HIMSS Analytics

HIMSS Analytics Stage 7 Case Study

Cambridge Health Alliance

Profile

CHA is a three-hospital system based in Cambridge, MA. CHA acts as the Cambridge Public Health Commission and Public Health Department of the City of Cambridge and serves as a teaching hospital for Harvard University and Tufts University. CHA employs 4,323 staff, including 690 physicians, and serves more than 140,000 patients in Boston's Metro North region. CHA has received NCQA Level 3 Medical Home recognition for ten of its twelve primary care practices, achieved HIMSS Stage 6 for Acute and Ambulatory in May 2015, and HIMSS Stage 7 for Ambulatory in September 2015.

The Challenge

Cambridge Health Alliance is a safety net health organization and cares for some of the most disadvantaged patients in Massachusetts. This population is, by definition, high risk for poor health outcomes. As part of our transition to the Accountable Care Organization, it is important to identify those patients that are higher risk and provide services to help them navigate the healthcare system. Our challenge was to create a method by which to identify high risk population, learn about the needs of this population, and create a system that can help support this population to increase their health. The organization is spread over 5 cities and the populations throughout those cities are diverse. There are multiple different cultures, languages, and access to healthcare in those different locations. We also provide different services in each of these locations. Our goal was to help identify this population, implement a complex care management program for these patients, and increase the health of this population. We also hoped to show a financial benefit by estimating the annualized cost avoidance based on the emergency and Hospital services provided for these patients.

Implementation Overview

The high risk population was identified by two methods. First, primary care providers were given a list of patients who met certain criteria of high ED and inpatient activity. They were asked to validate that these were high risk patients in their panels and to complete referrals to complex care managers. The complex care managers then validated the PCP referrals to ensure that the patients were high risk, using standard criteria including any of the following: a) more than 10 ED visits in a 12 month period; b) more than 3 inpatient admissions in the 12 month period; c) greater than 75% inpatient stay probability; or, d) greater than 90% risk score. These patients were required to have impactable conditions such as chronic kidney disease, congestive heart failure, severe psychiatric illness, substance abuse, diabetes, chronic obstructive pulmonary disease. After these patients were identified, they were enrolled into complex care management. During this time the patients were evaluated for barriers to improving their health and were provided support systems to minimize these barriers. Complex care managers also created patient care plans that identified each patient's goals and action plan.

Resulting Value / ROI

- Identifying high risk patient population: We used a combination of criteria to identify a high risk population with conditions that we could impact with complex care management. About one half of the patients who were identified using high ED or inpatient utilization were not validated by the primary care providers as being high risk.
- Willingness to participate: About one quarter of the patients identified were appropriate and willing to enroll in complex care management, but 40% of the patients who qualified either declined participation or were unable to be contacted.
- Cost avoidance: From the 77 patients in the high risk population identified and enrolled into complex care management, an annualized cost avoidance of $809,645 was achieved.
- Patient care plans: Care plans played a pivotal role in helping understand each patient's barriers, priorities, goals and services which would help the patients improve their health. These care plans were reevaluated every 6 months while the patient was enrolled in complex care management.

Lessons Learned

- Patient Identification: It is critical that the healthcare organization identify high risk patients including a validation process which includes the primary care providers. This will help inform the selection process and help focus attention on the very high risk populations.
- Improvement Opportunity: It is extremely important that the organization focus on patients who have conditions which can be improved with additional services.
- Engagement: Many patients who are identified as being appropriate for complex care management may either decline to participate or be difficult to contact. This is a very difficult population since this population is either not engaged in improving their health or has social/environmental barriers to engagement. Working on ways in which we educate and improve the engagement of patients will be a continued challenge.
- Care Plan: Creating a care plan provided the opportunity for the care manager and the patient to sit together and document barriers and goals. This allowed the complex care manager to focus on areas in which the patient was engaged. The care plan documented the goals and action plan and was reevaluated every 6 months, which helped improve patient engagement and provide accountability for the patient.
- Cost: Providing focused services to complex care patients has significant cost avoidance and is essential in providing complete care to complex patients as well as providing a financial benefit to the organization.