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Facilitators and Barriers to Care Coordination Between Medicaid Accountable Care Organizations and Community Partners: Early Lessons From Massachusetts

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Abstract

Care coordination is central to health care delivery system reform efforts to control costs, improve quality, and enhance patient outcomes, especially for individuals with complex medical and social needs. The potential impact of addressing health-related social needs further illustrates the importance of coordinating health care services with community-based organizations that provide social services and support. This study offers early findings from a unique approach to care coordination delivered by 17 Medicaid Accountable Care Organizations and 27 partnering community-based organizations for individuals with behavioral health conditions and/or those needing long-term services and supports. Interview data from 54 key informants were qualitatively analyzed to understand factors affecting cross-sector integrated care. Key themes emerged, essential to implementing the new model statewide: clarifying roles and responsibilities; promoting communication; facilitating information exchange; developing workforce capacity; building essential relationships; and responsive, supportive program management through real-time feedback, financial incentives, technical assistance, and flexibility from the state Medicaid program.

Keywords

Medicaid, ACO, delivery systems transformation, accountable care, care coordination, relationships

Introduction

Care coordination, the deliberate organization of patient care activities and information-sharing with patients and among providers, has become a key strategy for improving effectiveness, safety, and efficiency at the health service delivery and systems level (McDonald et al., 2007). Well-designed and targeted care coordination programs can improve both health care quality and outcomes for patients with complex needs, and can achieve cost neutrality or net savings (Berkowitz et al., 2018; Peikes et al., 2009; Tricco et al., 2014; Xing et al., 2015). Cross-sectoral initiatives in which health care services, social services, and community-based supports are coordinated hold particular promise for fulfilling the needs of individuals with complex physical, behavioral, functional, and social needs.

Reports from the National Academies of Sciences, Engineering, and Medicine (NASEM) have emphasized the importance of care coordination between health systems and community-based programs for high-risk patients (Long et al., 2017; NASEM, 2019). The two reviews identified the challenges of scaling and spreading promising care models and the role of state and federal health policies and payment models as either barriers or facilitators of effective care for high-need

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patients. A recent study proposed scaling up community-based partnerships in an effort to address social determinants of health; they observed positive effects on cross-sector collaboration, including improved performance and reduced health care costs (Robertson & Chernof, 2020). Partnerships between health systems and local community-based organizations often emerge organically, with or without formal relationships. As the primary payer for individuals with complex health care and social needs, Medicaid programs have an opportunity to support statewide, collaborative initiatives that leverage existing relationships, scale cross-sectoral partnerships, and increase patient access to and potential benefit from this more comprehensive level of coordination (Medicare Payment Advisory Commission [MPAC], 2018).

The Massachusetts (MA) Medicaid and Children's Health Insurance Program (CHIP) (MassHealth), through the 2017–2022 extension of their Section 1115(a) Demonstration Waiver approved by the Centers for Medicare and Medicaid Services (CMS), sought to improve the coordination of care and achieve better outcomes for members by implementing 17 new Accountable Care Organizations (ACOs) and formalizing partnerships between the new ACOs and 27 community-based organizations (Mass.gov, 2020). The MassHealth ACOs were built on a primary care foundation and are held accountable at the organizational level (with upside and downside risk) for the cost and quality of care. Prior to the program's launch in March 2018, primary care providers (PCPs) affiliated exclusively with one of the 17 ACOs. Patients were assigned to the ACO with which their PCP was affiliated to promote continuity of care.

Distinguishing features of the MassHealth ACO program include the requirement that ACOs hold their PCPs accountable for the cost and quality of care, and the requirement that MassHealth ACOs establish formal relationships with the 27 newly established community-based organizations (known as Community Partners [CPs]) that are tasked with coordinating care for subgroups of members with complex behavioral health and long-term services and supports (LTSS) needs (Mass.gov, 2020). MassHealth also required and oversaw the development of written commitments between ACOs and CPs describing the operational plans for their partnerships. During the early years of the program, MassHealth used claims-based algorithms to identify members with complex needs and enroll them with a CP in their area, while working closely with CPs before and after program launch to gauge and calibrate enrollment assignments with available CP capacity. CPs were given the opportunity to apply as individual organizations or as consortium CPs, wherein multiple community organizations grouped together under one entity (MPAC, 2018). CPs provide a wide range of non-clinical supports, including outreach and engagement, comprehensive needs assessment, care planning, and care coordination including during care transitions. The non-clinical supports delivered by CPs for members with behavioral health and LTSS needs were a new benefit paid for by MassHealth on a per-member per-month basis; CP enrollees continued to have access to all other MassHealth covered services.

These efforts were supported by a $1.8 billion Delivery System Reform Incentive Payment (DSRIP) Program that included plans for more than $1 billion in ACO and $0.5 billion in CP investments over 5 years (2018–2022), with larger up-front funding tapering over time (Mass.gov, 2019). The funding streams include support for capacity building, new infrastructure, technical assistance, training initiatives, workforce recruitment and retention incentives (e.g., loan repayment), quality-based performance incentives, and per-member per-month payments to CPs for care coordination supports (Mass.gov, 2020). Among the 27 participating CPs, 18 served patients with behavioral health needs and nine served patients with LTSS needs (Mass.gov, 2020).

