Agency for Healthcare Research and Quality
National Advisory Council Meeting

(Virtual Meeting)

July 14, 2020

SUMMARY

NAC Members Present
Tina M. Hernandez-Boussard, Ph.D., M.P.H., M.S., Stanford University School of Medicine (*NAC Chair*)
Gregory L. Alexander, Ph.D., R.N., FAAN, FACMI, Columbia University
Karen S. Amstutz, M.D., M.B.A., FAAP, Indiana University Health
Asaf Bitton, M.D., M.P.H., Ariadne Labs, Brigham and Women's Hospital
Cathy J. Bradley, Ph.D., M.P.A., Colorado School of Public Health
Melinda B. Buntin, Ph.D., Vanderbilt University School of Medicine
Gretchen M. Dahlen, M.H.S.A., FACHE, Consumer Health Ratings
Beth Ann Daugherty, M.P.H., R.N., Sparrow Clinton Hospital
Susan Edgman-Levitan, P.A., Massachusetts General Hospital
Peter J. Embi, M.D., M.S., FACP, FACMI, Regenstrief Institute
Christine A. Goeschel, Sc.D., M.P.A., M.P.S., R.N., FAAN, MedStar Health
Rahul Gupta, M.D., M.P.H., M.B.A., FACP, March of Dimes
Charles N. Kahn, III M.P.H., Federation of American Hospitals
Omar Lateef, D.O., Rush University Medical Center
Andrew L. Masica, M.D., M.S.C.I., SFHM, Texas Health Resources
Ramanathan Raju, M.D., M.B.A., CPE, FRCS, FACS, FACHE, Northwell Health (formerly)
Edmondo J. Robinson, M.D., M.B.A., M.S., Moffitt Cancer Center
Patrick S. Romano, M.D., M.P.H., University of California, Davis
Yanling Yu, Ph.D., Washington Advocates for Patient Safety

Ex Officio Members and Alternates Present
Naomi Tomoyasu, Ph.D., Veterans Health Administration (for David Atkins)
Ileana Arias, Ph.D., Centers for Disease Control and Prevention (for Chesley Richards)

AHRQ Staff Members Present
Gopal Khanna, M.B.A., Director
David Meyers, M.D., FAAFP, Deputy Director and Chief Physician
Robert McNellis, M.P.H., PA, Senior Advisor for Primary Care
Jaime Zimmerman, M.P.H., PMP, Designated Management Official, Senior Program Advisor
Karen Brooks, CMP, NAC Coordinator

CALL TO ORDER AND APPROVAL OF MARCH 26, 2020, MEETING SUMMARY

Tina Hernandez-Boussard, Ph.D., M.P.H., M.S., Stanford University School of Medicine and Chair of the National Advisory Council (NAC)

Dr. Hernandez-Boussard called the meeting to order at 10:00 a.m., welcoming the NAC members and other speakers, participants, and viewers. She noted that the meeting was being recorded and will be made available on the AHRQ website. She encouraged the NAC members to use the Zoom technology to indicate that they have questions or comments during the meeting, and she encouraged non-NAC members to email any comments.

Dr. Hernandez-Boussard noted that new NAC member Melinda B. Buntin, Ph.D., of Vanderbilt University School of Medicine, was engaging in her first NAC meeting. NAC member Hoangmai Huu Pham, M.D., M.P.H., recently became president of the Institute for Exceptional Care, and NAC member Ramanathan Raju, M.D., M.B.A., CPE, FRCS, FACS, FACHE, is former Senior Vice President and Community Health Investment Officer at Northwell Health.

Dr. Hernandez-Boussard referred to the draft minutes of the previous NAC meeting (March 26, 2020) and asked for changes and approval. The NAC members voted unanimously to approve the March meeting minutes with no changes.

OVERVIEW AND RECENT AHRQ ACCOMPLISHMENTS

Overview

Gopal Khanna, M.B.A., Director, AHRQ

Director Gopal Khanna thanked the meeting participants for taking the time to contribute to the meeting, recognizing the importance of their many activities in the wake of the COVID-19 crisis. He thanked Dr. Hernandez-Boussard for her aid in developing the meeting's agenda. He encouraged the NAC members to consider, as the meeting proceeds, a theme of potential roles for AHRQ in addressing the COVID-19 crisis, stressing a need to speak out regarding the importance of AHRQ's efforts in fostering safe and effective healthcare. The results of the COVID-19 crisis will have lasting implications for the ways in which healthcare is delivered. The U.S. Congress has directed AHRQ to be a driving force for safe and effective 21st century care. The crisis has exposed inadequacies in care, demanding new research and evidence to save lives.

