



*Agency for Healthcare Research and Quality*

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

# ***Health Services Research: Improving the Quality and Safety of Health Care***

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# AHRQ's Mission

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*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.*

# AHRQ's Research Focus

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- Patient-centered, not disease-specific
- Dual focus -- services and delivery systems
- Considers cost-effectiveness -- trade-off between quality, outcomes, access, and costs
- Effectiveness research focuses on actual daily practice, not ideal situations (“efficacy”)

# Congressional Response to the IOM Report

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AHRQ shall conduct and support research and build private-public partnerships to:

- Identify the causes of preventable health care errors and patient injury in HC delivery
- Develop, demonstrate and evaluate strategies for reducing errors
- Disseminate effective strategies throughout the HC industry

# AHRQ's Patient Safety Initiative

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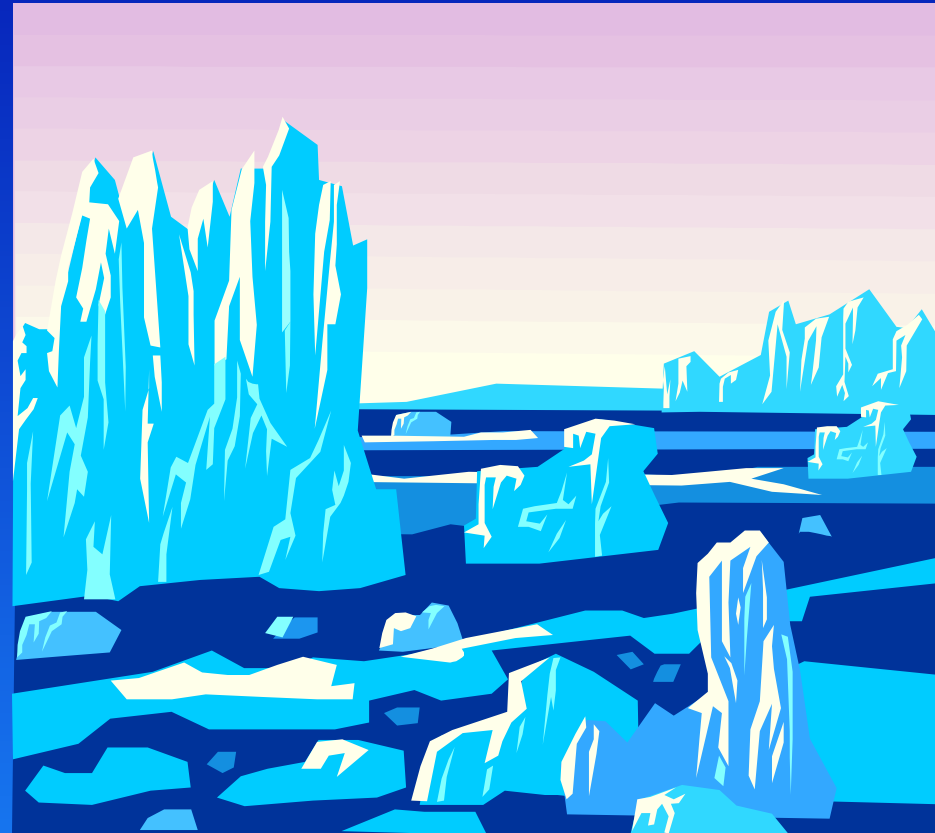
- Scope: \$160 million since FY 2001; 127 grants and contracts
- Diverse Portfolio: centers of excellence; reporting demonstrations; clinical informatics; working conditions -- includes several projects focused on blood transfusions; surgery
- AHRQ lead for HHS: work closely with CMS, FDA, CDC, HRSA and others, as well as the Office of the Secretary

# AHRQ's Patient Safety Initiative

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## The epidemic model:

- Stage 1: identify errors, raise awareness, build capacity
- Stage 2: implement proven practices, develop innovative practices, develop a culture
- Stage 3: sustain improvements



