Agency for Health Care Research and Quality (AHRQ): Developing and Implementing Evidence for Health Care Transformation

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Alliance of Independent Academic Medical Centers
Scientific Research Spectrum

- Laboratory-or Clinic-based Research
- Clinical Trials/Health Services Research
- Patient Care Health Services Research; Healthcare Delivery

TRANSLATIONAL RESEARCH

Basic Research

- Drug Discovery Research & Development Phases

Clinical Research

- Drug Treatments, Health Care & Services

Applied Research
The Agency for Healthcare Research and Quality's (AHRQ) mission is to:

1) Produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and,

2) To work within the U.S. Department of Health and Human Services and with other partners to make sure that the evidence is understood and used.
AHRQ’s Vision

Our Vision

Improve the lives of patients

(Why)
AHRQ’s Aim

Our Vision
Improve the lives of patients
(Why)

Our Aim
To help healthcare systems and professionals deliver care that is
- High Quality
- Safe
- High Value
(What)
Our Vision
Improve the lives of patients

(Why)

Our Aim
To help healthcare systems and professionals deliver care that is
• High Quality
• Safe
• High Value

(What)

Our Capabilities
• Health Systems Research
• Practice Improvement
• Data & Analytics

(How)
What Problems Are We Trying to Solve?

- Treated too late
- Treated in the same way
- Unwarranted health quality variation
- Patients treated in our silos
- Uncertain about what really works
- Frequent medical errors (not notified)
- Irrational workflow
- Patients non-adherent

- Proactivity
- Personalization
- Decision support
- Integrated care

- Real World Assessment
- Safety (monitored)
- Clinician and patient engagement in redesign
- Involvement
How AHRQ Makes a Difference

• AHRQ **invests in research and evidence** to understand how to make health care safer and improve quality

• AHRQ creates materials to **teach and train** health care systems and professionals to **catalyze** improvements in care

• AHRQ **generates measures and data** used to track and improve performance and evaluate progress of the U.S. health system
AHRQ is Versatile

- Targeted investments
- Broad exploratory investments
Supporting HHS Priorities

• Supporting HHS with cross-Agency groups in three key areas:
  ► Opioids
  ► Drug Pricing
  ► Value
HHS Comprehensive Approach to Drug Pricing Reform

• Increasing competition
  ► FDA’s Drug Competition Action Plan
  ► FDA’s Biosimilar Action Plan

• Better negotiation
  ► Medicare Part B International Price Index Model

• Creating incentives to lower list prices
  ► CMS to require list prices in advertising

• Reducing patient out-of-pocket spending
  ► Know the Lowest Price Act of 2018
• Medical Expenditure Panel Survey (MEPS)
  ▶ Collects and disseminates nationally representative prescription drug data

• Supports high quality, policy-relevant research on prescription drug expenditures and out-of-pocket costs
Strengths of MEPS Outpatient Prescription Drug Data

• Nationally representative
• All payers, people without drug coverage
• Pharmacy-reported payments and sources
• Drug details: NDCs, quantity dispensed
• Condition(s) treated by the drug
• Personal and family characteristics include family income, education, health status and functioning
• ≈35,000 persons, ≈320,000 fills per year
• Best for studying drugs for prevalent, chronic conditions
• 2 years of longitudinal data for each person
• Validated with Medicare Part D claims data
Supporting HHS Priorities

• Supporting HHS with cross-Agency groups in three key areas:
  ► Opioids
  ► Drug Pricing
  ► Value
HCUP is the Nation's most comprehensive source of hospital care data, including information on:

- in-patient stays
- ambulatory surgery and services visits
- emergency department encounters

HCUP enables researchers, insurers, policymakers and others to study health care delivery and patient outcomes over time, and at the national, regional, State, and community levels.
HCUP Databases

- National (Nationwide) Inpatient Sample (NIS)
- Kids' Inpatient Database (KID)
- Nationwide Emergency Department Sample (NEDS)
- Nationwide Readmissions Database
- State Inpatient Databases (SID)
- State Ambulatory Surgery and Services Databases (SASD)
- State Emergency Department Databases (SEDD)
- HCUP Statistical Briefs
  - Present simple, descriptive statistics on a variety of topics including specific medical conditions as well as hospital characteristics, utilization, quality, and cost.
AHRQ's Research Priority Areas

- Harnessing predictive analytics to improve diagnostic safety
- Transforming care for people living with multiple chronic conditions
- Powering Federal, State, and local innovations in health care through data, analysis and information
AHRQ's Research Priority Areas

• Improving Diagnosis

► 12 million Americans suffer a diagnostic error each year. Predictive analytics, personalized and precision medicine, and new technologies offer opportunities for transformative improvement.

