



U.S. Department of Health and Human Services



Agency for Healthcare Research and Quality

Advancing Excellence in Health Care • www.ahrq.gov



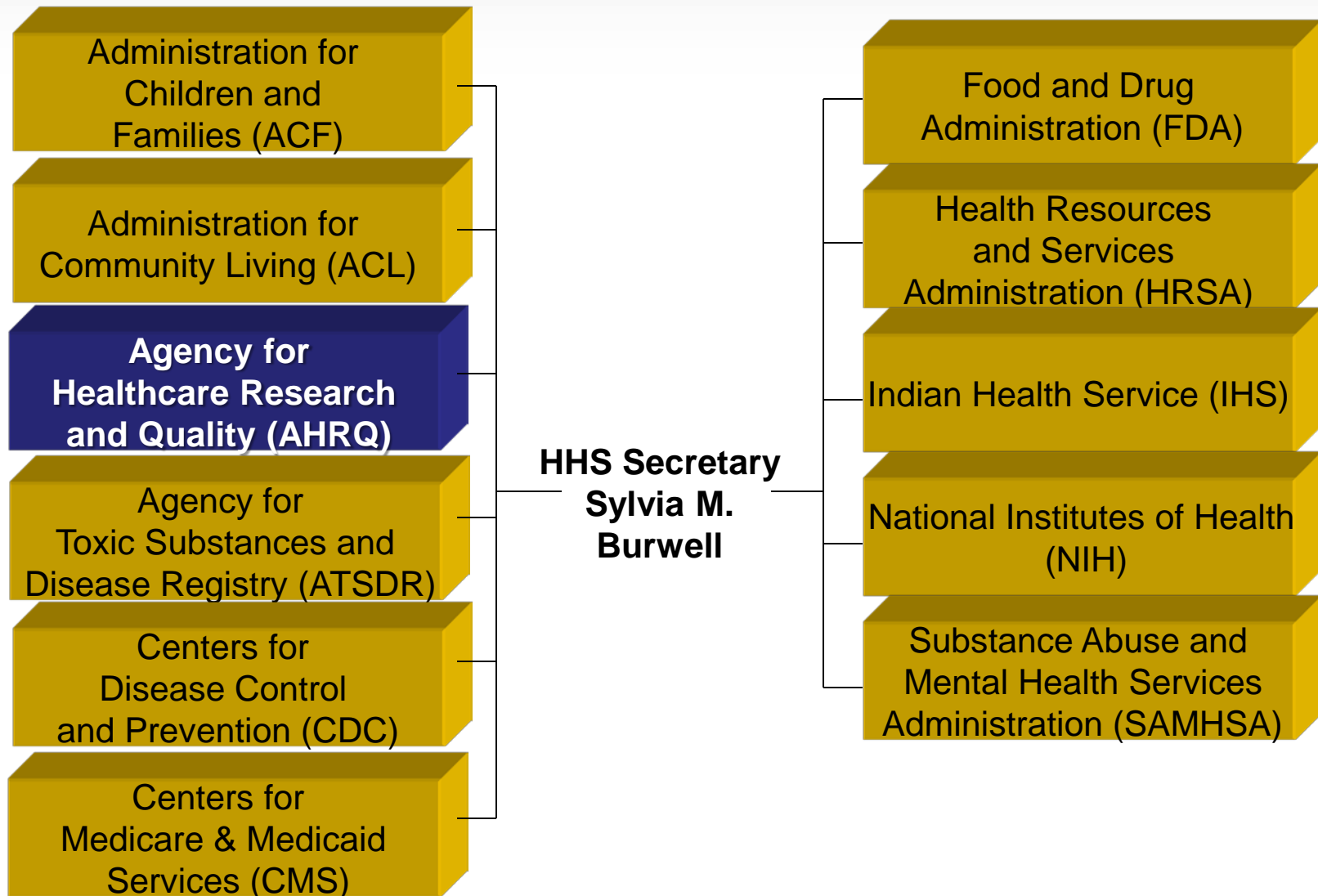
Getting Funded: AHRQ Grants Overview

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U.S. Department of Health & Human Services





AHRQ's Mission

“To produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and 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.”

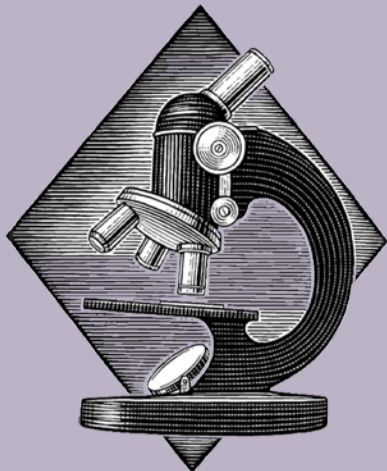


AHRQ's Priorities

- Produce Evidence To Improve Health Care Quality
- Produce Evidence To Make Health Care Safer
- Produce Evidence To Increase Access to Health Care
- Produce Evidence To Improve Health Care Affordability, Efficiency, and Cost Transparency

Where Does AHRQ Fit In?

