Reducing Variations in Care through Transparent Data Reporting

OneCare Vermont’s Approach

BACKGROUND

OneCare Vermont was formed in 2012 by a partnership of the University of Vermont Medical Center and Dartmouth-Hitchcock Health. The systems extended an open invitation to providers in the state, and the ACO was initially joined by all 14 of Vermont’s hospitals and their employed physicians, as well as multiple Federally Qualified Health Centers and independent practices. Providers in OneCare’s large and diverse network are naturally separated by geographic boundaries, with virtually no examples of two-hospital towns. While clinically integrated and aligned in mission and values, most of OneCare’s improvement initiatives are implemented at the local level by community regions (Health Service Areas). This separation can amplify variations in care that exist across health care delivery systems. This case study describes the development and use of an episode-based report to inform population-level improvements across the ACO.

APPROACH

In early 2016, OneCare leadership began investigating significant variation in the use of inpatient and post-acute services across the ACO’s network. These included differences in utilization for multiple categories within care episodes, such as inpatient length of stay (LOS) and care trajectories (varying pathways of post-discharge care). To understand these trends, OneCare used its 2015 Medicare Shared Savings Program (MSSP) claims data to build a report that would allow the ACO to analyze variation at the network, region, facility, and individual physician levels. The report was created in Excel and modeled after Medicare’s Bundled Payments for Care Improvement (BPCI) Initiative, analyzing 90-day total acute and post-acute expenditures for each of the 48 DRG family episodes of care. OneCare used BPCI as a framework for assessing the costs of these episodes within its broader population health strategy.

The “Medicare Bundled Payment Report” includes various clinical categories (e.g., inpatient costs, Part B physician costs, LOS, post-acute services, 90-day all-cause readmissions, 90-day all-cause observation/reencounters, emergency room reencounters). The report includes expenditure or utilization values, each with a mean, median, and IQR to inform the magnitude of statistical variation.

The report separates episode data for each network hospital, all out-of-network hospitals as a whole, and cases that represent discharges from network hospitals that were received in transfer. These transferred cases are tracked separately to account for the higher degree of complexity typically found with these patients. The episode analysis is case-mix adjusted. Versions of the report can also include data on individual clinicians, both surgeons or discharging physicians for medical episodes.

Using this Medicare Bundled Payment Report, OneCare decided to target variations in total joint replacement, as these episodes represent the most common surgical procedure among Medicare patients, accounting for a large portion of inpatient costs. OneCare leadership first intended to use the report to analyze regional variations to inform improvements in care by aligning communities. Once regional variations were understood, the ACO could then use the report to assess its entire population of orthopedic surgeons for more targeted improvement efforts.

Equipped with the report, in November 2016, OneCare organized a two-hour virtual total joint replacement symposium with presentations by three orthopedic surgeons from different regions—as well as representatives from inpatient rehabilitation, skilled nursing, home health, and outpatient physical therapy (PT)—to discuss the variation in services and best practices for matching patients with the most appropriate clinical setting. The post-acute care providers presented on the types of patients that are most appropriate for care in each venue, and the group shared ideas for criteria that define the clinical stability necessary to transition to a different level of care. Using the data as a guide, OneCare facilitated a collaborative learning session where providers could describe their methods for optimizing lengths of stay and choice of post-acute services. With this symposium, OneCare sought to determine what recommendations should be shared ACO-wide.

In addition to the symposium, OneCare has made the reports accessible to all network providers through the ACO’s secure data portal. Clinical consultants are made available to the network to help providers learn how to navigate the data. OneCare’s data transparency policy—
passed by the board early in the ACO’s development—promotes the named sharing of results; therefore, all data are un-blinded. Rather than using the variation data to strictly enforce behavior change, OneCare believes that by empowering providers with data and allowing them to see who is most successful, they will naturally seek to learn from one another.

RESULTS TO DATE

OneCare had data on 1,216 primary hips and knees in DRGs 469 and 470. Total 90-day bundle expenditures were approximately $30 million, averaging roughly $25,000 per case. Overall, this was in line with New England BPCI averages, but significant network variation did exist.

Although the report is still new, OneCare has already seen anecdotally that the communities are beginning to change their post-acute referral patterns from skilled nursing facility (SNF) to home health or directly to outpatient PT. The most profound impact has been in one community identified by the report as the leading user of SNFs as a discharge destination. Equipped with the report, the region is now conducting an internal analysis to understand the reason for its higher SNF usage and to educate its physicians on appropriate and cost-effective referral practices.

TOOLS & VENDOR PARTNERS

OneCare uses Health Catalyst’s data warehouse to aggregate claims and clinical data from the network’s many facilities and the Vermont health information exchange, Vermont Information Technology Leaders (VITL). QlikView is then used for visualization of the reports. While the report was originally written in Excel, OneCare has since developed an application that recreates the original report in the ACO’s Health Catalyst platform, renamed “Workbench One”. The application was built by OneCare Vermont’s 8-member analytic team, which includes a data architect, statistician, and other analysts. With this report and its other analytics, OneCare has found success using the standard templates provided by Health Catalyst, and producing other custom applications in-house.

CHALLENGES WITH IMPLEMENTATION

OneCare has a large and diverse provider network made up of many independently-operated organizations with their own leadership structures and electronic health record (EHR) platforms. With this configuration, ACO-wide changes can be difficult to enact. Additionally, OneCare Vermont’s network includes a mixture of seven acute care hospitals—two of which are tertiary academic centers—and four critical access hospitals (CAHs). This represents a significant challenge in analyzing cost data, as there are vast differences in inpatient reimbursement for CAHs versus DRG-paid acute care hospitals. CAH facilities also provide swing beds that can furnish post-acute skilled nursing care but at typically higher per-day expenditures than free-standing SNFs.

One challenge associated with analyzing episodes of care is teasing out which readmission claims are actually associated with the surgery in order to make a more meaningful quality assessment. To address this issue, OneCare plans to eventually purchase the 3M Potentially Preventable Readmission tool to enhance the power of the episode reports.

As an ACO, OneCare aims to increase the level of collaboration among providers across the continuum of care. With this variation analysis, OneCare has observed some tension between SNF, home health providers, and outpatient PT who compete for post-acute business. To date, OneCare has not used narrow network tactics. Instead, the ACO emphasizes the unique roles of each type of post-acute provider and the importance of collaboration to enable smooth and effective transitions of care.

KEY LEARNINGS

- **Combine ACO and bundle strategies**—Utilize episode-based analyses to drive improvements in population health management
- **Talk about transparency**—Lay the groundwork for data transparency expectations early
- **Facilitate collaboration**—Promote shared learning by empowering providers with data and creating opportunities to share unique perspectives

Contributors

Dr. Norman Ward  
Chief Medical Officer  
OneCare Vermont  
norman.ward@uvmhealth.org

Dr. Susan Shane  
Medical Director  
OneCare Vermont  
susan.shane@uvmhealth.org

Kate de Lisle  
CSB Program Manager  
ACLC  
katelyn.delisle@leavittpartners.com