

## CASE STUDY

April 25, 2019

# Serious Illness Approaches by ACOs: U.S. Medical Management

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## Summary

U.S. Medical Management operates a physician group-led Accountable Care Organization (ACO) focusing almost entirely on home-based primary care, enrolling a patient population of 20,000 consisting of homebound, frail, elderly, and others with serious illness.

## Background

Frail, elderly, homebound patients have complex and/or multiple chronic conditions, are often unable to travel, and struggle accessing clinical care. Given these challenges, these patients often have poorly managed conditions, which cause regular symptom exacerbations that require emergency department (ED) visits or hospitalizations.

Focusing an entire care model on such a challenging patient population is a high-risk proposition for an ACO. Care for these patients requires significant infrastructure investment, new methods of care coordination, and many other reforms. Additionally, unexpected, catastrophic events involving a small share of enrollees can dramatically swing financial results. Furthermore, technology and care approaches remain imperfect, and evolving regulations can make running a predictable program difficult.

At the same time, improving care for serious illness patients would reduce unnecessary (and expensive) ED visits and hospitalizations, thereby providing shared savings under the ACO model. Can an organization successfully operate an ACO targeted specifically at high utilizers? U.S. Medical Management (USMM) offers a strong test case, but impending changes hint at an uncertain future.

## Approach

USMM focuses on disease management and coordinated care to treat a homebound or home-limited population across 12 states. Because USMM's patients average 8–10 chronic conditions, often have limited access to care, and are

unlikely to become healthier, care delivery is focused on avoiding potential crises and keeping patients out of the hospital.

USMM providers visit patients monthly in their homes, giving them a more complete view of a patient's home life, access to basic necessities, and ability to keep up with daily tasks. Nurse navigators can make additional visits to

## Key Learnings

**Substantial infrastructure needed for serious illness patients:** USMM built substantial infrastructure to succeed in the ACO model, including a clinically staffed 24/7 call center, mobile x-rays and labs, an electronic data warehouse, population health and quality improvement analytics, social workers, and other services.

**Success depends on data integration:** USMM's integrated data system allows providers access to a range of data in one portal, including Medicare claims data, allowing providers to see the full care picture for patients.

**Early financial support is often critical:** Capital loans from parent organizations (such as Centene Corporation, who owns USMM) are often essential for organizations to make infrastructure investments that allow their ACO to start and implement initiatives aimed at seriously ill patients.

**Rules of the road matter:** USMM has demonstrated shared savings under the Shared Savings Program, but it may not be able to survive depending on the method for calculating benchmarks (historical vs. regional), risk adjustment, and attribution.

high utilizers to improve disease management, local practice managers make check-in calls, and social workers and other care coordinators connect patients to resources (e.g., long-term care or Meals on Wheels). The local team is backed by a 24-hour clinically-staffed call center and extensive data infrastructure, both of which operate out of the national office in Troy, MI.

Many of these resources exist because of the ACO model, as the fee-for-service payment system does not pay highly for primary care and does not include support for social work, care coordination, or high-touch approaches. Shared savings payments allow USMM flexibility in providing services based on the needs of their patients. In addition, the key infrastructure was only possible because of upfront investments by Centene Corporation, USMM's parent organization. USMM has cited both as critical for their ability to establish a 24-hour clinically-staffed national call center; support care managers, care coordinators, and social work; develop an electronic data warehouse; establish mobile x-rays and labs; and support the non-medical needs of patients.

Combined, these investments have allowed USMM to better understand the care needs of high-cost patients and the wide range of evidence-based approaches needed to treat them, a major leap forward from the limitations of the fee-for-service system.

## Results to Date

USMM has received shared savings bonuses in each of its three years in the Medicare Shared Savings Program (MSSP), earning \$20.8 million in bonus payments, thanks to \$46 million in overall savings in 2017, and a composite quality score of 92%. Hospitalizations and ED visits have both decreased. USMM has achieved this with some of the most complex patients in the MSSP. USMM also has the second highest proportion of beneficiaries 85 years or older (28%) in MSSP, the second highest hospice expenditures per person, and 20% of USMM's patients die in an average year.

