
Research Agenda for Models of Care to Advance Health Equity for Medicaid-Eligible Individuals

Health Systems Transformation Research Coordinating Center

Avalere Health | August 2020



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The Robert Wood Johnson Foundation (RWJF) is supporting this multiyear initiative to transform health systems to meet the complex needs of Medicaid-eligible individuals.

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Executive Summary

Problem Statement:

Inequities across many medical and non-medical factors – including healthcare, housing, education, employment, public safety, and food access – influence health and often create barriers that prevent individuals from leading healthy lives. Such inequities drive a wide range of interrelated medical and non-medical needs (e.g., physical health, mental health and substance use disorders, healthy behaviors, social, functional, and economic) for Medicaid-eligible individuals. Moreover, institutionalized oppression and systemic racism perpetuate medical and non-medical-related inequities, and affect care delivery and health outcomes of Medicaid-eligible individuals.

To address the needs of Medicaid-eligible individuals, health systems – defined as facility-based provider organizations that serve a high percentage of Medicaid-eligible individuals (e.g., public or essential hospitals, federally qualified health centers (FQHCs), integrated delivery systems) – are implementing new health system models of care. For the purposes of this work, a health system model of care involves:

- A set of interventions and activities targeted to a given population that are carried out consistently and organized in a coordinated, holistic way
- An array of care team members, defined care team roles and responsibilities, and the protocols that they follow
- Balanced human and technological resources that facilitate connections between the target population and both the clinical teams and other supports (e.g., community health workers (CHWs), community-based organizations (CBOs)) that can support them in maintaining and improving their health
- Partnerships with the community and appropriate social service or government agencies, organizations, and programs
- Data infrastructure to better identify and serve people's specific needs.

Although health systems have long been implementing models to address Medicaid eligible individuals' goals/needs, the current literature does not currently lift up characteristics of successful models in a structured framework.

Solution Statement:

To bridge these gaps, in July 2019, the Robert Wood Johnson Foundation (RWJF) funded Avalere to establish the Health Systems Transformation Research Coordinating Center (HSTRC). In collaboration with researchers, policymakers, and health system leaders, the HSTRC reviews relevant research, assesses health system models' ability to advance equity,

and identifies gaps in the evidence base to change the ways in which research is generated, funded, and used to promote health equity for Medicaid-eligible individuals.

The HSTRC developed this Research Agenda to strengthen evidence examining health system models of care that address the interrelated goals and needs of Medicaid-eligible individuals. Avalere built the Research Agenda using findings from a multidimensional Research Directory[†] that includes: 1) a literature review; 2) focus groups with Medicaid beneficiaries; and 3) interviews with key opinion leaders (KOLs).

The Research Agenda outlines:

- Priority components for health system models of care addressing the goals and needs of Medicaid-eligible individuals
- HSTRC activities to support the implementation of the Research Agenda
- Grantmaking efforts for comprehensive health system models of care that address the needs of the funder's target population and identify the resources and mechanisms that could facilitate long-term sustainability

The HSTRC will implement this Research Agenda through grantmaking that will add to the evidence base on successful models. Specifically, the HSTRC seeks to evaluate model components to advance those that work and de-prioritize those that offer little benefit. Following implementation, the HSTRC will synthesize findings across grant evaluations to update the HSTRC Research Agenda Framework (e.g., denote interventions that are working, remove interventions that are not working as expected) and hone in on what to recommend for scale/spread.

Research Agenda Objectives:

- Guide research to strengthen the evidence base for health system models of care that promote health equity and address the interrelated goals and needs of Medicaid-eligible individuals
- Promote health system models of care that address the interrelated goals and needs of Medicaid-eligible individuals using a comprehensive and integrated approach
- Identify and evaluate resources and mechanisms that can help to ensure health system model of care sustainability

[†] A research directory refers to a searchable database that houses findings from a literature review, focus groups with Medicaid beneficiaries, and interviews with key opinion leaders.

1. HSTRC Background & Objectives

1a. Background

Health systems can play a pivotal role in promoting health equity for Medicaid-eligible individuals by designing, executing, and evaluating different health system models of care. These models may serve as a vehicle for health system transformation, striving to address the interrelated goals and needs of these individuals, and ultimately advance health equity. There is an opportunity to systematically understand 1) how existing health system models of care are meeting the interrelated goals and needs of Medicaid-eligible individuals, and 2) to what extent these models are advancing health equity. In this Research Agenda, we define health systems as facility-based provider organizations that serve a high percentage of Medicaid-eligible individuals (e.g., public or essential hospitals, FQHCs, integrated delivery systems).

There is a gap in understanding how health systems are comprehensively addressing the interrelated goals and needs of Medicaid-eligible individuals. To bridge this gap, Avalere and RWJF partnered in July 2019 to establish the HSTRC. In collaboration with health system leaders and other stakeholders, the HSTRC aims to transform care to promote health equity for Medicaid-eligible individuals.

The COVID-19 pandemic emerged during the creation of this Research Agenda. We constructed the core of the Research Directory (that informed most of the Research Agenda) prior to the onset of the pandemic, so the Directory does not incorporate any impact related to COVID-19. However, the Research Agenda incorporates input from the HSTRC Advisory Board and other health systems leaders regarding the impact of the pandemic on planning within a health system, capacity issues, and the exacerbation of health inequities and associated needs of Medicaid-eligible individuals.

1b. HSTRC Objectives

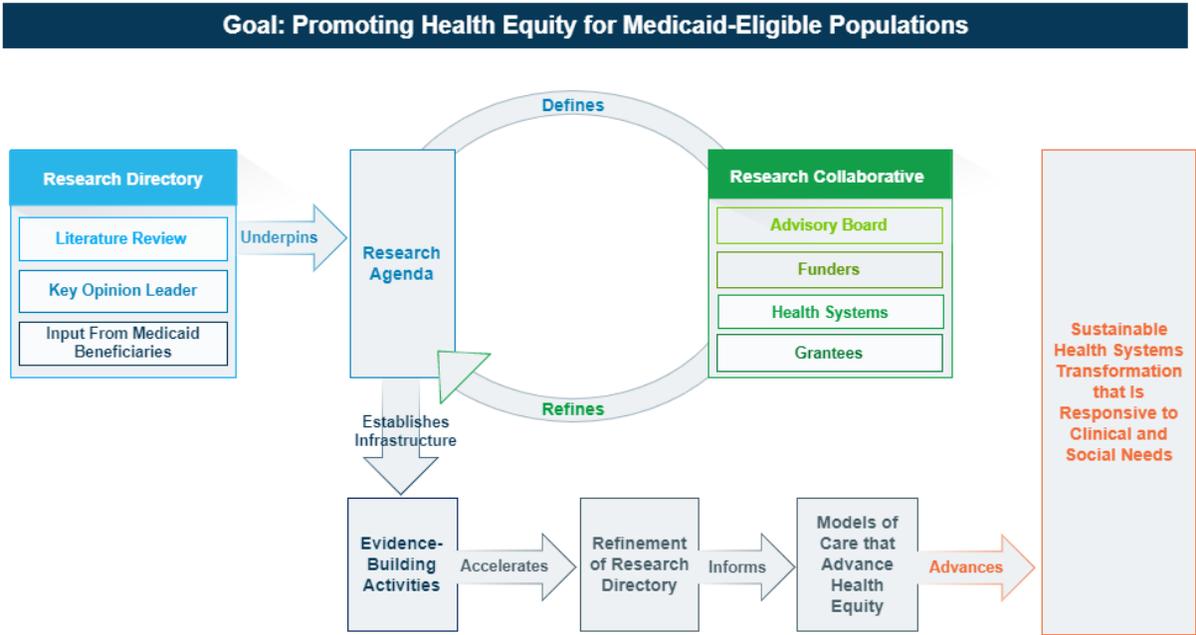
The HSTRC conceptual framework ([Figure 1](#)) presents the related and overlapping activities to achieve the HSTRC objectives (please refer to [Appendices 2 & 3](#) for a detailed description of the development of the Research Directory, Research Agenda Framework, and Research Agenda).