# Stage 1 and 2 Activities

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- Reporting demonstration projects providing insights on collecting and reporting patient safety data
- National and international collaborations adding to impetus for improvement system-wide
- Tools being developed to assess patient safety culture and implement patient safety improvement programs
  - Web M&M
  - Patient Safety Improvement Corps
  - Patient Safety Indicators

# AHRQ WebM&M

## Web-Based Medical Journal

- Online medical journal and forum on patient safety and health care quality
- Features expert analysis of medical errors reported anonymously by readers, interactive learning modules on patient safety, and forums for online discussion
- CME credit available

<http://webmm.ahrq.gov>

The screenshot shows the AHRQ WebM&M website in a Microsoft Internet Explorer browser window. The address bar displays <http://www.webmm.ahrq.gov/>. The website header includes the AHRQ logo and navigation links: ABOUT | REGISTER | SUBMIT CASE | CME | FORUMS | ARCHIVES | LINKS | LOG IN | HOME. A search bar is also present.

The main content area features a welcome message: "Welcome to AHRQ WebM&M ... the online journal and forum on patient safety and health care quality. This site features expert analysis of medical errors reported anonymously by our readers, interactive learning modules on patient safety ([Spotlight Cases](#)), and forums for online discussion. CME credit is available."

To the right, a "Did you know ..." section contains a bar chart titled "Of urban hospitals surveyed, few currently use Computerized Physician Order Entry (CPOE) but 30% plan to by 2004." The chart shows two categories: "Already have CPOE" at 30% and "Plan to implement CPOE" at 3%. The source is cited as "Source: Leapfrog Group, 2002".

Below this is a "Current Cases & Commentaries" section with a "FIND ANOTHER SPECIALTY" button. It lists five cases with their respective specialties:

MEDICINE	SURGERY/ANESTH	OB/GYN	PEDIATRICS	PSYCHIATRY
<b>Patient Mix-Up</b> A man almost received a medication intended for another patient with the same last name in the same room.	<b>Unexplained Apnea Under Anesthesia</b> A boy undergoing knee surgery stopped breathing after inadvertently being given a paralytic medication instead of an antibiotic.	<b>Procedural Mishap: Learning Curve?</b> A woman required emergency vascular surgery due to a complication during routine laparoscopic tubal ligation.	<b>Flying Object Hits MRI</b> An infusion pump being used for routine sedation in a child undergoing an MRI scan flew across the room and hit the MRI magnet, narrowly missing the child.	<b>When "Psychiatric" Symptoms are Not</b> A man with delusions and progressive neurological symptoms initially attributed to psychosis is found to have metastatic cancer.

The browser's taskbar at the bottom shows the Start button, several open applications (Inbox - Microsoft Outlook, AHRQ Press Releases, Microsoft PowerPoint), and the current time as 12:53 PM.

# Expanded AHRQ WebM&M

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- Patient Safety Network (PSNet)
  - AHRQ WebM&M remains the major focus of the contract
  - PSNet
    - A patient safety content and linking site
      - ◆ Coordination with [QUALITYTOOLS.GOV](http://QUALITYTOOLS.GOV)
      - ◆ Patient safety alerts
      - ◆ Patient safety toolbox
      - ◆ Patient safety conferences and training
      - ◆ State “What’s New”
      - ◆ Links to patient safety information, Web sites, etc.
        - Private and public

# Patient Safety Improvement Corps

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- Partnership with the VA
- Students representatives of States and their selected hospital partners
- Curriculum focused on helping them identify, collect, and analyze data on errors; how to develop and implement sustainable improvement
- Face-to-face formal instruction supplemented by teleconferencing and Web-based support
- First class of graduates completed their work in May; next class to begin September 2004

# AHRQ Web-Based Tools: Patient Safety Indicators

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- Free new Web-based tool helps hospitals quickly checkup on patient safety:
  - Detect potential adverse events in patients who have undergone medical or surgical care
  - Determine if problems detected were caused by potentially preventable medical errors
- Patient Safety Indicators:
  - [www.qualityindicators.ahrq.gov](http://www.qualityindicators.ahrq.gov)

