The HMORN – OAICs AGING Initiative

Funding Opportunities in Multiple Chronic Conditions

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NIA Funding Opportunities in Multiple Chronic Conditions Research

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National Institute on Aging/National Institutes of Health
HMORN-OAICs AGING Initiative
Webinar April 20, 2015
National Institute on Aging: Opportunities and Resources

- A bit about the NIA
  - Divisions, Mission, Initiatives
- Types of research support
  - Career Development Awards
  - GEMSSTAR
  - Investigator Initiated Awards
    - Parent Awards (R03, R21, R01),
    - High Priority Research, PA’s and RFA’s
  - Conference Grants, Clinical Trials, Other
- Tips and Resources
  - Matching and fueling your research interests
NIA Mission

To improve the health and well-being of older Americans through research, and specifically, to:

- Support and conduct high-quality research on aging processes, age-related diseases, and special problems and needs of the aged
- Train and develop highly skilled research scientists from all population groups
- Develop and maintain state-of-the-art resources to accelerate research progress
- Disseminate information and communicate with the public and interested groups on health and research advances and on new directions for research.
Aging vs. Aged

- **Aging processes**
  
  How do aging-associated changes in physiology affect predisposition to, and outcome from, specific diseases and conditions and their combination? (Across the entire lifespan)

- **Age-related diseases**
  
  What are the optimal strategies for diagnosing and managing age-related diseases and conditions along with comorbidities?

- **Special problems and needs of the aged**
  
  How do entities such as co-morbidity, polypharmacy, and geriatric syndromes (e.g. frailty, sarcopenia, vascular stiffness) affect the care and procedural risk of older adults?
OAIC Pepper Centers: www.peppercenter.org

Look for RFA, pilot grants
Geriatric Research Agenda: DGCG

**General Geriatric Themes**
- Multiple Chronic Conditions
- Polypharmacy
- Frailty
- Cognitive/Functional Impairment
- Transitions of Care/Independence
- Fall Prevention
- Pain/Palliation
- Fatigue
- Sarcopenia

**Disease/Organ Specific**
- Basic Aging Mechanisms
  - Oxidative stress
  - Immunoaging
  - Telomere shortening
  - Mitochondrial function
  - Body composition changes
- Organ Specific
  - CKD, Arterial Stiffness
- Disease Specific
  - CAD, Asthma, HIV in OA, Diabetes
- Geriatric Syndromes
  - Falls, Incontinence, Delirium

**Study Design**
- Clinical Trials, Longitudinal, Genetic, Pragmatic
<table>
<thead>
<tr>
<th>Funding Number</th>
<th>Research Program</th>
<th>Title</th>
<th>Release Date</th>
<th>Expiration Date</th>
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<tbody>
<tr>
<td>RFA-AG-13-008</td>
<td>DAB, DCGG</td>
<td>Secondary Analyses of CALERIE Data Set and Stored Biospecimens to Address Research Questions Related to Effects of Caloric Restriction in Humans and Adherence to Caloric Restriction Interventions (R01)</td>
<td>08/17/2012</td>
<td>10/31/2012</td>
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<tr>
<td>RFA-AG-13-006</td>
<td>DAB, DCGG</td>
<td>Grants for Early Medical/Surgical Specialists Transition to Aging Research [GEMSSstar] (R03)</td>
<td>07/18/2012</td>
<td>10/02/2012</td>
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<tr>
<td>RFA-AG-13-003</td>
<td>DCGG</td>
<td>Secondary Analyses of Comparative Effectiveness, Health Outcomes and Costs in Persons with Multiple Chronic Conditions (R21)</td>
<td>07/17/2012</td>
<td>10/12/2012</td>
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<tr>
<td>RFA-AG-13-002</td>
<td>DCGG</td>
<td>Claude D. Pepper Older Americans Independence Centers (OAICs) and Coordinating Center (P30)</td>
<td>01/27/2012</td>
<td>05/18/2012</td>
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<tr>
<td>RFA-MH</td>
<td>DAB, DCGG</td>
<td>Basic Research on Decision Making: Cognitive, Affective, and Behavioral Mechanisms (R03)</td>
<td>09/22/2011</td>
<td>01/14/2013</td>
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### Prioritizing Research

