



RWJF HSTRC Action Brief: How Can Technology Support Health Systems Transformation?

Avalere Health | An Inovalon Company
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The Action Brief Explores Technology As A Component of Care Health System Leaders Can Implement

THE ACTION BRIEF COVERS THE FOLLOWING SECTIONS:

Overview of Action Brief

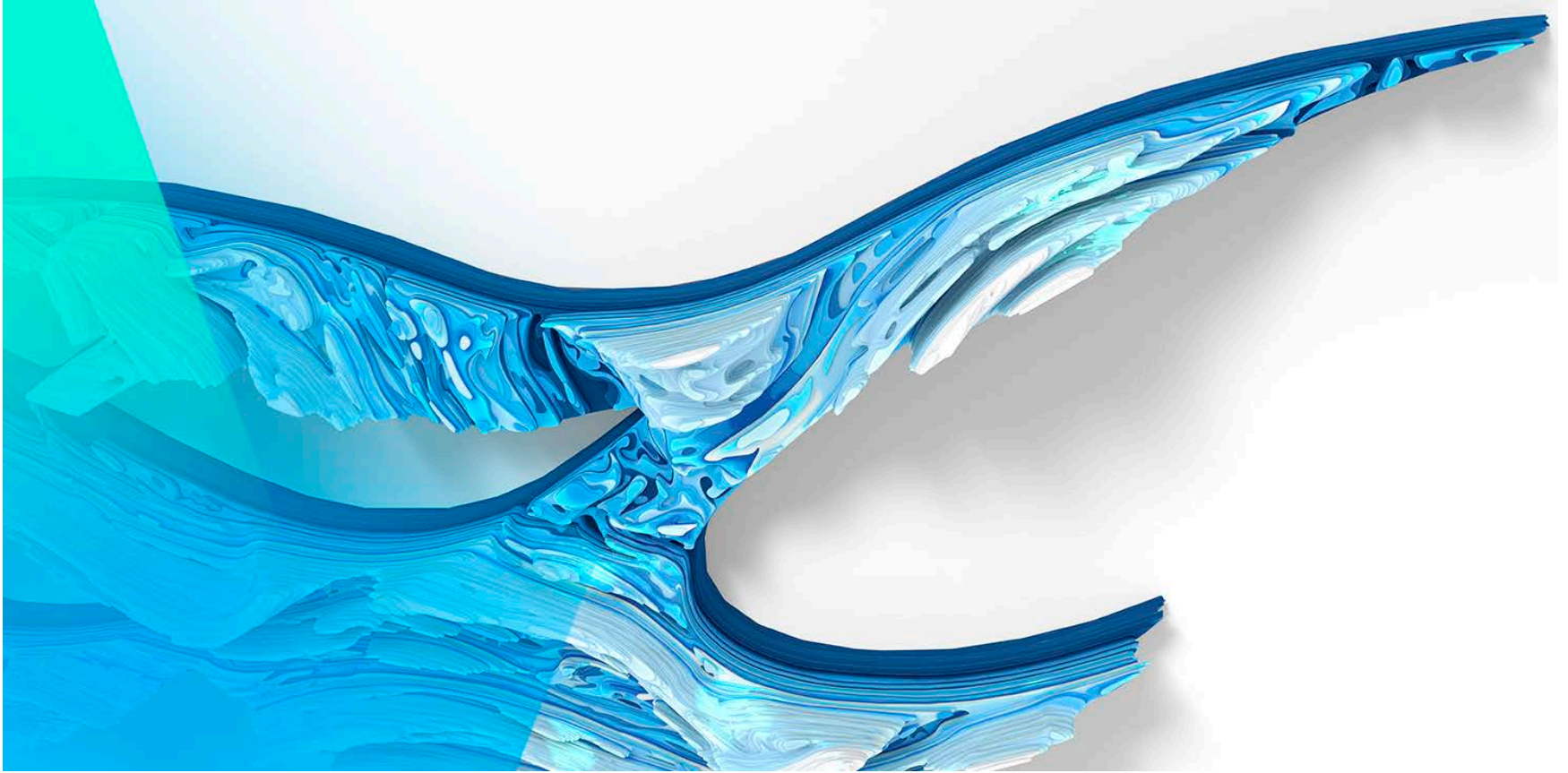
Purpose & Key Takeaways

Priority Component of Care: Technology

Recommendations & Next Steps

Further Information & References

