Partnership Profile

How CICOA Aging & In-Home Solutions Uses Data to Activate Services Faster and Deliver Value in Health Care Partnerships

CICOA Aging & In-Home Solutions (CICOA), an Indiana-based Area Agency on Aging, is turning a unique data connection with the Indiana Health Information Exchange into an opportunity to partner with health care entities to provide faster interventions and deliver personalized health-related services to high-risk individuals. For example, when CICOA quickly intervenes in the care of individuals who are at risk for falls, an area of great interest to their health care partners, they experience a reduction in fall rate to 5 percent from 25 percent. The result: happier, healthier community members and satisfied health care partners.

We have all heard the phrase 'knowledge is power.' But, how do we build knowledge in the first place? Knowledge is developed from a blend of available data and the wisdom of experience. CICOA Aging & In-Home Solutions (CICOA), a nonprofit Area Agency on Aging (AAA) focused on providing older adults, people with disabilities, and family caregivers with information, advocacy and support services, such as care management, nutrition services, and transportation, understands this well. CICOA has purposefully sought out and made use of data systems and sources to build greater internal knowledge about the effectiveness of non-medical interventions on health and health care outcomes. CICOA then turns this knowledge into greater power to partner with health care providers who are in the pursuit of better health outcomes for their clients.

CICOA funnels its use of health data to enhance cross-sector collaborations with hospital partners by activating the agency's services for at-risk clients more quickly and more effectively. CICOA has participated in four cross-sector partnerships with health care organizations, providing care management services as part of a multi-disciplinary team. For these partnerships, CICOA's staff has access to real-time data through the Indiana Health Information Exchange (IHIE), which enables them to quickly become aware of health care utilization and health status information for new and existing clients. This allows for immediate

connection with these individuals, often before they even leave the hospital, and ensures that their health-related social service needs are quickly identified and addressed, resulting in more efficient transitions to the community while avoiding unnecessary utilization of the health care system.

CICOA's cross-sector partnership strategy had led to an average annual revenue of $800,000.

The Starting Point for a Data-Centric Approach

In 2010, the CICOA leadership team, with President and Chief Executive Officer Orion Bell at the helm, first took an interest in IHIE. As the largest inter-organizational clinical data repository in the nation, IHIE is an incredibly rich data source for hospitals, physicians, payers and other potential cross-sector partners. Currently, IHIE has data connections with 117 hospitals, more than 15,600 medical practices and more than 14,100 providers, with health information associated with more than 14.4 million patients. Until recently, this was an untapped resource for community-based organizations (CBOs) like CICOA.

"We had a number of collaborative projects with hospital partners where we benefited from having the medical information of some of our clients, and we knew we were able to tailor the services we offered those clients based on our access to that data," explains Bell. "That was the starting point for us wanting to tap into more data resources. We knew IHIE had a vast store of relevant patient health data that could be useful to us. Once we recognized there could be incredible value here, the first step was to ask IHIE how we as a CBO could become a part of the exchange."

That proactive first step got the ball rolling. Leaders from CICOA and IHIE put their heads together to map out a plan, discussing the how and why of this new, unique data connection. "After those conversations, we were invited to participate in the information exchange," says Bell. "From there, we had to put mechanisms in place to make it work.

Fortunately, this data connectivity initiative was a case in which both sides were looking for reasons to say 'yes' rather than 'no.' The IHIE stakeholders already saw value in social service organizations being able to influence better health outcomes, so it was about agreeing upon the logistics, not overcoming objections. As Bell shares, the agency and the exchange had several discussions about creating appropriate permissions, how to determine the appropriate cost basis to participate, and what to use as data input codes—they developed a unique CICOA record entry in IHIE's system to mimic a clinic visit code—to make the connection work.

"We had to source a software and reporting architecture that would enable us to provide information to and communicate with the exchange. We secured funding from the Fairbanks Foundation for an HLS7 software system so that we could have a platform that was compatible with IHIE's. Once we adapted the technology for our community-based setting, we were off and running," he says.

Using IHIE Data to Intervene Faster

With connectivity established, CICOA can access relevant data from the IHIE system. "The data points we are most interested in are about any health events of a client of ours," says Bell. "Having access to IHIE's admission, discharge and transfer (ADT) reports in an automated feed has been the most important benefit for us, providing updates any time a client transitions through the health care system."

