2012 National and State HAI Progress Report Full series of tables for all national and state-specific data

5b. SIRs for abdominal hysterectomy surgery

Changes in national SIRs between 2011 and 2012 for CLABSI, CAUTI, and SSI

Changes in state-specific SIRs between 2011 and 2012 for CLABSI from all locations combined

Tables included in this report:

Table 6

Table 7

Table 1	Characteristics of facilities reporting to NHSN by state, 2011 vs. 2012 1a. Central line-associated bloodstream infections (CLABSI) 1b. Catheter-associated urinary tract infections (CAUTI) 1c. Surgical site infections (SSI)
Table 2	National standardized infection ratios (SIR) for CLABSI, CAUTI, SSI, hospital-onset MRSA bacteremia, and hospital-onset CD
Table 3	State-specific SIRs for CLABSI 3a. SIRs for all locations combined 3b. SIRs for intensive care units only 3c. SIRs for non-intensive care (ward) units only 3d. SIRs for neonatal intensive care units only
Table 4	State-specific SIRs for CAUTI 4a. SIRs for all locations combined 4b. SIRs for intensive care units only 4c. SIRs for non-intensive care (ward) units only
Table 5	State-specific SIRs for SSI 5a. SIRs for colon surgery

			Tab						by State ¹ , 2011						
				1a. Cent		ssociated	d bloodstre	eam inted	tions (CLABSI) ²	-	2012	<u> </u>			
						orting In	Stato			1		HSN Repo	rting In 9	Stato	
				l i	пои кер		ons (n) ²			}	I	пои керс	rung m v	State	
	Number of			Number of		Locatio	ons (n)				Number of				
	Facilities	Any State	Any	Facilities							Facilities				
State	in State ³	Mandate ⁴	Validation ⁵	Reporting	Total	ICU	Wards ²	NICU			Reporting	Total	ICU		
Alaska	26		No	9	30	9	19	2	No	No	11	31	11	18	2
Alabama	118	Yes	Yes	77	185	130	41	14	Yes	Yes	76	220	134	74	12
Arkansas	87	Yes	Yes	47	93	61	24	8	Yes	Yes	49	124	66	49	9
Arizona	97	No	No	58	143	93	40	10	No	No	58	181	97	71	13
California	417	Yes	Yes ^A	351	2,242	539	1,569	134	Yes	Yes	352	2,289	547	1,607	135
Colorado	94	Yes	Yes	51	119	68	33	18	Yes	Yes	51	145	67	60	18
Connecticut	41	Yes		30	67	54	2	11	Yes		30	63	48	2	13
D.C.	12	Yes		8	33	20	7	6	Yes	Yes	8	41	22	13	6
Delaware	13	Yes		8	20	13	5	2	Yes	Yes	8	22	13	7	2
Florida	237	No	No	186	611	384	184	43	No	No	187	634	393	191	50
Georgia	166		No	104	331	182	114	35	No		105	331	184	113	34
Hawaii	27	No	No	15	34	22	10	2	Yes	Yes	16	40	23	15	2
Iowa	122		No	40	75	48	16	11	No	Yes	48	83	49	23	11
Idaho	47	No	No	12	30	19	3	8	No	No	12	28	17	4	7
Illinois	207	Yes		150	393	226	128	39	Yes	Yes	146	527	227	255	45
Indiana	148		No	88	250	135	88	27	M	Yes	102	286	147	111	28
Kansas	149		Yes	43	90	64	16	10	No	Yes	46	93	63	20	10
Kentucky	116		No	71	169	126	30	13	No	No	71	194	123	58	13
Louisiana	172		No	73	186	111	48	27	No	Yes	76	218	116	77	25
Massachusetts	95		Yes	69	191	124	57	10	Yes		69	200	131	59	10
Maryland	59	Yes		47	168	88	63	17	Yes		47	183	79	87	17
Maine	41	No	No	22	59	30	26	3	No		22	59	30	26	3
Michigan	157	No	No	94	261	174	68	19	No	Yes	95	273	179	74	20
Minnesota	144	No	No	50	93	74	10	9	No	No	50	94	75	11	8
Missouri	135		No	76	171	125	27	19	Yes	No	75	177	119	36	22
Mississippi	111	No	No	43	135	67	54	14	No	No	46	159	69	76	14
Montana	64	No	No	12	32	13	14	5	No	, , l	12	36	14	17	5
North Carolina	133		NI-	93	358	173	161	24	Yes	Yes	96	370	174	172	24
North Dakota	48		No	6	21	11 26	4	6	No	No	6	21	11	4	6
Nebraska	95 29		No	19 24	71 35	26 27	38 5	3	No Yes	No	19 24	83 47	27 27	50 17	6 3
New Hampshire	94	Yes	Yes	72 72		27 141		~ I		Yes Yes	72			71	-
New Jersey New Mexico	48	Yes No	Yes	30	182 66	35	19 27	22 4	Yes M	Yes Yes	34	239 71	144 36	71 29	24 6
New Mexico Nevada	48			23	66 147	35 46	27 92	9	Yes	y es No	23	150	36 45	29 96	9
New York	251	Yes		23 177	714	367	92 294	53	Yes	INO	23 174	833	45 359	96 421	53
Ohio	203		N ₀	177	388	256	294 107	25	No	No	174	396	252	117	27
Oklahoma	144		No	134 54	130	∠56 79	43	∠5 8	Yes	INO	55	396 131	252 79	44	8
-	64		Yes		130 87	79 59	43 21	o 7	Yes		48	110	79 59	44	7
Oregon	I 04	l res	res	I ⁴⁴	01	อ	۷1	'1	168	I	40	110	39	44	4

