

Hospital Compare Data Verification

Hospitals will notice differences between the data shown in the December Hospital Compare Preview Report and the data generated from NHSN analysis reports. Analysis reports run in the NHSN application prior to the next NHSN update in December 2016 will still use the original baseline data and risk models¹⁻⁴. However, data included in the December 2016 Quality Net Preview Reports will be calculated using the updated 2015 baseline and risk models. While hospitals will be unable to see the new SIRs within NHSN until December, they can still review the numerator (i.e., number of events) and contributing denominator (e.g., central line days, patient days) in NHSN by using the existing SIR, rate table, and line list analysis reports. Table 1 outlines the changes in each measure's numerator and contributing denominator, and provides links to helpful resources that guide a user on how to run each recommended companion report. Hospitals are also encouraged to run the related CMS-related reports in NHSN. Guidance for each CMS Report within NHSN can be found here: <https://www.cdc.gov/nhsn/cms/index.html>.

CLABSI Example

The CLABSI measure includes the number of laboratory-confirmed cases of CLABSI among Adult, Pediatric, and Neonatal Intensive Care Unit (ICU) and selected Ward locations for events identified within the displayed time frame.

Patient Safety Component
Analysis Output Options
HELP

Expand All Collapse All

- Device-Associated (DA) Module
- Procedure-Associated (PA) Module
- HAI Antimicrobial Resistance (DA+PA Modules)
- MDRO/CDI Module - Infection Surveillance
- MDRO/CDI Module - LABID Event Reporting
- MDRO/CDI Module - Process Measures
- MDRO/CDI Module - Outcome Measures
- Antimicrobial Use and Resistance Module
- CMS Reports**
 - Acute Care Hospitals (Hospital IQR)
 - CDC Defined Output
 - SIR - CLAB Data for CMS IPPS [Run] [Modify]
 - SIR - CAU Data for CMS IPPS [Run] [Modify]
 - SIR - Complex 30-Day SSI Data for CMS IPPS [Run] [Modify]
 - SIR - CDI FacwideIN LabID Data for CMS IPPS [Run] [Modify]
 - SIR - MRSA Blood FacwideIN LabID Data for CMS IPPS [Run] [Modify]

Under the new 2015 baseline, CLABSI data will have the following changes:

- Numerator:** CLABSIs identified in patients with mucosal-barrier injury (MBI) are excluded from the SIR data calculated under the new baseline. In addition, CLABSIs from additional ICU locations that were previously excluded from the SIRs under the old baseline will now be included in the SIRs calculated under the new 2015 baseline. A list of locations can be found on Table 2.
- Central line days:** Central line days from additional ICU locations that were previously excluded from the SIRs using the old baseline will now be included in the SIRs calculated under the new 2015 baseline. A list of locations can be found on Table 2.

Facilities that report CLABSI data should analyze which cases, and how many, were identified as Mucosal Barrier Injury Laboratory-Confirmed Bloodstream Infections (MBI-LCBI). CLABSI rate tables and standardized infection ratios (SIRs) generated within NHSN prior to December 2016 will include all CLABSIs, regardless of which LCBI definition was met. Facilities can obtain information on which CLABSIs were MBI-LCBI by using the variable **mbi_lcbi** in event-level line lists and frequency tables.

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In this example, you have been following CLABSIs in your oncology medical/surgical ICU. Below is a snapshot of your CLABSI rate table for January 2015:

Facility Org ID=10000 CDC Location=IN:ACUTE:CC:ONC_MS

Location	Summary Year/Month	Perm CLA BSI Count	Perm Central Line Days	Perm CLA BSI Rate	NHSN PCLAB Pooled Mean	Incidence Density p-value #1
ONC MS	2015M01	1	150	6.667	1.4	0.2152

Location	Summary Year/Month	Temp CLA BSI Count	Temp Central Line Days	Temp CLA BSI Rate	NHSN TCLAB Pooled Mean	Incidence Density p-value #2
ONC MS	2015M01	2	175	11.429	1.2	0.0222

In order to see a detailed list of CLABSIs that were identified as MBI-LCBI, you can modify the “Line Listing – All CLAB Events” and include the variable **mbi_lcbi**. If you would like to see MBI-specific criteria and the reported organism, you can modify the “Line Listing – All Infection Events” within the Advanced output options folder and include the variables **cr_mbineutropenia**, **cr_mbiSCTwDiarr**, **cr_mbiSCTwGVHD**, and **pathogenDesc1**. For more information about running/modifying line lists in NHSN, please see: <http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/LineLists.pdf>.

National Healthcare Safety Network Line Listing for All Central Line-Associated BSI Events

As of: October 5, 2016 at 8:28 AM

Date Range: CLAB_EVENTS evntDateYM 2015M01 to 2015M01

orgID	eventID	eventDate	eventType	spcEvent	location	mbi_lcbi
10000	24188819	01/15/2015	BSI	LCBI	ONC MS	Y
10000	24188821	01/20/2015	BSI	LCBI	ONC MS	Y
10000	24188954	01/29/2015	BSI	LCBI	ONC MS	N

In order to obtain a count of how many CLABSIs were identified as MBI-LCBI, you can modify the “Frequency Table – All CLAB Events” and specify the variable **mbi_lcbi** as either the row variable or the column variable.

