Shared Savings Playbook:
Developing Accountable Health Communities

&

Environmental Scan Report
The potential of shared-savings models to support integrated health and social services for complex patients

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Developing Accountable Health Communities: A Community Shared Savings Playbook

Objective and Mission Statement: The goal of the Shared Savings Plan playbook is to assist communities through the development of a shared savings model in their community that compromises a multitude of service providers, including those in the areas of clinical health care, social services, behavioral health and public health.

Intended Audiences: The intended audiences of the playbook are community leaders from diverse sectors. It is designed to be an easy to understand tool for the many questions and thoughts to consider in the design of a successful Shared Savings Program (SSP). This Shared Savings Playbook is not designed to be a prescriptive tool for a community, but rather a guide for communities that aim to develop an integrated social service and clinical community health network. A basic understanding of the needs and resources in a community, as well as the basics of shared savings will greatly aid the use of this tool.

Introduction

The current health care system is not well equipped to manage patients with complex medical and social needs. It has been widely shown that a small portion of patients consume a large, disproportionate share of health care costs. This group of high costs patients includes but is not limited to those with unmet social needs such as housing and food insecurities, limited support networks, substance abuse, health illiteracy, and job loss. The ability of a community to better address the holistic needs of the population will raise the health of the entire community and lead to better health outcomes for the population as whole.

From small communities to state governments, there is a range of efforts going on throughout the country to change the health care delivery system into one that moves away from a traditional fee for service system into a value-based system that encompasses a broader range of health care providers. Healthcare stakeholders are beginning to bring community-based organizations and nonprofits to the table and better address the social determinants of health for some of the most vulnerable and complex patients.

With the emergence of ACOs, shared savings has emerged as a leading health care reform model for changing the financial system of healthcare. The concept of an accountable health community (AHC) has been proposed as a way to better address the social health needs of a given population. Developing partnerships with public health and social service organizations (SSOs) will be critical to addressing the social determinants of health, such as housing and food insecurities, poverty reduction, language and literacy, and public safety. Building an AHC that allows for service providers from different sectors to engage in shared savings across the community will provide the incentives necessary to address a wider range of determinants of health.

STEP 1: Defining the Shared Savings Program

The first step in developing a shared savings program in a community is defining the scope and parameters of the program. The sub-steps below are all critical to develop a shared saving program, though the order in which they are decided varies. Many of these definitions are dependent on each other, and for any given community it may make sense to begin with a different sub-step.

a. Define the patient population

- **Who is the population base and how is it defined?**

In order to implement a shared savings reform model, the population must be clearly defined. The population served by the program can be defined in a number of different methods: by need, partners involved, payer, disease, geographically, or some combination of the above options. When thinking about the population base, it is important to consider those who are most socially and medically vulnerable and stand to gain most from being enrolled in this new program.

b. Define the services and supports included in the plan

- **What services and supports will be available to the population base?**

The services available to the population must be clearly defined. Services can be clinical, social, or both, but they should be explicitly enumerated so clients can know what coverage to expect and organizations can plan accordingly. It is important that a community understand that services may come from a diverse range of service providers and delivery may occur in varied locations. The payer will determine the extent to which they are willing to help cover social services for clients and will likely help guide decisions on inclusion and exclusion of services. As much as possible, flexibility from the payer will help guide this novel cross-sector delivery model.

Through the process of defining services and supports, it is likely that clear service gaps will be identified. It is important to note these gaps, as they can serve as a basis for future community change at a policy or system level.

c. Define the mechanism of shared savings

- **How much risk are service providers and payers willing to take on?**

It is important as a community to assess the level to which service providers and payers in the network are willing to take on financial risk and accountability for the desired population. Many of the risk-sharing mechanisms will be based on defining who the payer is and how much risk that entity is willing to take on. This payer may limit the services and population, and as such this decision may need to come earlier in the process. There should be an understanding and conversation about who these payers should be. Savings are possible in the clinical sector, but also in the public health and social service sector as communities become healthier. It is important to understand that just as risk-sharing is a two-way street, savings can and should be allocated to multiple sectors.

d. Define the communication lines and network

- **Which service providers will be involved in the program or network?**
- **How can service providers communicate with each other? With the network architects?**
- **Can technology aid in the communication between payer and service providers?**

There are varieties of ways which communities can chose to set up communication lines within their network. It is important to involve as many stakeholders as possible in this process, including the payer, community organizations, and clients. Defined communication lines and touch points should be established both horizontally and vertically to ensure network success over the long term.

Spotlight: Camden Coalition

The Camden Coalition of Healthcare Providers (CCHP), based in New Jersey, is a non-profit membership organization of service providers from across the healthcare spectrum. CCHP has focused their population base on high-utilizers of the medical and hospital sector. The focus has been on identifying subsets of the population with high health costs, understanding their needs, and targeting interventions based on these findings. In this way, the basis of CCHP's definitions have come from seeking out high-spenders in the network and shaping services and supports to best fit the community needs.

A key success of CCHP is the extensive time and energy investment into communication among service providers. Relationship building in advance of the formal board and organization is often cited as a key component to CCHP's success. CCHP functions as a true coalition, and each participating organization is aware of their ability to bring up grants and opportunities for novel care delivery models. Each service provider is brought to the table on an even playing field, which allows relationships and conversations among diverse service providers to be easily fostered. A monthly Care Management meeting is held each month that brings service providers from different sectors to review and problem solve on particularly challenging client cases.

For further reading:

RWJF Case study: http://www.rwjf.org/en/research-publications/find-rwjf-research/2011/01/a-coalition-creates-a-citywide-care-management-system-.html

Website: http://www.camdenhealth.org/

STEP 2: Assessing Participant Contribution

The second step in developing a shared savings model is to determine the role stakeholders will play. Each stakeholder will provide different services ,and have varied involvement in the network, and as such, the distribution of savings should be defined clearly for each stakeholder. This step may be the most challenging for many networks as it determines the amount of funds each participating organization will be eligible to receive.

a. Risk adjustment

- **Does the population need to be adjusted for different subgroups?**
- **How can the risks and associated costs be adjusted for each subgroup?**

To assess properly both the cost and estimated savings, it is important to adjust calculations by the appropriate population characteristics. Populations can be risk stratified in a number of ways. Populations can be separate by existing clinical, social, or demographic factors such as those developed and used by the Center Medicare and Medicaid Services (CMS) and recorded in many SSO intake procedures. Social risk is an important factor to consider, and discussions should help to determine which tool to adopt and use for any given community. Many SSOs already assess risk in the form of social insecurities during intake procedures, and if possible, existing measures can be used.. There are many tools for social risk assessment and it will be up to service providers and stakeholders to determine the best fit for the network.

b. Attributable percentage savings and risk

- **What percentage of savings will each service provider be eligible to receive?**
- **How will this be determined?**

A key point of the shared savings network lies in changing financial incentives for service providers and the community at large. Allowing each service provider to be eligible for a percentage or prescribed amount of potential savings generated creates an incentive that will align service providers towards the same aim. Savings can be distributed back based upon a variety of ways, including but not limited to: number of clients served, severity of needs addressed, relevance of services to healthcare savings, cost of service, quality of service provided, or outcomes. Using clear methodology to determine savings for each eligible service provider will guide future network-wide decision and allow new service providers to enter the network in the future.