Pennsylvania	221	Yes	Yes	178	1,345	301	998	46	Yes	Yes	176	1,384	302	1,035	47
Puerto Rico	59	No	No	19	102	37	60	5	No	No	18	94	36	53	5
Rhode Island	14	No	No	11	27	19	7	1	No	No	11	53	18	34	1
South Carolina	81	Yes		67	410	105	295	10	Yes		66	420	106	307	7
South Dakota	64	No	No	13	43	21	18	4	No		14	48	21	24	3
Tennessee	154	Yes	Yes	96	329	166	139	24	Yes	Yes	94	341	174	143	24
Texas	506	M	No	267	656	425	118	113	Yes		277	776	429	223	124
Utah	53	Yes	No	25	50	36	1	13	M		26	50	37	0	13
Virginia	109	Yes	Yes	81	225	141	59	25	Yes	Yes	81	257	145	87	25
Vermont	16	Yes	No	8	11	10	0	1	Yes	Yes	7	10	9	0	1
Washington	103	Yes		62	124	80	28	16	Yes		63	136	80	39	17
Wisconsin	144	No		77	245	96	131	18	No	No	78	262	101	141	20
West Virginia	58	Yes	No	39	115	59	52	4	Yes	No	40	114	59	51	4
Wyoming	31	No	No	19	26	12	13	1	No	No	20	28	13	15	0

	T			2011	ociated ur					2012			
				NHSN	Reporting	In State					Reporting	In State	
State				Number of Facilities Reporting	Total	ICU				Number of Facilities Reporting	Total	ICU	
Alaska	26	No	No	5	6	4	2	No	No	12	29	11	18
Alabama	118	Yes		95	243	42	201	Yes		90	362	135	227
Arkansas	87	No	No	33	64	39	25	М	Yes	51	115	68	47
Arizona	97	No	No	19	60	30	30	No	No	58	156	95	61
California	417	No	No	103	438	145	293	No	No	338	1,256	532	724
Colorado	94	No	No	37	84	45	39	No	No	50	130	66	64
Connecticut	41	No	No	7	14	13	1	М		30	49	49	0
D.C.	12	No	No	4	11	5	6	No	No	7	34	20	14
Delaware	13	No	No	7	19	11	8	М	Yes	8	30	12	18
Florida	237	No		97	332	169	163	No	No	187	579	389	190
Georgia	166	No	No	59	173	96	77	No	No	107	274	182	92
Hawaii	27	No	No	9	18	9	9	М	Yes	15	47	23	24
lowa	122	No		53	86	32	54	No	Yes	68	108	49	59
Idaho	47	No	No	8	15	10	5	No	No	15	25	17	8
Illinois	207	No	No	55	195	97	98	No	No	147	437	224	213
Indiana	148	No	No	63	191	93	98	М	Yes	104	307	149	158
Kansas	149	No	Yes	41	73	50	23	No	Yes	52	103	66	37
Kentucky	116	No	No	33	121	60	61	No	No	72	222	123	99
Louisiana	172	No	No	29	78	45	33	No	Yes	78	194	113	81
Massachusetts	95	No	No	14	35	19	16	No	No	68	181	131	50
Maryland	59	No	No	28	116	56	60	No	No	38	135	59	76
Maine	41	No	No	6	39	12	27	No	No	22	52	30	22
Michigan	157	No	No	34	104	56	48	No	Yes	97	269	178	91
Minnesota	144	No	No	6	9	8	1	No	No	51	82	74	8
Missouri	135	No	No	18	32	22	10	No	No	75	163	120	43
Mississippi	111	No	No	24	96	46	50	No	No	46	146	69	77
Montana	64	No	No	12	40	12	28	No		14	47	14	33
North Carolina	133	No		42	184	67	117	Yes	Yes	100	327	175	152
North Dakota	48	No	No	3	12	5	7	No	No	6	15	11	4
Nebraska	95	No	No	17	61	20	41	No	No	20	86	26	60
New Hampshire	29	No	No	5	12	6	6	Yes	Yes	23	49	26	23
New Jersey	94	Yes	Yes	72	159	133	26	Yes	Yes	72	236	144	92
New Mexico	48	No	No	13	14	10	4	No	No	34	54	36	18
Nevada	46	No	No	17	95	38	57	No	No	24	131	45	86
New York	251	No	No		350	169	181	No	No	175	756	357	399

Ohio	203	No	No	40	177	70	107	No	No	136	383	250	133
Oklahoma	144	No	No	34	73	38	35	No	No	61	121	79	42
Oregon	64	No	No	22	62	33	29	No	No	47	104	58	46
Pennsylvania	221	Yes	Yes	190	1,400	302	1,098	Yes	Yes	190	1,440	303	1137
Puerto Rico	59	No	No	18	97	36	61	No	No	18	92	35	57
Rhode Island	14	No	No	8	21	16	5	No	No	10	55	18	37
South Carolina	81	No	No	25	97	36	61	No	No	64	241	102	139
South Dakota	64	No	No	10	26	9	17	No	No	18	50	21	29
Tennessee	154	No	No	27	98	42	56	Yes	Yes	95	266	174	92
Texas	506	No	No	122	278	172	106	No	No	285	669	427	242
Utah	53	No	No	5	9	6	3	M	Yes	26	41	37	4
Virginia	109	No	No	37	135	76	59	No	No	81	238	145	93
Vermont	16	No	No	1	3	3	0	No	No	5	7	7	0
Washington	103	No	No	38	82	50	32	No	No	61	128	78	50
Wisconsin	144	No	Yes	45	174	46	128	No	No	85	250	95	155
West Virginia	58	No	No	30	96	34	62	М	No	43	118	60	58
Wyoming	31	No	No	24	31	13	18	No	No	24	32	13	19

