Research Agenda

Delivery and Financing System Innovations for a Culture of Health

September 2015
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EXECUTIVE SUMMARY

RATIONALE

The Robert Wood Johnson Foundation’s *Systems for Action* (S4A) research program aims to discover and apply new evidence about ways of aligning the delivery and financing systems that support a Culture of Health. This program flows directly from RWJF’s Culture of Health Action Framework, which focuses on four action areas for achieving improved population health, well-being, and equity for all Americans: (1) Making Health a Shared Value; (2) Fostering Cross-Sector Collaboration to Improve Well-Being; (3) Creating Healthier, More Equitable Communities; and (4) Strengthening Integration of Health Services and Systems. The S4A program seeks to identify system innovations and interactions that are effective in potentiating key drivers of this Action Framework, particularly system-level drivers of cross-sector collaboration and integration across health services and systems.

The S4A program builds from a strong foundation of recent scientific progress in both health services research (HSR) and public health services and systems research (PHSSR) to identify system-level strategies for improving accessibility, quality, and efficiency in the delivery of medical and public health services, and to identify and address inequities in delivery. S4A seeks to extend this within-sector evidence base by using a wider research lens that includes other sectors contributing to population health and well-being, including housing, transportation, social services, education, criminal justice, and economic and community development. The research agenda for the S4A program centers on building robust scientific evidence that identifies how best to align the delivery and financing systems for medical care, public health and prevention, and social and community services to achieve sustained improvements in health and well-being for all Americans.

METHODS

A stakeholder-engaged expert panel process was used to identify initial research priorities for the S4A research program. A diverse group of 10 expert panelists served on the S4A technical advisory committee, including individuals with expertise in medicine, nursing, public health, and social and community services, economics, organizational networks and systems, community engagement, HSR, PHSSR, and health disparities. Committee members were purposefully selected to include both research-based and practice-based experts. Committee members nominated three additional stakeholder representatives to serve as part of the expert panel, with a specific focus on adding community-based stakeholder expertise to the process.

A series of expert panel methods were implemented sequentially to identify S4A research priorities, including: (1) an initial virtual meeting to discuss general research areas of interest and existing evidence bases; (2) a three-stage online Delphi process to nominate and rate candidate research topics; (3) a rapid synthesis of existing published research relevant to the nominated research topics; (4) a two-day in-person expert meeting to discuss Delphi results and to refine and prioritize identified research areas; and (5) follow-up communications to refine descriptions of priority research areas.
RESULTS

_Systems for Action_ research priorities focus on the central aim of producing evidence about how to achieve alignment, collaboration, and synergy across the delivery and financing systems for medical care, public health, and social and community services. Under this central aim, four overarching priority areas for research were identified: (1) investigate the implementation and impact of strategies designed to achieve alignment, collaboration, and synergy across delivery and financing systems; (2) investigate the implementation and impact of strategies designed to reduce and eliminate health inequities through cross-system alignment, collaboration, and synergy; (3) investigate the effectiveness and efficiency of information and decision support strategies in achieving alignment, collaboration, and synergy across delivery and financing systems; and (4) investigate the role of incentives in achieving alignment, collaboration, and synergy across delivery and financing systems.

Within each priority area, individual research topics were identified that reflect specific combinations of (a) implicated delivery and financing systems; (b) mechanisms for cross-system alignment and integration; and (c) population groups and practice settings of interest. Cross-cutting general research principles also emerged for S4A, including the importance of stakeholder-driven research approaches, an overarching focus on health equity, and multidisciplinary research teams that include both health sector and social and community sector expertise. A broad array of methodological approaches relates to the identified research priorities.

CONCLUSION

Research organized around the priorities identified in this _Systems for Action_ Research Agenda will identify and accelerate system innovations and interactions that are effective in potentiating key drivers of the Culture of Health Action Framework, with a special focus on drivers of cross-sector collaboration and health system integration.

