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Serious Illness Approaches by ACOs: NYC Health + Hospitals ACO (HHC ACO Inc.)

Mark Japinga, Robert Saunders

Summary

Background

NYC Health + Hospitals (NYC H+H) is the largest public hospital system in the country and the main health care provider for many vulnerable New York City residents, including a large fraction of Medicaid and uninsured patients. Compared to other ACOs in the Medicare Shared Savings Program (MSSP), NYC H+H's ACO, HHC ACO Inc., is an outlier with 70% of its attributed patient population either dually eligible for Medicare and Medicaid, disabled, or diagnosed with end-stage renal disease. Furthermore, its patients are more likely to have social risk factors, such as challenges in housing, economic resources, food, or transportation.

The hospital-led ACO has participated in the MSSP since 2013 and currently has a total of 10,000–12,000 attributed patients. The ACO provides services at 11 hospital-based clinics, 6 large ambulatory care centers, and a city-wide network of community-based clinics whose structure is similar to Federally-Qualified Health Centers (FQHCs).

Approach

Given its overall population, the ACO has instituted a variety of initiatives focused on higher risk populations, such as patients needing significant services or those with rising risk, using a decentralized, diverse approach. Each ACO clinic has taken different approaches to address the needs of their high-risk patient population, which may involve focus on transitions from the hospital or emergency department to home, palliative care, reducing emergency department usage, specific clinical conditions (such as HIV or sickle cell), integrating physical and behavioral health, or social needs (such as housing, legal assistance, food insecurity, and transportation).

The ACO has supported these initiatives through their data dashboard, which includes a variety of data sources on their patients. Their clinics then use the data to identify various groups of patients who may need additional attention.

In addition, a front-line physician champion at each clinic coordinates local activity based on the needs of its patient population, and the ACO provides venues to share best practices across the system.

The ACO does not intend for its patients to receive a special level of care, but models best practices with this group because they have more data on them (such as the claims data the Centers for Medicare & Medicaid Services [CMS] provides for ACO-attributed patients). Given that the ACO-attributed population is approximately 1% of the one million patients the system treats annually, the ACO is intended to be a laboratory for the larger system.

Key Learnings

All organizations, regardless of resources, can improve care. While HHC ACO is a safety-net organization and has limited resources, it has developed new initiatives for managing its higher risk populations, like its data dashboard.

Given diversity in care sites and patient populations, local flexibility is critical for meeting needs with existing resources. Each clinic site, with a physician champion, develop their own approaches based on their capabilities along with the medical conditions and social drivers for their patient population. The central ACO office is intentionally not proscriptive and provides data, assists with central resources, and shares lessons learned.

A data strategy focused on stratification and segmentation is important to identify actionable patient groups. The ACO has focused on stratifying and segmenting its patient population to actionable populations, whether that is by condition (e.g., HIV or sickle cell), social risk (e.g., housing instability or food), or people who would benefit from hospice and palliative care.

Results to Date

HHC ACO is the only ACO in New York State to generate shared savings for all 5 years it has been in the MSSP (2013–2017). It has achieved these results alongside strong quality scores, with an average composite quality score of approximately 90% between 2015 and 2017, and ranks in the top 5% of ACOs for measures such as screening for clinical depression and use of statin therapy. Also notable among these quality improvements are reductions in hospitalizations and emergency department usage for seriously ill populations, including a 10% reduction in emergency department usage since 2013.

Tools & Vendor Partners

HHC ACO provides most services in house, but also partners with community organizations to address the social needs of its patient population.

The ACO's most critical tool is its data dashboard, which consolidates and synthesizes claims, financial, clinical, and utilization data from internal sources and from CMS. Driven by clinician feedback, the ACO data team has focused from the beginning on linking the data dashboard to a member record number in the electronic health record (EHR) and to attribute patients to physicians based on their primary care visit history (so that the clinicians do not need to review all ACO-attributed patients). The dashboard provides snapshots of the ACO population, including chronic condition statistics that can help identify patients who are at-risk, may benefit from palliative care programs, or are visiting the emergency department or hospitalized. Local clinics then identify appropriate interventions for identified patients, given their resources and needs.