► AHRQ will invest in research to improve diagnosis in the area’s of cancer, vascular events, and infections. Then develop, test and disseminate tools to apply these new techniques and technologies at the point of care.
Building a Foundation for Improving Diagnosis

• New grant-funded research (FOA):
  ► AHRQ Patient Safety Learning Laboratories includes emphasis on improving diagnosis

• Leading the Federal Interagency Workgroup on Diagnostic Safety and Quality

• AHRQ's new Question Builder app helps patients and caregivers prepare and organize questions and other helpful information before medical visits and puts that information at their fingertips to help ensure more accurate, timely diagnoses

• Follow AHRQ’s diagnostic safety microsite for future updates
AHRQ's Research Priority Areas

• Transforming Care for People with Multiple Chronic Conditions

► More than 25% of Americans are living with multiple chronic conditions, including 2 of every 3 Medicare beneficiaries. Their care is often fragmented, leading to poor outcomes and increased cost.

► AHRQ will invest in developing, testing and dissemination of an interoperable digital dashboard to increase patient-centered care and evaluating new models of primary care that utilize technology to coordinate care and deliver outside of the office, followed by scale and spread of these innovations.
Building an MCC Foundation

• Improving Care Coordination and Integration
  ► Academy for Integrating Behavioral Health into Primary Care (Playbook and Tools)
  ► New FOA on Screening and Management of Unhealthy Alcohol Use in Primary Care

• Improving Patient-Centeredness (whole person, 360 degree care)
  ► Advancing the use of Patient Reported Outcomes, AHRQ Step-Up App Challenge,
  ► Development of interoperable e-care plans
  ► New FOA Study targeting data analytics to improve chronic disease management in primary care and community settings (released 3/20)
AHRQ's Research Priority Areas

• Powering Decision Making through Data and Analysis

► Health care decision leaders and professionals lack access to timely, reliable data and analytics to make informed decisions

► AHRQ is working to establish an integrated data, analytics, and information platform with integrated simulation models to capture a 360-degree view of the health care system.

► Policymakers and decision makers will have:
  - Improved State-specific estimates
  - Enhanced capacity to monitor, track and fine tune state programs
  - Improved ability to understand programs related to costly or policy-related populations
Building a Foundation for Data and Analytics

• Chartered a cross-agency data enterprise working group and will soon be recruiting a new Chief Data Officer
• Developing a new federal social determinants of health data base
• Social determinants of health data challenge
• Beginning to expand MEPS sample to allow for more and more accurate state-level estimates
Short-Term FY 2019 Initiatives

• Rapid-cycle grant program to make research findings available more quickly
• Funding opportunity announcement to test digital health interventions and improve communication and coordination during transitions in care
• Create a new data platform linking information on social determinants of health across Federal data sets
• Overall funding level for AHRQ:
  - $338 million
  - $4 million increase over FY 2018 level
    - $2 million for grants to address diagnostic errors
    - $2 million to establish a program to explore the effectiveness of data computing analytics to identify trends in chronic disease management

• Second consecutive fiscal year with a budget increase
FY 2019 Budget

- Funding levels for key AHRQ programs and activities:
  - Patient Safety: $72.3 million
  - Medical Expenditure Panel Survey: $70 million
  - Health Services Research Data and Dissemination: $96.3 million
  - Health IT: $16.5 million
  - U.S. Preventive Services Task Force: $11.6 million
  - New Investigator-Initiated Grants: $14.8 million
  - Patient Safety Learning Labs: $10.0 million
Individual Mentored Career Development Award (K)

- Provides an intensive and supervised research and career development experience in preparation for an independent research career.
- Provides salary and research support (Up to $90,000 salary and up to $25,000 in direct costs for research related expenses).
- Awards are 3 to 5 years and are non-renewable.
- Minimum 75% of full time professional effort.

Program Officer:
Tamara Willis, PhD, MPH, PMP, Tamara.Willis@ahrq.hhs.gov
Program Announcements (PAs) describe continuing, new, or expanded program interests for which grant or cooperative agreement applications are invited. Applications in response to PAs are reviewed in the same manner as unsolicited grant applications (i.e., by peer review committees of the AHRQ Initial Review Group [IRG]).

