

# Updating the National Risk-Adjustment of HAI Data

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## Objectives

- ❑ Review the timeline for updating the risk adjustment of HAI data at the national level
- ❑ Describe the importance of data quality at the local and national levels
- ❑ Discuss the potential impact of using updated risk models

# **SIR: BACKGROUND OF CURRENT RISK ADJUSTMENT**

## A Review: The Standardized Infection Ratio (SIR) and National SIR Baseline

**SIR** – A summary statistic that compares the number of healthcare-associated infections (HAIs) that were reported to the number of HAIs that were predicted to occur, based on a calculation using data for HAI events that occurred in a given referent time period.

$$SIR = \frac{\# \text{ observed HAIs}}{\# \text{ predicted HAIs}}$$

**National SIR baseline** – The HAI incidence rate for a referent time period that is used to calculate the predicted number of HAIs for a subsequent time period.

## Current (Original) National SIR Baselines: Differences Across HAI and Facility Types

HAI Type	Referent Period	Predicted HAIs
CLABSI	Jan 2006 – Dec 2008 Acute Care Hospitals	Calculated using rate data
	Jan 2013 – Dec 2013 LTACHs	
CAUTI	Jan 2009 – Dec 2009 Acute Care Hospitals	Calculated using rate data
	Jan 2013 – Dec 2013 LTACHs	
SSI	Jan 2006 – Dec 2008	Calculated using risk model
MRSA bacteremia	Jan 2010 – Dec 2011	Calculated using risk model
<i>C. difficile</i> infection	Jan 2010 – Dec 2011	Calculated using risk model

# NHSN's Plans to Calculate New National SIR Baselines for Each HAI Type ("Rebaseline")

## Key considerations:

- Need for a single referent period and consistent methods for calculating predicted infections
- Major changes to HAI definitions and criteria in 2015
- 2015 HAI data and a risk modeling strategy present an opportunity to update national SIR baselines in a uniform way
- Extend scope of prevention activities by including more facilities for which the SIR is calculated (i.e., minimum precision criterion)

**Today's Magic Word = REBASELINE!**

## Scope of the Re-baseline Project

### □ Includes:

- Updating HAI risk models for which SIRs are currently calculated
- Investigating new risk-adjustment methods of CLABSI, CAUTI, and VAE data
- Introduction of SIRs for LabID events for LTACHs and IRFs
- Potential for lowering the minimum precision criterion to determine eligibility for calculating the SIR
- Assessing the potential impact of a new baseline on HAI trends
- Implementing new SIRs into the NHSN application

# Current Risk Adjustment – A Review

## □ Central Line-associated Bloodstream Infection (CLABSI)

- Pooled mean rates and device utilization ratios (DURs) are published each year, stratified by CDC location
- Standardized infection ratios (SIRs) are calculated using referent baseline pooled means for the # predicted (i.e., denominator of the SIR)

$$\# \text{ predicted} = \# \text{ central line days} * \left( \frac{\text{NHSN baseline pooled mean}}{1000} \right)$$

- Original Baseline for Acute Care Hospitals (ACHs): 2006-2008\*
- Original Baseline for Long Term Acute Care Hospitals (LTACHs): 2013†

\*Edwards JR, Peterson KD, Mu Y, Banerjee S, Allen-Bridson K, Morrell G, et al. National Healthcare Safety Network (NHSN) report, data summary for 2006 through 2008, issued December 2009. Am J Infect Control 2009;37:783-805.

†Dudeck MA, Edwards JR, Allen-Bridson K, Gross C, Malpiedi PJ, Peterson KD, Pollock DA, Weiner LM, Sievert DM. National Healthcare Safety Network report, data summary for 2013, Device-associated Module. Am J Infect Control 2015;43:206-21.



