

ALIGNING IN ACTION: PCCI

- Lead organization: PCCI (Parkland Center for Clinical Innovation)
- Lead sector: Data science and analytics organization
- Location: Dallas, Texas
- Year founded: 2012
- Interview with Keith Kosel, Ph.D., former executive adviser to the Dallas Accountable Health Communities team and co-author of *Building Connected Communities of Care: The Playbook for Streamlining Effective Coordination Between Medical and Community-Based Organizations*.

Health is impacted by factors outside of the health care delivery system, including housing, education, poverty, employment, food availability, transportation, and safety. Recognizing that addressing these socioeconomic determinants of health is needed to meaningfully impact health inequities, a national policy shift is taking place.

Government agencies, payers, and providers are all adopting a social determinants perspective. To effectively address these nonclinical needs, partners must work across sectors. Now, the question is how — what are the best practices for effectively aligning systems?

[Aligning Systems for Health: Health Care + Public Health + Social Services](#), supported by the Robert Wood Johnson Foundation (RWJF) and managed by the Georgia Health Policy Center (GHPC), is focused on learning from stakeholders across the nation about effective ways to align these three sectors to better meet people's goals and needs.

Given variance in the local context, there is no single model or formula to align systems. However, Aligning Systems for Health seeks to understand commonalities that drive successful efforts to align sectors. This series examines how communities that describe their work as aligning systems are doing it around four core components of the [Cross-Sector Alignment Theory of Change](#) that RWJF and GHPC are testing: purpose, governance, data, and sustainable financing.

PCCI is a nonprofit health care data science, analytics, and innovation organization. PCCI's history of building one of the first Connected Communities of Care (CCCs) in the nation, rooted in its proprietary information exchange platform, gave it — as an intermediary or backbone organization — the necessary experience of aligning diverse stakeholders to then serve as a bridge organization for the Centers for Medicare and Medicaid Services (CMS) Accountable Health Communities (AHC) Model in Dallas.

LOCAL CONTEXT

PCCI started as a department within Parkland Health & Hospital System (Parkland) and was spun out as an independent, nonprofit organization in 2012 to support the needs of Parkland, as well as additional transformative initiatives under the PCCI name. PCCI remains tightly connected to Parkland, the Parkland Foundation, and the Parkland Community Health Plan, with collaborative work focusing on the needs of vulnerable populations across North Texas and beyond.

The Dallas-area CCC was initially a partnership between Parkland and two large anchor organizations, the North Texas Food Bank and the Metro Dallas Homeless Alliance, with many smaller community-based organizations (CBOs) under their umbrella. Over the last year, and particularly during the COVID-19 pandemic, PCCI has developed a much stronger relationship with Dallas County Health and Human Services, which did not participate in initial efforts.

404.413.0314
ghpc.gsu.edu
aligning@gsu.edu



Support
provided by

Robert Wood Johnson
Foundation



PURPOSE

CCCs are designed to support the safety and well-being of vulnerable and underserved community residents by aligning clinical and social service providers. There is inherent recognition of the need to seamlessly provide services that are complementary to medical care, including housing, food services, and employment assistance. Those coming together to form a CCC partnership fundamentally share a desire to seamlessly connect, communicate, and coordinate among health care, social services, and other entities, potentially including public health, criminal justice, and education sectors.

DATA

Data sharing is central to the CCC framework. PCCI uses a platform called Pieces™ Connect, developed by its for-profit sister company, Pieces Inc. It is a two-way communication messaging platform that enables back-and-forth communication, as well as tracking of referrals made from health care providers to CBOs and more generally enabling electronic case management around the social determinants of health. In the face of the COVID-19 pandemic, this system has been expanded to help with things like hot-spotting, contact tracing, and other public health needs.



The Pieces Connect system is used to measure and evaluate what is working and what is not working across multiple levels — program, CBO, and community resident. Data is shared with all participants in the CCC AHC network.

“It started out that data was always blinded; you are health care provider or CBO A, B, or C, but we have moved to sharing data in an unblinded format when the data and the underlying need warrant it,” explains Keith Kosel, former executive adviser to the PCCI AHC team.