		Table 1	. Characteristi	cs of facilities re 1c. Surgica	eporting to NHSN I site infections	_	11 and 2012:		
				2011	TORO INTOCRIONO			2012	
				NHSN Repor	ting in State			NHSN Repo	rting in State
State		Any State Mandate ⁴	Any Validation⁵	Number of Facilities Reporting	No. of Procedures Reported ⁷			Number of Facilities Reporting	
Alaska	26	No	No	3	82	No	No	9	1,910
Alabama	118	Yes	Yes	74	15,324	Yes	Yes	76	15,865
Arkansas	87	No	No	11	1,506	M	Yes	44	7,035
Arizona	97	No	No	13	4,691	No	No	58	19,821
California	417	M		332	137,480	Yes	Yes ^A	332	198,383
Colorado	94	Yes	No	61 4	29,782	Yes	Yes	62	33,993
Connecticut	41	No	No		1,969	M	No	30	9,595
D.C.	12	No	No	3	814	No	No	7 7	2,812
Delaware Florida	13	Yes	No	6 64	3,234	Yes	Yes		4,465
	237 166	No No	No	34	12,688	No No	No	180 103	50,067
Georgia	27	No No	No	2	10,341 12	No M	No Yes	103	28,763
Hawaii Iowa	122	No	No No	7	2,015	No	No	34	1,997 6,664
ldaho	47	No	NO	11	1,221	No No	INO	16	3,300
Illinois	207	Yes		139	39,433	Yes	Yes	154	61,479
Indiana	148	No	No	22	4,808	M	Yes	111	21,764
Kansas	149	No	Yes	13	3,701	No	Yes	50	11,109
Kentucky	116	No	No	7	1,676	No No	No	66	11,682
Louisiana	172	No	No	15	1,878	No No	Yes	83	11,886
Massachusetts	95	Yes	Yes	67	36,002	Yes	Yes	67	44,677
Maryland	59 59	Yes	Yes	45	24,160	Yes	Yes	44	25,563
Maine	41	No	No	2	847	No	No	24	5,249
Michigan	157	No	No	28	15,945	No No	Yes	93	35,993
Minnesota	144	No	No	5	3,629	No	No	50	13,178
Missouri	135	No	No	15	2,486	Yes	No	73	26,317
Mississippi	111	No	No	15	5,051	No	No	44	10,278
Montana	64	No	No	8	3,061	No	No	14	5,922
North Carolina	133	No	No	32	7,405	Yes	Yes	93	26,934
North Dakota	48	No	No	0	0	No	No	6	1,426
Nebraska	95	No	No	10	1,379	No	No	21	4,916
New Hampshire	29	Yes	Yes	26	6,990	Yes	Yes	26	8,215
New Jersey	94	Yes	Yes	71	28,985	Yes	Yes	72	38,455
New Mexico	48	No	No	5	103	No	No	27	3,134
Nevada	46	Yes	No	11	4,631	М	No	22	10,938
New York	251	Yes		178	64,063	Yes		178	85,396
Ohio	203	No	No	13	5,314	No	No	133	32,754
Oklahoma	144	No	No	24	4,773	Yes	No	67	11,043
Oregon	64	Yes	No	53	27,711	Yes	Yes	52	27,841
Pennsylvania	221	Yes	No	171	99,949	Yes	Yes	171	114,629
Puerto Rico	59	No	No	0	0	No	No	0	,
Rhode Island	14	No	No	0	0	No	No	11	2,418
South Carolina	81	Yes		59	26,956	Yes		61	31,380
South Dakota	64	No	No	7	130	No	No	16	1,760
Tennessee	154	Yes	No	81	24,784		No		29,206
Texas	506	М	No	254	27,207	Yes		332	136,410
Utah	53	No	No	4	33	1	Yes	31	4,647
Virginia	109	No	No	23	3,493		No		17,609
Vermont	16	No	Yes	13	2,926			12	3,342
Washington	103	No	No	44	30,435		No		44,958
Wisconsin	144	No	Yes	45	20,618		No		32,772
West Virginia	58	No	No	10	1,789	1	No		6,173
Wyoming	31	No	No	3	182	1	No		683

Footnotes for Tables 1a-1c:

- 1. United States, Washington, D.C., and Puerto Rico
- 2. Data included in this report are from 2011 and 2012 from acute care facility ICUs (critical care units), NICUs (see footnote 6), and wards (for this report wards also include step-down and specialty care areas [hematology/oncology, bone marrow transplant]). Long term acute care facilities and locations, inpatient rehabilitation facilities and locations, dialysis facilities and locations, and long term care facilities (skilled nursing facilities) are not included in this report.
- 3. The number of acute care facilities in a state was obtained using a list of facilities with Centers for Medicare and Medicaid Services Certification Numbers (CCNs) which was last updated on June 1, 2012. Acute care facilities for which data is included in this report (children's, critical access, psychiatric, and acute short stay hospitals) were identified in the file and counted. Facilities sharing the same CCN in the NHSN database were identified and added to the count from the CCN file. Military and VA hospitals were identified using the 2009 American Hospital Association survey of healthcare facilities and added to the count from the CCN file. Long term acute care facilities, inpatient rehabilitation facilities, and long term care facilities (skilled nursing facilities) were excluded from the count. Because of this methodology, this count may differ slightly from counts provided by state regulatory authorities.
- 4. Yes indicates that a legislative or regulatory requirement ("state mandate") for acute care hospitals to report data to the state health department via NHSN for at least one location or surgical procedure at the beginning of the reporting period. No indicates that a state mandate did not exist at the beginning of a reporting period. If no state mandate existed at the beginning of the reporting period, but was implemented during the reporting period, the value of this column is "M" for midyear implementation. The number of facilities reporting data to NHSN may be lower than the number of facilities in the state identified in footnote 3, as some hospitals in a state may not be included in the state mandate (e.g., facilities do not have units or perform procedures covered by the mandate, or the mandate covers only facilities above a certain bed size).
- 5. Yes indicates that the state health department reported the completion of either or both of the following validation studies of NHSN data reported during the reporting period: data quality assessment of missing or implausible values along with state health department followup with identified facilities, and detection of outlier facilities along with state health department followup with identified facilities. Yes^A indicates that the state completed one or both of these activities and also conducted an audit of medical records (although intensity of auditing activities varies by state). Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the particular HAI type. Some states without mandatory reporting of a given HAI to the state health department have performed validation on NHSN data that is voluntarily shared with them by facilities in their jurisdiction.
- 6. NICU locations included are those classified by NHSN CDC location codes as Level II/III and Level III neonatal critical care areas. A Level II/III neonatal critical care area is defined by NHSN as a combined nursery housing both Level II and III newborns and infants. A Level III neonatal critical care area is defined by NHSN as a hospital NICU organized with personnel and equipment to provide continuous life support and comprehensive care for extremely high-risk newborn infants and those with complex and critical illness.
- 7. SSIs included are those following select surgical procedures approximating procedures covered by SCIP, using NHSN-defined SSIs that were classified as deep incisional or organ/space, and were detected during admission or upon readmission. The SCIP procedures and their affiliated NHSN procedure categories are listed in Appendix A.

Table 2. National standardized infection ratios (SIRs) and facility-specific summary SIRs using HAI data reported from all NHSN facilities reporting during 2012 by HAI and patient population: central line-associated bloodstream infections (CLABSIs), catheter-associated urinary tract infections (CAUTIs), Methicillin-resistant Staphylococcus aureus (MRSA) bacteremia, Clostridium difficile infections, and surgical site infections (SSIs) following Surgical Care Improvement Project (SCIP) procedures

HAI and Patient Population or	No. of Facilities		No. of In			95% CI f		<u>Facil</u>	lity-specific	SIRs at Key	y Percentile	<u>s¹</u>		Facility-spec			
or Surgical Procedure	Reporting	Ор	served	Predicted	SIR	Lower	Upper			Median			No. Facilities with ≥1	No. Facilities w		No. Faciliti	
								10%	25%	(50%)	75%	90%	Predicted Infection	Significantly > Nat		Significantly	National SIR
CLABSI. all ⁴	3,516		17.710	31.449.156	0.563	0.555	0.571	0.000	0.188	0.469	0.821	1.220	2,349	N 250	%³ 11%	N 156	7%
ICUs ⁵	3,350		9.924	18.292.134	0.543	0.533	0.571	0.000	0.166	0.469	0.835	1.351	2,349	207	10%	82	4%
Wards ⁶	1.414		5.923	9.836.770	0.602	0.532	0.553	0.000	0.146	0.452	0.801	1.200	2,100	93	11%	62	4% 7%
NICUs ⁷	955		1.863	3,320.252	0.561	0.536	0.516	0.000	0.150	0.463	0.882	1.505	588	48	8%	14	2%
NICOS	933		1,003	3,320.232	0.501	0.550	0.567	0.000	0.131	0.479	0.002	1.505	300	40	0 70	14	2 /0
CAUTIs, ali ⁸	3,597		32,504	31,720.411	1.025	1.014	1.036	0.000	0.292	0.741	1.332	2.043	2,793	353	13%	358	13%
	3,319		24,577	22,536.843	1.091	1.077	1.104	0.000	0.320	0.801	1.450	2.200	2,497	301	12%	268	11%
	1,484		7,927	9,183.568	0.863	0.844	0.882	0.000	0.227	0.636	1.168	1.863	1,069	115	11%	103	10%
Hospital-onset MRSA bacteremia, facility-wide	1,175		2,618	2,719.301	0.963	0.926	1.000	0.000	0.393	0.825	1.378	1.994	572	45	8%	19	4%
Hospital-onset C. difficile infections, facility-wide	1,681		40,491	41,139.860	0.984	0.975	0.994	0.120	0.494	0.833	1.220	1.596	1,486	192	13%	270	18%
		No. of															
001bind 001Dd		ocedures	13.770	47 400 040	0.000	0.789	0.040	0.000	0.307	0.700	1.155	4 004	0.540	252	10%	200	00/
SSI, combined SCIP procedures ⁹ SSI, Hip arthroplasty	3,554 1.653	1,346,806 232,613	1.728	17,162.818 2,062.153	0.802 0.838	0.789	0.816 0.878	0.000	0.000	0.703 0.683	1.155	1.681 1.977	2,519 630	252 43	7%	206 21	8% 3%
SSI, Knee arthroplasty	1,663	341.048	1,720	2,062.153	0.636	0.799	0.813	0.000	0.000	0.594	1.176	1.824	686	43	7 % 6%	19	3%
SSI, Coronary artery bypass graft ¹⁰	718	106,494	917	1,291.982	0.714	0.737	0.613	0.000	0.000	0.540	0.974	1.719	451	30	7%	19	1%
SSI, Cardiac surgery	334	37,002	191	281.468	0.679	0.586	0.782	0.000	0.000	0.573	1.139	1.760	83	2	2%	0	0%
SSI, Peripheral vascular bypass surgery	135	4.399	94	126.976	0.740	0.598	0.702	0.000	0.000	0.573	1.117	1.697	47	1	2%	0	0%
SSI, Abdominal aortic aneurysm repair	202	1.787	11	34.768	0.316	0.177	0.524	0.000	0.000	0.07			4	·		ŭ	• • •
SSI. Colon surgery	3,318	288,362	6.845	8,598.058	0.796	0.777	0.815	0.000	0.205	0.661	1.200	1.807	2,003	169	8%	106	5%
SSI, Rectal surgery	299	5,927	121	159.308	0.760	0.630	0.908	0.000	0.000	0.468	0.958	1.926	34	3	9%	3	9%
SSI, Abdominal hysterectomy	3,172	299,412	2,086	2,335.919	0.893	0.855	0.932	0.000	0.000	0.713	1.362	2.045	748	53	7%	5	1%
SSI, Vaginal hysterectomy	663	29,762	135	151.179	0.893	0.749	1.057	0.000	0.000	0.747	1.215	2.033	27	1	0%	0	0%