The dashboard has evolved to a more streamlined process, with necessary data automatically flowing into a "data lake," so that the dashboard only takes 1–2 weeks to produce after receiving the CMS data. A care transition report is produced daily based on admission, discharge, and transfer data from their hospitals. To refine the dashboard, the ACO conducts surveys of its clinicians to understand how they are using the dashboard and where they would like improvements.

Challenges with Implementation

As a safety-net institution, the system does not have significant resources available for new initiatives, and often cannot afford to hire support staff or develop infrastructure that have been critical for ACO success elsewhere. The ACO faces numerous challenges in dealing with a sick and widely diverse patient population, and it can take tremendous effort to figure out how to care best for a patient with multiple chronic conditions who faces additional social risk factors, such as housing instability, food insecurity, or personal safety. Additionally, a decentralized system means clinics can develop their own mechanisms and models for patient care based on their local needs, but that requires the ACO to spend considerable effort to spread best practices and there are fewer economies of scale from common practices.

HHC Details

NYC Health + Hospitals, a large public hospital system, operates a hospital-led ACO (HHC ACO Inc). The ACO participates in the Medicare Shared Savings Program (Track 1), has 5,500 clinicians in the system, and has 10,000–12,000 attributed patients.

Location: Headquartered in New York City, NY; serves all 5 boroughs

Website: https://www.nychealthandhospitals.org/hhc-aco-inc-an-accountable-care-organization/

Detailed Case Study: NYC Health + Hospitals (HHC ACO)

Overview

NYC Health + Hospitals (NYC H+H) started their ACO, HHC ACO Inc. (hereafter HHC ACO), in 2012 as an early foray into value-based payment. The ACO is an outlier in multiple respects. First, NYC H+H is the largest public hospital system in the country, with its patient population mainly consisting of vulnerable New York City residents (including a large fraction of uninsured and Medicaid patients). Compared to other ACOs in the Medicare Shared Savings Program (MSSP), the attributed patient population is extremely high need, with 70% either dually eligible for Medicare and Medicaid, disabled, or diagnosed with end-stage renal disease. Furthermore, its patients are more likely to have social risk factors, such as challenges in housing, economic resources, food, or transportation.

Even with these challenges, HHC ACO has produced positive results. They are the only ACO in New York State to generate shared savings for all 5 years they have been in the MSSP (2013–2017). The ACO has also seen improvements in hospitalizations and emergency department usage for its seriously ill populations. For example, the ACO reduced emergency department visits per 1,000 person-years by 10% since 2013. Overall, the ACO has seen strong quality scores while achieving these savings, including an average composite quality score of approximately 90% between 2015 and 2017, excelling particularly in metrics focused on preventive care and at-risk patients.

Key Components of Care Model

HHC ACO has a small central office that manages the ACO, but most of the activity and innovation happen at the front lines. The central office provides data, organizes learning sessions for ACO leads to share best practices with one another, identifies common challenges and barriers, and helps to resolve problems that primary care could not resolve (like emergency department referrals from a medical or surgical specialty). Each site appoints an ACO lead, generally a primary care physician, who is a single point of accountability at each major site. The central office is intentionally not proscriptive on what needs to be done at each care site or what patient populations should be focused on for improvement efforts; this approach was important for buy-in among clinicians and administrative staff.

Given its overall population, the ACO has instituted a variety of initiatives focused on its higher risk patients, such as people needing significant services or those with rising risk. Each ACO clinic has taken different approaches to addressing the needs of their patient population, which may involve focus on transitions from hospital and emergency department, specific clinical conditions (such as HIV or sickle cell), or social needs (such as housing, legal assistance, food insecurity, and transportation). The ACO has supported these initiatives through their data dashboard, which consolidates and synthesizes the claims, financial, clinical, and utilization data for their practice sites, which then use the data to identify various groups of patients who may need additional attention.