Receiving automated ADT reports through the information exchange is a stark difference from how CICOA obtained this information prior to establishing a formal relationship with IHIE. Before CICOA's connection to IHIE was established, it could take quite a while for the agency to become notified of a client's admission to the hospital. For instance, if a client had a fall and went to the emergency room, there was no standard communication method for CICOA to find out; sometimes staff members would learn of the event right away, other times CICOA staff would not learn this information until much later. That information delay created an inability to deliver timely and valuable services to clients when it could have made a difference.

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“It can be difficult to locate clients over time. People change addresses, or maybe they had a pre-paid phone and they are out of minutes,” explains Donata Barnes, Director of Health Care Collaborations at CICOA. “Because of the ADT data we get automatically from IHIE, we have another opportunity to establish contact with our clients; we know almost immediately where they are because they appear on the IHIE record. Before we received information through the information exchange, a 20 percent contact rate was considered good. Today, because of the tools we have, coupled with our staff’s persistence, we have a contact rate as high as 70 or 80 percent.”

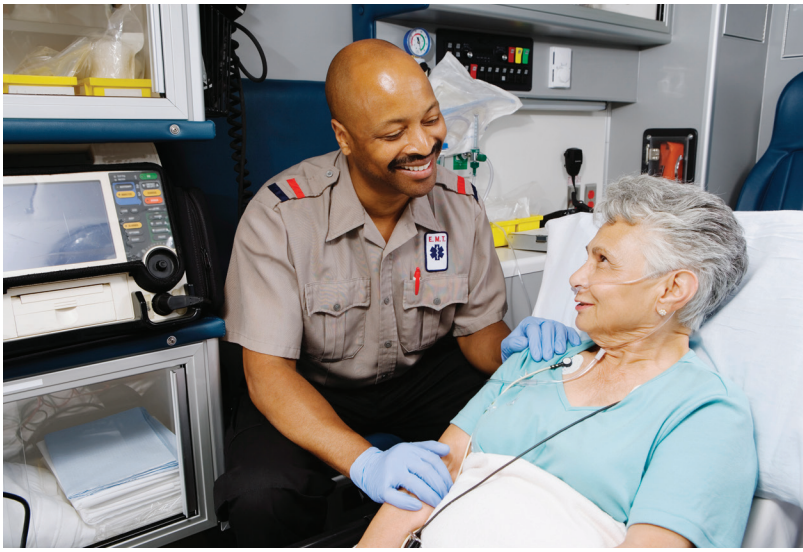
Improved contact rates lead to more reliable and frequent interaction with clients, ensuring their non-medical needs are actively addressed and that health-related concerns are addressed early, rather than after unnoticed complications lead to unnecessary and costly health care utilization, such as a visit to the emergency department.

“We have gained so much from having a system that allows us to access real-time information about admissions, discharges and transfers of our clients,” says Barnes. “When a client goes to the ER or gets hospitalized, we get an ADT alert automatically within 24 hours. Now, we can see that activity and begin planning the next steps with the client right away.”

Health care partners see the benefit, too. “Our hospital partners have tracked the effectiveness of the program, and it isn’t simply the fact that there is a CICOA staff member in the mix, but there is evidence that over time our collaboration can reduce ER admissions and hospitalizations for our community members,” shares Bell.

With access to IHIE’s real-time ADT reports, CICOA receives a snapshot of information about its clients, including why they were admitted, what kind of education they may require once they are discharged, and which social and behavioral determinants of health the agency can address to reduce the likelihood of re-hospitalization. The real-time nature of this data flow allows CICOA to be more proactive with clients; they can make the first call to establish contact with the patient or caregiver before they even leave the hospital, rather than relying on the client to reach out on their own after the fact.

Even with having access to automated ADT reports, CICOA leadership would tell you they are still only scratching the surface of the possibilities with IHIE data. “Having the ADT reports flags to us when a client is admitted—or re-admitted—to the hospital. The next step would be to use more of IHIE’s data capabilities, including their CareWeb tool that would provide a window into our clients’ medical history. What we are doing with data today is making a difference, and we plan to continue exploring new ways to use data systems to build knowledge and personalize services,” says Bell.



> **A person's health story does not end when they exit a hospital's doors.**

Give and Take

CICOA's data-driven strategy is not just about obtaining reports from IHIE; the agency also provides information to the exchange, providing their health care partners a perspective from the community previously unavailable to them—one of significant value in better understanding the conditions and needs of their shared clients.