^{1.} Facility-specific key percentiles were only calculated if at least 20 facilities had ≥1.0 predicted HAI in 2012. If a facility's predicted number of HAIs was <1.0 ,a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

^{2.} Facility-specific SIR data is only displayed for a location group or procedure category if at least 10 facilities had ≥1.0 predicted HAI in 2012.

^{3.} Percent of facilities with at least one predicted infection who had an SIR significantly greater than or less than the national SIR for the given location group or procedure category

^{4.} Data from all ICUs, wards (and other non-critical care locations), and NICUs. This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

^{5.} Data from all ICUs: excludes wards (and other non-critical care locations). NICUs. LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).

^{6.} Data from all wards (for this table wards also include stepdown and specialty care areas [including hematology/oncology, bone marrow transplant]). This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

^{7.} Data from all NICU locations, including Level II/III and Level III nurseries. For purposes of this report, both umbilical-line and central-line associated bloodstream infections are considered CLABSIs.

^{8.} Data from all ICUs and wards (and other non-critical care locations). This excludes NICUs, LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

^{9.} SSIs included are deep incisional or organ/space infections following select surgical procedures that were detected during the same admission as the procedure or upon readmission to the same facility. Eligible procedures and their NHSN/SCIP categories are listed in Appendix A.

^{10.} Coronary artery bypass graft includes procedures with either chest only or chest and donor site incisions

Table 3. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures, NHSN facilities reporting during 2012