Potential Challenge: It is important to note that it may not be possible to know how each service that a client receives directly correlates to a percentage savings. Retrospectively, it is possible that correlations may be drawn between outcomes and services received, but initially, it is important to think about the network-generated savings as a whole.

Spotlight: Hennepin Health

Hennepin Health, based in Minnesota, is a global budget system between four major stakeholders, Metropolitan Health Plan, Hennepin County Medical Center, Northpoint Health and Wellness Center, and Hennepin County Human Services and Public Health Department. The stakeholders involved share in both upside and downside risk, as a fully-capitated ACO. As savings are generated, money is reinvested into the system and distributed to the major partners at the year's end. The health plan functions as a third-party administrator that receives a percentage of revenue. The health plan has legal and regulatory clearance to operate Medicaid in the county after agreements with CMS and the state Medicaid agency. The four large partners entered into a series of MOUs and BAAs that allow for system-wide decisions to be made as needed following the agreed upon broad operating principles. If savings accrue, the four partners receive a previous-agreed upon portion of savings, whereas if losses accrue the four partners are liable for a portion of the losses. The way savings are apportioned this risk remains an active point of discussion for Hennepin Health, and is constantly evolving to best fit the community and network.

For further reading:

Health Affairs, Nov 2014. "Hennepin Health: A Safety-Net Accountable Care Organization for the Expanded Medicaid Population" http://content.healthaffairs.org/content/33/11/1975.abstract

STEP 3: Distributing Shared Savings

The third step in developing this shared savings model occurs at the larger system level, and involves the measures and metrics in the network's success. Defining the measures, both monetary and quality will help guide the types of data that service providers will need to keep

track of for network-wide aggregation. These measures will determine the amount of savings available for distribution through the methods laid out in step 2.

a. Calculation of savings or losses

- **What data will be used to determine spending across the network?**
- **What historical data will be used to determine prevented/avoided costs?**
- **Will all services be incorporated into the calculations, and if so, how?**

Understanding how spending data will be obtained and ensuring service providers are clearly aware of what needs to be included will help the community to better understand both how the data will be used as well as the network-wide results.

It is not necessary for every service included in the plan to be used in the calculation of costs or savings, but determining which are included should be done explicitly beforehand. Determining savings can become a particularly challenging point if it is not explicitly laid out. Communities can use historical data, predicted data, or a combination. In order to look at data across the network, even cost data, it is likely that data sharing agreements will need to be put in place, such as Memorandums of Understanding (MOU) or Health Insurance Portability and Accountability Business Associate Agreements (HIPAA BAA).

Potential Challenge: For some programs in place, it has proven challenging to obtain payer data, especially when it relates to Medicaid. It is important to have the payer involved in early conversations, particularly in regards to calculations of savings and losses for the network.

b. Quality indicators

- **What measures will be used for quality and outcome assurance?**
- **How can these measures be overseen to ensure their efficacy?**

Quality and outcome measures are key to insuring client and patient satisfaction and maintaining a high quality of care for clients in the network. Quality measures can be adapted from existing measures such as those developed by the National Quality Forum (NQF), the Healthcare Effectiveness Data and Information Set (HEDIS) measures and used in other Center for Medicare and Medicare Innovation (CMMI) financial reform models.

Developing social service and public health quality and outcome measures should be discussed with the understanding that service providers in the network already use many measures to assess for quality and outcomes. Working with service providers, to be sure that these measures align with existing measures and with those of major funders in the community, can serve as a place to start the conversation around the development of measures.

Potential Challenge: Be sure to consider the types of data currently being recorded across service providers and how service providers will be responsible for new measures in the future. Service providers need to have proper mechanisms of reporting these measures, otherwise the network may run into major challenges. One option to think about is how

STEP 4: Management and Sustainability

Spotlight: Pueblo Triple Aim Coalition

The Pueblo Triple Aim Coalition (PTAC) was formed in 2010 as a countywide group of stakeholders that have come together to adopt a collective impact strategy. The PTAC consist of dozens of members ranging from the health department to hospitals, schools, and philanthropies. The PTAC has adopted two main sets of measures to assess community improvement, one based on the Triple Aim and one based on University of Wisconsin's County Health Rankings. These measures are published externally, while other measures, including some around collective impact, are kept internal. These measures serve as important quality indicators that can guide the network towards achieving desired outcomes in the community.

The measures used by PTAC address not only the outcomes of the coalition for community improvement but also mapping how the coalition is functioning through process outcomes. PTAC uses social network mapping to assess how service providers are communicating and cooperating. Though some of it is still in research trials, it is a good first step in beginning to assess trust among the coalition.

For further reading:

Collective Impact: http://www.fsg.org/approach-areas/collective-impact

ReThink Health Dynamics: http://www.rethinkhealth.org/our-work/dynamic-modeling-strategy/

Pueblo Triple Aim Coalition: http://www.pueblotripleaim.org

Triple Aim Measures:

The fourth step in developing a shared savings network is to ensure there is feedback on the network from both service providers and the community. At the network level, some service providers will need aid in the form of care coordination and other support services. Care coordination across the network+ will be critical to the community's success, as will maintaining a support structure for service providers. Thinking carefully both about what is feasible and what is necessary will help ensure success.

a. Care coordination infrastructure

- **Will a novel care coordination structure need to be developed or improved upon from existing networks?**
- **What organization will be in charge of training and maintaining any necessary workforce?**

In many of the more successful health care reform programs, an element of enhanced care coordination is used to further ease client movement across the network and improve engagement among some service providers. An understanding of what care coordination services are already being employed in the community will be key to understanding if it will be necessary to hire full-time staff, such as case managers or community health workers, or enact a more advanced infrastructure for referral delivery and/or tracking. Assessing the degree to which new care coordination tactics will need to be employed, and who will be in charge of the start-up and maintenance of those services, must be adapted to each individual community.

Spotlight: Michigan Pathways HCIA Grant

The Pathways Community HUB Model has been in trials as the Michigan Pathways for Health program in three counties across Michigan as part of a Health Innovation Award from the Center for Medicaid and Medicare Innovation.. Each county has a Community Hub that oversees multiple care coordination agencies (CCAs). CCAs are then responsible for management and oversight of community health workers. Each level of oversight has clear roles in the management of care coordination services, a step that has ensured initial success in client impact and community health. Community HUBs help to ensure that care coordination efforts are not duplicate and help avoid clients who might otherwise fall through the cracks of the network.

The Pathways Community HUB Model has been standardized by the Agency for Healthcare Research and Quality (AHRQ) as a tool for improving healthcare quality delivery. It provides guidance and standards for the responsibilities of Community HUBs, which can help give networks some guidance on care coordination infrastructure set up and management.

For further reading:

AHRQ Pathways Model: https://innovations.ahrq.gov/perspectives/formalization-pathways-model-facilitates-standards-and-certification

Michigan Pathways Model: https://www.mphi.org/projects/michigan-pathways-to-better-

b. Service provider support services

- **What types of support services will be available to the service providers in the network and at what cost?**
- **Who will manage the delivery and coordination of such support services?**

Support services, in a variety of manners, can be critical to the success of the network. Some communities may have service providers willing and with enough means to not need many support services. For other communities, support services can be a major incentive point for service providers to join the network. Establishing the types of support a community needs will help prioritize what should be available to service providers and how those services will be managed long term. Decisions should carefully consider cost, management needs, and delivery of such services.