Almost 900,000 Medicaid patients were shifted from traditional managed care into ACOs over a 4-month transition period in 2018, during which members had access to providers in their historical and newly assigned ACO provider networks (Mass.gov, 2018). In July 2018, hundreds of partnerships were established between the 17 new ACOs and 27 CPs. By December 2018, about 42,000 and 11,800 MassHealth-eligible patients were enrolled with behavioral health and LTSS CPs, respectively (Mass.gov, 2018).

This study is part of a larger, mixed methods evaluation of the Massachusetts 1115 Waiver and DSRIP program. Our study findings fill a gap in the understanding of facilitators and barriers to implementation of statewide cross-sector inter-organizational care coordination programs for Medicaid enrollees with complex needs. While effective care coordination within the health care setting is known to improve health, understanding how and why care coordination between health care and community-based organizations develops, flourishes, or lags remains to be understood.

Research Questions Under Study

What are the facilitators and barriers to implementation of the new integrated ACO-CP care coordination model? How do financial incentives and state funding and support relate to the establishment of care coordination infrastructure and processes?

New Contribution

This study provides new insights into the facilitators and barriers of implementing a novel care coordination structure as a partnership between medical and community-based organizations in the context of Medicaid ACOs. We describe the relationship between state funding and incentives with implementation processes, and the ways in which these promote organizational actions to coordinate care for Medicaid

members with complex needs. Our findings highlight best practices and lessons learned from this ambitious delivery system reform initiative.

Method

Conceptual Framework

This study was guided by the Consolidated Framework for Implementation Research (CFIR) (Damschroder et al., 2009). The CFIR framework provides a model for understanding the implementation process and was determined to be the most applicable model to guide our study design, data collection, and analysis. The development of interview protocols was guided by the CFIR framework, which also provided the initial framework for qualitative analysis of interview data. A table summarizing the CFIR constructs and mapping to the interview protocols is provided in Table 1.

Study Design

An exploratory design and qualitative methods were employed, appropriate to understanding the implementation process. Further details about the study design and methods of the larger evaluation of the DSRIP program's implementation have been described previously (Goff et al., 2021). Data for the larger study were obtained via document review, semi-structured key informant interviews, surveys of ACO providers and CP staff, and case studies with select ACOs and CPs. This article focuses on data gathered from key informant interviews with ACO and CP leaders and managers, conducted in March through June 2019, to understand efforts to establish integrated cross-sectoral care coordination in the early days (first 15 months) of implementation. Of note, given the timing of these interviews, these data allow for deeper insights into facilitators and barriers that are especially important in the early stage of implementation and lay the foundation for further targeted data collection later in the 5-year initiative.

This study was determined not to meet the criteria for human subjects research by the University Institutional Review Board. Nevertheless, standard ethical practices for human subjects research were followed.

Sample Selection

Leadership and key staff (e.g., executives, managers, program directors) from all 17 ACOs and 27 CPs were recruited for the study via email through organizational liaisons, as recommended by MassHealth. To ensure a diverse group of participants, the research team provided each organization with information about the interview topics and suggested participant types (i.e., roles and responsibilities) given their likely knowledge of the topics. Participants were then selected with input from liaisons at each organization who identified key staff to speak to each topic area. Interviews were arranged and completed independently by the research team and averaged 1 hour in length. A total of 94 interviews with 99 participants were conducted by teams of two trained researchers per interview, via video conference or in-person. Two or three interviews were conducted with diverse representatives from each organization, depending on the size and structure of the organizations, and the availability of representatives with knowledge of interview protocol topics. Staff were not required to have been employed within the organization for any specific amount of time. The study team established a time frame for conducting the interviews (May through June 2019) and whomever was available to participate was selected.

Interview Protocols and Procedures

The interview protocol was informed by the CFIR constructs and domains (Damschroder et al., 2009), and review of documents submitted by each ACO and CP to MassHealth and provided to the researchers. Questions covered seven domains of interest: governance and leadership, staff and provider engagement, workforce development, quality and process improvement, working with partner organizations, care coordination and management, and the role of MassHealth and the policy environment (Goff et al., 2021). Further details on interview protocol development are provided in Table 1. Further details on all aims embedded in the larger evaluation are referenced in the recently published protocol paper (Goff et al., 2021).

The seven-member research team consisted of two experienced senior co-investigators, the project director, and four research analysts. The team reviewed documentation (e.g., participation plans/proposals, contracts, progress reports) submitted by ACOs and CPs to MassHealth in advance of the interviews. Important attributes and program elements for each organization were extracted using a standard protocol prior to the interviews and then used to create site-specific probes within the interview protocols. Through this process, probes were created for each site to gain more insight into unique programming (such as doula services available through one ACO or services provided to homeless populations as provided by one CP). Prior to data collection, all research staff members were trained by the co-investigators in standardized interview procedures. The interview protocol was piloted with representatives from one ACO and one CP (six total interviews, three each).

Interviewees were given a fact sheet detailing the process and invited to ask questions before they were interviewed. Interviews were conducted by teams of two research team members, with one serving as the lead and the other responsible for taking detailed notes. All interviews were audio recorded after obtaining interviewee consent. Interviewer pairs debriefed after each session and reviewed notes together. The interview process was discussed in weekly

Table 1. CFIR Constructs and Corresponding Interview Protocol Domains.

