

A P P E N D I X

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**Determining Risk Scores
under the Interim Risk Adjustment
System for Medicare+Choice**

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The interim system for risk adjustment of Medicare+Choice payments is a version of the principal inpatient diagnostic cost group (PIP-DCG) model. This appendix describes how risk scores will be determined under this system.

To determine risk scores under the interim system, the Health Care Financing Administration (HCFA) first created diagnostic cost groups (DCG) with a two-step process by grouping diagnoses using clinical criteria and then sorting the groups according to the expected costs to Medicare. In the first step, HCFA classified International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes into broader, clinically homogenous categories called DxGroups. In the second step, HCFA assigned fee-for-service beneficiaries to DxGroups based on the principal inpatient diagnoses for their 1995 hospital stays. HCFA calculated the mean 1996 total Medicare costs for the beneficiaries in each DxGroup. It placed beneficiaries in the DxGroup with the highest mean in the proper DCG, where a DCG is just a predetermined range of Medicare costs. These beneficiaries were removed from the sample, and the mean 1996 costs for the remaining DxGroups were recalculated. Of the remaining DxGroups, HCFA placed the beneficiaries in the DxGroup with the highest mean in

the proper DCG and removed them from the sample. It continued this process until all beneficiaries were in a DCG. As a rule, no DxGroup can be in a DCG below the base payment DCG, which includes beneficiaries with no inpatient diagnoses the previous year.

The next step in determining risk scores was to estimate the effect of fee-for-service beneficiaries' demographic characteristics and DCGs on annual 1996 Medicare spending. A beneficiary was assigned the DCG that corresponds to the most costly inpatient diagnosis, and its demographic characteristics were based on five variables: age; sex; Medicare eligible because of disability; eligible for Medicaid the previous year; or aged but previously eligible for Medicare because of disability.

The result was estimates of the expected additional costliness associated with each beneficiary's demographic characteristics and DCG. These estimates are additive, meaning that under the interim system, HCFA will calculate the expected total spending for Medicare+Choice enrollees by summing the amounts that each enrollee's demographic characteristics and DCG is expected to add to the enrollee's costliness. The data that will determine enrollee's demographic characteristics and DCGs, including inpatient diagnosis data, will be submitted by organizations. Finally,

enrollee's risk scores will be calculated as the ratio of expected total spending to the national average fee-for-service spending.

HCFA's adjustments to initial DCGs

In developing its PIP-DCG model, HCFA initially created more than 20 DCGs, but it was concerned "inconsistent or inappropriate reimbursements" could occur in some of the diagnosis groups (DxGroups) that comprise DCGs. In response, HCFA assigned a clinical panel to review the DxGroups. The panel considered some DxGroups to represent only minor or transitory diseases or disorders, rarely to be the main causes of inpatient stays, or to be vague or ambiguous. These DxGroups were reassigned to the base payment DCG where risk scores depend only on demographic characteristics. This process reduced the number of DCGs in the model to 15.

A second adjustment HCFA made to the initial DCGs to "ensure consistent and appropriate payment" was that all hospital stays of one day or less were assigned to the base payment DCG. HCFA reasoned that the majority of one-day stays were for diagnoses already in the base payment DCG, and short stays

are often associated with less serious and less costly cases, so this adjustment will have a small effect on payments for beneficiaries in the base payment DCG.

Data issues

HCFA also addressed two issues regarding the inpatient diagnosis data that

will be used to determine beneficiaries' risk scores. First, risk scores for new Medicare enrollees will be based only on demographic data instead of both inpatient diagnosis data and demographic data because inpatient diagnosis data will not be available for these beneficiaries.

A second data issue is that HCFA's initial payments to organizations in January 2000 will be based on inpatient

diagnosis data from July 1998 through June 1999. It has the option to make retroactive adjustments to these payments during 2000 when data from January 1999 through December 1999 become available, but a retroactive adjustment may cause financial problems for some organizations. Hence, HCFA has indicated it will use the July 1998 through June 1999 data throughout 2000. ■