- **NIA Programmatic Interests**
- **RFA vs PA’s**

<table>
<thead>
<tr>
<th></th>
<th>RFAs</th>
<th>PARs</th>
<th>PAs</th>
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<tbody>
<tr>
<td>Funds</td>
<td>Set-aside</td>
<td>Common pools (mech specific)</td>
<td>Common pools (mech specific)</td>
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<tr>
<td>Focus</td>
<td>Narrow – defined</td>
<td>Broad target/narrow review</td>
<td>Broad- Target</td>
</tr>
<tr>
<td>Applications</td>
<td>Usually single due date</td>
<td>variable</td>
<td>Standard due dates/years</td>
</tr>
<tr>
<td>Review</td>
<td>NIA Led or SEP</td>
<td>SEP (mainly NIA)</td>
<td>CSR assigned</td>
</tr>
<tr>
<td>Competition</td>
<td>Similar pool</td>
<td>variable</td>
<td>percentiled</td>
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</table>
Targeting a Vulnerable Time

First Faculty Appointment

- Opportunity to connect with mentor with aging expertise
- Pilot data for future funding

Medical +/- Graduate School

Internship/Residency Specialty Fellowship

Early Career Development as (Very) Junior Faculty

Mentored Career Development as (Less) Junior Faculty

Independent Clinician-Scientist

Private Practice Clinician-Educators

GEMSSTAR

K Award R03, R21

NIH R01
GEMSSTAR

- 2011 NIA launches ‘Grants for Early Medical and Surgical Specialists’ Transition to Aging Research’ (GEMSSTAR) RFA
  - **Goal**: provides opportunity for early career clinician-scientist in medical and surgical specialties to accrue pilot data and to establish a track record in aging-focused research
- R03 Mechanism – small research project ($75K/yr x 2 yr) PLUS an additional separately funded aging/geriatric focused career dvpt piece (approx $12.5-$25K/r x 2 yrs)
- Must have faculty appointment when award begins
- For specialists (including geriatricians) without extensive independently funded research record
- Professional Development Plan and commensurate support from non-NIH (ASP, VA, KL2, Private, etc.)
- GEMSSTAR Biennial Meeting – 2015, 2017, 2019
Career Development Awards

• Mentored Career Development Awards
  • Parent K01 (Research Scientist), K08 (Clinical Scientist), K23 (Patient-Oriented) - 3 cycles /year
  • Paul B. Beeson K08, K23 – “K deluxe” – set-aside – 1 cycle/yr – co-sponsored by AFAR & Hartford
    • $600k/3yr, $700K/4yr, $800K/5yr (direct costs)

• Pathway to Independence
  • K99/R00 – two phase accelerator award, 2yrs/3yrs

• Academic Faculty
  • K02 leadership/K07 infrastructure/K24 mid-career mentoring
Investigator Initiated Awards

- R03 – NIH Small Research Grant Program (2 yrs)
- R21 – NIH Exploratory Developmental Research Grant Program (2 yrs)
- R01 – Research Grant Program (up to 5 yrs)
- Early Career Investigator – within 10 years of ‘terminal training’ – this status garners your first R01 application score a few ‘lower’ points (depends on Institute- NIA 4-5 points)- to improve its competitiveness against established investigators ONLY for first R01 (no other R’s)
MCC Funding Opportunities

- The NIA has prioritized research pertaining to older adults with multiple chronic conditions (MCC)

Specific Funding Announcements

- **Self-Management for Health in Chronic Conditions**
  - **R21 – PA-14-343; R01 – PA-14-344; R15- PA-14-345**
  - Self-management is the ability of the individual, in conjunction with family, community, and healthcare professionals, to manage symptoms, treatments, lifestyle changes, and psychosocial, cultural, and spiritual consequences associated with a chronic illness or condition.