Appendix



Overview of Action Brief

RWJF HSTRC Action Brief: Background & Overview

Overview: Under Task 6 of the Health Systems Transformation Research Coordinating Center (HSTRC) project, Avalere is charged with developing an Action Brief for health system leaders, which will include recommendations for how to engage health system leaders in adopting and spreading new models of care and research emerging from the HSTRC.

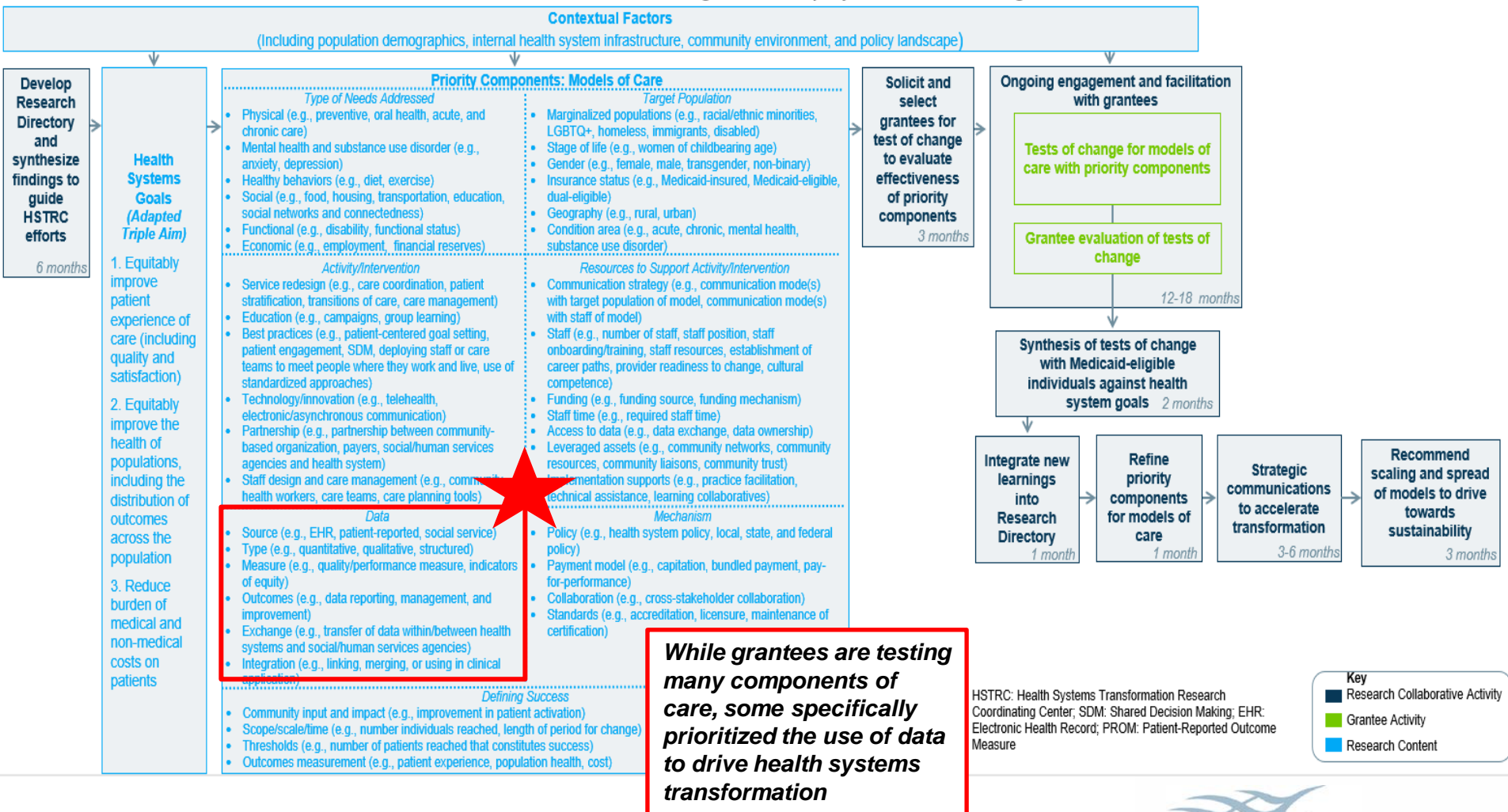
Background and Objectives:

