

The Role of Case Management in Value-based Health Care

Providers sharing patient data across the care continuum – using safe, appropriate, holistic, prevention-based treatments. Visibility to proven, measureable results that improve the quality and quantity of life. These needs are fundamental for true value-based health care.

Today's healthcare system is undergoing radical shifts in care delivery and payment models, transforming the very nature of the care continuum. The imperative to decrease cost, improve quality, and measure and report on outcomes is prompting stakeholders to focus on value-based care through coordinated, patient-centric, and data-driven care delivery.

Providers recognize that complex interactions between the varying physical, mental, and behavioral needs of a patient contribute to overall health—and are increasingly seeking to incorporate community and social service entities into the care continuum. However, decades of fragmentation have made it difficult for organizations to collect, integrate, and use the wealth of data necessary to deliver high-quality, value-based care.

Emerging Health Information Technologies Are a Key Solution to This Problem

Organizations like Region 6 Behavioral Healthcare in Nebraska and the AIDS Foundation of Chicago in Illinois are successfully using advanced case management solutions to:

- » Integrate disparate data
- » Provide resources for underserved populations
- » Track and care for their patients and clients
- » Improve operational efficiencies
- » Report comprehensive outcomes

This paper describes the healthcare system's evolution towards value-based care and some of the gaps that exist as that shift occurs. It examines how Health Information Technology (HIT) provides opportunities and presents hurdles in the efforts to integrate and use data in the merging of the social determinants of health and the traditional healthcare model. It addresses the challenges around change management that need to accompany these processes and strategies to manage all of these obstacles successfully.

The Evolution Towards Value-based Care

In recent years, rising costs, the growing prevalence of chronic disease, and an aging population have strained the healthcare system. Many observers have blamed the long-standing, reactive and episodic “fee-for-service” model—where conditions are treated as they occur, requiring additional visits for each new symptom—for healthcare spending increases. This model also fails to reward care coordination, often leaving providers with a lack of information they could use to inform treatment decisions. The lack of information can put patient safety at risk and contributes to unnecessary duplication in diagnostic testing, without actually improving the quality of the care provided.

Healthcare stakeholders are shifting toward value-based care, and its emphasis on quality and outcomes rather than the volume of services provided. This care model focuses on prevention, recognizing that many medical conditions can be avoided or addressed through:

- » Lifestyle changes
- » Simple medical procedures like screenings
- » Holistic treatment (not just biological, but also psychological and social)
- » Patient-centric treatment (bringing them into the decision making, meeting their needs, etc.)

Because value-based care is holistic, its implementation necessitates a greater degree of data collection, care coordination, and information exchange. In fact, data is essential for delivering value-based care. A comprehensive, value-based case management system should allow healthcare institutions to:

- » Construct a longitudinal record of care, including care that the patient may have received from other providers and organizations.
- » Enable providers—with these more comprehensive records—to better assess the value of ordering yet another diagnostic test.
- » Improve patient safety by avoiding contraindicated prescription medications.
- » Track in-system progress, so providers can better evaluate quality indicators and the effectiveness of treatments for both individuals and broad populations.
- » Track out-of-system progress, where community and social service organizations can provide valuable insight and better predict the potential outcome of a particular individual.
- » Share and evaluate data—in addition to collecting it.

Comprehensive care coordination ensures new providers will have all the information needed to make informed care decisions in concert with their patients. Information exchange is critical for bringing important data from outside of clinical settings into a patient’s care experience. Housing status and income, for instance, are not routinely captured at the point of care—but have a profound impact on health.

Value-based Care Enabled by Technology

HIT has emerged as a key solution to collecting and exchanging data. All along the care continuum, organizations have turned to HIT as a way to generate, collect, and use data to improve care. This has also enabled entities that traditionally function independently of clinical settings (such as community and social service providers), to begin laying the foundation for data sharing in support of value-based care. These organizations are leveraging sophisticated case management systems to digitize the data collection process and aggregate data from multiple sources into a centralized location. Database technology facilitates a number of important activities:

Reporting Outcomes

Many community service providers are nonprofit organizations who receive funding from a variety of sources, both public and private. To ensure money is well-spent, funders typically require grantees to report on specific metrics related to service provision, such as the number of clients being served, program outcomes, and improvements. In particular, most public-sector organizations are mandated to complete complex and extensive reports about the effectiveness of their programs. Community service organizations may also opt to publicly report on outcomes to demonstrate progress and justify ongoing and future funding. Having all necessary data in one location simplifies the process of identifying metrics for reporting.

Operational Efficiency

Data is critical for measuring how effective an organization is in achieving its mission and goals. The metrics that an outcomes-based, case management platform can provide will improve healthcare entities by:

- » Assisting administrators to allocate resources in order to evaluate and build the organization's capacity.
- » Helping organizations (especially those with a large service area) ensure that services are being delivered quickly and deployed to areas of greatest need.
- » Identifying subpopulations that have stopped coming in for services so they can be selected for proactive interventions.
- » Expanding an organization's resources by automating manual processes and improving workflows.
- » Proving the need for additional providers or services in a particular region.