- **Behavioral Interventions to Address Multiple Chronic Health Conditions in Primary Care**
  - **R01 – PA-14-114**

- **Secondary Analyses of Existing Data Sets and Stored Biospecimens to Address Clinical Aging Research Questions**
  - **R01 – PA-13-168**

- We invite your ideas!!
Syndrome and Disease Specific

- Diabetes and Cardiovascular Disease in Older Adults (R03, R21, R01)
- Solid Organ Transplantation: Older Donors and Recipients (R03, R21, R01)
- Systemic Amyloidosis: Basic, Translational, and Clinical Research (R01)
- Prevention Research in Mid-Life Adults (R21, R01)
- T1 Translational Research: Novel interventions for prevention and treatment of age-related conditions (R21)
- T2 Translational Research: Research leading to new health care practices, community programs and policies affecting older persons (R21)
- Secondary Analyses of Existing Data Sets and Stored Biospecimens to Address Clinical Aging Research Questions (R01)
- Chronic Inflammation and Age-related Disease (R01)
- Fatigability, Activity Limitations, and Bioenergetics in Aging (R03, R21, R01)
- Advancing the Science of Geriatric Palliative Care (R03, R21, R01)
- Translational Research to Help Older Adults Maintain their Health and Independence in the Community (R01, R21)
NIH Opportunities: http://grants.nih.gov
NIH List Serv: sign up for weekly notifications of newly released PA’s & RFAs
Tips and Resources: Where do I start?

- Career stage, TIME, resources, mentorship, pilot data
- Review NIA Initiatives, FOAs, Strategic Directions
  - Listserv
  - GEMSSTAR
- Specialty Society Leadership- ACC/Geriatric Cardiology Section Websites
- AGS – Specialty Society Mentoring Program
- NIA Resources
  - Animal resources
  - Large Databases – LIFE, BLSA, CHS
  - OAIC (Pepper Centers), GRECC/VA
- Large Databases – Registries, PCORnet, Collaboratories
- Input channels for ideas:
  - R13/U13 Conferences
  - Clinical Trials Advisory Panels
  - New NIA Blog
  - Give us a call!
http://www.nia.nih.gov/research/scientific-resources
NIA Resources: NIA BLOG!!

www.nia.nih.gov/research/blog

NIA Summer Institute on Aging Butler-Williams Scholar Program
Grant Review Experience

- Not only should you have as many people as possible review your grant, it helps tremendously to look at grants (especially K awards) that were funded if your colleagues are willing to share these with you.

- The Center for Scientific Review (CSR) offers an opportunity for Early Career Scientists to gain Reviewer experience:
  - [http://public.csr.nih.gov/ReviewerResources/BecomeARReviewer/ECR/Pages/default.aspx](http://public.csr.nih.gov/ReviewerResources/BecomeARReviewer/ECR/Pages/default.aspx)
We are here for you!!!
NIA – DGCG Phone: 301-496-6761

- Marcel Salive - marcel.salive@nih.gov
  MCC, Polypharmacy, comparative effectiveness research, transitions of care/health delivery
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- Basil Eldadah – basil.eldadah@nih.gov
  HIV, Pain, Fatigue, Pepper Centers
- Lyndon Joseph - lyndon.joseph@nih.gov
  Exercise, falls, monitoring, diabetes

WE NEED YOUR THOUGHTS AND INPUT!!
PCORI Funded Research on Multiple Chronic Conditions

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Lauren Azar, MHA
Program Associate, Improving Healthcare Systems, PCORI

HMORN-OAICs Aging Initiative Webinar Series April 20, 2015
Summary

- Overview of PCORI
- MCC Research Supported by PCORI
- PCORI Funding Announcements (PFAs)
- Questions and Discussion
Overview of PCORI

An independent research institute authorized by Congress in 2010. Governed by a 21-member Board representing the entire healthcare community.

Funds comparative effectiveness research (CER) via a contract mechanism that engages patients and other stakeholders throughout the research process.

Seeks answers to real-world questions about what works best for patients based on their circumstances and concerns.