CFIR constructs	ACO interview domain	CP interview domain
Intervention characteristics—features that might influence implementation, for example, investments and costs, stakeholders' perceptions about relative advantage of implementing intervention, complexity, source of the intervention	MassHealth program design and requirements, ACO and CP infrastructure funding, investments in workforce capacity building and technical assistance, perceived gaps in care Role of MassHealth: *Focuses on how ACOs and CPs utilize DSRIP funds, experience MassHealth's support for the ACO and CP programs, and their perceived effectiveness of DSRIP funding.* Example Question: In what way, if any, has the Delivery System Reform Incentive Payment (DSRIP) program funding impacted your ACO/CP?	
Inner setting—features of the implementing organization that might influence implementation, for example, implementation climate, leadership engagement, organizational incentives	Member needs and characteristics, organizational characteristics (e.g., governance structure, past APM experience)	
	Governance and decision making: *Focuses on what types of decisions are made at various levels of the organization, such as ACO governance or provider organization-level, as well as the role of other stakeholder groups in governance activities.* Example Question: How, if at all, do you engage patients in your governance structure?	Alignment with other Consortium/Affiliated CPs: *Focuses on strategies taken by CP leaders to engage consortium and affiliated partner organizations in fulfilling the goals of the CP.* Example Question: In what ways have your interorganizational community relationships changed, if at all, through this new model of care?
	Performance management and provider engagement: *Focuses on the types of strategies used to engage providers and staff in the ACO-CP care model, including the use of financial and other types of incentives.* Example Question: What types of provider engagement and/or incentives did you have before the DSRIP program? What do these look like now?	Quality and process improvement: *Focuses on CP strategies for engaging staff and meeting quality performance benchmarks under the CP program.* Example Question: Under the new DSRIP program model, how do you keep staff engagement high?
Outer setting—features of external context or environment that might influence implementation and organizational actions, for example, external policy and incentives likely to impact ACO/CP behavior	External funding and incentives; pre-existing strength of relationships ACOs and CPs have with each other and MassHealth; policy environment (e.g., federal regulations and programs); competitive pressures The general policy environment: How have other local, state, or federal policies—that is, apart from MassHealth ACO policies—helped or hindered your organization's ability to operate effectively as a MassHealth ACO?	
Characteristics of individuals—that might influence implementation, for example, knowledge and beliefs about the intervention, identification with the organization, competence, and self-efficacy	Knowledge of individual leaders, providers, and staffs about the ACO and CP programs ACO provider characteristics and perspectives of the ACO and CP programs	CP staff characteristics and perspectives of the ACO and CP programs
Implementation process—strategies or tactics that might influence implementation, for example, planning, engaging appropriate individuals, reflecting, evaluating	Individual entity actions at the ACO and CP level, attracting and involving the appropriate individuals in implementation, training, and education—resources for implementing outreach and engagement efforts for patients, reflecting and evaluating on progress and experience	
	Care coordination and management: *Focuses on the strategies ACOs used to coordinate care and manage patients with complex needs, including strategies for engaging patients in the care management process* Example Question: What has been a strength in the care coordination process under the new DSRIP model?	Care coordination, management, and transitions: *Focuses on how CPs engage and assist members in navigating care delivery systems and coordinate these efforts with partner ACOs*
	Workforce development—staff recruitment, retainment, and training: *Focuses on how CPs manage staff recruitment, as well as staff training and retention under the new ACO model.* Example Question: What strategies did you employ for workforce development with regard to employee retention?	

(*continued*)

Table 1. (continued)

CFIR constructs	ACO interview domain	CP interview domain
	Quality and process improvement: *Focuses on the key strategies used to contain costs and meet the MassHealth quality metrics, including the use of technology platforms and overall impressions of how the transition to an ACO has affected care delivery*	Quality and process improvement: *Focuses on CP strategies for engaging staff and meeting quality performance benchmarks under the CP program*
	Relationship with community partners: *Focuses on the relationship between the ACO and their contracted CPs, the strategies used to manage and coordinate care for members receiving CP services and general impressions about how well the ACO-CP partnership is working*	Relationship with ACOs: *Focuses on processes for coordinating administrative functions with partner ACOs*
	Example Question: How would you describe your relationship with your ACO/CP partners?	

Note. CFIR = Consolidated Framework for Implementation Research; ACO = Accountable Care Organization; CP = community partner; DSRIP = Delivery System Reform Incentive Payment; APM = Alternative Payment Model.

team meetings to address any issues and discuss emerging themes. Subsequent interviews were informed by prior obtained data, in an iterative manner, to enhance the robustness of data obtained overall. Interview recordings were professionally transcribed and reviewed for accuracy. Participants and entities were de-identified in all transcripts.

Analysis

A strategy for sequentially coding interview transcripts was developed by the research team, taking interviewee role(s), organization type, interview content area, ACO/CP geographic location, and other demographics into consideration to ensure a representative sample in anticipation of reaching data saturation before all 94 interviews were analyzed. The initial coding framework was informed by review of the CFIR framework, and relevant MassHealth documents regarding the initiative, and was decided on by the research team (Damschroder et al., 2009; Goff et al., 2021). The codebook was further elaborated over time through ongoing, iterative transcript review, discussion, and coding activities. Transcripts were coded until saturation was reached at 54 interviews. At least one interview from each ACO and CP was analyzed to ensure the final analysis was based on data from every organization. Data were managed using Dedoose software (Dedoose, 2018).