# AHRQ's Health IT Portfolio

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- Grant portfolio related to the development, evaluation and diffusion of HIT in diverse clinical settings
- Emphasis on the role of HIT in patient safety
  - Clinical Informatics to Promote Patient Safety (CLIP)
- HIT grants and contracts:
  - FY01: \$18.4M
  - FY02: \$21.8M
  - FY03: \$11.6M

# AHRQ: Building the Evidence Base for HIT

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- **Electronic Health Records**
  - *Shared Online Health Records for Patient Safety and Care*
- **Clinical Decision Support**
  - *Automated Lab Test Follow-up to Reduce Medical Errors*
- **Electronic Prescribing**
  - *Error rates and prescribing practices in pediatric clinics*
- **Use of hand-held devices**
  - *Acceptance, benefits, and barriers in the use of hand-held decision support systems in ambulatory settings*
- **Consumer-directed IT**
  - *Parent-Initiated Prevention Program*

# AHRQ: FY '04 HIT Investment

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## ■ \$60M initiative:

- \$26M: to implement proven technologies in small and rural communities where HIT penetration has been low
- \$24M: targeted for developing, implementing, and evaluating the use of new and innovative technologies to improve patient safety and quality of care in diverse health care settings
- \$10M: targeted for clinical data standards and interoperability

# **FY04: Health IT Initiatives**

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- **Transforming Healthcare Quality through Information Technology: 3 RFAs**
- **Health IT Resource Center**
- **State Demonstrations on Interoperability**
- **IHS EHR Collaboration**
- **CMS–AHRQ demonstration collaboration**
- **Development of clinical data standards**

# Transforming Healthcare Quality through HIT (THQIT)

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## ■ FY04 Grant Solicitations:

### – Determining the Value of HIT

- assess the value derived from the adoption, diffusion, and utilization of HIT

### – THQIT Planning

- assist healthcare systems and their partners in planning for activities that will lead to successful HIT implementation

### – THQIT Implementation

- support organizational and community-wide implementation and diffusion of HIT

# FY04 Contract Solicitations

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## ■ State Interoperability Demonstrations:

- State-based demonstrations of data sharing of interoperable data
- 5-year demonstrations, \$1M/year
- Plan to fund 5 states (43 letters of intent, 15 applicants)

## ■ Health Information Technology Resource Center (HITRC)

- Provide technical support to HIT grantees and selected other federal grantees
- Develop repository of best practices
- Broader technical support to community-at-large

# Clinical Data Standards

## \$10M Investment (with ASPE)

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- | Further standards development work is needed to allow systems to share important health information.
- | Focus on gaps in the following four areas:
  - voluntary industry clinical messaging and terminology standards
  - national standard nomenclature for drugs and biological products
  - standards related to comprehensive clinical terminology and nomenclature
  - research related to accelerating the adoption of interoperable health IT systems.
- | Examples include:
  - RxNorm/Daily Med
  - Device Nomenclature
  - ePrescribing

# 2003 Medicare Modernization Act

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## ■ Health IT Provisions

- Electronic Prescription Program
- Grants to Physicians – ePrescribing systems
- Telemedicine Demonstrations Projects
- Medicare Care Management Performance Demonstration
- Council for Technology and Innovation
- Commission on Systemic Interoperability