## Tools & Vendor Partners

USMM provides most services in-house through its sister organizations, and its data infrastructure has helped the organization implement high-value care practices. Their data warehouse integrates their EHR, claims data, practice management, labs, home health, hospice, and other services. As a result of this integration, a physician can view via a dashboard his or her schedule for the day, with a checklist for each patient that can help them meet a variety of quality standards, solidify new workflows, and address major sources of unnecessary ED visits and hospitalizations.

USMM gives providers significant flexibility to avoid unnecessary hospital admissions, in part because the organization

does not have a hospital in their ACO network, and these financial and health incentives encourage them to find ways for patients to remain at home.

## Challenges with Implementation

USMM's challenges differ from other ACOs because its attributed patient population consists almost entirely of frail, elderly patients, and internal and external challenges limit the feasibility of operating a home-based primary care ACO. One recurring issue is that many seriously ill patients are poor historians of their care, which means that the ACO needs to be vigilant about tracking ED visits and hospitalizations in order to coordinate with hospitals. Unfortunately, only some states operate a health information exchange where the ACO would have real-time access to hospitalization and discharge records. Due to the severe medical and cognitive impairments of USMM's patients, the ACO has to provide home visits every 30-45 days to prevent hospitalizations and ED visits because they find an increased probability of hospitalizations if patients are not seen within 45 days. This is a much higher touch program than would be provided by most other systems.

Policy issues that affect USMM's model include the shift from a historical to a hybrid historical and regional spending benchmark, prospective vs. retrospective patient attribution, and risk adjustment. This highlights the challenging balancing act the Centers for Medicare & Medicaid Services (CMS) must play in order to meet the needs of hundreds of ACOs in the MSSP, including unorthodox programs like USMM. USMM remains committed to the ACO program and is moving to Track 2 in MSSP, although it may move to a different track with the recently finalized Pathways to Success regulation.

USMM demonstrates the major strides ACOs are making to bring high-quality care to high-cost patients, the efforts and investments involved, and the continued work needed to foster success. Outlier organizations like USMM are doing important work developing new and more effective care pathways, especially for high-cost patients. Creating an environment where more organizations can take on these challenges will be essential for improving serious illness care.

### USMM Details

**Location:** Headquartered in Troy, MI, and treats patients across 12 states.

**Website:** [www.usmmlc.com](http://www.usmmlc.com)

# Detailed Case Study: U.S. Medical Management

U.S. Medical Management (USMM) operates a physician group-led Accountable Care Organization (ACO) headquartered in Troy, MI, which focuses on home-based primary care. Their patient population generally is frail, elderly, homebound or home-limited, has multiple medical comorbidities, and is on multiple medications. Such patients have limited access to clinical care, given their inability to travel. Due to these challenges, patients often have poorly managed conditions and frequently need to visit the hospital or emergency department (ED) for routine exacerbations.

USMM addresses these challenges by providing a high-touch care model with frequent home visits (or visits to the facility in which they live), by offering 24/7 access through a clinically-staffed call center, links to community services and social work, care coordination through their electronic data warehouse, and additional clinical services based on a patient's needs. These services allow people to live longer in their homes, remain stable in their health status without frequent ED visits and hospitalizations, and have their quality of life and symptoms addressed as their illness progresses to a more advanced state.

USMM has been an ACO under Track 1 (shared savings) of the Medicare Shared Savings Program (MSSP) since 2015. In 2017, the organization provided services to approximately 20,000 attributed patients through 200 employed providers. USMM is part of a larger practice organization, with affiliates like the Visiting Physicians Association (VPA), which is one of the nation's largest house-call practices. The VPA was started about 25 years ago by a hospitalist who was passionate about home-based care based on challenges in caring for aging family members, and then grew the company to manage additional services. The larger practice organization provides a range of services including home-based primary care, hospice, home health, mobile x-ray and labs, home-based durable medical equipment (DME), home-delivery pharmacy, and other services. The entire organization became a subsidiary of a large health insurer, Centene Corporation, in 2014.

