

Investing in the Future of Health Care

A Strategic Assessment of Federally Funded Health Services Research and Primary Care Research

Since its emergence in the 1960s, health services research (HSR) has provided insights to improve the delivery of care and the health of patients. Primary care research (PCR) also has emerged as a distinct field, improving our understanding of the part of the health care system in which most people receive care. Many federal agencies are involved in funding HSR and PCR. To better understand the breadth, scope, and impact of this investment, Congress directed the Agency for Healthcare Research and Quality (AHRQ) to commission an independent assessment of federally funded HSR and PCR spanning the U.S. Department of Health and Human Services (HHS) and Department of Veterans Affairs (VA). AHRQ contracted with the RAND Corporation to conduct this study.

The RAND team formed two technical expert panels (one for HSR and one for PCR), conducted 50 interviews across a diverse sample of five stakeholder groups, and performed a systematic environmental scan of federal research grants and contracts to assess the following topics:

- **breadth and focus** of federal agency research portfolios in HSR and PCR
- **overlap and coordination** among federal agency research portfolios
- **impacts** of federally funded HSR and PCR
- **gaps and prioritization** of federally funded HSR and PCR
- options for **improving the outcomes, value, and impact** of future federally funded HSR and PCR.

KEY FINDINGS

- The health services research (HSR) and primary care research (PCR) portfolios of federal agencies have distinct focus areas based on their individual congressional authorizations, missions, and operational needs.
- Research funded by agencies on similar topics is mostly complementary, but potential overlaps in HSR and PCR portfolios need to be more proactively identified.
- Federally funded HSR and PCR have a wide range of impacts that are often cumulative across agency research portfolios.
- The variety of gaps in HSR and PCR reflect the challenge of improving U.S. health care, which requires new research approaches and strategies to prioritize research efforts.

Findings

Federal agency portfolios have distinct focus areas

Eight agencies within the study scope have portfolios in HSR and PCR, with each agency shaping its portfolio around specific focus areas that address its individual congressional authorization, mission, and operational needs. Portfolios tend to differ along three main dimensions—the scope of the health care system examined (settings, populations), research objectives, and key research audiences. For example, the portfolios of AHRQ, the National Institutes of Health (NIH), and the Centers for Disease Control and Prevention (CDC) each have relatively broad but differing scopes:

- **AHRQ:** Study participants across the range of stakeholder groups emphasized AHRQ’s unique and central role in HSR and PCR (see Figure 1). As the only federal agency with statutory authorization to generate HSR with a mission to do so across the health care system, AHRQ focuses on systems-based outcomes, evidence syntheses, and dissemination of innovations throughout settings and populations in the United States. The agency also serves as the home for federal PCR, although it does not receive targeted funding for this latter mission.
- **NIH:** NIH’s portfolio of HSR and PCR addresses a similarly broad scope of health care, but its research tends to be organized around specific diseases, body systems, or populations.
- **CDC:** CDC’s portfolio of HSR and PCR is organized around diseases, conditions, and injuries,

while also focusing on prevention and health promotion across community and health care settings.

The portfolios of other agencies tend to focus on specific health care settings or populations (e.g., the Centers for Medicare and Medicaid Services on care for its beneficiaries, VA on veterans’ health care and health outcomes, the Health Resources and Services Administration on safety net services and the health care workforce, and the Administration for Community Living on elderly and disabled individuals) or research audiences (e.g., the Assistant Secretary for Planning and Evaluation on federal policymakers).

Agency research on similar topics is mostly complementary, but overlap in portfolios needs to be identified more proactively

While acknowledging that multiple agencies may fund research on similar topics, stakeholders noted that such overlap is typically complementary—that is, it addresses different facets of a topic or combines resources on an underfunded topic. See Figure 2.

Participants observed that federal agencies tend to be relatively adept at coordinating with other agencies regarding areas of overlap—once the overlap in portfolios is recognized. However, the discovery of overlap in research portfolios was described as “sporadic,” “accidental,” or occurring “by happenstance.” Coordination is especially challenging for federal PCR, which lacks dedicated funding to support coordination of research across agencies.

FIGURE 1
AHRQ’s Unique and Central Role

[T]o my mind, **AHRQ is the driving entity looking at**, do we have the best possible understanding of the **major processes, delivery systems, tools to make care meet those Institute of Medicine six dimensions** [safe, timely, effective, efficient, equitable, and patient-centered], and are we comparing different tactics and strategies fairly and well? . . . That’s right at the center of AHRQ’s swim lane.