The ACO is used as a laboratory for the overall larger system, given its attributed population is only 1% of the one million patients the system treats per year. Many ACO initiatives are pilots that, if successful, could be adopted more broadly. The ACO stresses that it does not want a special level of care for ACO patients, but wants to model best practices with this group because they have additional data on its own patients.

Social determinants of health

All of HHC ACO's patients, and especially its seriously ill patients, have significant social needs. The ACO is most concerned about housing, but also deals with food insecurity, transportation, legal support, and family support structures, which can complicate and exacerbate a patient's medical conditions. For example, a patient may be referred to their collaborative care clinic because of depression and diabetes, but the issue may be a legal one because a family member is incarcerated and they cannot interact with them.

HHC ACO faces challenges in providing services that address social drivers, given limited resources and over-taxed community partners. Further, it can be difficult to identify the specific social needs for a given patient, the social resources they have already have accessed, or other resources the person may be eligible to receive. For example, a clinician may not know from the medical record that a particular patient lives in group housing for developmental disabilities and what other social services in which they are enrolled.

Short Overview of HHC ACO

Organizational Description	HHC ACO is a hospital-led ACO established in 2012 as a wholly-owned subsidiary of NYC H+H, the largest public hospital system in the country. The ACO participates in the MSSP, and currently has 10,000–12,000 attributed patients. These patients receive health care services from a system of 11 hospital-based clinics, 6 ambulatory care clinics, and a network of community-based clinics whose structure is similar to Federally-Qualified Health Centers (FQHCs).
People in the Model	The overall health system is the principal provider of health care services to New York City's neediest residents (including a large fraction of uninsured and Medicaid patients). The ACO patient population tends to have complex health needs, with 70% either dually eligible for Medicare and Medicaid, disabled, or diagnosed with end-stage renal disease. The ACO particularly focuses on improving care for high-risk patients, such as with improved care transitions, coordination, and palliative care. Furthermore, the ACO addresses social needs of their patient population, which can include housing, legal assistance, food insecurity, and transportation.
Key Programs and Care Innovations	The ACO is decentralized, with each clinic identifying local priorities based on needs and capabilities. Local initiatives are supported by a data dashboard that consolidates and synthesizes claims, clinical, and administrative data. The dashboard identifies various high-risk patient groups using an in-house risk stratification algorithm along with algorithms to identify people in need of palliative care or intensive care management.
Local Market and Context	Operates in all 5 boroughs of New York City. Their local market is extremely urban and has several other hospital systems and clinical groups. The ACO's patient population varies between sites, such as with different cultures from immigrant communities.
Evolution and Buy-In	Has been an ACO in the MSSP since 2013. The ACO has gained buy-in by identifying physician champions at each of their clinical sites, providing actionable data for clinical management and care improvement, and having a decentralized structure where initiatives reflect local priorities and needs.
Financing & Infrastructure	Uses variety of financial sources to support infrastructure, including grant funding for starting new initiatives. The ACO also seeks to have low overhead given resource limitations.
Implementation Challenges	As a safety-net institution, NYC H+H is resource constrained. Furthermore, patients face adverse social drivers of health, clinicians are often overwhelmed with the expectations for care and demands on their time, and local market is complex with multiple competing health care systems and other data organizations.
Results and Key Outcomes	Generated shared savings every year from 2013 to 2017 (only MSSP ACO in NY to do this). They have achieved these results alongside strong quality scores, with an average composite quality scores of approximately 90% between 2015 and 2017, and are in the top 5% of ACOs for measures such as screening for clinical depression and use of statin therapy. The ACO also reports improvements in reducing emergency department visits and hospitalizations. Through the use of a daily care transition report delivered to the front-line, the ACO successfully reduced emergency department visits per 1,000 person-years by 10% since 2013. a daily care transition report delivered to the front-line, the ACO successfully reduced emergency department visits per 1,000 person-years by 10% since 2013.