Case Management

As with clinical care, case managers need information about their clients to successfully meet their needs. Data on income, employment, and housing, for instance, are important for understanding why a client may or may not be adhering to a care plan. Data can also be used collaboratively by case managers with their clients to set goals and measure progress toward attaining them.

A comprehensive, mobile case management platform—that can manage collaboration-friendly, multi-specialty client records, and has diverse capabilities in data analysis—extends a case manager’s ability to manage each individual client’s plan. This will lead to much more time with patients—and much less time spent on data collection and entry.

A critical feature of case management is incorporating the value-based care philosophy of personalized solutions for clients, which in turn improves the likelihood that clients will adhere to care plans. Most importantly, the end result is a better quality of life for the patient.

Data in Action

What follows are two examples of organizations that have implemented advanced case management solutions to collect, manage, and report on their data from a variety of sources. These best practice examples illustrate ways that organizations are using data for improving operational efficiency, compliance reporting, and case management.

Region 6 Behavioral Healthcare (Omaha, Nebraska)

A publicly funded entity providing behavioral health services for uninsured and indigent populations, Region 6 Behavioral Healthcare coordinates a network of behavioral health service providers across five counties offering programs for adults and youth, including peer support, drug and alcohol abuse prevention, housing, and emergency healthcare.

Region 6 also oversees the Professional Partner Program (PPP), a family-based case management program for severely emotionally disturbed youths, which helps clients “navigate the behavioral health system, educational system, and connect with formal and informal resources to address the needs of their child within their home environment,” said Micki Noah, the Director of Youth and Family Programs at Region 6. The program uses a “wrap-around” philosophy—a coordinated, community-based, and family-driven approach addressing individual needs of youth—enabling them to successfully function in their communities.

Region 6 and PPP collect a variety of data to support operations; demographics, individual and outcomes assessments, screening results, operational performance, and client satisfaction (among other data) are stored securely in the cloud, and can be accessed as needed. According to Noah,

“We track everything. Time from referral to admission in a program, wait times, our capacity, basic client demographics, discharge satisfaction, and internal processes like how long it takes a case manager to complete an individual care plan and how often those plans of care are updated. We also measure outcomes. We use the child and adolescent functional assessment scale tools to measure functioning at admission and discharge from a program to see overall improvements in behavioral health needs.”

The vast amount of collected data can conveniently be aggregated as it’s stored in one central location, and, according to Noah, “at any given moment, I can run a report to see how we’re doing.”

Internally, the software is used by case managers to keep track of their clients progress and provide a longitudinal view of services. Region 6 can monitor processes to ensure services are provided in a timely and effective fashion. Data is used to complete compliance reports. For example, Nebraska collects data on functional status generated through the child and adolescent functional assessments. Data is also used to report on requirements for grant funders.

Using advanced case management software, Region 6 has benefitted by:

- » Improving case manager's capability to capture and use mission critical data.
- » Allowing case managers to use the system as an electronic health record (EHR).
- » Saving time—while improving the patient experience.
- » Saving time—in system updates necessitated by reporting and compliance changes.

"In the past, it was a bunch of systems that were pieced together," explained Noah. "It was almost impossible to add queries or revise reports. They would have to be recreated or duplicated somewhere else, which would bog things down." Using an advanced case management solution, the required compliance changes now apply to the majority of the data Region 6 collects.

Instead of meeting with a client and then "returning to the office to enter all of their documentation, it allows the case managers to be mobile," noted Noah. "They can pull any information their clients may need in the moment, review the progress they've made and the goals they've set for themselves, all in real-time."

The database is contributing to improved outcomes for clients. Region 6 has used the software to identify areas of strength and where they can make program improvements. For example, Region 6 monitors the reasons why clients are discharged from a program. Patients may be discharged because they've been successfully helped, or they may be discharged because they've stopped seeking services. Clients who passively drop out of programs can be proactively selected for more intensive outreach to better understand why they've stopped seeking services, or re-engage them into the programs. "Last year we struggled a little with drop-off, but since we've been able to identify those people, it has improved quite a bit" said Noah.

AIDS Foundation of Chicago (Chicago, Illinois)

The AIDS Foundation of Chicago (AFC) oversees HIV-focused case management, housing case management, and prevention services for individuals in the greater Chicago region. Typical clients can call the organization's referral line or are referred by case managers or the central homelessness referral system. The AIDS Foundation of Chicago then collects demographic information, identifies which services a client qualifies for, and then enrolls them in the various applicable programs.

The AFC collects and uses a lot of data from clients, including demographics, insurance information, income, medical records, and lab results. Data is integrated into the case management system and used for both reporting to funders—nearly \$6 million annually from HUD, HRSA (Ryan White HIV/AIDS Program), and United Way—and measuring internal performance.

Cloud hosting enables AFC case managers to access and modify their data when and where needed via desktop or mobile device. Because of the stable and robust platform, the case management software can be configured as needed to keep up with changing reporting requirements. Joel Ritsema, AFC's Associate Director of Research, Evaluation, and Data Services credited the scalability and flexibility of their advanced case management platform.