FOUNDATIONAL WORK IN PUBLIC HEALTH SERVICES & SYSTEMS RESEARCH

The _Systems for Action_ research program builds upon multiple interrelated areas of scientific inquiry, including a strong body of research that focuses on the organization, financing, and delivery of public health services across the United States. The Robert Wood Johnson Foundation’s work in the field of _public health services and systems research (PHSSR)_ has supported more than 140 individual studies over the past five years on these topics, applying the methods and frameworks of health services research to the public health system. Many of these studies are designed and implemented through a national cohort of public health practice-based research networks (PBRNs), which collectively engage more than 2,000 state and local public health organizations and more than 50 university research centers across 32 states in collaborative, practice-based research studies.

Collectively, this body of research documents wide variation in the availability and quality of core public health services and cross-cutting public health infrastructure across the United States Communities that are underserved by public health services include people who reside in low-income, rural, and selected inner-city public health jurisdictions, and communities with larger proportions of residents from racial and ethnic minority groups. Governance structures and interorganizational relationships within public health delivery systems play powerful roles in shaping the availability and quality of public health services. A growing body of evidence indicates that when communities make larger investments in public health services, they experience tangible health and economic gains from these investments over time, including lower rates of preventable deaths and slower growth in per capita medical care spending.

I. INTRODUCTION

The Robert Wood Johnson Foundation’s (RWJF) Culture of Health Action Framework calls for a national movement toward better health and well-being for all Americans in every aspect of life. The Action Framework’s four action areas emphasize that improving outcomes in population health, well-being, and health equity require (1) Making Health a Shared Value; (2) Fostering Cross-Sector Collaboration to Improve Well-Being; (3) Creating Healthier, More Equitable Communities; and (4) Strengthening Integration of Health Services and Systems (Figure 1). The Action Framework targets systemic problems that hold the nation back from realizing its full potential in health, and it acts through interdependence among the many social, economic, physical, and environmental factors that drive health and well-being. Operationalizing this framework requires new mechanisms for collective action that support alignment, collaboration, and synergy across the diverse constellations of institutions, services, and sectors to promote health and well-being in American communities.

Unfortunately, the evidence base on effective mechanisms for alignment and integration across sectors, services, and systems remains thin. Scientific research on ways to improve the delivery and financing of health-related services and supports often focuses narrowly on a single service line, professional area of practice, or class of service providers—usually those within the medical care and public health sectors—rather than investigating interactions, synergies, and spillover effects across multiple sectors and services. Such targeted studies allow researchers to isolate the implementation and impact of a specific intervention or delivery system strategy while holding all else constant (ceteris paribus). These studies typically fall short in revealing how multiple services, delivery systems, and financing streams converge and interact—or fail to do so—in supporting population health.

Health services research (HSR) and public health services and systems research (PHSSR) have fueled the production and application of evidence about how to organize, finance, and deliver medical care and public health strategies across the United States. As RWJF pursues the new Culture of Health Action Framework, sound scientific evidence is needed to elucidate how to achieve this vision through a broader constellation of institutions, services, and delivery systems that shape health and well-being in American communities, including but not limited to the public health and medical care sectors. New research is needed on how best to align the delivery and financing systems for medical care, public health and prevention, and social and community services to promote community well-being and resiliency, realize efficiencies in resource use, and reduce inequities in population health.
To this end, the RWJF *Systems for Action* (S4A) research program aims to produce, synthesize, and translate new knowledge about ways of aligning the delivery and financing systems that support a Culture of Health. This program builds from a strong foundation of HSR and PHSSR studies, employing a wide lens that includes and extends beyond health sectors to include other spheres of human services research including social services, community services and supports, education, criminal justice, and economic and community development.

This *Systems for Action* Research Agenda is motivated by the recognition that delivery and financing systems for medical care, public health and prevention, and social and community services influence many factors that determine health and well-being. These delivery and financing systems share common goals and serve overlapping groups of families and communities, but they interact in complex and often poorly understood ways through fragmented funding vehicles, information flows, governance and decision-making structures, institutional relationships, implementation rules and strategies, and professional and interpersonal connections. The S4A research agenda seeks to untangle these interactions and expose novel pathways of influence that can support systemic gains in health and well-being.
The S4A program seeks to identify system innovations and interactions that are effective in potentiating key drivers of the Culture of Health Action Framework, with a particular focus on cross-sector collaboration and health systems integration. The sectors, services, and delivery systems implicated in the S4A research agenda are broad and overlapping, consistent with the Culture of Health Action Framework. Relevant delivery and financing systems for medical care encompass the full continuum of personal health services including clinical preventive services, primary and specialty medical care, mental health, substance abuse, and long-term care services and supports.