The ACO has multiple initiatives to expand social supports, with each clinic taking different approaches. One hospital trains its residents on nearby community resources and the local community situation to ensure they are familiar with what is facing patients, another hospital has a protocol for calling a community organization to send an advocate when it encounters patients in the emergency department who are homeless or substance abusing, and another clinic has social workers on staff who refer patients to available community organizations. Due to the ACO, the system launched pilots to deliver wraparound services, care management, social work, and behavioral health to their highest risk patients. HHC ACO has also started group visits for peer support and education.

> **"It's… not the medical illness piece so much, it's everything else that goes around. It's not so complicated to know how to handle diabetes or congestive heart failure, or ... It's just everything around it for the patient."**

Stratification, Segmentation, and Targeting

While some ACOs have focused broadly on reducing low-value care (such as care not backed by evidence or duplicative services) across all patients, HHC ACO did not find low-value care to be a significant problem. Instead, a small group of high-cost/high-risk patients presented the greatest opportunity for improvement.[1] The ACO has higher rates of dual-eligibles, disabled, and end-stage renal disease beneficiaries than the national average, and their patients tend to have more behavioral health and social needs than many Medicare beneficiaries. These patient groups require different interventions for managing their health.

Given this complex population, the ACO has implemented a framework of stratification, segmentation, and targeting, which has been discussed in other publications (e.g., the National Academy of Medicine).[2] The goal is to target a patient population in a clinically relevant manner that provides a clear care management approach, has potential actions clinicians can take, and addresses modifiable risk factors for patients. A starting place for many of the ACO's clinics in caring for various segmented populations is by identifying how to reduce inappropriate emergency department visits and other unnecessary care.

Some clinicians highlighted ongoing challenges in connecting segments of patients to existing resources. For example, the ACO's HIV clinic offers multiple comprehensive services to patients with that condition, but not all HIV patients are aware of or connected with that clinic. Future efforts may focus on identifying where the referral process to the HIV clinics was not effective and which clinicians should be tasked with referring a patient to resources or specialty clinics that offer services specific to a given condition.

Data Dashboard

To support local interventions, HHC ACO has a dashboard with summary information on its attributed patients that uses claims data, financial data, clinical data, social risk factors, and utilization.[1] First, the dashboard identifies the likely primary care clinician based on primary care visit history so that it assigns accountability to an individual clinic and clinician. For each clinician, the dashboard identifies which patients are higher need (using multiple algorithms and definitions), daily updates on who has visited the emergency department or had a hospitalization, who has various diagnoses, who has scheduled appointments, who may benefit from a palliative care program, and other clinical and social information. These snapshot statistics can be drilled down to patient-level information with the medical record number, so that the provider may cross-reference with the patient's medical record in the EHR.

In the beginning, the dashboards took 2–3 months to produce after receiving Medicare claims history. This was a very manual process with an analyst working with many individual data custodians to acquire data and then distilling the raw data into the dashboard. Over time, the group has reduced production time to 1–2 weeks. Key changes were the analysis programs evolving into production-level standards and creating a "data lake" where the needed data automatically flows.

The ACO highlighted that the dashboard has been well received by their front-line clinicians. Like many organizations, clinicians often did not have substantial information on where their patients were receiving care outside of their clinic, and claims data are able to fill part of that gap. Furthermore, the daily reports on hospitalizations and emergency department visits (from Admission, Discharge, and Transfer [ADT] feeds) help clinicians follow up with their attributed patients in a timely manner to ensure smooth care transitions after one of those events.

To ensure the dashboard is useful, the ACO's leaders have focused on making the presented information actionable at the patient level, which means it must be timely and limited to patients in a clinician's panel. To encourage buy-in from its clinicians, the ACO has emphasized the dashboard is a work in process, and they seek feedback from ACO clinical leads and primary care clinicians on how to improve it. For example, the ACO has had difficulty attributing patients to a given primary care clinician based on claims and EHR data, which is a common challenge, and HHC leaders ask clinicians to flag those patients who are incorrectly included in their panel so that they can be corrected in the system.