The agency's staff has been defining paths to move forward in areas of need, and some of those would be described in this meeting. AHRQ is, at its core, the "better outcomes agency." It develops evidence. The COVID-19 crisis has revealed disparities in various priority populations, and AHRQ can develop evidence that helps us to understand the best ways to address root causes. We also need evidence to help understand the Nation's response and the outcomes in various settings (e.g., long-term care facilities). The expansion of telehealth services offers an opportunity to study evidence for what works and what does not. Policymakers need to understand the evidence to make decisions. We see now that there is a need for a new supply-side database to help optimize resource allocation. We need to rethink care management, using a systems-engineering approach to create efficiencies. Director Khanna encouraged the NAC

members to be champions of AHRQ's work in their communities. The members' expertise can be used to drive and amplify AHRQ's messages among populations.

Director Khanna reviewed the meeting's agenda, which featured sessions on (1) AHRQ's recent efforts in research, practice improvement, data/analytics, and outreach, (2) AHRQ's efforts regarding the COVID-19 pandemic, and (3) the results of a recent independent study on ways to improve health services research (HSR).

AHRQ Accomplishments
David Meyers, M.D., FAAFP, AHRQ Deputy Director and Chief Physician

Dr. Meyers described recent accomplishments of the agency in the areas of research, practice improvement, data/analytics and operational excellence. He noted that the agency currently is recruiting for a new Chief Physician. He reported that the House Appropriations Subcommittee on Labor, Health and Human Services, and Education, recommended an FY 2021 budget of $334 million (a $5 million increase over FY 2020) for AHRQ. The subcommittee did not support the plan to merge AHRQ with the National Institutes of Health (NIH). The Senate will not be moving on fiscal bills until after Labor Day. There are plans for a new COVID-19-related supplement, which might involve AHRQ.

Dr. Meyers cited a list of recent agency accomplishments. He encouraged the NAC members to reach out to him or Jaime Zimmerman, M.P.H., PMP, to obtain greater details on the activities.

Health systems research

- AHRQ's Comparative Health System Performance Initiative, a 5-year project, is supporting a National Survey of Healthcare Organizations and Systems, with colleagues at Dartmouth Center of Excellence collecting and offering to researchers datasets about healthcare system use across the Nation. The initiative also is supporting development, at the NBER Center of Excellence, of a Health Systems and Provider Database and, at AHRQ itself, of a compendium of U.S. health systems (almost 700 systems across the country).

- AHRQ supported a data-driven policy paper titled "Designating Certain Post-Acute Care Facilities as COVID-19 Skilled Care Centers Can Increase Hospital Capacity and Keep Nursing Home Patients Safer" (*Health Affairs Blog,* April 15, 2020).

- AHRQ has collaborated with the CDC to produce three evidence-based practice reviews on the comparative effectiveness and harms of treatments for chronic pain, including the area of opioid addiction. The reviews will support the development of new clinical guidelines.

- Addressing infrastructure for research, the agency supported a collaborative case study on care for depression that would lead to better clinical care. This involved harmonizing outcome measures, implementing measures, and helping pilot practices use the measures remotely—that is, telehealth for mental health during the COVID-19 crisis.

- AHRQ's evidence-based practice center (EPC) has been helping to advance clinical decision making in areas including noninvasive positive ventilation in the home, platelet-rich plasma for wound care in the Medicare population, and skin substitutes for treating chronic wounds.

- An AHRQ evidence review will support work by the National Academies of Sciences, Engineering, and Medicine and the National Institute on Aging to develop a report with a research focus on persons living with dementia and their caregivers.

Practice improvement

- AHRQ's PRISM program seeks to make patient-reported outcomes information available electronically to help improve clinical care. An electronic modality recently was pilot tested and showed success.

