



HEALTHDOERS
NETWORK

HealthDoers Network Peer-To-Peer Event Summary

The Intersection of Clinical Data, Claims and the Social Determinants of Health: Integrating Multi-Sector Data to Create Health Out of Healthcare

January 23–24, 2017
The Health Collaborative
Cincinnati, OH

EXECUTIVE SUMMARY

To truly support the overall health of any individual, communities must meet both medical and non-medical needs. This requires true integration of clinical services with community supports if we are to address what is known as the social determinants of health (SDOH) — factors like housing, education, behavioral health, food and nutrition and personal safety. To date, however, the medical and social sectors rarely interact let alone share data and information.

75+ stakeholders from across the social service and healthcare spectrum — who wholeheartedly agree that integrating clinical and social services is the right work to do and that now is the time to do it — gathered in January, 2017 to collaboratively tackle this daunting work. Participants included representatives from a variety of social service agencies, data analysts, providers, hospital administrators, national policy experts and leaders of regional health improvement collaboratives (RHICs).

The event was hosted by the HealthDoers Network, an initiative of the Network for Regional Healthcare Improvement (NRHI), and supported by the Robert Wood Johnson Foundation.

Participants repeatedly acknowledged that many barriers to change exist in the current environment. The size, difficulty and complexity of this effort means organizations need to figure out how to “eat the elephant one bite at a time,” as one participant said.



Actionable Takeaways

1. Build/leverage relationships and trust with key community partners; other stakeholders will ask questions you have not thought of.
2. Identify priority work for your region and establish the value proposition to engage others.
3. Follow the money (e.g., high cost, high need populations) to help identify priority work and funding.
4. Identify what data you have that is “good enough”.
5. If you want new data, always ask, “Is the juice worth the squeeze?”
6. Move towards standardized data, but don't get bogged down.
7. Determine resource capacity for the selected service(s), i.e., don't unknowingly create demand that cannot be met.
8. Create ways to measure the value of your work.
9. Share the qualitative stories and quantitative data about your learnings!
10. Be confident and humble as a HealthDoer.

By dedicating their time and staff resources to this event and the ongoing work that was identified during their time together, regions effectively committed to figuring out a collaborative way to succeed. The crucial conversations and constructive debate participants engaged in is just the beginning of their work to integrate medical and non-medical data and services so as to improve health outcomes and cut costs.

Through these frank discussions the group as a whole identified building blocks and began to establish an actionable framework. This framework is structured around:

- strong cross-sector relationships
- mutually supportive leadership and governance
- a constant focus on the patient's wishes
- a dedication to holding each other accountable

Together, these participants committed to identifying and mining existing data sources, establishing standard measures for data collection and agreed to work together to build a balanced system of sharing information across all sectors.

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“Payment and policy have shifted to make social determinants of health a priority. The time is now to build the data infrastructure to connect an individual to services across the clinical and social services spectrum so patients and providers can succeed in identifying and influencing the wide range of factors that affect health.”

*— Elizabeth Mitchell, President and CEO,
Network for Regional Healthcare Improvement (NRHI)*

INTRODUCTION

At a time when the United States is spending \$3-trillion on healthcare — about the equivalent of the entire French economy — and the Centers for Medicare & Medicaid Services (CMS) is predicting that total medical care spending as a percent of gross domestic product (GDP) will increase from 17.5% in 2015 to 20.1% by 2025¹, there is the reasonable expectation that we would be experiencing the best healthcare, if not the best health outcomes, in the world. Yet the United States trails many other developed and developing countries when it comes to life expectancy, infant mortality, obesity, and more.²

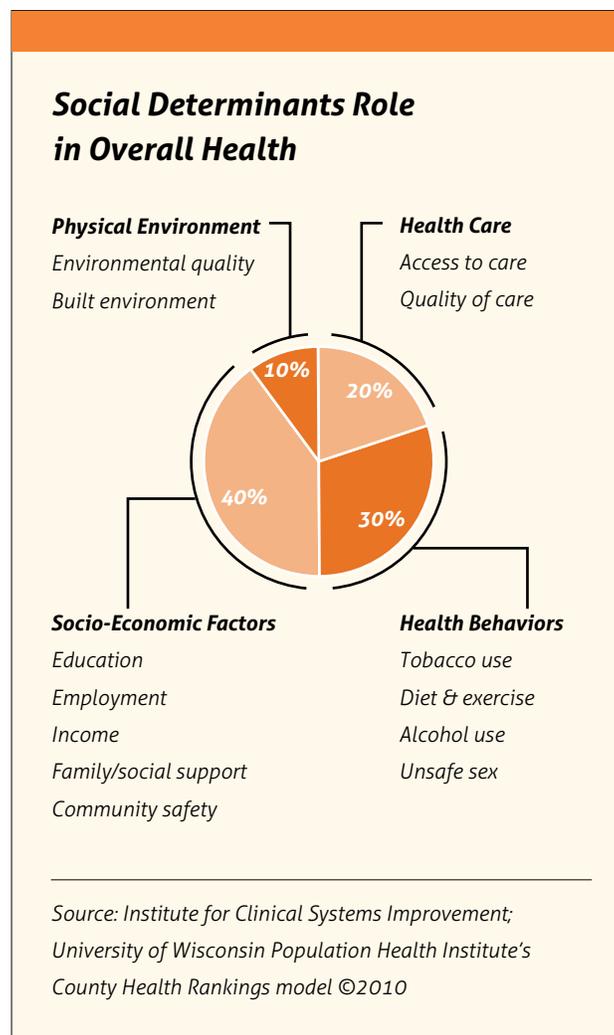
Increasingly, this reality is prompting attention and research into what role non-medical issues, or social determinants of health (SDOH), play in an individual’s and population’s overall wellbeing, and how they factor into what’s termed “total spend on health”, which Leavitt Partners defines as “health expenditures that extend beyond traditional clinical care costs or total cost of care measures to include costs related to social determinants of health”.

