

Refinement of Risk-Adjustment for Reports April 2003

Recent changes to the OBQI reports and an upcoming refinement of the OBQI reports that can cause differences in data between reports requested before and after the implementation. This is for your information only, no action is necessary.

A new version of the risk-adjustment model used to calculate the national reference values on the Risk-Adjusted Outcome Report was implemented over the weekend of March 8, 2003. National reference values on Risk-Adjusted reports requested before and after March 8 will not necessarily match. Also, due to an improvement in the risk-adjustment model, the measure 'Any Emergent Care' was moved from the Descriptive Outcome Report to the Risk-Adjusted Outcome Report. There is an ongoing procedure that incorporates late submissions, corrections and inactivations in the OBQM/I calculations. This procedure runs on the fourth Saturday of each month. OBQM and OBQI data for residents who have had a late submission or an assessment altered through the correction policy will be recalculated by this procedure. If an agency has a late submission or has corrected or inactivated assessments, then the data appearing on their OBQM and OBQI reports may be altered as a result of these changes being incorporated into the calculations.

A new refinement to the OBQI reports was implemented April 11, 2003. This adjustment will affect only the Risk-Adjusted Outcome Report and the Descriptive Outcome Report. The reasons and a more detailed explanation of the changes are outlined in the paragraphs below. Items that will be changed include:

- National reference values for all measures on both reports
- Number of Cases in Natl Ref Sample at the top of both reports
- Eligible cases for the national reference value for each individual outcome measure, provided in the body of the two reports.

The risk-adjusted outcome reports provided for home health agency outcome-based quality improvement includes, for each outcome measure, the agency's observed outcome rate and a risk-adjusted national reference rate. The national reference rate is calculated based on the case mix of the agency's patients, using statistical models estimated on a national sample of home health agency patients. The method used to calculate the national reference rate is as follows:

- For each home health agency patient to whom a particular outcome measure applies, a predicted outcome probability is calculated, based on the patient's health status and other attributes at admission to home health care.
- Predicted outcome probabilities are averaged across all of the agency's current patients to yield a predicted outcome rate, which is displayed as the national (risk-adjusted) reference rate for that agency. This current predicted outcome rate can be interpreted as the outcome rate that patients in the national sample would have experienced if they had the same case mix as the patients served by that particular agency.

This method of calculating a risk adjusted reference rate for Home Health Agencies appropriately takes into account variations between agencies in patient case mix, and it provides a means for all agencies to measure their outcomes against a

national, risk-adjusted standard. However, unless risk models are continuously updated and re-estimated, predicted outcome rates reflect outcome performance prevailing at some point in the past, when the national sample was drawn. They do not reflect any changes in overall national patient outcomes that may have occurred more recently. Therefore, agencies are compared against a standard from the past rather than against the current outcome experience of home health patients nationally.

While it is not practical to completely re-estimate all risk models every month, it is possible to adjust Home Health Agency predicted outcome rates to compensate for changes in national outcome performance and/or national home health case mix that may occur over time. Beginning April 12, 2003, the national reference calculation for the risk-adjusted outcome report will include an adjustment factor, as follows:

- Current observed and predicted agency rates will be calculated as described above, but the national (risk-adjusted) reference rate will be calculated using the formula:
$$\text{current agency predicted outcome rate} + (\text{current national observed outcome rate} - \text{current national predicted outcome rate}).$$

Note that the new formula for the national reference rate incorporates the current agency predicted outcome rate, as before, but adds to that rate the difference between the current national observed outcome rate and the current national predicted outcome rate. The national observed and predicted outcome rates are calculated in the same manner as current agency outcome rates, but for all home health patients nationwide. The same date criteria will apply to both agency and national rates. For example, if the agency's outcome report includes patient episodes of care during calendar year 2002, national rates will be calculated for patient episodes of care during 2002 as well. The displayed national reference rates on the Descriptive Outcome Report will also change with this release. Currently, the national reference rates displayed on the Descriptive Outcome Reports are the actual observed national rates for all episodes of care in the data sample used to derive the risk-adjustment model. With this release, the observed national rate for all patient episodes of care will be displayed instead.

Finally, the displayed national case counts on both the Risk Adjusted and Descriptive Outcome reports will be changed. Both the total national case count displayed at the top of the two reports and the count of eligible cases for each individual outcome measure are currently taken from the data sample used to derive the risk-adjustment model. With this release, the actual national case counts will be displayed instead.

If you have any questions concerning this information, please contact the Help Desk at HAVEN_help@ifmc.org or 1 (877) 201-4721.