Spotlight: PCCI Shared Savings Proof of Concept

Based in Dallas, Texas, the PCCI Shared Savings Proof of Concept (POC) is a collaboration effort between Parkland Health and Hospital System, and The Bridge North Texas, a homeless recovery center, in which 1) Relevant patient health data is securely exchanged between the two organizations to inform care provision and 2) Outcomes-based incentive payments are awarded to The Bridge for their influence on successful clinical outcomes. PCCI aided Parkland in sharing a limited, but relative, set of health data with The Bridge to better inform their social care. Upon enrollment into the program, PCCI developed a brief document with the relevant health information and discharge planning notes for a client that was then sent to The Bridge. PCCI acted as the middle-man between these two organizations, helping to coordinate the signing of paperwork, training staff, relationship building, and setting program guidelines.

Each organization was clear on how their relationship would be managed, and where open lines of communication existed to escalate questions. PCCI set up care coordination meetings between the organizations to understand the challenges and best manage any adaptations to the program.

For further reading:

Press release: https://unitedwaydallas.org/united-way-announces-new-groundfloor-investments/

PCCI: www.pccipieces.org

c. Patient and service provider evaluation

- **What mechanisms can be used to allow both patients and service providers to evaluate and contribute feedback on the day-to-day operations of the network?**
- **Who will conduct such evaluations and with what frequency?**
- **Who will be in charge of distributing feedback/education back to service providers?**

The long-term success of the network will depend on the ability of service providers to adapt to client and community needs as time goes on. Evaluations of the network should be conducted on a regular basis by both service providers and community members to ensure alignment between stakeholders, service providers, and the community.

It is important to define not only the metrics of evaluation but also the management and interpretation as well as the steps toward network alteration based upon results.

STEP 5: Governance

The fifth and final step to developing a shared savings model for your community will consist of determining the long-term plan for maintenance of the network. It is key that all stakeholders are comfortable not only with the governing body and the policies and procedures set in place at the onset but also the body's ability to make future decisions and guide the community towards success.

a. Governing body

- **Who will compose the governing body of the network?**
- **With what frequency will they meet and what will the scope of their decision-making and power?**

The governing body for the network can take on a variety of forms. The executive body should entail representatives from both key stakeholders and service providers in the community. There may be multiple committees within each network that develop and execute most policies, with major approvals and decisions coming from the executive committee. Other options include using existing bodies as subcommittees to an overarching body or a combination. Clearly defining the governing body will give stakeholders, service providers, and community members an established mechanism to escalate any issues and decisions that need to be made. Hiring of full time employees (FTE) may be necessary to manage the activities and follow through with decisions that the governing body makes, depending on its composition.

Potential Challenge: If possible, clear procedures should be laid out for the governing body to execute its decisions. If decisions are not clearly explained to service providers, and actionable procedures for each decision are not laid out, the follow through of these actions may falter and cause network stagnation, decreasing long-term sustainability.

Spotlight: Oregon Health Authority

The Oregon Health Authority (OHA) serves as the state governing body for public health, the Oregon Health Plan (OHP), and most of the state's health care programs. The OHP has enrolled most Medicaid members into coordinated care organizations (CCOs). OHP has set up both state and regional governance levels that ensure sustainability through CCOs. The state asked for submissions from regions that wanted to be considered a CCO. As a part of the application, each CCO determined a set structure that best fits their region and community and obtained letters of support from a large variety of community groups to ensure success and support of decisions the executive would eventually make.

The state and CCOs have clear expectations of responsibilities and deliverables to avoid future confusion. At the same time, there are clear communication lines and tactics for the CCOs to received support from OHP and their fellow CCOs. Since each CCO has the freedom to structure their region as is best fit, they are able to adapt and adjust as time goes on, much of which might occur through this shared learning.

For further reading:

About CCOs: http://www.oregon.gov/oha/OHPB/pages/health-reform/ccos.aspx

Performance metrics: http://www.oregon.gov/oha/Metrics/Documents/report-february-2014.pdf

b. Policies and procedures

- **What policies, procedures, and agreements need to be in place to allow the network to function?**
- **Who will develop such policies and how will they be reviewed?**

Policies and procedures should be fully agreed upon by all service providers and stakeholders. Policies and procedures will need to be written on the topics of financial sustainability, legality,

agreements various stakeholders, communication and reporting oversight, and frequency of policy revision. While it is valuable to adapt policies from existing networks, developing a unique solution for a given community can prove critical in ensuring long-term service provider, government, and community member buy-in. Each solution should ensure continued service provider and stakeholder engagement.

This step of the process may be done at the legislature, at the city, county, or even state level. It is important to assess the political landscape of a given community and try to include public officials whenever possible. For networks built more independently from a legislative body, understanding laws in both the nonprofit sector and medical sector will be critical to ensuring long-term stability and legality.

Potential Challenge: Client data in the network will most likely be composed of a variety of sensitive information, from social insecurities to medical information. It is important to have policies in place to protect existing patient privacy laws, such as HIPAA, and ensure data is being securely transferred through strong policies and MOUs between service providers.

The potential of shared-savings models to support integrated health and social services for complex patients

An environment scan report

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Abstract: Our current healthcare and social services delivery systems are not well equipped to effectively manage complex patients, defined as those with multiple comorbidities and complex social needs (food, housing, substance abuse, etc.), resulting in frequent utilization of healthcare resources without effectively addressing their clinical and social determinants of health. Payment and delivery system reforms and innovations to improve the effectiveness of managing the subset of complex patients covered by Medicare or Medicaid have accelerated significantly as a result of the Affordable Care Act and the establishment of the Center for Medicare & Medicaid Innovation (CMMI) within the Centers for Medicare and Medicaid Services (CMS) and its many payment and delivery reform efforts. For patients not covered by these reforms and innovations, or those whose needs have not been effectively satisfied by these programs, various community level efforts exist across the nation to offer assistance to integrate community resources to address their clinical and social determinants of health. However, such efforts are fragmented not well coordinated, and little is known on the approaches and effectiveness of these programs. This issue brief examines a wide range of payment and delivery reform initiatives in communities across the nation to explore the potential benefits and barriers to developing a financial model that integrates health care and social services providers to care for complex patients.

Background

Effective management of patients with complex clinical and social needs require effective integration of healthcare and social services. The current healthcare and social services delivery systems are fragmented and many of these patients do not have the resources and skills to access and navigate such a fragmented system. It has been shown that these patients consume a large share of health care services (1-4) and that social services providers play an important role in providing services for complex patients that are often poorly served by health care providers (5-8). For many of these patients, especially those with complex and multifaceted social determinants of health, social services providers can help meet their social needs and help to manage their clinical conditions and prevent frequent and costly utilizations of healthcare services such as emergency room visits or hospitalization. For example, homeless patients who are sent to temporary medical respite homes have less than half the number of inpatient stays in a year as those who do not (9). Diabetes patients that are enrolled in a community education program see substantial improvements as opposed to those who are not (10).

Social services could have huge impact on healthcare costs and patient outcomes, however there is a lack of mechanism to effectively coordinate the various silos of these services providers and to financially incentivize and compensate the social services providers to aim for lowering healthcare costs for these patients. Motivated by the urgent need to contain healthcare expenditure and the glaring need for closer collaboration among these diverse players and the huge potential benefits such collaboration could bring, a new wave of reform and innovation have taken place across the nation that could make lasting changes and improvement to the current systems (11).