- During the spring, the U.S. Preventive Services Task Force produced final new recommendations in the areas of screening for bacterial vaginosis in pregnancy, primary care interventions for prevention and cessation of tobacco use in children and adolescents, primary care-based interventions to prevent illicit drug use in children, adolescents, and young adults, and screening for unhealthy drug use. A number of new draft recommendations were posted for public comment.

- AHRQ released the first in a series of issue briefs to support better diagnostic safety. It is titled "Operational Measurement of Diagnostic Safety: State of the Science." A goal is to foster greater measurement and collection of data by health systems.

- The agency's "Six Building Blocks" program is helping to develop a team-based approach to improving opioid management. A published program guide is being distributed to both rural and urban health care practices and will be evaluated.

Data and analytics

- The Fast Stats pathways datasets from AHRQ's Healthcare Cost and Utilization Project (HCUP) have been updated. Topics include opioid-related hospital use, trends in inpatient stays, hurricane impact on hospital use, and trends in emergency department visits.

- The Medical Expenditure Panel Survey (MEPS) was used to analyze spending on prescription opioids by source of payment in 2017. This revealed, for example, a large contribution to the spending by Medicare.

- The Consumer Assessment of Healthcare Providers and Systems (CAHPS) program is developing a new visit-based survey for assessing patient experience in the ambulatory setting, with an emphasis on telehealth.

- AHRQ's Surveys on Patient Safety Culture program is developing survey items on workforce safety for the hospital and possibly other settings and supplemental survey items on diagnostic safety (for the Medical Office Survey).

- AHRQ plans to release, in late July, the ICD-10 risk-adjusted software for its quality indicator modules for hospitals. This will feature coding updates and measure refinements. Twenty-one measures recently were retired.

Operational excellence (outreach)

- Recent numbers indicate that AHRQ's penetration and uptake in social media, as in views, linked-in accounts, and followers, have grown significantly.

Discussion

Susan Edgman-Levitan, PA, stated that, in addition to the work that the CAHPS consortium is doing on the telehealth visit survey, the consortium is working with the National Committee for Quality Assurance (NCQA) to adapt telehealth questions for its health plan survey. That effort will not make use of a visit survey but will feature a broader audience with telehealth experiences.

Patrick S. Romano, M.D., M.P.H., inquired about the status of the Patient-Centered Outcomes Research Trust Fund and related training programs. Dr. Meyers responded that a congressional bill passed last year allows for AHRQ to receive about 16 percent of the trust fund each year for the next 10 years (about $100 million in total). AHRQ is charged with spending the money in three areas: disseminating and implementing evidence into practice, advancing the use of clinical decision support, and training the next generation of researchers. AHRQ intends to present its strategic planning in these areas at the November NAC meeting. As an example of current efforts, AHRQ is supporting a grant program to train researchers by embedding them in health care systems.

AHRQ COVID-19 UPDATE
Robert McNellis, M.P.H., PA, Senior Advisor for Primary Care, AHRQ, and David Meyers, M.D., FAAFP, Deputy Director and Chief Physician, AHRQ

Mr. McNellis began a session on COVID-19 by noting the rise in the number of cases and stating that AHRQ is working closely with sister agencies in the U.S. Department of Health and Human Services (HHS) to address the crisis. AHRQ is part of the "all government response." It is helping to develop short, intermediate, and long-term approaches for response and recovery. The agency is pursuing COVID-19 efforts within its major areas of research, practice improvement, and data/analytics, and it is contributing to a cross-agency working group to identify assets, gaps, opportunities, and new ideas.

Mr. McNellis recalled the previous meeting, in which the NAC members offered ideas for AHRQ efforts in response to the COVID-19 crisis. Those included attention to rapid-cycle

research, tailored patient education, telehealth, an emphasis on practice improvement that gets the latest evidence and resources to patient care (e.g., an online knowledge platform), a data/analytics system that provides timely responses to questions about the pandemic, and the application of a systems-engineering approach.

In late spring, AHRQ published three funding opportunity announcements. The first was for novel high-impact studies evaluating health system and healthcare professional responsiveness to COVID-19 (2-year R01 grants). The other two were competitive revision supplements for existing AHRQ grants and cooperative agreements to evaluate health system and healthcare professional responsiveness to COVID-19, using either (1) health systems research or (2) patient-centered outcomes research. The response was tremendous.

