FAQs: NHSN CAUTI Definition & Rebaseline

This document contains frequently asked questions regarding the catheter-associated urinary tract infections (CAUTI) definition change and the 2015 standardized infection ratio (SIR) baseline. CDC is updating the baseline to continue driving the progress of preventing HAIs. The current risk adjustment methods and original baselines which vary by HAI type and/or healthcare facility type, have been updated using dated entered into NHSN in 2015 as the source of aggregate date. For more information about the rebaseline, please visit: http://www.cdc.gov/nhsn/2015rebaseline.

Why have the CAUTI rates and SIRs for 2015 dropped significantly compared to previous years?

In January 2015, the reporting of Urinary Tract Infections (UTI) changed due to an updated definition that excludes urine cultures that are positive only for yeast and other non-bacterial pathogens, as well as urine cultures with colony counts less than 100,000 CFU/ml.

Due to these changes, some facilities might notice a decrease in the number of CAUTIs identified and reported to NHSN in 2015 and forward, as well as a decrease in the SIR. This is because the new numerator will not include the non-bacterial cultures and the urine cultures with lower colony counts removed, while the denominator uses the pre-2015 definition which includes these events.

How much have the CAUTI SIRs decreased nationally from the original 2009 baseline to 2015?

The **preliminary** estimate of the national CAUTI SIR from the first two quarters of calendar year 2015 is 0.55, indicating an estimated reduction of 45% in acute care hospitals compared to the previous year (SIR = 1.00). Due to variability among hospitals in the proportion of CAUTIs identified with yeasts, some hospitals may notice a less significant decrease than the national preliminary estimate.

When assessing the impact of prevention efforts, how can a hospital or organization adjust for the definition change in UTI reporting?

An estimate of the effect of the definition change must be accounted for in order to assess the impact of CAUTI prevention efforts between 2015 and previous years. This estimate can be made by excluding infections in the pre-2015 data that would not meet the 2015 definitions (i.e., adjusting the numerator). Hospitals and other organizations (e.g., corporate groups, QIN-QIOs) can perform internal trend analyses of their CAUTI rates by making this adjustment. Applying these exclusions can approximate what CAUTI rates would have been had this updated definition been used in years prior to 2015. Instructions for performing this analysis can be found on the NHSN website (http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/analyzing-hai-data-over-time-period-with-different-definitions.pdf). Reductions seen after making this adjustment might be due to implemented prevention efforts; however, not all 2015 definition changes can be accounted for in this adjustment. An adjustment of pre-2015 data should be considered an estimate.

How does the definition change impact the Targeted Assessment for Prevention (TAP) Strategy and TAP Reports?

The CAUTI TAP reports calculate the cumulative attributable difference (CAD), or "excess" CAUTIs, using the Department of Health and Human Services' (HHS) CAUTI SIR goal of 0.75. Because of the reduction in the CAUTI SIRs due to the UTI definition changes, hospitals may appear to have met the HHS goal even if they still require further CAUTI prevention efforts. Therefore, NHSN recommends that hospitals and groups customize their CAUTI TAP reports using an SIR_{goal} that closely represents or is below the current national CAUTI SIR of 0.55 until the national risk-adjustment of these data has been updated.

When will CDC publish updated CAUTI rates and/or SIRs that reflect this definition change?

CDC will update the risk-adjustment for HAIs using the event and denominator data reported to NHSN for 2015. Beginning in 2015, HAI prevention progress will be measured in comparison to infection data reported to CDC's NHSN

in 2015, using updated risk-adjustment models. The SIRs using the 2015 baseline are scheduled to be available in NHSN in January 2017.

What can hospitals and other organizations expect to happen to their SIRs after the 2015 rebaseline?

The data included in the 2015 baseline will serve as a new "reference point" for comparing progress. CDC expects that hospital SIRs will increase and shift closer to 1, especially for SIRs that will be calculated for 2015.

Questions about the rebaseline may be directed to nhsn@cdc.gov.