—State-level payer

Of course, patients are the center of AHRQ’s research. . . . But **the way AHRQ conceptualizes** it is different . . . , in terms of looking from **the system perspective**.

—Health services researcher

The impacts of HSR and PCR are often cumulative across agency portfolios

Stakeholders described a variety of impacts associated with HSR and PCR, ranging from contributions to scientific and professional knowledge to changes in health care systems and services, new health care policies, and improved patient and societal outcomes.

The range of impacts is rarely realized by a single project but instead tends to accumulate across studies and agency portfolios. Case illustrations of cumulative impact described in the RAND team's report include federally funded studies and interventions to combat health care-associated infections and efforts to refine and disseminate the patient-centered medical home model in primary care.

Study participants also identified barriers to achieving impact, including a lack of investment in high-risk studies—which offer potential for high value by demonstrating novel approaches. In addition, study participants noted frequent areas of disconnect between research results and health care practice.

Many of the gaps in HSR and PCR reflect the challenge of improving U.S. health care

Study participants identified several research gaps driven by the complexity and pace of change in the U.S. health system. A key challenge involves the difficulty of parsing out how multiple, evolving features of the health care system (e.g., the way care is financed or how it is delivered) affect the different outputs and outcomes of care (e.g., quality, access, cost, equity, health outcomes).

Participants noted other general gaps related to producing timely results for improving health care delivery, developing methods suited to studying the complex dynamics of health care change, and communicating results in ways that are helpful for guiding implementation of new practices. They also described the need for research that better leverages digital health technologies and uses theory to connect findings and advance knowledge on health care improvement.

Key gaps noted for PCR included the lack of research on the core functions of primary care in holistically treating and managing patients' health; instead, much current research focuses on screening or managing specific conditions in primary care settings. Participants also called for research on optimizing the

FIGURE 2

Overlap in Research Is Complementary

I kind of think of it as **like a nice Venn diagram**, where there is overlap and it **creates that sweet spot, where everybody is doing what they're supposed to be doing**, based on their mandate as an agency. When there is a sweet spot, **that's where action and change can really take place**. I think there should be some overlap, quite frankly.

—Consumer group stakeholder

role of primary care within newer models of integrated care in the wider health care system.

Recommendations

Based on analysis of results and suggestions of the technical expert panels and interview participants, the RAND study team proposed the following recommendations.

Cross-cutting recommendations for federally funded HSR and PCR



Improve the relevance and timeliness of research

- 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 suited to generating evidence on the implementation of change in complex health systems.
- Create funding mechanisms that support innovative, high-risk, high-reward research.



Disseminate and communicate results that are actionable and findable

- Train and assist researchers in effectively communicating results in formats that can readily be used by health care delivery stakeholders.
- Fund research to identify the most-effective channels through which to communicate research results for different audiences and users.
- Require researchers to consider implementation issues early in study design and explicitly apply theories of change to help connect disparate results.
- Expand funding for the synthesis of evidence across projects.



Improve cross-agency prioritization and coordination processes

- Initiate a strategic planning process across federal agencies to prioritize HSR investments.
- Establish a review process and data systems to proactively identify areas of potential overlap across agency portfolios.
- Maintain AHRQ as an independent agency within HHS to serve as the funded hub of

federal HSR to ensure its unique and central role in the field.

PCR-specific recommendations

- Initiate a strategic planning process across federal agencies to prioritize PCR investments, and include relevant PCR stakeholders.
- Establish a review process to proactively identify areas of potential overlap across agency research portfolios, focused on maximizing the limited federal funding available for PCR.
- Provide targeted funding for a hub for federal PCR to adequately support research on the core functions of primary care and its role in the wider health care system and to coordinate PCR across federal agencies.

Conclusion

The results of this study provide a balanced, evidence-based understanding of federally funded HSR and PCR that policymakers can use in shaping the future of these federal research programs. The study distinguishes the strengths and contributions of HHS agencies and VA to the federal HSR and PCR enterprise and offers insights on how to improve these research programs to serve the needs of the rapidly evolving U.S. health care system.

This brief describes research conducted in RAND Health Care and documented in *Health Services and Primary Care Research Study: Comprehensive Report*, by Peter Mendel, Courtney A. Gidengil, Andrada Tomoia-Cotisel, Sean Mann, Adam J. Rose, Kristin J. Leuschner, Nabeel Shariq Qureshi, Vishnupriya Karedy, Jessica Sousa, and Daniel Kim, RR-3229-AHRQ, 2020 (available at www.rand.org/t/RR3229). To view this brief online, visit www.rand.org/t/RBA623-1. The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.

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