DEVELOPING A RISK ADJUSTMENT METHODOLOGY FOR MEDICARE DRUG PLANS

SUMMARY

This article describes ASPE-sponsored research in support of efforts by the Centers for Medicare and Medicaid Services (CMS) to develop a risk adjuster for payments to plans delivering the new Medicare drug benefit enacted under the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA). We briefly describe the problems faced in developing the initial risk adjustment model; the contribution of ASPE research to the development of the model by CMS; and, finally, issues that remain for the future in this policy area.

BACKGROUND

In contrast to fee-for-service payment systems where payment is made for each service provided, capitated systems make a single payment to a health plan for managing the care of a given enrollee. In order to ensure that payments are adequate, and do not engender inappropriate incentives for plans to either favorably or adversely select enrollees, such payments are adjusted to reflect the relative health care cost risk of enrollees--a process known as 'risk adjustment.' In other words, by adjusting payments based on the health status of enrollees, risk adjusters are designed to level the playing field among competing health plans by removing incentives to enroll primarily healthy beneficiaries.

Payments to Medicare Advantage (formerly Medicare+Choice) plans have been risk adjusted over a number of years using a relatively stable system subject to ongoing refinements. The MMA followed the Medicare Advantage payment model in specifying that payments under the new drug benefit should reflect the cost of providing care to a given set of beneficiaries. However, prior to the passage of the MMA, Medicare did not cover most outpatient drugs, so there was relatively little experience in this area, and little data to use to develop a comparable risk adjustment mechanism.

The risk adjustment system developed for Part A and B spending was based on patient diagnoses. However, this system could not automatically be applied to the drug benefit, because different diagnoses require different mixes of drugs and other medical care inputs. That is, a beneficiary with a diagnosis requiring a surgical intervention in an inpatient hospital stay might incur relatively few drug expenses; conversely, a beneficiary with a different diagnosis might have to incur high drug costs in order to avoid other types of medical care. Therefore, in order to implement the new drug benefit by January 2006, a new risk adjustment approach had to be developed.

THE SEARCH FOR APPROPRIATE DATA

Since prior to the MMA, Medicare did not cover most outpatient prescription drugs, there were no existing Medicare data with which to develop the new risk adjustment weights. CMS, which has the responsibility for implementing the Medicare drug benefit, identified

Blue Cross Blue Shield (BCBS) data covering approximately 650,000 retirees and their spouses in the Federal Employees Health Benefit Plan (FEHBP) as a potential source for developing these weights because the data included both drug spending and diagnostic information for a large number of Medicare beneficiaries. The data provided by BCBS to CMS covered the years 1999, 2000, and 2001. However, the FEHBP data are limited in that they under-represent low-income and institutionalized Medicare beneficiaries, exclude disabled Medicare beneficiaries less than 65 years of age, and over-represent beneficiaries residing in the East Coast and mid-Atlantic states. ASPE sought to supplement the FEHBP data with additional data sets to correct these deficiencies and hired the National Opinion Research Center, (NORC) to review and analyze other potential data.

After examining several choices, NORC identified a linked Medicaid-Medicare data set with diagnoses for 1999 and drug claims for 2000. This data set allowed analysis of the principal populations under-represented in the FEHBP data (the low income, the less-than-65 disabled, the institutionalized), and covered all states.

ANALYSES

NORC compared the drug spending for subgroups within the population dually eligible for both Medicare and Medicaid ("dual eligibles"), and compared drug spending among dual eligibles and FEHBP enrollees where comparable groups could be found in both databases. For example, no data on persons less than 65 were available in the FEHBP data. Among FEHBP enrollees (those 65 years of age and over), actual drug spending (prior to risk adjustment) was approximately 30 percent higher for institutionalized enrollees than for other FEHBP enrollees. Similarly, unadjusted drug spending among institutionalized dual eligibles (using the linked Medicaid-Medicare data) was consistently higher than for non-institutionalized persons across all age groups. Also using the linked Medicaid-Medicare data, actual spending was found to be higher for dual eligibles less than 65 compared to those 65 and over, whether community-based or institutionalized. Persons who were less than 65 and institutionalized had the highest spending.

The risk adjustment model was then used to predict risk-adjusted costs—in other words, the drug costs that a beneficiary with a given set of diagnoses would be likely to incur. By comparing these risk-adjusted costs to actual costs, one can see to what extent plans might be over- or under-paid for different types of beneficiaries. To illustrate, if risk-adjusted costs for a particular subgroup are $2500 and actual costs are $3,000, then it means that the payment to a plan for a beneficiary in that subgroup (which is set based on risk-adjusted cost) would be too low and plans would have an incentive to avoid enrolling that type of person. After applying the risk adjustment model, NORC found that there would likely be underpayment to plans (relative to risk-adjusted predicted costs) with respect to both community-based and institutionalized dual eligibles less than 65 years of age.

Based on these and other analyses conducted by NORC and CMS, CMS analysts concluded that a separate (higher) adjustment was warranted to adequately reflect the anticipated drug costs of low-income and institutionalized enrollees. CMS' Office of the Actuary developed an adjustment to spending in order to account for the generosity of the FEHBP drug benefit compared to the new Part D benefit. CMS also decided that a drug plan could not receive two separate payment adjustments for enrolling a beneficiary who was both low-income and institutionalized, based on the assumption that drug purchases for institutional residents were made by the nursing home and not likely to be influenced by changes in coverage.

Because of difficulties CMS encountered in making direct comparisons between the FEHBP and the linked Medicaid-Medicare data sets, the estimates of the increase in spending likely to come about by moving from no coverage to coverage (induced demand) were derived using the Medicare Current Beneficiary Survey.

As shown in the table below, the multipliers or adjustments ultimately used were as follows: for the institutionalized, plans will receive an additional payment of 8 percent for institutionalized beneficiaries over age 65 and 21 percent for institutionalized, disabled Medicare beneficiaries under age 65; for beneficiaries living in the community, plans will receive an additional 8 percent for those in low-income Group 1 (income less thanbelow 135% off the federal poverty leveline and with assets less than three times the asset limit for Social Security Income eligibility) and an additional 5 percent for beneficiaries in low-income Group 2 (income and 5 percent for the next poorest group between 135 and 150% of the federal poverty level and assets of less than $10,000 for a single person and $20,000 for a married couple). These factors are applied to a person's total risk factor when deriving payments.

Adjustments for Special Populations

Beneficiary Subgroup*	Multiplier*
Long-term institutionalized	
Less than 65 years	1.21
65 years and older	1.08
Low-Income	
Group 1: Less than 135% FPL, assets less than 3 times SSI	1.08
Group 2: Less than 150% FPL, assets less than $10k/20k for single/couple	1.05

*Payments for beneficiaries who are both institutionalized and low-income are subject only to the institutionalized multiplier.
** Applied to person-level total risk factor from risk adjustment model, used in plan payment.
FPL: federal poverty level; SSI: asset limit for SSI eligibility

NEXT STEPS/REMAINING ISSUES

ASPE plans to continue research in this area as it is extremely important that plans have appropriate and accurate incentives to enroll low income, disabled, and institutionalized beneficiaries. ASPE and NORC are working in conjunction with CMS to define the most

critical analyses. These are likely to include: additional analyses to confirm and/or refine the adjustments for beneficiary subgroups; analyses of geographic variation in spending and premiums; and assessment of the types of data that will be needed to monitor implementation and long-term impacts of the benefit.