

# An Introduction to Comparative Effectiveness Research (CER) (A Synopsis)

**Avi Dor**, Professor of Health Policy and Health Economics,  
George Washington University

**Ellen Umapathi**, Research Associate, George Washington  
University, Department of Health Policy

**Comparative Effectiveness Consultative Unit (CECU)**

# What is CER?

- CER is “the rigorous evaluation of the impact of different options that are available for treating a given medical condition for a particular set of patients” (CBO and MedPAC)
- CER is “the generation and synthesis of evidence that compares the benefits and harms of alternative methods to prevent, diagnose, treat, and monitor a clinical condition or improve the delivery of care in ‘real world’ settings” (IOM and ARRA)
- CER is designed to inform health-care decisions, by providing information for health care professionals, patients, payers, and policy makers

# Why CER?

- Economic assessments are essential to increase efficiency of the health care system and curb costs
  - National health expenditures grew from 5.2% in 1960 to 17.9% of GDP in 2010 (CMS)
  - U.S. total national health spending reached \$2.6 trillion in 2010 or \$8,402 per capita (CMS)
- CER can result in cost savings in the long run, conditional on dissemination of knowledge and a change in provider behavior (Chandra, Jena, and Skinner, 2011)

# Federal Policies Support CER

- The 2009 American Recovery and Reinvestment Act (ARRA) created the Federal Coordinating Council for CER
- ARRA dedicated \$1.1 billion for CER
  - \$300 million Agency for Health Care Research and Quality
  - \$400 million to the National Institute of Health
  - \$400 million for the Office of the Secretary of Health and Human Services
- The 2010 Affordable Care Act formed and funded the Patient-Centered Outcomes Research Institute (PCORI)
  - PCORI helps people make informed health care decisions by producing, promoting, and disseminating evidence-based information

# 2010 NIH Awards for Evidence Development and Synthesis

- In 2010, NIH awarded \$190 million (Benner et al., 2010):
  - Spending focused on cancer (\$31.5 million), cardiovascular disease (\$31.0 million), and depression and other mental health disorders (\$30.1 million)
  - Spending on obesity, dementia, pulmonary disease, and pregnancy and child disorders each was below \$5 million
  - Very little was targeted to understand the genetic or genomic basis of diseases or response to treatment (\$4.8 million)