This new wave can be categorized by a combination of top-down reforms initiated by CMS and CMMI, and bottom-up innovations driven by various community level efforts to more effectively utilize resources in the community to help those complex patients. The ACA and expansion of Medicaid provided many of these patients with insurance coverage and many of the demonstration projects at the federal and state levels attempted to enhance care coordination and to align financial incentives among care providers to provide more coordinated and patient centered care to these patients (11). To fill the gaps left by these federal and state level efforts and to care for uninsured patients and insured patients not covered by these innovations and demonstration projects, various community level efforts are also attempting to coordinate community level resources to help these patients (12,13).

One key element of the Federal and state level reform is payment reforms to move from current fee for service based model towards pay for performance and pay for value models and to incentivize care coordination among providers (14). As the largest payers, they have the leverage to drive payment and healthcare delivery system reforms, and those innovations that are proven effective may be sustained and expanded across the nation. On the other hand, these programs were initiated by healthcare payers (CMS alone or in collaboration with other payers) and therefore focus on the collaboration among healthcare providers, with very limited efforts to integrate various social services into the network of providers to effectively meet the complex clinical and social needs of complex patients. Innovative programs at the community level can more effectively utilize social services providers to care for these complex patients, however they usually rely on grant funding, are much smaller on scale, and may not be sustainable beyond the grant period and may be difficult to expand beyond the local communities.

Understanding the experiences of these programs will be very informative as we move forward as a nation to strive for the Triple Aim of better care, better health, and lower cost, however we are not aware of a comprehensive review of these programs. In this report, we survey the landscape of these programs and discuss some of the early results and challenges of these programs. Since the more established programs such as Accountable Care Organizations have been reviewed extensively in the literature (15-20), we will focus on more recent or innovative programs that have not received as much attention. Our aims are to describe and summarize these programs, to highlight some of the common

features, challenges, and approaches of these programs, and to explore lessons learned to inform policy makers and other interested parties in making informed decisions.

Methodology

Data collection

A three-step mixed methods approach was employed in this study to collect a comprehensive list of innovation programs, to achieve in-depth understanding of these programs, and to provide a comprehensive map of these programs in geography and program characteristics. In step 1, an extensive literature search and a semi-structured email survey of key informants (a list of key informants is included in Appendix 1) led to identification of around 300 innovative programs across the country that meet our inclusion criteria: Program targets socially vulnerable, high-utilizers, or medically complex populations, AND at least one of the following:

- Program incorporates financial arrangement of two or more sectors (defined as distinct areas of health services that share similar funding streams and client delivery goals. A few of the health sectors we define include clinical services, behavioral services, and social, or human, services.) OR
- Program incorporates care coordination between the clinical sector and another sector OR
- Program involving risk sharing among organizations (with involvement beyond the medical sector)

These programs often demonstrated novel care coordination mechanisms or community and partnership engagement that also serve to benefit our research. In step 2, a stratified purposive sample (21) of these programs was chosen to conduct in-depth interviews. This sampling allowed some diversity in the sample and thus a broad range of programs was explored. Of the 16 programs invited to participate in the study, 14 agreed to be interviewed (please refer to Appendix 2 for a list of programs interviewed). Semi-structured, in-depth interviews based on a topic guide were used to enable a detailed exploration of programs' experiences using a flexible and responsive approach. Interviews were audio-recorded and transcribed verbatim with participant permission, and lasted around 60 minutes. The topic guide included the following areas: Organization and governance – including inception and timeline Measuring shared savings and/or description of the financial model Metrics – assessment and accuracy Challenges – both past and future Technology Legal, privacy, and regulatory concerns Other questions – generally program specific (if existed) financial arrangements, challenges.

In step 3, based on the findings of the qualitative data, a quantitative survey was sent to all 301 the programs identified, to create a comprehensive picture of current innovations across the nation (please refer to Appendix 4 for the survey instrument). In this survey, we adapted a framework developed by McGinnis and colleagues (22)and modified it using a Delphi method (23) to develop a list of key domains to summarize the commonalities and differences among these diverse programs (the rubric, attached in Appendix 3). A rubric with four dimensions was created based on the qualitative results, and was then refined and finalized through semi-structured, in-depth interviews with domain experts. This finalized rubric was used in the survey questionnaire. Due to the difficulty of obtaining responses for a web survey, we ended up scheduling structured phone interviews to obtain the answers to the survey for a vast majority of the programs.

Data analysis

We used a variation of content analysis to develop a coding scheme for performing a qualitative description of the themes discussed by interviewees. The final codebook included both inductive and

deductive codes and was finalized after reaching consensus among the research team. We coded and analyzed the interview transcripts in NVivo software (NVivo qualitative data analysis software; QSR International Pty Ltd. Version 10, 2014) with analysis focusing on both overarching themes and specific areas for program innovations. The analysis focused on 5 key themes: payment reform arrangement, inclusion of community based organizations, relationships among partner organizations, future plans and considerations, and challenges, but also allowed other themes to emerge from the data. Quantitative analysis of survey results was conducted using R 3.2.0.

Results

Qualitative results of the program interviews

109 unique themes within 16 categories were identified across 14 interviews. The most prevalent themes included collaboration, social services participation, social determinants of health, data and analytic challenges, hospital system support, integrated IT and data systems, payment reform, and public-private partnership.

Among the 14 programs interviewed, each was unique with diverse participants. The most referenced population groups of focus were Medicaid patients, however, variation existed within this population as well. For example one program focused solely on the Medicaid expansion group – adults with no kids between the ages of 21 and 64. Other programs considered Medicaid high utilization patients, Medicaid and Medicare enrollees with chronic conditions, and homeless individuals overwhelmed by mental illness. Even within specific programs, widespread internal variation was apparent based on the location of the sub-programs, as well as the populations being served by the sub-programs.

Among 5 programs that reported a financial reform model, 1 was slow to move into risk arrangements and referred to "cost avoided" versus "savings" approach. In this program, incurred savings are currently shared based on performance indicators. Another considered itself an ACO model with savings shared between partners equally on an annual basis. A third program was in the midst of testing several methods, including pay for performance and shared savings between ACOs, but had accrued no significant savings at the time of the interview. Another program used pay for performance incentives based on key quality indicators. Lastly, a collaboration between providers and community organizations noted being "committed to making an ACO work", with planned savings between primary care providers and the greater community. The other 7 programs interviewed were social service oriented and mostly grant funded, with no financial reform arrangements in place. Some of these programs hoped for an incentive or "pay for value" system in the future, given their role in integrating healthcare and socioeconomic services. One program noted the likelihood that it would change from primarily grant funded to mostly fee-for service over the next few years.

At the time of the interview, only a few programs reported having accrued measurable savings. No organization reported shared savings with community-based organizations, although several stated a desire to do so in the future. Some programs also stated a desire to reinvest savings into planning and community programs. Even among programs that reported strong preliminary results, most interviewees cited the need for research to support program success and pending evaluations on the first years of the program

Interviewees, despite varied financial designs, discussed the important role of social determinants in their program model. Emphasis was continuously placed on the inclusion of social services and more non-traditional types of care and services (non-health programs) in addressing the needs of at-risk patients and forming community partnerships. Care management was cited in almost all interviews as important to addressing social determinates. With the exception of 1 organization, which highlighted their role as "linking" patients to services, each organization stressed partnership,

collaboration, or integration with other community resources. Support of hospitals and providers was cited as important to making each of these models work. Among the most unique partnerships addressed (in progress or future consideration) were partnerships with homeless groups, mental and behavioral health organizations, housing services, legal support, schools, law-enforcement, and the Department of Corrections.