The R01-mechanism grant includes a suggested focus on how responses to COVID-19 affect socially vulnerable populations and people with multiple chronic conditions. It also includes a suggested focus on how digital innovations contributed to responses, outcomes, and unintended consequences. There will be 10 awards, and the grantees will be asked to add dissemination plans to their research plans.

AHRQ has been conducting rapid evidence reviews in its Effective Healthcare Program (EPC), especially focusing on COVID-19 aspects. These include a review of the use of masks in healthcare and community settings. The new expedited process may become the new model for the EPC review program. There will be reviews of the allocation of scarce resources and no-touch modalities in care settings.

In the area of practice improvement, AHRQ's Patient Safety Network has produced Web-based publications focused on healthcare delivery and pharmacists during the COVID-19 pandemic, COVID-19 safety for older adults, team and human factors for safety, and a listing of COVID-19 resources. The agency's ACTS program unveiled a "COVID-19 Guidance to Action" collaborative to improve the dissemination and use of guidance, and its TAKEheart program (cardiac rehabilitation in hospitals) has made adjustments in response to the COVID-19 crisis.

Regarding telehealth, AHRQ has continued to offer its published comparative effectiveness review and added information on patient safety during the use of telehealth. Project ECHO now features, in its training sessions, a focus on expanding telehealth and telementoring during COVID-19.

Regarding data and analytics, the HCUP program has been providing information to various Federal and State agencies and healthcare systems on, for example, occupancy rates and capacities for ICUs and ventilators. The MEPS program has provided analyses of racial and ethnic differences in health status and employment-related exposure risk.

AHRQ's Office of Communications has been busy, with teams engaged in the following:

- Launching a COVID-19 Web page, with links to AHRQ resources,
- Publishing blogs on telehealth, data, and insights,
- Reviewing and clearing AHRQ products,

- Answering inquiries from product developers, patients, and physicians,
- Clearing HHS guidance documents,
- Publishing weekly electronic news,
- Posting on various social media platforms.

AHRQ created a response team to interact with the cross-agency working group to identify assets, identify gaps and opportunities, develop new ideas, track COVID-19 activities, and coordinate across HHS. AHRQ teams also propose new initiatives, identify strategies for engaging COVID-19 research, and address issues of health disparities. A data enterprise team interacts with partners within HHS.

AHRQ's grantees also contribute, publishing work on COVID-19 and chronic pain management, reducing diagnostic error, surge capacity and bed management, the design of COVID-19 skilled care centers, and healthcare costs and resource use associated with COVID-19.

Dr. Meyers expanded on the themes presented by Mr. McNellis, describing additional AHRQ efforts and plans for the future. He cited Director Khanna's challenge to the AHRQ team to consider how the agency's competencies could be used to contribute to the national response to COVID-19. What is next? What unmet needs should be addressed? In response to the Director, the AHRQ team proposed a series of actions:

- Evaluate the healthcare system's response to COVID-19,
- Learn from the rapid expansion of telehealth in response to COVID-19,
- Develop healthcare supply-side data and analytics to respond to COVID-19,
- Consider a systems-engineering approach for responding to COVID-19,
- Evaluate the safety of nursing home residents and staff during the pandemic.

The COVID-19 pandemic has revealed critical gaps in our knowledge of coordination logistics, the workforce, and material challenges in hospitals, emergency departments, nursing homes, and primary care. We lack understanding of what strategies have been or have not been effective. We need to identify factors in effective strategies.

(1) AHRQ will support a series of rapid-cycle evaluations to identify scalable, successful strategies used by healthcare professionals and systems as they continue to address the pandemic. These will be research grants. AHRQ currently is the only HHS agency engaged in evaluating the healthcare delivery system's response to the pandemic.

(2) Regarding telehealth, as the pandemic enters its next phase, policymakers, health systems, healthcare professionals, and patients will want to understand what worked or did not work well and for whom. Moving forward, the agency will be interested in safety, quality, and value for telehealth. There are many questions, and AHRQ will respond with rapid-cycle research grants to study the implementation and outcomes of telehealth and its expansion. It will fund telehealth learning collaboratives and engage healthcare professionals to disseminate best practices and evidence. It will produce an evidence-based telehealth implementation guide.