¹ National Health Expenditure Data Fact Sheet, Centers for Medicare & Medicaid Services, 12/2/16)

² Squires D, Anderson C. U.S. Health Care from a Global Perspective: Spending, Use of Services, Prices, and Health in 13 Countries. 2015 Oct 8

Determining how to connect individuals and populations to needed clinical and social services that will improve their health, and then tracking their progress across all fronts is critical to achieving successful health outcomes and reducing healthcare costs. Further, requirements under the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) are pushing provider organizations toward accountability for population health, increasingly tying these population health outcomes to payment and shifting the focus from volume to value. Embracing SDOH is necessary to long term sustainability of healthcare organizations.

To this end, on January 23–24, 2017 the HealthDoers Network held a Peer-to-Peer event in Cincinnati, Ohio, to explore SDOH and ways to collaborate on multi-sector data collection, reporting and sharing. Participants shared best practices for building a data infrastructure to support collaboration between health systems, social services agencies and communities, leveraging data and engagement and developing a business case for the integration of SDOH, claims and clinical data.



Key themes that emerged from the event include:

- There is a cultural divide between public health/social service organizations and health/clinical organizations that must be bridged for successful integration of SDOH and health services. Relationships across these sectors need to be developed under clear governance structures.
- A data environment that includes and integrates SDOH is increasingly important as we move to value-based payment. Prioritizing and standardizing measures in terms of what data to collect, how to collect it and how to effectively share it across stakeholders will create efficiencies for all stakeholders.
- A clear value proposition needs to be established and communicated in order for stakeholders to justify dedicating resources and time to data — especially for providers who feel burdened.
- Immediate opportunities exist for mining and integrating existing data as opposed to creating new data streams.
- Leveraging public payer momentum toward value-based payment (e.g., MACRA, Medicaid) and the downstream benefit of addressing SDOH to achieve savings may accelerate programs.
- Models or “bright spots” exist across the country that show these approaches work.

This is a summary of key takeaways that emerged from this dialogue and next steps for physician leaders, social service agencies and regional health improvement collaboratives (RHICs) moving forward.

“We need to remember social services are not the same as social determinants of health. Giving someone food does not get to why the person is hungry.”

*— Sanne Magnan, M.D., PhD, Co-Chair,
National Academies of Sciences Roundtable
on Population Health Improvement*

GETTING STARTED: WHY ARE WE HERE?

The United States is justifiably locked in heated debates over how to make healthcare affordable and equitable. Because so much of our health is driven and determined by factors outside of the healthcare system, to successfully reduce costs while improving outcomes requires incorporation of SDOH in the equation.

“SDOH are the conditions in which people are born, grow, live, work, learn, worship and age,” said Sanne Magnan M.D., PhD, Co-Chair, National Academies of Sciences Roundtable on Population Health Improvement, during opening remarks at the event. “When we look at the overall health of a population, only 20% is related to access to quality medical care. The other 80% is related to the non-medical determinants such as healthy behaviors, socio-economic conditions and the environment. We need the overall system to ensure resources, payment and investments align with actual health needs.”

To begin, Mangan says stakeholders should be aware of “polarities” in their work which can create tension. These polarities are often viewed as opposites and conflicting, yet are inter-dependent, and need to be managed effectively. Mangan offered a list of polarities present in bridging clinical care and public health/community work. Recognizing and holding these polarities in creative tension will further the work. “You are all knowers. You are all learners. Two polarities but in the end, you are all doers.”

POLARITIES IN FOCUS

Vision and Specifics

In SDOH work, there are visionary people who do not prioritize next steps, and there are implementers who are bogged in the details. Yet vision without specifics is a dream, and tactics without a vision are busywork. In our multi-sector collaborations, we need both.

Community and Individual

Changing SDOH requires that we address them on a community level through policies and systems changes and an individual level with clinical services. For example, raising the price of tobacco products is the most effective intervention for decreasing tobacco use. But it must be combined with tobacco quit lines and pharmacotherapy to support tobacco users in their cessation efforts.

Population and Equity

Aggregate SDOH population data must be accompanied by data stratified by race, ethnicity, age, income, geography, etc. As David Kindig, M.D., PhD, Emeritus Professor of Population Health Sciences with the University of Wisconsin says, “We must raise the mean and close the gaps.”