Another important theme across interviews was the use of similar hospital utilization measures as key measures of performance (ER/ED Use; hospital (re)admission, hospital stays). In addition to these indicators, a couple of organizations also used different measures, such as prescription drug use and high cost imaging. There was a demonstrated desire across organizations who considered performance and utilization indicators, to eventually focus on more patient outcomes and population-level indicators in the future.

Among the most referenced theme in the interviews was the importance of integrated information technology, as well as the challenges and improvements needed across technology platforms. All of the organizations interviewed cited the use of IT in program operations, but most noted challenges and room for improvement within existing technology. One program noted the need for more high quality data within the system. Important challenges related to communication were also apparent. The need to communicate with and educate patients, staff, partners, and the greater community was discussed by about half of organizations as crucial to articulating program purpose and need. Lastly, challenges as a result of federal and state oversight, including challenges related to privacy and flexibility in innovation seemed to constrain some programs in testing different models.

Early results and Common Challenges

Many programs have not yet reported results. For those that do report results, most reported positive results mixed with some challenges in some programs. For example, Hennepin health reported a 16% increase (from 8.6% to 10%) in patients receiving optimal diabetes care, 9.1% reduction in emergency department visits between 2012 and 2013, with 87% of members satisfied with their care (24). It is reported that the NewYork-Presbyterian Regional Health Collaborative, an integrated network of patient-centered medical homes that were linked to other providers and community-based resources serving patients in the Washington Heights-Inwood community, achieved 29.7% and 28.5% reduction in emergency room visits and hospitalizations respectively among 5,852 patients with multiple cormobities during a three time period (25). On the other hand, some of the CMMI funded programs have not achieved the promised results. For example, some CCTP programs reportedly had difficulties meeting enrollment benchmarks and targeted readmission measures (26).

There are some common challenges. One common challenge cited by many programs we interviewed is the lack of flexibility under current financial and regulatory framework to engage social services providers financially in a sustainable manner to achieve the potential cost savings as these social services providers usually do not quality to be reimbursed for their services under current structure even though the services they provide may significantly impact the costs of caring for complex patients. This challenge is also commonly cited as the reason why the social services providers have not been more involved in addressing the social determinants of health.

Another commonly cited challenge is developing and maintaining the technology and data sharing infrastructure to enable effective care coordination, performance measurement, data sharing and the safety and security of the data. Setting up and maintaining such infrastructure requires significant upfront investment, and many programs do not have the financial resources or flexibility to make such investments. Finally, working with diverse stakeholders to put together an effective program and maintaining compliance with the complex legal and regulatory frameworks governing health care and social services is another commonly cited challenge. Programs have to engage a diverse set of

healthcare and social services providers and navigate several legal and compliance landmines, including antitrust considerations and applicable federal and state laws (27).

To assess whether our qualitative study reached saturation, we considered the degree to which new themes were identified in our interviews. Following existing methods in the literature, we considered data saturation to be the point at which no new information or themes are observed in the data (28,29). Previous research has found that saturation typically occurs within the first twelve interviews, while basic elements of meta-themes are present as early as six interviews (28,29). Overall, our findings are consistent with existing literature.

Shared savings program outside the healthcare sector

In considering the development of integrated services to achieve cost savings, it is valuable to look outside of health care not only for framework considerations but also to consider the challenges and proven successes. Two programs, in energy and shared administrative services, have provided interesting insights with strong success indicators. The Chicago Public Schools system partnered with Energy Star to help reduce the districts' energy costs (30). Schools voluntarily sign up and are rewarded with a portion of savings over a 5% baseline reduction (30). The school has given out $550,000 to date, with only one third of schools enrolled. Another interesting initiative, in New York State, is being conducted as a joint effort between three large entities, Nassau County School District, Nassau County, and Nassau Board of Cooperative Education Services. The Nassau School and Municipal Savings Initiative created three sub-committees spanning the organizations that work to streamline services and reduce administrative costs. From an initial $1M grant in 2010, they have generated nearly $10M in savings that has been divided between the state and county (31,32).

Results of the quantitative survey and mapping of programs using the Rubric

Of the 301 programs surveyed, 65 (22%) completed the survey. Table 1 below describes the response rates by type of organizations that lead these programs. It can be seen that programs led by CBOs, health plan/payers, and community alliances had higher response rate than those led by hospitals/health systems or physician networks/clinics, although some of the numbers are small so the difference in response rate should be interpreted with caution.

Table 1: Response rates by lead organization type

Lead organization	Total (n=301)	Responses (65)	Response rate (22%)
CBO	66	28	42.4%
Hospital/Health System	32	6	18.8%
Physician Network/Clinic	177	22	12.4%
Health Plan/Payer	2	2	100%
Community Alliance	13	6	46.2%
State/Local Government Agency	6	1	16.7%
University	5	0	0%

Tables 2 and 3 below describe the characteristics and self-reported rubric and outcomes of these programs.

Table 2: Characteristics of the programs (n=65)		
Characteristic		Number
Pilot Study		
	Yes	46
	No	19
Evaluation		
	Yes	42
	No	23
Community patenrs in the program		
	Community health center	30
	Homeless shelters	14
	Food banks	15
	Public hospitals	51
	Other (e.g., elderly homes, nursing homes, county health departments, AAA)	34
Current financial arrangement		
	Shared Savings	8
	Capitated payment/PMPM	18
	Fee for services	35
	Combination	4
Organizations participating in financial arrangement		
	Payer	56
	Provider	49
	CBO	20
	Other (e.g., schools, nursing homes)	12
Challenges in financial arrangement		
	Measuring savings and losses	56
	Sharing savings or losses	52
Risk sharing?		
	Yes	14
	No	51
Data elements collected		
	Health data (patient level)	65
	Cost data	62
	Population health data (community level)	53
	Quality of care	55
	Other	6

Table 3: Self-reported rubric and other outcomes (n=65)		
Self-reported rubric or outcome		Number
Resulted in savings or losses		
	Savings	46
	Losses/No savings	19
Improved quality of care		
	Yes	42
	No	23
Quality measures improved		
	Preventive services	30
	Health disparity	14
	Patient satisfaction	15
	Other (e.g., ER visits, admissions and readmissions)	51
Domain 1: Care coordination		
	2 sectors with no integration	7
	2 sectors with care coordination	18
	3+ sectors with care coordination	19
	3+ sectors with care coordination and referral tracking	8
	3+ sectors with long term goals and coordination	13
Domain 2: Financial alignment		
	None beyond Fee for Service	23
	Fee for service with some predefined payment measures	21
	2 sectors with partial capitation or social impact bonds	2
	3+ sectors with risk sharing or pmpm bundles	16
	Total alignment with full downside risk sharing	3
Domain 3: Data Sharing		
	No data or information sharing	6
	Sharing within a single sector	14
	Sharing of non-real time data across multiple sectors	16
	Sharing of real time data across multiple sectors	21
	Integrated information exchange with analytic overlay	8
Domain 4: Metrics/Reporting		
	No metrics reported	8
	Metrics reported on process in single sector	10
	Metrics reported on process and outcome in single sector	21
	Process, outcome, and composite measure 2+ sectors	20
	Process, outcome, and composite measure 2+ sectors with prevention focus	6

Given the moderate response rate and the small number of programs in some of the cells in tables 2 and 3, the results may not be representative of the population of innovative programs and should be intepretted with caution. Nevertheless, there are some conclusions that can be drawn from these results. Firstly, it is apparent that even in this early stage, there is clear diversity in the innovative programs across the country. Based on both the qualitative and quantitative results, these programs can be divided into three phenotypes, with a few large, highly innovative, highly integrated programs, a

large number of CMS/CMMI designed and funded programs, and a few grass root programs generated in communities. Secondly, despite this diversity, most of the programs that completed the survey reported achieving positive outcomes, including cost savings and improved quality of care. These outcomes were, however, self-reported, so should be interpreted with caution. Thirdly, these programs face some common challenges, including financial sustainability, measuring outcomes, measuring and sharing of cost savings, data integration, and harnessing the potential power of the available data.