The Research Agenda will support achievement of the HSTRC objectives. The objectives of the Research Coordinating Center are:

- Synthesize and track relevant research and emerging trends on health system transformation designed to meet the interrelated goals and needs of Medicaid-eligible populations
- To launch a Research Collaborative and change the ways in which research is generated, funded, and used to transform health systems – and ultimately improve health outcomes, especially for Medicaid-eligible beneficiaries with complex needs

- Implement a robust Research Agenda that supports the Research Collaborative in achieving the Research Agenda’s outlined objectives
- Recruit additional funders to help sustain and further the Collaborative’s research and transformation
- Develop an actionable sustainability plan to ensure the Collaborative’s success and the attainment of the long-term goals outlined in the Research Agenda

Figure 1: HSTRC Conceptual Framework



1c. Cross-Cutting Principles and Concepts

Terms commonly used in the Research Agenda are defined in [Table 1](#) below.

Table 1: Commonly Used Terminology

Term	Definition
Health Equity	Everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness, lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care. ¹
Health System	Facility-based provider organizations that serve a high percentage of Medicaid-eligible individuals (e.g., public or essential hospitals, FQHCs, integrated delivery systems). ²
Interrelated Goals and Needs	Interconnected medical and non-medical goals and needs. Specific types of goals and needs include physical, mental health and substance use disorder, healthy behaviors, social, functional, and economic.
Medicaid-Eligible Individuals	Due to changes in state-specific eligibility criteria and individual circumstance, many people fluctuate in and out of Medicaid coverage. ³ With this fluctuation, some individuals may be eligible for Medicaid (including low-income families, qualified pregnant women and children, and individuals receiving Supplemental Security Income), but not necessarily maintain continuous coverage. Additionally, individuals may be eligible for Medicaid coverage, yet are not enrolled. Medicaid eligibility is based on financial (e.g., modified adjusted gross income) and non-financial (e.g., state resident, US citizen or certain qualified non-citizens) eligibility criteria.
Health System Model of Care	A health system model of care includes: ⁴ <ul style="list-style-type: none"> ○ Set of interventions and activities targeted to a given population that are carried out consistently and organized in a coordinated, holistic way ○ Array of care team members, defined care team roles and responsibilities, and the protocols that they follow



	<ul style="list-style-type: none">○ Balancing of human and technological resources that facilitate connections between the target population and both the clinical teams and other people that can support them in maintaining and improving their health○ Partnerships with the community and appropriate social service agencies/organizations○ Leveraging of data to better identify and serve people's specific needs
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2. HSTRC Research Agenda Mission & Objectives

The HSTRC developed the Research Agenda to strengthen evidence regarding health system models of care that address the interrelated goals and needs of Medicaid-eligible individuals. It will be used to guide funding, evidence generation, and evaluations of models of care that promote health equity for Medicaid-eligible individuals.

This Research Agenda intends to:

- Guide research to strengthen the evidence base for health system models of care that promote health equity and address the interrelated goals and needs of Medicaid-eligible individuals
- Promote health system models of care that address the interrelated goals and needs of Medicaid-eligible individuals using a comprehensive and integrated approach
- Identify and evaluate resources and mechanisms that can help to ensure health system model of care sustainability

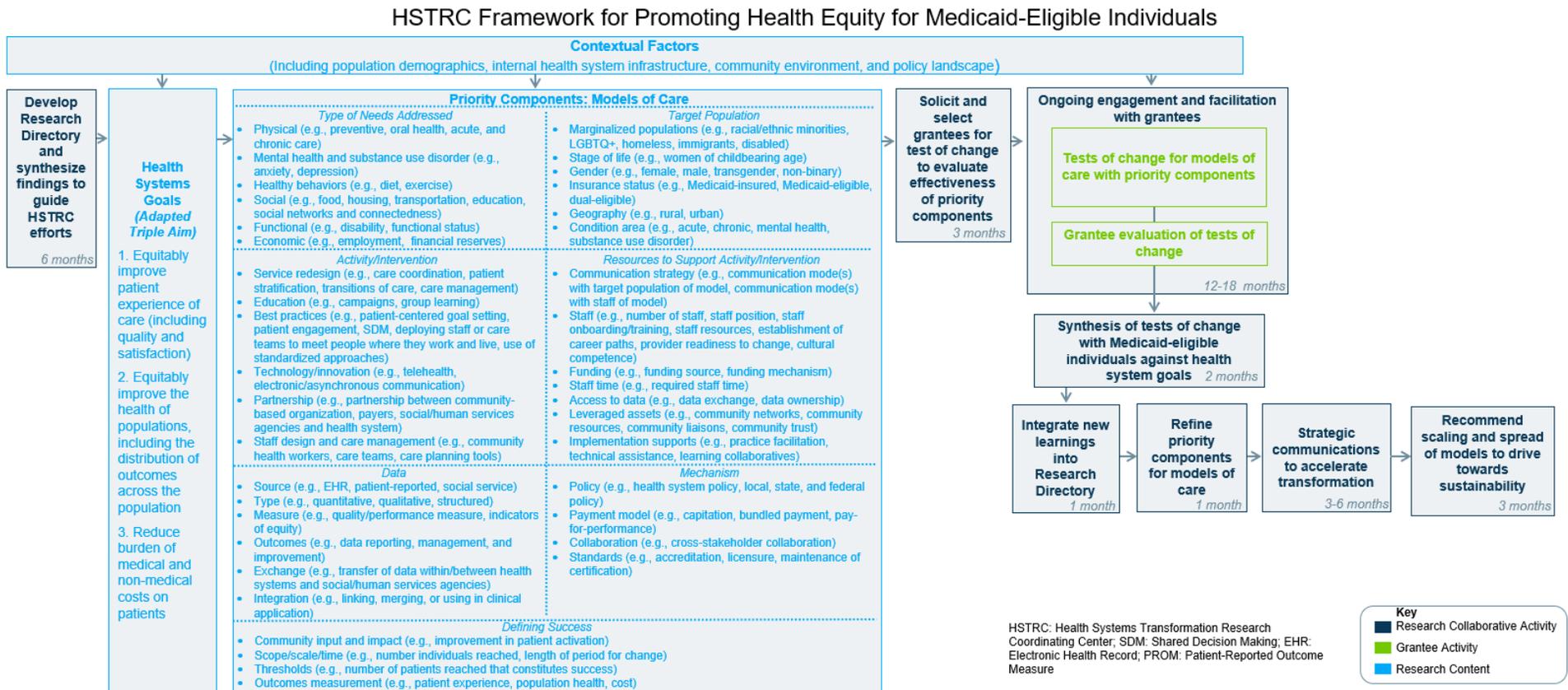
3. Research Agenda Activities and Research Content

This section will review HSTRC work completed to date, set expectations for grantee tests of change, and describe how results from grantee tests of change will be used by HSTRC.

We started by developing a Research Directory (development detailed in [Appendix 2](#)), which resulted in identification of priority components highlighted in the Research Agenda and accompanying Research Agenda Framework (presented in detail below). The development of the Research Agenda Framework and Research Agenda are detailed in [Appendix 3](#). We will then support implementation of this Research Agenda through grantmaking for tests of change. Historically, the perspectives of Medicaid-eligible have not been incorporated into research design and evaluation. To that end, it is critical that health system models of care leverage participatory approaches (please refer to [Section 3d. Priority Methods for Research and Evaluation](#) for more detail). HSTRC's selected tests of change presents an opportunity to change this shortcoming.

