“As to diseases make a habit of two things - to help, or at least, to do no harm.”

Epidemics I
The Role of Health IT in Comparative Effectiveness Research

Making Habits

David R. Hunt, MD, FACS
Medical Director, Office of Provider Adoption Support
Office of the National Coordinator for Health IT
Goals of ARRA Funding

• Establishment of a process for CER priority-setting that maximizes the value of Federal investments in CER.

• Development of a robust, foundational infrastructure for CER.

• Implementation of a strategy to support rapid, systematic dissemination of CER results
CER Definition

“Comparative effectiveness research is the conduct and synthesis of research comparing the benefits and harms of different interventions and strategies to prevent, diagnose, treat and monitor health conditions in ‘real world’ settings…”

Federal Coordinating Council for CER Report to the President and Congress, June 2009
Hippocrates of Kos (ca. 460 BC – ca. 370 BC)

“You better know what you should do before you enter, for in many cases help is needed, not thought.”

Decorum 11
Strategic Framework Investments

- CE Research
- Human & Scientific Capital
- CER Data Infrastructure
- Translation and Adoption of CER

Priority Populations

Priority Conditions

Types of Interventions

Cross-Cutting Priority Themes

Primary
Secondary
Supporting
Major Gaps in CER Landscape

- Coordination across the CER framework
- Research
- Human and Scientific Capital
- Priority Interventions
- CER Data Infrastructure
- CER Dissemination & Translation
- Priority populations
Gaps: CER Data Infrastructure

• Fragmented data
• Data sources limited in terms of clinical robustness of data and longitudinal data capture
• Data capture and feedback loop at point of care often lacking
Efforts to develop and implement a nationwide, interoperable health information technology infrastructure could provide a means for incorporating CER into decision-support systems for clinicians and other applications in health care.
HITECH Act

- Regional extension centers
- Workforce training
- CMS-Based Incentives and penalties
- State grants for health Information exchange
- Standards & certification framework
- Privacy & Security framework
- Adoption of EHRs
- Meaningful Use of EHRs
- Exchange of health information

Research to enhance HIT

• Improved individual and population health outcomes
• Increased transparency and efficiency
• Improved ability to study and improve care delivery

Gaps: CER Dissemination & Translation

• Tools and methods to disseminate CER findings to clinicians and patients and translate CER into practice

• Limited linkages between CER findings and directly improving patient outcomes

• Point-of-service decision-support tools and reminders to clinicians
Gaps: Priority Populations

- Ability to track populations and treatments across payers, and suboptimal translation and adoption of CER findings.

- Attention on designing studies with sufficient power to discern treatment effects and other impacts of interventions among patient

- Improved access to and utilization of Federally sponsored databases that include priority populations can significantly enhance the inclusion of sub-groups into CER
Charles V. Roman, M.D. (1864-1934)

“…born of the exigencies of the American environment…”
ex·i·gent (ek´sə jənt)

adj. [L. exigens, prp. of exigere, to drive out: see EXACT]

1. calling for immediate action or attention; urgent; critical
2. requiring more than is reasonable; demanding; exacting

– ex·i·gent·ly adv
Distribution of core quality measures for which members of selected group experienced better, same, or poorer quality of care compared with reference group

IOM Model: Distinction between a Service Difference and a Service Disparity

- Quality of Health Care
  - Non-Minority
  - Minority

- Difference
- Clinical Appropriateness and Patient’s Need and Preferences
- The Operation of Healthcare Systems and Legal and Regulatory Climate
- Patient-Provider Interaction: Biases, Stereotyping, and Uncertainty

Populations with Equal Access to Health Care

Source: Gomes and McGuire, 2001
It soon became clear, however, that tacit assumptions -- the substance of dogma-- served as a barrier to effective communication.

Nobel Laureate, Medicine (1983)
Nobel Banquet, December 10, 1983
Conclusions-- Our findings suggest that the race and sex of a patient independently influence how physicians manage chest pain.

Conclusions- Among hospitals engaged in a national quality monitoring and improvement program, evidence-based care for acute myocardial infarction appeared to improve over time for patients irrespective of race/ethnicity, and differences in care by race/ethnicity care were reduced or eliminated.
P. Breughel, the Elder, “Turmbau zu Babel,” 1563
Kunsthistorisches Museum, Vienna
“A man who carries a cat by the tail learns something he can learn in no other way.”

Mark Twain 1835-1910
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