OUR MISSION

PCORI helps people make informed health care decisions, and improves health care delivery and outcomes, by producing and promoting high integrity, evidence-based information that comes from research guided by patients, caregivers and the broader health care community.
Number of projects: 365

Amount awarded: $734.8 million

Number of states where we are funding research: 39 (plus the District of Columbia)
The Research We Fund is Guided by Our National Priorities for Research

- Assessment of Prevention, Diagnosis, and Treatment Options (APDTO)
- Improving Healthcare Systems (IHS)
- Communication & Dissemination Research (CDR)
- Addressing Disparities (AD)
- Accelerating PCOR and Methodological Research
**PCORI Science Program Distinctions**

**IHS**
- CER beyond clinical treatment options. Interventions at different levels of the healthcare system; multicomponent
- Well articulated and valid comparators, for both trials and studies using observational data
- Outcomes relevant to patients & actionable by stakeholders

**APDTO**
- Compares the effectiveness of two or more clinical treatment options known to be effective, but have not been adequately compared in previous studies (i.e. heterogeneity of treatment effects)

**AD**
- Compares interventions to reduce or eliminate disparities in patient-centered outcomes
- Address contextual factors and their impact
- Compares health care options across different patient populations
- Compares and identifies best practices within patient populations

**CDR**
- Research in clinician engagement with CER
- Translating research, decision support interventions, and risk communication
- Distribution of CER to patients, caregivers and providers
PCORI-Funded Projects Studying MCCs

All Funded projects can be found at: http://www.pcori.org/research-results

Number of Projects: 16
Amount Awarded: $29,328,228

Projects studying populations with 2+ chronic conditions, or projects studying populations with one chronic condition with a subgroup analysis for MCCs. This analysis does not include Methods projects.

PROJECTS SUPPORTED BY EACH PCORI PROGRAM

IHS, 4
AD, 7
CDR, 4
APDTO, 1

STUDY POPULATIONS (not mutually exclusive)

STUDY DESIGNS

Secondary Data, [VALUE]
Observation al, 3
RCT, 11

PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE
PCORI-Funded Projects Studying MCCs

Primary Diseases and Conditions

- Multiple/co-morbid chronic conditions (General): 11
- Neurological Disorders (MS + Depression + Chronic Pain): 1
- Nutritional and Metabolic Disorders (Obesity + diabetes, high cholesterol, or high blood pressure): 2
- Kidney Disease (Chronic Kidney Disease + Depression): 1
- Mental/Behavioral Health (Major depression + chronic diabetes, heart failure, or coronary heart disease): 1
<table>
<thead>
<tr>
<th>Sponsored by the IHS Program</th>
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<tbody>
<tr>
<td><strong>Title:</strong> An Emergency Department-to-Home Intervention to Improve Quality of Life and Reduce Hospital Use</td>
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<tr>
<td><strong>Intervention:</strong> Area Agency on Aging-based ED-to-home vs. usual post-ED care</td>
</tr>
<tr>
<td><strong>Design:</strong> RCT; 600 chronically ill Medicare beneficiaries at 2 ethnically diverse FL hospitals</td>
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<tr>
<td><strong>Budget/Duration:</strong> $1,802,602 / 3 years</td>
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<tbody>
<tr>
<td><strong>Title:</strong> Programa Esperanza (Project Hope)</td>
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<tr>
<td><strong>Intervention:</strong> Culturally modified psychosocial intervention vs. enhanced usual care (PCMH)</td>
</tr>
<tr>
<td><strong>Design:</strong> Mixed Methods/RCT; 250 Spanish-speaking Latino patients ≥ 55 years of age with depression and multiple medical conditions</td>
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<tr>
<td><strong>Budget/Duration:</strong> $1,456,086 / 3 years</td>
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<tr>
<th>Sponsored by the CDR Program</th>
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<tbody>
<tr>
<td><strong>Title:</strong> Preparing Spanish-speaking Older Adults for Advance Care Planning and Medical Decision Making</td>
</tr>
<tr>
<td><strong>Intervention:</strong> Advance care planning website + Spanish advance directive (SAD) vs. SAD alone</td>
</tr>
<tr>
<td><strong>Design:</strong> RCT; 400 Latinos aged ≥ 55 years of age with multi-morbidities and/or frailty</td>
</tr>
<tr>
<td><strong>Budget/Duration:</strong> $2,100,000 / 3 years</td>
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PCORI Funding Announcements (PFAs)