This goes for sharing data that conveys both good news and bad news.

“You have got to take even a small accomplishment back to the health care provider or CBO to celebrate it: ‘That’s great, the nutrition counseling is working,’” says Kosel. Conversely, when things are not going well you must address them. “People showed up at the food pantry, but they were turned away. What went wrong?”

Having people involved in the management and oversight of the CCC who have the time and capability to analyze and interpret the data is critically important, as is communicating findings from the data to community members.

“This is where you need experienced staff that can look at the data and say, ‘Wow, the majority of people that are coming in to this food bank are diabetic, but most of the food we have is not ideal for them,’” explains Kosel.

FINANCING

PCCI was fortunate to have had a large amount of seed funding from a Dallas-based philanthropic organization that allowed it not only to build the technology platform, but also to bring together partners and all of the small CBOs, and to fund the work for several years prior to receiving the CMS AHC award.

Even CCC-related projects are not immune from the “one and done” problem, where once a grant is over and the funding is gone, so is the collaboration. Kosel says PCCI has learned this is why it is critical to have anchor organizations mentally and financially invested in a CCC effort, as they may be called upon to contribute some additional funding to keep the network afloat until it is self-sustaining. But, Kosel advises, to get that additional funding, it is imperative to demonstrate early on to the funders that the effort is working.

“You have got to be able to demonstrate pretty quickly — with data — that you are beginning to move the needle,” says Kosel. “Does it have to move a lot? No. But it’s got to be moving in the correct direction.”

To help drive home this point, Kosel explains a program PCCI was involved in where patients with diabetes and/or hypertension were connected to food pantries capable of helping them manage their dietary and nutrition needs.

“The program saw an 8% decrease in emergency department visits,” Kosel says. “Well 8% isn’t a lot, but the control group showed a 48% increase in emergency visits. So, the alternative of doing nothing was worse. Most people turn up their nose at 8%, but if you multiply that by the number of individuals you’re talking about times, say \$1,500 per

emergency department visit, all of a sudden now you've got a lot of savings. That's a quantifiable result and a start at demonstrating a positive impact of the initiative. The data has to say something beyond how many people you're feeding." To make the program sustainable past the initial term of the grant, a health system or hospital that is at risk for the care of the population could theoretically pay a small amount, say \$5 per person, to the food pantry for providing nutrition counseling and helping patients select nutritious foods to help them better manage their diabetes.

"We're not talking a lot of money here," says Kosel. "For every 20 people that receive the food bank's help, if four or five of them change how they look at something as simple as selecting brown rice over white rice, and in so doing reduce the likelihood they will end up in the emergency department, it becomes a cost-savings to the health care provider. Here again is where having the data to document these changes is invaluable."

Kosel says that participants in large demonstration programs, like the ones CMS supports, need to think of sustainability from the beginning. "CMS demonstrations act as a fire-starter or an accelerator," says Kosel. "Once you take the accelerant away, you need to keep the fire going, and we know that doesn't always happen — in the real world sometimes the fire goes out."

Kosel advises that in those initial conversations with the CBO partners it is necessary to be direct about the importance of collecting the data, looking at the data, and making sure that the effort is moving in the right direction.

"Most of the money CMS earmarks for its demonstration programs is aimed at supporting learning and identifying more effective and efficient ways to generate health, and that's a good thing," says Kosel. "My worry would be that when the money stops, if those organizations have not capitalized on that money to really change their practices and generate demonstrable results, they may revert back to the old way of doing things. Sustaining change, until it becomes the norm, is not easy. Those that have changed their workflows and their processes, and have some evidence that the changes bring about better health and well-being for their community's residents, will be in a stronger competitive position."

GOVERNANCE

PCCI's experiences have taught them that governance is a multitiered process. When building a CCC, particularly in the first year, governance is more easily achieved initially with a smaller group of partners — one or two large anchor institutions and three or four smaller, but critical, partners. These organizations, with the support of a backbone organization, can begin to put together a game plan, i.e., a strategy, for what they want to do, how they are going to go about doing it, and what sort of "rules of the road" are going to exist in this future network. Key foundational questions and considerations include, What's a memorandum of understanding going to look like for participants? What kind of data is going to be collected? What kind of data is going to be shared? How is this CCC network going to be funded? Keeping the group small reduces the amount of disagreement and makes decision-making faster.