# Current Risk Adjustment – A Review

## □ Catheter-associated Urinary Tract Infection (CAUTI)

- Pooled mean rates and device utilization ratios (DURs) are published each year, stratified by CDC location
- Standardized infection ratios (SIRs) are calculated using referent baseline pooled means for the # predicted (i.e., denominator of the SIR)

$$\# \text{ predicted} = \# \text{ urinary catheter days} * \left( \frac{\text{NHSN baseline pooled mean}}{1000} \right)$$

- Original Baseline for ACHs: 2009\*
- Original Baseline for LTACHs and Inpatient Rehabilitation Facilities (IRFs): 2013†

\*Dudeck MA, Horan TC, Peterson KD, Allen-Bridson K, Morrell GC, Pollock DA, et al. National Healthcare Safety Network (NHSN) report, data summary for 2009, device-associated module. Am J Infect Control 2011;39:349-67.

†Dudeck MA, Edwards JR, Allen-Bridson K, Gross C, Malpiedi PJ, Peterson KD, Pollock DA, Weiner LM, Sievert DM. National Healthcare Safety Network report, data summary for 2013, Device-associated Module. Am J Infect Control 2015;43:206-21.

# Current Risk Adjustment – A Review

## □ Surgical Site Infection (SSI)

- Last publication of stratified pooled mean SSI rates was in 2009 (incl. data from 2006-2008)
- Stratified pooled mean rates were replaced by SIRs in 2010
- The predicted # of SSIs is calculated using logistic regression models
  - Original Baseline: 2006-2008\*
  - Three different models developed:

**All SSI Model:** Most inclusive model

**Complex A/R SSI Model:** Subset of procedures and SSIs; more suitable for public reporting

**Complex 30-day SSI Model:** Used for CMS Hospital IQR Program and CMS PPS-Exempt Cancer Hospital QR Program

\*Mu Y, Edwards JR, Horan TC, Berrios-Torres SI, Fridkin SK. Improving Risk-Adjusted Measures of Surgical Site Infection for the National Healthcare Safety Network. Infect Control Hosp Epidemiol 2011;32(10):970-86.

## Current Risk Adjustment – A Review

### □ Laboratory Identified (LabID) Events – MRSA and CDI

- SIRs are the only risk-adjusted measure (i.e., no stratified rates)
- The predicted # of Healthcare facility-onset (HO) Incident LabID events is calculated using negative binomial regression models
  - Original Baseline: 2010-2011\*
  - Available for ACHs, FACWIDEIN data only
  - Limited to MRSA bacteremia and CDI

\*Dudeck MA, Weiner LM, Malpiedi PJ, et al. Risk adjustment for healthcare-facility onset *C. difficile* and MRSA bacteremia Laboratory-Identified Event reporting in NHSN. Available at <http://www.cdc.gov/nhsn/PDFs/mrsa-cdi/RiskAdjustment-MRSA-CDI.pdf>. Accessed June 2, 2015.

## Changes in NHSN since Original Baselines

- ❑ **Increase in number of facilities reporting data to NHSN**
  - State mandates
  - CMS Quality Reporting Programs
- ❑ **Changing demographics of facilities reporting data to NHSN**
  - Inclusion of LTACHs and IRFs
  - Large # of non-teaching hospitals

## Changes in NHSN since Original Baselines

- ❑ **Increase in number and types of locations reporting DA data**
  - Telemetry Wards
  - Mixed Acuity Units
  - Oncology ICUs and Wards
  - Specialty (i.e., non-general) ICUs and Wards
- ❑ **Greater volume of procedures reported each year**
  - More outpatient procedures reported than in 2006-2008
- ❑ **Introduction and increased use of CDA**
- ❑ **Increase in number of partners using NHSN Group function**

# Changes in NHSN since Original Baselines

## □ Definition and protocol changes

- Removal of BSI-CSEP specific event
- Removal of UTI-ASB specific event
- Discontinued collection of umbilical catheter days separate from non-umbilical central line days in NICUs
- Ventilator-associated Event (VAE) replaced Ventilator-associated Pneumonia (VAP) for adults
- Significant changes to CAUTI definition (2015)
- Introduction of new specific events:
  - BSI-LCBI-MBI
  - UTI-ABUTI
  - SSI-PJI
  - GI-CDI