Visit the **PCORI website** for up-to-date information

**Broad (Investigator-Initiated)**

- Solicits the research community’s best ideas under PCORI’s initial National Priorities for Research; 2 cycles per year
- $1.5M direct costs over 3 years (all programs) or $5M over 5 years (IHS)
- Best way to tap into the creative cutting edge and to fund relatively young investigators

**Pragmatic Clinical Studies (aka Large Pragmatic Studies)**

- Research topics that reflect national priorities for PCOR (PCORI, IOM, AHRQ)
- Head-to-head comparisons in large, representative study populations
- Anticipate 5 funding cycles, up to $450M total commitment
- First awards announced in February 2015
- Max of $10M direct costs over 5 years
Applications are reviewed against five criteria:

- Impact of the condition on the health of individuals/populations
- Potential for the study to improve healthcare and outcomes
- Technical merit
- Patient-centeredness
- Patient and stakeholder engagement

- Applications are reviewed by a panel of two scientists, one patient, and one other stakeholder.
- PCORI’s Board of Governors makes funding decisions based on merit review and staff recommendations.
Questions and Discussion
AHRQ MCC Research Initiatives

Joy Basu, PhD
Center for Evidence and Practice Improvement

HMORN-OAICS AGING Initiative Webinar
April 20, 2015
• AHRQ’s New Mission and Priorities
• MCC Research Network and HHS Strategic Framework
• Specific Examples of Research on MCC
• Review of MCC RN other Products
• AHRQ’s New Center and Divisions
• Funding Mechanisms
• Funding opportunities
AHRQ’s New Mission

To produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work with HHS and other partners to make sure that the evidence is understood and used.
AHRQ’s Priority Areas of Focus

• Improve health care quality by accelerating implementation of Patient Centered Outcomes Research

• Make health care safer

• Increase accessibility by evaluating Affordable Care Act coverage expansions

• Improve health care affordability, efficiency, and cost transparency
AHRQ has funded the AHRQ MCC Research Network to promote evidence-based research on MCC patients.

The Network aligns with a Department of Health and Human Services' effort to address MCC issues.
Four Goals: HHS Strategic Framework

• Foster health care and public health system changes to improve the health of individuals with multiple chronic conditions

• Maximize the use of proven self-care management and other services by individuals with multiple chronic conditions

• Provide better tools and information to health care, public health, and social services workers who deliver care to individuals with multiple chronic conditions

• Facilitate research to fill knowledge gaps about, and interventions and systems to benefit, individuals with multiple chronic conditions
From 2008-2010 AHRQ funded 45 research grants

<table>
<thead>
<tr>
<th>Awarded grants</th>
<th>Research topic</th>
<th>Number of publications as of 2013</th>
</tr>
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<tbody>
<tr>
<td>18 R21s (2008)</td>
<td>Preventive services</td>
<td>30</td>
</tr>
<tr>
<td>14 R21s (2010)</td>
<td>Comparative effectiveness</td>
<td>11</td>
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AHRQ’s MCC Research Network

http://www.ahrq.gov/professionals/prevention-chronic-care/decision/mcc

These grants aimed to improve understanding of:

• Interventions that provide greatest benefit to MCC patients

• The safety and effectiveness of interventions that may be affected by MCC

• Interventions that may need to be modified for specific patient population
Examples of 2010 R21 Grants on MCC

• Beta blocker effect on a range of health outcomes in older adults with CAD and COPD

• Determining Processes of Cardiovascular Care Relevant to Complex Patients

• Should High-Risk Statin Utilization Rates Be Increased For Complex AMI Patients?