Compared to other ACOs in the MSSP, USMM is an outlier. Based on 2017 public data, USMM's patients are some of the most complex (with a weighted average hierarchical condition category [HCC] score of 1.73, which is the highest in the entire program). The USMM population is older than other ACOs, with the second highest proportion of beneficiaries 85 years or older (at 28% of their attributed

population). USMM also has the second highest hospice expenditures per person, indicating strong use of hospice care.

Despite these complex demands, USMM has achieved shared savings every year they have participated in MSSP. In 2017, they generated savings of \$46 million, with \$20.8 million in earned savings bonus, while producing a composite quality score of 92%.

## Key Components of Care Model

Similar to other geriatric care models, USMM's goal for their patients is not recovery or improvement, but maintenance and comfort. Given that USMM's patients often have 8-10 chronic conditions and no form of care will help them become healthier, USMM's main goal is to prevent further health degradation or crises, such as acute exacerbations of chronic obstructive pulmonary disorder (COPD) or severe hyperglycemia. Because their patients are so sick, the ACO has found they have considerable churn; in a given year, approximately 20% of their patients die. With the overall poor health of patients when they enter the model, they have found that it takes approximately 6 months to stabilize a patient after joining.

To care for its complex population, USMM visits patients in the home (or facility if their patients live there), as their patient population is generally unable to travel. They note a home visit gives an honest view of a patient's life as they can see the medications a patient is actually taking, their access to food, caregiver access, and ability to maintain their daily tasks. Home visits provide a sharp contrast to clinic visits, where a patient may feel embarrassed admitting that family members are not regularly bringing food or fear that they will be sent to a facility if clinicians find out that they are unable to keep up with home maintenance. Given the patient population, clinicians have more of a palliative care mindset than many traditional primary care providers. In fact, the ACO is considering how to implement specialty palliative care in their markets.

USMM stressed the importance of frequent visits. They found from their data and experience that when they do not see a patient for 45 days, that patient is much more likely to have an ED visit or a hospitalization. As a result, the ACO strives for a high-touch model of care, visiting each patient every 30-45 days and within 1-2 days after a hospital discharge. These



## Short Overview of U.S. Medical Management

### Organizational Description

Physician group-led ACO, part of larger provider system owned by a large health insurer; 200 providers work for USMM, and the Medicare ACO had approximately 20,000 attributed lives in 2017.

### People in the Model

Entire focus is home-based primary care focused on people who are homebound or home-limited (either in their home or in a facility). Most people are frail elderly with poorly managed conditions and on multiple medications. The goal is to stabilize patients, provide access for after-hours concerns (outside of the ED or hospital), and provide care without the patient needing to travel.

### Key Programs and Care Innovations

Home-based primary care with appointments every 30–45 days, as they have found that patients are likely to be hospitalized if they have not been seen within 45 days.

### Local Market and Context

Operates in 12 states (as of 2017) with more than 40 physical offices. Beneficiaries tend to live in urban or suburban areas, with one-eighth of their patients in rural areas.

### Evolution and Buy-In

Has been an ACO under the MSSP since 2015, but their parent organization, VPA, has existed for 25 years. VPA started with a commitment to home-based primary care because the founder saw the challenges in providing care for older family members, especially those associated with traveling to clinician visits. USMM joined the ACO model because they felt traditional fee-for-service reimbursement did not adequately reimburse for care coordination, seeing a patient in their home, expanded access after traditional business hours, or other services. After successfully collaborating with other organizations in a Pioneer ACO, they joined the MSSP.

### Financing & Infrastructure

ACO is a critical part of their overall business model. The ACO supports significant infrastructure, including a clinically-staffed 24/7 call center, mobile x-rays and labs, an electronic data warehouse, population health and quality improvement analytics, social workers, and other services. Without the savings, they would not be able to offer the services they do. Between the MSSP, Independence at Home demonstration, and commercial value-based payment arrangements, 80-85% of their revenues are in some type of value-based arrangement.

