

# Case STUDY

 **Learning Systems**  
for Accountable Care Organizations

## Keystone ACO's Health Navigator Program to Identify and Close Care Gaps

Keystone Accountable Care Organization's health navigator program uses community health assistants (CHAs) to identify and resolve beneficiary care gaps. The CHAs collaborate with beneficiaries' care teams to conduct home visits and determine whether beneficiaries have unmet health and social needs. The CHAs then help resolve these needs by reporting potential clinical issues to the care team and connecting beneficiaries with community organizations to address nonclinical concerns. In 2017 and 2018, Keystone's CHAs supported more than 23,750 interventions to identify and resolve potential care gaps, including conducting home visits, follow-up calls, and email-based outreach to beneficiaries.

### BACKGROUND

#### *Keystone ACO*

As of 2019, Keystone Accountable Care Organization (ACO) serves about 78,000 attributed beneficiaries in primarily rural areas of Pennsylvania. The ACO is a joint venture consisting of Geisinger Health System, two independent hospitals, a graduate medical education organization, and a collection of independent physician practices. The organization also has patient-centered medical home recognition for its primary care practices. Keystone ACO joined Track 1 of the Medicare Shared Savings Program in 2013 and transitioned to the Track 1+ Model in 2018.

#### *Program history*

In 2013, Geisinger Health System began designing a program to improve patients' health outcomes by addressing social determinants of health and clinical needs. According to Anthony Reed, the ACO's Chief Administrative Officer, Geisinger sought to address nonclinical care gaps in the following five areas: (1) housing instability and quality, (2)

food insecurity, (3) utility needs, (4) interpersonal violence, and (5) transportation needs beyond medical transportation. Geisinger envisioned having community health assistants (CHAs) identify and address these needs by conducting home visits and coordinating with community organizations.

Geisinger received a grant from a local foundation to develop and pilot a program. The pilot program, called the ProvenWellness<sup>®</sup> Neighborhood Program, launched in 2014 and targeted five primarily rural counties. At the outset of the pilot, program leaders personally met with approximately 140 community organizations, including local agencies on aging, food pantries, and domestic violence shelters, to raise awareness about the program, its goals, and services offered. During the three-year pilot program, the six

*"We believed that we could provide care better . . . if we were tying people who live in those communities directly into services that were already available."*

—Anthony Reed, Chief Administrative Officer

CHAs hired by Geisinger worked remotely, and used company-provided laptops to track data on completed home visits and correspond with beneficiaries, community organizations, and other Geisinger staff. Geisinger found that the pilot program closed approximately 20,000 care gaps for more than 15,000 patients of all ages and insurance types, including those with no insurance. After the grant funding expired in 2016, Geisinger and Keystone ACO's leadership teams decided to continue the program and moved it into the ACO. In 2017, they relaunched the initiative as a component of the ProvenHealth® Navigator Medical Home program. Figure 1 shows a timeline of the program's launch and history.

**Figure 1**  
**Program timeline**

**2013**

Planning begins to pilot the Proven Wellness Neighborhood Program  
Keystone ACO launched



**2014**

Pilot program launched under Geisinger Health System



**2016**

Pilot program concluded



**2017**

Program expanded and brought into Keystone ACO, renamed Proven Health Navigator Medical Home Program



As part of the program relaunch and expansion in 2017, Geisinger and Keystone hired additional CHAs to serve Geisinger's entire service area, increasing the number of CHAs to 37 by June 2019. Although the program remained open to Geisinger patients of all ages and insurance types, the program's population changed with the transition to the ACO. Currently, most of the CHAs' interventions focus on high-risk, high-need Medicare beneficiaries and individuals with dual Medicare-Medicaid enrollments. To support ongoing operations, Keystone and Geisinger contribute funding for the CHAs proportionally based on the mix of ACO and Geisinger patients served by the CHAs. This cost-sharing model has allowed the CHAs to maintain a payer-agnostic approach.