# Changes in NHSN since Original Baselines

## □ Definition and protocol changes (cont'd)

- Introduction and refinement of definitions for identifying HAIs:
  - 7-day Infection Window Period
  - Date of Event
  - Present on Admission (POA)
  - 14-day Repeat Infection Timeframe (RIT)
  - Secondary Bloodstream Infection Attribution Period
  - Pathogen Assignment Guidance
- Required reporting of LabID events from EDs and Observation Units for FACWIDEIN surveillance
- Additional information reported for procedures
  - Diabetes
  - BMI
  - Present at time of surgery (PATOS)

# **MOVING FORWARD: ANALYTIC PLANS**



## Moving Forward...

- ❑ Data reported to NHSN for 2015 will be used as the NEW baseline for future SIRs
- ❑ CDC will use a complete year of data for the final risk adjustment
- ❑ Risk adjustment methods and risk models may vary from original baselines
  - All applicable factors will be assessed/re-assessed (incl. use of quarterly prevalence rates and quarterly CDI Test type for LabID)

# Moving Forward...

## □ Timeline

- Spring 2015 through May 2016:
  - Various data quality checks on surveys, events, and denominator data
  - Perform preliminary analyses – incl. univariate analyses and preliminary risk models using Q1-Q3 2015 data
- June 1, 2016: Begin final analyses and risk-adjustment
- July 15, 2016: Complete risk-adjustment
- August 15, 2016: 2016Q1 data will be submitted to CMS using new 2015 baseline
- December 2016/January 2017: Incorporate new SIRs and risk-adjustment into NHSN application

## Data Quality Checks

- ❑ Preliminary analyses have included regular data quality checks throughout the analytic period
- ❑ Special focus on new risk factors and new protocol items, including (but not limited to):
  - Outlier detection for height/weight/BMI on procedure records
  - Adoption of Sampled Denominator Data collection method for CLABSI and CAUTI
  - Reporting of accurate CDI Test Type, per quarter
  - Reporting from ED and Obs units for MRSA and CDI LabID
  - Reporting of LabID events from LTACHs and IRFs

## Data Quality Checks

- **Efforts have been made by CDC to resolve data quality issues through various methods, which include:**
  - Outreach to affected hospitals
  - Education via newsletters, trainings, etc.
  - Enhancements in NHSN application (if necessary)
  - Addition of “Data Quality” related output options and/or modifications to existing output options (if necessary)

## Moving Forward...

### □ Re-baseline Analyses Planned/Prioritized:

Event	Acute Care Hospitals	LTACHs	IRFs
CLABSI	✓	✓	
CAUTI	✓	✓	✓
SSI (multiple models)	✓		
MRSA LabID	✓	✓	✓
CDI LabID	✓	✓	✓
In addition: VAE, MBI-LCBIs, Antimicrobial Resistance – HAIs, Antimicrobial Use			

## Moving Forward...

- ❑ **Re-Baseline Analyses Planned for SSI data (ACHs only):**
  - **Complex 30-day Model**
    - NQF-endorsed measure
    - Used for CMS Quality Reporting Programs
    - Inpatient Adult COLO and HYST procedures only
  - **All SSI Model and Complex A/R Model**
    - Separate models for each procedure category
    - Separate models for age group (i.e., adults vs. peds)

## Changes to CLABSI and CAUTI Risk-adjustment Methods

- CDC plans to move toward risk models for the new CLABSI and CAUTI baseline
  - CDC Location-stratified rates would not be available at the *National* level
  - Allows for assessment of other factors, for example:
    - Facility type
    - Facility bedsize
    - Medical school affiliation

## Re-Baseline Plans - Implementation

- ❑ **The new baseline and risk-adjustment will be implemented in Dec. 2016/Jan. 2017 release of NHSN**
  - New output options for SIRs calculated on the new baseline, for 2015+ data
  - SIRs calculated on “original” baseline will be retained and moved
- ❑ **Additional improvements to output options are planned:**
  - DA output grouped by location type (e.g., WARD, CC\_ONC), rather than denominator type (e.g., ICU-OTHER)
  - Indicator variable(s) for procedures/SSIs excluded from the models, with brief explanation of reason for exclusion
  - MBI-LCBI rate table(s)
  - Add clear option for cumulative rate/SIR for specified time period
  - When complete, risk-adjusted measures will match the survey data with year of HAI data (e.g., 2015 surveys will be used to calculate 2015 SIRs, 2016 surveys will be used to calculate 2016 SIRs, etc.)



