

**Long Term Acute Care –LTAC and Rehab)  
Central Line Associated Bloodstream Infection (CLABSI)  
Standardized Infection Ratio (SIR) Tables  
January 1, 2008 – November 30, 2008**

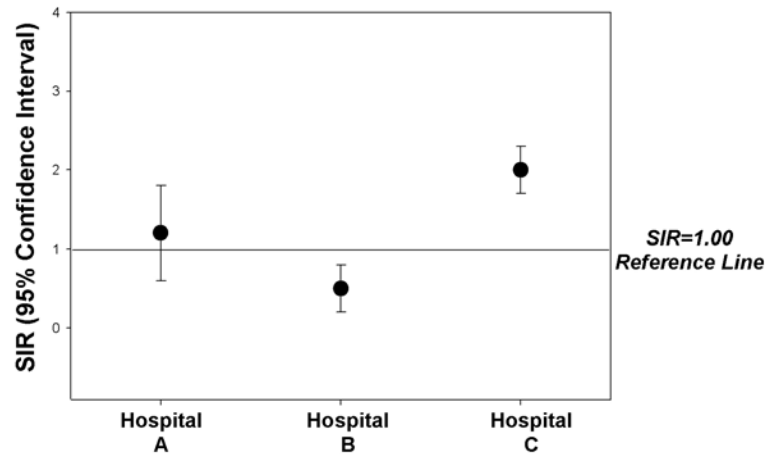
See [Definition of Terms](#) on the [Healthcare Acquired Infections Report](#) website for a more in-depth explanation of Standardized Infection Ratios.

**Standardized Infection Ratio:** The Standardized Infection Ratio (SIR) is a summary measure used to compare the central line associated bloodstream infection (CLABSI) experience among a group of reported locations to that of a standard population. It is the *observed* number of infections divided by the *expected* number of infections.

For HAI reports, the standard population comes from NHSN data reported from all hospitals using the system. “Expected”<sup>\*</sup> is based on historical data for those procedures at the national level.

**Confidence Intervals (CIs)**

Because we can never obtain a hospital’s true “population” data (e.g. all patients for all time), we use statistical procedures to “estimate” various measurements using “sample” data. Since estimates have “variability” we use 95% confidence limits (or intervals) to describe the variability around the estimate. These limits (or intervals) give us the range within which the TRUE value will fall 95% of the time, given that the sample data are reflective of the true population. Below is a graphical example of what CIs would look like if they were in graph form.



Graph Interpretation:

**Hospital A:** If the 95% confidence interval crosses over the reference line of 1.0, we conclude that the hospital's infection rate is similar (not significantly different) from "expected" (predicted).

**Hospital B:** If the 95% confidence interval falls completely below the reference line of 1.0, we conclude that the hospital's infection rate is significantly lower than "expected" (predicted).

**Hospital C:** If the 95% confidence interval falls completely above the reference line of 1.0, we conclude that the hospital's infection rate is significantly higher than "expected" (predicted).

All conclusions are based on the assumption that the hospital's patient population is similar to the NHSN pooled patient population.

**\*Please note that the "expected" number of infections does not mean that you expect to get an infection when you go into the hospital for surgery. The goal is for the hospital is to prevent all HAIs.**

**Table 5**  
**Central Line Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR)**  
**Reportable Period: January 1, 2008 – November 30, 2008**  
**Location: Adult Surgical Inpatient Ward**

## Statewide

Hospital	Observed (O) No. of CLABSI	No. of Central Line Days <sup>a</sup>	Statistically “Expected” (E) No. of CLABSI <sup>b</sup>	Hospital SIR = O/E	95% Confidence Interval (CI)		Statistical Interpretation <sup>c</sup>
					Lower	Upper	
<b>Carolina Pines Regional Medical Center</b>	2	431	0.69	2.90	0.35	- 10.48	Not Different
<b>Kershaw County Medical Center</b>	1	703	1.12	0.89	0.02	- 4.95	Not Different
<b>Patewood Memorial Hospital</b>	0	29	0.05	0.00	0.00	- 79.50	Not Different

- a. Please note that the “expected” number of infections does not mean that you expect to get an infection when you go into the hospital for surgery. The goal is for the hospital is to prevent all HAIs.
- b. SC Hospital SIR Statistical Interpretation Comparison to the standard population means that the SIR is compared to one (1) where the observed equals the expected (Observed = Expected)
- Not different = Statistically not different than the standard population
  - Lower = Statistically lower than the standard population
  - Higher = Statistically higher than the standard population

**Table 5**  
**Central Line Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR)**  
**Reportable Period: January 1, 2008 – November 30, 2008**  
**Location: Step Down Unit**