In the second stage of governance, several additional partners will be brought in to serve as key players in more tactical or operational roles but who may not have a large say in the strategic decisions. This will also include planning for the next tier down in the network of community-level participant organizations — in the case of Dallas, this included the individual food pantries, homeless shelters, or faith-based organization that are part of the network.

Kosel indicates that in parallel to early governance discussions, PCCI always conducts a readiness assessment to help both the governance group and PCCI, when it serves as the backbone organization, know what the community looks like and what its needs are. This should include clinical and social factors that may already be gathered through a hospital or health system's community health needs assessment or a survey of community needs conducted by a large social service entity such as the United Way or Salvation Army. The readiness assessment must also look at technology capabilities and the experience of the network participants.

In the second year of development, likely when seed money is diminishing, a more permanent, sustainable governance structure should be in place, possibly with a few other partners for both financial and operational support. The focus in year 2 is on longer-term planning, including succession planning in the face of leadership change or withdrawal of a main organizational player.

"When beginning to work with the CBOs to implement the network's technology, you must clearly lay out the workloads and expectations about what has to be done and in what way," says Kosel. "It is important to take the position that there are certain things the CBO will have to do if it is going to be part of this network. If you leave it up to the individual CBOs, the results will be all over the board and the CCC network will suffer. PCCI learned this lesson the hard way and it took a concerted effort to realign participants' thinking."

INSIGHTS FROM THE COLLABORATIVE

While not completely unexpected, Kosel says there is an inherent difference between what a cross-sector partnership envisions and how CBOs work day to day. In the end, a lot of how things actually work is dependent on building trusting working relationships among the network participants, governance group, and the backbone organization.

“We made mistakes, as I’m guessing most everybody else does when they’re trying to build connectivity between health care, public health, and CBO entities,” admits Kosel. “If people don’t see or understand the value of the network, then they’re not likely to share information back and forth. Our tip-off that we had some problems was when people weren’t completing the loop. Somebody at a health care provider would make a referral to a food pantry and they would never hear back from the food pantry. That’s as bad as the old model where a patient is handed a piece of paper with the address of a food pantry and told to go there for food. The whole idea of this information platform is to see the entire process playing out — Sally Smith with diabetes is coming over (to the food pantry); Sally got to the food pantry, and here is what we did for Sally. This allows the clinician and the food pantry to be on the same page.”

Acknowledging that the relationships and communication are the bedrock of the whole network and workflow, Kosel says revisiting the value proposition of aligning is critical as the network evolves.

“While keeping an eye on the operations — is it working the way you envisioned — backbone organizations must be communicating continually with network participants. Are you visiting with and building relationships with the CBOs?” asks Kosel. “Ask the participants, ‘How is the CCC working for you? What problems are you encountering?’ This relationship building and maintenance is really, really labor intensive. That’s probably why most people don’t do it given the scale of the community networks that they’re putting up.”

This also argues for starting your CCC small and growing it in measured steps. Kosel recalls that in Dallas at the end of the CCC’s first year, there were a large number of CBOs participating and it was difficult to find the time necessary to reach out to all of them and build solid relationships. Most came in under the umbrella of the two anchor organizations. Ultimately, there were many small CBOs that needed guidance and direction and an understanding of why the network came together, how it operates, and what each CBO’s role is in the network.

“It doesn’t take long for the wheels to come off the wagon in that sort of scenario,” says Kosel. “Especially for front-line staff, you have to give them the full story. Give them a thorough understanding of what the CCC network is trying to accomplish and what their role is. If they are expected to screen 50 extra people a day for social determinants of health needs, they need to know that up front.”

INSIGHTS FOR ALIGNING

- The CCC demonstrates that one way to align systems that are built to last is to involve anchor organizations that are bought in to the concept both mentally and financially.
- Multitiered structure, especially early on, may help to build the collaborative through a focused engagement of the different partners.