**UNDER CONSIDERATION: UPDATING THE  
MINIMUM PRECISION CRITERION**

## Minimum Precision Criterion - Rationale

- ❑ **Currently, SIRs are not calculated when the predicted number of infections is less than 1.**
  - Rationale: The low precision of SIRs with low predicted values can lead to extreme SIRs that may not accurately reflect performance. An arbitrary value of 1 was originally implemented for ease of application and to raise precision awareness not previously imposed for HAI rate calculations.
- ❑ **A negative byproduct of this criterion is the exclusion of many facilities with positive HAI counts that reflect a need for prevention.**

# Under Consideration: Updating the Minimum Precision Criterion - Methods

- ❑ Used data from July 2014 (Q3) through June 2015 (Q2) to investigate the SIR distribution of facilities with predicted values less than 1.
- ❑ **Analysis of Variance Approach**
  - Assumption: Among SIRs that have predicted  $< 1$ , if the variance of the SIR distribution below the new predicted value threshold is not significantly different than the variance above the new threshold, facilities can be included in SIR calculations.
  - Compared the variances of the SIR distributions at each threshold below 1 (at increments of 0.1) statistically using Levene's Test for homogeneity.

## Under Consideration: Updating the Minimum Precision Criterion - Methods

- ❑ A negative byproduct of this new, potential predicted value threshold is the inclusion of facilities with zero HAIs which will change SIR distributions inflating the number of zero SIRs.
- ❑ Transitioning from SIRs to Adjusted Ranking Metric values will account for differences in SIR precision and reliability.
- ❑ **Conclusion:** Across all HAI types, SIRs calculated below a predicted value of 0.2 showed significantly higher variance than those above 0.2.
  - In other words...there is the potential to calculate SIRs when the predicted number is  $\geq 0.2$

# Under Consideration: Updating the Minimum Precision Criterion – Impact

Impact of the proposed precision criterion (predicted value  $\geq 0.2$ ) on all acute care hospitals reporting from 2014Q3 - 2015Q2. SIRs calculated using original baselines.

HAI/SIR	Total Reporting	N(%*) Included with Proposed Criterion	N(%*) New Facilities Added	N(%) of New Facilities with 1 Infection	N(%) of New Facilities with >1 Infections	N(%**) with SIR=0	%** Increase of facilities with SIR = 0
CLABSI	3,824	3,100 (81.0%)	695 (18.1%)	82 (11.8%)	24 (3.5%)	1,101 (35.5%)	14.3%
CAUTI	4,079	3,678 (90.1%)	812 (19.9%)	117 (14.4%)	23 (2.8%)	1,236 (33.6%)	13.9%
C. Diff	4,160	3,974 (95.5%)	371 (8.9%)	56 (15.1%)	21 (2.9%)	722 (18.2%)	6.9%
MRSA	4,089	3,192 (78.1%)	1,145 (28.0%)	177 (15.4%)	81 (7.1%)	1,247 (39.1%)	21.5%
SSI COLO Cplx 30-day	2,837	2,779 (97.9%)	700 (24.6%)	178 (25.4%)	81 (11.5%)	791 (28.4%)	11.6%
SSI HYST Cplx 30-day	2,256	2,033 (90.1%)	1,148 (50.8%)	288 (25.0%)	116 (10.1%)	970 (47.7%)	22.2%

\*Percent of total facilities reporting.

\*\*Percent of facilities included in the SIR calculation.