The Research Agenda outlines a holistic way to evaluate health system models of care by specifying priority components. Health system models of care should clearly articulate: their population of interest; the set of needs they aim to address; how data infrastructure supports model success; model activities and/or interventions; the set of resources are required to carry out the activities or interventions; mechanisms that may be leveraged to develop, implement, or sustain the model; and what model success looks like. Please note, the Research Agenda outlines suggested priority components for models of care. We are hopeful that health systems will continue to drive innovation by elevating models of care that, to the extent possible, incorporate these components.

Figure 2: HSTRC Research Agenda Framework



Ongoing engagement and facilitation with grantees

Tests of change for models of care with priority components

Grantee evaluation of tests of change

12-18 months

Synthesis of tests of change with Medicaid-eligible individuals against health system goals
2 months

Integrate new learnings into Research Directory
1 month

Refine priority components for models of care
1 month

Strategic communications to accelerate transformation
3-6 months

Recommend scaling and spread of models to drive towards sustainability
3 months

Key

- Research Collaborative Activity
- Grantee Activity
- Research Content

HSTRC: Health Systems Transformation Research Coordinating Center; SDM: Shared Decision Making; EHR: Electronic Health Record; PROM: Patient-Reported Outcome Measure

3a. Contextual Factors

The HSTRC recognizes health system goals, health system models of care, tests of change, and evaluation of models are impacted by the context in which health systems are operating. Accordingly, the HSTRC took a social ecological⁵ approach to acknowledge the impact of:

- **Population patient characteristics** (race/ethnicity, education level, income, substance use, or history of trauma)
- **Internal health system infrastructure** (number, type, and diversity of staff within health system, leadership buy-in for new or innovative health system models of care, and investment in technological infrastructure that allows for the exchange of data as well as staff wellbeing (e.g., avoiding staff burnout, establishing career growth, facilitating cultural competency trainings))
- **Community environment** (structural factors, such as historical trauma, availability of community-based or faith-based organizations and community trust in health system institutions)
- **Policy landscape** (federal state, local, and health system policy. For example, policy may impact funding for initiatives and levers health systems can use to implement health system models of care. Further, health systems may operate in environments impacted by a history of discriminatory policies (e.g., redlining, policing)

3b. Health System Goals

The Research Agenda utilizes an adapted version of the Institute for Healthcare Improvement's *Triple Aim* Framework⁶ to specify health system goals that promote health equity for Medicaid-eligible individuals. The *Triple Aim* was selected because it is a well-known and accepted framework frequently leveraged by health systems. In recognition that the *Triple Aim* does not have an explicit focus on health equity, Avalere adapted the goals in consultation with the HSTRC Advisory Board members ([Appendix 5](#)).

For the purposes of the HSTRC, the adapted *Triple Aim* health system goals referenced in this Research Agenda are:

1. Equitably improve patient experience of care (including quality and satisfaction)
2. Equitably improve the health of populations, including the distribution of outcomes across the population
3. Reduce burden of medical and non-medical costs on patients

3c. Priority Components: Health System Models of Care

The HSTRC identified several components of health system models of care that promote health equity with positive or promising results. The HSTRC considers these components to be drivers of model success. Model components and level of specificity will vary based on the health system in which the model is implemented. However, health system models of care should

clearly articulate: their population of interest; the set of needs they aim to address; how data infrastructure supports model success; model activities and/or interventions; the set of resources required to carry out the activities or interventions; mechanisms that may be leveraged to develop, implement, or sustain the model; and what model success looks like.

Target Population

Health system models of care start by defining their target population. Health systems stratify and segment their populations based on common features, such as:

- **Marginalized populations** include individuals excluded from full involvement in mainstream economic, political, cultural, and social activities. Though not an exhaustive list, marginalized populations typically include racial or ethnic minorities, individuals who identify as LGBTQ+, homeless populations, immigrants, and the disabled. These populations face environmental and social challenges that inhibit access to and adequacy of care, such as poverty, low education, limited English proficiency, and substance use disorder (SUD).⁷
- **Stage of life** indicates a person's age and acknowledges that healthcare and social needs vary based on a patient's stage along the life cycle.⁸ For example, older adults (i.e., 65+) are more chronically ill,⁹ have decreased functional status,¹⁰ and have access to different healthcare coverage (i.e., Medicare) than adults under 65.¹¹ Another example is that women's reproductive health, and corresponding concerns and priorities, change over time.¹²
- **Gender** describes a wide range of identities (e.g., female, male, non-binary, transgender) to which an individual may identify.¹³ Gender can influence a person's health and health-seeking behaviors.
- **Insurance status** refers to the source of coverage patients have. The HSTRC is focused on Medicaid-eligible individuals; target populations may include Medicaid-insured, Medicaid-eligible, and dually eligible (i.e., coverage through Medicare and Medicaid) individuals.
- **Geography** (e.g., rural, urban) influences a person's access to high-quality care and other social services. For example, focus group participants from rural communities indicated that they faced barriers to care, including transportation and locating a specialist in geographic proximity.
- **Condition areas** (e.g., acute, chronic, mental health, and SUD) require different intervention types. For example, patients with chronic conditions benefit from ongoing care and management,¹⁴ while acute conditions require immediate symptom management and response.

Health systems define their target population using 1 of the dimensions identified above, or they may layer several dimensions. For example, a model may focus on black women of child-bearing age (versus all women). Health systems may define their target population at the person level (e.g., all dual-eligible individuals of Hispanic descent) or at a geographic level (e.g., group of individuals residing in 3 zip codes). Focus group participants suggested applying the social-ecological model to help focus the target population.¹⁵

Though patient data and health system goals are key inputs for defining the target population, additional considerations, such as availability of Medicaid waivers (e.g., 1115 SUD waivers,

Delivery System Reform Incentive Payment (DSRIP) waivers), which are defined further below, may be key drivers for determining the population of interest.

Types of Needs Addressed

Target populations have specific needs that can be addressed through health system models of care. Experts encouraged the HSTRC to include the full range of physical, behavioral, social, and other needs that support or inhibit optimal health (defined further below).

- **Mental health and SUD needs** encompass psychological and addiction-related needs.
- **Social needs** refer to individuals' unmet social needs (e.g., food, housing, transportation, education, social connectedness). Often conflated with social determinants of health (SDOH), which refer to a community's underlying social barriers, social needs reflect individual-level needs that can be screened for and addressed by healthcare organizations.
- **Functional needs** describe an individual's disability and/or functional status.
- **Economic needs** refer to individuals' access to adequate employment that provides a living wage and access to financial reserves (i.e., savings) in the event of a crisis or other unforeseen large expense.
- **Physical needs** include needs associated with health and healthcare, including preventive health, oral health, acute care, and chronic care.
- **Healthy behaviors** are related to diet, exercise, stress management, and general well-being that promote health and wellness which are linked to health outcomes.

Successful models recognize these needs are interconnected and address them together, rather than in isolation. Our research demonstrated most models do not tackle all needs listed above, but rather address a subset determined to be of particular relevance for their target populations.

In the aftermath of the COVID-19 pandemic, many health systems are considering how to be responsive to the needs of Medicaid-eligible individuals, many of whom struggle under normal circumstances. For example, Medicaid-eligible individuals, sometimes struggle to sustain adequate employment at a living wage, may face job losses or, for those who are able to maintain employment, be disproportionately likely to work a job that puts them at risk for exposure to COVID-19.¹⁶ Medicaid-eligible individuals are more likely to work in essential jobs, exacerbating the effects of the pandemic on low-income individuals.

