Healthcare Associated Infections in New Jersey Acute Care Hospitals

Legislative & Regulatory Overview

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HAI Legislative History

- **P.L. 2007, C. 196**
  - Health Care Facility-Associated Infection Reporting and Prevention Act
  - Approved October 31, 2007
  - Required uniform reporting to the Department of Health on a quarterly basis
    - CLABSI, CAUTI, SSIs, VAP were recommended
  - Information should be available to the public on Department website
  - Commissioner of Health should consult with QIAC regarding rules, regulations and expansion of reporting requirements
  - Findings must appear in annual reports

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HAI Regulatory History

- **N.J.A.C. 8:56**
  - Health Care Facility Infection Reporting
  - Developed and adopted in November 2008
  - Designates the CDC National Healthcare Safety Network (NHSN), as the reporting system
  - Sets forth enrollment and training requirements for NHSN, data collection and reporting requirements
  - Commissioner works with QIAC to determine the HAI data required to be reported
  - Provisions for data accuracy, confidentiality, and enforcement
  - Availability of the data to the public

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Senate Bill No. 817

- Approved in 2011
- Amends P.L. 2007, C. 196 to allow for personal identifying information to be transmitted via the NHSN system.
- Allows the Department to independently verify accuracy of data and conduct research on HAI trends.

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HAI Reporting History

- **2009 : Hospitals began submitting data to New Jersey using the National Healthcare Safety Network System (NHSN) developed by CDC**
  - Central Line-Associated Bloodstream Infections (CLABSIs) in adult, pediatric and neonatal intensive care units.
  - Coronary artery bypass graft (CABG)
  - Abdominal Hysterectomy (HYST)

- **2010: First Hospital Performance Report to include HAIs**
  - CLABSIs in adult, pediatric and neonatal intensive care units

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HAI Reporting History

- **2010: hospitals reported 2 additional HAIs**
  - Catheter-associated urinary tract infections (CAUTIs) in adult ICUs
  - Knee arthroplasty procedures and associated infections (KPRO)
- **2011: 2009 CABG and Abdominal Hysterectomy procedures and infections published in HPR**
  - 1 year surveillance for surgeries with implants
- **2012: hospitals began reporting Colon procedures and associated infections**

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HAI Data Source and Measures

- **Hospitals submit data into the National Healthcare Safety Network (NHSN)**
  - CLABSI and CAUTI data are from intensive care units
  - Surgical procedures and associated infections are from inpatients

- **Measures submitted:**
  - CLABSI
  - CAUTI
  - CABG
  - Knee Arthroplasty
  - Colon Surgery
  - Abdominal Hysterectomy

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When is the Data Due into NHSN?

NHSN Event	CMS Reporting Deadlines
CLABSI	Q1 (Jan.-March): August 15
Start Q1 2011 - adult, pediatric, and neonatal ICUs	Q2 (April-June): November 15
Start Q1 2015 - adult and pediatric medical, surgical, and medical/surgical wards	Q3 (Jul.-Sept.): February 15 Q4 (Oct.-Dec.): May 15
CAUTI	Q1 (Jan.-March): August 15
Start Q1 2012 - adult and pediatric ICUs	Q2 (April-June): November 15
Start Q1 2015 - adult and pediatric medical, surgical, and medical/surgical wards	Q3 (Jul.-Sept.): February 15 Q4 (Oct.-Dec.): May 15
SSI (following COLO Procedures)	Q1 (Jan.-March): August 15
(Start Q1 2012)	Q2 (April-June): November 15 Q3 (Jul.-Sept.): February 15 Q4 (Oct.-Dec.): May 15
SSI (following HYST Procedures)	Q1 (Jan.-March): August 15
(Start Q1 2012)	Q2 (April-June): November 15 Q3 (Jul.-Sept.): February 15 Q4 (Oct.-Dec.): May 15

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Standardized Infection Ratio (SIR)

- Summary measure developed by the CDC used to track HAIs
- SIR=Observed Infections/Expected Infections
- SIR is not calculated if the Expected is less than 1
- The SIR for the National Baseline=1
- SIRs less than 1 are optimal

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Central Line-Associated Bloodstream Infections

- Estimated cost in 2012 averaged more than $45,800 per infection.
- Approximately 250,000 CLABSIs annually in the U.S.
- Death rate between 12% to 25%
- 2015 ICU SIR=0.65
- 2015 NICU SIR=0.54

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Catheter-Associated Urinary Tract Infections

- Patient hospital costs range from $862 to $1,007 per incident
- Estimated more than 449,000 occur annually in the U.S.
- Associated with more than 13,000 deaths annually
- 2015 CAUTI SIR=0.69

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Surgical Site Infections

- **Most common HAI and attributable costs are more than $3 billion a year in acute care hospitals**
- **Treatment costs in 2012 were between $18, 902 to $22,667 per infection**
- **Estimated more than 157,500 infections occur annually in the U.S.**
- **Estimated more than 8,200 deaths annually**