In using data to orient their strategy, one of the ACO's first analyses was examining hospice use. It found hospice was significantly underused compared to benchmarks, which

led to a conversation among clinical leads at each ACO clinic. This helped to identify the correct referral pathways, so patients could be connected to palliative care and hospice at the right time.

> **"We've never had this much information about a group of patients."**

For serious illness and related high-risk categories, the dashboard includes a variety of approaches to stratify and segment patients. The ACO had challenges using existing algorithms for identifying high-risk patients, like Hierarchal Coding Categories (HCC), because of differences in coding compared to other health systems.[3] Furthermore, many high-risk patient algorithms are proprietary and require fees to implement. The ACO developed a risk stratification approach based mostly on prior utilization, demographics, and diagnoses, which was then spread to the full health system as a payer-agnostic approach to risk stratification using claims data that identified super-utilizing patients based on prior utilization, demographics, diagnoses, and social risk factors.[4] The social risk factors include zip code changes as a surrogate for housing instability and payer changes; the ACO would like to expand the use of these and other social determinants data in future high-risk algorithms. This example illustrates how NYC H+H used its ACO as a laboratory for developing a system-wide approach.

The dashboard also includes information to target their serious illness patients who may benefit from palliative care. To do this, the ACO used a model that incorporated recent hospitalizations and the use of specific durable medical equipment as a surrogate for a patient's functional limitations. They coupled this with the "surprise question" to their primary care clinicians, where they asked the clinicians whether they would be surprised if a given patient passed away in the short-term. The ACO noted that the current algorithm is not as specific or timely as they would like, with some patients on the list not needing palliative care and others already in hospice or having died.

Implementing Care Models Inside ACO

NYC H+H started HHC ACO in 2012 as a wholly-owned subsidiary, and the hospital-led ACO has participated in track 1 of the MSSP. The ACO is part of their broader value-based care strategy, which includes participation in New York State's Delivery System Reform Incentive Payment Program and others. ACO-attributed patients comprise approximately 1% of the 1 million people seen by the system every year.

There is substantial diversity among the ACO's 17 major points of care (11 hospitals, 6 large ambulatory care centers), along with the partner network of FQHC-like community clinics. Each ACO clinic has different team structures depending on local needs and resources, such as whether it is a hospital-based or community clinic. Individual clinics have different types of staffing for coordination and social needs, with some having social workers, others having nurse case managers, and others being more physician-driven. This is in part due to each site's evolution and the other programs available at that site that can serve as resources. Common resources are from their certified patient-centered medical home infrastructure, which all ACO clinics have implemented, and a collaborative care program integrating behavioral health into primary care, which many clinics have launched.

In terms of their serious illness workforce, each facility has a chief of palliative care, either a physician or nurse practitioner, an inpatient palliative care unit at most facilities, and their residents are trained in palliative care principles. However, other aspects of palliative care teams can differ. Some facilities have specialty-trained palliative care physicians, while others have ethics teams who have experience in goals of care and other difficult conversations with patients and families. There are also differences between clinics in what clinical staff manage the referral to palliative care, such as oncology physicians, primary care clinicians, or social workers.

In addition, each clinic uses the data dashboard differently depending on its specific needs. Some clinics use the dashboard for case reviews to discuss what social supports, medical services, or care coordination are needed for given patients. Many clinics have started by identifying their congestive heart failure patients, as that condition often leads to emergency department and hospitalization use when poorly managed, and the clinics focus on improving care management and coordination for that population. Several clinics use the daily transitions report to identify patients who used the emergency department overnight or over the weekend or who were recently hospitalized, and the clinicians ensure the patients have the necessary supports to transition to home and to avoid future potentially avoidable emergency department visits.