NIH



Biomedical research
to prevent, diagnose,
and treat disease

CDC



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

AHRQ



System-wide
improvement of health
care quality, safety,
effectiveness, efficiency
and affordability



Health Services Research

“Health services research is a multidisciplinary field of inquiry, both basic and applied, that examines the use, costs, quality, accessibility, delivery, organization, financing, and outcomes of health care services to increase the knowledge and understanding of the structure, processes, and effects of health services for individuals and populations.”

IOM, *Health Services Research: Work Force and Educational Issues*, 1995



Who Uses AHRQ Research?

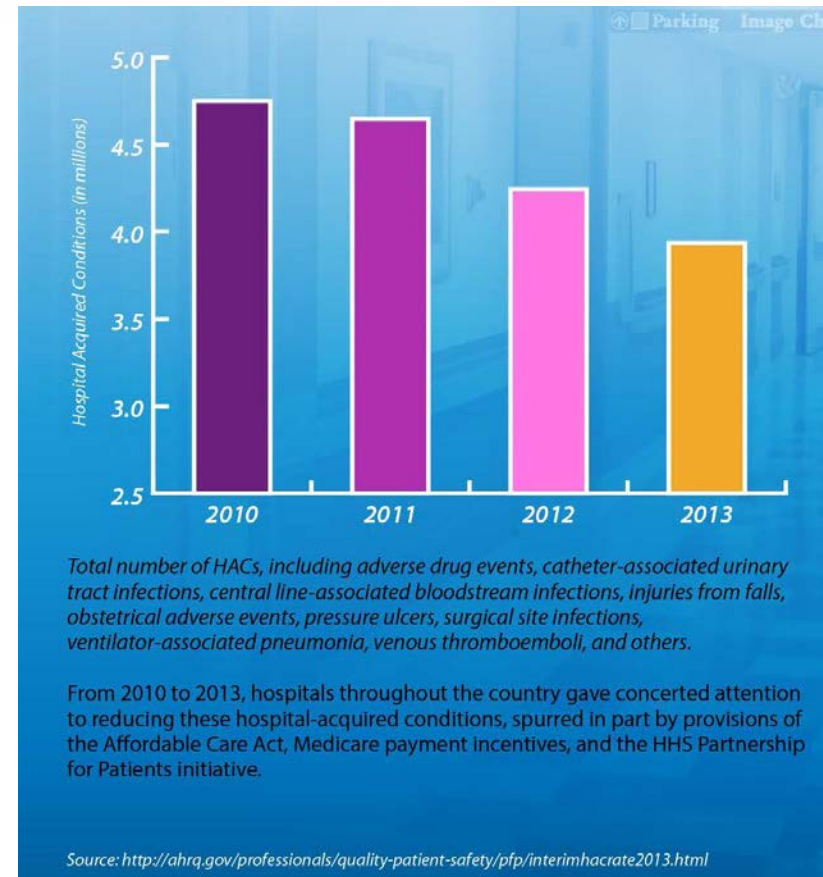
- Clinicians, including doctors, nurses, and other health care professionals
- Consumers and patients
- Policymakers
- Purchasers and payers
- Hospitals, nursing homes, and other health care organizations





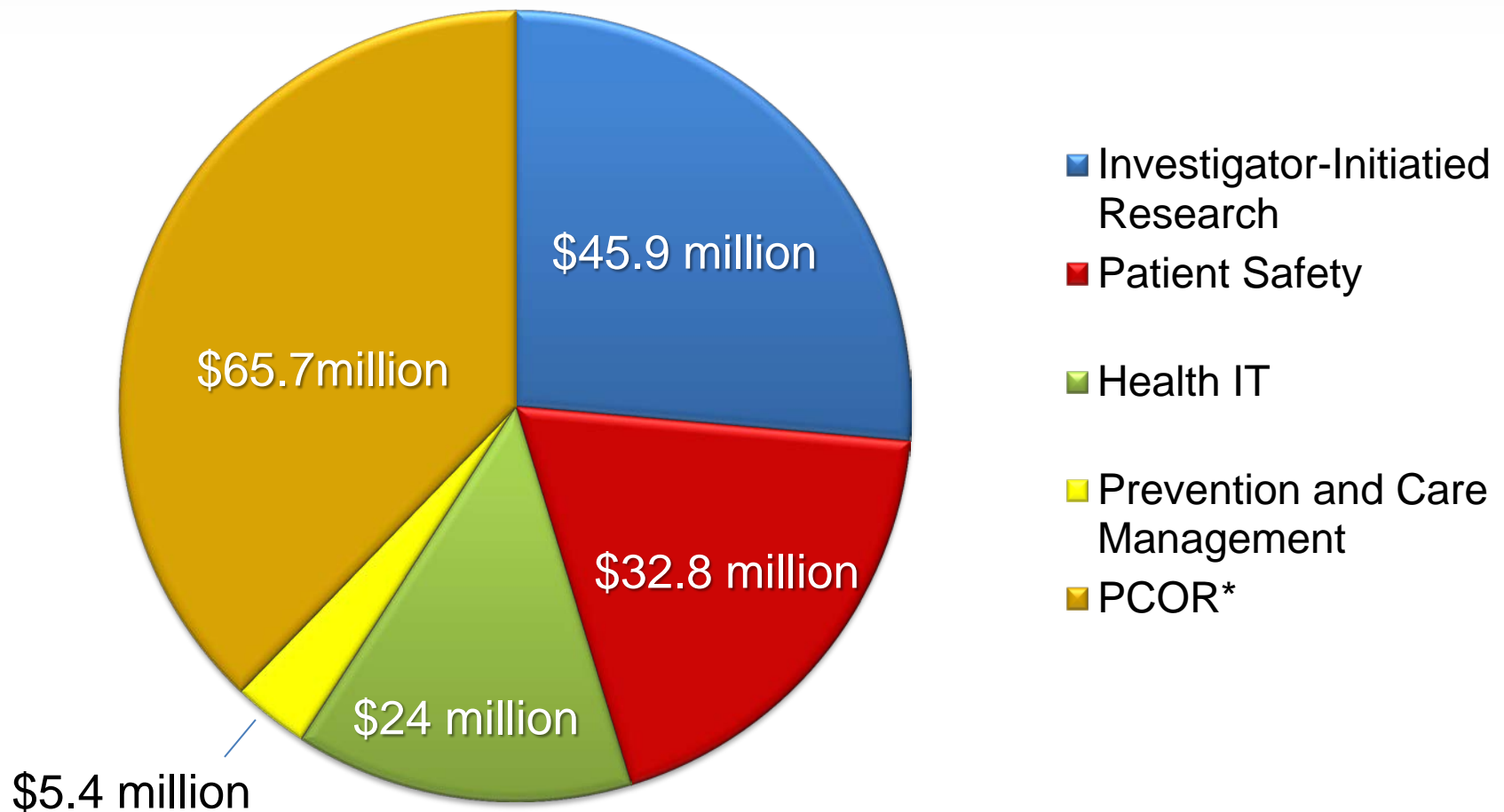
Hospital-Acquired Conditions (HACs) Declined by 17 Percent