To that end, as health systems increasingly emphasize clinical needs over social needs during the pandemic, it is important that they do not lose sight of social and economic factors that can increase the rate of disease transmission.

Activity/Intervention

After determining the patients' needs to address and the priority population, health systems must design and implement activities and interventions responsive to these needs. Promising approaches are defined below.

- **Service redesign** involves revising traditional care pathways or approaches to care delivery to improve outcomes and achieve efficiency in healthcare.¹⁷ Common approaches to service redesign include care coordination, patient stratification, transitions of care, and care management. Care coordination provides referrals to health and social services by coordinating with outside providers, including community-based providers.¹⁸ Patient stratification divides patient populations into subgroups for targeted interventions.¹⁹ Health systems that improve transitions of care aim to prevent breakdowns that occur as patients transition from 1 setting (e.g., the hospital) to another (e.g., post-acute care) and proactively addresses social needs that put these transitions at risk.²⁰ Care management programs provide comprehensive support to help patients become active and empowered healthcare consumers.²¹ These service redesigns require significant resources, including staff time, to enact. However, most are not reimbursable services, and, when reimbursement is available, it is often inadequate.²²
- **Education** campaigns, training, and group learning provide healthcare practitioners and community providers with the tools and resources to promote engagement and quality improvement. To the extent possible, education should be tailored to the practitioner and aligned to practitioner values.²³ Moreover, while didactic methodologies are important to relaying key information, mentoring, and shadowing may be more effective at producing high staff engagement.²⁴ Yet, it is critical to consider implicit biases providers and researchers may hold when developing and executing these educational interventions.
- **Best practices** are procedures or protocols widely accepted as being effective, including patient-centered goal setting, patient engagement, shared decision making, and meeting people where they work and live. Additionally, engagement, with community-level organizations like faith-based organizations, is important. For example, to gain patient buy-in on care plans, engaging patients to set goals relevant and important to their personal priorities may result in better plan adherence.²⁵ The guiding principles behind these best practices is that timely information, supportive interventions, and adequate engagement can help guide decision-making processes and promote a value-based approach to care.²⁶
- **Technological innovations**, such as telehealth and electronic or asynchronous communication, enable remote care delivery and can alleviate access burdens that Medicaid-eligible individuals face, such as transportation to appointments and time lost from work.²⁷ Though telehealth and asynchronous communication are not traditionally used to address social needs, as physical distancing becomes an increasingly important tool to minimizing the spread of COVID-19, they have been deployed to meet people where they live and work. For example, the Penn Center for CHWs is arming their workforce with cell phones and laptops and ensuring they have access to internet connectivity to continue engaging high-risk patients.²⁸

- **Partnerships** with community members, CBOs, payers, social or human service agencies, or other health systems are a key activity to engage relevant stakeholders. While many health systems find value in informal partnerships with local community organizations, the health system leaders we interviewed indicated that formal, legally binding partnerships were essential to communicating freely and exchanging data with community partners. Establishing community connections is also important in ensuring patients within communities can build trust with health systems.
- **Staff design and care management** are standardized activities or measures to improve health. The Research Directory uncovered several promising models and interventions for addressing Medicaid-eligible individuals' interrelated goals and needs, including CHW programs, care teams, and care planning tools. CHWs may serve as a component of a broader model (e.g., as an intervention within an Accountable Care Organization (ACO))²⁹ or be implemented as a standalone program.³⁰ Care plans also appear in models as one of many care management tools implemented in tandem with other interventions or priority components to encourage patient self-management and improve health outcomes.³¹

Resources to Support Activity and Intervention

Health systems have varying resources to support an activity or intervention based on their geographic location, financial reserves, and community stakeholders. The key resources required to enable activities and interventions are:

- **Leveraged assets**, such as community networks, community resources or liaisons, and community trust, are instrumental to establishing and gaining patient buy-in. Marginalized populations have low trust in the medical system; engaging the right assets and incorporating trusted members of the community into an intervention or activity can improve patient engagement and trust.³²
- **Communication strategies** for how and when to communicate with the target population, key model staff, and external stakeholders. Each stakeholder requires different levels, modes, and frequencies of engagement based on their role in the model. For instance, weekly calls with model providers and/or multidisciplinary teams ensure adherence to care plans.³³ Staff outside of the core team may be engaged less frequently to minimize burden.³⁴ Patient communication at key inflection points (e.g., after a hospital discharge) can lead to better self-rated health, satisfaction, and patient activation.³⁵
- **Availability of staff** appropriately trained to perform the activity or intervention can impact model success. This includes having enough staff to manage additional workflow, defining the appropriate role (e.g., care manager, care coordinator, CHW), and creating career paths for growth within positions. Research also demonstrates hiring the right staff by using well-defined protocols and guidelines supports staff retention and job satisfaction and can contribute to improved health outcomes.³⁶ Because Medicaid-eligible individuals come from distinct cultural backgrounds, cultural backgrounds of staff can match that of their community or staff should be trained in cultural competency to

minimize barriers to care.³⁷ Additionally, linguistically appropriate services and/or translation services must be made available to respond to a diverse population and minimize challenges related to access.³⁸ Provider readiness for change can determine the success of an activity or intervention. Key drivers for provider readiness include training, education, and strong partnerships with CBOs.³⁹

- **Staff time** to perform the activity or intervention is as important as having staff available. Particularly if the activity or intervention is additive to standard workflow, staff must have adequate time to perform their regular duties as well as their new responsibilities. Special attention must be paid to caseload, so key staff have time to engage each patient in their caseload and refer them to needed services. For example, more intensive interventions or those operating in communities with fewer local resources (e.g., rural settings) necessitate that staff have smaller caseloads.⁴⁰
- **Access to funding sources** can impact model design, success, and sustainability. Key sources of funding include capitated payments and other payment models (e.g., from Medicaid managed care organizations, shared savings models, pay-for-performance programs, etc.), Medicaid waiver dollars, internal funds (e.g., community benefit dollars), and grant funding. KOLs agreed that grant funding is helpful for testing innovations and initiating activities and interventions. However, challenges arise when grant funding expires; many health systems have had to retire promising programs that failed to achieve leadership buy-in during the grant period.
- **Data** from a wide variety of healthcare and non-healthcare sources (e.g., CBOs, faith-based organizations, social services agencies) provides context to help health systems ascertain the target population for an activity or intervention and track progress towards achieving health system goals. Health systems should also monitor data-related barriers to model success. KOLs detailed challenges with establishing the infrastructure to exchange data with non-healthcare entities. For example, health system administrators may not prioritize integration with CBOs unless there is a clear business case. CBOs typically have access to more limited means of data exchange (e.g., unsecured email, fax) that may or may not be compliant with privacy and security requirements.
- **Implementation supports** provide hands-on training (e.g., practice facilitation, technical assistance) from qualified professionals or similarly situated peers (e.g., learning collaboratives), educate staff, disseminate best practices, and accelerate innovation by consolidating guidance.⁴¹ For example, clinicians who participate in learning collaboratives achieve higher levels of fidelity to an intervention and express greater buy-in.⁴² Moreover, clinicians appreciate the opportunity to share with and learn from peers.⁴³

Though many resources (e.g., staff, funding, access to data) are helpful for all interventions, some are essential to specific interventions. For example, leveraged assets are instrumental in developing strong partnerships with local organizations.

In addition to determining resources essential to supporting the activity or intervention, data infrastructure and availability should be considered to help track and monitor model execution.