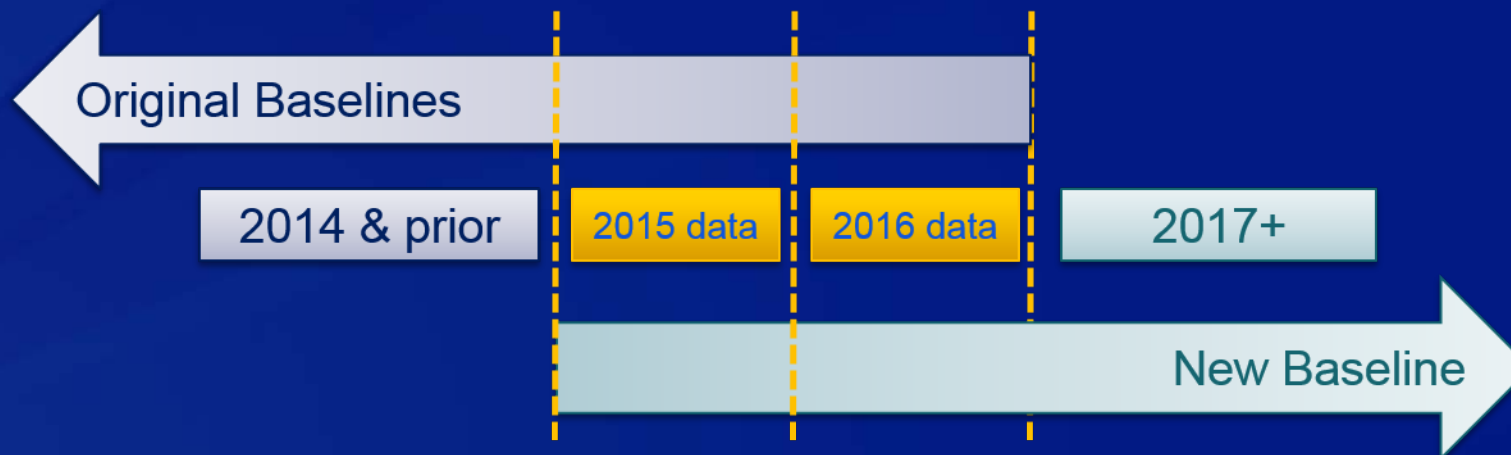
**ANSWERED** (*AND SOME UNANSWERED*)  
**QUESTIONS**

## Questions and Answers

- ❑ **Will MBI-LCBIs be excluded from the CLABSI baseline?**
  - YES.
  - CLABSI events reported to NHSN as MBI-LCBI will be excluded from the numerator when performing risk-adjustment of CLABSI data.
  - Hospitals and groups should also expect to see these events removed from the new CLABSI SIRs that will use the 2015 baseline.
- ❑ **Will SSIs reported as “Present at time of Surgery”(PATOS) be excluded from the SSI SIRs?**
  - The Complex 30-day SSI SIRs will exclude SSIs reported as PATOS.
  - This variable will be assessed for the other SSI models separately.

## Questions and Answers

- **Once the new SIRs become available in NHSN, will users have the ability to analyze their data under the previous baseline?**
  - YES.
  - SIRs, based on the original baselines, will be calculated within the NHSN application through 2016 data.
  - NHSN will create new reports that will calculate SIRs for 2015 and forward using the new 2015 baseline.





## Questions and Answers

- **Will this change increase or decrease a hospital's SIR?**
  - SIRs produced under the new 2015 baseline will not be comparable to SIRs calculated under the original baselines.
  - The 2015 baseline is a new “starting/referent point” from which to measure future progress – therefore, we expect that hospital SIRs will shift closer to 1, particularly for the 2015 SIRs calculated with the 2015 baseline

## Questions and Answers

- ❑ **Hospitals transitioned to ICD-10-PCS codes for 4<sup>th</sup> quarter data submissions in 2015. What impact will this have on the SSI denominators and SIRs?**
  - The direct impact is unknown at this time.
  - Additional validation of the NHSN Procedure codes with the ICD-10-PCS and CPT Codes is being performed

## Questions and Answers

- ❑ Will ED/Obs CO prevalence rates be included as risk factors for the MRSA Blood and CDI LabID SIRs
  - These prevalence rates will be assessed
  - However - it is too early in the analytic process to determine certainty of the use of these rates as significant risk factors.