### Implementation Challenges

Recruiting clinicians interested in providing home-based care, accessing data on ED visits or hospitalizations (especially in states without a health information exchange), coordinating care with hospitals and specialists, and patient engagement with patients with dementia/cognitive impairment.

### Results and Key Outcomes

They have achieved shared savings every year in MSSP, with \$46 million of generated savings in 2017 (with \$20.8 million in earned savings bonus) with a composite quality score of 92%. They have also achieved reductions in hospitalization and ED visits.

in-home visits are performed by a physician or nurse practitioner, accompanied by a medical assistant; since USMM patients have complicated conditions, each of these visits lasts longer than a standard 15-minute clinic appointment.

When including travel time to drive to the patient's house, their clinicians see 8-12 patients per day. (Clinicians are able to see more patients per day if they visit multiple patients in facilities, as there is less travel time between patients.) Tablets connect a care team to a patient's electronic health record (EHR) and other data systems, even when traveling between visits, so they can be aware of changes to their schedule (e.g., newly scheduled patients due to emergencies) and review clinical histories while in the field.

In states with health information exchanges, USMM will be notified when one of their patients visits the ED or is hospitalized. For ED patients, they can follow up quickly to make sure the patient is well managed. For hospitalized patients, the care team will work with the hospital care management staff in the hospitals and explain their care history, as their patients (especially those with dementia or cognitive impairment) can be poor historians to a new clinician. Because their patients are so complex, hospital physicians often want to discharge to a facility (e.g., skilled nursing facility) because they assume these patients need a higher level of care. In these instances, USMM explains the services and support available, so patients can be discharged to home in most cases and transition to facilities only when absolutely necessary.

In addition to physician home visits, nurse navigators will visit patients who have had significant utilization recently to help them manage their disease, and local practice managers will call high-risk patients to check on them. Social workers and patient care coordinators in the local office work to connect patients to local resources, creating lists of services within a 30-mile radius of the office; these resources may include transportation, respite care, Veterans Health Administration, Meals on Wheels, or placement in long-term care or assisted living. A local scheduler keeps a list of patients with the most complex health needs to know whom to quickly flag for follow-up; if one of these patients calls during the day, the scheduler will try to get their physician or another provider to visit their house that day to address their concern. The local care team is backed by a call center and data infrastructure system operated out of the national office.

The ACO also has active case management for the top 5% most complex patients (such as those with recent hospitalizations or history of high utilization). USMM notes that there is still a need for predictive modeling to find the patients who are on a downward trajectory (versus those who already are significantly utilizing hospitals or in crisis). The best predictor remains the surprise question (asking physicians whether they would be surprised if this patient passes away in the short term), but future methods are welcome.

Given the home-limited or homebound nature of their patients, there is a struggle providing specialty care. Even after a referral, it is unlikely that their patients will visit a special-

ist because it requires leaving the house. (For some patients, the 20% Medicare co-insurance is often a financial barrier to attending the visit.)

For their care model, their primary care physicians have become more comfortable providing specialty services; without them, USMM patients will likely not receive such care. In addition, each local office has compiled lists of specialists willing to take new patients, who are willing and able to share medical records for referred patients, and who may offer transportation (or are physically located near available transportation options).

## Implementing Care Models Inside an ACO

The current fee schedule does not reimburse for many services (e.g., coordinating with case workers and physicians at hospitals or identifying community resources for the patient) and pays lower rates for primary care services, which cost more due to traveling to patients' residences. USMM stressed that they require shared savings to sustainably implement their model.

**USMM's high-touch approach would not be possible under fee-for-service.**

With the shared savings from being an ACO, USMM operates a national call center open 24 hours a day and 7 days a week, which is staffed by multiple clinically-trained staff who can access patients' EHRs and help the patients identify a plan beyond visiting the ED. The call center then patches in a physician on call to talk through the patient's or caregiver's concerns. In the morning, each distress call is flagged for the local branch, who will contact the patient and have a physician or nurse practitioner visit them that day.

