

# Population Health Management Optimization of Interventional ROI

## Interventional ROI Case Study

### Overview

The BaseHealth analytics engine analyzes "unknown" rising financial and population health risk. It also targets specific members for interventions with the greatest opportunity for return on investment (ROI). This model has been proven with our anchor partner, Banner Health. Integrated health systems and ACOs looking to more effectively manage population health risk will benefit from the visibility the BaseHealth engine

provides into both the total and rising risk of their member populations. Most importantly, BaseHealth identifies exactly what costs and medical conditions can be expected from a given population before they happen, why they will happen, and which interventions would prevent or mitigate this risk. The BaseHealth analytics engine is the most effective way to identify, prioritize, and intervene with at-risk populations.

### Current Approach to Population Health Management

Traditional approaches to risk stratification rely on claims data, targeting the top 5% of claimants that account for 50% or more of the previous year's total claims costs. This is the **"Known Risk"**. Contrary to conventional thought, only 1% of this population will contribute significantly to next year's cost. The remaining 4% of high cost members in the next plan year, will come from members previously at low to moderate risk for chronic or acute conditions. Due to the insignificant number of claims generated by these members, they've historically been invisible to analysts and population health managers. While the traditional approach to risk stratification and managing population health works to improve outcomes for many, it fails to segment the population with enough accuracy and specificity, largely because claims data is retrospective. On its own, claims data cannot provide insight on the prospective migration of patients amongst intensity levels.

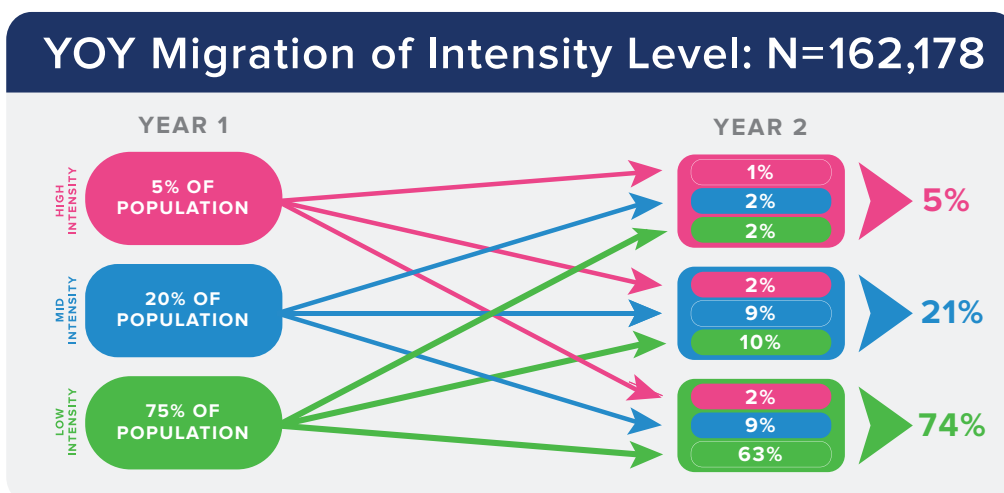


Figure 1: The real member migration in an actual ACO member population.

## Our Proposal: Optimization of Interventional ROI

The BaseHealth analytic engine identifies the members that comprise the **“Unknown Rising Risk”** in a given population. The **“Unknown Rising Risk”** represents the group hidden within the 95% of the population that accounts for essentially the other 50% of a health plan’s costs. Most plans have no visibility into this population. By identifying members before they become acutely ill, we can help customers to provide better care, improve health outcomes, and intervene with the greatest opportunity for impact.

Our studies show that on average, interventions targeting the top 5%, or the **“Known Risk”**, result in a savings of \$1,186 PMPY. In contrast, understanding specifically which members to target in the **“Unknown Rising Risk”**, and knowing which interventions will have the greatest impact, generates up to seven times (7X) the ROI as the traditional approach.

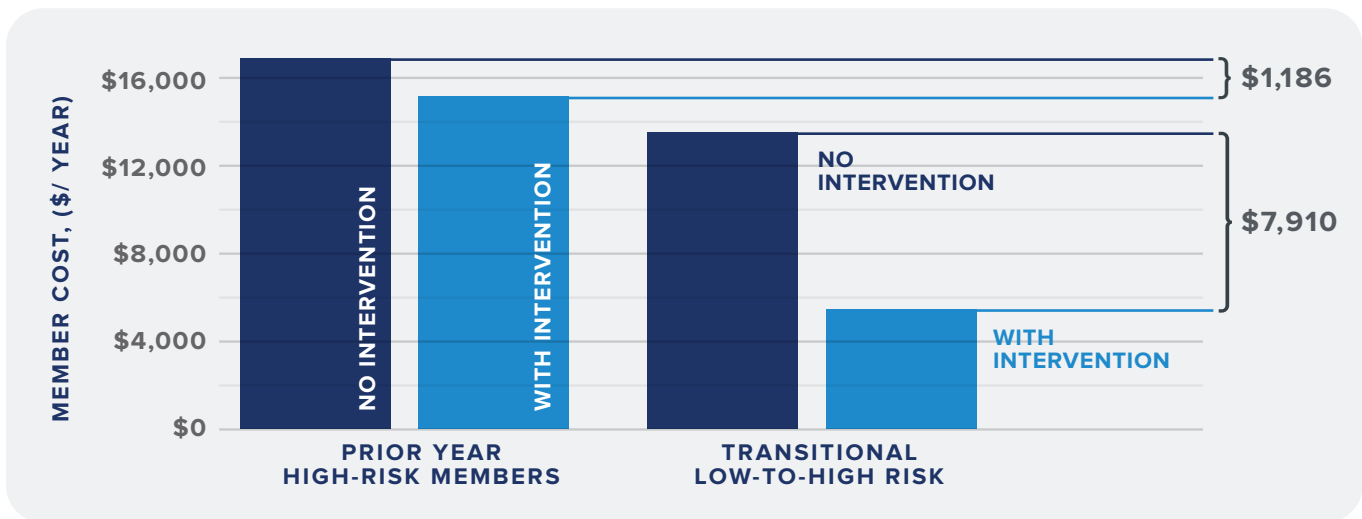


Figure 2. Intervening with members before they reach high-risk classification results in lower cost members and imputed savings, as opposed to targeting the top 5%.

## Getting Ahead of The Rising Risk

Most of the industry’s care management and intervention programs struggle to demonstrate value, as they lack the insights to properly identify the members with rising risk. Instead programs today end up targeting the wrong members, or too large of a population with no chance for an ROI. In order to get ahead of the unknown rising risk within your member population, you must be able to quantify future liability at the individual level, and understand the detail behind the disease at the risk factor and cost levels. This enables your organization to prioritize its member cohort and create targeted interventions to mitigate financial liability and improve health outcomes. At Banner Health, an analysis of 50,000 MA members yielded 4,800 high “rising” risk members; further analysis identified a subset of 400 specific members with the highest potential for interventional effectiveness and ROI. These 400 members were selected for PHM/Clinical initiatives with a potential savings of ~\$3.9M (a 200% ROI.)

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