The entire research team reviewed two transcripts together to develop a shared understanding of the initial framework and emerging codes. Four pairs of team members coded a total of eight transcripts together and then coded transcript data independently, consulting each other as questions arose. Weekly team meetings provided opportunity for discussion of emerging codes and the interpretation of data. Inter-rater reliability was assessed following the independent review of every 10 transcripts, using Cohen's kappa coefficients, with an average kappa of 0.8. Research staff individually prepared memos summarizing themes related to the research questions, which were reviewed by the entire team to ensure the integrity of data interpretation and the completeness of findings. Preliminary findings were reviewed in sessions with stakeholders from MassHealth and community organizations to confirm accurate representation of issues and the interpretation of results. Feedback from these stakeholders was incorporated into subsequent interviews, where possible and relevant, consistent with the rapid cycle nature of the evaluation.

Results

The analysis included interviews with 54 of 99 total participants, of whom 37 (69%) were female. The most common roles were program manager ($n = 24$, 44%) and executive ($n = 17$, 31%). Interviewee characteristics are presented in Table 2. The majority of interviewees were employed by their organizations prior to DSRIP program inception; many contributed to their organization's proposal to participate. The characteristics of participants whose interview data were analyzed prior to saturation did not differ significantly from the characteristics of the remaining sample. All 17 ACO and 27 CP organizations were represented in transcripts analyzed.

Final themes as presented in this article were determined after content analysis showed convergence across different themes, resulting in the larger thematic groupings presented below. Six key themes emerged in the implementation of ACO-CP care coordination activities: clarifying roles and

responsibilities; promoting communication; facilitating information exchange; developing workforce capacity; building essential relationships; and responsive program management. Themes and representative quotes are summarized in Table 3.

DSRIP program funding for infrastructure and capacity building served as an incentive for organizations to participate as MassHealth ACOs and CPs. This funding, coupled with the requirements for ACO-CP relationships, supported implementation of the new model and allowed room for improving capacity and infrastructure. ACOs and CPs were held accountable for quality measures reflecting joint ACO-CP care coordination processes, per the DSRIP protocol, including completion of patient care plans with patients, signed by primary care providers (PCPs) and patients/patient designees, follow-up visits after emergency or acute care, and engagement of patients referred to CPs.

Clarifying Roles and Responsibilities

Roles and responsibilities evolved over time, grounded in the clear commitment of ACOs and CPs to the implementation of Waiver reforms. Organizational culture and level of responsibility for serving MassHealth patients were important sources of variation within and between ACOs and CPs. We noted differences in how roles were defined at the organizational and staff levels and that these definitions differed among organizations. For example, a care coordinator at one CP did not have the same roles and responsibilities as a care coordinator at another CP. These differences are also reflective of diverse patient populations, with clear distinctions between ACOs and their practice sites based only partially, rather than entirely, in the communities they serve.

Interviewees noted that clearly defined roles and responsibilities improved communication and facilitated better relationships and better patient care at all levels. This was especially true for staff with overlapping roles and dynamic responsibilities. ACOs that described a better understanding of CP staff capabilities felt more comfortable building bridges among team members. Staff at each organization functioned most effectively as a team when communicating in real time about responsibilities, ultimately reducing service provision redundancies for patients. Interviewees shared that MassHealth's requirement of written agreements outlining responsibilities prompted discussion among care coordinators regarding patient needs while eliminating redundancies in care.

CPs described challenges coordinating with other state agencies (e.g., Department of Mental Health, Department of Developmental Services) that originally described CPs as delivering overlapping or duplicative services and supports. Delineation of responsibilities between state agencies and CPs eventually became clearer. Effective inter- and intra-organizational relationships and explicitly defined roles, with some flexibility to adapt through real-time communication, strengthened ACOs' and CPs' ability to provide coordinated care.

Table 2. Interviewee Demographics.

Number of interviewees by organization type	Coded group		Full sample
	N	%	%
Accountable care partnership plan ACO[a]	21	39	41
Primary care ACO[b]	7	13	9
Managed care organization (MCO) administered ACO[c]	1	2	3
Total ACO interviewees	29		
BH CP	17	31	29
LTSS CP	6	11	12
BH/LTSS CP	2	4	5
Total CP interviewees	25		
Total	54	100	100
Number of interviewees by interviewee gender			
Female	37	69	76
Male	17	31	24
Total	54	100	100
Interviewees by role group			
Executive	17	31	31
Mid-level	12	22	22
Program management	24	44	45
Other	1	2	1
Total	54	100	100

Note. ACO = Accountable Care Organization; MCO = Managed Care Organization; CP = community partner; BH = behavioral health; LTSS = long-term services and supports; PCP = primary care physician.
[a]Accountable Care Partnership Plan ACOs: A network of PCPs who have exclusively partnered with a single managed care organization's network. There were 13 totally. [b] Primary Care ACOs: A network of PCPs who contract directly with MassHealth and its network. There were three totally. [c] Managed Care Organization (MCO) Administered ACOs: A network of PCPs who contract with one or more MCOs. There was one totally.

Promoting Communication

The development of effective communication strategies helped create consistent care coordination practices within and between organizations. With appropriate cadence and steady participation of key care team members, interviewees felt they could build relationships and develop protocols to improve patient care. For example, regularly scheduled multidisciplinary case reviews and programmatic/resource allocation discussions helped staff feel knowledgeable and use this information while delivering care. When ACOs and CPs shared significant patient loads, more frequent communication was often a positive result.

Promising practices emerged, such as designating points of contact to call, email, or text to expedite matters.

Table 3. Six Main Themes With Relevant Quotes.