**PROGRAM OVERVIEW**

The CHAs are the heart of the health navigator program. Through home visits and follow-up phone calls, the CHAs help identify beneficiaries' clinical and nonclinical needs and triage them to the beneficiary's primary care team or community resources, as appropriate. In effect, they help beneficiaries navigate the health care system by serving as a bridge between beneficiaries, clinicians, and community organizations.

While the CHAs work independently to resolve social needs, they work alongside the beneficiary's primary care team to resolve clinical needs. To deepen the connections between CHAs and care team members, Geisinger and Keystone embedded CHAs into one or two primary care practices when relaunching the program in 2017. The proximity afforded by colocation helps CHAs obtain background information about beneficiaries from nurse case managers and social workers before initiating home visits. In addition, through their home visits, CHAs serve as a key resource to clinicians when gathering information to support clinical decision-making.

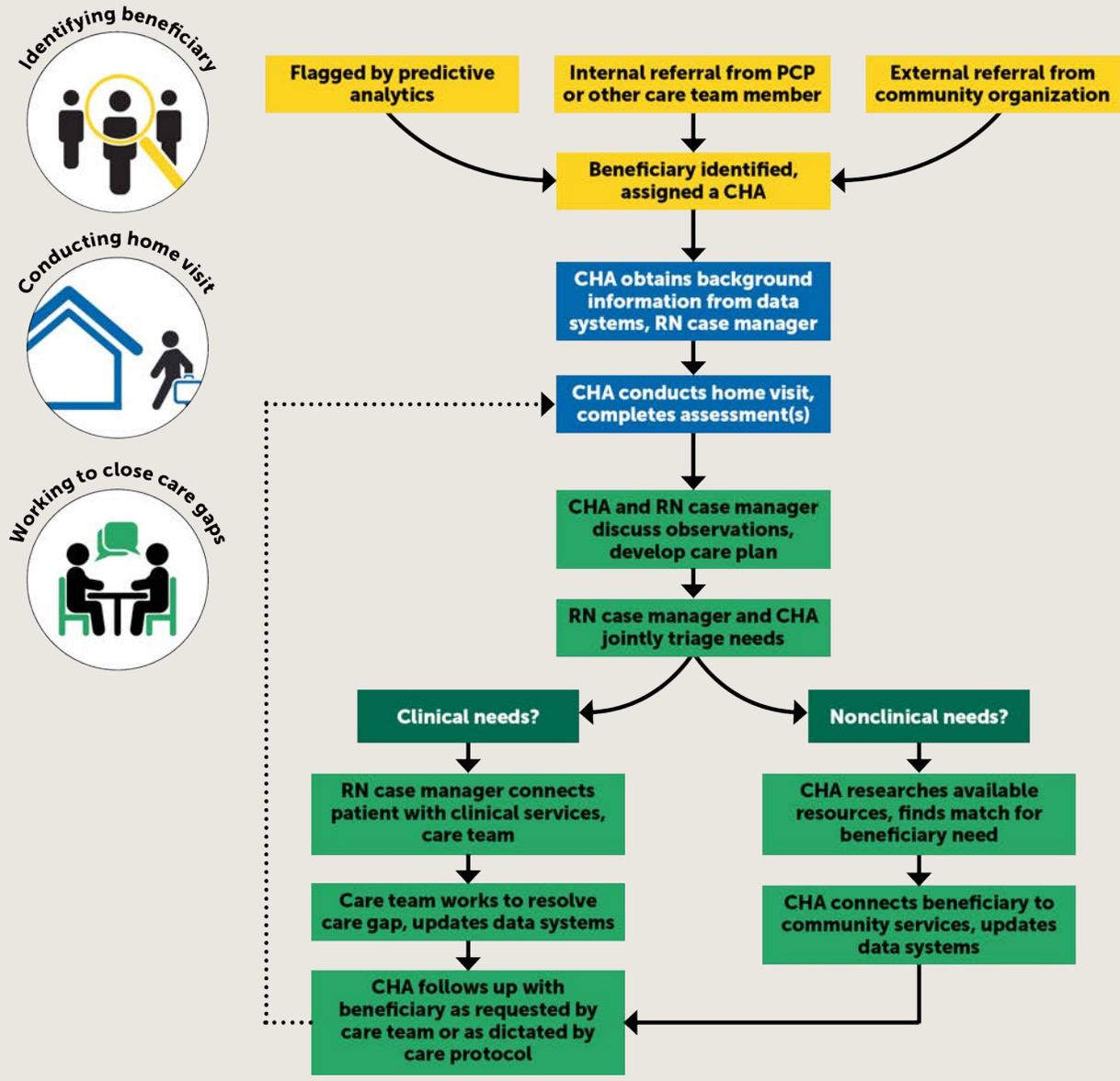
*Program process*

The ACO defines the process for the health navigator program using three stages: (1) identifying the beneficiary, (2) conducting the home visit, and (3) determining the course of action to close care gaps (see Figure 2 for the detailed workflow). Each stage leverages the ACO's information technology (IT) systems and emphasizes the importance of CHA collaboration with other care providers.

Beneficiaries can be identified for the program through multiple channels. Community organizations make referrals through the ACO's toll-free number, and clinicians refer beneficiaries by contacting the CHA or nurse case manager directly, or by using a flag in the electronic health record (EHR). Keystone also identifies prospective beneficiaries using predictive analytics, which consider a beneficiary's hierarchical condition coding (HCC) score, an internal risk score, and past utilization (such as repeat emergency department visits or a recent hospital discharge).