## Statewide

Hospital	Observed (O) No. of CLABSI	No. of Central Line Days <sup>a</sup>	Statistically “Expected” (E) No. of CLABSI <sup>b</sup>	Hospital SIR = O/E	95% Confidence Interval (CI)		Statistical Interpretation <sup>c</sup>
					Lower	Upper	
<b>Carolina Pines Regional Medical Center</b>	1	291	0.7	1.43	0.04	7.98	Not Different
<b>East Cooper Regional Medical Center</b>	0	570	1.4	0.00	0.00	2.70	Not Different
<b>Laurens County Healthcare System</b>	0	258	0.6	0.00	0.00	5.96	Not Different
<b>St. Francis - Eastside</b>	*	1	*	*	*	*	*
<b>Upstate Carolina Medical Center</b>	0	236	0.6	0.00	0.00	6.51	Not Different

- a. Too few central line days. Reporting on too few central line days is a risk to patient confidentiality. If there are twenty-five (25) or fewer central line days, the report for the number of infections will be deferred until there are more central line days.
- b. Please note that the “expected” number of infections does not mean that you expect to get an infection when you go into the hospital for surgery. The goal is for the hospital is to prevent all HAIs.
- c. SC Hospital SIR Statistical Interpretation Comparison to the standard population means that the SIR is compared to one (1) where the observed equals the expected (Observed = Expected)
  - Not different = Statistically not different than the standard population
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  - Higher = Statistically higher than the standard population

**Table 5**  
**Central Line Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR)**  
**Reportable Period: January 1, 2008 – November 30, 2008**  
**Location: Medical/Surgical Inpatient Ward**

## Statewide

Hospital	Observed (O) No. of CLABSI	No. of Central Line Days <sup>a</sup>	Statistically “Expected” (E) No. of CLABSI <sup>b</sup>	Hospital SIR = O/E	95% Confidence Interval (CI)		Statistical Interpretation <sup>c</sup>
					Lower	Upper	
Abbeville Area Medical Center	0	52	0.1	0.00	0.00	54.57	Not Different
Allendale County Hospital	1	296	0.4	2.60	0.06	14.48	Not Different
Cannon Memorial Hospital	1	158	0.2	4.87	0.12	27.13	Not Different
Chesterfield General Hospital	0	129	0.2	0.00	0.00	22.00	Not Different
Coastal Carolina Medical Center	0	78	0.1	0.00	0.00	36.38	Not Different
Colleton Medical Center	1	1307	1.7	0.59	0.01	3.28	Not Different
East Cooper Regional Medical Center	1	917	1.2	0.84	0.02	4.67	Not Different
Edgefield County Hospital	*	0	*	*	*	*	*
Fairfield Memorial Hospital	*	0	*	*	*	*	*
Georgetown Memorial Hospital	5	774	1.0	4.97	1.61	11.60	Higher
Greer Memorial Hospital	1	426	0.6	1.81	0.05	10.06	Not Different
Hampton Regional Medical Center	0	215	0.3	0.00	0.00	13.20	Not Different
Hillcrest Memorial Hospital	0	631	0.8	0.00	0.00	4.50	Not Different
Hilton Head Regional Medical Center	1	1137	1.5	0.68	0.02	3.77	Not Different
Laurens County Healthcare System	2	469	0.6	3.28	0.40	11.85	Not Different
Loris Community Hospital	0	373	0.5	0.00	0.00	7.61	Not Different
Marion County Medical Center	0	544	0.7	0.00	0.00	5.22	Not Different
Marlboro Park Hospital	0	124	0.2	0.00	0.00	22.88	Not Different

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**Reportable Period: January 1, 2008 – November 30, 2008**  
**Location: Medical/Surgical Inpatient Ward**

## Statewide

Hospital	Observed (O) No. of CLABSI	No. of Central Line Days <sup>a</sup>	Statistically “Expected” (E) No. of CLABSI <sup>b</sup>	Hospital SIR = O/E	95% Confidence Interval (CI)		Statistical Interpretation <sup>c</sup>
					Lower	Upper	
McLeod Medical Center - Darlington	0	471	0.6	0.00	0.00	6.02	Not Different
McLeod Medical Center - Dillon	0	193	0.3	0.00	0.00	14.70	Not Different
Newberry County Memorial Hospital	0	248	0.3	0.00	0.00	11.44	Not Different
Palmetto Baptist Medical Center - Easley	2	625	0.8	2.46	0.30	8.89	Not Different
Providence Hospital Northeast	0	654	0.9	0.00	0.00	4.34	Not Different
Summerville Medical Center	0	1438	1.9	0.00	0.00	1.97	Not Different
Upstate Carolina Medical Center	1	314	0.4	2.45	0.06	13.65	Not Different
Waccamaw Community Hospital	3	1060	1.4	2.18	0.45	6.36	Not Different
Wallace Thomson Hospital	0	259	0.3	0.00	0.00	10.96	Not Different
Williamsburg Regional Hospital	*	15	*	*	*	*	*

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