Data

Data availability is key to supporting interventions across healthcare and non-healthcare stakeholders. For instance, the use of data can help health systems to identify and stratify the target population for an intervention so they can match appropriate resources to the need of the individual. It is equally important that data collected be segmented by patient characteristics (i.e., Race, Ethnicity and Language (REAL) data) to showcase where health inequity exist and the impact it has on health outcomes.

Simply having access to data does not ensure that the data will have utility. To support model implementation, track progress, and evaluate success, health systems should consider the following:

- **Source:** Experts agreed that health systems must have access to a range of data sources, including electronic health records (EHRs), administrative or claims data, patient-reported data collected through surveys or patient-facing portals, social service data, and CBO data.
- **Type:** Data may be quantitative or qualitative, and structured (e.g., standardized format in an EHR) or unstructured (e.g., EHR notes). While structured, quantitative data can be used for statistical analysis, unstructured and/or qualitative data may provide insight and context into the patient experience.
- **Measure:** Quality measures quantify healthcare processes, outcomes, and patient perceptions.⁴⁴ Measures of health equity focus on disparity reduction, through equitable improvements in patient experience of care, equitable improvements in the health of populations, and a reduction in the burden of medical and non-medical costs to patients. Further, collection of REAL data can inform individual provider practices, health system understanding of variation in quality of care across sub-populations, and knowledge around where disparities persist.⁴⁵
- **Outcomes:** Providers must have capacity to collect, track, and report on outcomes to improve care internally and also compare performance to peers. Segmentation of REAL data will also highlight variation in outcomes amongst sub-populations.
- **Exchange:** Health systems must be able to securely transfer data internally and externally (with other health systems, community partners, social/human services agencies). For example, some health systems' grant community partners access to their EHRs to minimize the burden of transmitting data. Community partners may have limited access to technology, so it is important to be flexible and accommodate paper files, when necessary.
- **Integration:** Data must be linked, merged, or used in clinical applications. For example, when community partners have limited access to technology, health systems should convert data into a useable electronic format (e.g., entering it into a spreadsheet or database), for ease of EHR integration. Health systems can merge distinct data sets (e.g. administrative, incarceration, EHR) for a complete picture of the patient population.

Mechanism

Models disrupt standard care delivery and require policy and payment mechanisms to enable change. The most influential mechanisms to support innovation are:

- **Policy**, including internal health system, local, state, and federal policy, is one of the most powerful levers for change. The literature found that models have been initiated using state Medicaid waivers (e.g., 1115 waivers) or federal policies and programs (e.g., Children’s Health Insurance Program Reauthorization Act (CHIPRA)). The primary levers used to develop and implement health system models of care are waivers and State Plan Amendments (SPAs). Federal programs, such as Center for Medicare and Medicaid Innovation (CMMI) demonstrations and federal legislation, and state-level managed care requests for proposal (RFPs) enabled health system reform. At the state and federal level, health systems are limited by the policies pursued by their state Medicaid office. However, health systems may leverage internal policy mechanisms, such as community benefit dollar requirements, to provide sustainable support to address social needs.⁴⁶ As a result of the COVID-19 pandemic, policymakers have also facilitated the advancement of telehealth as a mechanism for health systems.
- **Payment models**, which include moving away from fee-for-service (FFS) payment mechanisms (e.g. capitated payments, bundled payments, and pay for performance) allow health systems the flexibility of spending to invest in non-traditional healthcare services and service redesign. Additionally, value-based care continues to be a priority across the country, but their presence and the specific focus of models vary by state.⁴⁷
- **Collaboration** between health systems and local community organizations is a strong mechanism for success. Experts contend that innovation is facilitated in communities where partnership between local stakeholders is vibrant. Medicaid beneficiaries have a broad spectrum of needs better addressed by community partners and organizations, social services agencies, and other non-healthcare stakeholders.
- **Standards**, such as accreditation, licensure, and maintenance of certification requirements, establish minimum thresholds for quality care and can influence provider behavior. The HSTRC Advisory Board members asserted that hospitals and providers prepare for accreditation, which can be a driving force for their internal policies. Graduate medical education (GME), the professional educational standards for medical care, could also serve as an important lever for changing physician behavior.

Defining Success

To develop the appropriate model for its target population, health systems must define success early in the model design and implementation process. Success should be defined based on community needs, the health system’s patient population, and the health system priorities and goals. Metrics for health systems to consider when defining models’ success include:

- **Community input and impact** defines intended impact of model on the community and type of community involvement in model implementation and evaluation.
- **Time** indicates the anticipated length of time for change to take effect.

- **Scope** defines the type (e.g., key characteristics) and total number of individuals a model of care or intervention is intended to reach.
- **Thresholds** define the number of patients reached that would define success, recognizing that a model of care or intervention is unlikely to reach every eligible individual.
- **Outcome measures** to assess whether the model is impacting measures of health equity through equitable improvements in patient experience of care, equitable improvements in the health of populations, and a reduction in the burden of medical and non-medical costs to patients.

3d. Solicitation and Selection of Grantees for Tests of Change

The HSTRC will consist of RWJF grantees that will conduct tests of change and evaluations over 12-to 18-month periods. Grantees will test how a model of care has direct impact on a set of person-centered defined outcomes for their population of interest. We are very interested in understanding how grantees can apply the Research Agenda to the health system models of care in developing over time and assess impacts from bringing that approach to their existing health system models of care ([Figure 2](#)).

For RWJF HSTRC grantees, the process of solicitation and selection will take place over a 3-month period in the fall of 2020. Specific criteria for RWJF HSTRC grantees will be outlined in a 2020 Call for Proposals (CFP) on the RWJF website. Since COVID-19 may impact health systems' ability to participate in the CFP there may be variation in timing for selection and research focus of RWJF HSTRC grantees.

Prioritized Topics of Research

Given the variation in how health system models of care are defined, the HSTRC is focused on components that drive model success, not model type or name (e.g., patient-centered medical home (PCMH), ACO). Many of the successful models examined through the Research Directory featured common components, including community health teams, patient engagement, data exchange, and cross-stakeholder communication ([Appendix 4](#)).

The HSTRC recognizes components of promising health system models of care and interventions as part of the evidence base. Solicitations should prioritize further strengthening the evidence base for these promising components or filling in gaps for components with a weak or small evidence base.

Priority Methods for Research and Evaluation

It is important to the HSTRC that future research includes participatory approaches, like community-based participatory research (CBPR)⁴⁸ and use of evaluation as a tool for advancing equity by applying principles of equitable evaluation.⁴⁹ Given the focus of participatory approaches is to conduct research “with” and not “on” the community, the method allows hierarchy of knowledge that traditionally prioritizes the researcher over the community to be

democratized.⁵⁰ For example, CBPR recognizes that engaging community throughout the research process leads to increased community participation, improved external validity, and a relevance to the community which increases the likelihood of model sustainability after research concludes.^{51,52} Incorporating community members also initiates a shift in power that aims to dismantle systemic oppression. Further, participatory models can promote health equity by allowing researchers to better understand the root causes of inequities in the community.⁵³ As such, routine community input on research design and outcomes is critical.