- 1** **Inputs:** Between January and March 2020, Avalere conducted interviews with 10 health system leaders to discuss how they can support the spread of new models of care and research that emerges from the Research Collaborative. In addition to HSTRC grantee applications and interim updates, these interviews provided a breadth of knowledge regarding current gaps in care transformation, as well as identified barriers and facilitators of implementing new models of care.
- 2** **Audience:** Health system staff (clinical and non-clinical) and administrative/clinical leadership responsible for implementing new models of care (title will vary, but could include providers, medical directors, practice manager or administrator, etc.).
- 3** **Objectives:** 1) Highlight best practices of implementing technology as a priority component of care for models serving Medicaid-eligible populations; 2) Provide a living document with a “how-to” implementation guide for the selected component; and 3) Showcase example health systems that have successfully executed the selected component into their models.

Final Product: After dissemination to grantees and other health system leaders, the Action Brief will be posted to the HSTRC website for health system leaders to utilize in their daily practice.

Data Stood Out As A Prioritized Component of Care for Grantees and Interviewed Health System Leaders

HSTRC Framework for Promoting Health Equity for Medicaid-Eligible Individuals



Avalere Health. "Research Agenda for Health Equity Released in Collaboration with RWJF." July 2020. [Link.](#)

How Can Technology Support Health Systems Transformation?

