

The Milliman Individual Medical Underwriting Guidelines[™] (IMUGs[™]) are evidence-based underwriting guidelines that enable underwriters to assign debit points to individuals. Relative to the rating process, the IMUGs are a tool that allows a consistent "measuring stick" along which underwriters can assign debit points and place relativities for individuals. Each insurer can then make decisions about which rating actions to take, such as premium increases, application of exclusion riders, or denial of coverage.

The IMUGs are developed through the cooperative efforts of Milliman's actuarial and clinical consultants and represent a combination of clinical and claim evidence, experience, and expert judgment. Milliman carefully reviews client input and considers this as part of the update process. The IMUGs are fundamentally different than other commercially available underwriting guidelines because of their rigorous evidence basis. The ratings in the IMUGs are not subjective, but instead are based on extensive claim data analysis and clinical input. Although reliance on actual claim experience is the core of the IMUGs, Milliman also incorporates significant clinical information and research to further distinguish ratings within conditions and to identify the important information necessary during underwriting to more accurately enable underwriters to stratify risk. The IMUGs have data analysis from a longitudinal database containing up to 10 years of claim data at their core.

How the IMUGS are used

- From information provided on initial underwriting applications, identify conditions present and current prescription drug, height/weight, and tobacco use status.
- Determine debit points for an individual or family based on conditions and prescription information shared in their application. Debit points assigned represent the estimated average cost for the first 12 months of coverage for an individual with a given condition relative to those without the condition.
- The debit points can then be used to estimate the relative morbidity of the individual or family.
- The IMUGs also provide detailed information about when to apply exclusion riders and the impact this has on the expected claim cost for the applicant.

• This relative morbidity score can be used to arrive at a rating action, such as accept, decline, accept with exclusion riders, or accept with an additional premium charged.

Advantages of using the IMUGs

- The IMUGs contain ratings for a list of over 1,600 medical conditions. These condition ratings include information for the relative cost of these conditions and how those costs differ based on specific factors relevant to each condition.
- The prescription drug index includes more than 4,000 different medications with expected costs calculated, including dosage pattern, average discounted cost per fill, and compliance rates.
- Drug/condition conversion tables allow easy identification of which conditions are indicated for each prescription drug, to provide an easy reference guide.
- Average debit point distributions show frequencies and relative costs, to form the basis for related actuarial calculations.

Based on evaluation of the individual's health status and therefore total number of debit points assigned, the underwriter may take one of the following actions. Some of these options may be limited by state or federal law.

- Classify the individual or group as a preferred risk.
- Classify the individual or group as a non-preferred risk.
- Classify the individual as a preferred risk with coverage for certain conditions or services excluded.
- Classify the individual as a non-preferred risk with coverage for certain conditions or services excluded.
- Decline coverage.

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What do the IMUGs contain?

CONDITION RATINGS

The IMUGs contain ratings for specific medical conditions with various debit point assignments depending upon several factors relevant to each condition.

BUILD CHARTS

The Build Charts contain rating recommendations based on the height and weight of the potential insured. The charts provide debit points for each individual based on height, weight, gender, and whether the applicant is an adult or child.

PRESCRIPTION DRUG INDEX

The Prescription Drug Index includes debit points for prescription drugs identified in an applicant's medical history. This index is presented in two ways: sorted by medical condition (with all drugs for each condition listed) and sorted by drug name (with all medical conditions associated with the drug listed). Prescription drug information and debits can also be found in the detailed rating for each medical condition.

TOBACCO USAGE

The IMUGs include appropriate debit points for tobacco usage by age and gender.

RIDER DEFINITIONS

The IMUGs define a numbered list of exclusion riders for conditions where riders are useful in removing a meaningful amount of points from the rating. The ratings for such conditions will include differentials in debit point values if an exclusion rider is used as well as the rider number referencing the specific rider assumed to be used.

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