Calculating Cost Savings for Care Management

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ABSTRACT

ANALYSIS OF POSSIBLE THREATS TO VALIDITY

• Selection bias:
  - Used an alternative comparison group of CM enrollees not currently enrolled – savings rate similar but slightly higher
  - Sensitivity to start month:
    - Replicated the savings calculation using 5 different CM starting months (June – October 2006) and used the weighted average as the final savings rate

SUMMARY AND IMPLICATIONS

• New model provides a consistent framework for producing sound cost savings estimates
• Can account for temporal change, selection bias, and subject-specific regression to the mean effects
• Overcomes other methodological limitations by using...
  - Quasi-experimental comparison group
  - Large sample size
  - Multiple repeated observations
  - Sophisticated statistical method
• Can be updated regularly (e.g., quarterly) to monitor changes in savings rate over longer implementation periods

Impressive that we use a sound framework for evaluating CM cost savings to provide a confident basis for National, State, and private payors’ investment in these programs.

FUTURE RESEARCH GOALS

Questions?

References:

5. Supplementary Material. Further details on CM interventions, definitions, data, and study design.

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Background:

• Little evidence that Care Management (CM) programs (e.g., case/disease management) significantly reduce healthcare costs
• Results from prior studies questionable due to inadequate methodological rigor
• Lack of sound, standardized analytical framework for measuring cost savings

Goals of current research:

• Develop a consistent framework for producing sound costs savings estimates for CM programs

Participants:

• Adult (18+) commercial health plan members with at least 1 of the chronic conditions targeted by the CM program

Study groups:

• Intervention: active in CM (i.e., high- and low-intensity)
• Comparison: never enrolled in CM

COST SAVING MODEL

Expected $PMPM = $PMPM* + β1*Month + β2*Intervention + β3*Intervention*Month + ε

Observed $PMPM = $PMPM* + (β1 + β4*Intervention)*Month + (β2 + β4*Intervention)*Intervention + ε

Evaluation:

• Use a sound framework for evaluating CM cost savings to provide a confident basis for investment in these programs.

References:

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