Proactive, Data-Driven Well-Being Programs Overcome Payer Uncertainty

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Proactive healthcare models aim to prevent chronic diseases and reduce healthcare costs, but uncertainty around their effectiveness has made organizations hesitant to implement them. By leveraging data analytics, predictive modeling, and highly targeted engagement strategies, companies can reduce this uncertainty, increasing the likelihood of their use toward delivering measurable benefits for health and cost control. This article explores the hesitations to the introduction of proactive care models and defines strategies to overcome barriers to their implementation. To be clear, for any given organization these two are not mutually exclusive approaches, and programs can have components of both, to varying degrees.

INTRODUCTION

Chronic disease is largely driven by unhealthy lifestyles, such as diet, exercise, stress management, lack of social engagement, and the like. These conditions afflict about 20% to 25% of any health plan and represent 80% to 85% of health plan costs each year.[1] Disease progression tends to: (1) increase over time, and (2) spawn the incidence of additional chronic illnesses. For example, obesity can trigger Type 2 diabetes and hypertension, which can then lead to age-related macular degeneration and kidney failure.

This progressive health degeneration is further accelerated by the unfortunate fact that people are only 50% compliant with the clinical standards of care for their condition, which are designed to control those chronic conditions and limit disease progression.

These are some of the key contributing factors driving the approximately one trillion dollars in healthcare costs for chronic diseases each year.[2] Managing those costs has become an organizational imperative. However, the programs used to address them come with their own costs. Thus, the specific approach used must be more cost-effective than the problem itself.

An important distinction to understand when choosing between models is consideration of proactive versus reactive approaches.[3] At its most basic level, reactive models initiate action in response to health events and costs. Proactive models initiate action in anticipation of those health events and costs.

This article explores the hesitations to the introduction of proactive care models and defines

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strategies to overcome barriers to their implementation. To be clear, for any given organization, these two are not mutually exclusive approaches and programs can have components of both, to varying degrees.

THE ALLURE OF REACTIVE APPROACHES

Traditional reactive models focus on treating health issues after symptoms appear. This is a straightforward approach, as you only pay for what you use. As a result, many may regard reactive models to be easier to account for economically and from a health status perspective.

Reactive models utilize health data that are concrete, because they have already happened. This is commonly referred to as a "rearview mirror" approach by allowing decision-makers to see the costs and conditions that have happened during a previous time period (quarter, year, and so forth). This is also a very direct approach that evaluates concrete, non-projected cost and clinical data.

From the standpoint of the organization, there is an understandable comfort level to this approach for those who are uncomfortable with the inherent unknowns of proactive models, as detailed below.

PROACTIVE STRATEGIES

By contrast, proactive healthcare management involves implementing programs for those who may not currently require healthcare services but need to prevent health issues from developing in the future and therefore, reduce healthcare costs.[4] This seems like an obvious idea, as the cost of healthcare is dramatically higher than the cost of prevention. However, significant concerns with this model can prevent its implementation.

The argument is that, of the members who engage in a proactive program, some of them will need those programs to return to health. Others, however, are already healthy and so will not use the healthcare system, whether they enroll in the programs or not.

This begs the question of how much of that positive outcome (the absence of health claims) is due to the program and how much of it would have happened anyway. In other words, as attributed to Carl Sagan, "The absence of evidence is not evidence of absence."

Because of this uncertainty, the concern is that proactive approaches will not produce the participation, engagement, and outcomes necessary to justify their costs. Furthermore, if proactive care approaches are to be deployed with more frequency and to greater effect in the future, this level of uncertainty needs to be addressed.

SOLUTIONS TO OVERCOME UNCERTAINTY

Before moving into the specific strategies, it is important to point out that none of the solutions suggested below presume to solve every aspect of the problem. There will never be a program that results in an automatic 100% participation, full engagement, and outcomes that leave every person in the low-risk category. However, these strategies can help to overcome organizational concerns about providing proactive approaches in the first place.

1. Data Analysis

A first concern with the proactive approach is its cost/benefit ratio. Although all members will be offered the program, only a subset will engage. Of those who do engage, only some of them will improve their health status. Of those who do improve their health condition, that improvement will be to varying degrees. With all this variability, a payor cannot be certain that the

cost of investing in those programs is balanced by its benefits.

One solution to help overcome this hesitation is the application of data analytics. Regular assessments of claims data can show what the clinical impact and cost of the program actually was for each category assessed. This can also reveal trends over time to see general improvements associated with the program.

Beyond the data for populations, this reporting also reduces uncertainty by showing the conditions and costs of a member population down to the individual. Successive years' comparisons can show to what degree those proactive programs improved clinical outcomes and reduced costs, per person. Knowing who engaged, under what clinical conditions, at what cost, and resulting in what outcome provides the level of detail to alleviate uncertainty for the payor.