> **"Having the information is great. But, if you don't have anybody to do anything with the information, that's not so helpful."**

ACO leaders stressed that focusing on emergency department utilization often allowed for the most immediate improvements to patient health. Emergency department utilization was a major marker of success, since it is actionable, can be tracked regularly, and serves as an early marker of health problems. Clinicians also would talk with patients about their reasons for going to the emergency department, especially if they go during clinic hours or for medication refills. Such conversations could reveal when patients were unaware of the system's services or uncover where future efforts were needed.

Organizational Factors Necessary for Success

Gaining Buy-In Among Clinicians

The HHC ACO's leaders have focused on gaining buy-in from their clinicians, given that clinician buy-in is critical for the success and sustainability for any initiative.

One important buy-in consideration is balancing intrinsic and extrinsic motivation. Most value-based models, like ACOs, provide extrinsic motivation through financial incentives. The ACO's shared savings bonuses, almost entirely distributed to primary care physicians, were welcomed by the ACO's physicians, but they are not the only motivation for improving care. Rather, the ACO leaders emphasize that, as a safety-net institution, its clinicians are heavily motivated by the intrinsic motivation of furthering the organization's mission. Therefore, the ACO's messaging has not been limited to financial incentives around shared savings, but also emphasizes the goal of reducing avoidable suffering among its patients.

Another way the ACO has encouraged buy-in is by having each ACO site choose its improvement priorities based on local needs and capabilities. The ACO creates a community of practice by bringing together the physician champions at each ACO site monthly, either in person or by webinar, to identify common challenges, share solutions developed at each site, and provide feedback on the effectiveness of different tools.

Other buy-in strategies have been to engage physicians in the initial design of the data dashboard, survey physicians on how they are using the dashboard, and ask clinicians how they would like the dashboard to evolve. For example, physician feedback emphasized the first thing they wanted in a data dashboard was a patient's member record number so the clinician could cross-reference the dashboard with their EHR. In addition, the ACO has focused on providing small wins, which can improve morale and create successes that build on one another.

There are tensions with different buy-in approaches. For example, the ACO found that data-led conversations with clinicians and facilities were important for buy-in, but those conversations need to be clinical, open, transparent, and non-punitive for buy-in to occur. One provider may have worse scores because their patients are sicker or other factors that affect their patients' outcomes. Another tension was balancing physician empowerment in improving care for their patients with team-based care. Physicians may want to "own" the care process for their patients, but team members will need to be involved in care to increase access.

Articulating the Business Case

HHC ACO leaders needed to be able to articulate a business case to their system's broader leadership, both to show the scale of resources needed and the gravity of the situation. The ACO's continued shared savings helped that conversation, as those savings provided financial flexibility. The business case conversation was supported by the ability to show specific results using their expanded data resources, such as lower expenditures for serious illness patients or savings from new care initiatives. For example, before the ACO was established, the system had more emergency department visits and hospital discharges per person than other organizations that joined the MSSP, and the ACO's initiatives have changed those specific metrics.

The business case conversation was supported by the ability to show specific results using their expanded data resources, such as lower expenditures for serious illness patients or savings from new care initiatives.

One business case consideration for hospital-led ACOs is that they receive lower revenue when they reduce hospitalizations (which is only partially offset by an ACO's shared savings). However, the ACO has found several factors offset lower revenue from fewer hospitalizations. For example, reducing readmissions reduces the Medicare readmissions penalty, and thereby improves overall financial sustainability. In addition, better relationships with Medicare patients means that these patients then seek most or all of their care from the health system. Care for Medicare patients is paid for by the Medicare program, as opposed to the substantial uncompensated care from their larger uninsured population, and thus helps the health system's financial sustainability.