Public and Private

Multi-sector collaborations to address SDOH need both public and private contributors. They may have different perspectives and needs but looking for common ground can bring additional resources and options.

Process and Outcomes

All work is a process, and we want improved processes (and policies) for better SDOH that can lead to better health outcomes. For example, providing food to someone in need is a good process and may lead to better outcomes. But it is not the same as addressing food insecurity resulting from poverty.

POLARITIES IN APPROACHES

Evidence-based and Evidence-informed

Evidence-based approaches are the gold standard. But in new emerging areas such as SDOH in health care, we need innovation that is based on the best evidence available. Innovate and evaluate — many “plan-do-study-act (PDSA)” cycles.

Planning and Taking Action

Good plans are invaluable, but the balance between planning and taking action must not be waylaid by “perfect is the enemy of good.” Multi-sector collaborations will find a diversity of people on both sides of this polarity. Listening for the right balance will be crucial.

Short-term and Long-term

Having short-term and long-term objectives will be important in addressing the SDOH in healthcare and the community. There are entrepreneurs looking for short-term opportunities and big-picture people looking for long-term plans. You need both.

Leading and Following

There is a power differential between health care, and social services and the community. Health care leaders need to listen to and follow community wisdom — building community capacity and trust.

Answers and questions

Often we are looking for answers or best practices. Yet in emerging fields such as the integration of SDOH with healthcare, the answers may be in the questions. For example, “How do I get started?” The answers are “What problem or population do I most want to address?” “What outcome do I hope to achieve?” “What data can I use?”

POLARITIES IN ATTRIBUTES

Data-driven and stories

We need both quantitative and qualitative data to drive action. For example, the point-in-time count of homeless people is useful but more powerful when combined with a story of the impact of homelessness on a family.

Technical and adaptive

An example: creating standard data definitions for SDOH is a technical challenge. Integrating and using this data across health care and community partners require addressing adaptive challenges — changes needed in attitudes, values, beliefs, and roles.

Confident and humble

We want boldness in moving forward, but we must have a healthy dose of humility. For example, we want to address obesity, but patients and/or community members say that violence and safety are the most pressing issues to them. Identifying what is important to patients, health care and community members — finding common ground(s) — requires both confidence and humility.

“There is a lot of good work going on across the states... but there are also a lot of one-offs. We need to identify what’s working and how to scale it.”

*— Kelly Cronin, Care Transformation Director,
Office of National Coordination for Health
Information Technology*

NATIONAL PERSPECTIVES: THE VIEW FROM WASHINGTON, D.C.

Amidst adjusting to a new administration, Kelly Cronin, Care Transformation Director for the Office of National Coordination for Health Information Technology, took the time to update event participants on how the federal government views the integration of SDOH into healthcare transformation efforts.

Federal agencies increasingly view capturing SDOH data as critical to the success of value-based payment systems.

“There’s been a lot of excitement around social determinants of health in the last year or so,” said Cronin. “We know a lot more about what’s happening in states and many communities. There is a lot of good work going on across the states... but there are also a lot of one-offs. We need to identify what’s working and how to scale it.”

Federal agencies look to the many lessons learned from Accountable Care Organization (ACOs) and efforts to serve high-cost, high-need populations (e.g., “dual eligibles” — those who qualify for Medicare AND Medicaid). Cronin says stakeholders need to be able to identify who is in a subset, how to stratify risk and how to meet the needs of the whole person — including the non-clinical factors — that drive outcomes. A useful approach, Cronin suggests, is to follow the money that is spent on services these individuals use.

Communities need to identify what to solve for, what their SDOH priorities are and how data fits into that equation.

Communities need to identify the priority uses of SDOH services so they can develop effective risk assessment standards, target interventions, determine eligibility and provide appropriate referrals to community service organizations. "If you know what your needs are, you can automate that referral." One example is how [MyHealth Access Network](#), in Oklahoma, is making automated referrals.)

There is widespread interest in getting more granular and reliable about risk adjustment. SDOH data is critical to formulating rates and setting risk adjustment. Some promising approaches around SDOH are [New York Health Homes](#) and Massachusetts' community risk scores.

Communities need to identify variables and standardize data measures.

Stakeholders should identify what they need, what data assets they have and how to leverage those to build a model that works for their community and state.

Some promising approaches where communities are leveraging existing data and measures: Washington State is building a dashboard that incorporates claims data from their State Innovation Model (SIM), Department of Health survey data and SDOH information; Hennepin County in Minnesota started an Accountable Care Organization that partners effectively with social service agencies in communities.

Government, health system and community organizations need to work together to identify variables and how to standardize measures in order to successfully meet the needs of individuals in an efficient and cost-effective way. This involves accounting for variables at point of capture, in patient self-reporting and in systems each agency or organization uses to capture data. Standardizing measures across stakeholders requires mutual recognition of what the measures are, how to support the adoption of established standards, what are the tools organizations will use to capture and share data and how to fund a unified approach. Cronin reminds stakeholders that many times they will find "no one size fits all".