2. Predictive Analytics

For proactive programs, one of the most potent sources of ambiguity is how the health of the member population will change over time. Without credible optics on future costs and conditions of a population, proactive well-being programs will certainly be appropriate for some members, but just as certainly not for others. Being able to see, in advance, who needs what program, allows proactive programs to be more targeted in their approach, so that a higher percentage of their members receive programs specific for their needs.

Strong predictive analytical systems can show how a population is trending with regard to healthcare utilization. Projections of upcoming costs helps organizations by anticipating costs without being blindsided by them. Also, the predictive capacity allows them to tailor communications, incentives, and the thoughtful selection of programs for exactly the targeted outreach needed.

But the predictive analytics system must also report trends down to the member level. Understanding, for each individual, the nature and degree of healthcare issues and costs—both actual and forecast—is critical, prompting the organization to target the main issues in advance of their occurrence. In the absence of this specific information on each individual, the specific proactive programs chosen are simply the result of guesswork. Applying a predictive component can improve confidence that the program can reach the right person with the right program.

3. Accounting For False Negatives

In some cases, a program may seem to fail when individuals need care, take the program, but are not helped. This negative outcome, however, will typically include some portion of false negatives. This can happen for members who may participate but are not motivated to make lifestyle changes.

An example would be that segment of every population which simply cannot be convinced to improve their own health: to quit smoking, to be active, to update their nutrition, and so on (see the "Engagement x Need" table, below). These members may engage with health coaching and take up the valuable time of the clinical provider. But without a clear motivation to change behavior, the investment of the care staff will not result in improvement in the health status of the member. There are many possible reasons for the lack of follow-up, but the bottom line is that there was no readiness to change.

This can represent a huge risk to taking on a proactive program. Without knowing who will actually make healthy lifestyle changes, it is impossible to understand the return on investment (ROI).

One way to reduce this uncertainty is with a

"motivation to change" index. Because this drive to change is prerequisite to engagement, lower motivation scores will naturally lead to lower participation. By contrast, higher levels of motivation will necessarily lead to higher utilization and improved outcomes. This understanding can reveal who to prioritize for engagement.

Having this index can also inform highly targeted messaging for those who are ready to change, other outreach for those who are on the cusp, and still other outreach for those who are completely resistant. This allows organizations to have greater confidence that their proactive program is being as effective as it can be.

Importantly, the index must be quantitative and based on data, rather than self-reported or based upon interviewer's impressions. Quantitative models for motivation to change are available and can provide an added layer of certainty that the proactive program is reaching those who will actually make the changes needed to live healthier lives.

4. Highly Targeted Outreach

Proactive models can introduce uncertainty if they apply programs for an entire member population, uninformed by data. Company-wide walking or nutrition programs commonly attract participation from those who are already fit or healthy. This makes it an open question of how much this approach really moves the needle for those at medium risk and those in true danger at high risk.

A solution to overcome this concern is to correlate behavioral data from a Health Risk Assessment (HRA) with the clinical data from a claims or other report.

This "behavior x condition" layering can show how much a given clinical condition is driven by a certain behavior.

For example, those with diabetes may need better nutrition, stress management, or activity. But the well-being program would not know which aspect was the most relevant without this analysis. Overlaying clinical and behavioral data allows care management coaches to get a more granular picture to inform their intervention. This reduces the uncertainty for the organization by delivering exactly the exact solution that each member needs for his or her particular condition.

5. Prevent Health Erosion

Health erosion is that tendency within a member population that undergoes the predictable slide from low risk to medium risk, or from medium risk to high risk each year. Preventing health erosion is a primary benefit of proactive programs. They deliver solutions for individuals at all levels of risk. One outcome of this initiative is to help keep healthy people healthy. However, not knowing which members will move into higher risk categories can create an added level of uncertainty for the payer.

A key solution to reduce that uncertainty is to have a quantitative metric for emerging risk. This is a derived outcome comparing current and projected claims data. This "mover" index shows those in a given population who are the most likely to transition between risk categories over the upcoming months.

Importantly, having a rolling average of repeated measurements can show trends over time, and also anticipate changes. Correlating each member's mover index with the programs they engage with can determine which proactive programs are the most effective at mitigating erosion across risk categories.

6. Communications x Engagement

A concern around proactive care models is the cost of the programs if engagement is low. Fortunately, some of the most effective engage-

ment strategies come at the lowest cost, such as targeted communications that are triggered by specific program events. Triggers can include program initiation, acquisition of program targets, incentive deadlines, and the like.

Relevance holds the key to engagement. When communication is linked to a salient event, the person will be more likely to engage. For the organization, the data becomes relevant when the communication strategy is yoked to engagement. This would involve correlating engagement data with each communication to assess which campaigns work for individuals and which are less effective—and by how much. For organizations, this is exactly the data needed to have some control over the process and make changes as needed to optimize the outcomes.