- Concerted efforts by hospitals reduced adverse events:
 - ▶ 1.3 million fewer patient harms
 - ▶ 50,000 lives saved
 - ▶ \$12 billion in health spending avoided
- Most significant gains occurred in 2012 and 2013
- HACs declined by 17 percent over 3-year period





\$170 Million in New Grant Activity in 2014



*PCOR funding is an estimate for FY 2015. All other figures are for FY 2014.



Three Research Pathways

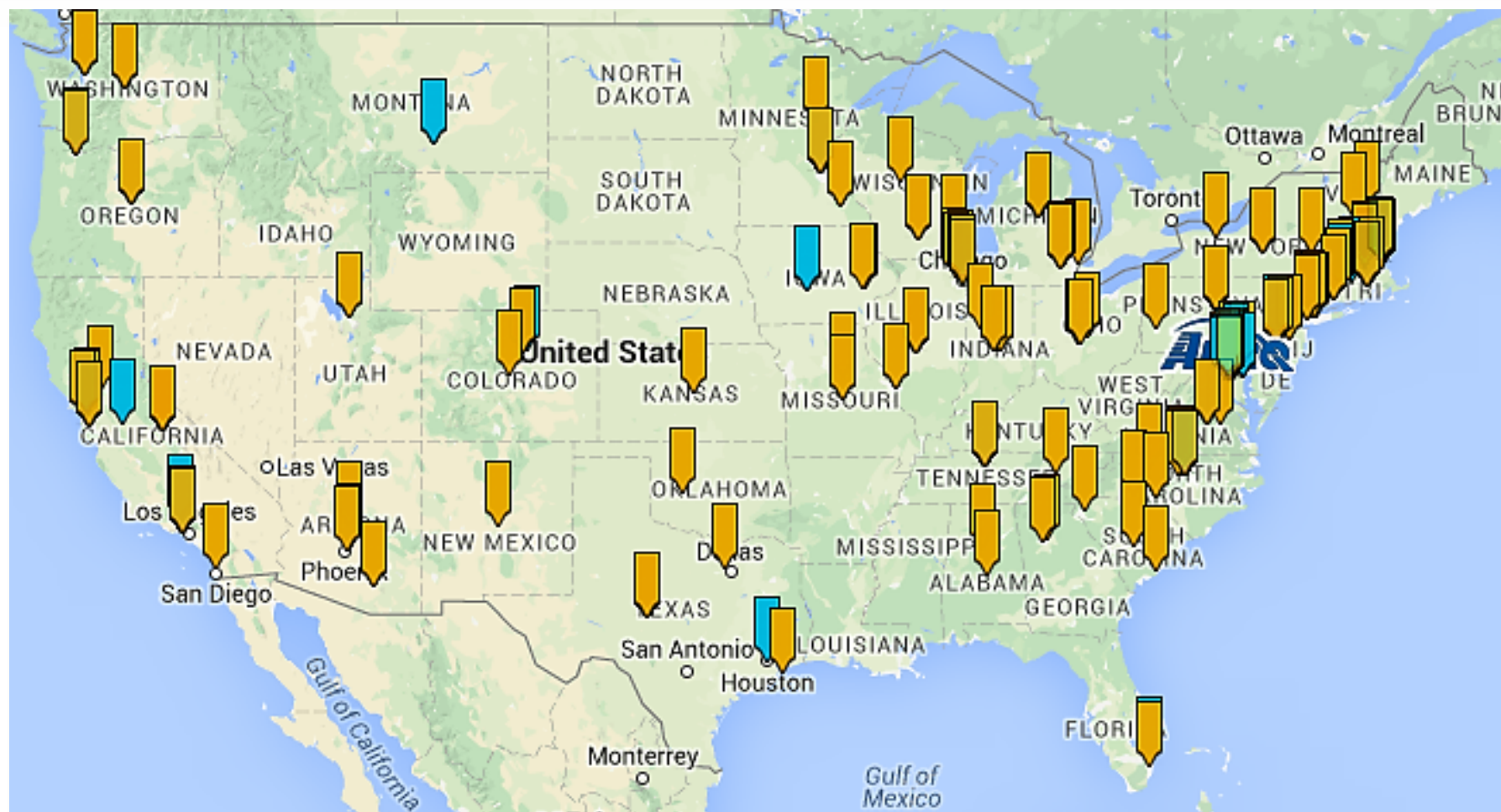
- Make, buy, or support?
- Intramural data & research
 - ▶ Building databases (e.g. HCUP, MEPS)
 - ▶ Targeted research, generally smaller projects with secondary data
- Contracted research & dissemination
 - ▶ Develop specific research and products
 - ▶ Put research findings into practice
- ***Research grants***
 - ▶ Support independent institutions & researchers in performing complex, flexible research
 - ▶ Develop scientific knowledge and products as a public good