3a. Central line-associated bloodstream Infections (CLABSI), all locations¹

				No. of Ir	fections		95% CI f	or SIR	Fa	cility-specific SI	Rs	Facility	y-specific	SIRs at K	ey Percer	ntiles⁵
State	State NHSN Mandate ²	Any Validation ³	Number of Facilities	Observed	Predicted	SIR	Lower	Unnor	No. of facs with at least 1 predicted CLABSI	% of facs with SIR sig higher than national SIR ⁴	% of facs with SIR sig lower than national SIR⁴	10%	25%	Median (50%)	75%	90%
State Alaska		No	Reporting	Observed 39		1.109	0.789	Upper 1.517	CLABSI 4	national SIR	national SIR	10%	25%	(50%)	15%	90%
	No		11 76		35.157			0.732		11%	11%	0.000	0.134	0.200	0.697	1.044
Alabama	Yes	Yes			524.852	0.659	0.592		36			0.000		0.399		1.044
Arkansas	Yes	Yes	49	185	332.298	0.557	0.479	0.643	24	4%	0%	0.000	0.210	0.544	0.868	1.175
Arizona	No	No	58	351	548.110	0.640	0.575	0.711	45	11%	4%	0.000	0.113	0.359	0.685	0.953
California	Yes	Yes	352	2,596	4,872.095	0.533	0.513	0.554	289	12%	10%	0.000	0.219	0.467	0.772	1.125
Colorado	Yes	Yes	51	186	395.177	0.471	0.405	0.543	32	6%	9%	0.000	0.000	0.285	0.733	1.061
Connecticut	Yes		30	178	252.845	0.704	0.604	0.815	24	8%	13%	0.048	0.244	0.586	0.924	1.176
D.C.	Yes	Yes	8	128	164.534	0.778	0.649	0.925	8							
Delaware	Yes	Yes	8	38	89.582	0.424	0.300	0.582	8							
Florida	No	No	187	1,108	2,000.491	0.554	0.522	0.587	167	13%	8%	0.000	0.196	0.501	0.885	1.327
Georgia	No		105	615	923.138	0.666	0.615	0.721	66	18%	8%	0.000	0.287	0.563	0.941	1.495
Hawaii	Yes	Yes	15	22	112.560	0.195	0.122	0.296	13	8%	31%					
lowa	No	Yes	48	68	148.005	0.459	0.357	0.582	16	0%	0%					
Idaho	No	No	12	18	55.927	0.322	0.191	0.509	8							
Illinois	Yes	Yes	146	695	1,225.901	0.567	0.526	0.611	106	10%	8%	0.000	0.228	0.529	0.849	1.579
Indiana	M	Yes	102	479	723.178	0.662	0.604	0.724	57	11%	4%	0.000	0.000	0.301	0.868	1.230
Kansas	No	Yes	46	111	219.378	0.506	0.416	0.609	19	11%	5%					
Kentucky	No	No	71	322	360.696	0.893	0.798	0.996	37	16%	3%	0.000	0.141	0.532	1.014	1.350
Louisiana	No	Yes	75	339	483.211	0.702	0.629	0.780	50	16%	0%	0.000	0.458	0.703	1.035	1.368
Massachusetts	Yes		67	312	586.164	0.532	0.475	0.595	45	7%	9%	0.000	0.000	0.290	0.570	0.828
Maryland	Yes		47	248	447.332	0.554	0.488	0.628	39	10%	5%	0.000	0.225	0.464	0.726	1.325
Maine	No		22	91	98.273	0.926	0.746	1.137	7							
Michigan	No	Yes	95	388	908.803	0.427	0.386	0.472	60	2%	13%	0.000	0.145	0.506	0.664	0.898
Minnesota	No	No	49	122	252.942	0.482	0.401	0.576	21	0%	0%	0.000	0.000	0.312	0.547	0.858
Missouri	Yes	No	74	259	564.403	0.459	0.405	0.518	47	6%	4%	0.000	0.000	0.400	0.711	1.002
Mississippi	No	No	46	278	296.428	0.938	0.831	1.055	26	27%	0%	0.000	0.411	0.761	1.268	1.748
Montana	No	110	12	32	65.628	0.488	0.333	0.688	8	21 70	0 70	0.000	0.111	0.701	1.200	1.7 10
North Carolina	Yes	Yes	96		908.913	0.512	0.466	0.560	57	7%	5%	0.000	0.000	0.415	0.640	0.929
North Dakota	No	No	6	24	65.143	0.368	0.236	0.548	6		0.0	0.000	0.000	00	0.0.0	0.020
Nebraska	No	No	19	168	223.925	0.750	0.641	0.873	16	13%	6%					
New Hampshire	Yes	Yes	24	23	53.034	0.434	0.275	0.651	8	1070	070					
New Jersey	Yes	Yes	72	436	613.567	0.711	0.645	0.781	69	16%	0%	0.118	0.380	0.630	0.974	1.427
New Mexico	M	Yes	34	89	145.124	0.613	0.492	0.755	14	14%	0%	0.110	0.300	0.030	0.974	1.427
	Yes	No	23	303	505.069		0.492	0.733		21%						
Nevada New York	Yes	INO	23 174	1,234	1,932.469	0.600 0.639	0.534	0.671	19 133	17%	16% 4%	0.000	0.316	0.566	0.964	1.396
	1	Na		,	,											
Ohio	No	No	135	520	1,183.604	0.439	0.402	0.479	91	4%	9%	0.000	0.116	0.345	0.600	0.920
Oklahoma	Yes		55	179	370.612	0.483	0.415	0.559	27	7%	7%	0.000	0.000	0.261	0.580	1.215
Oregon	Yes		47	79	202.437	0.390	0.309	0.486	21	0%	0%	0.000	0.000	0.368	0.483	0.770
Pennsylvania	Yes	Yes	175		2,523.117	0.490	0.463	0.518	125	7%	14%	0.000	0.241	0.428	0.615	1.014
Puerto Rico	No	No	18	152	146.835	1.035	0.877	1.213	16	50%	6%					
Rhode Island	No	No	11	57	89.197	0.639	0.484	0.828	8							
South Carolina	Yes		65	470	755.406	0.622	0.567	0.681	42	12%	7%	0.000	0.296	0.503	0.884	1.077
South Dakota	No		14	21	76.298	0.275	0.170	0.421	7							
Tennessee	Yes	Yes	94	512	900.394	0.569	0.520	0.620	55	11%	4%	0.000	0.178	0.478	0.745	1.109
Texas	Yes		277	1,197	2,156.639	0.555	0.524	0.587	193	9%	3%	0.000	0.154	0.440	0.821	1.115
Utah	M		26	99	153.296	0.646	0.525	0.786	15	13%	0%					
Virginia	Yes	Yes	81	375	651.140	0.576	0.519	0.637	48	8%	8%	0.000	0.099	0.426	0.823	0.941
Vermont	Yes	Yes	7	6	24.057	0.249	0.092	0.543	2							
Washington	Yes		63	200	350.918	0.570	0.494	0.655	40	3%	3%	0.000	0.340	0.527	0.968	1.229

Wisconsin	No	No	78	214	478.212	0.448	0.390	0.512	50	0%	2%	0.000	0.038	0.401	0.675	1.124
West Virginia	Yes	No	40	94	240.347	0.391	0.316	0.479	22	14%	9%	0.000	0.000	0.374	1.097	1.689
Wyoming	No	No	20	2	12.297	0.163	0.020	0.588	3							
All US			3,516	17,710	31,449.156	0.563	0.555	0.571	2,349	11%	7%	0.000	0.188	0.469	0.821	1.220

- 1. Data from all ICUs, wards (and other non-critical care locations), and NICUs. This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).
- 2. Yes indicates the presence of a state mandate to report CLABSI data from any location to NHSN at the beginning of 2012. M indicates midyear implementation of a mandate.
- 3. Yes indicates that the state health department reported the completion of either or both of the following validation studies of NHSN CLABSI data reported from any location during the reporting period: data quality assessment of missing or implausible values along with state health department followup with identified facilities, and detection of outlier facilities along with state health department followup with identified facilities. Yes^A indicates that the state completed one or both of these activities and also conducted an audit of medical records. Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the particular HAI type and location.
- 4. Percent of facilities with at least one predicted CLABSI that had an SIR significantly greater or less than the 2012 national overall CLABSI SIR of 0.563. This is only calculated if at least 10 facilities had at least one predicted CLABSI in 2012.
- 5. Facility-specific key percentiles were only calculated if at least 20 facilities had ≥1.0 predicted CLABSI in 2012. If a facility's predicted number of CLABSI was <1.0, a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

Table 3. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures, NHSN facilities reporting during 2012

3b. Central line-associated bloodstream infections (CLABSI), critical care locations¹