Similarly, a broad conceptualization of the public health sector includes but extends beyond governmental health agencies to encompass the full array of actors and actions that work to protect health and prevent disease and injury on a population-wide basis. Public health services are defined broadly to include not only targeted preventive services and community-level interventions but also cross-cutting activities and supporting infrastructure such as those for community health assessment, health improvement planning, epidemiologic investigation, emergency preparedness and response, enhancing and improving the built environment, and environmental inspection and monitoring. Social and community services also are defined broadly to include housing, transportation, nutrition and food security, child and family support services, income support and poverty reduction, community development, education and training, criminal justice and law enforcement, and disability support services.

**Delivery and financing systems interact in complex and often poorly understood ways through fragmented funding vehicles, information flows, governance and decision-making structures, institutional relationships, and professional and interpersonal connections.**
II. CROSS-CUTTING PRINCIPLES

Five overarching principles guide the *Systems for Action* Research Agenda:

1. Studies should generate findings that promote innovation and transformational action at national, state, and local levels.

2. Engagement with community, practice, and policy stakeholders throughout the research process increases the likelihood that research studies ask the right questions and produce findings that can be put into action. Studies should include collaborations with underserved populations, service providers, policy decision-makers, community-based organizations, practice-based research networks, and other stakeholders relevant to population health and well-being. Research should draw from and support the academic and community infrastructure that allows diverse stakeholders to participate in the scientific process by helping to identify evidence needs, cultivate information and data sources, contribute experiential knowledge about program and community mechanisms, and promote understanding and application of research findings.

3. Achieving health equity is an overarching goal of the S4A research program. Studies should seek to identify innovative system strategies that improve health outcomes for underserved and high-risk population groups, including but not limited to racial and ethnic minorities, low-income persons, populations residing in rural and remote geographic areas, and persons with chronic and complex health conditions, including mental health and substance abuse disorders, physical disabilities, and cognitive deficits.

4. In examining health disparities and fundamental determinants of health, S4A studies should recognize and account for the complex ways in which historical developments, institutions, and social norms shape contemporary causes and effects of health disparities, often with long and persistent lag times. System-level studies should recognize and respond to the time-dependent and path-dependent nature of relevant social and health phenomena.

5. S4A studies should incorporate culturally and linguistically appropriate approaches to addressing the environmental, social, economic, and behavioral determinants of health and promoting improved outcomes in health and well-being.

*A broad conceptualization of the public health sector includes but extends beyond governmental health agencies to encompass the full array of actors and actions that work to protect health and prevent disease and injury on a population-wide basis.*
III. PRIORITY RESEARCH TOPICS

Systems for Action research priorities focus on the central aim of producing evidence about how to achieve alignment, collaboration, and synergy across the delivery and financing systems for medical care, public health, and social and community services. Under this central aim, four priority areas for research were identified:

1. Investigate the implementation and impact of strategies designed to achieve alignment, collaboration, and synergy across delivery and financing systems;

2. Investigate the implementation and impact of strategies designed to reduce and eliminate health inequities through cross-system alignment, collaboration, and synergy;

3. Investigate the effectiveness and efficiency of information and decision support strategies in achieving alignment, collaboration, and synergy across delivery and financing systems; and

4. Investigate the role of incentives in achieving alignment, collaboration, and synergy across delivery and financing systems.

Within each priority area, individual research topics were identified that reflect specific combinations of (a) implicated delivery and financing systems; (b) mechanisms for cross-system alignment, collaboration, and synergy; (c) population groups and practice settings of interest; and (d) methodological approaches (see Figure 2).

Figure 2: Research Focus Areas for the Systems for Action Program
PRIORITY AREA #1:
Investigate the implementation and impact of strategies designed to achieve alignment, collaboration, and synergy across delivery and financing systems.