After the beneficiary agrees to participate in the program, the CHA prepares to conduct the home visit. To learn about the beneficiary and their potential needs, a CHA will review the beneficiary's EHR as well as any notes in Keystone's care management software. The CHA will also speak with the beneficiary's nurse case manager or social worker. During a home visit, the CHA will evaluate beneficiary care gaps using an assessment checklist and diagnosis-specific surveys. For example, for a beneficiary with COPD, the CHA might use an assessment survey to confirm that the beneficiary has access to food and reliable transportation to get to appointments, while the diagnosis-specific survey assesses respiratory challenges. The CHA will also inquire about potential needs or risks identified by the care team, address questions about the care team's treatment plan, confirm access to and understanding of prescribed medications, and review how to operate and clean any medical equipment.

**Figure 2**  
**Program workflow**



The CHA will then collaborate with the case manager, clinicians, and other care team members to determine a course of action and update the care plan to fully address all needs identified during the home visit. Though the care team addresses clinical concerns, CHAs maintain responsibility for next steps related to social needs, including making connections with community organizations and updating the ACO’s data systems about interventions to close nonclinical care gaps. In addition, CHAs help beneficiaries navigate both the health care system and the process of engaging community organizations. For example, a CHA might observe a beneficiary’s deteriorating condition or worrying symptoms and report that information to the care team, which helps avoid unnecessary emergency department visits. Or, a

CHA might discover that a low-income beneficiary with diabetes is rationing insulin, unbeknownst to the beneficiary’s primary care clinician, and can work to connect the beneficiary with an organization that can help pay for the medicine.

***Identifying and supporting CHAs***

As Keystone increased the scale of program operations, the ACO explored strategies to identify new CHAs and provide assistance through their onboarding and work experience. Over six years, Keystone has refined its strategies to hire and onboard new CHAs, structure and oversee the organization, and provide ongoing support for all CHAs.

