Example of a QI Federal Proposal Call:

### https://www.ahrq.gov/funding/policies/nofoguidance/index.html

The Agency for Healthcare Research and Quality (AHRQ) is the lead Federal agency charged with improving the quality of healthcare for all Americans. Providing high-quality care means providing safe, effective, and individualized care to meet the consumer's desires but also accomplished promptly and efficiently. AHRQ develops science-based knowledge, tools, and data to improve healthcare and help consumers, healthcare professionals, and policymakers make informed decisions.

# **AHRQ's Research Priority Areas**

- 1. Research to improve healthcare quality and patient safety.
- 2. Research to improve healthcare delivery and practice improvement.
- 3. Research to enhance whole-person healthcare delivery.

## **Research on patient safety**

- Identification of risks, hazards, and patient harm.
- Design, implementation, and evaluation of mitigation strategies (patient safety practices) and the adaptation, refinement, and sustainment of those strategies to address risks, hazards, and harms.
- Design, implementation, dissemination and spread, and evaluation of interventions to improve patient safety.
- Establishment of strategies to sustain patient safety improvements such as just culture, incident/event reporting, measurement, monitoring, and surveillance.
- Surveillance, measurement, detection, and reporting of patient safety events.
- Impact of human performance, workflow, and working conditions on patient safety.
- Patients' role and contribution to patient safety.
- Diagnostic safety and quality.
- Safe use of medical devices and medications, including safely prescribing opioids.
- Role of Patient Safety Organizations.
- Challenges inherent in transitions of care in the same setting and between settings and handoffs between healthcare providers.

- Patient characteristics that might influence the risk of experiencing a patient safety event, for example, attributes of AHRQ's priority populations that can impact patient safety and address.
- Strategies to address barriers to safe care.

AHRQ encourages an interdisciplinary, systems science patient safety approach. In addition to health services research, perspectives from organizational theory, human factors, industrial engineering, facilities design, education, and other disciplines can be incorporated into research plans.

# Research on the prevention and control of healthcare-associated infections (HAIs)

- Determination of the clinical efficacy and effectiveness of preventive interventions, including unintended adverse consequences.
- Characterization and assessment of relevant epidemiological aspects of HAIs, including but not limited to patient risk factors, clinical presentation, and sources of antibiotic-resistant organisms involved in developing HAIs.
- Demonstration, dissemination, and evaluation of strategies and approaches for preventing and reducing HAIs.
- Research regarding the adoption and implementation (including sustainment, spread, and scale-up) of evidence-based approaches to prevent HAIs.
- Generation of knowledge for combating antibiotic-resistant bacteria.
- Promotion of appropriate antibiotic use to reduce the transmission of resistant bacteria and prevent HAIs in the first place.

As noted above, clinical investigations that seek to establish the efficacy or effectiveness of preventive interventions typically involve comparing the intervention in question to routine care or, less frequently, to a placebo (when the latter is ethical). Such clinical studies are included in AHRQ's patient safety research priorities. AHRQ does not fund comparisons of two known efficacy or effectiveness clinical interventions to determine which is more efficacious.

### Research to Improve Healthcare Delivery

AHRQ supports research that advances understanding of how to improve healthcare delivery, with an emphasis on strengthening primary care and moving towards whole person care—care that is goal-oriented, based on the values and circumstances of each patient, and that addresses a patient's physical, behavioral, and social health needs from prevention to chronic care management and their needs for human services. Priorities include:

### Research to engage people and communities in care

- Strategies to engage and empower patients and caregivers in direct care and care coordination (e.g., care in and outside of clinic walls).
- Innovative digital healthcare tools can empower patients and caregivers.
- Models of community involvement, for example, co-design or community-based participatory research to increase the scale, spread, and sustainability of person-centered clinical care.
- Impact of shared decision-making on healthcare outcomes.

# Research to support healthcare professionals in providing whole-person care

- Tools and training to enable healthcare professionals to deliver whole-person care effectively across the life course, from prenatal to end-of-life care.
- Healthcare system use of digital healthcare data (clinical, contextual, and patientgenerated), knowledge (training, guidelines, decision support, advanced analytics), and tools to support clinicians in providing better care.
- Digital healthcare use to reduce clinician burden (e.g., using generative AI to reduce administrative burden; innovative digital methods or tools that can positively affect clinician workflow).