What Is AHRQ Funding?

- 600+ active grants as of April 2015
- Visit www.gold.ahrq.gov to
 - ▶ Search all AHRQ-funded grants and contracts
 - Search by keyword, grant type, PI, PO, state, year & more!
 - ▶ Research what AHRQ has funded in your interest area
 - ▶ Find potential collaborators
 - ▶ Locate appropriate Project Officers

AHRQ Projects 2014





Comparative Health System Performance in Accelerating PCOR Dissemination

AHRQ Centers of Excellence



Data Core



Data Core



Data Core



Study Topics



Study Topics



Study Topics

- **Focusing on ABCS**

- ▶ Grants for dissemination of patient-centered outcomes research to small- and medium-size primary care practices
- ▶ Focus: Million Hearts™ ABCS (aspirin use among people with heart disease, blood pressure control, high blood cholesterol control and smoking cessation advice and support) campaign to prevent heart attacks and strokes





Funding Announcement: Making Health Care Safer in Ambulatory & Long-Term Care

- New multi-year initiative in FY 2015 to improve patient safety in all health care settings
- Initial two health care settings—ambulatory care and long term care facilities
- Studies funded under this funding opportunity could address a broad range of issues, including pressure ulcers and falls in nursing homes, and medication safety and diagnostic error in outpatient settings
- Specific interest in settings that serve vulnerable populations, including Federally Qualified Health Centers
- AHRQ intends to fund 5 to 10 awards, for a total of up to \$3.5 million



Current & Recent VCU Grants

Use of Patient Buddy Application to Disseminate Knowledge & Prevent Readmission	BAJAJ, JASMOHAN S.	04/06/15 - 03/31/17	\$149,999
Reproductive health and behavior: the role of abuse and couple pregnancy intent	CHA, SUSAN	09/30/14 - 09/29/15	\$41,884
Accountable Care Organizations: Development, Taxonomy, Quality and Cost Effects	CHUKMAITOV, ASKAR	09/30/14 - 09/29/17	\$747,063
Care Interventions and Quality of Care in Rural and Urban Nursing Units	BAERNHOLDT, MARIANNE	09/30/14 - 09/29/18	\$941,576



VCU Grants (Cont'd)

Incentives to Encourage Primary Care Use: A Randomized Controlled Trial in a Safety Net	BRADLEY, CATHY J.	09/30/13 - 09/29/17	\$1,954,183
Effectiveness of Shortened Interval to Postpartum Visit in Improving Attendance	MASHO, SABA W.	09/30/13 - 09/29/17	\$1,863,823
Development of a Collaborative Goal Setting Measure for Patients with Diabetes	MORRIS, HEATHER L.	06/01/13 - 09/30/14	\$40,344
Engaging Vulnerable Consumers in Developing Useful Public Healthcare Reports	LONGO, DANIEL R.	09/30/12 - 08/31/15	\$348,015