The ACO also has built additional infrastructure to support seriously ill patients. In the last few years, they developed an electronic data warehouse that integrates their EHR systems, claims data, practice management, labs, home health, hospice, and other services. USMM noted that access to claims data was another advantage of the ACO model, since they did not have access to their patients' Medicare claims prior to becoming an ACO.

USMM's data warehouse also incorporates the practice management system, allowing providers to see their daily schedules along with a checklist of activities for each patient to meet various quality standards (e.g., HEDIS measures, MSSP measures through GPRO, STAR ratings, and others). This is in contrast to the situation for providers in other organizations, who may have to go through different portals (as payers often

operate individual portals for their patients) to access information on their patients, and even then will find different data in different formats.

USMM's data system allows providers to view a dashboard of their personal progress toward various measures and compare themselves to other practices for internal quality improvement purposes. The data warehouse can be mined by local practices, such as for searching to find all patients on a particular medication or who need additional follow-up. In addition to these resources, USMM is also investing in new scheduling and care management software.

The ACO model also grants USMM access to claims data. Before they joined the ACO model, they did not have access to such data, which limited their ability to understand the full care picture for their patients. USMM has since incorporated those claims data in their electronic data warehouse (as described above) and has supplemented these claims with clinical and utilization data from health information exchanges in states where available (as noted later in the case study). Access to expanded data sources has allowed the ACO to assess the performance of different interventions in terms of utilization (e.g., hospitalization or ED use) and care quality (e.g., quality measures required for ACO and payment programs or quality measures they are piloting with other organizations).

Shared savings also provide flexibility to invest in services that improve patient health. This flexibility is important as the Medicare fee schedule does not include funding for social work or other services that address social drivers of health (e.g., food, housing, or transportation), even though many USMM patients have social needs that affect their overall health. With new flexibility from shared savings, USMM has spent resources on social factors, including for a social worker who connects patients to community resources. Additionally, leadership has noted that for dual-eligible patients, access to broader resources can vary between states and depends upon waiting lists for Medicaid home- and community-based services.

## Organizational Factors Necessary for Success

Implementing serious illness care within an ACO requires success in several organizational competencies. One key competency is continuous quality improvement. For example, USMM leadership analyzed their data last year and found that urinary tract infections were a key contributor to unnecessary ED visits and hospitalizations. Part of the challenge was that providers were unable to routinely get urine samples during the course of a home visit as patients may not be able to produce samples during the home visit. The lack of samples meant that they were unable to test for urinary tract infections. After identifying this issue, the ACO changed their workflow to leave a urine-collection sample cup behind and asked patients to provide a urine sample on the day of their next home appointment. USMM also started using a new form of urine testing that identifies the specific bacterial DNA and the most effective antibiotic treatment in a shorter timeframe than standard culture and sensitivity tests. As a result of these two interventions, USMM reduced urinary tract infection-related hospitalizations.

USMM recently identified chronic obstructive pulmonary disease (COPD) as a key challenge. To better manage this condition, USMM hired a respiratory therapist to work with their providers. Payers do not routinely cover respiratory services, but USMM has identified that greater use of respiratory therapists could help COPD patients better manage their condition and reduce overall costs. USMM can use its flexibility as an ACO to direct savings towards these traditionally unreimbursed services. In hopes of further improving COPD patient care, USMM is testing noninvasive ventilators, C-PAP machines, and other therapies to see which work best.

Beyond disease-specific interventions, USMM has examined the impact of different structural factors for care delivery. For example, USMM has examined clinician utilization patterns, such as which providers have the highest hospitalization rates for ambulatory-sensitive conditions. Similar examinations were done on where patient care coordinators should be located. Originally, patient care coordinators were centralized in Troy, MI, but USMM found that a central pool meant that patients talked to many different coordinators when they called, thereby making coordination difficult. They have since moved the patient care coordinators into local offices so that the care coordinators have a personal relationship with patients in that area and know the high utilizers there.