Building in incentives for all stakeholders will be key to achieving buy-in.

The success of efforts to integrate SDOH and healthcare depends on strong, trusting relationships between social service staff, providers and state partners as well as building in incentives for stakeholders to engage in this work collaboratively. For example, MACRA provides incentives for collecting data. Organizations need to leverage these types of factors to establish a business case with staff so data collection isn't seen as just another added task. Congress and federal agencies are concerned about provider burden and will be working to minimize this burden.

There is bi-partisan recognition and support for integrating data around social and medical services on a national scale such as directives in MACRA.

A strategic goal in MACRA's Quality Payment Program is to improve data and information sharing. At the same time, Medicaid is an important driver.

Cronin emphasized that RHICs can help the new Administration and other leaders understand that standardization is critical to affordability and cost reduction, that a multi-year agenda is needed and that government can play an important role in engaging the provider community in the work of integrating non-medical services into overall care.

“Focus on the data you have...not the data you want.”

— Niall Brennan, former CMS Chief Data Officer

Niall Brennan, who formerly worked as Chief Data Officer at CMS, shared perspective on building a database to support integration of non-medical needs into care models. He emphasized that over the next three years, CMS will focus on operationalizing and standardizing data with an eye toward minimizing the burden on the provider.

Brennan says when building a system to collect, analyze and share data around anything (e.g., SDOH), stakeholders should ask EVERY time how the data they are considering fare against these questions:

1. How much will it cost to collect this data? "Is the juice worth the squeeze?"
2. How good is the data? Is it standardized?
3. How comprehensive is the data? Does it include 5%, 10%, 50%, 100% of people?
4. What level of granularity does the data need to be at? Patient-level data gets very expensive quickly unless it is collected as a by-product of something else (e.g., office visit, social service usage).

CMS offers access to SDOH data, including: race, income proxies, dual eligibility and claims data. Other federal agencies that offer SDOH data include: Health and Human Services, Housing and Urban Development, Transportation, Education, etc. State and County government agencies are also a treasure trove. "Focus on the data you have ... not the data you want," Brennan advises. Government data is available — use it!

Some examples of data tools that are working well:

- [Blue Button](#): is a government enabled way to engage patients in their own health management by providing them access to data, ways to share it with their providers and the ability to use the information in conjunction with other health management programs. A Medicare beneficiary can download up to three years of claims.
- [Accountable Health Communities](#): A 5-year CMS initiative to promote clinical-community collaboration around health-related social needs screening, referrals and assistance to individuals navigating a broad spectrum of clinical and non-medical services. CMS will implement and test a three-track model based on promising service delivery approaches. Each track features interventions of varying intensity that link beneficiaries with community services.

Brennan also highlighted the [Current Medicare Beneficiary Survey](#), where CMS collects detailed information on 16,000 individuals every year at a cost of \$20 million in an effort to have a continuous, nationally representative sample of the Medicare population. Brennan's assessment is that at that cost, it would not be practical to expand this survey as some people had suggested.

Brennan concluded that the RHIC model of leading collaboration regionally is a strength and that in many ways, the RHICs are ahead of the curve in terms of addressing SDOH. By connecting multi-stakeholders across medical and non-medical services, setting clear priorities for integrating SDOH into clinical approaches, and collaborating on how to build a data infrastructure together will bring you far fast.

“Success in integrating medical and non-medical data would be a seamless flow of information from patient to provider to social service to CMS and back to patient.”

*— Niall Brennan, Former
Chief Data Officer, CMS*

REGIONAL PERSPECTIVES: WHAT'S WORKING

The HealthDoers Network invited two regions to share their progress and learnings around efforts to integrate SDOH and clinical data.

Colorado

Kristin Paulson, JD, MPH, Director of Health Care Programs the Center for Improving Value in Health Care (CIVHC), shared key takeaways from the System for Resource Connection (SouRCe) initiative, which focuses on the redesign of care delivery, transparency and payment reform.

Paulson highlighted one case study around food insecurity since hunger is a major challenge in managing diabetes. The team looked at how they could better address this and other social resource needs in Colorado.

They looked to other nationally recognized models such as Health Leads, to determine what elements might work well for rural areas and populations. After 1,200 hours of stakeholder interviews around researching SDOH they uncovered tremendous inconsistencies with data collection, social resource access and resource referrals. However, they were able to assess what data was available from sources like United Way 2-1-1, state agencies and health systems.



Voices From The Field:

Colorado:

The Center for Improving Value in Health Care (CIVHC): System for Resource Connection. This initiative focuses on the redesign of care delivery, transparency and payment reform. The team built "Colorado Source", a tool to capture SDOH data in a way that will support widespread integration with clinical, claims and other data sets.

Features include:

- Recipient profile
- Needs assessment
- System selects- resources that meet the needs of the patient
- Provider connection to the recipient
- Provider follow up prompts

While challenging, the work has enabled the team to create a collective solution that involves health systems, providers and patients in collecting SDOH data. The criteria they identified for such a system:

- Flexibility
- Timely
- Accurate
- Accessible
- Data-producing
- User friendly
- Low cost
- Effective
- Sustainable

With a partner in California, the team built a platform for the system, called “Colorado Source”, to capture all of these data points. They are now working with diverse stakeholders and local funders to determine a collaborative approach for statewide implementation.

