What Does “Adjusted” Mean?
A Demonstration of Quality Indicator Calculation in Nursing Homes

How is risk-adjustment calculated?
Risk-adjustment process

Table 1: Quality Indicator Description

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
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<tbody>
<tr>
<td>Depression Rating Scale (DRS)</td>
<td>0.0297</td>
</tr>
<tr>
<td>96,071 7%</td>
<td>has similar proportion of residents</td>
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</tbody>
</table>

Unadjusted QIs

Unadjusted QI = (numerator / denominator) × 100%

Numerator: Total number of residents triggering a QI
Denominator: Total number of residents at risk for the QI

Note

Average to Rate calculated using logistic regression and weighted

Risk-adjusted QIs

Risk-adjustment process

What does an adjusted QI look like?
Example: Calculating Percentage of Residents With Symptoms of Delirium for Facility A and Facility B

Facility A

- Low Risk: DRS = 0
- High Risk: DRS > 0

Facility B

- Low Risk: DRS = 0
- High Risk: DRS > 0

Facility A: 143 residents (8% of all assessments) were at risk for delirium, and 7 residents (4.9%) triggered the QI.
Facility B: 118 residents (6% of all assessments) were at risk for delirium, and 7 residents (5.9%) triggered the QI.

Facility A: Weighted Delirium QI rate = 0.0701
Facility B: Weighted Delirium QI rate = 0.0792

How do we interpret this adjusted QI example?

The adjusted QI rate represents a number based on an SRP to enable comparisons among nursing homes, by adjusting for differences in the populations served and the associated performance, relative to that of their peers, in multiple key care domains.

How can a facility address variance between unadjusted and adjusted QI rates?

- **Within a facility:** It is important to know the residents’ risk profiles and look at the QI rates for each risk group.
  - For instance, in Facility A, there are more residents with symptoms of delirium in the high-risk group compared to the low-risk group.
  - The adjusted QI rate represents the rate of residents with symptoms of delirium, adjusted for the differences in the populations served.

- **Between facilities:** Facility A and Facility B have different proportions of residents and adjusted rates in each risk group compared to the SRP.

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ccrs@cihi.ca