### Infrastructure investments were critical for USMM to succeed as an ACO.

While shared savings provide operational support, USMM had to make upfront investments in infrastructure. It was able to make these investments because they are part of a larger organization, Centene Corporation, which allowed them access to capital for upfront investments (that could be paid back through continued shared savings).

# Implementation Challenges and Implications for Spread

There are numerous challenges to implementing this model, which may limit its ability to spread broadly. The first is recruiting clinicians to provide home-based primary care. Doing home-based primary care is difficult, given that this type of care can be demanding, and it is not suited for every physician. To ensure that prospective providers fully understand what this type of work involves, USMM requires a day-long ride-along with a current physician and medical assistant before they can be hired.

A second challenge is that this model was developed for a geriatric, frail, elderly population, and there are challenges in implementing it in other populations. For example, the ACO notes that younger patients are less likely to be there for appointments, thereby causing providers to travel without being able to provide care. This emphasizes the importance of continually monitoring effectiveness through data (such as reducing unnecessary care or generating savings), as it may be that resources need to be reallocated or different care models need to be implemented for different populations.

**USMM leadership stressed that improvement becomes harder over time—eventually, all low-hanging fruit has been addressed, and then the ACO has to focus on more complex areas to continue to improve.**

Third, USMM encountered cultural challenges since it became an ACO. Individual providers have had to shift their focus from their personal panel of patients to a team-based approach to patient care. This meant providers had to be comfortable with other clinicians taking care of their patients so that the patients had faster access (and therefore did not go to the ED). Similar to many other organizations, some providers may not appreciate that change and not like giving up control over their patient panel. Becoming an ACO also required a culture shift from providing services to patients to being accountable for patients. USMM noted that they have worked through these culture changes, which are common among many other ACOs, but it took significant management attention to do so.

Fourth, data access and quality remains a problem, despite the fact that USMM has spent considerable resources on their electronic data warehouse and analytics. For example, Medicare claims are generally 60-90 days old, which limits their utility for real-time management. Even when health infor-

mation exchange data are available, quality is often poor and requires filtering of extraneous information (e.g., repeated flags for a patient because they have changed rooms in the hospital or received a daily service). The limited data governance with many health information exchanges has meant there is tremendous data variability within a single structured data field. There are also challenges in receiving clinical records from other practices, which often arrive via fax or are provided in unstructured formats and require manual review before being added to a patient's chart. These challenges are not unique to USMM, but they still limit USMM's ability to fully manage care.

Fifth, patient engagement remains challenging, given the medical complexity of their patient population. The advantage of their model, with longer and frequent visits, is that a provider can build a relationship that allows them to have difficult (albeit important) conversations, such as about end of life wishes. Providers note that you cannot have these conversations immediately. Instead, the providers provide education about the course of diseases over time to the patient and caregiver and share the advantages and disadvantages of curative and palliative care. They may then involve social workers or nursing staff in follow-up conversations.

Sixth, many of USMM patients have dementia and cognitive impairment. To help those patients, providers have focused on keeping their education and instructions simple and short for their patients with dementia, and they try to engage family caregivers on the phone or in person during visits. There are particular challenges when these patients have ED visits or hospitalizations, as the patients are generally not good historians of their care. This is one reason why USMM monitors ED visits and hospitalizations consistently so they can coordinate with the hospital on the patient's condition and the services they are already receiving.

Finally, approximately half of their patients have limited caregiver access. Patients without a regular caregiver may have challenges with ongoing maintenance. Some may miss insulin injections if they do not have a caregiver coming by that day to give the injection; others may not adhere to a recommended diet (to control diabetes or obesity) because they get their food through a community service or from a neighbor who brings fast food.

