

## ROI for Care Management: Challenges of Establishing Measurement

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or health plans, one of the biggest challenges in measuring the effectiveness of care management programs is the
difficulty in identifying a control group for comparison and measurement. Without a true control group, measuring the impact of a care management program (in terms of preventing avoidable utilization) is difficult.

Care management programs traditionally target high risk individuals – members who are highly likely to have a preventable hospitalization or multiple hospitalizations. These individuals generally have unmanaged chronic conditions and significant socio-economic constraints, such as health literacy, physician access, nutrition issues and more. Because every health plan's mission and charter are to assist all members that are at risk for adverse outcomes, plans have both a moral and financial obligation to help these members. Consequently, a health plan is not going to withhold critical services from high risk individuals for the purpose of creating a "pure" control group.

## **Creating the Control Group**

Plans need an alternate approach to defining a control group so that they can measure the ROI of their care management programs without crossing over to the wrong side of the ethical boundary. The key is finding an approach that has the least bias, yet is valid and reliable enough for measurement.

Another way of measuring impact is to compare the outcomes of care management enrollees to the outcomes of members referred to care management, but who did not enroll. These members can be parsed into two categories.

- 1. Members whom the plan contacted for care management, but who declined to enroll in the program (refusers), and;
- 2. Members whom the plan attempted to contract for care management, but for various reasons were unreachable (unreachables).

While the refusers could be used as a control group, these members who decline care management are not directly comparable and may bias the impact analysis. This is because decliners may be healthier than those who accept, and, therefore, this population contains too much bias and is not reliably comparable.

Members in the second group, the unreachables, do not directly decline an enrollment invitation. Because they are unreachable, their status is unknown. There are multiple reasons why plans are unable to contact a member. The member may simply choose not to engage with the plan or respond to a voicemail. They may have changed their phone number, their address, or they may be homeless. They may even be confused by the health plan's intentions or invitation to help.

Though there is still some bias in choosing this population as a comparable control group (the fact that they are unreachable may correlate to a greater incidence of negative outcomes), this population more closely mirrors the experience of people enrolled in care management. This makes them the preferred control group.

## Short and Long-Term Measurement

Once a control group is identified, a plan can set parameters for both short-term and long-term measurement.

Short-term measurement allows the plan to quickly evaluate the directional success of a program, which can also be a predictor of the program's long-term financial ROI. Using claims and service authorization data to collect ER Visits, admissions and readmissions events, plans can compare utilization rates between care management enrollees to the unreachable control group. This methodology provides a directional indicator of success within the first 90 days.

But what plans really want to know is how successful their care management programs are over the course of six months or a year. For this, they should look to their medical claims data, which will give them not only their ER, admission and readmission counts, but also the costs of those services.

All told, the primary goal of care management is to reduce unnecessary and avoidable utilization, of which the highest cost and most acute points of care are ER and inpatient hospital admissions. If, at the end of the measurement period, the non-control group has an admission rate of 35 percent while the control group rate is 50 percent, then, clearly, the program has achieved its goal of reducing utilization.

## **Identifying Care Management Costs**

The final step in evaluating ROI is to identify the costs of care management.

Historically, plans measure costs by calculating per member, per month (PMPM) dollar values of the amount of money a member has spent, looking at a rolling average over the prior 12 months. The pitfall of this methodology is that by looking at a six-month post intervention figure for a member who has engaged with care management, that rolling average will also include the previous six months prior to care management.

The plan should, in fact, expect the cost before intervention to be higher than the cost post-intervention, particularly if the member had an episode that flagged them for care management. Also, once the member has been in care management, the care manager will encourage them to see their PCP, potentially visit a specialist, and adhere to their medications. Those activities are likely to cause an increase in short-term spend per patient costing the plan money during the initial engagement period in return for longer-term benefit and future cost reduction from avoided utilization.

To complete this phase of the analysis plans should exclude events and costs considered unavoidable, such as a traffic accident or a patient admitted for surgery who had additional complications, such as an infection, which will impact the cost analysis. To prevent these events and their corresponding unavoidable costs from being attributed to care management, the plan needs to segment them into an "episode grouper" outside of the overall cost analysis.

By following these steps, plans can compare the costs for members in care management to those in the control group and better gauge the financial impact their program has on medical expenditure. As plans gain new insight into their care management ROI, they can use the information to refine their care management strategies.

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