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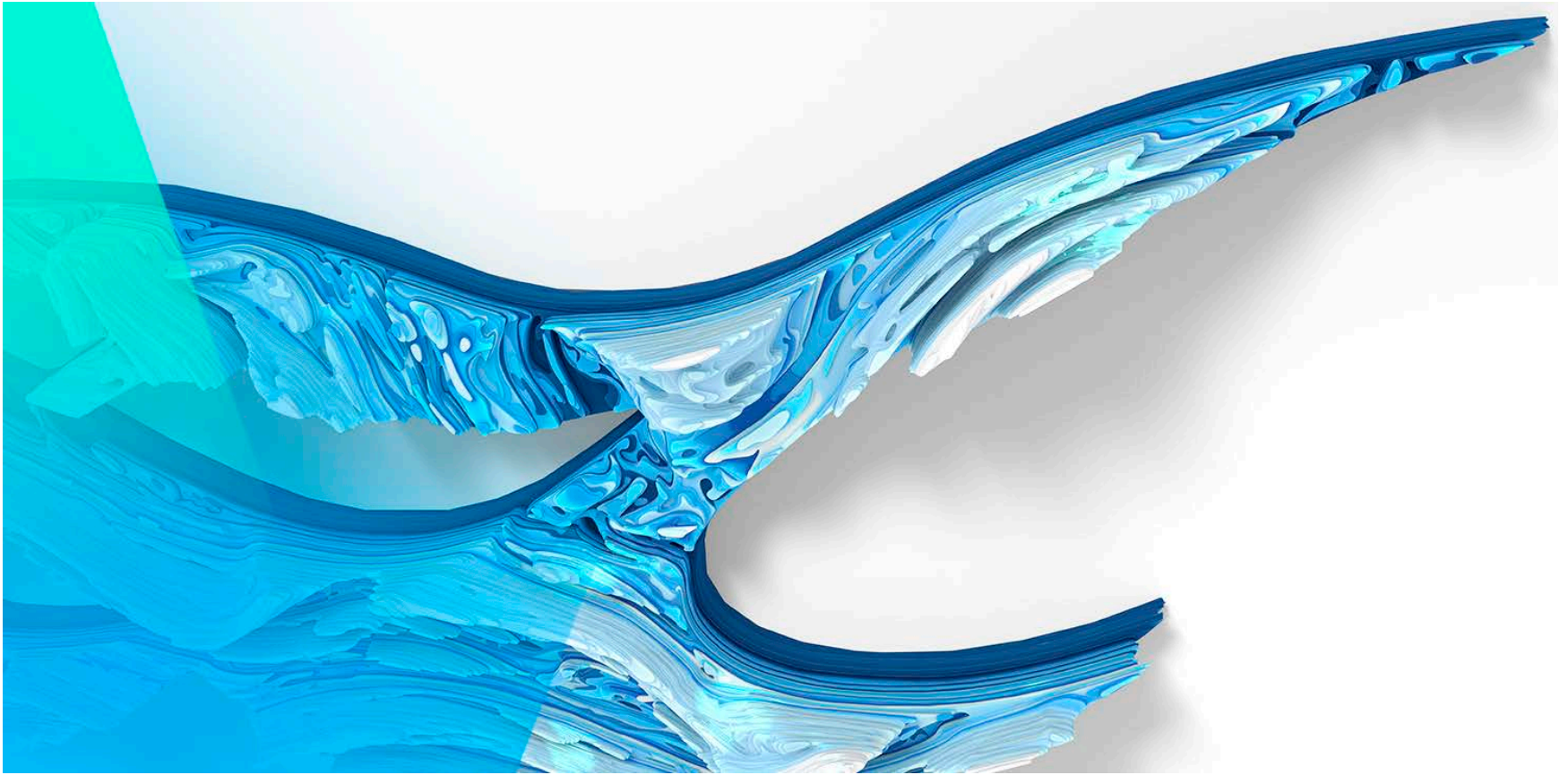
Aim / This action brief intends to provide health system leaders the necessary steps to implement technological advances into their practice by sharing relevant lessons learned and best practices.

Key Takeaways /

- Advancing data exchange and integration in clinical practice can improve workflow, support equitable patient care, and demonstrate program ROI
- Finding the right internal champions and aligning with an IT team early in program design can alleviate legal challenges
- Telemedicine and digital apps are an emerging form of engagement to explore

“The transformed system has to embody the ability to link data across multiple sectors and at multiple levels, from the planet to the neighborhood in order for us to understand how we got here, where we are right now, and what we are facing ahead.”

- Commissioner Raymond Baxter, National Commission to Transform Public Health Data Systems



Priority Component of Care: Technology

Health System Leader Interviews and Grantee Feedback Informed 3 Key Insights

Leveraging innovative technology, strong data collection methods and linkages, and expanded telemedicine has the potential to:



“Data integration across a wide range of sources, the sheer volume of health-related data, and increased computing power and technological innovation together hold great promise for the development of proactive, data-driven solutions that improve health, equity, and well-being.”

- National Commission to Transform Public Health Data Systems

RWJF. “Charting a Course for an Equity-Centered Data System: Recommendations from the National Commission to Transform Public Health Data Systems.” October 2021. [Link](#).