## Policy Challenges

USMM's leadership has emphasized the challenges associated with quality measures because their patients differ from the general population. There are specific challenges with the MSSP measures that require specialty care, like diabetic eye exams or mammograms, given that their patients are generally homebound and cannot travel. Even with these challenges, they have received relatively high quality scores, with a 2017 composite score of 92%. In hopes of improving quality



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

## Specific Competency\*

## Example Actions

### Care Delivery

Provide convenient and timely access to care based on the needs of patients.

24/7 call center staffed by clinicians with access to EHRs and ability to patch in on-call physician. Local schedulers will work with patients to find an available clinician for same-day home appointments for their problem.

Facilitate access to community resources and social support services.

Patient care coordinators and social workers in each local office spend time trying to connect patients to resources and services, including transportation, senior living centers, landlords, former employers, the VA, and other resources.

### Governance

Engage providers and health care leaders through all levels of the organization.

CEO and his team visit every physician site twice a year to share the organization's direction and strategy and discuss changes with on-the-ground providers and staff.

Capture and report data on cost, processes of care delivery, health outcomes, and patient experience in a standard manner.

Developed a dashboard that shows patient receipt of protocols, as well as best practices and activities needed to meet quality measures. This dashboard is used by clinicians during home visits and for broader quality improvement.

Set meaningful and appropriate goals for quality improvement efforts, and monitor and communicate progress towards achieving those goals.

Identified major sources of unnecessary ED visits and hospitalizations through regular data analysis, finding that COPD and UTIs were major drivers. Implemented plan to manage those conditions, including new workflows for providers and educating patients on actions they could take.

### Finance

Align care provider compensation and incentives with value-based performance measures.

Clinicians are incentivized based on their productivity, quality measures, and their contribution to the ACO's shared savings.

Access to capital to support transition to value-based payment.

ACO needed significant capital for their infrastructure to be successful as an ACO, including a 24/7 call center staffed by trained clinicians with access to patient medical records; an electronic data warehouse containing EHR, claims, practice management, and other sources; dashboard to show progress toward quality measures; and local social workers and patient care coordinators. While the ACO model provided financial incentives to support ongoing activities, the ACO needed a capital loan from the parent organization to initially invest in infrastructure.

### Health IT

Develop platforms to house and analyze data.

Electronic data warehouse with claims, EHR, practice management system, home health, hospice, and other resources, which are then analyzed for progress toward quality standards; also analyzed by local offices for specific care challenges in that area, such as use of particular medications.

Enable data sharing and access by care teams.

When available, draw on data from state health information exchanges to identify patients with a recent ED visit or hospitalization. In states without such infrastructure, the ACO sometimes has relationships with specific hospitals to coordinate care of their patients.

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



measures, they are working with the American Academy of Home Care Medicine and the National Home-Based Primary and Palliative Care Network to pilot quality measures for the homebound patient population using a registry; this registry may serve as a template for other ACOs that serve a specific homebound population.

A related quality measure challenge is the diversity in quality measure specifications for various payers (e.g., Medicaid, Medicare, commercial payers). For example, different programs include varying measures assessing hemoglobin A1C, a measure of diabetic blood sugar control, each of which use a different threshold of when blood sugar is poorly controlled (e.g., 8, 9, or 10). This lack of consistency means that USMM's electronic data warehouse has to either: 1) build more quality measures and recognize patient location and coverage to identify which measure is appropriate for a particular situation; or 2) implement the strictest specifications for assessing all providers. Changes in measure specifications can add to ongoing infrastructure maintenance costs; USMM has noted reprogramming costs associated with updating their measure software given how many quality measures change specifications each year.

USMM clinicians report challenges with quality measures and documentation. In order to count for quality measures, data needs to be placed in structured fields—if the data is placed in another place in the chart, the providers will have to go back and enter it into the correct structured field to impact the quality measure. The electronic data warehouse has raised awareness about the importance of documentation, as clinicians can see what they are being judged on. For example, clinicians may see a patient classified as a diabetic, but know the patient is not diabetic. However, the provider can then look at the claims data to see that in the past the patient had been in the hospital

with steroids and had transient diabetes, which is showing up in their records. To provide better quality measures that CMS could use, USMM is working with the American Academy of Home Care Medicine to submit and pilot new quality measures specific to a homebound population.