Theme and quote	Participating organization	Facilitators and barriers by theme
Clarifying roles and responsibilities		
"[The Medicaid ACO] was an amazing opportunity for provider groups and health plans to come together in partnership to find a way to manage this population . . . [we] saw this as an opportunity to jump in and be part of the strategy and part of the solution . . . This is a significant undertaking, but I believe the organization saw it as an important step . . . to come together with its [provider] organizations and be part of this plan with the state." (ACO1101)	ACO	Facilitator: Designated points of contact between ACOs and CPs Barrier: Inconsistency, redundancy, and/or lack of clarity in roles in both the ACOs and CPs
"We've [long worked] with [CP constituent entity], which strengthened what we [do]. As the health care provider, we're comfortable [with Medicaid], but a lot of our partners were not . . . One of the hard things for human services and homeless service providers is that there's no broad funding stream, and you live and die by grants and siloed state funding. This was an opportunity to see . . . [how to] leverage Medicaid dollars in a broader sense." (CPB0702)	CP	
"It works best . . . where we have the regular, case-by-case coordination. Because our [CP] staff are connected to their [ACO] staff . . . 'Jane' will call 'Joe' and say, "Hey, you know, 'Marty's' in the hospital again. Do you want to come with me? We can both meet with him, and then we can figure out who's going to do what." (CPB0803)	CP	
Promoting communication		
"One of the positive things we did is that we hired a program support coordinator, and she is responsible across all of our ACOs—she keeps in contact with our ACO partner and every single CP partner. . . . If they are having a difficult time, it will very often outreach to her. And very often, she's able to help them . . . and it keeps us in the loop in understanding who may be having challenges, and then we work on that when we have our quarterly meetings with the CP partners. (ACO0702)	ACO	Facilitator: Communication strategies discussed and implemented between ACOs and CPs Barrier: Lack of communication and confusion about care coordination roles
"For the [ACOs] we're working with, it's all really good. I know who to call if something goes wrong, if we don't get a care plan back, I can get a live person." (CPB0501)	CP	
"We've had a few good successes working with some BH-CPs, where we have them come onsite to the hospital . . . " (ACO1102)	ACO	
"It's easier when their PCP is here . . . not because they're right here, but [because] we have relationships with [them] . . . Then [the care plan, which] is so big for patient care, let alone the administrative burden of getting it signed. For external ACOs, it's complicated because every process is different, and every team lead has had to become fluent in those processes." (CPL1702)	CP	
Facilitating information exchange		
"The only group that is missing, because of privacy, we don't get any notifications for the population that had discharges from behavioral health facilities. We've [have] staff capable of helping . . . but [these are] the highest-risk members and we don't even know that they're having a transition of care." (ACO0902)	ACO	Facilitator: Shared EMR access between ACOs and CPs Barrier: Non-standardized information sharing practices and privacy concerns about behavioral health data exchange
"The most successful relationship is with an ACO that granted us read-only access to their EMR . . . when the care plan [is] signed, they upload it and integrate it successfully. (CPL2403)	CP	
"ACOs have different rules about [if] we're allowed to reach out to [clients] directly . . . and so we have different results." (CPL1702)	CP	

(*continued*)

Table 3. (continued)

Theme and quote	Participating organization	Facilitators and barriers by theme
Developing workforce capacity		
"To diversify the population of our service providers, it's great to have some [staff] who have lived experience . . . who maybe didn't go to college, but have years of experience working in the field. . . . There's evidence to suggest that that's really powerful in terms of outcomes." (CPB0202)	CP	Facilitator: Robust workforce including the number of staff, the quality of staff, and the training available to staff, enables the other identified themes, allowing for stronger care coordination Barrier: Not enough staff and too much turnover reduces morale and leads to decreased workforce capacity
"The model that we have found to be most effective is to have . . . mentoring or coaching, whereas care coordinators are coming on, they partner with somebody that has been here for some time. We find that to be most successful in learning the role." (CPB0301)	CP	
"They [staff] experience a lot, and you want to make sure, hey, this is what you do with self-care. Then if you experience any of these things, nightmares, and this and that, here is the name that goes with it. It's called vicarious trauma. You're witnessing just so much. And here are the tools that you need to do to take care of yourself, so you could manage those 40 clients that we've assigned you to." (CPL0602)	CP	
"Giving providers a voice and [making them] part of the decision-making creates buy-in . . . allowing them to have that voice deepens the level of engagement so we can actually implement programs that . . . require them to change practice workflows to ensure that we perform under the incentives that we've been provided." (ACO1402)	ACO	
"I think some of it is less about training and more about engaging your team and problem solving with them. And then bringing in resources or staff you might have or experts to deal with whatever issue you're dealing with." (CPB1002)	CP	
Building essential relationships is key to successful care coordination		
"Building [trust] and working relationships . . . the [closer] the CP and the practice [are] in terms of working together on a regular basis, the faster that trust gets built." (ACO1403)	ACO	Facilitator: Trust and relationship building prompted care coordination-specific collaboration between ACOs and CPs Barrier: Lack of trust hindered relationship building
"We love the collaboration . . . in the past, we never had anybody that could advocate [with] insurance. The ACO care facilitators do the extra advocating, because they're a part of insurance, [working] to reduce [patient] cost of care." (CPL0701)	CP	
"We wouldn't have gotten involved if we didn't have a strong commitment and sensibility that this was an important wave of integration, and to really . . . connect to the clinical care of the person with their home and their community life." (CPB0602)	CP	
Responsive program (MassHealth) management		
"The team has been responsive . . . they have tried very hard to be collaborative with us." (ACO0301)	ACO	Facilitator: MassHealth's real-time responsiveness and program changes aided implementation Barrier: There may be policy implications so not all changes can happen even if the State is in agreement with the ACOs and CPs.
"MassHealth [is] actively soliciting feedback, and [taking] into account people's perspectives." (CPB2202)	CP	

Note. ACO = Accountable Care Organization; CP = community partner; EMR = Electronic Medical Record.