Discussion

Our findings confirmed both the enormous challenges in reforming the current healthcare and social services delivery systems to best serve these complex patients, and the depth and breadth of the current wave of innovations and reforms in payment and healthcare delivery underway to meet these challenges. While these challenges and the reform and innovation efforts to address them are not new, a combination of factors, including the passage and implementation of ACA, the large number of patients with complex social needs due to the recent great recession, and the worsening financial situation, made the current wave of innovations and reform unprecedented in both the depth and breadth of the innovations attempted and the number of patients affected (11). As such, it may bring larger and more lasting changes and improvements to the current system.

Our findings also highlighted the key role that payment reforms in driving and sustaining the reforms necessary to build a more integrated healthcare and social delivery system able to care for complex patients. While there is broad agreement that the current fee-for-service system is not sustainable and the need for payment reform to drive care coordination and the effectiveness of payment reform to drive behavior change is well established (PCMH, ACO, etc.), there is no consensus on the most appropriate payment model and how to get from the current model to the most appropriate model (14). The lack of flexible payment models to properly incentivize and engage social services providers and the difficulty to sustain the programs beyond the initial funding period are among the key challenges commonly cited by the interviewees. At the same time, there is a wide diversity of the payment models powering these programs and little agreement among the interviewees on what types of financial arrangements are needed.

Our findings show that the shared savings model currently implemented in the Medicare Shared Savings model have yet to be widely implemented beyond those who participate in these demonstration projects. While many interviewees acknowledged the potential for a shared savings model to achieve closer care coordination and financial alignment among healthcare and social services providers, the complexity of legal and regulatory hurdles, and the lack of proven models make it unlikely that this payment model will gain widespread adoption outside the healthcare sector in the near term. The diversity of the programs suggests that a unified framework that can be applied across the nation may not be in the horizon.

The diverse and bottom-up nature of many of these programs also means that there is a lack of coordination and system level thinking in the design, implementation, and evaluation of the various programs. As such, it would be difficult to learn what is effective and what is not, and to apply the lessons in a systematic way. Many of the innovations occur in an environment with multiple changes at various levels, so Isolating the specific impact of multiple (and often simultaneous) interventions can be difficult, if not impossible even under the best scenarios, and due to budgetary constraints, many

programs do not even attempt rigors evaluation. Many of these programs are local, modest in scale and may not be sustainable in the long term.

Without a system-wide drive to develop a sustainable and proven payment model to enable close care coordination and financial alignment among healthcare and social services providers and a consensus among current programs on the most appropriate payment model, it remains to be seen whether or not a successful payment model will emerge. And while the current wave of innovations to care for the most vulnerable populations is already unprecedented in its scale and diversity, such activities are less likely to be sustainable and lead to lasting changes in the absence of appropriate payment models that provide the appropriate financial incentives and achieve budget neutrality.

Beyond payment reforms, other key ingredients include timely access to patient medical records and quality and performance data to enable effective care coordination and to encourage transparency and accountability for performance, and the IT infrastructure that support care coordination and quality measurement are also commonly cited challenges. And while each of these components are necessary to achieve the close coordination and financial alignment needed to effectively care for the complex patients in the community, it is evident from our findings that that these components will be most effective if implemented together in ways that are reinforcing. For example, a payment model that provide incentives for the use of health IT and reporting on performance would work better than one that does not.

Our study has several limitations that need to be acknowledged. Firstly, while we took every effort to get a comprehensive list of programs that meet our criteria, we may have missed some programs, or some new programs may have emerged after our search. We believe that the overall findings would apply to these missed and/or new programs. Secondly, the rubric mapping tool has not been externally validated, and using information from the program survey to create the mapping may bring bias as programs may lack consistency in their response to the rubric related questions. As such, the mapping results should be interpreted with caution. Finally, with the current speed of reform and innovation, our survey may miss the latest innovations that emerged after we conducted the environment scan.

Conclusion

To truly reap the potential benefits that close coordination among healthcare and social services providers to care for complex patients, it is necessary to Many of the pieces necessary for community-based health care financial reform can be expanded upon from previous models and existing systems. For such programs, there could be strong benefits for complex patients, the payers, and the health care and social services providers that serve them. Hospitals have already seen that alone they cannot meet the cost savings measures being demanded by many payers (33,34). At the same time, social services providers have expressed interest in financial rewards for the individual services they already provide. Social service providers are buying into social impact and are looking for ways to more accurately receive funding for the work they do(35,36). Despite the promise of an integrated program that serves everyone's interest, there are many unanswered questions. The wealth of models today should serve as examples for future health care reform in order to successfully encompass both financial incentive alignment and the inclusion of community-based services. While the details have yet to unfold, community-based health care reform is well on its way.

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Appendix 1: List of Key Informants who responded to our inquiry and programs interviewed

Questions asked:

1. Are there any community-based organizations—defined as those that provide services to vulnerable populations, such as homeless shelters, food aid organizations, and community health centers—that are financially aligned, in any capacity, with a health care provider that you know of?
2. Is there a group, that you are aware of, that is trying to incorporated community-based organizations into a health care financial arrangement? Or any project similar to ours?
3. Is there anyone you know if that may have further insights into these questions?

Names:

-Bold indicates potential for future involvement in workgroup

-Blue highlights are programs interviewed in depth

Organization/Hospital	**Contact Name**	**Title (if applicable/known)**
PwC	Alan Baronoskie	
NTAHP	Alexandra Gorman	
Collaborative Healthcare Strategies	Amy Boutwell, MD*	Founder
Trust for America's Health	Anne De Biasi	Director of Policy Development
Yale	Betsey Bradley	
Rippel Foundation	Bobby Milstein	Director, ReThink Health
US Oncology	Brad Hirsch, MD	
CDC	Brian Lee	
America's Essential Hospitals	Bruce Siegel, MD	
Department of Public Health Sciences, University of Virginia School of Medicine	Carolyn L. Engelhard, MPA	Assistant Professor
College of Public Health, University of Oklahoma	Christina J. Bennett, JD	Assistant Professor
Michigan Public Health Institute	Clare Tanner	Program Director
CMS/CMMI	Darshak Sanghavi	
Brigham and Women's Hospital	David Bates, MD, MSc, PhD*	Senior Vice President for Quality and Safety and Chief Quality Officer
Mannat, Phelps, & Phillips, LLP	Deven McGraw	Partner in Healthcare Practice
National Governors Association	Frederick Isasi	
Kaiser	Gabriel Escobar, MD	
Alvarez & Marcel	George Bo-Linn, MD	
Vermont Health Care Innovation Project	Georgia Maheras	Project Director
Harvard Law School	**Glenn Cohen, JD**	Assistant Professor of Law