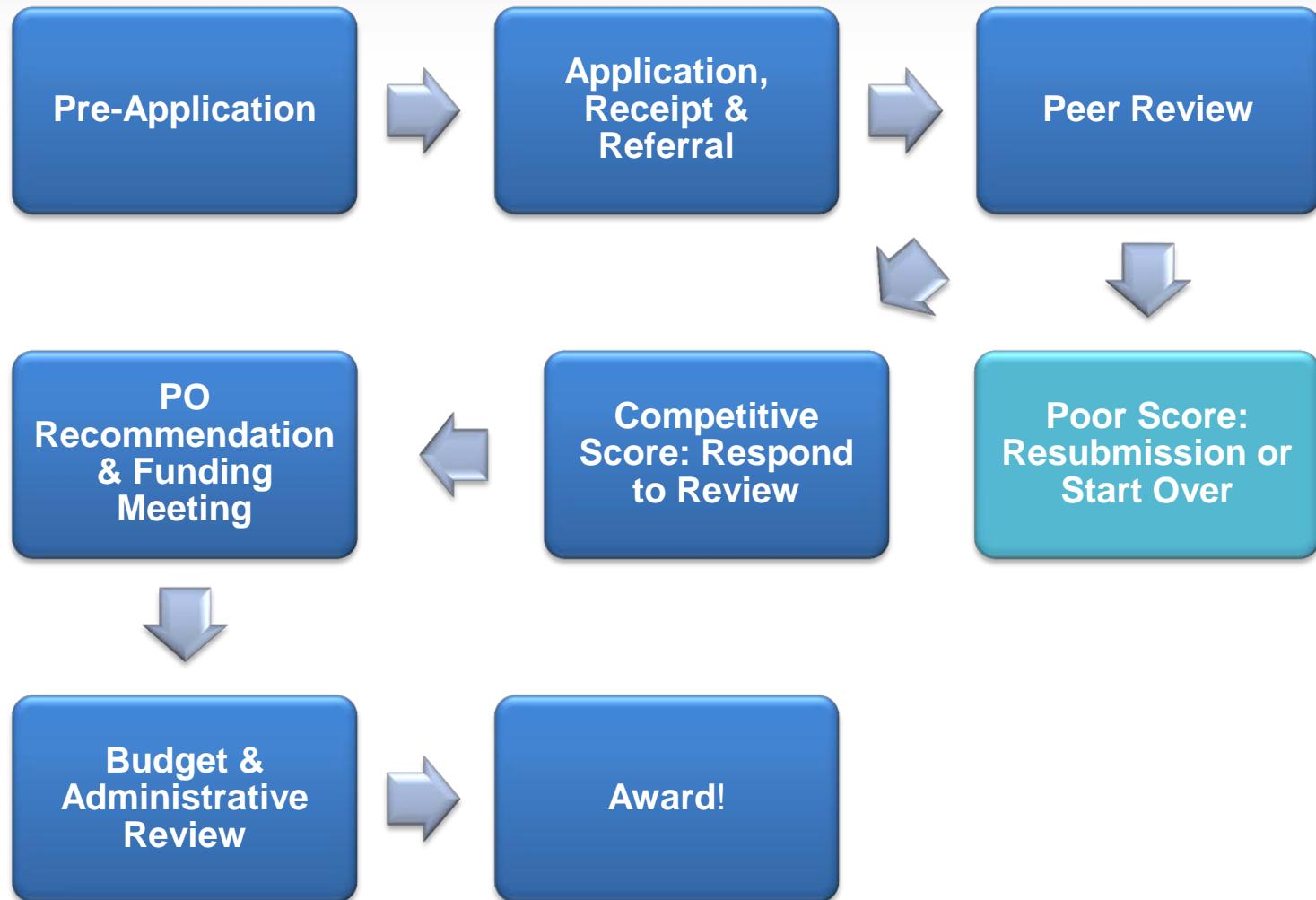


VCU Grants (Cont'd)

Communicating about Choices in Transplantation: An Educational Intervention	MARSHALL TRAINO, HEATHER M.	03/01/12 - 02/28/14	\$50,000
Evaluating Clostridium difficile Infection in Hospitalized Patients	PAKYZ, AMY L.	07/01/10 - 04/30/15	\$119,030
Increasing Communication about Live Donor Kidney Transplant: A Proof of Concept	MARSHALL TRAINO, HEATHER M.	07/01/10 - 04/30/16	\$98,801



Application Process Overview






Pre-Application




Doing Your Homework









Visit Our Website

www.ahrq.gov/funding


 U.S. Department of Health & Human Services

  Menu 

 Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

Funding & Grants




Policies and procedures, grant announcements, contract solicitations, special initiatives, call for partners, small business innovation research, and research dissertations, training, and career development.

Funding Opportunity Announcements

Grant announcements from the Agency for Healthcare Research and Quality for supporting research to improve the quality, effectiveness, accessibility, and cost effectiveness of health care.

Research Policies

GRANTS ON-LINE DATABASE (GOLD)