"We're beginning to work with managed care organizations, sending us clients who they've been unable to contact ... and we're enrolling them in our case management program. All of the data collection for that is happening in our database, and it's something we've been able to build out ourselves using the using the tools provided by the cloud platform on which our database is built."

In fact, the use of the comprehensive software has enabled AFC to demonstrate positive improvements in the health of clients, especially viral load suppression (an indication of a maintained medication regimen). Using test results from the lab reports integrated into the database, the AFC has tracked monthly viral load suppression for its clients. For those clients with poor results, the AFC offers targeted case management interventions to help reduce barriers to managing their condition. “We’ve seen really positive results,” said Ritsema. “We’ve seen dramatic improvements across the board in achieving and maintaining viral load suppression.”

Strategies for Overcoming Barriers to Technology Adoption

These two case examples illustrate the power of integrating a broad set of data into a central system. Both organizations oversee a variety of programs which contribute data to their database. Because data is integrated and normalized, organizations are able to use the data they’ve collected for a variety of purposes, including outcomes and compliance reporting, internal process measurement, and program monitoring and evaluation.

Moreover, having all of the data in one, securely accessible location enhances the flexibility of the organizations. They can more quickly respond to new funder-mandated reporting requirements while also facilitating their ability to pull new metrics to assess performance.

Staff at both organizations appreciate the flexibility of their advanced case management solution, which hosts their data in the cloud—enabling case managers to access the database and enter data in real-time with their clients via a mobile device. Case managers only have to enter data into a single system, saving time, improving accuracy, and increasing productivity.

However, implementing an integrated database was challenging for both organizations. Anytime a new technology system is introduced, it disrupts existing workflows and processes. Effective change management is an important factor during the transition period. Ritsema noted, “It’s difficult to gain buy in from case managers and service providers to enter data. Their primary focus and motivation is on serving the client.” Noah added, “There are always different levels of technical skills and the ability to be comfortable with technology.”

Careful preparation can help overcome barriers to technology adoption and empower organizations to gain a broader understanding of the true value of their data. Noah and Ritsema identified a number of strategies their organizations used to overcome implementation challenges. They suggest carefully selecting a technology platform that:

- 1. Emphasizes usability and flexibility.** According to Noah, “[Our case management software] is very user friendly, especially for people entering the data. It’s easy for them to maneuver in the system.” Ritsema said that it is “really flexible and really configurable.” The AFC has been able to support its recent work with managed care organizations by “building out the data collection pieces ourselves with the help of Professional Services.”
- 2. Provides scalability.** A case management solution needs to allow scaling of the solution to meet program needs—and keep up with growth—without excessive costs or loss of current functionality. Scalability to meet changing needs greatly lowers the total cost of ownership over time.

- 3. Puts the power in your organization's hands.** For example, the AFC built out a set of dashboards that show aggregate data on demographics, agency performance, and outcomes. As a result, "our staff is able to see what their data actually looks like, they can use it to measure their own performance, and they can see how we're evaluating them as well," said Ritsema.
- 4. Has flexible training options.** When first implementing their database, Region 6 created an internal team comprised of supervisors, end users, and staff to inventory current processes and translate them into the new system. Over time, the implementation team became a set of "super users" that were available to assist other staff in learning how to use the system. When new staff are hired, they are paired with a training mentor that teaches them how to navigate the system.
- 5. Can show proof of experience with interoperability between systems.** Many organizations are working with a variety of different stakeholders (state government, public and private funders, service providers, etc.). Ritsema stressed the importance of selecting an organization that has demonstrated willingness to integrate with others. "Knowing that we have that support and won't face resistance in attempting to interface with different systems is really useful." Noah noted that, at the very least, having an integrated database means that it is a lot easier for Region 6 to pull all of the data they need to submit to other systems in one process. "The system that we have right now makes it easier for us to extract data for the state and format it for submission."

Laying the Groundwork for a Value-based Future

The evolution toward value-based care has been both prompted and enabled by the development of health-care technologies that facilitate data collection, integration, and use in support of care coordination and information exchange. In fact, HIT has assisted organizations traditionally on the edges of the clinical care continuum to begin building the infrastructure that will one day facilitate the integration of rich data on the biopsychosocial health of patients to support value-based care in clinical settings.

In the meantime, case management solutions used by social and community service organizations are already helping capacity to improve the lives of underserved populations. Advanced case management software has enabled organizations like Region 6 and the AFC report to funders and the public on compliance and outcomes, monitor and improve internal performance, and deliver high quality care to more clients.

These experiences reveal strategies that other organizations can use to identify and overcome any initial challenges to the implementation and use of new technologies. By selecting the right technology partner with a proven, flexible and scalable solution, comprehensively training their staff to use systems and developing tools for demonstrating the value and power of data, these organizations have laid the foundation for value-based care—and have improved their capacity to meet the needs of their clients both now, and in the future.

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