Specific Organizational Competencies and Example Actions Used to Implement Serious Illness Care Model

Specific Competency*	Example Actions
Care Delivery	
Provide care team with data access and support	HHC ACO invested substantial resources in creating data dashboard that is regularly updated, can be drilled down to the individual patient and clinician level, and identifies actionable opportunities based on risk and condition.
Adapt risk assessment models in response to patient need, business use, or payment incentives	Data dashboard contains multiple risk models to flag patients at risk of emergency department or hospitalization or who need palliative care. Developed in-house algorithm given unique population and data challenges, and published algorithm for others to use.
Understand the unique cultural characteristics of the population served to implement changes in the organization to provide high-value care	The ACO population has multiple social needs, including housing, legal, and food. The ACO serves many different cultural communities that have varying trust in medical systems and beliefs about end of life care.
Governance	
Commit to pursue value-based care	Leadership created the ACO as part of their broader value-based care strategy, which includes Medicaid initiatives. The ACO serves as a laboratory for examining initiatives for the broader system.
Engage provider network	The ACO pursued a decentralized strategy where clinics can customize interventions based on patient needs and local capabilities.
Select clinical champions who demonstrate commitment to lead quality improvement efforts	The ACO identified clinical champions at each site to lead improvement efforts and share best practices between clinics.
Finance	
Align incentives with value-based objectives	In addition to sharing savings with primary care physicians, the ACO created a team fund to recognize the contributions of other clinicians in improving care and outcomes.
Health IT	
Develop platforms to house and analyze data	Developed common data lake that contains multiple data streams, streamlining data dashboard creation.

*Competencies drawn from the Accountable Care Atlas published by the Accountable Care Learning Collaborative.

Implementation Challenges and Implications for Spread

A variety of challenges limit HHC ACO's ability to implement its serious illness initiatives, and its unique context affects whether its efforts can be spread to other health care organizations.

Diverse Patient Population

Different conditions have varying disease courses and needs, meaning that there is not a generic intervention for high-risk patients. For example, people with end-stage renal disease will have different needs and disease courses than people with congestive heart failure, chronic obstructive pulmonary disorder, or severe behavioral health concerns. Furthermore, physicians may be challenged in forecasting whether a given patient has sufficient support given different caregiving networks and resources, with some having an active spouse who could help and others not having any resources.

New York City has a large population—more than many states—with substantial diversity. As such, the ACO sees a diverse patient population, with significant (and different) immigrant communities living near the various ACO clinics. Different segments of their patient populations have varying expectations of and perspectives on the health care system.

These differences include varying diets, beliefs in advance directives or do-not-resuscitate (DNR) orders, the presence (or absence) or caregiving networks from family and community, and whether to make major medical and end-of-life decisions themselves or delegating to their children or family members. More so, some groups have significant distrust of the entire medical system, having clinical personnel visit their homes, or having telephone or telehealth conversations with providers.

Managing serious illnesses with that level of diversity requires culturally sensitive conversations about goals of care, palliative care, and end of life. The ACO now teaches its residents and attending physicians how to conduct active and reflective listening, as well as how to respond empathetically to people with mistrust, fear of health care, or have had poor past experiences with health care. Moreover, the ACO has done focus groups with caregivers to understand caregiver needs, resources, and beliefs, and the lessons learned from those have informed how the ACO supports its patients.

Clinician Overload

HHC ACO physicians, like many physicians nationally, are overwhelmed with the expectations for care and demands on their time. As a result, an important way to motivate physicians is by reducing the logistical demands on their time. For example, physicians notice and appreciate new support, like a nurse case manager, since new staff can take on responsibilities that allow the physician to focus on their care roles.

Contextual Factors Affecting the Ability to Spread the Model

Contextual Factors	Description
Institutional	HHC ACO is part of a larger safety-net health system, which limits resources available for new initiatives. The health system is large and diverse, meaning that the ACO has pursued a decentralized strategy to meet local needs and ensure buy-in.
Local Market	Their diverse patient population has varying beliefs, needs, and resources for serious illness care, requiring significant engagement by their clinicians. The NYC area encompasses a large diverse population with multiple overlapping health systems and health care organizations.
Regulatory	Challenges with risk adjustment, given the uniqueness of their patient population and their historical coding practices.