*“If the beneficiary had three ER visits in the last three months, we deploy CHAs to make a home visit . . . to ask the question, ‘What can I do to help you not need to go to the ER?’”*

—Joann Sciandra, Geisinger Health,  
Vice President of Care Coordination and Integration

### Hiring and onboarding new CHAs

When hiring CHAs, Keystone looks for individuals who previously worked in a medical setting, such as a home health aide, social worker, or a medical office employee. In addition to having prior experience in a medical setting, Keystone also values hiring CHAs who live or work in the area and are familiar with the community. CHAs’ knowledge of the surrounding area and local community organizations enables Keystone to identify new partners and strengthen existing relationships.

When new CHAs are hired, they go through an intensive training course, developed by the ACO’s education team. Over eight to twelve weeks, CHAs complete online modules and receive hands-on training through classroom simulations and observation during home visits. Joann Sciandra, Geisinger’s Vice President of Care Coordination and Integration, noted that the ACO emphasizes recreating actual situations in an effort to get CHAs out of the classroom. The training also reviews the structure and goals of the ACO, as well as how to navigate Geisinger’s EHR and care management software.

The ACO creates incentives and pathways for CHAs to grow in their careers. When launching the pilot program, Keystone was surprised at the high number of applications from candidates with advanced degrees. Rather than turn away candidates who seem overqualified, Keystone offers new CHAs a ladder to move up in the organization and recognizes that some might develop into case managers or behavioral health social workers. To support the CHAs’ trajectories, Keystone created levels based on education and experience level: Level 1 CHAs have a high school diploma, and Level 2 CHAs generally have a bachelor’s or master’s degree. In addition, the ACO partnered with a local university to develop a patient navigator certificate program, similar to a community health worker certification, which enables Level 1 CHAs to move to Level 2.

### Defining an organizational structure

CHAs manage large caseloads under the direction of regional nurse case managers and with support from care coordinators. On average, each CHA carries a caseload of around 50 to 60 beneficiaries per month, some of whom might have multiple outstanding care gaps necessitating interventions. CHAs report to a regional nurse case manager, each of whom typically oversees between 10 and 12 CHAs assigned to primary care practices within the regional case manager’s geographic region. To help CHAs prioritize their caseload, Keystone also had

select care coordinators take on CHA scheduling functions. These care coordinators work with the nurse case managers to triage and schedule CHAs’ home visits. Keystone implemented this scheduling function after the pilot, since CHAs reported sometimes struggling to prioritize their caseloads on top of managing their heavy travel schedules.

### Providing ongoing support and peer-sharing opportunities

After their initial onboarding experience, CHAs receive ongoing educational support through formal and informal training opportunities. Formal training includes completing virtual modules on housing options or attending in-person trainings on emergency responses (for example, stopping bleeding). Informal training occurs during monthly, virtual meetings led by case managers and during quarterly, in-person meetings. During these meetings, case managers present on new strategies and resources, and the CHAs learn from their peers by asking one another questions.

Keystone built IT tools to enable CHAs to communicate with one another outside meetings, share materials, and request advice on individual cases. Keystone also maintains a compendium of organizations on a collaboration website for CHAs to consult and enhance as they identify new community-based organizations. The database includes the organization’s name, contact information, and a description of services offered. CHAs use this database when deciding which organization is best suited to help resolve a beneficiary’s care gap.

## RESULTS

Keystone looks to the number of CHA interventions that close care gaps as an assessment of program effectiveness. The ACO developed this strategy to assess the effect of the program after recognizing that CHAs were too integrated into the care team to effectively measure the direct impact of the program on changes in utilization, cost, or health outcomes. As Joann Sciandra noted, “It is difficult to say that any one thing truly drove outcomes.”