Given the difference between their patient population and the general population, USMM has reported concern about the ACO financial benchmark. While they have been judged based on their historic spending, USMM is concerned that shifting to a regional benchmark would limit their ability to achieve shared savings. Even though the regional benchmark would include risk adjustment for their unique population through the HCC approach, there is a well-known challenge with the HCC approach not capturing the full severity of a frail elderly population. As noted earlier, USMM has the highest weighted average HCC score of all MSSP ACOs.

The ACO reports that hitting its spending benchmark has been more difficult since skilled nursing facility patients are now attributed to USMM clinicians, even when these patients are being treated by skilled nursing facility physicians. Some of these benchmark challenges could be overcome by capturing the savings from providing an institutional alternative for frail elderly patients.

There are several other regulatory hurdles to overcome due to USMM's outlier status. USMM is concerned about prospective attribution methods because they lose so many patients (approximately 20–30%) in a given year because of death or patients moving in with family. They have preferred retrospective attribution because that allows them to be accountable for a broader population of patients. Under the new Pathways to Success rule, all ACOs in the MSSP will have the ability to choose retrospective, prospective, or vol-

## Contextual Factors Affecting the Ability to Spread the Model

### Institutional

The ACO is part of a larger organization, which allowed them access to capital for infrastructure investments. Smaller practices may not have similar access to capital for upfront investments, which may limit their ability to access the data or workforce they need. USMM does not have a hospital in their ACO, which means that they do not have a financial incentive for hospital admissions.

### Local Market

USMM provides services in multiple markets across several states, with varying geography (rural, urban, suburban), payer mixes, and data access. In states without a statewide health information exchange, the ACO is limited in their ability to track when their patients visit the ED or are hospitalized, thereby not allowing coordination with the hospital or manage transitions to home. States also differ in their opioid policies (with USMM having to maintain a lengthy and constantly updated opioid protocol) and community resources.

### Regulatory

Challenges with quality measures, risk adjustment for benchmarks, and attribution given the difference between their patient population and the broader population.

untary attribution each year depending on their preference. Besides attribution, USMM noted they would prefer to access waivers like other ACO programs (e.g., the 3-day skilled nursing facility waiver), since that would allow them to more strongly coordinate care and provide additional access options. Finally, USMM noted a lack of a palliative care benefit, as their patient population is aging and frequently does not have caregiver support structures in place to allow them to remain stable and with a good quality of life.

## Summary

USMM operates a physician group-led ACO focused on homebound, frail, elderly patients who vary significantly from the general Medicare population on many statistical measures. USMM has implemented a high-touch care model, involving frequent home visits to stabilize their patients and keep them in their home (instead of the ED or hospital). To be successful, this model depends on significant infrastructure, such as an electronic data warehouse, clinically-staffed 24/7 call center, and a diverse care team. This infrastructure required substantial upfront investment by their larger, parent organization. USMM's high-touch care model could be spread to other organizations and geographies, but would likely require changes to quality measures, risk adjustment, and attribution.

## Acknowledgments

This research is funded by the Gordon and Betty Moore Foundation through Grant GBMF6879 to the Margolis Center for Health Policy at Duke University. We would like to acknowledge specific support and interest from Beth Metcalf.

We also would like to thank members of our broader research and design teams at Duke University and Leavitt Partners that helped refine and disseminate this work, including Mark McClellan, David Muhlestein, Lia Winfield, Brystana Kaufman, Jeffrey Clough, Nathan Smith, Hannah Crook, Robert Richards, David Anderson, Mathew Alexander, Jonathon Cook, Erin Campbell, Jacqueline Critchlow, Kirk Jernigan, Elizabeth Cook, Patricia Shea Green, and Sarah Supsiri.

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