

To: HSCRC Commissioners, Interested Parties
From: John O'Brien
Deputy Director, Research and Methodology
Re: Resolution of Technical issues related to the calculation of the ROC
Date: April 10, 2009

On March 11, 2009 the ROC/ICC Workgroup met to resolve a number of technical issues related to the application of the adjustments approved by the Commission for the Reasonableness of Charges analysis. At that meeting four separate topics were discussed.

Use of P4 and P5 schedules to arrive at the direct strip for Medical education.

Issue: In the past, the calculation of the direct cost of residents was a derived number based upon a statewide calculation of the average cost per resident x the number of residents allowed up to the cap.

Problem: The intent of the direct strip is to remove costs associated with resident salaries that can be measured. This is the intent of the direct strips in general: there are certain costs that need to be removed from the ROC as they are unique to a hospital and should not be the basis of a comparison with other hospitals. Taking an average resident cost and applying it across all hospitals is inconsistent with this approach.

Resolution: Since the new ROC methodology counts all residents and fellows all the direct costs for residents and fellows that the hospital reports on the P4 and P5 schedules should be used to arrive at the direct strip for medical education.

Calculate the adjustments for DSH and IME direct strips or variation from the means.

Issue: There are two alternative ways that adjustments for IME and DSH can be applied to the ROC calculation. These are:

- Direct strip. Calculate an IME and DSH per case cost from the regression and remove those costs from the CCT.
- Variation from the mean. Calculate the statewide average for IME and DSH per case, subtract that from the hospital's own DSH and IME adjustments and apply the result to the hospital's CCT

In and of themselves the choice of variation from mean or direct strip adjustment do not affect a hospital's ROC position relative to its peers. It does, however, broaden the distribution around the mean such that hospitals who are farthest from the means (either above or below) become even farther under a direct strip approach.

Resolution: Since the effect of the alternatives is strongest at the extremes the use of a direct strip will increase the potential for full rate reviews and (in future years) the severity of spenddown requirements. Therefore, a variation from the mean approach will be used. It should be noted,

however that the use of a variation from the mean, especially for IME (see the discussion of the compromise factor below) has some problems and the Commission may revisit this issue in the future.

How should profit be handled in the calculation of and adjustment for IME

Issue: In the past, when only an IME effect was determined using a regression. It was calculated and adjusted as follows:

- Adjustment Each hospital's CPC was adjusted (except for capital, which should have been) for all factors. The regression was then done using each hospital's adjusted CPC FURTHER ADJUSTED TO REMOVE PROFIT and then the cost of IME was calculated using the RESBED ratio. The reasoning for this approach is quite strong. If profit is not removed when calculating IME and teaching hospitals have systematically higher profits than non-teaching hospitals the regression will build profit into the calculation of IME and potentially lead to some very bad feedback loops – teaching hospitals with ever higher profits having an increasing IME adjustment justifying those profits.
- Application. Once the IME adjustment was calculated the effect of IME was then calculated as a percent of the hospital adjusted CPC, some argued that profit was then built back into the IME allowance

Resolution: Under the revised ROC policy, IME and DSH are determined simultaneously in the same regression. As before, profit is adjusted out of each hospital's CCT when doing the regression. This is appropriate as it should account for systematic profits for the teaching hospitals, or if high DSH hospitals have systematically lower margins. These adjustment should be apply to a hospital's CCT with no further adjustment.

Compromise factor

Issue. Under previous ROC methodologies only IME was adjusted using a regression. In addition this adjustment was applied as a variation from the mean; with non-teaching hospitals have their CCTs adjusted upward slightly. Also, because this adjustment was a constant (cost of teaching) applied to the CPC or CCT that is variable, the percentage the adjustment for non-teaching would vary slightly by hospital - a counter intuitive result. To address apparent inconsistency a compromise factor was developed to make the percentage adjustment for all non-teaching hospitals equal. Under the revised ROC methodology the IME and DSH adjustments are developed jointly and must be applied consistently.

Resolution. You must apply the DSH and IME adjustments consistently and calculate no compromise factor.

The final ROC results with all technical issues accounted for is here.