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Is Your Care Management Program Working: A Guide to ROI Challenges and Solutions

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Care management plays a central role in the world of value-based reimbursements, at-risk contracts, and population health management. Such programs are often high-touch and resource-intensive, and as such, face pressure to demonstrate that they are not only improving patient care, but are also cost saving. Many care management teams simply don't know if their program is working. Questions abound: How long should it take to get an ROI? What cost savings is achievable early-on in the program, and how soon can we see results? How should early increases in costs and utilization be contextualized?

Several national leaders in care management have answered these questions by demonstrating a reduction in costs along with increased quality of care, and in the longer-term, a positive ROI. Partners HealthCare's Integrated Care Management Program (iCMP) demonstrated in a 2017 *Health Affairs* article that "overall participation in the care management program was associated with a reduction in Medicare spending of $101 per participant per month, a decline of 6 percent." In a study of an earlier iteration of this program, an independent evaluator commissioned by CMS found hospitalization rates were 20 percent lower than the comparison group, ED utilization rates were 13 percent lower for enrolled patients, and mortality per annum was 16 percent (compared to 20 percent for the control group). The success of this program—both in its early, and its scaled version—is not an isolated example. In a literature review looking for efficacy of congestive heart failure care management programs,

the Agency for Healthcare Research and Quality (AHRQ) found an ROI that ranged between $1.08 and $1.15 for every $1 spent.

How can organizations achieve this kind of success with their care management programs? This paper will examine the myriad challenges care management programs face, and offer solutions for creating and sustaining a program that will show a positive ROI—essential to any organization hoping to succeed on the journey to population health.

ROI Roadblocks for Care Management Programs

There are several roadblocks that make it challenging for care management programs to document ROI. Care management doesn't happen in isolation, and it can be tough to discern the effects of care management on a population, separate from the other programs impacting that patient's care. Furthermore, ROI from care management programs often takes time; this can challenge organizations facing increased financial pressure due to changing payment models. Additionally, it can be difficult to get access to the right data (often from disparate data sources) needed to understand the care and utilization impacts of care management, outside the walls of a single health system. Lastly, engaging the patient—a critical step in care management—can be tricky to accomplish.

Complexity of Environment

Effective care management does not happen in a bubble. Most often it is just one of several pillars of a population health management strategy. Therefore, it can be difficult to demonstrate ROI from a care management program, separate from the other initiatives that may be in place (i.e. ED diversion programs, patient-centered medical home efforts, embedded psychiatric care, post-acute programs, etc.). These programs work synergistically, and it can be challenging to parse out the ROI effect of care management alone.

Prolonged Time to ROI

While care management programs improve patients' care and experience upfront, they can take time to demonstrate ROI. This stems from the fact that when studied, care management programs may initially increase patients' access to care and may increase their adherence to recommended medical regimens— both of which can, in the short term, briefly increase the costs of care. In the long-term, care management is both better for patient care and cost-reducing, but this time lag can challenge organizations that are stretched thin.

Access to Disparate Data

To understand the effect of a care management program, administrators need access to data about care delivered both within and outside the walls of their particular health systems. It is difficult to estimate the ROI of a care management program without access to multiple data sources from multiple systems, to get a holistic understanding of utilization and leakage.

Engaging One Key Stakeholder: The Patient

Care management programs can only be effective, and will only demonstrate ROI, insofar as patients are engaged. This relies on creative tactics and communication channels that work. Many health systems rely on outdated and difficult-to-use patient portals, which undermine their ability to have fully-engaged patients and fully-leveraged care managers.

Guiding Principles: Structuring a Care Management Program to Show ROI

While it's true that care management programs face barriers, there are many examples of programs that are having significant impacts on patient care while bending the cost curve. These winning programs have laid a strategic foundation built on a defined vision, realistic expectations, thoughtful governance, and a robust infrastructure. While some of the drivers of these successes rely on investment in people and infrastructure, others simply require a thoughtful approach to planning and program design.

Take a Strategic Approach: Don't Start Everywhere at Once

A care management program cannot be all things to all people. It is key to understand an organization's strategic priorities, payer mix, and risk contracts, and to let those variables determine which population to initially manage. Organizations should also start small, with a pilot. It's important to leverage existing infrastructure and to aim for small, and early, wins.