A growing body of evidence suggests that coordinated efforts to identify and meet the social needs of patients and population groups can lead to improved health status and well-being as well as lower health care utilization and costs. Studies suggest that well-targeted delivery of social services and community supports, such as transportation, housing, nutrition, income support, parenting and child care support, and caregiver support can produce significant health benefits for individuals and communities. Related research suggests that improved integration of mental health and substance abuse services into health care delivery models offers significant health and economic benefits for individuals and communities. Similarly, improved integration of public health and prevention services into health care delivery models may offer health and economic benefits for communities, including services that address infectious disease risks, chronic disease prevention, and environmental health problems.

New research is needed to determine the specific combinations of health care, social services, and public health services that yield desired outcomes for specific population groups. Research also is needed to identify the most effective organizational models and financing strategies that support coordinated medical, public health and social services delivery, as well as how optimal models and strategies vary based on community resources or other contextual factors. Specific research questions of interest relate to design and implementation issues, organizational issues, and economic and financing issues as specified below.

1.1 Design and Implementation Issues

- Which strategies for aligning medical, social, and public health and prevention services have the largest effects on health and well-being at both the individual and population levels? Service combinations of interest include primary care, mental health, substance abuse, chronic disease prevention, nutrition, transportation, housing, income support, education and training, parenting and child development, caregiver support, physical activity, and recreation services. What is the optimal mix, intensity, and timing of service combinations for population groups of interest?

- Which strategies successfully optimize service delivery across the full continuum of health and social services, ranging from prevention, self-care, and informal care to primary and specialty health care services and social services and supports delivered through outpatient, institutional and community settings?

- Which population groups benefit most from integrated health care and social support delivery, and which targeting and tailoring mechanisms most effectively improve health outcomes?

- What mechanisms most effectively match unmet social support needs with specific combinations of services to improve health and well-being?

- How do community development programs and policies impact health and well-being? Under what conditions are these strategies most effective at improving health, and what are the most important components of these strategies?
1.2 Organizational Issues

- What organizational models promote quality, efficiency, and sustainability in integrated health and social services delivery, including umbrella agencies, coalition and alliance structures, referral agreements, accountable care organizations, accountable health communities, and community trusts?
- What are the most important dimensions of organizational and system coordination and integration, and what methods most accurately measure these dimensions?
- What types of institutions are best positioned to perform integrator roles in linking people to needed medical, social, and public health services?
- Which workplace-based, school-based, and community-based models are most effective and efficient in supporting integrated health and social services delivery?

1.3 Economic and Financing Issues

- What types of health and social investments produce the largest health and equity gains per dollar invested, ranging from improving health care access and quality to expanding prevention, education, urban design, poverty reduction, and violence prevention? What is the optimal portfolio of investments across health care, social services, prevention, and public health interventions for a community given its sociodemographic characteristics and population health needs? How does the value of these investments vary across communities based on multilevel characteristics and risk factors, including health condition prevalence, social, and economic characteristics?
- How do health and social spending interact at the community level to influence population health status? In communities with greater social investment is there better health status per dollar of health expenditures?
- How does the availability and quality of social services, prevention, and public health services in the community influence medical care utilization and costs? Are there medical cost offsets attributable to nonmedical public health and social services, and if so, how do offsets vary based on the extensiveness, intensiveness, and quality of available nonmedical services and programs?
- How cost-effective are integrated health care and social service delivery models, and what time periods are required to realize health improvements and cost reductions or cost offsets associated with these models?
- What mechanisms most effectively provide sustainable and equitable financing for integrated health and social support service delivery models, such as shared-savings models, hospital community benefit expenditures, pay-for-success arrangements, and social impact bonds?
- What mechanisms are most effective in aligning payment systems across multiple service providers and sectors to improve coordination in service delivery and health outcomes? What is the comparative effectiveness and efficiency of alternative models to align cross-sector payment systems, such as the State Innovation Models supported through the Affordable Care Act?
PRIORITY AREA #2:

Investigate the implementation and impact of strategies designed to reduce and eliminate health inequities through cross-system alignment, collaboration, and synergy.