Standardization has been critical. The team identified workflows for various settings, ways to improve cultural competency and training to ensure appropriate communication regardless of the care setting or population being addressed.

Using the Colorado Source Database

The Colorado Source Database is accessed through 6 simple steps.

- 1  Provider **BUILDS** care recipient’s **PROFILE** in the Colorado Source Database
- 2  Provider completes a **NEEDS ASSESSMENT** for care recipient to identify appropriate social needs
- 3  **SYSTEM SELECTS** resources that meet the care recipient’s needs based on their profile (socioeconomic, geographic, etc.)
- 4  **PROVIDER SELECTS** which resources best match the needs of their care recipients from the system’s selections
- 5  **PROVIDER CONNECTS** care recipient to identified resources by assisting with paperwork, calls, forms, etc. to aid in enrollment
- 6  **PROVIDER** will **FOLLOW-UP** within a two week window to verify that the connection was made between the care recipient and selected resources

Cincinnati

Robert Kahn, M.D., MPH, Cincinnati Children's Hospital described how his health system trains providers to screen and collect SDOH information on physiologic health, safety, belonging, hunger, self-esteem, poverty, joblessness and homelessness. Kahn says making this as easy as possible for the providers is critical. When appropriate, care teams use the information to make referrals to social service and community organizations. Funding for such referrals can be challenging but they are often very effective. Kahn highlighted one such case.

In 2010, providers at Cincinnati Children's Hospital had a partnership with the Legal Aid Society of Greater Cincinnati (Legal Aid). The providers were trained to ask about SDOH, e.g., housing in children with asthma. In one case of a child with worsening asthma, Legal Aid intervened with the child's landlord to correct sub-standard housing conditions that were contributing to asthma exacerbations. In relative quick succession, 16 children with asthma were identified as living in a handful of buildings all owned and managed by the same landlord out of New York. Lawyers at Legal Aid helped residents form tenant associations, and eventually a coalition of community organizations secured a \$30-million Housing and Urban Development grant to refurbish the apartments, including new ventilation systems and mold removal. The children's living situations improved, and as a result so did their health, including reduced asthma rates.



Voices From The Field:

Cincinnati: Working with the Legal Aid Society

"Housing plays a really important role in asthma: mold, mildew, cockroaches, rodents all make asthma worse. And so we've been very attentive to what are some of the out-of-the-box things we can do for asthma."

– Robert Kahn, M.D., MPH, Cincinnati Children's Hospital

To hear Robert Kahn, MD, MPH of Cincinnati Children's Hospital describe in his own words how his organization approaches SDOH and their work with the Legal Aid Society, watch this video: <https://vimeo.com/201783081>

You can also read this New York Times account: <http://tinyurl.com/hs3fg8w>

OPERATIONAL CHALLENGES: 10 THINGS THAT ARE HARD

As the self-proclaimed “data geeks” for the Center for Improving Value in Health Care (CIVHC), Jonathan Mathieu, PhD, Vice President of Research and Compliance, Jonathan Mathieu, PhD and Kristin Paulson, MPH, Director of Health Care Programs, are all too familiar with the challenges of operationalizing efforts around data collection, reporting and sharing. They are also familiar with what it takes to do it successfully. As a tool for communities to use when planning and building data infrastructure to support collecting, reporting and sharing multi-sector data on SDOH, they offer this Top 10 List:

1. Data Governance

Data lives in many different places. Governance is a system or structure for “governing” access to the data and determining who can have access to the data, for what purposes and under what conditions. Key questions from a governance perspective include: What data do stakeholders need? How do stakeholders get the data they need? Where does the data live? How can it be combined with other data from disparate sources? Who owns the merged/combined data? How do organizations provide appropriate access?

2. Privacy, Security and Legal

In this work, stakeholders can get caught up in the rules and requirements around data privacy and security. They need to develop and share best practices on how to address these issues. Community programs may not have the resources necessary to develop adequate privacy and data security measures to handle, protect and store protected personal health information (PHI).

3. Relationship Management

Health system and provider buy-in for collecting SDOH and other data from multiple sources can be difficult to obtain, but it is critical to progress. Sensitivity to existing reporting burdens and what it would take for key stakeholders to make the necessary data available is essential.

Establishing and communicating a clear business case that such data collection and sharing ultimately helps improve patient outcomes is a key element of this effort.

4. System Platform

How do stakeholders build a platform to efficiently collect data from multiple sources and share actionable information in a functional way? How do they adapt to the availability of additional data sources? These systems must need to be flexible, adaptable, and have the ability to identify and match individuals across data sources to avoid duplication of identity. (i.e., collecting data on same person in different places with no cross reference).

5. Integration of existing data

Where can stakeholders find existing SDOH information? (e.g., Department of Education, Department of Transportation, community based organizations, etc.) How can data from multiple sources be tied together as it is being pulled into an integrated health/SDOH system? (E.g., Multiple United Way 2-1-1 systems in Colorado that are not synchronized or interconnected). Planning for these challenges and building workarounds into an integrated data infrastructure will be key.