# Research to increase the use of evidence in healthcare policy, coverage, and clinical practice

- Identification of strategies to facilitate the scale, spread, and sustainability of person-centered care and evidence-based guidelines across healthcare contexts and settings.
- Identifying costs and benefits to individuals, healthcare systems, and society of interventions and implementation strategies promoting person-centered care.
- Strategies to facilitate the adoption of evidence into practice through primary care practice-based research networks (PBRNs) and other collaboratives.
- Research to improve mental health treatment access and quality for children/adolescents (e.g., integration with primary care, school-based models).
- Research to develop, adapt, implement, and evaluate evidence-based interventions to eliminate disparities in chronic disease management, including community-based participatory research strategies and holistic interventions that address social determinants of health.

AHRQ encourages projects that use AHRQ databases, such as MEPS, HCUP, the Compendium of U.S. Health Systems, and our innovative databases (<u>Physician and Physician Practice Research Database (3P-RD)</u>, <u>Social Determinants of Health</u> (<u>SDOH</u>), and <u>Synthetic Healthcare Data for Research (SyH-DR</u>).

- Research to increase accessibility and affordability of health care by examining innovative approaches to care delivery and financing.
- The impact of consolidation, ownership, and payment models affect the safety, quality, accessibility, and affordability of healthcare.
- Research to identify how healthcare system approaches to implementation of evidence vary and which are most effective at improving patient care.

### Research to advance health services research methods

- Use of evidence synthesis methods and processes to promote efficiency, usefulness, and rigor; and promote uptake of their findings (e.g., in guidelines, clinical decision support, and other healthcare decision-making).
- Use of AI and machine learning methods to improve the timeliness and value of health services research.
- Identification of implementation science methods that provide more timely, actionable results.
- Integration of implementation science methods with other health services research methods.

# Research on the digital healthcare ecosystem to support care quality, and care transformation

- Identify how the digital healthcare ecosystem can best help care quality by bringing the latest evidence quickly and efficiently to the point of care.
- Identify how digital healthcare can best help innovative models of practice transformation in primary care and other ambulatory care settings.

### Research on the Delivery of Person-centered Whole Healthcare

Research on the delivery of person-centered whole healthcare is critical to optimize health, functional status, and well-being, emphasizing the needs of older adults and children with complex medical conditions. Priorities include:

• Patient, practice, community, and health system level interventions, including multilevel interventions designed to improve access, quality, and outcomes by preventing and managing chronic disease, including multiple chronic conditions.

- Research to develop, implement, evaluate, and spread effective patient-centered models of care for people at risk for and living with multiple chronic conditions and to integrate the caring function of health care with data-driven evidence, synthesis, implementation, and generation.
- Approaches to integrate clinical care include primary care with community and social services and public health to address social determinants of health (SDoH) and optimize health outcomes among high-risk individuals, communities, and populations.
- The development, testing, and scaling of information technology solutions to improve care delivery for people with chronic illness, disability, and frailty, including solutions that enable or support care outside the office and effective care planning and coordination.
- Use of artificial intelligence to understand how different constellations of multimorbidity impact outcomes to identify and inform decision-making by patients, clinicians, and health systems and to improve outcomes.
- Evaluation of payment models to align payment with desired outcomes and enable whole-person care, fostering health and wellness and sick care.

AHRQ also encourages the following in the design of projects to address AHRQ research priorities:

- Co-design of interventions and co-creating evidence in partnership with patients, caregivers, communities, clinicians, other frontline health workers, and healthcare executives is recommended.
- Use of various methods, including agile design, adaptive trials, rapid-cycle evaluation approaches, and methods drawn from complexity science to address the challenges of designing and evaluating implementation interventions.
- When mixed methods are employed, describe the mixed-methods evaluation approach, data sources, data collection (including how and where data will be collected), and analysis plan. Describe the quantitative and qualitative data that will be captured to help assess the effectiveness and impact of the implementation.
- Mechanisms of sustainability of interventions developed and tested.