(3) The COVID-19 crisis has revealed gaps in the data needed for response. AHRQ can collect healthcare delivery system data, or supply-side data, and perform analyses. It plans to develop a census of physicians, physician practices, and their characteristics. This database will be pilot tested within 4 months and then expanded. The agency will create a companion census of U.S. hospitals, emergency departments, and nursing homes. It will build a predictive analytic model to inform health policy decision making. The model will be refined and expanded continually on the basis of new data. AHRQ has a solid foundation of data infrastructure and the expertise to creatively link data sources and develop models.

(4) Hospital executives and clinical leaders at times do not have the data needed to make life-saving decisions (available beds? waiting times for triage? number of sterilized intubation kits?). Systems engineering can be applied to mitigate the problem and empower decision making. One strategy is the use of a command center in a hospital to improve system responsiveness. Yet data can still be lacking. AHRQ has been partnering with systems-engineering experts. It plans to design, implement, and evaluate hospital command centers in six diverse hospitals. It will develop and disseminate a model hospital command center that integrates real-time data on patients, staffing, and operations, with a goal of informing decision making.

(5) Healthcare professionals and other staff in nursing homes need to understand ways to be safe and to keep patients safe. They must know how to prevent disease transmission by redesigning workflow and processes, conducting environmental cleaning, improving infection-control protocols, and improving patient care, living spaces, and the built environment. AHRQ will synthesize the current evidence and best practices. It will develop and disseminate tools and training for infection prevention and control in nursing homes. This will involve rapid-cycle research grants. AHRQ has a history of translating evidence about healthcare safety. Its efforts have contributed to reductions in healthcare-associated infections during the past decade. It has a history of disseminating best practices based on research.

Dr. Meyers asked the NAC members to consider the issues and respond, in particular, to the following questions:

- Do these proposals address important gaps?
- Do these proposals have the potential for meaningful impact?
- Are there ways to expand, focus, or refine these proposals to increase relevance or value?
- Are there other important needs faced by healthcare delivery systems that AHRQ is positioned to address?

Discussion

Dr. Hernandez-Boussard asked Dr. Meyers to offer perspective on the AHRQ budget with respect to the stated proposals. Dr. Meyers responded that each of the five proposal areas would require spending in the neighborhood of $50 million. One strategy would be to start with $20 million in each case and eventually move upward in funding as needed.

Dr. Raju cited experience with COVID-19 in New York City and listed areas that AHRQ might consider studying. These included working with community-based organizations, engaging

community leaders, determining who should be tested for COVID-19 and where they should be tested, and addressing health literacy and access to the Internet.

Peter J. Embi, M.D., M.S., FACP, FACMI, encouraged AHRQ to have a focus on ways to increase the speed of communications during the pandemic. He noted that Indiana created a collaborative that brings people together to share information. Could AHRQ identify ways to foster rapid collaboration and sharing? Perhaps small grants could support researchers who study the natural experiments and produce rapid publication outside the normal (longer) grant cycle. Dr. Meyers responded that AHRQ has some grantees studying ways in which COVID-19 information is being communicated. It likely would not be in AHRQ's scope to help States organize such efforts. Perhaps, stated Dr. Embi, AHRQ could serve to catalogue or inventory such activities. There is a paucity of data on the sharing of information among nursing-home and long-term care facilities. Director Khanna encouraged the NAC members to propose particular areas in which AHRQ could support rapid-cycle research. Dr. Hernandez-Boussard added the need to find ways to get messages out, collect feedback, and identify gaps. Some evidence that comes out today is subsequently retracted. Could AHRQ support research on such issues?

Cathy J. Bradley, Ph.D., M.P.A., raised the issue of payment/reimbursement policies and how they can affect the potential adoption of telehealth strategies. AHRQ could perhaps be a leader in supporting research in this area—an area featuring issues of equity and access. Dr. Bradley also raised the issue of health system redesign and infrastructure, especially noting the problem of hospital closures that result in healthcare gaps. How are healthcare systems reestablished? Dr. Bradley proposed that quality measures be linked to or incorporated with patient-reported outcomes. This would help us to evaluate responses to emergencies and to deliver quality healthcare.