HSL: Health System Leader; ROI: Return on Investment

Data Integration and Data Exchange Support Improved Workflow And More Equitable, Holistic Care Delivery

Data Integration Streamlines Documentation and Tracking

Workflow Follows Documentation

- Creating inclusion criteria extractable from EMR to streamline patient IDs and improve timeliness of intervention¹
- Integrating data systems to bill more effectively and reduce admin burden²
- Directly accessing EMR data to build population dashboard and demonstrate value and outcomes to providers²
- Integrating SDOH data directly in the EMR to expand model's reach²
- Tracking Medicaid enrollment and use of social benefits to understand uptake across health and non-health services³

"If we could share and gather data more effectively, the support services would be more efficient, and we'd see less duplication of effort."
- Robin Wittenstein, Denver Health

1. Penn Center for CHWs 4. Ochsner Health System

2. St. Joseph's Health 5. JPS Health Network

3. Benefis Health System 6. HealthPartners

EMR: Electronic Medical Record; ID: Identification; SDOH: Social Determinants of Health

Cross-Sector Data Exchange Support Care Coordination

High-Needs Populations Require Integrated Data Systems

- Collecting SDOH data to address individualized barriers and provide whole-person care informed by data⁴
- Creating dashboards to meaningfully engage patients, update care plans, and drive clinical outcomes²
- Partnering locally to flag at-risk patients, gain new patients, define population⁵
- Identifying cost-savings across sectors to see where investments are going⁶
- Pulling on various data sources to better understand / define population²

"We need a huge system of data to connect the services helping this population (e.g., data from shelters, prisons, hospitals). This is a huge opportunity and significant deficit that we're trying to figure out how to address."
- Robin Wittenstein, Denver Health

Demonstrating Cost Savings And Improved Outcomes Reaps Buy-In from Different Stakeholders

Demonstrating clear ROI can position a program as an organizational priority and help it get “on the radar”¹

Departments invest in research if they can expect improvements to their program²

Population-specific data and outcomes attracts attention from local policymakers²

RCT data that demonstrates ROI and the intervention’s benefits can support overall operations³

ROI data can dictate where to invest short-term for the quickest benefit⁴

“We’ve been able to create cross sector datasets. I think [one opportunity is] understanding intersections between public investment and total costs societally across different programs and thinking about outcomes.”

- Ross Owen, HealthPartners

1. JPS Health Network
2. Hennepin Health
3. Penn Center for CHWs
4. HealthPartners

ROI: Return on Investment; RCT: Randomized Control Trial

Difficulties Working with Data and Connecting with IT Present Significant Challenges to Health Systems

Health Systems Face Data Barriers

- Difficult to find dedicated IT team¹
- Delays in claims data, lack real-time data²
- Lack of institutional support; securing funding is dependent on motivated few²
- Unclear ownership of social services data²
- Slow linking of manual datasets²
- Providers unable to see how CBOs meet patient needs³

Recommendations From Health Systems on Overcoming IT Barriers

- Integrate IT into the research team¹
- Attract IT through innovative program design or relevant waiver (i.e., 1115)¹
- Partnership between research group and local stakeholders to jointly develop programs²
- Form data linkages in-house to guard privacy²
- Appoint county IT to bring in political perspective / priorities²
- Partnering on-the-ground to better understand datasets² and with community organizations capable of direct EMR documentation⁴
- Create platform to sync with EMR to demonstrate how CBOs meet patient needs³

“[Biggest challenge is] merging data, analyzing data, and working with data scientists.”
- Katherine Vickery, Hennepin Health

1. JPS Health Network

3. Johns Hopkins HealthCare, LLC

2. Hennepin Health

4. St. Joseph's Health

IT: Information Technology; DSRIP: Delivery System Reform Incentive Payment; EMR: Electronic Medical Record

Case Study: Integrated Health System Secured Direct EMR Access for Community Partners in Legal Win

Overview: St. Joseph's Health (New York) is an integrated system built into a Medicaid Health Home. The model benefits from being clinically integrated and adds to its EMR system by allowing community-based entities direct access.

Making A Business Case: Initially managing 2 data protocols, St. Joseph's struggled to get approval for sub-contracts' direct access to Epic.