For proactive programs with the goal of preventing healthcare issues before they happen, closing care gaps are an important application of this solution. Care gaps—such as unfilled prescriptions, missed well visits, cancer screens, eye tests, and the like—are a critical issue: among patients with chronic diseases, only 50% of individuals have "medical adherence"[5] and over 30% of medicine-related hospital admissions are due to "medicine nonadherence."[6] Creating an automatic ping reminder from their platform, triggered on the notification of gaps in care, can move some portion of the members to fill their prescriptions, take their medications, get their primary care provider (PCP) visit, have a cancer screening, or other preventive activity.

Of the proactive strategies, this is perhaps the lowest cost, highest return component of a comprehensive proactive approach.

7. Feedforward

Proactive approaches face uncertainty, in part, because each population is unique. A solution that might work in the manufacturing segment may fall flat in an office environment. Therefore, static solutions will typically fit only a small subset of the member group. The same can be said for the incentive strategies, messaging, and programs.

To reduce this level of uncertainty, proactive approaches must take a "continual improvement" approach with program engagement and claims data. To understand how to maximize the engagement and outcomes of the unique population, annual assessments are critically important to determine:

- Which programs and processes actually worked.
- Which messaging campaigns closed more care gaps.
- Which programs (for which individuals, under which conditions, given each person's behavioral HRA) were more or less likely to reduce healthcare costs and biometric risks.

This feedforward analysis of Analytics x Engagement x Outcomes must be performed annually, with the willingness to change the tactical aspects of the program based upon the data. For the payer, this level of full transparency and partnership in the process is essential to create confidence in the process, and set the thoughtful course corrections that will maximize outcomes.

CONCLUSION

Proactive care approaches are an excellent tool for addressing health issues in advance of crisis events, creating a more effective and cost-efficient approach to increase health and productivity while controlling costs.

However, proactive care approaches can suffer from the uncertainty of paying for programs for everyone without understanding who they are helping, by how much, and if at all. These

variables can increase the risk of higher costs at the expense of lower outcomes.

In order to achieve the promise of proactive programs, strategic data-driven solutions must be applied to overcome these uncertainties. Addressing these concerns requires the creative use of data—claims, biometric, and behavioral—and the outcomes-driven adjustments to optimize program effectiveness in the long term.

Although these solutions cannot eliminate risk around proactive programs, they can lower the barriers for organizations. By providing a cogent means for assessment, correction, and resource deployment, organizations do not have to simply trust that their proactive solution is the right one.

TABLE: Engagement x Need

The Punnett Square below lists sources of uncertainty, as a function of clinical need and the likelihood of member engagement. Together, these can identify a gradient of uncertainty to inform strategies that target each level of risk to the program provider.

	Motivated to Engage	Not Motivated to Engage
They need the program	✓ ✓ **1.**	⊘ ✓ **3.**
Do not need the program	✓ ⊘ **2.**	⊘ ⊘ **4.**

1. Motivated & Needs the Program

A person who is motivated to improve their own health status is most likely to engage with the program because they have the internal drive and also the clinical need for it. This group offers the greatest probability of engagement and positive outcomes.

2. Motivated & Does not Need the Program

This person, who is relatively fit and healthy, is likely to engage because they are already motivated to maintain a healthy lifestyle to prevent illness. This category of person will likely engage with the program because they are actively maintaining a healthy lifestyle. The approach for this person will be to prevent them from slipping into a medium- or high-risk category, that is, to prevent "health erosion."

3. Not Motivated & Needs the Program

This person is unhealthy and will need the program to improve their health and mitigate their use of the healthcare system. That said, they may not engage without external motivation and clearly targeted communication. This group of members represents the greatest uncertainty for the payer.

4. Not Motivated & Does not Need the Program

This person is the least likely to engage, as they are neither motivated nor in need of the program. This creates the highest level of uncertainty because these members have multiple reasons not to engage.

NOTES:

[1]Reference to incidence of chronic disease: Hoffman and Rice, Chronic Conditions: Making the Case for Ongoing Care, Partnership for Solutions, Johns Hopkins University Press, September 2004.

[2]Waters andGraf M., editors. The costs of chronic disease in the U.S. 1st ed. Milken Institute; 2018.

[3] https://www.medesk.net/en/blog/proactive-healthcare-management.

[4]Sonmez, Weye, and Adelman,. Primary Care Continuity, Frequency, and Regularity Associated With Medicare Savings. JAMA Netw Open. 2023;6(8):e2329991.

[5]Lam and Fresco, Medication Adherence Measures: An Overview. Biomed Res Int. 2015;2015:217047. doi: 10.1155/2015/217047. Epub 2015 Oct 11. PMID: 26539470; PMCID: PMC4619779.

[6]Osterbergand Blaschke, Adherence to medication. N Engl J Med., 2005 Aug 4;353(5):487–97. doi: 10.1056/NEJMra050100. PMID: 16079372.