6. Community Resource Capacity

Stakeholders need to understand and plan for adequate social service resource capacity. Increased demand resulting from integration with health services can overburden existing community resources. Without consistent reimbursement, service providers will not be able to support additional need.

7. Data Access and Visualization

Are interfaces intuitive to use? Are they usable in multiple formats (e.g., mobile, tablet, laptop)? How is the data recorded on services made available in a patient's home — particularly rural areas? How does the

system address cultural variation and different needs? (For example, rural farming areas have very different needs than metropolitan or business-oriented neighborhoods). Once the data has been created, how do stakeholders work with it? How will the data be made available? Who will use it?

User-friendly data collection tools must be available and functional at point of care/service. Once initial data is collected and shared, stakeholders must also have tools to make the data/information actionable.

This will help secure buy-in across stakeholders, greatly enhance standardization of measures and, once the data has been collected, will provide better access to other stakeholders.

8. Workforce and Training

Training the existing workforce on integrating SDOH into the clinic involves training individuals on a system, but also identifying how new tasks will be incorporated into existing workflows of widespread users (e.g., patient navigator, resident, social worker, provider, etc.) and how users will be able to share best practices. How do you constantly keep people trained on data collection, input and analysis?

This is particularly important after the data has been collected and access becomes a reality. How much training is required to get users up to speed in different areas (e.g., urban, rural, frontier)? How often is training required? Can this be made as simple as possible? Can people, once trained, serve as trainers for others in their offices? Can someone with modest computer and information technologies (IT) skills learn to use the tool and information relatively simply and easily?

9. Evaluation

Evaluating the integration of SDOH into traditional healthcare will be critical for sustainability. What data is needed to show the effects of that integration? What metrics or measures can reflect the impacts of the change? How will stakeholders determine which areas are successful and where expansion or reduction in services are needed? Compiling the

data to show impacts and point to appropriate next steps will involve extensive data integration and analysis. How do stakeholders get people to focus on health instead of healthcare? For example, do they need a bus route in a neighborhood? Food program?

How do we know whether SDOH efforts are making a difference? Can we develop standard metrics and ways to measure progress?

Who needs to be involved? What perspectives on this are important? (e.g., population health improvement patient and community level success stories).

10. Sustainability

Social resources and services already struggle with financial sustainability, and rely heavily on grants and state funding for continued operations. Integrating SDOH into healthcare and collecting data creates a new system level that is outside of current healthcare funding. How do we pay for ongoing operations? Will this new mechanism integrate into existing healthcare payment methods? How will we ensure the system continues to meet needs with accurate and up to date information? How do we keep data collection systems up to date? How do we pay for constant upgrades?

Once built, how do we maintain the systems? How do we ensure data and information available is current?

ORGANIZATIONAL DESIGN CHARACTERISTICS FOR MULTI-SECTOR DATA USE

Craig Brammer, CEO of The Health Collaborative in Cincinnati shared lessons learned through Gen-H, a 7-county initiative encompassing Greater Cincinnati and Northern Kentucky. Through the project, 100 community leaders across multiple sectors committed to a goal of 70% of adults in the region reporting excellent or very good health, and 95% reporting access to a usual and appropriate source of care. Brammer also incorporated lessons learned while developing, implementing and operating HB (HealthBridge) Suite products and services, which bring together disparate data from many sources on 3.4-million individuals. He says the following characteristics are needed to establish effective collaboration around SDOH database systems:

Leadership alignment and support for a data-driven agenda

Leadership alignment is essential to the success of any effort to collect and share data across multiple sectors. You can generate the necessary enthusiasm and buy-in by working with existing committees and workgroups whose members include: community organization leaders, social service providers, health system chief information officers, technical operations leaders, chief executives from health systems and health plans, comprehensive primary care data workgroups, physicians and public health officials.

Workforce alignment to ensure successful outcomes

Technical expertise across organizations is a fundamental workforce element — including expertise in things like identity management to prevent repetition and inefficiency (e.g. Enterprise Master Person Index (eMPI) is the central “source of truth” for identification and classification of patients). There are many other factors to consider to ensure the workforce is up to the task: should an organization dedicate staff or hire contractors or consultants? How will providers and other users be trained? Do organizations have resources to handle work queues?

Data Governance

The transition to a new process must be carefully managed to ensure efficiency, efficacy and a *participatory* model. Organizations will want to access the data in ways that best meet their needs. The data infrastructure must ensure balance between providers, social service organizations and payers by using a common method to standardize and “normalize” data (e.g., HB Suite pulls data from 30 different sources — it is challenging but possible). Systems must also talk to each other to prevent “layering” — redundant reporting on the same individual in different systems.

Privacy & Security

There is a broad landscape of regulatory and accreditation organizations: HiTrust, DirectTrust, Electronic Healthcare Network Accreditation Commission (EHNAC), Qualified Entity, etc. Social service organizations may not have the experience with these requirements, and assistance will be needed.