Embedding CP staff in ACO care settings was found to be beneficial. Co-location promoted closer relationships and more timely access for CP staff to PCPs, which facilitated care team discussions and PCP sign off on patient care plans. For CP sites that were also practice sites within an ACO, this structural integration was natural.

Organizational flexibility in creating communication plans and styles was initially welcomed, but also led to confusion about how to implement DSRIP programs. Ultimately, those who prioritized meeting patient needs as per their personal care plans were more likely to establish open lines of communication with designated points of contact at external

organizations, and were ready to discuss specific patient needs quickly, facilitating care coordination.

Facilitating Information Exchange

Health information technology (HIT) and information sharing protocol standardization aided care coordination efforts within ACOs and between ACOs and CPs. Parameters for data-sharing between organizations were not initially prescribed by MassHealth, allowing ACOs and CPs flexibility to use technology and processes to meet their diverse needs. However, many interviewees found using several different platforms or mechanisms challenging and eventually asked for standardization guidance from MassHealth. To overcome the lack of interoperability between legacy HIT systems, paper and fax modalities were used, and many organizations invested in new HIT infrastructure to increase connectivity.

The lack of standardized, integrated HIT systems was discussed as a prominent barrier to care coordination. Some ACOs had PCPs and hospitals on different systems, which magnified problems. ACO-specific rules about communication with patients and data-sharing between ACO providers and CPs were another barrier. These restrictions hindered the ability of CP staff to engage patients in a timely manner and to obtain information (e.g., a patient's location) to facilitate such engagement. Standardized procedures and interoperable HIT systems improved communication and allowed ACOs and CPs to work together more efficiently, thereby building stronger relationships.

Developing Workforce Capacity

In the early stages of implementation, participants navigated workforce development in terms of staff recruitment, retention, and training. Throughout the interviews, organizations described competition for the types of care coordination staff that were being recruited by ACOs and CPs, as hiring began simultaneously once DSRIP went live. The challenging nature of the work was acknowledged, as was the need for organizations to support their staff. CPs offered useful insight into their initial approaches to workforce capacity development, as summarized in Table 3.

Provider and staff engagement, or lack thereof, was often discussed as central to sustainable workforce capacity and an important correlate of successful care coordination efforts. During these interviews, only some ACOs and CPs were tracking engagement within their sites, but those who were, felt encouraged.

Building Essential Relationships

Building relationships was essential for successful care coordination, conferring an advantage to providers, staff, and organizations with pre-existing relationships. Information sharing was important, but the means by which information was shared was also noted as a relationship builder. CPs that shared information regularly, through consistent points of contact, and efficiently, through an established electronic process, reported more positive views of working relationships—both interorganizationally and externally.

Ineffective communication and limitations in information sharing undermined front-line provider and staff confidence in the value of the new ACO-CP care model, which impeded relationship-building. The challenge of developing new relationships was amplified by the many new relationships that required simultaneous attention. ACOs and CPs discussed their value in their complementary roles and observed that trusting relationships developed faster with more frequent interactions. Interviewees noted that good interpersonal relationships with counterparts at other organizations, especially between central points of contact, helped them overcome barriers and facilitated implementation. These quotes are highlighted in Table 3.

Responsive Program Management

Interviewees overwhelmingly agreed that MassHealth's responsiveness, willingness to make programmatic changes, and provision of technical assistance enabled necessary adjustments to meet program goals. ACOs and CPs had opportunities for regular input, separately and jointly, during recurring meetings with MassHealth. Several shared feedback in a MassHealth led multi-stakeholder forum. Real-time responsiveness and program changes by MassHealth were viewed as major facilitators to implementing DSRIP programs. Input from organizations to MassHealth contributed to policy changes. For example, a notable change was a change in the requirements that allowed ACOs and CPs to have more flexibility in selecting partners.

Ambitious timelines that MassHealth initially established for engaging CP enrollees, who were often difficult to contact and locate, was a consequential challenge because of the potential for cessation of per-member per-month payments. As a result of MassHealth's collaborative style, timelines were subsequently adjusted based in part on stakeholder feedback, again highlighting the importance of program management responsiveness.

Discussion

The Massachusetts Medicaid ACO-CP model is an innovative approach that uses incentives and requirements in pursuit of improved integration of care coordination between health care and community-based organizations serving targeted groups of Medicaid enrollees across the state. While there are ample studies of care coordination within the health sector, research describing the implementation of this unique partnership model is sparse. This study provides preliminary evidence of the viability of this model and generates new insights into the process of implementing and coordinating

care between health care systems and community-based organizations in a Medicaid accountable care context.