Searchable database of AHRQ Grants, Working Papers & HHS Recovery Act



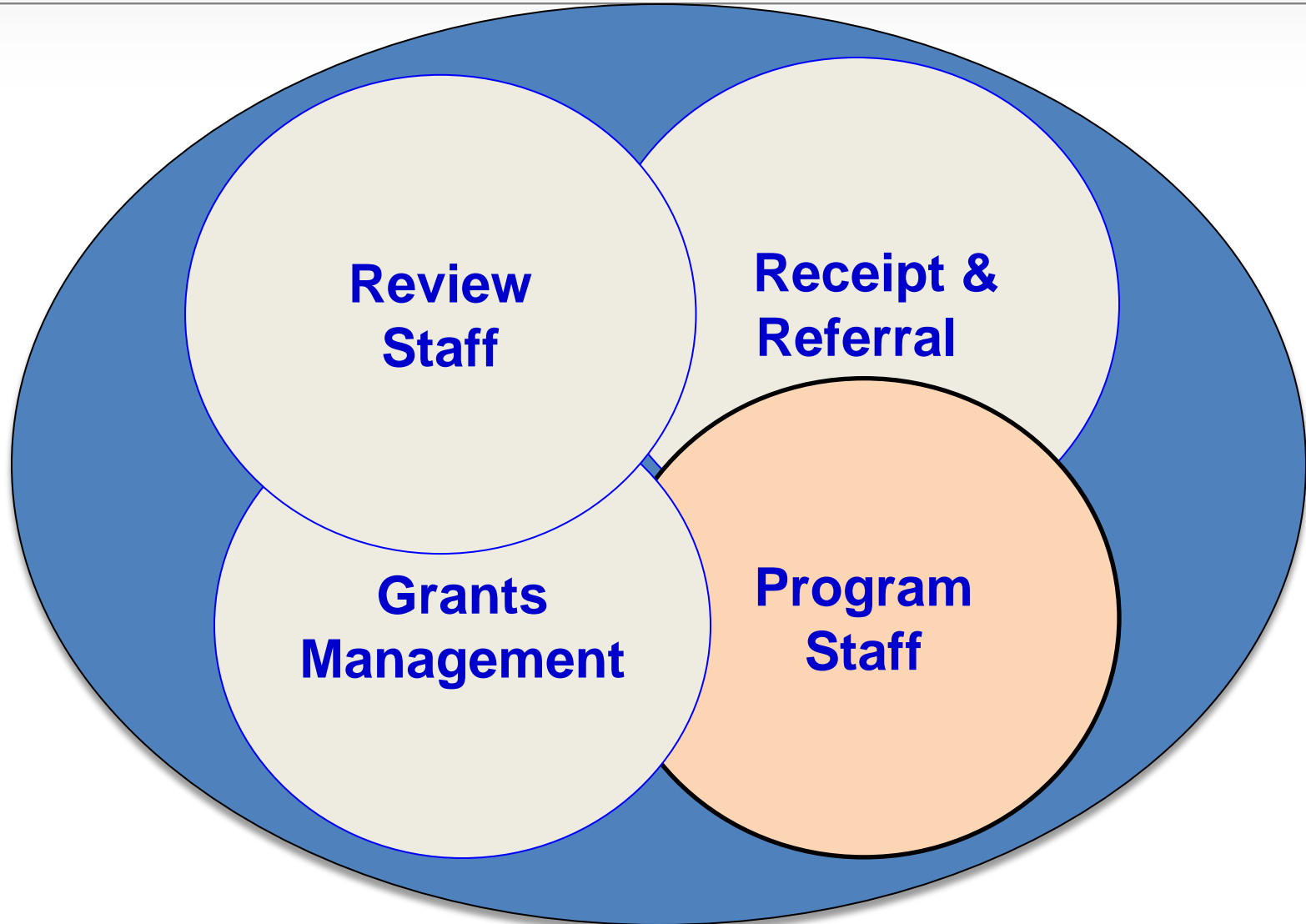
One-Stop Shop

Visit www.ahrq.gov/funding for:

- Funding Opportunity Announcements
- Research Policies
- Application, Review & Award Process
- Grants Management
- Funding Priorities & Staff Contacts
- Training & Education Funding
- Contracts



The AHRQ Extramural Team





Who Is Eligible for Grants?

- **Institution eligibility**

- ▶ Public or non-profit private institution, such as a university, college, or a faith-based or community-based organization
- ▶ Unit of local or State government
- ▶ Eligible agency of the Federal government
- ▶ Indian/Native American Tribal Government or Tribally Designated Organization
 - For-profit organizations and foreign institutions may participate in projects as members of consortia or as subcontractors only

- **Individual eligibility (education & training grants only)**

- ▶ Citizens or non-citizen nationals of the United States, or have been lawfully admitted to the U.S. for Permanent Residence.
- ▶ Individuals on temporary or student visas are not eligible

Learn more here:

http://grants.nih.gov/grants/guide/pa-files/PA-14-291.html#_Section_III_Eligibility



Standard Funding Opportunities

- **R01 and R18 large research grants**
 - ▶ 3 application receipt dates per year
 - ▶ Up to \$250K/yr total costs for up to 5 years
 - ▶ Or \$400k/yr for projects in affordability and accessibility for up to 2 years
- **R03 small research grants**
 - ▶ 3 application receipt dates per year
 - ▶ Up to \$100K total for up to 2 years
- **Single & multi-year conference grants (R13)**



Education and Early Career

- **Dissertation support (R36)**
 - ▶ Brenda.Harding@ahrq.hhs.gov
- **National Research Service Awards
Postdoctoral Fellows (NRSA F32)**
 - ▶ Shelley.Benjamin@ahrq.hhs.gov
- **Mentored researcher support (K01, K08-
several options)**
 - ▶ Kay.Anderson@ahrq.hhs.gov



Special Funding Announcements

- **Standing targeted announcements, for example:**
 - ▶ Patient safety: simulation research (R18)
 - ▶ Patient safety: safe medication use (R18)
 - ▶ Health information technology exploratory and developmental studies (R21)
- **One-time announcements, for example:**
 - ▶ Patient safety in ambulatory care and long-term care settings (R01, closes April 27, 2015)
 - ▶ Comparative health system performance (U19, closed October 17, 2014)



Application

Putting It All Together



What's In An Application?

