Measuring DM Program Outcomes: The Use of Incident and Prevalent Populations

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Abstract

The population-based pre- versus post-period design, also known as the adjusted historical control group design, is a popular method to evaluate disease management (DM) programs. This method combines results for members who are newly identified, the "incident population," with results for members who are identified before the evaluation periods, the "prevalent population."

Recently, there has been interest in two issues related to the incident population. First, there is interest in separating the incident members from the prevalent members. The primary rationale for this is to minimize a source of regression to the mean (RTM), and hence to minimize systematic bias. Second, there is interest in creating a cohort of members from the incident population and using them to make an RTM adjustment.

In this white paper, we describe the rationale and need for these approaches and show the results of our investigation into this issue using administrative claims data from two health plans. The conclusions from our analyses are that:

1. Separating the incident and prevalent populations is useful, but

2. The use of a cohort to make an RTM adjustment is unwarranted in the population-based pre- versus post-period design.