### Outpatient CO Prevalence Rate (per location):

$$\frac{\# \text{ CO LabID events}}{\# \text{ Encounters}}$$

### FACWIDEIN CO Prevalence Rate:

$$\frac{\# \text{ CO LabID events, inpatient units}}{\# \text{ Admissions}}$$

## Questions and Answers

- **When will the new baseline be used for calculation of SIRs for CMS’s Hospital Value Based Purchasing (VBP) Program?**
  - Per the Final Rule published in the Federal Register, August 17, 2015\*:
    - FY2017 and FY2018 Program Years will use the original NHSN baselines
    - FY2019 and forward will use the new, 2015 NHSN baselines

CDC’S STANDARD POPULATION DATA IN THE HOSPITAL VBP PROGRAM				
	FY 2017 Program year*	FY 2018 Program year*	FY 2019 Program year**	FY 2020 Program year**
NHSN Measures Baseline Periods.	Current standard population data.	Current standard population data.	New standard population data.	New standard population data
NHSN Measures Performance Periods.	Current standard population data.	Current standard population data.	New standard population data.	New standard population data

\* CDC will use “current standard population data” to calculate measure data that we will translate into scores on the measures.  
 \*\* CDC will use “new standard population data” (CY 2015) to calculate measure data that we will translate into scores on the measures.

\* <https://www.gpo.gov/fdsys/pkg/FR-2015-08-17/pdf/2015-19049.pdf>

## Questions and Answers

- **How can hospitals confirm their 2015 and 2016 CMS-related data prior to the new SIRs becoming available?**
  - Hospitals should continue to use the CMS-related reports within NHSN to confirm completion and accuracy of reported data, prior to each quarterly deadline
  - While new SIRs will not be available until late 2016, relevant data that may inform the SIRs are currently available for hospitals to perform data quality checks:
    - Number of patient days, device days, admissions
    - Number of events
    - Categorization of LabID events (e.g., hospital onset vs. community onset)
    - Event and procedure level details, via line lists

## Example: Checking 2015 CLABSI Data

- Let's look at our 2015Q3 CLABSI data in NHSN:

National Healthcare Safety Network  
SIR for CLAB Data for CMS IPPS - By OrgID  
As of: January 28, 2016 at 2:31 PM  
Date Range: CLAB\_RATES\_CMS summaryYr After and Including 2015  
if((((bsiPlan = "Y" ) AND (locationType IN ("CC", "CC\_N" ))) OR ((bsiPlan = "Y" ) AND (locCDC IN ("IN:ACUTE:WARD:M", "IN:ACUTE:WARD:MS", "IN:ACUTE:WARD:S", "IN:ACUTE:WARD:M\_PED", "IN:ACUTE:WARD:MS\_PED", "IN:ACUTE:WARD:S\_PED" ))))

orgid=10018 CCN=868768

orgid	summaryYQ	infCount	numExp	numCLDays	SIR	SIR_pval	SIR95CI
10018	2015Q3	8	1.888	1040	4.238	0.0009	1.968, 8.048

- When the 2015 SIRs are calculated with the new baseline, the MBIs will be excluded
  - How can we tell how many CLABSIs would be excluded from the numerator (infCount)?

## Example: Checking 2015 CLABSI Data

- ❑ Run the CLABSI Frequency Table and include the variable mbi\_lcbi
- ❑ Based on our results, 1 CLABSI would be excluded when our data will be calculated using the 2015 baseline:

### Analyzing MBI-LCBI CLABSI Data

#### Description

Facilities that report CLABSI data may wish to 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 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.

