



# Putting the Horse *before* the Cart: Addressing Usability in Health IT Design

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**Usability Present and Future**  
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# AHRQ's Mission

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Improve the quality, safety, efficiency and effectiveness of health care for all Americans



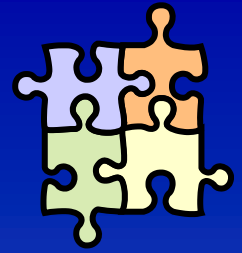


# What AHRQ does

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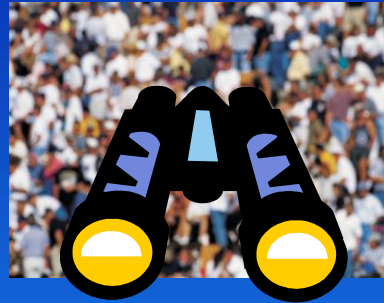
- Focus on
  - Generation,
  - Synthesis and Dissemination, *and*
  - Implementation of knowledge
- Convene key stakeholders
- Inform policy

# AHRQ's 'Niche'



**NIH**

Biomedical research to prevent, diagnose and treat diseases



**CDC**

Population health and the role of community based interventions to improve health



**AHRQ**

Long-term and system-wide improvement of health care quality and effectiveness

# Health IT: Where We've Been

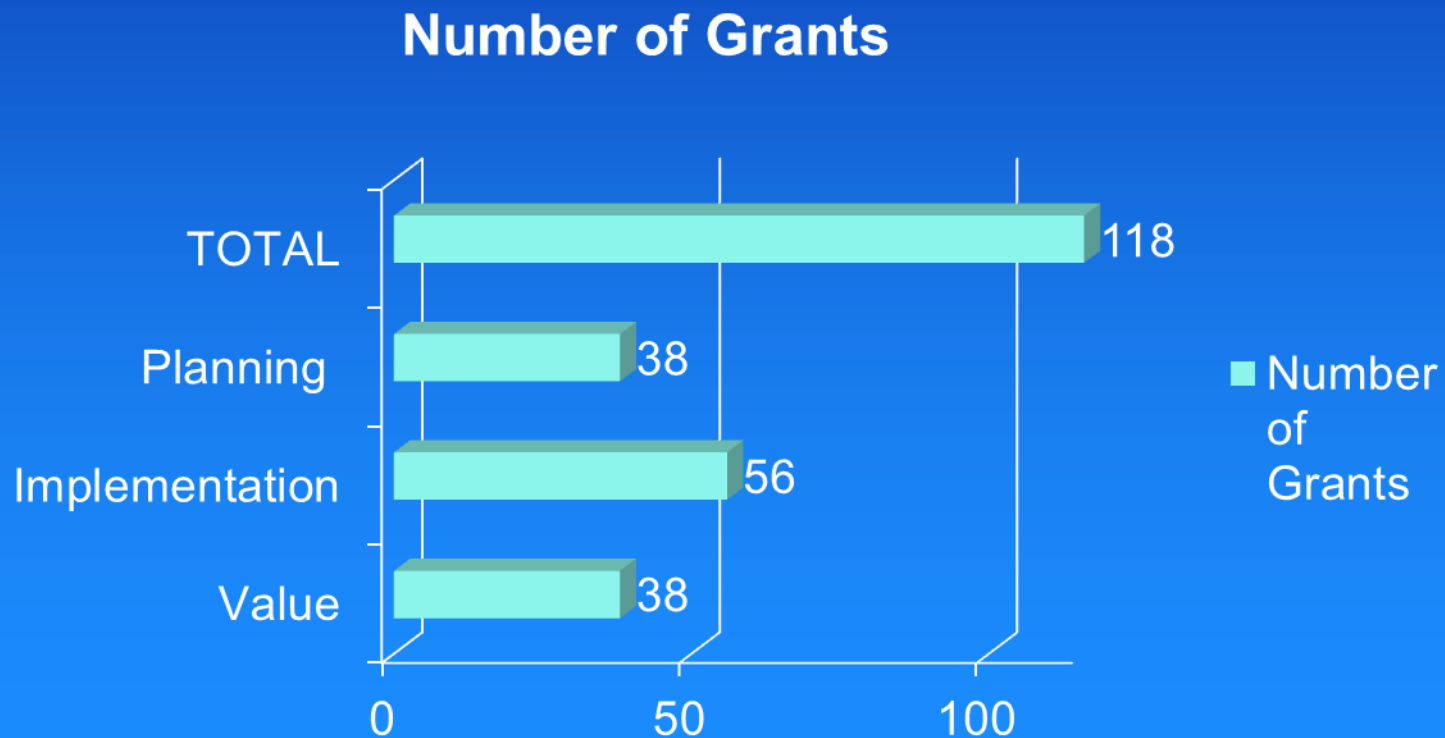


- Over 200 *projects and demonstrations*
- Projects in over 48 States
- Best practices that can improve quality of care



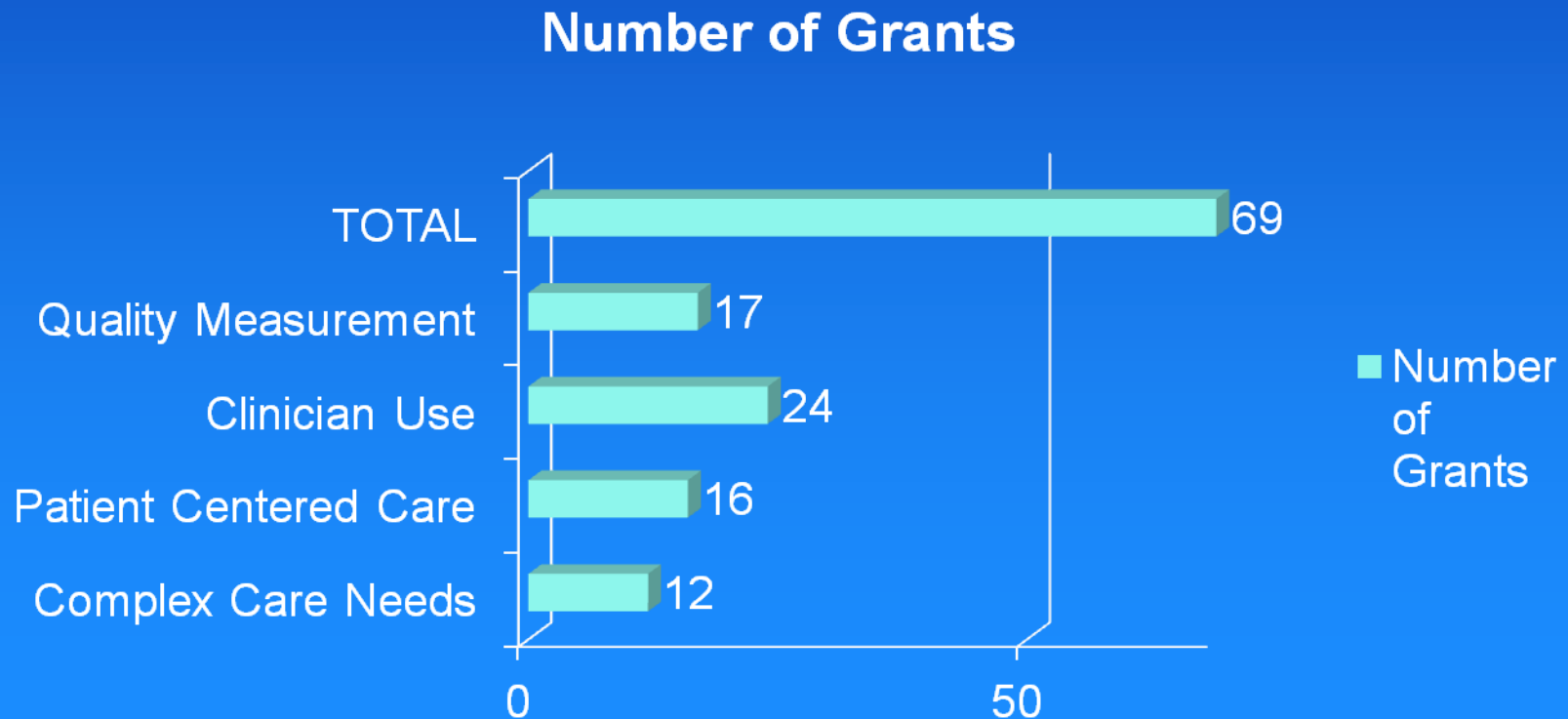
# Transforming Healthcare Quality through Information Technology Initiative (THQIT) (2004-2008)

