

# NHSN 2022 HAI Rebaseline Fact Sheet:

## Which National Baseline Should I Use for SIR Analyses?

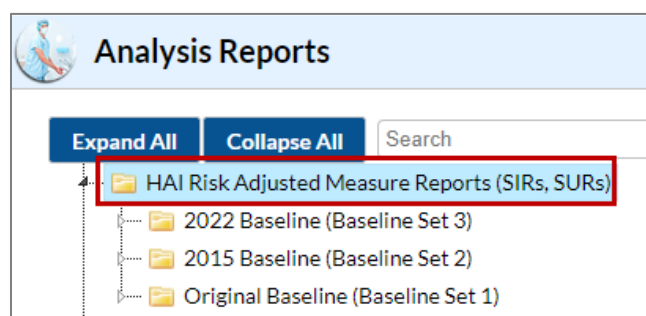
November 2024

### Purpose:

- This document provides considerations for analyzing standardized infection ratios (SIRs) under either the 2015 or 2022 national baseline. Similar concepts and considerations apply to the standardized utilization ratio (SUR) reports.

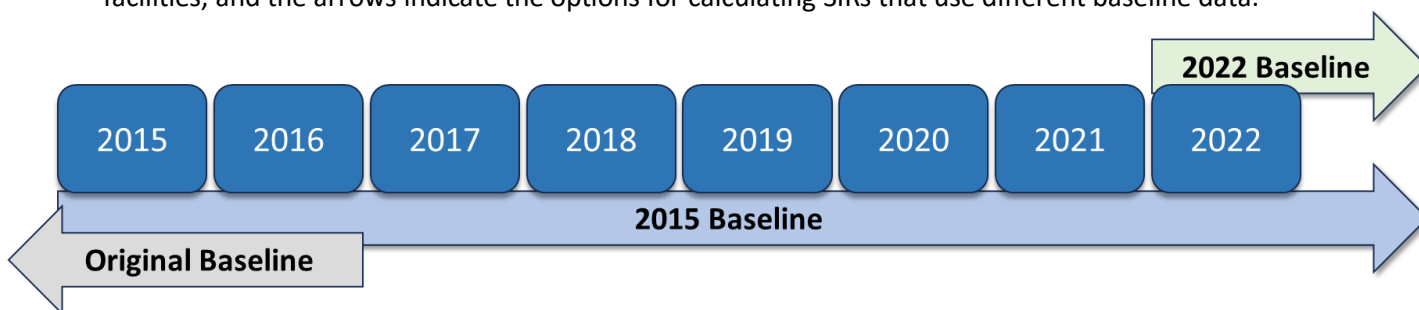
### Background:

- NHSN is updating the baseline for calculating the SIR and SUR from 2015 to 2022 to better reflect recent data. More information is available on NHSN's Rebaseline homepage: <https://www.cdc.gov/nhsn/2022rebaseline/>
- New analytic reports are being built in NHSN, in phases, that provide SIRs and SURs under the 2022 baseline.
  - More information about which reports are currently available in NHSN can be found [here](#).
  - Analytic reports using the 2015 baseline will remain available in NHSN.
- Users can choose which baseline<sup>‡</sup> to use (i.e., which analytic report to run in NHSN) when analyzing their HAI data.
- Data analysts and/or NHSN Users should select the baseline year that aligns with the goals of their analyses and their needs for a national comparison.



### Time Period for SIR Data Analysis Using Different Baselines:

- The following diagram depicts the available years of data that can be analyzed under each national baseline<sup>‡</sup> in NHSN. The years in blue rectangles represent the HAI data entered into NHSN by participating healthcare facilities, and the arrows indicate the options for calculating SIRs that use different baseline data.



- As indicated by the diagram, NHSN users may continue to run analytic reports that use the 2015 baseline.
  - However, the 2015 baseline was created using 2015 national HAI incidence data from 2015. Since then, there have been updates to surveillance definitions, diagnostic testing practices, HAI prevention practices, science, technology, and hospital operations.



- The 2022 baseline is a way to incorporate these changes when analyzing HAI incidence, and allows facilities to compare their HAI incidence to more recent national data.
- There may still be important reasons to continue to use the 2015 baseline, as outlined below.

## Which Baseline Should I Use for My SIR Analyses? Key Details and Recommendations

As of November 2024

| Considerations   | 2022 Baseline   | 2015 Baseline  |
|--|---|--|
| <i>National comparison used in the SIR</i>                             | Compares a facility's HAI data to 2022 national incidence rates*  | Compares a facility's HAI data to 2015 national incidence rates*   |
| <i>Available time periods</i>  | Can be used to measure HAI incidence from 2022 and forward  | Can be used to measure HAI incidence from 2015 and forward   |
| <i>Alignment with National HAI surveillance and prevention efforts</i> | May align with <b>future</b> HAI surveillance and reduction efforts at the federal level, such as the national HAI Action Plan from the Department of Health & Human Services (HHS), and future NHSN surveillance reports and publications such as CDC's National & State HAI Progress Report | Aligns with current national efforts for HAI surveillance and prevention, such as <a href="#">CDC's National &amp; State HAI Progress Report</a> and the HHS 2020 <a href="#">national HAI reduction goals</a> |
| <i>Alignment with other efforts and goals</i>                          | May align with <b>future</b> HAI surveillance and prevention efforts from other healthcare or public health organizations at the federal, state, or local level. More information about rebaseline implications for groups and organizations can be found <a href="#">here</a> .              | May align with current targets and goals set by corporations, medical centers, state health departments, quality improvement organizations, etc.   |
| <i>Use in CMS Programs</i>   | Not currently used by CMS programs <sup>†</sup>   | Currently used for CMS quality reporting and pay-for-performance programs  |

## Careful Interpretation is Essential

- SIRs must be interpreted correctly, in the context of the applicable baseline that was used for the calculation.
- More information about SIR interpretation can be found in [NHSN's Guide to the 2022 Baseline SIRs](#) and the Rebaseline Talking Points for [Infection Prevention Staff/Hospital Leadership](#) and [Organizations](#).
- SIRs calculated under the 2022 baseline are not comparable to those calculated under the 2015 baseline.
  - SIRs calculated under either baseline should always be analyzed and assessed independently of one another.
  - SIRs under two different baselines should not be displayed together, visually, in a single graph or plot.
  - More information about analyzing SIRs under different baselines can be found on the Rebaseline education [webpage](#), in the training webinar titled: "[How Will My SIRs Change? Understanding the Impact of the 2022 HAI Rebaseline.](#)"

Footnotes:

<sup>‡</sup> The original national baseline (Baseline Set 1) is available when analyzing HAI data from 2016 and prior. The baseline year [varies](#) by HAI type.

\* The denominator of the SIR, number of predicted HAIs, is the number of HAIs predicted to occur in a facility, based on the national incidence of HAIs in 2022. The SIR denominator reflects the pattern of exposure and relevant risk factors in the facility.

<sup>†</sup> As of the time of publication (Fall 2024), no timeline has been established for the adoption of the 2022 baseline SIRs into CMS programs.