A person's health story does not end when they exit a hospital's doors. To build a fuller picture of the client as a person, CICOA and other health organizations tapping into IHIE can also learn what happens during transitions of care and long-term management of services and supports at home. When CICOA provides data to the exchange it helps bridge the gap between when people leave the health care setting and when they are back home in the community.

"As an example, we had one client who was not mobile; she couldn't physically get from her home in the building where she lived down to the front door to pick up her medications," says Bell. As a result, she was not adhering to her care plan because she was not taking her prescribed medications, but her health care providers were unaware. CICOA's contact with the client within her home shed light on the problem and allowed the agency to resolve the issue by providing medication delivery as a solution for this client, so she could get her medications without having to go to the front door of the building. This enabled the client to adhere to her care plan and take her medications on time, eliminating the risk of complications of her health condition that could have led to unnecessary utilization of health care services and poor health outcomes.

CICOA is also able to use its data-centric approach as a differentiator when partnering with health care organizations serving the same population. The interface with IHIE allows them to be more intentional with specific interventions for specific clients, with a level of individualized servicing that would not be possible otherwise. "We have the data and performance measurements, so we are able to report out that information in meaningful ways," says Bell. "By tracking our clients' ADT reports and layering our own case note data on top, we have evidence—and confidence—that what we're doing works."

When you speak with CICOA's partners, you hear loud and clear that health care leaders also have confidence that what the agency is doing works.

Christopher Callahan, MD, who serves as the Chief Research and Development Officer at Eskenazi Health; Director of the Indiana University Center for Aging Research (IUCAR); and Cornelius and Yvonne Pettinga Professor at Indiana University School of Medicine, has seen firsthand the value CICOA brings to a health care partnership. "As a community partner, CICOA is effectively our eyes and ears in the in-home setting," he says. "By having CICOA staff embedded within the hospital setting, we are bridging cultures and strengthening relationships across the medical and social sectors. Our ability to share data enables us to constantly come together to refine our programs and provide better service and care to the aging members of our community."

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When Data Access Leads to Better Outcomes

If knowledge is power, then knowledge must be put to good use and yield real results.

"Our health care partners see the value in our services and interventions because the improved health outcomes are there," Bell asserts.

How does CICOA know that their investment in data systems is making a difference?

"One metric we use as a proxy is tracking how long a person stays enrolled in Indiana's Medicaid waiver program, which gives us a similar measure to days in the home. For someone who qualifies for a nursing-home level of care, we look at how long we can keep that person in the community. On average, this is 1,050 days—more than three years," explains Bell. Reducing the need for institutionalization by providing targeted home and community-based services not only results in better health outcomes for clients, but also results in cost reduction for health care partners looking to control costs.

"When we talk about this with health care payers the comparison we can make is that we know what a year of institutional care costs, and we know what a year of community-based care costs," says Bell. "Generally speaking, community-based care is roughly 50 percent less expensive than institutionalized care; this is tangible and meaningful for health care payers."

CICOA puts great emphasis on tailoring services for clients to produce the best outcomes possible. This approach appears to be working, because CICOA has found that 88 percent of clients receiving care management reported in client satisfaction surveys that their quality of life has "definitely improved."

The financial impact is there, as well. "With the hospitals where we have CICOA staff within facilities, they look at the return on investment, at the cost of having our staff in the environment vs. hiring someone in-house, and they tell us they get a bigger bang for their buck by partnering with us," says Bell.

Building Knowledge and Momentum

CICOA is an impressive example of how CBOs can make use of available data to enable earlier interventions that lead to better health outcomes. And the agency is not stopping here.

"We are in discussions now with several providers to expand our use of data," shares Bell. "We can talk about our ability to integrate our social determinants services to complement the services provided by the health system or insurer. We see more cross-sector and collaborative opportunities, and we feel fortunate that we have 'cheerleaders' in the health care community. They see the value we bring because of our decades of experience and our access to IHIE."

The authors are grateful for the time and insights provided by those who were interviewed for this cross-sector partnership profile, especially Orion Bell, President and CEO at CICOA; Donata Barnes, Director of Health Care Collaborations at CICOA; and, Dr. Christopher Callahan, Chief Research and Development Officer at Eskenazi Health, Director of Indiana University Center for Aging Research (IUCAR), and Cornelius and Yvonne Pettinga Professor at Indiana University School of Medicine.

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