- St. Joseph's had internal EMR data but needed outside expertise and data to help define the target population (i.e., PEH)
- Internal champions advocated for access to legal team by demonstrating value (i.e., improved billing, reduced administrative burden, streamlined tracking)
- Program team looked at the health system's highest-need populations to find the right community partners (e.g., Salvation Army) and grant them access to document directly in the EMR

St. Joseph's used its broad access to EMR data to build a detailed dashboard for their target population, which regularly pulls from the EMR to show outcomes (e.g., ED use) and to identify gaps.

"I was just really stubborn and made it clear we couldn't have 2 different data systems for tracking. It was a battle for legal compliance."

- Kristen Mucitelli, St. Joseph's Health

Several Models of Care Implement Digital Advancements Through Apps And Telemedicine

Penn Center for CHWs

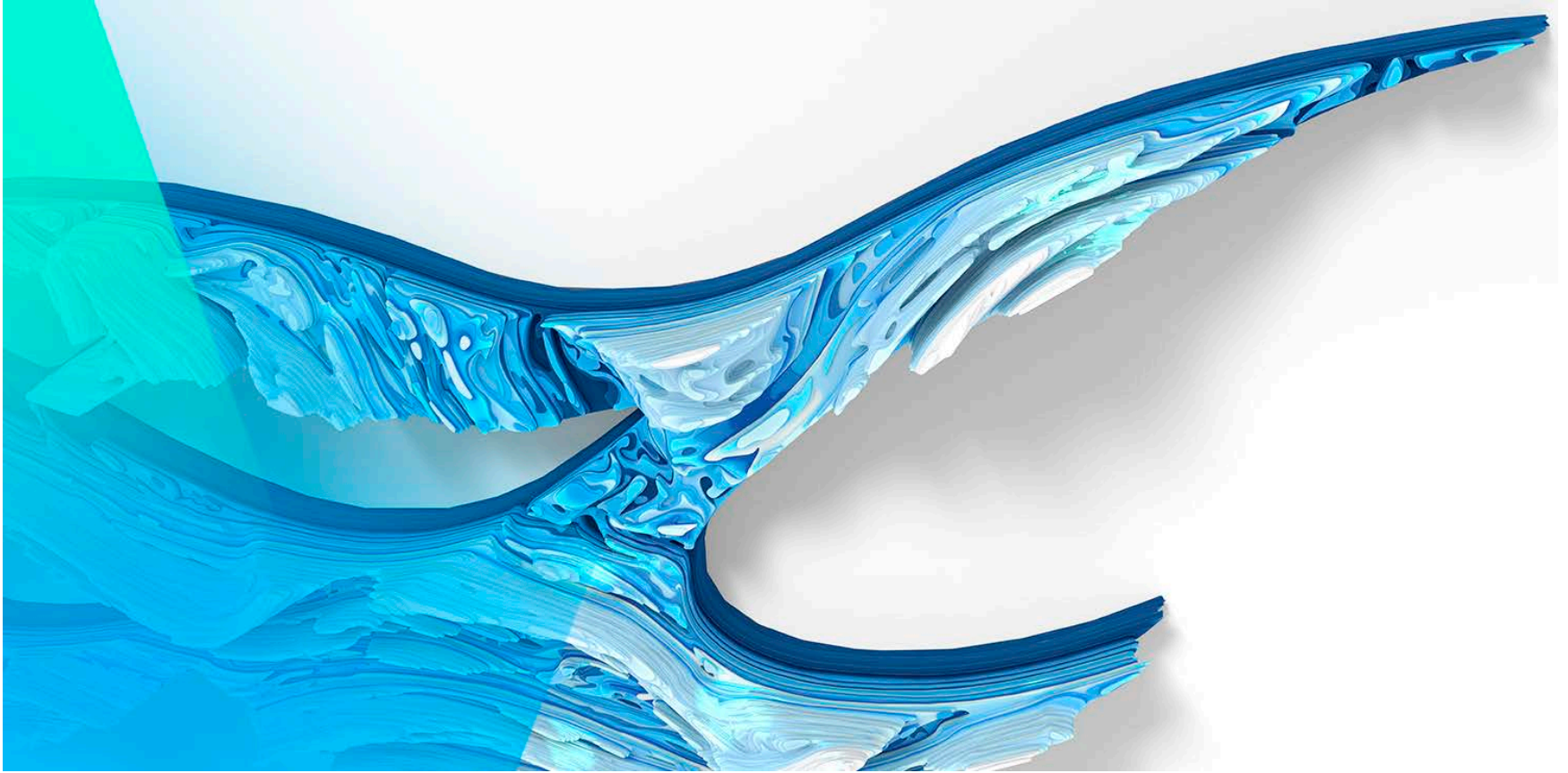
- Designed an app to align documentation with program workflow & model
- Reports automatically pull from notes for to-do lists
- Data dashboards track team outcomes & compare against CHWs
- Coordination pulled from EMR organizes patients
- App streamlines workflow beyond existing EMR functionality