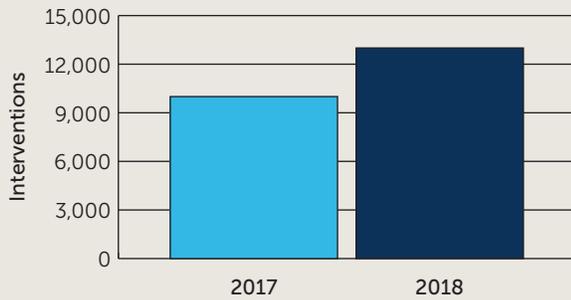
In 2017 and 2018, the CHAs conducted a total of 23,750 interventions, which includes visiting homes and calling beneficiaries (see Figure 3). Keystone grew the number of CHA-led interventions by 29 percent between those two years, which the organization attributed to additional funding in late 2017 that allowed the program to hire more CHAs. The ACO suspects, however, that the count of interventions does not fully represent the program’s reach and volume, as the data-tracking system captures only CHA-based activities and not CHAs’ indirect support for

*“How do you measure whether getting someone a home [will] keep them off of the street and [avoid] pneumonia? Tracking the care gaps is how we really measure our impacts in the community.”*

—Anthony Reed, Chief Administrative Officer

**Figure 3**

**CHA-led interventions**



Keystone ACO, 2019

social workers and other staff that close care gaps. To better measure the program in the future, Keystone plans to add a field to its care management system to flag when a CHA's intervention might have prevented an emergency department visit or inpatient admission.

Keystone has received positive feedback from clinicians and beneficiaries about the health navigator program. Clinicians appreciate the insights gained from CHAs' observations during home visits, which they use to refine treatment plans and ultimately improve the quality of care delivered. In addition, Reed noted that multiple beneficiaries mentioned CHAs in their obituaries, which demonstrated their deep relationships and is "the highest level of recognition . . . for anyone in healthcare."

**LESSONS LEARNED**

Keystone ACO identified several lessons learned when implementing the program:

- 1. Prioritize partnerships with community organizations.** When launching the pilot, Reed and colleagues met with more than 140 organizations to develop a network of community resources. The number and variety

of partner organizations enabled the program to serve the diverse needs of individuals throughout the geographic region. Keystone noted that in-person meetings with these organizations helped build partnerships and encouraged community organizations to identify and refer beneficiaries that would benefit from the CHAs' support.

- 2. Consider the geography of the program's target region.** Because the pilot focused on a primarily rural population, Keystone had to develop a robust infrastructure during the early stages of implementation. For example, CHAs received laptops with wireless internet access to enable work outside the office and when visiting beneficiaries' homes. Keystone also recognized that CHAs in rural locations would have a lower caseload and serve fewer beneficiaries per day than CHAs operating in an urban or suburban environment.

- 3. Emphasize accurate data collection.** When increasing the number of CHAs during the program relaunch, Keystone encountered challenges related to data completion and quality. The ACO found that CHAs did not consistently capture all data in both the EHR and a customized care management software, creating concerns about data accuracy. To improve tracking of the program, Keystone invested in training CHAs on accurately reporting the care gap closures that they supported.

**NEXT STEPS**

Based on the growth of the CHA program and positive feedback, Keystone plans to expand the reach of CHAs to support different care in diverse delivery settings. The ACO is considering embedding CHAs in emergency departments to follow up with beneficiaries that sought treatment for emergent conditions and help them understand their post-discharge instructions. Keystone is also enhancing an existing program that sends CHAs into the homes of beneficiaries with congestive heart failure to collect clinical information that supports cardiologists' treatment plans. Keystone views CHAs as a key component to transforming its care delivery and looks for opportunities to carry the best practices of the ProvenHealth® Navigator Medical Home program into the organization's overall strategy.

**About the ACO Learning Systems project**

This case study was prepared on behalf of CMS's Innovation Center by Julia Embry and Kate D'Anello of Mathematica Policy Research under the Learning Systems for ACOs contract (HHSM-500-2014-00034/ HHSM-500-T0006). CMS released this case study in October 2019. We are tremendously grateful to the many staff from Keystone ACO for participating in this case study.

**For more information, contact the ACO Learning System at [ACOLearningActivities@mathematica-mpr.com](mailto:ACOLearningActivities@mathematica-mpr.com).**

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