Several elements of programmatic design by MassHealth and strategies taken by ACOs and CPs promoted relationship-building during early implementation. Contractual requirements for documenting plans for coordination at program launch and holding quarterly interorganizational meetings helped establish a floor for functional and process integration (Singer et al., 2020), which most ACO and CP partnerships then exceeded including by establishing designated points of contact, holding frequent regularly scheduled meetings and multidisciplinary case reviews, and clearly defining roles. Evidence of interpersonal integration (Singer et al., 2020) was also observed among many partnerships through open channels for real-time communication and a shared perception of working as a team despite being situated in different organizations. MassHealth's inclusion of a subset of quality measures for CP enrollees which applied to both ACOs and CPs added a sense of shared accountability, which is described as essential to the fidelity of implementation of interorganizational care coordination (Albertson et al., 2022).

Our results confirm that implementing communication strategies and foundational relationship-building activities can produce strong partnerships between health care systems and community organizations in the Medicaid context. With resource constraints and diverse organizational characteristics, not all partnerships can be equal; the benefits of investing in relationship-building and customizing communication strategies for each partner must be balanced with the associated effort. Recurrent interactions and larger volumes of shared patients catalyzed ACO-CP relationship development. For partners with high volumes of shared patients, for example, co-location of teams has been identified as a feature of successful care models (Long et al., 2017). Co-location was perceived favorably among ACO and CP respondents, but used sparingly. Organizations could focus resource-intensive staff co-location efforts on high-volume partners where there are greater potential benefits from such an investment.

Although rare during the early implementation period, elements of structural integration (Singer et al., 2020), namely co-location of staff and shared access to HIT infrastructure, were perceived as facilitators of successful partnerships when present. More commonly, failure to standardize data-sharing protocols and establish interoperable HIT within and between ACOs and CPs was a prominent impediment, consistent with prior studies that have highlighted the importance of HIT and information exchange for effective care coordination (Wu et al., 2017). The nature of such challenges facing social services-oriented community-based organizations has been documented in a prior study of their attitudes toward and preparedness for partnering with the health care sector (Taylor & Byhoff, 2021). Specifically, community-based organizations described facing resource scarcity and expressed concerns about sacrificing organizational culture by adopting a medical model of service delivery. Behavioral health and LTSS CPs acknowledged that partnerships with the health care sector presented an opportunity to secure a stable funding source, while recognizing the importance of establishing systems and processes necessary to attract and sustain such partnerships. MassHealth included substantial funding for infrastructure (including HIT) and capacity building for both ACOs and CPs, technical assistance from third parties, and developing programmatic staffing at MassHealth to support implementation (Mass.gov, 2020).

Our results have implications for those considering delivery system reform that would establish cross-sector relationships between health systems and community-based organizations especially for Medicaid programs focusing on addressing health-related social needs for medically complex patients. The combination of up-front infrastructure investments and per-member per-month funding of care coordination activities was critical for engaging ACO practice sites and partnering community-based organizations in reform efforts and developing their capacity to support members with complex needs. However, balancing payment policies with staff burden at community-based organizations is important for workplace satisfaction and subsequently patient care. Developing trusting relationships with medically and socially complex patients involves substantial time and effort, and parameters of such processes and relationships may not fit into prespecified expectations or timelines. This may also happen when developing effective inter-organizational relationships. The initial requirements for ACOs and CPs to partner with essentially all organizations in their service areas strained both groups as they strove to build relationships with multiple partners simultaneously. However, this was also an opportunity for community-based organizations to participate as CPs, who otherwise may not have due to lack of existing relationships or infrastructure.

The widespread participation of health systems and community-based organizations in MassHealth's Medicaid ACO/CP programs reflects the value of public investments (like DSRIP program funds) to provide incentives for participation in reform efforts aimed at system- and community-wide improvements. Broadening this commitment to engaging community-based organizations in providing integrated supports across the care continuum, MassHealth ACOs began partnering with over 30 social services organizations in 2020 to launch over 60 Flexible Services programs providing nutritional and housing supports to members with demonstrated needs (Commonwealth of Massachusetts Executive Office of Health and Human Services, 2022). The strong commitment among MassHealth stakeholders and policymakers to shifting care delivery toward integrated, value-based care, with open dialogue and ongoing program refinement, clearly facilitated the implementation and evolution of the MassHealth ACO-CP model.

Numerous strategies exist for Medicaid programs to finance and incentivize health systems and community-based organizations to address the full-spectrum of needs of Medicaid recipients (MPAC, 2018). Massachusetts is one of several states using Section 1115 waivers to support delivery system reform at a statewide level by incentivizing integration of care coordination for select Medicaid populations. Further research is needed to determine how these novel partnerships affect health care costs, patient outcomes, and the patient and provider care delivery experience over a longer implementation and observation period.

Strengths

A major strength is that this study was conducted 1 year after statewide implementation of the Massachusetts DSRIP Program, which allowed the exploration of facilitators and challenges faced by ACOs and CPs. We interviewed representatives from all MassHealth ACOs and CPs, achieving a robust sample of interview participants from diverse organizations, reflecting a variety of roles.

A limitation is that the perspectives herein are primarily from individuals in director/executive level roles. We have previously found that relationships at the site level are crucial and sites vary greatly among ACOs (Dyer et al., Under Review). Additional information from frontline providers and staff is needed to understand ACO and CP care coordination strategies better; this information could ultimately include provider and patient perspectives and outcomes for future study. While our sample size adequately represented Massachusetts, applicability to other states must be considered individually as Medicaid programs are unique based on the characteristics of health care, community-based organizations, and their communities.