The health consequences attributable to unmet needs for social, medical, public health, and prevention services fall disproportionately on racial and ethnic minority groups, persons living in poverty, and other underserved populations. Health inequities based on educational attainment, gender, sexual orientation, immigration status, disability status, income status, food security status, housing status, and rural/urban geographic areas of residence also are linked to unmet needs for social, medical, and public health services. New research is needed to identify innovative strategies to align and coordinate delivery and financing systems for medical care, social services, and public health and prevention services to reduce health inequities over the life course. Specific research questions of interest include:

- How do differences in the combined availability and accessibility of medical, social, and public health services across communities contribute to health disparities based on race, ethnicity, socioeconomic status, and geographic area of residence? How do these actual disparities in service delivery compare to the perceptions of policymakers and health care and public stakeholders?

- Which combinations of medical, public health, prevention, and social and community services and supports are most effective in reducing health disparities based on race, ethnicity, socioeconomic status, and geographic area of residence?

- Which strategies are most effective in targeting and tailoring the delivery of medical, public health, prevention, and social and community services and supports to population groups that experience the largest disparities in health outcomes, including those based on race, ethnicity, socioeconomic status, and geographic area of residence?

- Which organizational and financing strategies are most effective in expanding the reach of integrated medical, public health, prevention, and social and community services and supports to population groups that experience health disparities?

- Which communication, engagement, and motivational strategies most effectively increase community awareness of health equity issues and community participation in health equity solutions, including participation by the medical, social, and public health and prevention sectors?
PRIORITY AREA #3:
Investigate the effectiveness and efficiency of information and decision support strategies in achieving alignment, collaboration, and synergy across delivery and financing systems.

The delivery and financing systems for medical care, public health, prevention, and social services share common goals in improving health and well-being and serve overlapping target populations with defined needs and risks. Lack of coordination in the information and decision support infrastructure used across these systems may contribute to gaps in service delivery effectiveness, efficiency, and equity. Coordinated decision support processes and infrastructure—such as combined community needs assessment initiatives, shared practice guidelines and protocols, and integrated data systems—may present opportunities for strengthening ties among public health agencies, health care systems, social service providers, and other community partners. Coordination and collaboration may be beneficial to multiple information and decision-making processes, including: the collection, analysis, and exchange of information through electronic records; the development of practice guidelines and clinical decision aids; the implementation of community assessment, planning, and priority-setting processes; the development of performance measurement, performance feedback, and public reporting initiatives; and the implementation of quality improvement initiatives. Specific research questions of interest include:

- How are service delivery decisions and outcomes affected by information systems that integrate a core set of community-level public health and health status indicators into electronic health records? To what extent do these information systems influence transitions across care settings, chronic disease care management, and self-care strategies, as well as the integrated delivery of social and public health services?

- Which strategies most effectively link electronic health record and client record systems across health care, social services, and public health delivery systems to facilitate shared access, information exchange, and data use for clinical decision-making and community-wide quality improvement initiatives? How can data elements at multiple levels of aggregation—including person-level health information and small area or neighborhood-level measures of risk factors for major diseases, individual behavioral practices, and health care accessibility indicators—be obtained and used by health and social service professionals to inform clinical practice?

- What is the comparative effectiveness of alternative information system redesign strategies that use decision support capabilities, electronic health records, and personal health records to increase adherence to evidence-based guidelines and to inform patient and provider decision-making? To what extent does access to social information during medical care encounters, such as the inclusion of information on social determinants in electronic health records, impact the outcomes of medical care?

- Which decision support strategies most effectively communicate information about the potential health and economic benefits and costs of investments in medical, social, environmental, and public health interventions operating across diverse sectors of a community? How does the dissemination of local estimates about the comparative value of health and social investments shape clinical, policy, and business decisions, implementation strategies, and health outcomes? Decision support strategies may include health impact assessments and interactive system dynamics modeling.
PRIORITY AREA #4:

Investigate the role of incentives in achieving alignment, collaboration, and synergy across delivery and financing systems.