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2015 SSI Results

- **CABG**
  - More than 4800 procedures reported
  - SIR was 0.85
- **Abdominal Hysterectomy**
  - More than 7,200 procedures reported
  - SIR was 0.96
- **Knee Arthroplasty**
  - More than 16,000 procedures reported
  - SIR was 0.62
- **Colon**
  - More than 8,000 procedures reported
  - SIR was 0.83

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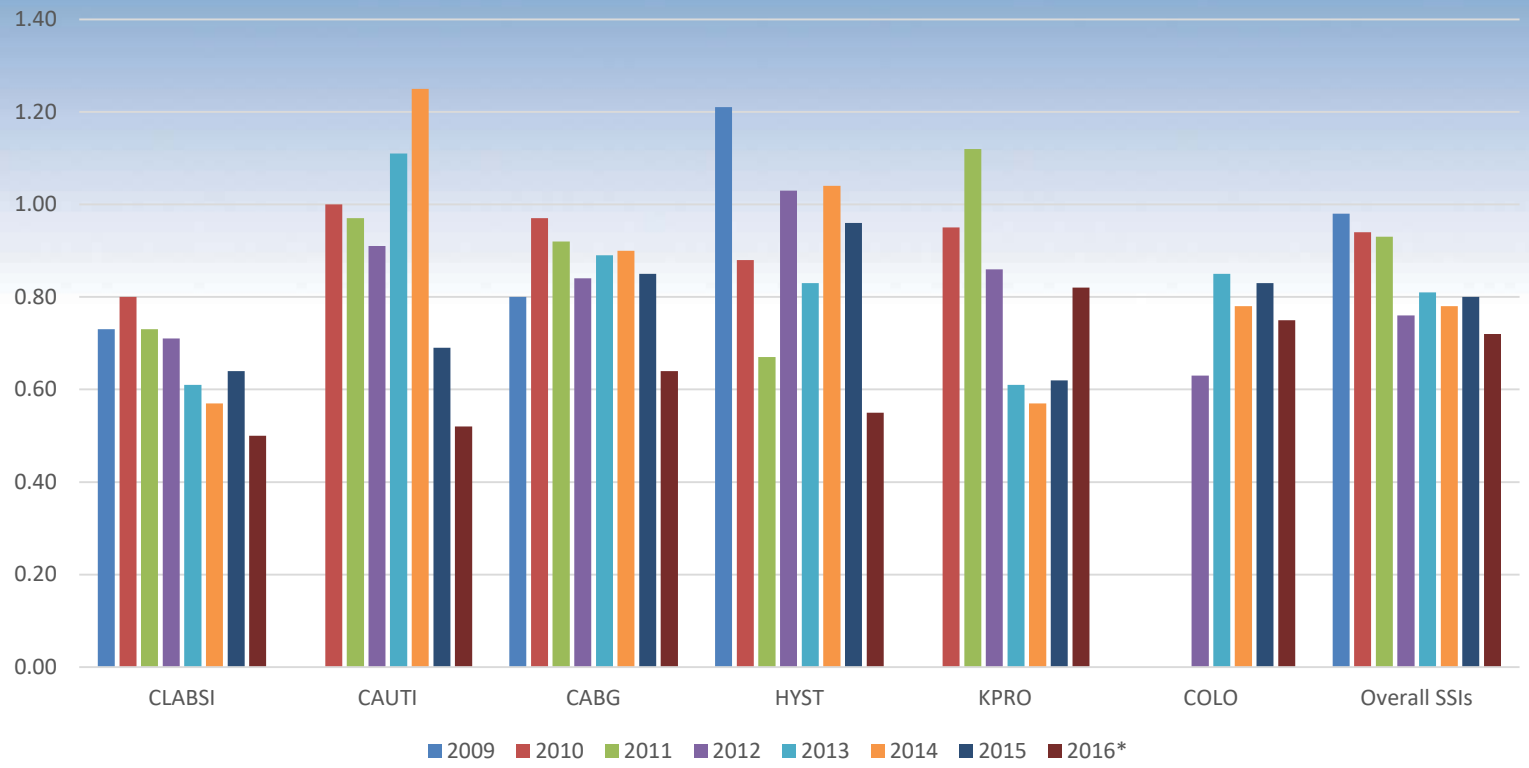
HAI SIRs 2009-2016



*2016 data not publicly reported

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Summary

- New Jersey is continuing to make progress
- CLABSI, CAUTI, Abdominal Hysterectomy and Knee Arthroplasty SSIs were lower than the National Baseline
- Most measures show improvement from the first year of public reporting
- Audits are needed to ensure appropriate data entry
- Continue prevention strategies and collaboratives to reduce and prevent HAIs

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Questions?

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