HHS ONC IT	Hunt Blair	
Interfaith House, Chicago	Jennifer Nelson-Seals	Executive Director
Oregon Office of Health Policy and Research	Jeanene Smith	Director
United Way of Metropolitan Dallas	Jill Scigliano	Chief Impact Officer
Univ. of Arkansas	Justin Hunt, MD	
National Association of Medcaid Directors	Kathleen Nolan	Director of State Policy & Programs
UCSF	Laura Gottlieb	Assistant professor
Rippel Foundation	Laura Landy	President, CEO
Independent Consultant	Lynn Etheredge	
PAMF	Martin Entwistle	
IBM Corporation	Martin J. Sepulveda	IBM Fellow and Vice President of Integrated Health Services for the IBM Corporation
UCSF	Neil Powe, MD	
CMMI	Patrick Conway, MD	
RWJF	Paul Tarini	
Columbia University	Prabhjot Singh	
CMS/CMMI	Rahul Rajkumar	
Oregon Health Authority	Rhonda Busek	Director of Medical Assistance Programs
UCSF	Rishi Manchanda, MD, MPH	Physician & Founder, HealthBegins
Nassau County Savings Initiative	Robert (Bob) Hanna	Steering Committee Head
Criminal Justice (Dallas)	Ron Stretcher	Director
Hennepin Health, MN	Ross Owen	Deputy Director
Yale University	Sandy Chang, MD,	
CMS/CMMI	Stephen Cha	
Colorado Department of Health Care Policy and Financing	Susan (Sue) Birch	Executive Director

Appendix 2: A list of programs interviewed

Name and Title of Interviewee	Organization	Date Interviewed
Ross Own, Deputy Director	Hennepin Health, MN	November 13, 2014
Bob Hanna, Steering Committee Director	Nassau County Savings Initiative, NY	November 13, 2014
Rhonda Busek and Team, Director	Oregon Health Authority	November 14, 2014
Jennifer Nelson-Seals, Executive Director	Interfaith House, Chicago, IL	November 17, 2014
Sue Birch, Executive Director	Colorado Department of Health Care Policy and Financing	November 17, 2014
Clare Tanner, Program Director	Michigan Public Health Institute	November 20, 2014
Georgia Maheras, Project Director	Vermont Health Care Innovation Project	November 20, 2014
Ellen Lawton, Co-Principal Investigator	Medical Legal Partnerships	January 26, 2015
Mel Piper, Partnership Coordinator	Partnership for a Health Durham, NC	January 27, 2015
Dale Fleming, Julianne Howell, Wilma Wooten, & Peter Shih	Live Well San Diego, CA	January 30, 2015
Matt Guy, Managing Director	Pueblo Triple Aim Coalition, CO	February 2, 2015
Jared Susco, COO, & Matt Humowiecki, Legal Counsel	Camden Coalition of Healthcare Providers, NJ	February 9, 2015
Jill Misra, Interim CEO	Together 4 Health, Chicago, IL	March 17, 2015
Anne Meara, Associate VP, Network Management	Montefiore Medical Center, NY	March 20, 2015

Appendix 3 Rubric for mapping innovative programs

- The purpose of this rubric is to map the programs we identified in the Commonwealth report across four different dimensions. We solicited input from several experts to internally validate the rubric, but it should not be used for other organizations or purposes.
- The scale, 1-5, is intended to signal degree of integration and alignment among participating organizations in a program's implementation. The scale is ordinal, not interval, and higher numbers in the scale do not imply or predict better performance or any outcomes measures and are not necessarily preferable to lower numbers.
- For this purpose of this rubric we define sectors as distinct areas of health services that share similar funding streams and client delivery goals. A few of the health sectors we define include clinical services, behavioral services, and social, or human, services.

	coordination among program components	**Financial alignment among program component towards the Triple Aim**	**Data and information sharing among program components**	**Metric reporting**
	This is designed to map the degree to which a program includes various components in the healthcare and social services delivery systems, such as healthcare providers, public health agencies, and community based organizations (CBOs) that provide various social services such as food assistance and shelter, and the degree to which participating organizations in a program coordinate care delivery to program enrollees. Examples of care coordination include referral tracking, transition coordination, and needs assessment.	*This is designed to map the degree to which the financial payment incentives of the participating organizations of a program are aligned to achieve the Triple Aim (value-based system).*	*This is designed to map the degree to which data and information sharing occurs among participating organizations. Data use has been intentionally left out to focus on data capture and sharing (stage 1 of meaningful use definition).*	*This is designed to map the degree to which metrics are monitored and reported across participating organizations in a system and their alignment towards the Triple Aim.*
1	Program includes participating organizations in two sectors(including but not limited to clinical, behavioral, and social) but there is no integration and communication between participating organizations beyond simple referrals [i.e. Current standards of care delivery]	No financial relationship among participating organizations beyond fee for services [i.e. Current Medicaid payment system]	No data or information sharing between participating organizations	No metrics reported

	Coordination among program components	Financial alignment among program component towards the Triple Aim	Data and information sharing among program components	Metric reporting
2	Program includes participating organizations in two sectors, and are engaged in some early care coordination, which may include the use of case managers [i.e. Interfaith and Northwestern]	The financial relationship among participating organizations is based on fee for services, but has an extra portion of payment based on the receiving organization(s) meeting some pre-defined quality measures (e.g., one-sided shared savings model) [i.e. Medicare ACOs phase 1]	Data and information sharing within a single sector across multiple providers [i.e. Montefiore Medical Center HIE]	Metric reporting based on utilization within a single sector
3	Program, includes participating organizations in three or more, which are engaged in some care coordination, and may include the use of case managers. [i.e. Camden Coalition of Healthcare Providers]	The financial relationship between at least two participating organizations is based on some alternative payment arrangements, such as patient centered medical homes or social impact bonds.	Sharing of non-real time data (such as monthly or quarterly discharge data) on a regular basis (e.g., monthly, quarterly, etc.) from multiple sectors (including but not limited to clinical, behavioral, and social) [i.e. Pueblo Triple Aim Coalition]	Regular report of metrics incorporating both utilization and quality measures within a single sector [i.e. Hennepin Health]
4	Integrated health delivery through care coordination between participating organizations in three or more sectors (including but not limited to clinical, behavioral, and social), that includes the use of referral tracking to coordinate and monitor patients as they move among organizations	The financial relationship among all participating organizations is some kind of population based, risk-sharing payment system, such as partial capitation, or per member per month bundles. [i.e. Oregon Health Authority]	Data and information sharing with real-time updates that includes data from multiple sectors [i.e. San Diego CIE]	Regular reporting of metrics incorporating both utilization and quality measures across multiple sectors (including but not limited to clinical, behavioral, and social) [i.e. Colorado Accountable Care Collaborative]
5	Integrated health delivery with participating organizations in three or more sectors and an increasing focus on long-term goals and creating and culture of health	Total financial alignment: all participating organizations under central budgetary control (though not single payer)	Integrated data and information exchange across all providers with analytics overlaid and real-time data acquisition that includes data from multiple sectors	Regular reporting of metrics incorporating both utilization and quality measures that extend to focus on prevention and wellness across multiple sectors [i.e. Pueblo Triple Aim Coalition]

Appendix 4: Survey instrument

A. Pre-Survey: We would first like to confirm that the information we have about your program is correct.

1. Our records indicate that the name of your program is [the program]. Is this correct?

__ Yes
__ No

1a. Please provide the most accurate name of your program or initiative.