Recognizing Team Contributions

While the ACO model emphasizes shared savings to the participating physicians, care is delivered by a broader team. To recognize the contributions of the entire care team, the ACO created a team fund to recognize the contributions from this larger group of clinicians and health professionals. This funding could be used for infrastructure that the full team could use, and it was well received by the physicians and teams. The team fund comes out of the ACO's part of shared savings and goes to each facility for activities or projects for all team members.

Limited Resources

Safety-net institutions like HHC ACO are resource constrained; do not have significant staff, time, or finances for new initiatives; and have multiple competing priorities. Despite repeated praise from interviewees for social workers, nurses, and other non-physician support staff, financial limitations make it difficult to hire more clinicians and staff. As a result, the ACO tends to build on existing systems, like their patient-centered medical home, as opposed to building each initiative with new infrastructure.

Local Context and Dispersed Health Care Systems

New York City has a large number of health systems and hospitals, as well as a variety of health care resources and organizations. For example, the city has multiple non-overlapping regional health information organizations (RHIOs), which limit HHC ACO's ability to access data feeds (i.e., ADT) on when their patients use other health systems' emergency departments or hospitals. As a result, the ACO only knows about outside care when it receives Medicare claims data. That data lags approximately three months, which can limit the ACO's ability to identify and address patient crises.

Policy Challenges

HHC ACO leaders highlighted their concerns about risk adjustment, especially in assessing the needs of their patient population. Their ACO-attributed patient population is unusual in that 70% are dually-eligible for Medicare and Medicaid, disabled, or diagnosed with end-stage renal disease, which is a higher rate than the national ACO average. Furthermore, the ACO's patient population has considerable behavioral health needs and other sociodemographic vulnerabilities. However, their overall risk score, as measured by HCC, is lower than average, at 0.88 (the average is set to 1.0). Their situation underscores the challenges with using a risk adjustment approach that depends on health care claims.

The ACO noted that it does not have a culture of extensively coding health conditions, given that coding conditions and interventions are intended for billing insurance plans and NYC H+H takes care of many uninsured who do not have insurance. Furthermore, social risk factors, like housing insecurity, food insecurity, or general poverty, are not reflected in health care claims data and, therefore, not included in the HCC risk score. To address this challenge, the ACO now includes chronic condition coding in their data dashboard to have physicians review the accuracy of current coding (whether there were erroneous or missing conditions).

Like many other clinicians, ACO clinicians report feeling overloaded by the number of quality measures required for reporting. The ACO tries to align measures in their data dashboard so that physicians have one source of information and are not getting different feedback from each health plan (as different payer contracts include varying measures). In addition to too many measures, there are also not ideal measures for several important areas, such as for general palliative care or for integrating palliative care services into primary care. These challenges underscore the broader national challenge in aligning quality measures to reduce the burden of quality measure reporting, as well as the need for measure development in key areas.

While the shared savings from the ACO provides financial flexibility for many of their serious illness program, overall reimbursement for palliative care services is limited. This is especially a challenge in providing palliative care services to their large uninsured population, as those patients are often least able to afford paying for palliative care and other serious illness care. The overall limited funding prevents investments in staffing and infrastructure for serious illness approaches.

While the shared savings from the ACO provides financial flexibility for many of their serious illness program, overall reimbursement for palliative care services is limited.

Summary

HHC ACO shows that ACOs can provide successful serious illness programs even in a safety-net environment with limited resources. Given the variation in infrastructure and needs of its diverse clinics, the ACO has taken a decentralized approach with each site identifying key challenges and interventions based on needs and resources. It acts as a laboratory for the broader system, and it can model best practices for its defined population. The central ACO has supported local innovation through a data dashboard that allows sites to identify high-risk patients for additional care coordination or palliative care services. The overall impact has been shown through its overall MSSP results, in which the ACO has achieved shared savings every year.

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For more information about this brief, please contact
Robert S. Saunders, PhD at Robert.Saunders@duke.edu.

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