Yanling Yu, Ph.D., raised the issue of a lack of standards for COVID-19 care. One example is dealing with infections in long-term care facilities. There are no evidence-based standards for handling patients and staff in the facilities with respect to COVID-19. How should separations be established? AHRQ could play a leadership role in obtaining evidence and producing standards and best practices. There are disparities between the dissemination of knowledge around large academic research centers/hospitals, with their good networking and communication, and rural hospitals, which rely on State hospital associations to obtain information. Perhaps AHRQ could facilitate connections that would increase the dissemination of evidence and standards. Dr. Meyers responded that the agency can take Dr. Yu's suggestions regarding dissemination to the planners of the larger combined HHS effort.

Gregory L. Alexander, Ph.D., R.N., FAAN, FACMI, encouraged AHRQ to estimate and announce timelines for the new awards, as they become clear. He encouraged the agency to obtain international perspectives on the COVID-19 pandemic. Perhaps new research projects could be asked to include datasets with an international perspective. This could enrich our understanding.

Ms. Edgman-Levitan stated that there are serious issues in workforce safety relating to the virus, especially in diverse communities and for people working on the front lines. Perhaps AHRQ

could include a research focus on this area. It affects spread in the community. COVID-19 has affected primary care practices. Research could be directed at solutions there.

Andrew L. Masica, M.D., M.S.C.I., SFHM, stated that AHRQ has an opportunity to develop quality metrics relating to COVID-19 care. It could develop a risk-adjusted mortality metric that accounts for socioeconomic status, and it could study survivors long term, obtaining data on health outcomes, quality of life, and more. It could study the transitions of care as we move forward with types of disease management.

Asaf Bitton, M.D., M.P.H., seconded the idea of AHRQ supporting research on payment policy relating to healthcare. COVID-19 has exposed the fact that hospitals have a dangerous financial reliance on elective surgeries and outpatient facilities have a dangerous financial reliance on person-visits. AHRQ research could be directed toward issues such as forms of fund flow. Payment policy should be part of the preparation for pandemics.

Gretchen M. Dahlen, M.H.S.A., FACHE, agreed with the proposals for AHRQ to play roles in addressing health literacy and establishing best practices. The agency also should consider studying consumer experiences with telehealth. The primary care practices database should perhaps consider vulnerable populations. Will the physicians database and the hospital census duplicate what is already established by the American Medical Association and the American Hospital Association? Will the projects be coordinated?

Edmondo J. Robinson, M.D., M.B.A., M.S., encouraged AHRQ to move forward to fund the proposal on telehealth, or virtual care. The agency also could study the effects of the COVID-19 crisis on clinicians (infection, stresses, aspects of applying virtual care). A significant number of nurses are absent from work because they tested positive for COVID-19. This affects the healthcare organizations greatly. Could healthcare workers who are positive for COVID-19 but not incapacitated be leveraged to continue to work, perhaps in the telehealth scenario?

IMPROVING HEALTH SERVICES RESEARCH ACROSS THE FEDERAL ENTERPRISE: FOCUS ON KEY RECOMMENDATIONS FROM AN INDEPENDENT STUDY ON HEALTH SERVICES RESEARCH AND PRIMARY CARE RESEARCH
Jaime Zimmerman, M.P.H., PMP, Designated Management Official, AHRQ, and David Meyers, M.D., FAAFP, Deputy Director and Chief Physician, AHRQ

Ms. Zimmerman expressed gratitude that a major report on health services research (HSR) has been published and people are now digesting its contents, which include recommendations. She invited the NAC members to continue a conversation, with a focus on ways to move the topic forward. She introduced the AHRQ Internal Advisory Group, which guided development of the report. The group comprised Arlene S. Bierman, M.D., M.S., Francis Chesley, M.D., Patricia Keenan, Ph.D., Robert McNellis, M.P.H., PA, and Ms. Zimmerman herself.

The study and report derived from a congressional mandate in 2018, which called for AHRQ to contract with an independent entity to study cases of HSR and primary care research (PCR) that are supported by Federal agencies. The project was intended to identify research gaps and areas ripe for consolidation and to propose strategies for better coordination of the Federal

government's HSR enterprise. AHRQ awarded $1 million to RAND to conduct the investigation. Study questions to guide the process focused on the following issues: the breadth and scope of HSR and PCR, the overlap and coordination of Federal research proposals, the impacts of the research, the gaps and prioritization associated with the research, and options for improving the value and impact of federally funded HSR and PCR. The project would produce evidence-based analysis to inform policy.