• Comparative Effectiveness of Lipid-Lowering and Antihypertensive Medications among Patients Infected with HIV
Examples of 2010 R24 Grants on MCC

- Enhanced Data to Accelerate Complex Patient Comparative Effectiveness Research
- Washington University Comparative Effectiveness Administrative Data Repository
- Clinical Database to Support Comparative Effectiveness Studies of Complex Patients
In 2014 AHRQ funded additional 14 research grants

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<thead>
<tr>
<th>Awarded grants</th>
<th>Research topic</th>
<th>Expected date of Completion</th>
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<tbody>
<tr>
<td>7 R01 (2014)</td>
<td>RFA-HS-14-001 “Rapid Secondary Analysis to Optimize Care for Patients with Multiple Chronic Conditions”</td>
<td>2016</td>
</tr>
<tr>
<td>7 R21 (2014)</td>
<td>RFA-HS14-002“Addressing Methodological Challenges in Research for Patients With Multiple Chronic Conditions”</td>
<td>2015</td>
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Examples of 2014 Grants Related to MCC

- Combination of Chronic Conditions Determining Clinical Relevance and Resource Use—R21
- Stroke Prevention for Atrial Fibrillation with Multiple Chronic Conditions—R01
- Individualized Risk Assessment in Patients with Multiple Chronic Conditions—R21
http://www.ahrq.gov/professionals/prevention-chronic-care/decision/mcc/
2010 R24 Datasets

http://www.icpsr.umich.edu/icpsrweb/AHRQMCC/
Other Dissemination Products from MCCRN

- An animated video essay on MCC
- *Medical Care* Special Issue on MCC, published in February 2014
- AHRQ MCC project highlights in *Annals of Family Medicine*
- MCC Infographic
- MCC Chart Book
Internal Data Sets at AHRQ

• Healthcare cost and utilization project (HCUP)
  ► Nationwide Inpatient Sample (NIS)
  ► Kids’ Inpatient Database (KID)
  ► Nationwide Emergency Department Sample (NEDS)
  ► State Inpatient Databases (SID)
  ► State Ambulatory Surgery Databases (SASD)
  ► State Emergency Department Databases (SEDD)

• Medical Expenditure Panel Survey (MEPS)
  ► Household Component (HC)
  ► Medical provider Component (MPC)
  ► Insurance Component (IC)
In 2014, AHRQ’s Center for Evidence and Practice Improvement (CEPI) was created to:

- Generate new knowledge, synthesize evidence, translate science on what works in health care delivery, and catalyze practice improvement across health care settings.

Five Divisions:
- Evidence-based Practice Center program
- U. S. Preventive Services Task Force program
- Division of Decision Science and Patient Engagement
- Division of Health Information Technology
- Division of Practice Improvement
Funding Opportunities

Consistent with AHRQ’s and CEPI’s new Mission, AHRQ would be interested in grants for MCC patients that:

• Demonstrate the effectiveness of synthesizing, translating, and communicating complex scientific evidence.

• Discover, test, and spread techniques for health care practice improvement (ambulatory care setting in particular), including accelerating the implementation of evidence-based practice.

• Improve health care quality through the use of information systems and data resources to support clinical and organizational improvement.
Funding Mechanisms

Investigator initiated grants in response to standing Program Announcements:

Research Project Grants
- RO1: Large Research Grant
- R03: Small Research Grant
- R13: Conference Grant
- R18: Research Demonstration and Dissemination Grant
- R21: Exploratory/Development Grant
- R24: Resource related Research Grant
- R36: Dissertation Grants

Research Career Development Program
- K02: Independent Research Scientist Development Award
- KO8: Mentored Clinical Scientist Development Award

In addition, there are several grants that should respond to RFA only (e.g., P01, P20, T32, U01, U18)

http://www.ahrrq.gov/funding/process/mechanisms/
Questions ?

Contact: Jayasree.basu@ahrq.hhs.gov
301-427-1579
For inquiries regarding this presentation or the HMORN-OAICs AGING Initiative:

- Contact Kathryn Anzuoni at Kathryn.anzuoni@meyersprimary.org

- Or search online: “HMORN-OAICs AGING”

Thank you!