A growing body of evidence from the field of behavioral economics suggests that many health and social problems derive from small decision errors and cognitive biases that lead people to make choices that are contrary to their personal, professional, and social interests related to health and well-being. Well-designed incentives can help align choices with broader objectives in health, well-being, and equity. Most of the existing health research in behavioral economics focuses at the individual patient level, and considerable uncertainties exist regarding the most effective incentive designs and strategies to support collective actions across multiple service providers, funders, payers, sectors, population groups, and communities. Specific research questions of interest include:

- What novel financial and nonfinancial incentives are most effective in expanding access to services, improving continuity and quality of care, and constraining the costs of care across individual care settings and episodes? How do health and social service providers and consumers respond to different types of incentives using behavioral economics and other models of human behavior? Incentives may include gains as well as losses, immediate versus delayed realization, large versus small rewards and penalties, self-centered versus altruistic motivations, and individual versus group realization.

- What new financial and nonfinancial incentives most effectively support collective actions across service providers and sectors that allow for coordinated delivery of medical care, social services, and public health and prevention services? Incentives may include shared-savings models, pay-for-success models, social impact bonds, global budgeting, and other shared accountability models.

- How do performance measurement, public reporting, and pay-for-performance strategies influence coordinated delivery of medical care, social services, and public health and prevention services, and how might these incentives be aligned to optimize outcomes in population health, well-being, and health equity?

- What types of financial and nonfinancial incentives are most effective in reducing health inequities based on race, ethnicity, socioeconomic status, and geographic area of residence at the individual, group, and community levels?
IV. RELEVANT METHODOLOGICAL APPROACHES

Applying Systems for Action (S4A) evidence in transformative ways will require scientific knowledge not only about what strategies are successful in achieving alignment, collaboration, and synergy across delivery and financing systems, but also about how and why these strategies work under certain conditions. Producing this evidence requires a variety of methodological approaches that draw on systems science and stakeholder engagement approaches, including but not limited to:

- natural experiments and quasi-experimental methods that examine the population health effects of changes in the organization, financing, and/or delivery of health and social services;
- agent-based modeling, game theory, and related methods for exploring system behavior, complexity, and collective actions and their downstream outcomes;
- network analyses examining patterns of interaction between and among the institutions, service providers, and consumers involved within medical, social, and public health service delivery systems;
- economic evaluations that elucidate the benefits, costs, productivity, and efficiency of delivery and financing system innovations;
- action and participatory research approaches that incorporate experiential knowledge from service providers, community organizations, program and policy officials, and community members about delivery and financing system behaviors and outcomes;
- rapid ethnographies designed to enhance understandings of environmental and organizational drivers of cross-sector collaboration and integration;
- comparative effectiveness research that analyzes the relative benefits and costs of alternative system-level approaches to improving health;
- positive deviance studies that elucidate the strategies and mechanisms by which exemplary systems and system innovations improve population health outcomes; and
- grounded theory approaches that develop and enhance the knowledge base for what works across systems under what conditions to improve population health.

Studies that triangulate findings using mixed-method approaches and data sources are likely to yield robust and broadly applicable evidence, particularly when nonrandom sample selection and/or small sample sizes limit the inferences that can be supported from individual study components. Additionally, successful studies on S4A research priorities are likely to require advances in the measurement of key constructs such as those related to system alignment, collaboration, and synergy. Such measurement advances may include innovations in linking and combining multiple data sources and in constructing measures at multiple levels of aggregation.
V. DISSEMINATION AND TRANSLATION OF FINDINGS

Peer-reviewed scientific publications are an essential component of building a durable, credible, and replicable knowledge base for the Culture of Health Action Framework. Nevertheless, disseminating and translating *Systems for Action* (S4A) research findings into actions that advance a Culture of Health requires additional mechanisms that reach a broader spectrum of knowledge-users on a more timely and ongoing basis, including health and social service providers, policymaking bodies, community organizations and leaders, advocacy organizations, funders, employers, and industry.

*Systems for Action* studies should reach these stakeholder audiences through a variety of available channels, including discussion papers, research briefs, social media, blogs, professional and trade publications and meetings, government reports, and the popular press. Early releases of interim findings and research in progress should be used to ensure timeliness of research dissemination and to build interest in final results. Studies should develop, implement, and evaluate linguistic and culturally appropriate approaches to translating findings to communities of practice. Where possible, S4A studies should incorporate policy translation strategies that explicitly reference the value and cost implications of the system strategies under study, including potential spillover effects on other delivery systems and services.
The Robert Wood Johnson Foundation (RWJF) appointed a Technical Advisory Committee in February 2015 to develop a research agenda for a new Systems for Action (S4A) national research program. The Committee included ten representatives with relevant expertise in areas that include medical care, nursing, health policy and management, economics, community and stakeholder engagement, social and organizational systems, and health equity. Because the committee members were geographically dispersed across the United States, research agenda development was completed from March through July using a variety of deliberation mechanisms, including electronic communications, two virtual meetings, and one in-person meeting.

