SOCIETY OF ACTUARIES

Article from:

The Actuary

May 1995– Volume 29, No. 5

Risk adjustment research proceeding

by Alice Rosenblatt

Through a collaboration of academic researchers and practicing actuaries, the SOA's Risk Adjustment research project has completed some preliminary data analysis. The researchers, actuaries from Coopers & Lybrand LLP and researchers from Harvard University, were awarded the project last fall. So far, they have prepared detailed data for six pools of data containing more than a million-and-a-half life-years of experience.

The team is supported by nine FSAs on the SOA Risk Adjuster Research Task Force, chaired by Bill Lane, and an advisory group of four national experts: FSAs Jim Hickman, Ph.D., from the University of Wisconsin at Madison and Bill Hsiao, Ph.D., from Harvard, and health policy experts Joseph Newhouse, Ph.D., from Harvard and Harold Luft, Ph.D., from the University of California at San Francisco. Following is the scope of the project.

Definition

To define risk adjustment, risk assessment must first be defined and both placed in the appropriate context: health care reform. Risk assessment is a methodology used for distinguishing individuals or groups of individuals and applying relative weights to their risk characteristics. Risk adjustment is a method of determining monetary transfers between carriers in a competitive marketplace due to the differing risk characteristics of each carriers' insureds. More information on risk assessment and risk adjustment and their roles in health care reform are in the American Academy of Actuaries' monographs, numbers 1 and 14.

Questions being addressed

The Risk Adjustment research team is addressing the following:

1) What is the predictive accuracy of different risk assessment methods; i.e., how close are actual expenditures to those predicted by a method? How does this accuracy compare across risk assessment methods? The risk assessment methods to be tested include:
   - Ambulatory care groups (ACGs) for all costs
   - Diagnostic cost groups (DCGs) for all costs
   - DCGs for inpatient costs with ACGs for all other costs
   - The New York Method (age and sex groupings with a small number of specific high cost diagnoses/events)
   - Age and sex
   - Adjustments for identified high cost diagnoses/events combined with above methods 1, 2, 3 and 5
2) How do different risk assessment methods compare, based on other criteria, such as administrative practicality, ability to restrict manipulation and gaming, and incentives for efficiency?
3) How can the existing risk assessment methods be improved?
4) What alternative methodologies exist? How are they likely to compare with those currently available?

Some specific issues in risk assessment and risk adjustment are being addressed:

5) Prospective versus retrospective risk adjustment. Prospective risk adjustment methods are used to estimate a transfer amount between plans in advance to reflect the relative risks of the insured. Retrospective risk adjustment is used to determine health plan transfer amounts in a settlement process. Retrospective and prospective methods are often combined to equitably set the amounts of health plan transfers. In this area, the following questions will be addressed:
   - What are the major issues in prospective versus retrospective adjustment?
   - How do different risk assessment methods compare in terms of predictive accuracy when used in prospective versus retrospective adjustment?
   - Does the difference in the predictive accuracy of a method when used in prospective versus retrospective adjustment vary systematically with the characteristics of the insured?
6) Demographic rating. Up front, risk adjustment involves premium variation based on risk classes of the insured. Certain health reform proposals allow demographic rating variation. This research will address risk adjustment with demographic rating, a research area that has not been previously explored.

Alice Rosenblatt is a partner with Coopers & Lybrand LLP in Boston and a member of the SOA Board of Governors.

May Board meeting open to members

The Board of Governors meeting May 11 in Kansas City is open to interested Society members. Board meeting minutes are available upon request. For more information, call the Society office, 708/706-3500.