Indicators for Driving Towards Health System Goals

To determine whether research for tests of change are successful, grantees will be assessing their performance against their intended impacts and/or outcomes through evaluations. We will offer guidance to prospective grantees regarding what defines success but will allow for flexibility within that categorical guidance. We want grantees to measure success in a way that assesses impact on their specified target population. Suggested indicators^{54,55} to measure successful achievement of health system goals include:

- Equitably improve patient experience of care (including quality and satisfaction)
 - Patients' level of trust in staff⁵⁶
 - Interprofessional collaboration as a routine aspect of care and services provided⁵⁷
 - Assessment of whether patients report that their health and healthcare needs have been met
 - Percent of patients that can access a place they call their "medical care home" within 2 weeks' time
 - Patient satisfaction with medical encounters as a measure of culturally and linguistically appropriate care
- Improve the health of populations, including the distribution of outcomes across the population
 - Improvements in patients' quality of life (as a result of receiving care at the clinic)⁵⁸
 - Difference in outcome for whole system measure stratified by different subpopulations
 - Patient-reported health status
 - Health risk assessment scores
- Reduce burden of medical and non-medical costs on patients⁵⁹
 - Percentage of adults who report not being able to pay their medical and non-medical costs⁶⁰
 - Percentage of adults who reported difficulty in paying for basic needs (e.g., food, housing) due to medical costs⁶¹
 - Percentage of adults who reported not seeking medical care or dental care due to cost⁶²
 - Total patient out of pocket medical and non-medical (e.g., transportation) costs
 - Average number of patients reached by model per month⁶³

3e. Analysis and Use of Research

To ensure research funded through grantmaking creates sustainable transformation, Avalere will synthesize findings across grantees to understand results across tests of change. During this synthesis, Avalere will strive to work with grantees and Medicaid-eligible individuals to help interpret and prioritize lessons learned. Following synthesis of the tests of change, Avalere will integrate new learnings into the Research Directory. The Research Directory is intended to be a living document that incorporates new findings from research conducted as part of the HSTRC. Additionally, Avalere will work with the Advisory Board to refine the priority components for health system models of care. Refinement of priority components will allow for incorporation of new learnings into recommended priority components for health system models of care.

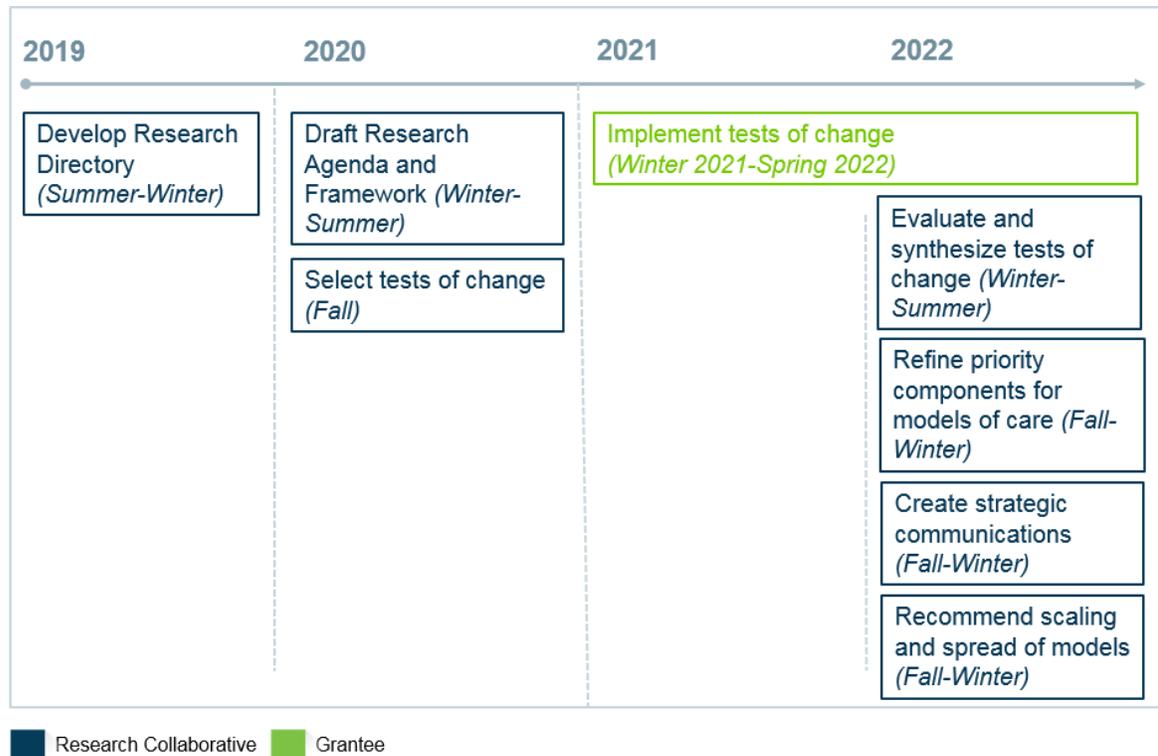
Avalere will build a translational and communication infrastructure to ensure learnings from evaluation and synthesis are accessible to various stakeholders, with a focus on those well-positioned to spread the research findings. To do this, Avalere will: 1) develop a plan of action to communicate the Collaborative's research; 2) create and manage a website to make the information readily available; 3) synthesize lessons learned; and 4) translate the work of the grantees into actionable resources to accelerate transformation.

Avalere will regularly engage the Advisory Board to identify models or interventions recommended for spread and scaling and accelerate health systems transformation. Spread refers to the replication of a model of care or particular intervention in a different population while scaling refers to widespread implementation of a model of care or intervention in a particular population.⁶⁴ While tests of change will likely impact a smaller number of individuals from the grantee's target population, the HSTRC aims for both spread and scale of promising health system models of care to ensure widespread health systems transformation.

4. Milestones

As detailed in [Figure 3](#), the HSTRC expects Research Collaborative activities to occur from Summer 2019 through 2022. Throughout the duration of the engagement, the HSTRC will continue to use learnings from RWJF grantees to refine existing priority components, and to ensure that priority components and lessons learned are included in future tests of change.*

Figure 3: HSTRC Research Agenda Timeline



5. Limitations of Research Agenda

We have identified 3 limitations of the Research Agenda. First, the HSTRC acknowledges that health systems cannot fully address all interrelated goals and needs of Medicaid-eligible individuals. Second, models of care are not expected to solve larger, systemic issues within the health system (e.g., systemic racism). However, health system models of care can begin to address some of these issues through small-scale changes, such as convening a diverse research team, or facilitating diversity and inclusion trainings for researchers prior to model implementation. These small-scale changes can gradually disassemble larger structural issues.

* Grantee evaluation will likely be staggered due to timing of other HSTRC grantees. However, the HSTRC will continue to synthesize tests of change and integrate new learnings into the Research Directory on an ongoing basis.



Finally, we recognize grantees models of care will vary in their ability to evaluate long-term outcomes. Further, the duration of RWJF HSTRC grants will likely not allow for grantees to evaluate long-term outcomes.

6. Conclusion

The HSTRC developed this Research Agenda to strengthen evidence regarding health system models of care that address the interrelated goals and needs of Medicaid-eligible individuals. The HSTRC hopes that researchers, health systems leaders, providers, and others working to transform the care of Medicaid-eligible individuals will use this Research Agenda to elevate models that are meeting these individuals' complex needs in a holistic manner and to prioritize resources and mechanisms that are critical to sustaining success of this type of model.

Appendix 1: Roles within the Research Collaborative

Multiple stakeholders are involved in the implementation of this Research Agenda as presented in the Research Agenda Framework ([Figure 2](#)). Below, [Table 2](#) further details the type and role of stakeholders involved in the development and execution of this Research Agenda.