ALIGNING IN ACTION

As a test of the CCC concept early on, PCCI participated in the Data Across Sectors of Health (DASH) program. The premise was that providers at Parkland — the physicians and the case managers — knew that patients with hypertension and diabetes often had food needs. They were either getting the wrong kind of food or they didn’t have access to food, much less nutritious food. It may have been noted in a medical record that the patient should be on low-starch, low-sugar diet, but that’s where it ended.

CCC’s electronic Pieces Connect platform enabled clinicians to begin sending that dietary message out to the food pantries where these patients were getting their food, which created a case management partnership between the clinicians and the CBOs.

This closed-loop model used existing relationships, technology, and staff. Three large food pantries were

selected for participation because they (1) were members of the North Texas Food Bank network, (2) had rotating nutritionists that would visit the food pantries, and (3) served large numbers of Parkland patients.

“Most food pantries will not mandate that clients only select healthy food,” says Kosel. “That said, we wanted these three food pantries to provide nutrition counseling and then strongly recommend what food they should be selecting and why they should be selecting it.”

Based on interviews, patients reported the food pantries did encourage them to try healthy items. PCCI determined that it was the relationship between the food pantry staff and the patient — the personal touch and guidance — that ultimately changed food selection behavior on the part of many patients.

“It goes to show that case management that’s done in a trusting, honest, and open way, with some degree of structure to it, can be effective for a large portion of the population,” Kosel says. Data showed that in addition to a small drop in emergency department visits by patients who received nutritional counseling at the food pantries, there were improvements in medication compliance and a reduction in the number of clinic visits.

“One of the most interesting takeaways was how positively patients reacted to questions we asked them about understanding their illness and their responsibility for their care. We asked questions like, ‘Do you understand your disease better now than you did before the program? Do you now have a better sense of what you’re responsible for with regard to managing your health versus before the program?’” says Kosel. “Responses came back in the neighborhood of 80% to 90% positives. Patients see these CBO staff that are providing the nutrition counseling and food every week. They talk to them, they trust them, they look like them, and many of the counselors have taken the same path that the patient is on. It makes sense that this may be the way to build patient engagement at the grassroots level.”

While funding for the nutrition counseling ended with the end of the grant, the referral system remains in place and continues to be used by Parkland clinicians.

ALIGNING DURING THE COVID-19 PANDEMIC

PCCI has a strong data science group and is well-known for building predictive models. Traditionally, its models include things like predicting 90-day pediatric asthma exacerbations that will lead to a hospitalization or identifying patients at high risk for having an adverse drug event. With the COVID-19 pandemic, Parkland was interested in having PCCI help them build predictive models around hospital capacity. Similarly, Dallas County Health and Human Services was interested in having PCCI help them identify hot spots within the county and at the ZIP code and neighborhood level.

“The question became how do we go beyond just telling people what the current rates are to how do we begin to give them more information about the incidence and the prevalence of the virus in their particular neighborhood,” Kosel says. “PCCI’s models can identify cases down to the street address level to identify which neighborhoods within ZIP codes are a real hot spot for COVID-19 cases. We can identify those individuals in the community that are positive for COVID-19 and their geographic proximity to patients coming to Parkland for a clinic visit or hospitalization. This information was developed into a [proximity index](#) to help Parkland know which incoming patients should be targeted for testing.”

Kosel adds that CBOs, who know some of the patients and communities really well, are able to target boots-on-the-ground efforts using medical or nursing students and community health workers to do some of the contract tracing. The contact tracers work with local CBOs to enhance the effectiveness of contact tracing efforts.

“We could have something on the 6 o’clock news but a lot of the folks that we’re targeting are not news watchers. They get their information from somebody else that is in the homeless shelter or in the food pantry line,” Kosel explains. “We have started to build that communication network through faith-based organizations, food pantries, and homeless shelters. We think by optimizing the CCC network we have a really quick and effective way of getting information about what’s happening with COVID-19 in the community into the hands of the people that can potentially use it.”