Engage All Stakeholders in Your Ecosystem

Care management can't add value in isolation. For a care management program to successfully keep patients healthy and at home, all members of the care team need to be aware of and engaged in the care management process: from ED nurses, to the front desk staff at the primary care provider, to the outpatient pharmacist. Whether a patient is in the ED, at home, or at a skilled-nursing facility, care management functions most effectively when the acting care team is aware of the program and looping the care manager into decision making and transition planning.

Meet Patients Where They're at to Improve Patient Engagement

An organization needs to consider how it will engage with patients. The tactics used will vary based on the population involved in the care management program. This may mean home visits, it may mean drop-in hours at a community health center, and it may mean electronic methods. Ultimately, the program must stretch to meet patients where they're at, then engage them there.

Understand Best Practices for Care Management

Care management programs can involve a lot of activity and touch points. The programs are those that are evidence-based, and rooted in best practices. This means

programs match the level of contact and management with the level of patient risk, use high-yield tactics tailored to patient needs, and are able to adjust when interventions need improvement.

Care Management ROI Through Data and Analytics

The challenges care management teams face can appear daunting, but with a robust analytics platform that takes in multiple data sources, leverages real-time information, supports patient engagement capabilities, and defines a pre-set patient control arm, care teams are empowered to build and refine programs that show cost savings and improve patient care.

Match the Right Patients to the Right Programs

Though readmission and risk scores are good inputs to start building cohorts for a care management program, teams can come up with more robust identification algorithms by leveraging multiple sources and data analytic applications. This includes using machine learning to predict which patients may be readmitted, and which will be most impacted by a program. Once created, the list of identified patients should also be evaluated by the primary care provider and the assigned care manager to evaluate patient impactibility. This algorithm and review process should be repeated as frequently as is practical for a specific organization.

It's also important to avoid mismatching resources to patients. Care teams should consider which programs are best for which patients. A transitional care management program would be more impactful for patients who are transitioning from a long hospitalization and rely on a solid follow-up plan, accurate medication reconciliation, and in-home monitoring, where appropriate. For patients with more complex medical conditions and compounding psychosocial factors, a longitudinal care management program with more intensive services would be warranted.

Use Machine Learning to Find Highly Impactable Patients

Beyond looking at risk scores, care teams should also find those patients who can be most impacted by a care program. Healthcare organizations have finite resources, and ensuring every patient gets the level of care needed while avoiding excessive care is important to realizing ROI. High-touch resources should be reserved for patients who would benefit from those more intensive types of interventions. In other words, a care program is most effective when it targets the intervention to the patient.

Machine learning can help drive this effectiveness and make suggestions for cohorts of similar patients. Knowing what has been successful in the past can then inform what will work in the future.

Correctly Measure the Effect of a Care Management Program

One major challenge to measuring the effects of a care management program is identifying a control group. It is often described as inaccurate to use pre- and post-data

for a particular patient group, because as time goes on, patients move on from acute events; they either get better or pass away. These events account for regression to the mean and may exaggerate the improvements stemming from a care management program.

Having an analytics platform, therefore, that establishes a control group (composed of a similar group of patients, identified for care management, who either declined or are in queue for enrollment) is a great option for monitoring the effectiveness of a program in real time.

Take the Long View of Care Management Success: Cost Savings on the Road to ROI

Showing a positive ROI for a care management program can take years. Initially, organizations should look at cost savings and focus on quick wins. For example, a reduction in ED utilization can be a source of significant savings within the first year of a program's start. Organizations require patience and strategic focus as they continue on this journey.

Some organizations have seen early care management success within readmission rates. Allina Health put a new care transition process in place, redesigned workflows, and added key patient support roles for its mental health patients. The organization saw a 27 percent relative reduction in potentially preventable readmission rate. AHRQ's literature review found a congestive heart failure care program realized a 74 percent reduction in hospital readmissions within six months.

Use Case Example: Using the Health Catalyst® Care Management Suite to Be Successful in a Medicare At-risk Contract

The following use case demonstrates how care management teams can use the Health Catalyst Care Management Suite to show cost savings, and eventually, a positive ROI.