- Check the FOA and eRA Commons for forms & instructions. NIH's SF424 is the most common, and includes:
 - ▶ Biosketches of PI and key personnel
 - ▶ Institutional information
 - ▶ Budget
 - ▶ Abstract
 - ▶ Specific Aims
 - ▶ **Research Strategy**
 - ▶ Supplemental info on human subjects, recruitment of women and minorities, etc.
 - ▶ Letters of support

Abstract, Title, Specific Aims

- **Write your abstract & title last**
 - ▶ Sell it!
 - ▶ Most read of any of your application materials
 - ▶ Will become public if you're funded
 - ▶ Succinct but thorough
 - ▶ Should be *about your study*, not all background
- **Specific aims**
 - ▶ Next-most read of your materials
 - ▶ Logical connection to research questions
 - ▶ Clear, concise, and connected (no potpourri of projects)



Research Strategy

- Background
 - ▶ Preliminary studies, state of the field
- Significance
 - ▶ Who cares and why
- Innovation
 - ▶ What's new?
- **Approach/Methods**

Approach, Approach, Approach!

- Great idea + weak approach = poor score!
- Clearly state research questions/hypotheses (Specific Aims)
- Data & Methods should be:
 - ▶ Appropriate to answer research questions
 - ▶ Feasible given timeline, budget, environment
 - ▶ Understandable to reviewers who do not have knowledge of particular methods, research instruments, etc.

Approach (cont'd)

- Qualitative & quantitative methods both need to be fully described and justified
 - Clearly link methods in mixed methods studies
 - Logic models, explanatory diagrams helpful
- Study population/data should be clear and justified—convenience is not sufficient
- Dust off your biostats and econometrics:
 - Statistical power, sample sizes, effect sizes, controls or comparison groups
- Include timeline of work
- **Address limitations & challenges...**
 - ...or reviewers will do so for you!



Investigators

- Research team's effort and expertise should be linked to approach.
- Clearly highlight relevant work in biosketches.
- New investigators should be paired with experienced, or apply for career/training grants.
- Avoid "TBD" team members if possible.



Peer Review

Behind the Scores



Purpose of Peer Review

To evaluate the scientific and technical merit of grant applications, providing information and recommendations used by the Agency and Centers to make funding decisions.



Peer Review Core Values

The AHRQ peer review process helps optimize the benefits gained from public investment in research by adhering to these three core values:

- ***Scientific and Technical Competence***
- ***Fairness and Objectivity***
- ***Transparency and Consistency***



Criteria For Peer Reviewers

- Demonstrated Scientific Expertise
- Doctoral Degree or Equivalent
- Mature Judgment
- Work Effectively in a Group Context
- Breadth of Perspective
- Impartiality – Objective Judgment
- Interest in Serving – Commit to Serve
- Adequate Representation of Women and Minority Scientists



Peer Review Process Overview

- AHRQ Receipt & Referral Officer does initial review for technical acceptability (e.g. page limits) and responsiveness/relevance to FOA and agency, then assigns to study sections
- Scientific Review Officer (SRO) assigns each application to at least 3 peer reviewers
- Peer reviewers evaluate application and provide preliminary scores



Peer Review (Cont'd)

- Reviewers meet to discuss applications
- ~50% of worst-scoring applications are “triaged” and will not be discussed or receive final score
- Other applications receive full discussion and final overall score
- Scores and summary of reviewer comments are released



Confidentiality of Review Process

- Members of a review panel are identified, but never individual reviewers of an application.
- Reviewers and AHRQ staff may not divulge information about the review to investigators prior to the release of summary statements; doing so could result in transmission of inaccurate information on the review outcome and inequitable treatment of applicants.
- Communications between reviewers or AHRQ staff and the applicant that violate the confidentiality of the review process are prohibited.



Core Review Criteria

- For all R01, R03, and R18 applications:
 - Significance
 - Investigators
 - Innovation
 - Approach – Methods and Data
 - Environment – Facilities and Resources
 - *Check specific announcements for different or additional criteria



Reviewers may not consider

- Comparisons with other applications
- Program relevance (except if stated in FOA)
- Funding levels or anticipated budget reductions
- Information that is **NOT** presented in the application (personal knowledge)



Overall Impact Score

- Reviewers will provide an **overall impact score** to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field involved, in consideration of the following five core review criteria and additional review criteria.

Significance

- Does the project address an important problem or a critical barrier to progress in the field?
- If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved?
- How will successful completion of the aims change the concepts, methods, technologies, treatments, or services that drive this field?

Investigators

- Are the PIs and other researchers well-suited to the project?
- If new investigators, do they have appropriate experience and training? If established, have they demonstrated an ongoing record of accomplishments that have advanced their field?
- If the project is collaborative, do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project?

Innovation

- Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions?
- Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense?
- Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

Approach

- Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project?
- Are potential problems, alternative strategies, and benchmarks for success presented?
- If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed?


Environment

- Will the scientific environment in which the work will be done contribute to the probability of success?
- Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed?
- Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

Additional Review Criteria (Unscored)

- Human subjects protections, including data safety
- Inclusion of women & minorities in study population
- Inclusion of AHRQ priority populations (e.g. low-income, rural, elderly)
- Responsiveness to FOA
- Budget & period of support
- Resubmissions: responsiveness to prior review
- *Read each announcement for special criteria!