SMALL GROUP DISCUSSIONS: PRIORITIZING SDOH WORK IN YOUR REGION AND OPERATIONALIZING SDOH WORK IN YOUR REGION

Participants broke into small group discussions to brainstorm about a specific SDOH priority in their region and how to operationalize the work. Some examples of approaches being piloted or implemented in regions around the country include:

San Diego: Housing

Debbie Kennedy, Vice President of Operations for San Diego Health Connect shared how her region is working to pilot The Whole Person Project as a method to tackle housing as a SDOH issue. The program seeks to establish a systematic and comprehensive approach to addressing Medi-Cal beneficiaries who are high-cost, frequent users of Emergency Departments and/or inpatient services, and are currently experiencing homelessness or are at risk of homelessness. One of the key elements of the program is a “navigator of navigators” who would help each individual connect to services across the clinical and social service spectrum.

Multiple Regions: Education

Marc Bennett, President and Chief Executive Officer of HealthInsight identified education as the SDOH priority for the region his organization serves. Several regions suggested working with state departments of education to access and analyze high school graduation rates and how SDOH data connects to/influences those rates. The goal is to identify what services and programs keep students in school AND healthy.

Multiple Regions: Food Insecurity

One potential approach identified was to collect data about the location of full service grocery stores to identify underserved neighborhoods, overlay them against surveys of intake of fruits and vegetables and see if people can be identified who may not necessarily be hungry but whose diet may be leading to health issues (e.g., Interactive Health in Illinois

does such a survey that gives a snapshot of food access and nutrition). One approach is to move produce into communities through mobile food trucks and food pantries and see if there is a change in health outcomes when nutritious food is made available.

Multiple Regions: Childcare

One potential approach identified was to establish a baseline of what childcare programs are available, quality of early childhood development programs, who can access both and what gaps exists. Stakeholders can then analyze the collective data to see return on investment evidence through links/connections to clinical data.

Multiple Regions: Medical Legal Support

The consensus is that the medical community needs to understand how legal challenges sometimes link directly to health and how to bridge the data to identify collaborative approaches across social workers, lawyers and hospitals. (E.g. \$1,000 spent on legal services could help avoid \$20,000 for pediatric emergency department visits.) Managed care organizations often foot the legal bill by being forced to share the risk. Physicians need to be able to see the results of referrals.

CONCLUSION

Stakeholders across the social service and healthcare spectrum are increasingly recognizing that to achieve the ultimate health goals of affordability, reduced cost and better outcomes, the medical and social service sectors must implement coordinated approaches to collecting, measuring and sharing SDOH information and tracking individuals across all services.

By dedicating their time and resources to participating in this the Peer-to-Peer event, stakeholders in effect committed to engaging in this work in their regions. Participants came away with new contacts from across the country, ideas for forming relationships across sectors, understanding of how to identify SDOH priorities in their region, tools and examples of how to build data infrastructure to collect and share SDOH data, and most importantly, a sense that they can collectively succeed.

The HealthDoers Network will continue to share resources, lessons learned and best practices to help stakeholders get started or to accelerate their SDOH work. We look forward to continuing the conversations online and in person.

For more information on the HealthDoers Network and how to join, go to <https://community.healthdoers.org/home> or contact Lydia Kinney (llkinney@nrhi.org), the HealthDoers Community Manager.



Next Steps:

1. Build/leverage relationships and trust with key community partners; other stakeholders will ask questions you have not thought of.
2. Identify priority work for your region and establish the value proposition to engage others.
3. Follow the money (e.g., high cost, high need populations) to help identify priority work and funding.
4. Identify what data you have that is "good enough".
5. If you want new data, always ask, "Is the juice worth the squeeze?"
6. Move towards standardized data, but don't get bogged down.
7. Determine resource capacity for the selected service(s), i.e., don't unknowingly create demand that cannot be met.
8. Create ways to measure the value of your work.
9. Share the qualitative stories and quantitative data about your learnings!
10. Be confident and humble as a HealthDoer.

ACKNOWLEDGMENTS

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About the Network for Regional Healthcare Improvement (NRHI)

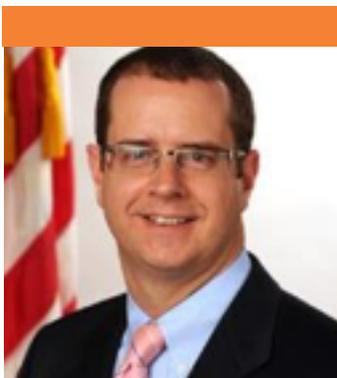
The Network for Regional Healthcare Improvement is a national organization representing more than 30 regional multi-stakeholder groups working toward achieving the Triple Aim of better health, better care, and reduced cost through continuous improvement. NRHI and all of its members are non-profit organizations, separate from state government, working directly with physicians, hospitals, health plans, purchasers, and patients using data to improve healthcare. For more information about NRHI, visit www.nrhi.org.