_____

B. Program History: We will begin by asking a series of questions related to the history of [the program]

1. Is there a pilot study associated with [the program]?

__ Yes
__ No

1a. Please describe the pilot study, including timeline and findings.

_____
_____
_____

2. Has an evaluation been conducted on [the program]?

__ Yes
__ No
__ Evaluation in Progress

2a. Briefly describe the evaluation results.

_____
_____
_____

3. Has [the program] resulted in cost savings or losses?

__ Yes
__ No

3a. What was the magnitude of savings or losses?

_____
_____

4. Has [the program] impacted quality of care?

__ Yes
__ No

4a. Which quality measures were improved and how? *(Check all that apply and describe.)*
__ Preventive Services: _____
__ Health Disparities: _____
__ Patient Satisfaction: _____
__ Other: Please Specify: _____

5. What data are collected through [the program] for future evaluation?
(Check all that apply and describe data type.)

	At Baseline	Ongoing (During Program)
a. Health data (individual health) _____ _____	_____	_____
b. Cost data _____ _____	_____	_____
c. Population health data (community-level) _____ _____	_____	_____
d. Quality of care _____ _____	_____	_____
e. Other _____ _____	_____	_____

6. Is the data referenced in Question 5 available to PCCI?

__ Yes, electronically
__ Yes, paper
__ No
__ Other: Please Explain: _____
_____

7. What Community Based Organizations (CBOs) are partners of [the program]?
(Check all that apply and describe the partnership roles.)

__ Community Health Center: _____
__ Homeless Shelters: _____

__ Food Banks: _____
__ Public Hospitals: _____
__ Other: Please Specify: _____

C. Financial Arrangements: We would now like more information about the financial arrangement used in [the program].

1. Which term best describes the current (or planned) financial arrangement of [the program]?

__ Gain Sharing
__ Shared Savings
__ Capitated Payment
__ Fee for Service
__ Other: Please Specify: _____

2. Which organization(s) participate in this financial arrangement?
(Check all that apply and describe participation.)

__ Payers: _____
__ Providers: _____
__ CBOs: _____
__ Other: _____

3. What challenges are being faced related to this financial arrangement?
(Check all that apply.)

__ Measuring savings and losses
__ Sharing savings and losses
__ Other: Please Specify: _____

4. Is risk sharing a component of this financial arrangement?
__ Yes
__ No

5. What costs/financial outcome best describes your program?

__ Savings
__ Losses
__ Other: Please Explain: _____

5a. Please describe how have savings or losses have been shared between program participants.

_____

_____

6. How frequently are these funds shared among participants? *(Please circle one option.)*
Every _____ Days / Months / Other (Please specify: _____)

7. Is the current financial arrangement expected to change in the future?
__ Yes
__ No

→7a. Please describe anticipated changes to the current financial arrangement as well as the reason(s) for changes.

_____
_____
_____

8. How long will the current financial arrangement last from today (until the next contract renewal date)?
_____ Months

D. Program Innovation: For each of the 4 domains below, please indicate which category (1-6) best describes your program: *(MARK ONLY ONE)*

1a. Domain 1: Coordination

__ 1 Program includes participating organizations in at least two sectors (including, but not limited to clinical, behavioral, and social) but there is no integration or communication between participating organizations beyond simple referrals.

__ 2 Program includes participating organizations in at least two sectors, which are engaged in some care coordination, and may include the use of case managers.

__ 3 Program includes participating organizations in three or more sectors, which are engaged in some care coordination, and may include the use of case managers.

__ 4 Integrated health delivery through care coordination between participating organizations in three or more sectors, including the use of referral tracking to coordinate and monitor patients as they move among organizations.

__ 5 Integrated health delivery through care coordination between participating organizations in three or more sectors, including the use of referral tracking to coordinate and monitor patients as they move between organizations, and a focus on long-term goals and creating a culture of health.

__ 6 Other: Please describe the coordination in your program, including which category above (1-5) most closely aligns with it. _____
_____

1b. Domain 2: Financial Alignment

__ 1 Total financial alignment: All participating organizations under central budgetary control with full downside risk-sharing (though not single payer).

__ 2 Financial relationship among organizations in at least 3 sectors (including, but not limited to clinical, behavioral, and social) with any downside risk-sharing payment system, such as per member per month bundles.

__ 3 Financial relationship between organizations in at least 2 sectors that is based on some alternative payment arrangements, such as partial capitation or social impact bonds.

__ 4 Financial relationship among participating organizations is based on fee for service, but some payment is based on the receiving organization meeting pre-defined quality measures.

__ 5 No financial relationship among participating organizations beyond fee for services.

__ 6 Other: Please describe the financial alignment in your program, including which category above (1-5) most closely aligns with it. _____
_____

1c. Domain 3: Data Sharing

__ 1 No data or information sharing between participating organizations.

__ 2 Data and information sharing within a single sector (including, but not limited to clinical, behavioral, and social).

__ 3 Sharing of non-real time data (such as monthly or quarterly discharge data) on a regular basis (e.g., monthly, quarterly, etc.) across multiple sectors.

__ 4 Sharing of real-time data across multiple sectors.

__ 5 Integrated data and information exchange across all providers with analytics overlaid and real-time data acquisition that includes data from multiple sectors.

__ 6 Other: Please describe the data sharing in your program, including which category above (1-5) most closely aligns with it. _____
_____

1d. Domain 4: Reporting

__ 1 Metrics reported incorporating process, outcome, and composite measures (*a combination of multiple measures to produce a single score*) that extend to focus on prevention and wellness across multiple sectors (including, but not limited to clinical, behavioral, and social).

__ 2 Metrics reported incorporating process, outcome, and composite measures across multiple sectors.

__ 3 Metrics reported incorporating both process and outcome measures within a single sector.

__ 4 Metric reporting based on process within a single sector.

__ 5 No metrics reported.

__ 6 Other: Please describe the metrics reporting in your program, including which category

above (1-5) most closely aligns with it. _____
_____

E. Program and Respondent Information: The following questions will help us to capture important information about program and respondent demographics.

1

2. Is information about the program (including description, patient characteristics) publicly available online?

__ Yes (Skip to Question 3)
__ No

2a. Please provide a brief description of the program.

_____
_____
_____

2b. How many individuals are served by the program?

_____ # Adults _____ # Children

2c. What region(s) and/or community(ies) are served by the program?

_____

2d. What are the key characteristics of the program's target population?

__ Low Income
__ Medically Underserved
__ Chronically Ill
__ Homeless
__ Other: Please Specify: _____

3. Please provide the website where program information can be obtained.

_____

4. Please provide your name and contact information (email address, phone number).

_____
_____

5. What is your position within the program?

__ Director
__ Consultant
__ Other: Please Specify: _____

6. May we contact you if we have questions about the program or your responses?

__ Yes
__ No

Use this space to provide any additional information about the Program or Initiative that may be relevant for our research.

_____
_____
_____
_____
_____
_____

Thank you for your participation.