#### Example

You have been following CLABSIs in your hematopoietic stem cell transplant ward (HSCT). Below is a snapshot of your CLABSI rate table for January 2013:

Org ID=10018 CDC Location=IN:ACUTE:WARD:ONC\_HSCT

Location	Summary Month	Perm CLA BSI Count	Perm Central Line Days	Perm CLA BSI Rate	NHSN PCLAB Pooled M	Incidence Density value #1	Incidence Density Percentage #1

National Healthcare Safety Network

Frequency Table for All Central Line-Associated BSI Events

As of: January 28, 2016 at 2:38 PM

Date Range: CLAB\_EVENTS evntDateYQ 2015Q3 to 2015Q3

Frequency	Table of locCDC by mbi_lcbi			
	locCDC	mbi_lcbi		
		N	Y	Total
→ IN:ACUTE:CC:C		2	1	3
IN:ACUTE:CC:MS		2	0	2
IN:ACUTE:CC:NURS		2	0	2
IN:ACUTE:CC:S		2	0	2
IN:ACUTE:WARD:REHAB		1	0	1
Total		9	1	10

## Currently Unanswered Questions

- ❑ How can a hospital or state trend their HAI data over time?
- ❑ What will be the impact on hospital rankings in HVBP and HACRP?
- ❑ Will there be location-specific SIRs for DA infections?
- ❑ What will the impact be on TAP Reports and prevention activities?
- ❑ How will organizations assess the impact of prevention activities that were ongoing in 2015?
- ❑ What will the 2015 HAI Progress Report look like?
- ❑ Should states republish their 2015 public report once the new baseline becomes available?



**LET'S TALK ABOUT CAUTI...**

## Impact of the 2015 CAUTI Definition Change

- ❑ **2015 CAUTI Definition excludes\*:**
  - Urine cultures that are positive only for yeast and other non-bacterial pathogens
  - Urine cultures with colony counts <100,000 CFU/ml
- ❑ **Some facilities may notice a decrease in the number of CAUTI identified and reported to NHSN in 2015 and forward**
- ❑ **This decrease would also be evident in the SIR**
  - The # predicted is calculated using events reported to NHSN in 2009

\*Please see the NHSN September 2014 Newsletter for additional changes to the CAUTI definition: <http://www.cdc.gov/nhsn/newsletters/index.html>

## Impact of the 2015 CAUTI Definition Change

- ❑ The *preliminary estimate* of the national CAUTI SIR, 2015Q1-Q2, is 0.55
- ❑ Indicates an estimated reduction of 45% in acute care hospitals compared to the previous year (2014 SIR = 1.00)
- ❑ Due to variability among hospitals in proportion of CAUTI identified with yeasts, some hospitals may notice a less significant decrease

## Impact of the 2015 CAUTI Definition – on prevention efforts

- ❑ An estimate of the effect of the definition change must be accounted for when comparing 2015 CAUTI data to previous years
- ❑ This can be accomplished by excluding those infections in pre-2015 data that would be excluded under the 2015 definition
  - Perform internal trend analyses of CAUTI rates
  - This may approximate what the actual CAUTI rates would have been if the updated definition was used in prior years
  - NOTE: This analysis would result in an **estimate**, since not all of the 2015 definition changes can be accounted for in this adjustment.
  - NOTE: This adjustment cannot be made with SIRs, since the denominator would still be calculated using the pre-2015 definition

## **Impact of the 2015 CAUTI Definition – on prevention efforts**

- ❑ **By default, CAUTI TAP reports use the HHS Action Plan goal of 0.75 when calculating the CAD**
- ❑ **Due to the definition changes, hospitals may appear to have met this goal even if further CAUTI prevention efforts are needed**
  - Solution: Until new risk-adjustment becomes available, NHSN recommends using a custom SIR goal (i.e., CAD multiplier) that is at or below the current, national estimate of 0.55.

## Re-baseline Take-Home Points:

- ❑ Data reported to NHSN for CY2015 will be the new baseline for HAI SIRs
- ❑ Updated risk adjustment will be applied across various HAI types and healthcare settings
- ❑ SIRs using the 2015 baseline will be submitted to CMS beginning in August 2016
- ❑ Hospitals and Groups with access to NHSN will be able to obtain SIRs using the new baseline in December 2016/January 2017
- ❑ Under Consideration: SIRs may be calculated for more hospitals as a result of potentially lowering the minimum precision criterion to 0.2 (i.e., SIRs will be calculated when the # predicted  $\geq 0.2$ )

# Questions?

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