About the Robert Wood Johnson Foundation

For more than 40 years the Robert Wood Johnson Foundation has worked to improve health and healthcare. We are working with others to build a national Culture of Health enabling everyone in America to live longer, healthier lives. For more information, visit www.rwjf.org. Follow the Foundation on Twitter at www.rwjf.org/twitter or on Facebook at www.rwjf.org/facebook.

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Mr. Brennan directed leading-edge research and analysis published by CMS, as well as efforts to make its considerable data sets available to external researchers seeking to promote better understanding of health care in the United States. He also managed CMS' extensive data and information product portfolio.

Prior to joining CMS, Mr. Brennan worked at the Brookings Institution, the Medicare Payment Advisory Commission, the Congressional Budget Office, The Urban Institute, and Price Waterhouse Coopers. He is a graduate of University College Dublin, and earned a master's degree in Public Policy from Georgetown University.

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She's also acted a senior advisor to the Administrator for the Centers for Medicare & Medicaid Services and supported the establishment of their Center for Innovation.

Prior to ONC, Ms. Cronin directed patient safety initiatives at the Food and Drug Administration and worked for the House Energy and Commerce Health Subcommittee. Her work experience also includes health services research and clinical trial administration.

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Robert S. Kahn, MD, MPH, is a general pediatrician and child health researcher.

Dr. Kahn's main interest lies at the intersection of poverty and child health, trying to understand what

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Dr. Kahn attended Princeton University and Vanderbilt University School of Medicine. At Children's Hospital in Boston, he completed his residency in pediatrics and a fellowship in primary care research. At the same time, he obtained a Master of Public Health at Harvard School of Public Health. Dr. Kahn came to Cincinnati Children's in 1999 as an assistant professor of pediatrics within the University of Cincinnati College of Medicine.

Currently, he is a professor and associate director of the Division of General and Community Pediatrics. He now helps to direct the Community Health initiative in the Strategic Plan, and he is co-director of the Cincinnati Child-Health Law Partnership.

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Sanne Magnan, MD, PhD is the former President and CEO of the Institute for Clinical Systems Improvement (ICSI) (2006-2007; 2011-2016).

Dr. Magnan served as Commissioner of

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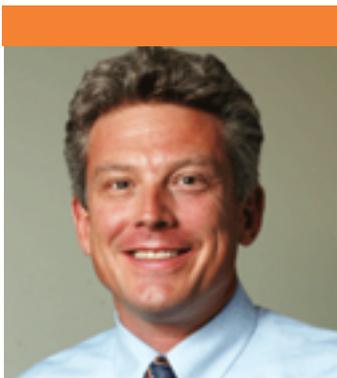
Dr. Magnan was a staff physician at the Tuberculosis Clinic at St. Paul- Ramsey County Department of Public Health (2002-2015) and a clinical assistant professor of medicine at the University of Minnesota. Her previous experience includes Vice President and Medical Director of Consumer Health at Blue Cross and Blue Shield of Minnesota.

Dr. Magnan holds an M.D. and a Ph.D. in medicinal chemistry from the University of Minnesota, and is a board-certified internist.

She currently is co-chair of the National Academy of Medicine's Roundtable on Population Health Improvement, a member of the Population-based Payment Model Workgroup of the Healthcare Payment Learning and Action Network, a member of the CMS Multi-sector Collaboration Measure Development Technical Expert Panel, and a Senior Fellow with HealthPartners Institute. She has served on the board of MN Community Measurement and the board of NorthPoint Health & Wellness Center, a federally qualified health center and part of Hennepin Health. She was named one of the 100 Influential Health Care Leaders by Minnesota Physician magazine in 2004, 2008 and 2012.

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Prior to her work at CIVHC, Ms. Paulson worked in organ transplant data analytics and policy through the University of Minnesota Department of Medicine and Center for Bioethics, and the United Network for Organ Sharing. Ms. Paulson completed undergraduate work in Biology at the University of Colorado at Boulder, and completed her Juris Doctorate and Master of Public Health work through the University of Minnesota's joint degree program in Law, Health, and the Life Sciences.

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Craig Brammer, In December 2012, Craig Brammer began a new role leading Greater Cincinnati's health care transformation efforts. Craig was tapped to be the first person to serve as Chief

Executive Officer of the combined operations of the Greater Cincinnati Health Council, the Health Collaborative and HealthBridge. As CEO, Brammer is responsible for overseeing the strategy and coordination of the region's health improvement initiatives.

Brammer, a Cincinnati native, was previously at the Office of the National Coordinator for Health Information Technology in Washington, DC, where he focused on the intersection of technology and payment policy, and led a \$260 million Federal technology innovation program.

Brammer was familiar with the Greater Cincinnati health care community from previous positions. Prior to serving in the federal government, he led several regional initiatives including the Humana-sponsored Physician Leadership Program, the Health Collaborative's Aligning Forces for Quality program — the signature health care improvement initiative of the Robert Wood Johnson Foundation—and research to inform Ohio Medicaid's pay-for-performance approach. He also holds a faculty position at the University of Cincinnati.

Brammer earned his Master's degree in Organizational Behavior at the University of Cincinnati. He has authored numerous studies on health policy, health IT, performance measurement and payment reform.

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