Conclusion

The Massachusetts Medicaid ACO-CP model is one of the first to directly support the establishment of formal relationships between health care and community-based organizations to coordinate care for Medicaid patients statewide. We identified several replicable strategies that promote relationship building through central points of contact, staff co-location, and regular case conferences. Standardizing communication processes and information sharing, and improving HIT integration, promoted collaborative care, with shared electronic health record (EHR) access between ACOs and CPs a best, but uncommon, practice during early implementation. Rapid-cycle feedback supported continuous policy improvement and furthered engagement within organizations. The relationship between investments aimed at enhancing cross-sector care coordination, outcomes, and cost trends remains uncertain. Future research examining outcomes and costs of care, including variation across organizations with divergent approaches, will be critical to understanding the effects of innovative approaches to care coordination for complex patients.

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References

Albertson, E. M., Chuang, E., O'Masta, B., Miake-Lye, I., Haley, L. A., & Pourat, N. (2022). Systematic review of care coordination interventions linking health and social services for high-utilizing patient populations. *Population Health Management*, *25*(1), 73–85.

Berkowitz, S. A., Parashuram, S., Rowan, K., Andon, L., Bass, E. B., Bellantoni, M., Brotman, D. J., Deutschendorf, A., Dunbar, L., Durso, S. C., Everett, A., Giuriceo, K. D., Hebert, L., Hickman, D., Hough, D. E., Howell, E. E., Huang, X., Lepley, D., Leung, C., . . .Brown, P. M. (2018). Association of a care coordination model with health care costs and utilization: The Johns Hopkins Community Health Partnership (J-CHiP). *JAMA Network Open*, *1*(7), e184273–e184273.

Commonwealth of Massachusetts Executive Office of Health and Human Services (2022). *Delivery System Reform Incentive Payment (DSRIP) program flexible services program public list*. https://www.mass.gov/doc/flexible-services-program-public-list/download

Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, *4*(1), 1–15.

Dedoose. (2018). *Web application for managing, analyzing, and presenting qualitative and mixed method research data*

(Version 8.0.35). SocioCultural Research Consultants. www.dedoose.com

Dyer, Z., Alcusky, M., Himmelstein, J., Ash, A., & Kerrissey, M. (Under Review). Practice site heterogeneity within and between Medicaid Accountable Care Organizations. *Medical Care*.

Goff, S. L., Gurewich, D., Alcusky, M., Kachoria, A. G., Nicholson, J., & Himmelstein, J. (2021). Barriers and facilitators to implementation of value-based care models in new Medicaid accountable care organizations in Massachusetts: A study protocol. *Frontiers in Public Health*, *9*, 645665.

Long, P., Abrams, M., Milstein, A., Anderson, G., Apton, K. L., Dahlberg, M., & Whicher, D. (2017). *Effective care for high-need patients*. National Academy of Medicine.

Mass.gov (2018). *Massachusetts delivery system restructuring: 2018 baseline report*.

Mass.gov. (2019). *Massachusetts delivery system restructuring: 2019 update report*.

Mass.gov. (2020). *Massachusetts Delivery System Reform Incentive Payment (DSRIP) Program Protocol*. Mass.gov.

McDonald, K. M., Sundaram, V., Bravata, D. M., Lewis, R., Lin, N., Kraft, S. A., McKinnon, M., Paguntalan, H., & Owens, D. K. (2007). *Closing the quality gap: A critical analysis of quality improvement strategies (Vol. 7: Care coordination)* (Report No.: 04(07)-0051-7). Agency for Healthcare Research and Quality.

Medicare Payment Advisory Commission Medicaid & CHIP Payment and Access Commission. (2018). *Data book: Beneficiaries dually eligible for Medicare and Medicaid*. Medicaid and CHIP Payment and Access Commission (MACPAC) and the Medicare Payment Advisory Commission (MedPAC).

National Academies of Sciences, Engineering, and Medicine. (2019). *Integrating social care into the delivery of health care: Moving upstream to improve the nation's health*. The National Academies Press.

Peikes, D., Chen, A., Schore, J., & Brown, R. (2009). Effects of care coordination on hospitalization, quality of care, and health care expenditures among Medicare beneficiaries. *Journal of the American Medical Association*, *301*(6), 603–618.

Robertson, L., & Chernof, B. A. (2020). Addressing social determinants: Scaling up partnerships with community-based organization networks. *Health Affairs Blog*.

Singer, S. J., Kerrissey, M., Friedberg, M., & Phillips, R. (2020). A comprehensive theory of integration. *Medical Care Research and Review*, *77*(2), 196–207.

Taylor, L. A., & Byhoff, E. (2021). Money moves the mare: The response of community-based organizations to health care's embrace of social determinants. *The Milbank Quarterly*, *99*(1), 171–208.

Tricco, A. C., Antony, J., Ivers, N. M., Ashoor, H. M., Khan, P. A., Blondal, E., Ghassemi, M., MacDonald, H., Chen, M. H., Ezer, L. K., & Straus, S. E. (2014). Effectiveness of quality improvement strategies for coordination of care to reduce use of health care services: A systematic review and meta-analysis. *Canadian Medical Association Journal*, *186*(15), E568–E578.

Wu, F. M., Shortell, S. M., Rundall, T. G., & Bloom, J. R. (2017). The role of health information technology in advancing care management and coordination in accountable care organizations. *Health Care Management Review*, *42*(4), 282–291.

Xing, J., Goehring, C., & Mancuso, D. (2015). Care coordination program for Washington state Medicaid enrollees reduced inpatient hospital costs. *Health Affairs*, *34*(4), 653–661.