Table 2: Key Research Collaborative Members Involved in the Research Agenda

Role	Definition
Advisory Board	The Advisory Board is a group of experts who provide ongoing guidance on how the Research Collaborative can transform the way health systems provide care to Medicaid-eligible populations. Advisory Board member responsibilities include vetting the Research Agenda Framework, reviewing the full Research Agenda, and collaborating with other Research Collaborative members to synergize efforts in advancing health equity for Medicaid-eligible individuals. The names and affiliations of Advisory Board members can be found in Appendix 5 .
Funders	Funders, including RWJF, participate in the Research Collaborative and help to shape the goals and content of the Research Agenda.
Grantees	Grantees are researchers/research entities funded to conduct tests of change of health system models of care for Medicaid-eligible individuals. The HSTRC will work with grantees to assess the success of priority components included in the model of care, identify new priority components, and discern and apply lessons learned in future tests of change. Grantees also engage with the Research Collaborative and share their findings to further understanding of the Research Agenda and needs for scaling and sustainability.
Health Systems	Health systems refer to facility-based provider organizations, or other provider organizations (e.g., public or essential hospitals, FQHCs, integrated

	<p>delivery systems) that serve a high percentage of Medicaid-eligible individuals. For the purposes of this work, health systems play various roles, including:</p> <ul style="list-style-type: none"> ○ Setting of care for research evaluating tests of change funded by RWJF HSTRC grantees and other HSTRC grantees ○ Role in research, either in executing the tests of change or leading research ○ Health systems leaders, who provide expert guidance in the Research Collaborative
<p>Research Coordinating Center</p>	<p>Avalere serves as the HSTRC or “Research Coordinating Center”. The HSTRC identifies gaps of understanding and evidence to change the ways in which research is generated, funded, and used to transform health systems – and ultimately improve health outcomes, especially for populations with the most complex needs. In this role, Avalere’s responsibilities include: leading the development of the Research Directory and Research Agenda, convening a Research Collaborative, fielding a CFP on behalf of RWJF, supporting grantee activities, and creating a sustainability plan for the HSTRC.</p>

Appendix 2: Research Directory Development Process

Development of Research Directory

Avalere developed a Research Directory over a 6-month period to assess how health systems currently address the interrelated goals and needs of Medicaid-eligible individuals. The Research Directory houses synthesized learnings from: 1) a targeted literature search; 2) 16, 1-on-1 telephone interviews with KOLs; and 3) 4 virtual focus groups with patients insured by Medicaid. The Research Directory is comprised of 8 components:

- **Component 1:** Health system models of care that promote health equity and meet people's interrelated goals and needs
- **Component 2:** Evidence-based clinical practice guidance documents that promote health equity
- **Component 3:** Tools/resources developed to facilitate implementation of identified models and practices
- **Component 4:** KOLs leading work in this area
- **Component 5:** Health system leaders successfully spreading new health system models of care
- **Component 6:** Funders promoting research to advance new health system models of care
- **Component 7:** Other best practices in health systems research and promoting health equity
- **Component 8:** Patient-reported experience with care they receive at health systems

Literature Search

Using 8 research components, Avalere performed a targeted literature search. Avalere searched PubMed and Google to identify relevant literature, guidelines, tools, and resources focused on meeting the interrelated goals and needs of Medicaid patients. Avalere included articles that met the following criteria: English-only, published in the last 10 years (2009-2019), human subject, free full text, and U.S. only. Avalere developed 23 search strings using Medical Subject Heading (MeSH) terms for specific care settings and topics of interest. Avalere initially reviewed 1,032 titles and abstracts for relevance and performed a full review on 333 articles from PubMed and Google. For the purpose of this literature search, Avalere defined the term "articles" as all published articles, white papers, grey literature, and other resources published online.

Avalere also performed targeted searches of the Better Care Playbook, Social Interventions Research & Evaluation Network (SIREN) Evidence Library, the Centers for Medicare & Medicaid Innovation (CMMI) website, Centers for Medicare & Medicaid Services (CMS) website,

and relevant Health Affairs issues published in the last 5 years to supplement findings from the PubMed and Google searches.

Focus Groups with Medicaid Beneficiaries

Avalere staff with qualitative expertise developed a moderator guide designed to illicit feedback from participants around patient goals and needs, successful care models, reasons for model success, challenges and barriers to model success. The guide was then refined and finalized with input from RWJF. To recruit focus group participants, Avalere partnered with the Savvy Cooperative, a patient recruitment organization. Savvy uses online platforms, such as Facebook support groups, and partnerships with patient advocacy organizations, to identify participants. Focus group participants were required to meet 1 of 3 coverage criteria: 1) be covered by Medicaid; 2) be the parent of a child with Medicaid; or 3) be dually eligible for Medicaid and Medicare. Additionally, participants were required to have at least 1 chronic condition, though most had multiple.

Interviews with KOLs

To facilitate conversation, the Avalere team created 2 moderator guides, 1 for leaders with a research focus and 1 for leaders with a policy focus. The guides were designed to elicit information regarding health system models of care, their evaluation, and reasons for success or challenges. To recruit KOLs, Avalere identified individuals through its own network, RWJF suggestions, findings from the literature review, or suggestions from other KOLs.

Following the completion of the Research Directory, Avalere synthesized findings and key takeaways to inform priority components for health system models of care. Specifically, Avalere identified promising health system models of care and promising interventions based on available evidence.

Appendix 3: Research Agenda Development Process

Development of the Research Agenda Framework

Following completion of the Research Directory in December 2019, Avalere developed a draft Research Agenda Framework. The Framework is intended to serve as a graphical depiction of the Research Agenda. Avalere took an iterative approach to develop the Research Agenda Framework. First, Avalere reviewed findings from the Research Directory to identify 1) key components of health system models of care addressing the interrelated goals and needs of Medicaid-eligible individuals, 2) health system models of care with promising or positive results, 3) interventions with promising or positive results, and 4) health system models of care with limited evidence for ongoing monitoring. Additionally, Avalere reviewed existing health equity^{65, 66, 67, 68} and socioecological models⁶⁹ to ground the Research Agenda Framework.

Next, Avalere conducted 30 to 60-minute, 1-on-1 in-depth telephone interviews with all 14 Advisory Board members and 10 health system leaders to garner input from KOLs on the draft Framework. Specifically, interviews sought to:

- Discuss areas for further development within the Research Agenda Framework
- Identify additional components for inclusion in the Research Agenda Framework to address Medicaid-eligible individuals' interrelated goals and needs
- Discuss ways in which the Research Agenda can be used to inform future research related to the interrelated goals and needs of Medicaid-eligible individuals

Avalere consolidated feedback from the Advisory Board and health system leader interviews periodically over 12 weeks to iterate on the Framework. As the Framework was updated, Avalere presented new versions to interviewees for feedback.

Finally, in March 2020, Avalere convened the Research Collaborative for a 3-hour virtual Dialogue Session. The main objective of the Dialogue Session was to build consensus for the Research Agenda Framework ahead of finalizing it. Following the Dialogue Session, Avalere consolidated attendee feedback, updated, and finalized the Research Agenda Framework.

Development of the Research Agenda

After finalizing the Research Agenda Framework, Avalere developed a draft Research Agenda. The Research Agenda aims to define:

- Prioritized topics of research, based on the current state of the field, and opportunities or needs for future research
- Roles of key stakeholders, including funders, in achieving the mission of the Research Agenda and the HSTRC more broadly
- Success metrics, including timing, to achieve the HSTRC's stated objectives



Throughout the development process, the HSTRC leveraged the Research Directory and Research Agenda Framework to ensure the Research Agenda was grounded in evidence.