The study examined the years 2012-2018 and all HHS agencies plus the Veterans Health Administration. It considered intramural and extramural research supported by the agencies. The investigators defined HSR and PCR and made use of expert panels, stakeholder interviews, an environmental scan, and portfolio analysis. This was a mixed methods study with qualitative and quantitative approaches. The investigators made use of broad, independent expertise. RAND conducted 50 semi-structured interviews with stakeholders representing key interests in HSR and PCR. It created a database of more than 93,000 Federal HSR projects and categorized the projects. The categorizing of research domains included inputs to care (organization, financing, et al.), outputs of care (quality, access, et al.), and special topics (safety, prevention, et al.).

The results indicated that HSR and PCR have made a difference in patients' lives and are vital for improving the quality, safety, and value of healthcare for all Americans. HSR and PCR conducted within the HHS agencies are mostly complementary rather than duplicative and address distinct missions. AHRQ is the only Federal agency mandated to support HSR and PCR. The study determined that improved data systems, especially for contracts, could help track projects more effectively and bolster cross-agency collaboration. There are opportunities for new types of HSR that would improve the research's impact. Outcomes and impacts across multiple categories are unlikely to be generated by a single research project. The study concluded that cross-agency coordination of PCR to prioritize research topics could add value and lead to increased impact. The study identified a range of research gaps for HSR and PCR, most of which are well known. It resulted in the following recommendations, with particular actions noted:

- Improve cross-agency prioritization and coordination processes,
- Improve relevance and timeliness of research,
- Disseminate and communicate results that are actionable and fundable.

Subsequent steps included the following: (1) Director Khanna briefed HHS leadership in March. (2) The report was shared with sister agencies. (3) It was posted on the AHRQ website. (4) AHRQ will confer with AcademyHealth regarding the recommendations. (5) AHRQ will convene a meeting with sister agencies to begin identifying key topics to help with coordination and prioritization.

Recommendation 2 and discussion

Dr. Meyers referred the NAC members to recommendation 2, regarding relevance and timeliness of research. He added these sub-recommendations:

- Create funding mechanisms that support more rapid, engaged research approaches, such as embedded research and learning health system models,

- Expand funding to refine mixed qualitative and quantitative research methods to generate evidence on the implementation of change in complex health systems,

- Create a funding mechanism that supports innovative high-risk/high-reward research.

Dr. Meyers asked the NAC members to consider ideas within each of those recommendations that could affect relevance and timeliness. To encourage a discussion, he offered his own suggestions: Consider revising the grant review process so that the top 5 percent of meritorious applications receive immediate funding and the next 25 percent join a lottery for remaining funds. Consider creating large program grants ($10 million or more) to focus on high-priority national health care delivery challenges, with each application proposing an approach and measurable outcomes and with multiple projects integrated. Consider requiring HSR/PCR large-grant applications to include a healthcare delivery system partner with a letter of commitment to use study results to improve quality, safety, and value.

Dr. Hernandez-Boussard stated that she was impressed by the report's conclusion that only a small amount of duplication exists across agencies and that AHRQ has a unique presence and ability to advance particular areas of research.

Dr. Robinson proposed expanding the idea of including a delivery system partner in a research application/project to include a healthcare delivery consortium. In addition to high-risk/high-reward research, perhaps we might consider high-risk/high-reward *techniques* (e.g., using machine learning or artificial intelligence). How might we address certain biases? Dr. Hernandez-Boussard added that we could develop new ways to support young investigators beyond the K awards, with a goal of producing innovation and new techniques.

Dr. Embi suggested building an expectation that a research project will help us advance toward a strong health system and will be applied. He encouraged the use of smaller grants that may be welcomed by the large healthcare systems and may push them in certain directions, changing the culture. Earning awards in collaboration with health system research partners is a good idea.