All PAs are published in the *NIH Guide for Grants and Contracts*.

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<thead>
<tr>
<th>PA Number</th>
<th>Title</th>
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<tbody>
<tr>
<td>PA-18-795</td>
<td>AHRQ Health Services Research Projects (R01)</td>
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<tr>
<td>PA-18-794</td>
<td>AHRQ Small Research Grant Program (R03)</td>
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<td>Notice of Clarification: Research Strategy page limit</td>
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<tr>
<td>PA-18-793</td>
<td>AHRQ Health Services Research Demonstration and Dissemination Grants (R18)</td>
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<td>PA-18-792</td>
<td>Advancing Evidence into Practice through Shared, Interoperable Clinical Decision Support Resources (U18)</td>
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<td>PA-18-765</td>
<td>AHRQ Health Services Research Dissertation Program (R36)</td>
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<td>PA-18-750</td>
<td>Making Health Care Safer in Ambulatory Care Settings and Long Term Care Facilities (R18)</td>
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<td>Agency for Healthcare Research and Quality (AHRQ)-sponsored</td>
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Standard Funding Opportunity Announcements

- **R01 and R18 large research grants**
  - Three application receipt dates per year
  - Up to $250k/yr. total costs for up to five years
  - Or $400/yr. for projects in affordability and accessibility for up to two years

- **R03 small research grants**
  - Three application receipt dates per year
  - Up to $100k total for up to two years

- **Single & multi-year conference grants (R13)**
### Training Programs for Individuals

<table>
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<tr>
<th>Training Program</th>
<th>Predoctoral</th>
<th>Postdoctoral</th>
<th>Early Career</th>
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<td>Health Services Research Dissertation Awards (R36)</td>
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<tr>
<td>AHRQ National Research Service Award (NRSA) Individual Postdoctoral Fellowship (F32)</td>
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<td>AHRQ Mentored Research Scientist Research Career Development Award (K01)</td>
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### Announcements

The following are the latest announcements from AHRQ's Division of Research Education:

- Supporting the Next Generation of Learning Health Systems Researchers: Grants Awarded Under the AHRQ-PCORI Institutional Mentored Career Development Program (K12)
- Special Emphasis Notice on AHRQ's Interest in Health Services Research to Address the Opioid Crisis.
- Getting Recognition for Your AHRQ-Supported Study.
- AHRQ Career Development (K1) Award Program Evaluation Report.
NIH & AHRQ Grant Application Similarities

• Announcement publication:

• Application forms:
  ► Form 424 Research and Related (SF 424 R&R) [http://grants.nih.gov/grants/funding/424/index.htm](http://grants.nih.gov/grants/funding/424/index.htm)

• Application submission and referral – NIH Center for Scientific Review (CRS)
Application Process

• Applications sent from NIH to AHRQ
  ► Assigned to one of the five AHRQ study sections
  ► Assigned to a specific Program at AHRQ

• Scientific Review typically occurs 3-4 months after applications received
  ► dissertations, three months later
  ► Summary Statements issued

• Funding decisions occur 1-3 months later

• Resubmission – one allowed
What Determines Which Awards Are Made?

• Scientific merit
  ► Significance, Innovation and originality – Overall Impact
  ► Methods - Qualifications of Investigators

• Program considerations
  ► What is uniquely AHRQ
  ► Existing portfolio balance
  ► Anticipated IMPACT of research

• Availability of funds
Key Points to Promote Success

- Talk with an Agency (AHRQ, etc.) program officer(s)

- Previously funded work can be informative. See AHRQ Grant Database: https://gold.ahrq.gov/projectsearch/

- Consult with senior investigators regarding grantmanships
Key Points to Promote Success

• Bottom Line – Go/No Go
  ► AHRQ Priority Populations
  ► IRB/Human Subjects Protection & Inclusions
  ► Data Monitoring Plans

• Common Problems
  ► Flaw(s) in the Proposed Methodology
  ► No apparent translatability of research into practice or policy
  ► Not unique to AHRQ or relevant to mission or in line with AHRQ’s research portfolio
Increasing AHRQ’s Impact

• Building new capabilities to increase AHRQ’s impact in each of the Agency’s core competencies:
  ► Health Systems Research
  ► Practice Improvement
  ► Data & Analytics
Your Questions