State	CLABSI), critical care locations		LIALEU DIOC				
Alashan No No 10 21 14:168 14:42 0.917 2.266 3 3 8 0.000 0.000 0.00 </th <th></th> <th></th> <th>O.D.</th> <th></th> <th></th> <th></th> <th></th>			O.D.				
Alabama							
Arkansas Yes Yes 43 116 210.189 0.552 0.456 0.682 24 4% 0% 0.000 0.0							
Artzona No No S6 220 379.312 0.580 0.580 0.68c 45 9% 4% 0.000 0.020 0.30 0.000							
California Yes Yes 318 1,036 1,882,470 0.550 0.517 0.581 256 9% 1% 0.000 0.119 0.4							
Colorado							
Connecticut				,			
D.C.						Yes	
Delaware Yes Yes 8 26 64.438 0.403 0.264 0.591 8						V	
Florida	l -						
Georgia No					-		
Hawaii Yes Yes 15						NO	
No						V	•
Idaho							
Illinois Yes Yes 141 370 646,197 0.573 0.516 0.634 100 11% 2% 0.000 0.175 0.48							
Indiana M Yes 91 228 399.082 0.571 0.500 0.650 51 10% 4% 0.000 0.000 0.24 Kansas No Yes 42 58 140.952 0.411 0.312 0.532 17 12% 0% Kentucky No No 71 214 267.695 0.799 0.696 0.934 36 11% 3% 0.000 0.123 0.5 Louisiana No Yes 73 221 313.175 0.706 0.616 0.805 44 14% 2% 0.000 0.388 0.6 Massachusetts Yes 66 170 395.211 0.430 0.368 0.500 45 44% 44% 0.000 0.000 0.24 Maryland Yes 46 172 298.524 0.576 0.493 0.669 37 11% 0% 0.000 0.170 0.3 Maine No Yes 94 222 36 44.291 0.813 0.569 1.125 6 Minnesota No No 49 111 226.793 0.489 0.403 0.589 21 0% 0.9 0.9 0.000 0.300 0.3 Missouri Yes No 73 189 419.841 0.450 0.388 0.519 47 68% 68% 0.000 0.300 0.300 0.3 Mississippi No No 43 159 176.589 0.900 0.766 1.052 24 29% 0% 0.000 0.300 0.3 Morth Carolina No No 45 45.861 0.153 0.061 0.314 6 0.801 0.80	I - I						
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Kentucky No No 71 214 267.695 0.799 0.696 0.914 36 11% 3% 0.000 0.123 0.5 Louisiana No Yes 73 221 313.175 0.706 0.616 0.805 44 14% 2% 0.000 0.368 0.6 Massachusetts Yes 66 170 395.211 0.430 0.368 0.500 45 4% 4% 4% 0.000 0.000 0.368 0.6 Maryland Yes 46 172 298.524 0.576 0.493 0.669 37 11% 0% 0.000 0.170 0.3 Maine No 22 36 44.291 0.813 0.569 1.125 6 Michigan No Yes 94 282 683.433 0.413 0.366 0.464 55 2% 11% 0.000 0.000 0.000 0.3 Missouri Yes No 73 189 419.841 0.450 0.388 0.519 47 6% 6% 0.000 0.000 0.000 0.3 Missouri Yes No 73 189 419.841 0.450 0.388 0.519 47 6% 6% 0.000 0.000 0.3 Mississippi No No No 43 159 176.589 0.900 0.766 1.052 24 29% 0% 0.000 0.350 0.3 Morth Carolina Yes Yes 90 274 522.312 0.525 0.466 0.591 50 8% 4% 0.000 0.000 0.300 North Carolina Yes Yes 90 274 522.312 0.525 0.466 0.591 50 8% 4% 0.000 0.102 0.4 New Hampshire Yes Yes 72 341 465.420 0.733 0.622 0.466 0.813 13 8% 0.68 New Hampshire Yes Yes 72 341 465.420 0.733 0.627 0.466 0.813 13 8% 0.96 New Always Yes Yes 72 341 465.420 0.733 0.627 0.466 0.813 13 8% 0.96 New Always Yes Yes Yes 72 341 465.420 0.733 0.627 0.815 66 18% 3% 0.086 0.345 0.60 New York Yes No 22 127 238.407 0.533 0.444 0.634 18 6% 11% Nevada Yes Yes 173 632 1.109.163 0.570 0.526 0.616 125 13% 2% 0.000 0.000 0.30 0.22 0.40 No							
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North Dakota	l -				 	Vos	
Nebraska No No 19 53 85.253 0.622 0.466 0.813 13 8% 0% New Hampshire Yes Yes 24 17 42.104 0.404 0.235 0.647 8 New Jersey Yes Yes 72 341 465.420 0.733 0.657 0.815 66 18% 3% 0.086 0.345 0.60 New Mexico M Yes 30 41 79.745 0.514 0.369 0.698 10 10% 0% New York Yes No 22 127 238.407 0.533 0.444 0.634 18 6% 11% New York Yes 173 632 1,109.163 0.570 0.526 0.616 125 13% 2% 0.000 0.234 0.4 Ohio No No No 134 364 841.774 0.432 0.389 0.479 88 3%							