Dr. Alexander complimented the agency for being action oriented. He suggested that AHRQ consider issues surrounding vendors within the healthcare system, that is, their priorities, their development, and the programs in which they are interested. AHRQ could consider the importance of sustainability relating to large and long programmatic grants and institutions, which come to an end. AHRQ could support development of models of sustainability.

Dr. Romano discouraged the use of a lottery to determine some grant winners, which would eliminate the merit factor at some point. AHRQ could nevertheless consider reaching down into the mix in a modest way to address special priorities. Dr. Romano also cautioned about the idea of using large program grants (as NIH does). That tends to work against the desire to create a diverse set of grantees. It also can work against the development of relationships with organizations that are not large research concerns, thereby leading to a concentration of more funds for fewer organizations. Concerning the third idea, requiring delivery system partners, Dr. Romano agreed with the additional idea of requiring consortia as partners, in particular, the use

of practice-based research networks for health system research. Perhaps AHRQ's ACTION program could offer such partnerships. A use of broader requests for applications (RFAs) might bring in more applications, which could be re-allocated to address particular program priorities. The applications could be scored and placed in a pool from which the agency could select as needed, with updating. That could produce a rapid cycling.

Dr. Buntin proposed that the choice to adopt any of the ideas be evidence-based. Perhaps there should be different mechanisms for different types of research (patient safety, health services, implementation, payment). Perhaps grant success for young investigators could be speeded up by using mentoring or coaching (cutting through the rounds of revision). Perhaps AHRQ could conceive of special ways to advance/award innovative or young investigators. Study sections could nominate such investigators, who could be placed in a special lottery. One criticism of the usual process is that it does not prize innovation.

Dr. Hernandez-Boussard wondered how AHRQ might support research grant strategies that reduce systematic biases in the healthcare system and in outcomes. Might it encourage a diversity of investigators on research teams (extra points)?

Dr. Yu expressed enthusiasm for a high-risk/high-reward funding mechanism, especially to address emergent issues in healthcare (COVID-19, disparities). Quicker projects can be associated with fewer funds. How the investigators will disseminate findings should be an additional criterion. Finally, applicants should be urged to build the learning health system model into their proposals—including the use of consumer partnerships.

Christine A. Goeschel, Sc.D., M.P.A., M.P.S., R.N., FAAN, encouraged AHRQ to consider theories on healthcare leadership and management by clinicians. How do such managers function or network? How do they affect quality and safety? Such ideas perhaps reside under the learning health system umbrella. We need review panel members who represent the organizations that are doing the work. We should get health system leaders invested in the research review process.

Ms. Dahlen encouraged AHRQ to develop an assessment of the strengths, weaknesses, and funding challenges. A problem statement or common framework should be agreed upon prior to recommending solutions.

PUBLIC COMMENTS

There were no public comments.

CHAIRMAN'S WRAP-UP AND NAC INPUT

Director Khanna stressed that HHS Secretary Alex Azar is taking a whole-department approach in responding to the COVID-19 crisis. The crisis is a game changer. AHRQ is seeking to identify gaps and leveraging its core competencies to produce the greatest impact. An overarching gap is that between the needed improvements in healthcare delivery and the resources available. Secretary Azar is visiting States and delivery systems. The NAC members can amplify the department's messages in their professional communities.

Dr. Alexander expressed caution regarding any proposed large changes in the criteria for evaluating grant applications. Visibility and input from stakeholders should be sought. Dr. Meyers responded that the proposals he raised were meant to serve as a prod to get the discussion going. Any changes would result from a strong process of consultation and discussion. The agency needs to be innovative. Dr. Meyers and Ms. Zimmerman encouraged the NAC members to continue to offer suggestions by phone or email. Dr. Hernandez-Boussard encouraged the NAC members to read and share the information posted on Director Khanna's blogs. She encouraged them to forward ideas for future meeting topics.

ADJOURNMENT

Director Khanna thanked Dr. Hernandez-Boussard, the other speakers, and NAC members. Dr. Hernandez-Boussard also thanked NAC members and presenters. She noted that the next NAC meeting will take place on November 10, 2020, and again will be a virtual meeting. She adjourned the meeting at 1:00 p.m.

Respectfully submitted,

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Tina Hernandez-Boussard, Ph.D., M.P.H., M.S. Date
Chair, National Advisory Council
Agency for Healthcare Research and Quality