Committee members recommended engaging additional stakeholders to enrich discussion of potential topics for the S4A research agenda, and members were subsequently invited to nominate additional stakeholder to participate in agenda setting activities. Three additional stakeholders joined the agenda and priority-setting process representing diverse perspectives, including two representatives having experience in community development and engagement with underserved racial and ethnic groups in health research, and one representative having experience with stakeholder engagement of health care professionals and interest groups in quality measurement and reporting activities.

As background for identifying research priorities, committee members were provided an overview of the RWJF Culture of Health Action Framework (see Figure 1) and a synthesis of public health services and systems research evidence.

A three-stage Delphi survey process was used to identify and prioritize S4A research topics with participation by the committee members and stakeholder representatives (n=13), RWJF representatives (n=2), and key project staff (n=3). A secure electronic survey tool was used throughout the process. In the first stage, potential topics and research areas were solicited by asking each person to submit between three and twelve candidate research topics, considering these four criteria:

- The potential for research on the topic area to generate knowledge that leads to significant improvements in health status and health equity through relevant components of RWJF’s Culture of Health Action Framework, i.e., health as a shared value, cross-sector collaboration, healthy and equitable communities, and integrating health and health care systems;

- Relevance to the S4A general theme of aligning and integrating services and delivery and financing systems that impact population health, including public health, medical care, and social and community services;

- The potential for research on the topic area to generate new knowledge and evidence that does not already exist; and

- The potential for research on the topic area to complement and be synergistic with—and not duplicative of—research supported by other funders and funding mechanisms.
Nominated topics were solicited from committee members and stakeholders using the secure electronic survey tool, and a total of 55 topics were received during the first stage solicitation.

In the second stage, committee members and stakeholders were asked to rate each of the 55 nominated topics on a 10-point scale, ranging from “Very Important” to “Not Important,” considering the same criteria listed above. Respondents also were invited to nominate up to five additional topics for consideration. During this rating process, nominated topics were not edited, combined, or divided except in obvious cases of duplication; however, some overlap in topic areas was addressed later in the research agenda-setting process. After the second stage ratings were completed, rating results were disseminated back to the respondents, including individual rater results, as well as statistics for central tendency, range, coefficient of variation, and other measures of agreement in ratings.

In the third stage, the panel reviewed the group and individual ratings of the first 55 topics and were prompted to confirm or change their ratings for each topic after having reviewed the ratings of other panelists. In addition, panelists rated the importance of 11 new topics recommended in the second stage survey, using the same 10-point scale as above.

With the third stage ratings completed, standardized rating scores and measures of agreement were calculated for each of the 66 topics. Topics were ranked from most important to least important, based on the standardized mean score. Committee members and stakeholders received the rank-ordered topic list with detailed results on ratings. Results of the Delphi ratings are available in a separate report.

Panelists were provided with research evidence summaries completed in 11 broad areas related to the nominated topics, including research on delivery systems for social services, community development, and poverty reduction. Summaries, while not comprehensive evidence reviews, were designed to stimulate further thinking and dialogue about S4A research priorities. These summaries are available in a separate report.

An in-person meeting of committee members and stakeholders was conducted to refine, consolidate, de-duplicate, and prioritize the list of 66 research topics. Committee members who were not able to attend the meeting were interviewed individually to gather their opinions into the process. The ten topics with the highest mean standardized importance ratings identified in the third stage Delphi survey provided a starting point for the convergence discussion, with additional items grouped accordingly. Some topics were deemed more fitting as guiding principles, methodological approaches, or dissemination and translation recommendations.

After the in-person meeting, written descriptions of priority S4A research agenda items were developed, reviewed, and refined through three waves of written comments and telephone conference calls held with committee members and stakeholders.
APPENDIX 2:
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