M E M O R A N D U M

Date: October 30, 2008

To: Kären Larson and Anne Mackie, WSHIP

From: Julie Peper, Reden & Anders

RE: EXPECTED PERCENT SHQ DENIAL RATE - EIGHT PERCENT EQUIVALENT

I. Introduction

Per RCW 48.41.060, "The questionnaire shall be designed such that it is reasonably expected to identify the eight percent of persons who are the most costly to treat who are under individual coverage in health benefit plans, as defined in RCW 48.43.005, in Washington state or are covered by the pool, if applied to all such persons."

The Washington State Health Insurance Pool (WSHIP) engaged Reden & Anders (R&A) to estimate, for the general population applying for individual health care coverage, an appropriate Standard Health Questionnaire (SHQ) denial rate. This denial rate will be based on the SHQ's ability to identify the 8% costliest members currently enrolled in WSHIP or in an individual policy with a health plan. The purpose of this analysis is to validate whether the actual denial rate being experienced is reasonable and within expectations. This analysis was recommended by the Tool Committee and approved by the Board at the last meeting.

The remainder of this memo discusses the methodology utilized and provides both a percent denial equivalent range and best estimate. It should be noted that the approach taken is a reasonable but high level approach. There are additional factors that could have been reviewed to refine the analysis but the additional effort is not expected to significantly improve the results.

II. Methodology and Assumptions

In order to understand how to adjust the 8% costliest current members to a SHQ percent denial equivalent, R&A began by analyzing the relationship between new applicants and those currently enrolled in WSHIP or individual health insurance plans. During this process, R&A identified and evaluated many factors, but most of these factors were not found to be significant or data was not readily available to measure the impact. The main and most significant factor between these two populations is the difference in the average health status of the applicants versus those currently enrolled so this difference was the focus of the analysis.

It is generally accepted that medically underwritten members become more costly over time and as the duration of continuous enrollment increases. Duration is the length of time that a member has continuous medically underwritten coverage. Thus, duration 0 would be the time of application/enrollment and the duration would increase by one for each additional month/year (depending on how it is being measured) of coverage. Since at duration 0 members have just passed medical underwriting, members typically have low claims costs in the initial months. As a member's duration increases, he/she is more likely to have new health conditions arise and as a result, the average member's claims costs increase by duration.

Compounding this issue is the belief that members who remain relatively healthy may leave their current health plan and undergo medical underwriting again in order to obtain more attractive coverage elsewhere. These members then have their duration set back to 0 upon changing plans. This typically leaves the less healthy members at the higher durations since they must often keep their current coverage since they may no longer be able to pass medical underwriting. Thus, because of the members becoming less healthy as duration increases and since the healthier members tend to lapse at a higher rate than the less healthy members, the average claims costs by duration increases significantly by year for the first several years.

The members who are currently in Washington state's medically underwritten health plans are estimated to have been underwritten and "passed" the questionnaire, on average, two to three years ago (this is a similar duration to the non-Medicare eligible individuals in WSHIP). The expectation is that many of these members have since had health conditions such that they would be denied if they were to take the SHQ today. Thus, if the costliest 8% of the currently enrolled population would be denied coverage at a given point, this 8% would translate to some percent less than 8% if we move the members back to duration 0 (date of insurance application/enrollment). What this exact percent is at duration 0 is the central point of the analysis.

R&A utilized a duration report, sponsored by the Society of Actuaries (SOA), to adjust the 8% costliest members to a percent denial equivalent. The report, titled *Variation by Duration in Individual Health Medical Insurance Claims*, was written by Leigh Wachenheim in October of 2006. This report develops duration factors that compare the monthly and annual relative allowed costs of members over the course of their enrollment.

The following assumptions and constraints related to the SOA study and how it was used should be noted.
- The study includes member and claim data from plans that use the Single, Long-Form in their underwriting.
- The study excludes HMO products, COBRA, temporary medical plan of insurance and limited coverage plans.
- Duration is defined as the time difference between date of issue and the date of claim incurral.
- Data in the study was adjusted to remove the impact of differences in benefits, provider discounts, trend and demographics.
- It is assumed that the durational curve of WSHIP and the health plan enrollment is generally increasing and similar to the average duration in the study;

To adjust the 8% for this duration effect, the weighted average duration factor for currently enrolled members was compared to the duration 0 factor to develop an adjustment to the 8%. While R&A utilized an average durational curve and average member weights by duration to

calculate the best estimate, other slopes and member weights were examined to develop a range of estimates. R&A also smoothed the data to improve the credibility where necessary (e.g. monthly factors). To arrive at a final percent denial equivalent, R&A also assumed the following:

- The demographics and health status composition of applicants is relatively constant over time. Note that if market conditions change significantly (e.g. uninsured population changes) it is possible that the health risk of the applicants, and thus the actual denial rate, may vary.
- By applying the change in costs by duration to the 8%, we are assuming the increase in costs from one duration to another would translate to a proportionate increase in denials. This would not be the case if, for example, the increase in costs by duration was all due to members that had no claims in duration zero having moderate, but not extreme health conditions in future durations. Without additional information and/or rigorous data analysis, it is unknown which members are driving the increased costs by duration, but it is not unreasonable to assume, as we have, that it is proportionate across all members.

III. Analytic Results

Based on the methodology outlined above, R&A estimates that, on average, the percent denial equivalent should fall in the range of (5.2%, 6.4%), with a best estimate of 5.6%.

It should be noted that due to monthly fluctuations and potential data complications (such as a single applicant completing the application for multiple carriers), the percent denial for any given month may fall outside the R&A range. For example, based on 2008 applications, if 10 denied applicants fill out two SHQ's in a month (and are denied both times) the denial rate will increase by approximately 0.1%.

Lastly, the range of estimated denial rates should be considered a guideline and should not be used as a strict measure for several reasons. First, this analysis is high level and uses national duration factors that may vary from the Washington market. Second, it is possible given the direction of the economy that there is a change in current market conditions that would alter the actual denial rate percent. Lastly, without looking at additional data in detail (e.g. the number of multiple applications by a person), the impact of some variables are unknown.

Please let us know if you have any questions or comments regarding this analysis.

Reden & Anders
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