Trustees of Boston

- Model invests in FQHC telehealth capacity, training, infrastructure
- Evaluates effects of telehealth on quality of care / patient experience
- Plans to share best practices for optimizing telehealth's quality and equity, design telehealth playbook for testing and scaling at safety nets, prime for integration into Medicaid 1115 waiver
- Faced difficulty recruiting patients virtually

NORC at UC

- Model evaluates telehealth service delivery for rural Head Start (HS) programs serving culturally & linguistically diverse children
- Aims to understand how telehealth affects access and health outcomes through an RCT
- Assess sustainability of telehealth payment models among Medicaid-eligible populations
- Disseminate a toolkit for broader telehealth uptake



Recommendations & Next Steps

Health System Leaders Can Take Immediate Action to Implement Technology As A Component of Their Model

Opportunities /

- Collect standardized SDOH and other “non-clinical” data during patient identification
- Use data to identify inequities and unmet needs faced by your target population and promote meaningful patient care and health equity
- Build partnerships (i.e., community, governmental, IT) and legal solutions to facilitate data exchange with social services and departments in a timely, efficient manner that allows for stratification
- Support a clinical workflow and identify incentives to establish data integration into an EMR

Recommendation /

Use research findings in this Action Brief to engage colleagues and practice leadership through conversations and/or in a presentation during a staff meeting AND integrate these findings and case studies into a data or IT conversation for training your organization’s staff.

“Helping health systems develop [real-time data] and collaborate across systems can speed up some of this data work that is so frustrating otherwise.”

- Tyler Winkelman, Hennepin Health

Further Information & References

Please find additional resources below.

1 [HSTRC Website](#)

2 HSTRC Toolkit*

3 [Research Agenda](#)

4 [Recommendations from the National Commission](#)

*Final link forthcoming

“[A transformed public health data] system must be fully integrated with healthcare and other sectors that drive health by linking data across multiple sectors and at multiple levels, and provide data that are disaggregated, comprehensive, and timely.”

- National Commission



Appendix:
HSTRC Background & Overview

In 2019, HSTRC Was Established to Advance Health Equity Through a Multistakeholder Research Collaborative

Needs Statement: RWJF is supporting this multiyear initiative to bring together relevant research, consider the merits of various models, and identify gaps in our understanding and evidence.

Key objectives of HSTRC include:

Launching a Research Collaborative to change how research is generated, funded, and used to transform health systems that advance health equity and meet people's interrelated goals and needs

Implementing a robust Research Agenda that advances the goals of the Research Collaborative

Developing an actionable sustainability plan to ensure the Collaborative's success and the attainment of the long-term goals outlined in the Research Agenda



HSTRC's work predominantly focuses on advancing systems and care delivery models that support Medicaid-eligible individuals.

Avalere Developed the Research Agenda Framework to Inform the Research Agenda for Grantees Testing Components

HSTRC Framework for Promoting Health Equity for Medicaid-Eligible Individuals

