</b>
<b>Vanderbilt University Medical Center</b>
<b>Weill Medical College of Cornell University</b>
<b>University of Chicago</b>

### **General Description:**

The Centers for Education and Research on Therapeutics (CERTs) research program is an on-going national research demonstration initiative to conduct research and provide education that advances the optimal use of therapeutics (i.e., drugs, medical devices, and biological products). Begun in 1999, the program currently consists of 14 research centers and a Coordinating Center and is funded and run as a cooperative agreement by the Agency for Healthcare Research and Quality (AHRQ), in consultation with the U.S. Food and Drug Administration (FDA). A National Steering Committee includes at-large members from other Federal agencies such as CMS, CDC, and NIH and membership from consumers, the health care sector, and the therapeutics industry.

The CERTs leverage their core public funding from AHRQ and FDA with other Federal and private resources. The research conducted by the CERTs program has three major aims which have significant impact, high relevance, and direct benefit to the elderly, who disproportionately use multiple and complicated therapeutic regimens:

1. **To increase awareness** of both the uses and risks of new drugs and drug combinations, biological products, and devices, as well as of mechanisms to improve their safe and effective use.
2. **To provide clinical information** to patients and consumers; health care providers; pharmacists, pharmacy benefit managers, and purchasers; health maintenance organizations (HMOs) and health care delivery systems; insurers; and government agencies.
3. **To improve quality while reducing cost of care** by increasing the appropriate use of drugs, biological products, and devices and by preventing their adverse effects and consequences of these effects (such as unnecessary hospitalizations).

As an AHRQ priority population, the elderly and their healthcare needs are a prominent research focus of the CERTs. The publications cited at the end of this form showcase the CERTs' examination of the special healthcare needs of older adults and their families, encompassing physiological, mental and social issues related to aging, elders' needs for therapeutics and for psychological and mental care, family and social supports, end of life care, financial challenges, and overall quality of life.

Emblematic of the importance of therapeutics among the elderly, AHRQ solicited a new CERT Center with a thematic emphasis in aging, resulting in a 2006 award to the University of Iowa CERT, since designated as the "elderly care CERT" and focusing on research and education in therapeutics and optimal healthcare for the elderly. A significant portion of older adults consume many medications and also have symptoms due to aging that may be confused with medication side effects, placing them at high risk for harmful drug interactions. Among its many projects, the Iowa CERT is developing a medication review tool that will assist pharmacists in identifying and remedying clinically significant medication problems and dangerous drug interactions among the elderly they serve.

***Excellence:*** What makes this project exceptional?

The CERTs research program is **exceptional** in the breadth, depth, quality, and impact of its research products in improving the health and quality of life of the aging. Topics that have been addressed include the aging process itself, the special healthcare needs of the elderly surrounding therapeutics, the effectiveness, safety, and comparative effectiveness of different therapeutic choices, and the quality and efficiency of elderly health care involving therapeutics.

**Significance:** How is this research relevant to older persons, populations and/or aging society?

In addressing the optimal use of therapeutics, a **significant** component of elderly care, the CERTs Program is particularly relevant to an aging society and to older persons where the most extensive and complicated use of therapeutics occurs. Research by the CERTs has direct relevance to the elderly covered by Medicare and Medicaid, including the dually eligible who are especially vulnerable to adverse events from therapeutics.

**Effectiveness:** What is the impact and/or application of this research to older persons?

Information developed by the CERTs program informs the elderly, their physicians, and policy and decision-makers throughout the healthcare system in making informed choices among therapeutic options in order to promote the **effectiveness**, safety, efficiency, and quality of care received by the elderly. By developing research and translating it into educational products that will be used throughout the health care system, the CERTs enable the optimal use of therapeutics health care for all, but especially the elderly who use more drugs than any other age group of the population.

**Innovativeness:** Why is this research exciting or newsworthy?

In terms of **innovativeness**, CERTs research is exciting and newsworthy in addressing conditions among the elderly that are preventable through the optimal use of therapeutics. These include such important and timely topics as the prevention of medication errors in the elderly, the avoidance of hospitalization or death for treatable conditions among older adults, and the risk of inappropriate prescribing to the elderly outside of hospital settings.