Research Collaborative members were given 2 weeks to review and provide feedback on the full draft Research Agenda. Specifically, the Research Collaborative was asked to provide feedback on:

- Clarity of objectives in the Executive Summary section
- Topics of research prioritized in the Research Agenda Section 3, “Research Agenda Activities and Research Content”
- Clarity of how upcoming HSTRC activities can support implementation of the Research Agenda

Following the Research Collaborative review, Avalere consolidated feedback to identify areas of disagreement or comments that warranted additional discussion. Avalere then facilitated a 90-minute virtual Research Collaborative meeting to share the Research Collaborative’s feedback and to discuss areas of disagreement to reach consensus. Following the Research Collaborative meeting, Avalere finalized the Research Agenda.

Appendix 4: Promising Models and Interventions

Table 3: Examples of Models for Which There Is Promising Evidence

Model of Care	Components that Drove Model Success	Results
Vermont Blueprint for Health	<ul style="list-style-type: none"> • Practice facilitation by professional coaches who are trained in quality improvement (QI) and support PCMH recognition and ongoing QI (Activity/Intervention, Resources Required) • Community health teams that leverage OneCare's (ACO) risk stratification tools to link the most vulnerable patients to social and economic services (Activity/Intervention, Resources Required) • Flexible program implementation that allowed for evolving priorities (Mechanism) • Significant staff resources dedicated to community engagement (Resources Required) • Technical assistance and other implementation support to providers (e.g., learning collaboratives (Activity/Intervention, Resources Required) • Data exchange and availability of data repositories (Resources Required, Data) • State legislation to accelerate change (Mechanism) 	<ul style="list-style-type: none"> • Reduced costs^{70, 71} • Reduced emergency department (ED)/in-patient admissions⁷² • Greater proportion of out-patient care⁷³
Hennepin Health (ACO)	<ul style="list-style-type: none"> • Patient stratification and targeted engagement at point of highest need (e.g., when leaving jail) (Activity/Intervention, Data) • Cross-stakeholder collaboration that includes all major community parties (Mechanism, Activity/Intervention, Resources Required) • Community health teams comprised of nurse care coordinators, clinical social workers, and CHWs (Activity/Intervention, Resources Required) 	<ul style="list-style-type: none"> • Reduced medical costs⁷⁴ • Reduced ED visits⁷⁵ • Increased outpatient visits⁷⁶ • Improved quality of care⁷⁷ • Higher patient satisfaction ratings⁷⁸

Model of Care	Components that Drove Model Success	Results
	<ul style="list-style-type: none"> • Data exchange to share EHRs between medical and social services and the health plan (Resources Required, Data) 	
Oregon Coordinated Care Organizations	<ul style="list-style-type: none"> • Cross-stakeholder collaboration that includes a unique governance structure, healthcare providers, community members, and health system leaders (Mechanism, Activity/Intervention, Resources Required) • Patient engagement in model design and implementation (Activity/Intervention) • Care coordination (Activity/Intervention) • Regional-level focus through governance, financing, and care delivery (Target Population, Mechanism) 	<ul style="list-style-type: none"> • Reduced expenditures⁷⁹
Colorado Accountable Care Collaborative	<ul style="list-style-type: none"> • Cross-stakeholder collaboration to support communication channels that connect patients to resources (e.g., food, housing, job training) (Mechanism, Activity/Intervention, Resources Required) • Patient engagement in model design and implementation (Activity/Intervention, Resources Required) • Care coordination (Activity/Intervention) • Regional-level focus through governance and care delivery (Target Population, Mechanism) • Patient stratification and interventions targeted at patients with the most complex needs (Activity/Intervention, Data) 	<ul style="list-style-type: none"> • Reduced expenditures⁸⁰ • Reduced hospital admissions⁸¹

Within and independently from models, some interventions are proving essential to addressing Medicaid beneficiaries’ social needs, including incorporating certain staff roles (e.g., CHWs,^{82,83} care managers, and/or health resilience specialists^{84,85,86}) into a multidisciplinary care team.

Table 4: Examples of Interventions for Which There is Promising Evidence

Intervention	Components that Drove Intervention Success	Results
CHWs	<ul style="list-style-type: none"> ● Thoughtful recruitment and onboarding (Resources Required) ● A standardized approach to patient action plans for achieving goals (Activity/Intervention) ● Patient-centered approach for goal setting rather than condition- or disease-focused (Defining Success) ● Cross-stakeholder collaboration with community organizations with aligned missions to provide data and referrals, and with MCOs, FQHCs and safety net providers (Mechanism, Activity/Intervention, Resources Required) ● Prioritizing outreach to underrepresented groups (Target Population) ● Clear job descriptions and protocols (Resources Required) ● Liaisons who interfaced between clinical and non-clinical staff (Activity/Intervention, Resources Required) ● Rigorous CHW interview process (Resources Required) ● Establishing CHW as a career instead of relying on grant funding for 1-off engagements (Resources Required, Mechanism) ● Broadly trained CHWs instead of condition-specific trainings (Resources Required) ● Meeting high risk patients where they are to deliver CHW services (Target Population, Resources Required) 	<ul style="list-style-type: none"> ● Improved quality of care⁸⁷ ● No difference in patient satisfaction, physical health or medical adherence⁸⁸ ● Reduced recurrent readmissions⁸⁹ ● Reduced Medicaid spending⁹⁰

Intervention	Components that Drove Intervention Success	Results
Care Management	<ul style="list-style-type: none"> ● Patient stratification (Activity/Intervention, Data) ● Cross-stakeholder collaboration between service providers relevant to the patients in the community and with CBOs (Mechanism, Activity/Intervention, Resources Required) ● Patient-centered approach instead of disease- or condition-specific (Defining Success) ● Community health team that supports patient management across multiple settings (Resources Required) 	<ul style="list-style-type: none"> ● Reduced Medicaid spending⁹¹ ● Savings impact per patient⁹²
Health Resilience Specialist	<ul style="list-style-type: none"> ● Thoughtful recruitment and onboarding (Resources Required) ● Patient engagement in their own health management by sharing information on available social services and prescription adherence (Activity/Intervention, Resources Required) ● Community health team to support patients and help clinicians understand patients' complex needs (Resources Required) ● Meeting high risk patients where they are to deliver services (Target Population, Resources Required) 	<ul style="list-style-type: none"> ● Increase in behavioral health visits⁹³ ● Reduced rates of ED visits and hospitalizations⁹⁴ ● More use of primary care services⁹⁵ ● Savings impact per program participant⁹⁶

Appendix 5: Contributors to Development of the Research Agenda

Name	Affiliation	Role within HSTRC
Victor Armstrong, MSW	North Carolina Department of Health and Human Services	Advisory Board Member
Neil Calman, MD, FAAFP	Institute for Family Health	Advisory Board Member
Roberta Capp, MD, MHS	Blue Cross Blue Shield of North Carolina	Advisory Board Member
Sameera Fazili, JD	Federal Reserve Bank of Atlanta	Advisory Board Member
Eliot Fishman, PhD	Families USA	Advisory Board Member
Laura Gottlieb, MD, MPH	UCSF Social Interventions Research and Evaluation Network (SIREN)	Advisory Board Member
Ivor Horn, MD, MPH	Angel Investor	Advisory Board Member
Julie Hudman, PhD, MPP	Vikasa Health	Advisory Board Member
Dora Hughes, MD, MPH	George Washington University	Advisory Board Member
Ann Hwang, MD	Community Catalyst	Advisory Board Member
Nupur Mehta, MD, MPH, FACP	GW Medical Faculty Associates	Advisory Board Member
Ross Owen, MPA	HealthPartners	Advisory Board Member
Bayley Raiz, DBH	Kaiser Permanente	Advisory Board Member
Clare Tanner, PhD, MS	Michigan Public Health Institute – Data Across Sectors for Health (DASH)	Advisory Board Member
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