## ■ Health IT implementation and demonstrating value



# Ambulatory Safety and Quality Initiative (2007-2011)

- Explore health IT use and related policies and practices in ambulatory settings





# Health IT: Where We're Going

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- R03 and R21 good funding mechanisms for pilot testing interventions and evaluating usability
  - <http://healthit.ahrq.gov/healthitfoas>
- Evaluating usefulness as part of demonstration projects
  - <http://www.ahrq.gov/fund/grantix.htm>
- Continuous improvement part of the lifecycle of any application

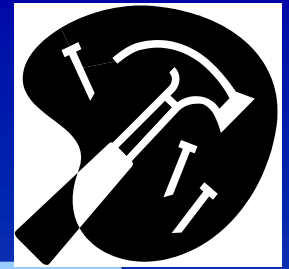




# Health IT: Where We're Going (2)

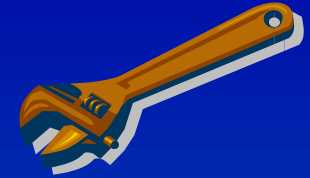
- Need to better understand
  - Clinical work and how it's done
    - Understanding Clinical Information Needs and Health Care Decision Making Processes in the Context of Health Information Technology (IT) (R01) (PA-11-198) -  
<http://grants.nih.gov/grants/guide/pa-files/PA-11-198.html>
  - How individuals and families manage health information
    - Understanding User Needs and Context to Inform Consumer Health Information Technology (IT) Design (R01) (PA-11-199) -  
<http://grants.nih.gov/grants/guide/pa-files/PA-11-199.html>

# Resources



- Clinical information systems
  - Workflow Assessment for Health IT toolkit
    - <http://healthit.ahrq.gov/workflow>
  - Health IT Hazard Manager (HM)
    - Final Report and HM Available Summer 2012
    - Important resource as part of continuous improvement

# Resources (2)



## ■ Consumer health IT

- Barriers and Drivers of Health IT Use for the Elderly, Chronically Ill, and Underserved

- <http://www.ncbi.nlm.nih.gov/books/NBK38653/>

- Health Care Comes Home: The Human Factors

- [www.nap.edu/catalog.php?record\\_id=13149](http://www.nap.edu/catalog.php?record_id=13149)

- Consumer Health IT in the Home: A Guide to Human Factors Design Considerations

- [www.nap.edu/catalog.php?record\\_id=13205](http://www.nap.edu/catalog.php?record_id=13205)



# Some of the Trailblazers

PI	Institution	Project Title
Elizabeth Chrischilles	University of Iowa	Personal Health Records and Elder Medication Use Quality
David Dorr	Oregon Health and Science University	Enhancing Complex Care through an Integrated Care Coordination Information System
Alexander Krist	Virginia Commonwealth University	Promoting Use of an Integrated Personal Health Record for Prevention
Mary Hook	Aurora Health Care	Using Evidence-Based Nursing Practices and Electronic Health Record Decision Support to Reduce Fall-related Patient Injuries in Acute Care
Joanne LaFleur	University of Utah	Knowledge Engineering for Decision Support in Osteoporosis



# Trailblazers (2)

PI	Institution	Project Title
Matthew Samore	University of Utah	Patient-Centered Informatics System to Enhance Health Care in Rural Communities
Steven Simon	Harvard Pilgrim Health Care, Inc.	Improving Laboratory Monitoring in Community Practices: A Randomized Trial
Melissa Stockwell	Columbia University	Flu Alert: Influenza Vaccine Alerts for Providers in the Electronic Health Record
Peggy Wagner	Medical College of Georgia	Using An Electronic Personal Health Record To Empower Patient With Hypertension
David C. Ziemer	Emory University	Computer Assisted Medication and Patient Information Interface



## Questions?

<http://healthit.ahrq.gov>