# “TRIP”: What We Have Learned

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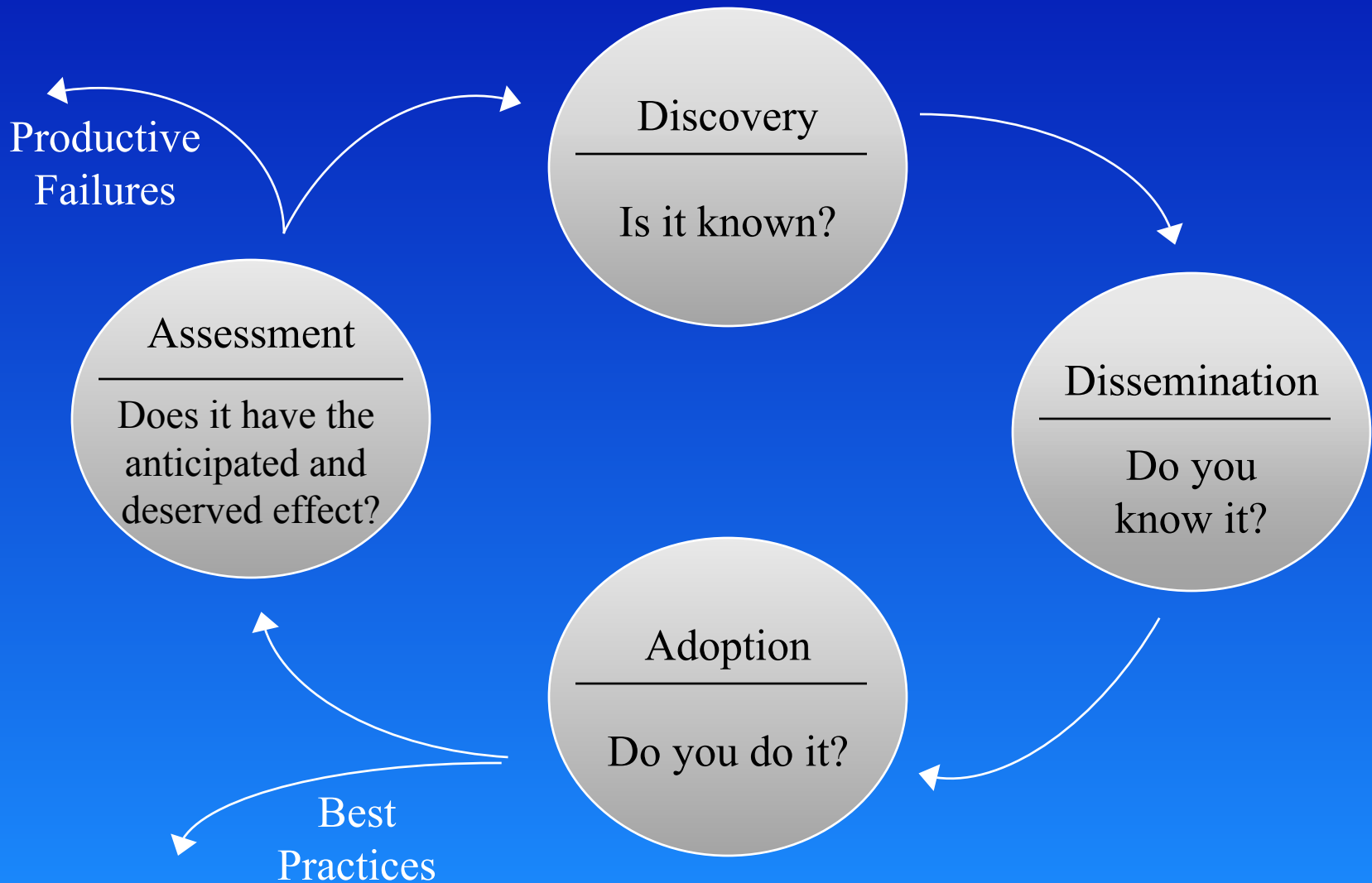
- Knowing the right thing to do is **NOT** doing it!
- Improvement must be based on science
- Patients as participants are far more effective than patients as ‘recipients’
- Safety in health care delivery is critical

# TRIP: Incorrect Assumptions

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- Receptor sites (demand for new information, products) “assumed”
- Decision making is not-linear; evidence is only part of the “solution”
- Synthesis, packaging, and training will be done by others
- Broad dissemination → modest effects

# Research Empowering American's Changing Healthcare System (REACHES)



# Importance of Impact

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- Uncovering “little jewels” of research translation is not enough
- Need to track impact systematically and deliberately
- **Are we changing practice and improving safety?**