

**Table 1: Coronary Artery Bypass Graft (Chest and donor site incisions)
Surgical Site Infection (SSI)
Standardized Infection Ratio (SIR) Tables
July 1, 2007 – November 30, 2008**

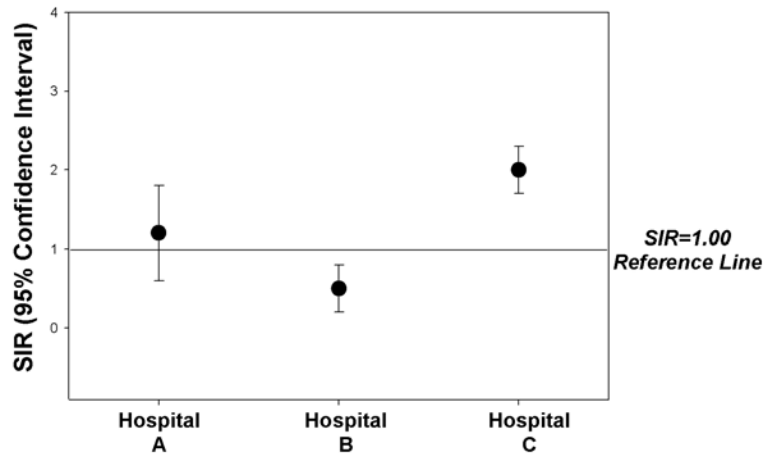
See [Definition of Terms](#) on the [Healthcare Acquired Infections Report](#) website for a more in-depth explanation of Standardized Infection Ratios.

Standardized Infection Ratio: The Standardized Infection Ratio (SIR) is a summary measure used to compare the surgical site infection (SSI) experience among a group of reported procedures 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”^{*} 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. The confidence interval (CI) gives us the range within which the TRUE value will fall 95% of the time, assuming 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 $SIR = 1.0$, 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 $SIR = 1.0$, 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 $SIR = 1.0$, 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 care. The goal is for the hospital is to prevent all HAIs.**

Table 1
Surgical Site Infection (SSI) Standardized Infection Ratio (SIR)
Reportable Period: July 1, 2007 – November 30, 2008
Procedure: Coronary Artery Bypass Graft (Chest and Donor Incision)

Statewide

Hospital	Observed (O) No. of SSI	No. of Procedures	Statistically “Expected” (E) No. of SSI ^a	Hospital SIR = O/E	95% Confidence Interval (CI)		Statistical Interpretation ^b
					Lower	Upper	
Aiken Regional Medical Center	6	90	3.6	1.68	0.62	3.65	Not Different
AnMed Health Medical Center	4	267	8.6	0.47	0.13	1.19	Not Different
Carolinas Hospital System	9	221	7.0	1.29	0.59	2.45	Not Different
Grand Strand Regional Medical Center	8	553	18.7	0.43	0.18	0.84	Lower
Greenville Memorial Hospital	17	725	27.4	0.62	0.36	0.99	Lower
Hilton Head Regional Medical Center	2	61	2.3	0.86	0.10	3.12	Not Different
McLeod Medical Center – Pee Dee	3	270	9.1	0.33	0.07	0.96	Lower
MUSC Medical Center	12	312	10.8	1.11	0.57	1.94	Not Different
Palmetto Health Richland	4	426	15.6	0.26	0.07	0.66	Lower
Piedmont Medical Center	1	178	6.5	0.15	0.00	0.86	Lower
Providence Hospital	6	948	28.5	0.21	0.08	0.46	Lower
Roper Hospital Inc.	13	452	16.5	0.79	0.42	1.35	Not Different
Self Regional Healthcare	2	149	4.8	0.42	0.05	1.51	Not Different
Spartanburg Regional Medical Center	6	425	14.5	0.42	0.15	0.90	Lower
St. Francis Downtown	3	361	11.4	0.26	0.05	0.77	Lower
Trident Medical Center	2	231	9.1	0.22	0.03	0.79	Lower

- 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