A health system recently entered into a Medicare NextGen ACO agreement. The system has a good transitional care management program, but system leaders know from experience and data that patients in their particular Medicare and COPD population are high emergency department (ED) utilizers, a challenge the system was seeking to tackle. Using the patient stratification tool, and filtering for Medicare patients with COPD, they find patients with this targeted background. They decide to focus on patients with "x" number of ED visits and patients with a total cost of care greater than "y." (It's important to note that while "x" number of ED visits isn't ideal, it's possible the total cost of care is low enough that it doesn't warrant a more intensive care management program.)

They then create a cohort algorithm labeled "Medicare COPD, high ED Utilizers," which feeds into the patient intake tool and is distributed to the care team. The care managers that the organization hired for this NextGen ACO contract use the tool to approve patients

that the algorithm identified and assign those patients to nurse care managers and social workers, as appropriate.

Using the care coordination tool, care managers then go about their day-to-day work. The organization's care team calls patients in the cohort to ensure medication compliance and to check in regarding the patients' respiratory status, then document the call in the tool. They get reminded about upcoming patient appointments and coordinate transportation for patients who are at risk of missing that appointment (and avoiding a possible ED visit). They help with home oxygen challenges. Additionally, the entire supporting care team, including the pharmacist and social worker, uses the tool at the point of care to organize patient interventions.

Most patients in this population have a mobile device (or have a child with a mobile device), so the organization provides them with access to care companion, a tool that reminds them of appointments and makes it easy to engage with the care team. This tool can also loop in the patient's family, friends, and support team.

Finally, all this data feeds into the care team insights tool. The organization's leaders can see if the program has, indeed, reduced ED visits and see other utilization metrics. Eventually, leaders will be able to see if the program has an ROI and if it has helped the organization be successful.

For more information on how we can help your organization show this kind of success, contact us for a demo.

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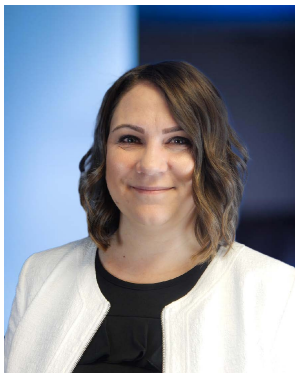
Amy Flaster joined Health Catalyst in August 2016 as the Vice President of Care Management Services. In this role, she is concurrently employed by Partners Healthcare as an Assistant Medical Director of Population Health Management. She continues to see patients as an internist at the Brigham and Women's Hospital in Boston and is an Instructor of Medicine at Harvard Medical School. Prior to joining Health Catalyst, Amy completed her residency in the Division of General Medicine and Primary Care program at the Brigham and Women's Hospital. Amy has previously co-founded a healthcare IT startup (TrueNorth Healthcare) which operates in the end-of-life space, and has worked as an advisor to other startups through her work with the BWH iHub incubator. She has worked extensively on provider innovation and transformation through her work with the Brigham and Women's Physicians Organization. Amy has earned a BA from Dartmouth College, an MD from Harvard Medical School and an MBA from Harvard Business School.



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Kathleen Clary joined Health Catalyst in May 2017 as VP of Care Management & Patient Engagement. Prior to coming to Catalyst, Kathleen worked for MultiCare Health System as the Administrator of Patient Navigation & Care Coordination. Kathleen has a degree in Bachelors of Nursing from Mount Marty College, a Masters of Nursing from University of Washington, Tacoma, a Doctorate of Nursing Practice in Systems Leadership from Rush University, Chicago and currently enrolled (graduate 2018) at the Army War College to earn a Master's in Strategic Studies.

ABOUT HEALTH CATALYST

Health Catalyst is a mission-driven data warehousing, analytics, and outcomes improvement company that helps healthcare organizations of all sizes perform the clinical, financial, and operational reportin and analysis needed for population health and accountable care. Our proven enterprise data warehouse (EDW) and analytics platform helps improve quality, add efficiency and lower costs in support of more than 50 million patients for organizations ranging from the largest US health system to forward-thinking physician practices.

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