Scoring Descriptions

Impact	Score	Descriptor	Strengths/Weaknesses
High Impact	1	Exceptional	 <div>Strengths</div>
	2	Outstanding	
	3	Excellent	
Moderate Impact	4	Very Good	
	5	Good	
	6	Satisfactory	
Low Impact	7	Fair	
	8	Marginal	
	9	Poor	
Non-numeric score options: NR = Not Recommended for Further Consideration, DF = Deferred, AB = Abstention, CF = Conflict, NP = Not Present, ND=Not Discussed			

AHRQ Peer Review Scoring Descriptor Table

	Score	Descriptor	Additional Guidance on Strengths/Weaknesses
High	1	Exceptional	Exceptionally strong with essentially no weaknesses
	2	Outstanding	Extremely strong with negligible weaknesses
	3	Excellent	Very strong with only some minor weaknesses*
Medium	4	Very Good	Strong but with numerous minor weaknesses
	5	Good	Strong but with at least one moderate weakness**
	6	Satisfactory	Some strengths but also some moderate weaknesses
Low	7	Fair	Some strengths but with at least one major weakness
	8	Marginal	A few strengths and a few major weaknesses***
	9	Poor	Very few strengths and numerous major weaknesses

Non-numeric score options:

DF = Deferred, AB = Abstention, CF = Conflict, NP = Not Present, ND = Not Discussed

***Minor Weakness:** An easily addressable weakness that does not substantially lessen impact

****Moderate Weakness:** A weakness that lessens impact

*****Major Weakness:** A weakness that severely limits impact

- Applications that are not discussed at the meeting will not be given an overall Final Impact Score, but the applicant, as well as the AHRQ staff will see the preliminary scores for each review criteria as additional feedback on their summary statement
- For each criterion rating, the strengths and weaknesses within that review criterion should be considered

Priority Scores & Percentiles

- Triaged applications (~bottom 50%, not discussed) receive category scores from preliminary reviewers but no final score.
- Discussed applications receive scores of 10 (worst) to 90 (best), calculated by mean score of all reviewers x10.
- Percentiles are normalized based on distribution of scores across multiple review meetings.
- One-time funding announcements and certain types of grants (e.g. conferences) receive only a score and no percentile.

Post-Review

**Recommendation, Award &
Resubmission**

Post-Review Timeline (approx.)

- 1 week after review: final scores released
- 4-6 weeks: summary statements released
- 6-9 weeks: POs request responses to reviewer critiques from PIs from applications scoring in the competitive range for funding
- 10-12 weeks: POs present funding recommendations to Senior Leadership Team (SLT)
- 12-13 weeks: SLT makes preliminary decisions
- 13-17 weeks: Grants Management performs administrative and budget review
- 17-21 weeks: Formal Notices of Grant Award

What Determines Which Awards Are Made?

- Scientific merit (peer review score)
- Program considerations
 - ▶ Congressional, HHS & AHRQ priorities
 - ▶ Overall portfolio of research
 - ▶ Availability of funds

Congratulations! Now What?

- Notice of Grant Award includes all terms & conditions
- Annual & final reports
- Notify AHRQ of all pending publications
- Changes in approach, personnel, budget need approval of PO and Grants Management staff
- Check in with your PO on progress
- Apply for another grant!

Resubmission

- Resubmissions historically have a higher funding success rate than original applications.
- Any unfunded applicant may resubmit (but not everyone should!)
- Review nature and tone of reviewer comments in Summary Statement

Resubmission (cont'd)

- If weaknesses cited are relatively minor, contact your PO to discuss resubmission.
 - ▶ Address all major reviewer concerns in both application and separate introduction
- If reviewers questioned the fundamental research questions or cited major weaknesses in the approach that cannot readily be addressed, a resubmission is less likely to succeed.

Final Tips

- Talk to a PO early
- Have an experienced investigator review your application—the more the better
- Find the right opportunity: consider all funders
- Proofread!
 - ▶ Spelling & grammar errors, old biosketches, disjointed applications are common but avoidable

Grants Priorities & Contacts

Research Priority	Point of Contact	Phone	Email
Improve health care quality by accelerating implementation of PCOR	William Baine (PCOR - dissemination)	(301) 427-1504	William.Baine@ahrq.hhs.gov
	Tamara Willis (PCOR - training)	(301) 427-1011	Tamara.Willis@ahrq.hhs.gov
Make health care safer	Erin Grace	(301) 427-1580	Erin.Grace @ahrq.hhs.gov
Increase accessibility	Amy Taylor	(301) 427-1660	Amy.Taylor @ahrq.hhs.gov
	Melford Henderson	(301) 427-1665	Melford.Henderson@ahrq.hhs.gov
Improve health care affordability, efficiency and cost transparency	Brent Sandmeyer	(301) 427-1441	Brent.Sandmeyer@ahrq.hhs.gov
	Geralyn Goins	(301) 427-1419	Geri.Goins @ahrq.hhs.gov

AHRQ Research Conference Returns!

- 2015 AHRQ Research Conference *Producing Evidence and Engaging Partners to Improve Health Care* (cohosted with AcademyHealth)
 - ▶ October 4–6, 2015
 - ▶ Crystal Gateway Marriott, Arlington, VA
 - ▶ October 6—AHRQ and AcademyHealth will team with the Patient-Centered Outcomes Research Institute (PCORI) to hold joint sessions

Thank you!

- Questions?
- www.ahrq.gov/funding
- Brent Sandmeyer
 - ▶ Brent.sandmeyer@ahrq.hhs.gov
 - ▶ 301-427-1441