
OREGON HOSPITAL QUALITY INDICATOR PROJECT, 2004

GLOSSARY

- **Expected Rate** - The expected rate is the rate the provider would have if it performed the same as the U.S. population given the hospital's actual case-mix (e.g., age, gender, specific condition or procedure, and comorbidity categories). If the observed rate is higher than the expected rate (i.e., the ratio of observed/expected is greater than 1.0, or observed minus expected is positive), then the implication is that the provider performed worse than the reference (U.S.) population for that particular indicator.¹
- **Margin of Error** - A gray line is displayed with each hospital rate that represents the margin of error for that rate. The larger the range is (represented by a longer line), the greater the potential influence of random chance on the calculated rate. The range will vary for each hospital depending upon the number of cases or deaths for that condition or for that procedure, and the standard error rate for that year. The margin of error is wider for hospitals with fewer cases.
If the margin of error line does not intersect the state average line and is **below** the state average, the hospital's rate is statistically **lower** than the state average. If the margin of error line does not intersect the state average line and is **above** the state average, the hospital's rate is statistically higher than the state average. If the state average line intersects the hospital's margin of error line, the hospital's rate **is not** statistically different from the state average.
- **Observed Rate** - The observed rate is the raw rate from the data provided by the hospital, or simply the percentage of patients admitted for a particular condition or procedure who died.
- **Risk-adjusted rate** - The risk-adjusted rate is the rate the hospital would have if it had the same case-mix as the U.S. population, given the provider's actual performance. Adjustments are made to the Oregon hospital data based on national patient demographics such as age, gender and medical codes (diagnostic groups) for a specific condition or procedure. The risk-adjusted rate is the best estimate of what the hospital's rates would have been if the hospital had a mix of patients identical to the national-average patient mix for that year.
- **Smoothed rate** - The smoothed or "reliability-adjusted" rate minimizes random differences in patient characteristics by adjusting for the reliability of the provider's risk-adjusted rate. A ratio of (smoothed rate - population rate) / (risk-adjusted rate - population rate) greater than 0.80 suggests that the difference is likely to persist over time (whether the difference is positive or negative). A ratio less than 0.80 suggests that the difference may be due in part to random differences in patient characteristics (patient characteristics that are not observed and controlled for in the risk adjustment model).

¹ With the exception of the definition of Margin of Error, all definitions are from AHRQ Quality Indicators, *E-Newsletter*, Vol. 1, No. 1, June 2005, <http://www.qualityindicators.ahrq.gov/newsletter.htm>. <7.5.05>.