For more information about running/modifying frequency tables in NHSN, please see: <http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/FrequencyTables.pdf>.



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Other HAI Types

For all HAIs, the number of predicted events shown in NHSN will not match the number of predicted events shown on the December Preview Report. **Table 1** describes additional changes under the new baseline that impact the SIR numerators and/or contributing denominators for each HAI. We encourage facilities to use the additional recommended reports and resources available within NHSN to determine changes in their numerator and contributing denominator.

Table 1. Changes to the SIR Numerators and Contributing Denominators in the 2015 Baseline

HAI Type	Changes to the SIR numerators calculated under 2015 baseline	Changes to the contributing denominator of SIRs calculated under 2015 baseline	Additional Resources
Central Line-Associated Bloodstream Infection (CLABSI)	<p>1. Exclude MBI-LCBIs.</p> <p>2. Events from additional ICUs will be included (<i>note: some ICUs were not included in the original baseline data, but will be included in SIRs calculated under the 2015 baseline</i>) (See Table 2).</p>	Central line days from additional ICUs will be included (see Table 2).	<p>MBI-LCBIs Guide: http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/mbianalysis.pdf</p> <p>Summary Data Line List: http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/summarylinelist.pdf</p>
Catheter-Associated Urinary Tract Infection (CAUTI)	Events from additional ICUs will be included (See Table 2).	Urinary catheter days from additional ICUs will be included (See Table 2).	<p>Summary Data Line List: http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/summarylinelist.pdf</p>
Facility-Wide Inpatient (FacWideIN) <i>Clostridium difficile</i> LabID Event	No changes to the events counted in the numerator of the SIR.	No changes to the patient days included in the SIR.	<p>Troubleshooting the MRSA & CDI LabID Event SIRs: http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/mrsacdi_tips.pdf</p>
Facility-Wide Inpatient (FacWideIN) MRSA Blood Specimen LabID Event	No changes to the events counted in the numerator of the SIR.	No changes to the patient days included in the SIR.	<p>Troubleshooting the MRSA & CDI LabID Event SIRs: http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/mrsacdi_tips.pdf</p>



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HAI Type	Changes to the SIR numerators calculated under 2015 baseline	Changes to the contributing denominator of SIRs calculated under 2015 baseline	Additional Resources
<p>Surgical Site Infection (SSI): Colon Surgery (COLO) and Abdominal Hysterectomy (HYST)</p> <p>Complex 30-day Model</p>	<p>Exclude SSIs where PATOS = YES.</p>	<p>In addition to the procedure exclusion criteria in effect before the 2015 baseline, procedures meeting the following new criteria will be excluded from the Complex 30 days SIRs:</p> <ul style="list-style-type: none"> ○ BMI: If BMI>60 or BMI<12. ○ Gender: If gender is missing or gender is "O". <p>If an SSI is identified as PATOS (PATOS=Yes), then the associated procedure is excluded.</p> <p>Additional procedures, regardless of the closure technique reported, will be included.</p> <p>More information on the procedure exclusion criteria can be found here: https://www.youtube.com/watch?v=2zKqpSrZVAU&feature=youtu.be</p> <p>http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/ssi-sir_tips.pdf</p>	<p>Line List of Procedures: http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/faq-procedure-line-list.pdf</p> <p>Analyzing Procedure Closure Technique: http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/proceduresclosuretechnique.pdf</p>



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Table 2. Locations required by CMS's Hospital Inpatient Quality Reporting Program that will be included in CLABSI and CAUTI SIRs for the first time using the 2015 baseline

HAI Measure	CDC Location	
Central Line-Associated Bloodstream Infection (CLABSI)	IN:ACUTE:CC:R	IN:ACUTE:CC:T_PED
	IN:ACUTE:CC:B_PED	IN:ACUTE:CC:ONC_M
	IN:ACUTE:CC:CT_PED	IN:ACUTE:CC:ONC_MS
	IN:ACUTE:CC:NS_PED	IN:ACUTE:CC:ONC_S
	IN:ACUTE:CC:PNATL	IN:ACUTE:CC:ONC_PED
	IN:ACUTE:CC:S_PED	IN:ACUTE:WARD:S_PED
Catheter-Associated Urinary Tract Infection (CAUTI)	IN:ACUTE:CC:PNATL	IN:ACUTE:CC:B_PED
	IN:ACUTE:CC:ONC_M	IN:ACUTE:CC:NS_PED
	IN:ACUTE:CC:ONC_MS	IN:ACUTE:CC:S_PED
	IN:ACUTE:CC:ONC_PED	IN:ACUTE:CC:T_PED
	IN:ACUTE:CC:ONC_S	IN:ACUTE:WARD:S_PED

References to original baseline data and risk models:

¹CLABSI: <http://www.cdc.gov/nhsn/PDFs/dataStat/2009NHSNReport.pdf>

²CAUTI: http://www.cdc.gov/nhsn/PDFs/NHSNReport_DataSummaryfor2009.pdf

³SSI: http://www.cdc.gov/nhsn/PDFs/pscManual/SSI_ModelPaper.pdf

⁴MRSA Bacteremia and C.difficile LabID Event: <http://www.cdc.gov/nhsn/PDFs/mrsa-cdi/RiskAdjustment-MRSA-CDI.pdf>

