Nationwide Rural ACO Reduces Costs in MSSP by Harnessing Data

By Lynn Barr

Based in Nevada City, California, the National Rural Accountable Care Consortium (the Consortium) is unique in the Medicare Shared Savings Program (MSSP) in that we are the only rural-based nationwide Accountable Care Organization (ACO), with fifty-two participating provider organizations from Texas, California, Washington, Iowa, Indiana, Missouri, Oregon, Illinois and Michigan.

This geography-spanning structure was necessary due to our participants’ limited financial resources and Medicare patient population sizes. Our members also faced a lack of experience with population health management and value-based payment models. The leaders from our founding organizations recognized that the fee-for-service and cost-based reimbursement payment models we were accustomed to were changing, so we would have to find ways to get more of the premium dollar in the coming years in order to remain financially viable.

We determined the best way to achieve that goal and better manage the patients who are driving our largest costs was through improved care coordination supported by information technology tools. As we learned, not all population health management technology was equipped to serve a unique ACO like ours. With Lightbeam Health Solutions implemented, the ACO was able to reduce avoidable admissions and emergency department visits, while expanding our overall patient population and improving MSSP care quality metrics.

Overcoming Early Obstacles. The origins of the Consortium, which formed as a MSSP ACO in 2013, date back to 2009. I was working as a chief information officer at a rural critical access hospital (CAH) leading an initiative in California to help one-third of the state’s CAHs implement electronic health record (EHR) systems. These systems added significant cost, only a part of which was being paid for by Medicare.

We resolved that we would not only adopt these systems, but that we would use them to improve care, lower cost, and get paid more to do it. Dozens of programs were being introduced by the Center for Medicare and Medicaid Innovation (CMMI), but rural providers either didn’t have the right case mix, enough volume, or the infrastructure to participate in most of them. None of the California rural providers, and only a fraction of other rural providers, were participating in any of the programs.

We determined that MSSP participation was the only feasible program for our rural organizations. Importantly, it paid for managing population health, and we had fixed populations that we cared for throughout the majority of their lives. However, the costs of starting and running an ACO, which costs millions of dollars, was not a challenge any one of us could overcome on our own. Furthermore, only one applicant had enough beneficiaries to form its own ACO, so collaboration was essential. Nine brave CEO’s -- Tim Putnam, David Ameen, Steve Barnett, Christine Baumgardner, Melanie Van Winkle, Jim Suver, David Hill, and Lee Barron -- started the first National Rural ACO in 2014, quickly followed by many more.

Discovering New Population Health Tools. Since none of the ACO members were experienced with using claims data for population health management, choosing from the wide array of software tools was a significant challenge. After considering several vendors, the Consortium adopted a population health management strategy, but was forced to abandon the initiative after investing six hundred thousand dollars due to the vendor’s inability to deliver the promised functionality or respond adequately to our unique needs. While a frustrating experience, it helped better focus our selection process for the next system we implemented, which has better served the needs of our organization.

A key feature we sought in our second population health management system was that the analytic tools must be simple to use for care coordinators and other clinicians working with this type of technology for the first time. The reports generated from the data analysis also had to be easy to understand for the physicians and clearly verifiable against information from their charts.
We found our replacement system based on a recommendation from an ACO leader who we contacted after reading about him in an article. The population health management system he recommended offered the following key features we desired, in addition to the ease-of-use and reporting tools:

- Combined clinical, claims and demographics data in its warehouse so we could perform more timely and reliable analyses
- Normalized data from the ACO’s different EHR systems and documentation methods so analysis and reporting was consistent and reliable
- Applied MSSP quality measures and business logic to our data so the reports generated were relevant to the ACO program and to building market share for our customers
- Delivered real-time predicative reporting to facilitate more efficient care interventions for high-risk patients

The system also served our hospitals’ entire patient population, not only MSSP-attributed patients. As we later learned, addressing care gaps of non-attributed patients improved our care quality metrics and increased overall revenue by aligning patients with much-needed care.

Data Analysis on a Micro- and Macro-level. The primary users of the tool are care coordinators who serve each participating community and concentrate on engaging individual high-risk patients. The population health management tool identifies patients with gaps in their care relative to evidence-based guidelines, MSSP and HEDIS measures, or other metrics. The technology also helps coordinators identify those patients most likely to need additional support.

For example, it ranks patients by utilization. Thanks to the data capture and analysis, one of our participating hospitals identified a patient who had visited its emergency department 84 times in one year, but had not yet received any intervention to address this behavior.

With a consolidated view of the patient’s clinical, claims, and social data, providers were able to determine that the over-utilization was motivated not by medical conditions, but rather social factors, namely the recent death of his wife. Patient support staff was able to align the patient with mental health counseling services and social support available through his church. Since then, that patient has not returned to the emergency department.

On a Consortium-wide level, the administration leverages the population health management tool to analyze data and deliver reports identifying cost and quality issues that require improvement, which may not yet be detected at the individual facilities.

Reducing Admissions, but not Revenue. In addition to addressing the frequent emergency department visitors, the Consortium has also improved other care quality metrics in the MSSP program in the nine months since it began using the population health management tool.

Hospital admissions have reduced by 14 percent across the ACO, and emergency department visits are down by 5 percent. Participating hospitals were also able to reduce admissions among Chronic Obstructive Pulmonary Disease (COPD) patients by 38 percent after educating participating physicians about recently changed best practices.

Through the population health management tool, the Consortium discovered that physicians were prescribing older, less effective medications to treat COPD, even though there was substantial evidence demonstrating the efficacy of newer, more effective treatments. We were certain that physicians would not be receptive to administrators simply demanding they modify their prescribing habits, so instead, the Consortium offered an education program for physicians about newer COPD management protocols, using data from Lightbeam to gain credibility. Their response to the outreach, as indicated by the improved metrics, was clearly positive.

Although avoidable admissions have decreased, which potentially helps improve our revenue under the MSSP payment model, overall patient volume for the participating organizations has increased. Due to improved preventive and follow-up care, as well as effective high-risk interventions, organizations are treating more patients before an adverse event or complication occurs. Many of these patients may have gone undetected and avoided care before the population health management software was implemented. This improved level of service also builds loyalty with patients.

Continuous Improvement through Data Analysis. The Consortium continues to learn more about population health management and explore how our information technology tools can support these efforts. Based on our experience in 2014, the Consortium plans to reach out to skilled nursing and other long-term care facilities to explore how they can more efficiently use resources involving our ACO’s patients after they are discharged from our participating hospitals.

We are confident that the analysis and reporting will be advantageous for us in helping these facilities identify their contribution to the overall costs and encourage new behaviors while still supporting safe, high-quality evidence-based care.

This type of provider outreach is another example of how access to timely insights of clinical and claims data analysis is crucial to managing patients throughout the continuum of care, not just within the walls of the National Rural Accountable Care Consortium’s facilities. Even when providers are separated by states and time zones, collaborative care and continuous improvement is possible through information technology.

Lynn Barr is the founder of the National Rural Accountable Care Consortium, based in Nevada City, California. She may be reached at lbarr@nationalruralaco.com