New Hampshire Yes Yes 24 17 42.104 0.404 0.235 0.647 8 New Jersey Yes Yes Yes 72 341 465.420 0.733 0.657 0.815 66 18% 3% 0.086 0.345 0.60 New Mexico M Yes 30 41 79.745 0.514 0.369 0.698 10 10% 0% New Action Mexico M Yes No 22 127 238.407 0.533 0.444 0.634 18 6% 11% New York Yes 173 632 1,109.163 0.570 0.526 0.616 125 13% 2% 0.000 0.234 0.4 Ohio No No 134 364 841.774 0.432 0.389 0.479 88 3% 0.000 0.000 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00							
New Jersey Yes Yes 72 341 465.420 0.733 0.657 0.815 66 18% 3% 0.086 0.345 0.66 New Mexico M Yes 30 41 79.745 0.514 0.369 0.698 10 10% 0% New Action Mexical Yes No 22 127 238.407 0.533 0.444 0.634 18 6% 11% New York Yes 173 632 1,109.163 0.570 0.526 0.616 125 13% 2% 0.000 0.234 0.4 Ohio No No 134 364 841.774 0.432 0.389 0.479 88 3% 8% 0.000 0.000 0.000 0.							
New Mexico M Yes 30 41 79.745 0.514 0.369 0.698 10 10% 0% Nevada Yes No 22 127 238.407 0.533 0.444 0.634 18 6% 11% New York Yes 173 632 1,109.163 0.570 0.526 0.616 125 13% 2% 0.000 0.234 0.4 Ohio No No 134 364 841.774 0.432 0.389 0.479 88 3% 8% 0.000 0.000 0.00 0.34 Oklahoma Yes 53 119 254.192 0.468 0.388 0.560 24 8% 4% 0.000 0.000 0.00 0.22 Oregon Yes 44 49 145.382 0.337 0.249 0.446 19 0% 5% Pennsylvania Yes Yes 157 508 1,052.081 0.483							
Nevada Yes No 22 127 238.407 0.533 0.444 0.634 18 6% 11% New York Yes 173 632 1,109.163 0.570 0.526 0.616 125 13% 2% 0.000 0.234 0.4 Ohio No No 134 364 841.774 0.432 0.389 0.479 88 3% 8% 0.000 0.000 0.00 0.3 Oklahoma Yes 53 119 254.192 0.468 0.388 0.560 24 8% 4% 0.000 0.000 0.00 0.20 Oregon Yes 44 49 145.382 0.337 0.249 0.446 19 0% 5% Pennsylvania Yes Yes 157 508 1,052.081 0.483 0.442 0.527 102 3% 6% 0.000 0.231 0.4 Puerto Rico No No No							•
New York Yes 173 632 1,109.163 0.570 0.526 0.616 125 13% 2% 0.000 0.234 0.4 Ohio No No No 134 364 841.774 0.432 0.389 0.479 88 3% 8% 0.000 0.000 0.30 Oklahoma Yes 53 119 254.192 0.468 0.388 0.560 24 8% 4% 0.000 0.000 0.22 Oregon Yes 44 49 145.382 0.337 0.249 0.446 19 0% 5% Pennsylvania Yes Yes 157 508 1,052.081 0.483 0.442 0.527 102 3% 6% 0.000 0.231 0.4 Puerto Rico No No 10 31 53.195 0.583 0.396 0.827 7							
Ohio No No 134 364 841.774 0.432 0.389 0.479 88 3% 8% 0.000 0.000 0.30 Oklahoma Yes 53 119 254.192 0.468 0.388 0.560 24 8% 4% 0.000 0.000 0.29 Oregon Yes 44 49 145.382 0.337 0.249 0.446 19 0% 5% Pennsylvania Yes Yes 157 508 1,052.081 0.483 0.442 0.527 102 3% 6% 0.000 0.231 0.4 Puerto Rico No No 18 87 83.395 1.043 0.836 1.287 13 31% 8% Rhode Island No No 10 31 53.195 0.583 0.396 0.827 7						NO	
Oklahoma Yes 53 119 254.192 0.468 0.388 0.560 24 8% 4% 0.000 0.000 0.20 Oregon Yes 44 49 145.382 0.337 0.249 0.446 19 0% 5% Pennsylvania Yes Yes Yes 157 508 1,052.081 0.483 0.442 0.527 102 3% 6% 0.000 0.231 0.44 Puerto Rico No No 18 87 83.395 1.043 0.836 1.287 13 31% 8% Rhode Island No No 10 31 53.195 0.583 0.396 0.827 7						No	
Oregon Yes 44 49 145.382 0.337 0.249 0.446 19 0% 5% Pennsylvania Yes Yes 157 508 1,052.081 0.483 0.442 0.527 102 3% 6% 0.000 0.231 0.4 Puerto Rico No No 18 87 83.395 1.043 0.836 1.287 13 31% 8% Rhode Island No No 10 31 53.195 0.583 0.396 0.827 7 7						140	
Pennsylvania Yes Yes 157 508 1,052.081 0.483 0.442 0.527 102 3% 6% 0.000 0.231 0.48 Puerto Rico No No 18 87 83.395 1.043 0.836 1.287 13 31% 8% Rhode Island No No 10 31 53.195 0.583 0.396 0.827 7							
Puerto Rico No No 18 87 83.395 1.043 0.836 1.287 13 31% 8% Rhode Island No No 10 31 53.195 0.583 0.396 0.827 7						Ves	•
Rhode Island No No 10 31 53.195 0.583 0.396 0.827 7				,			,
						140	
South Dakota No 11 10 32.199 0.311 0.149 0.571 4							
Tennessee Yes Yes 93 275 498.402 0.552 0.488 0.621 49 18% 8% 0.000 0.160 0.4						Yes	
Texas Yes 270 816 1.497.116 0.545 0.508 0.584 187 10% 3% 0.000 0.095 0.4						100	
Utah Yes 26 61 112.281 0.543 0.416 0.698 15 7% 0%				,	-		
Virginia Yes Yes 81 188 371.145 0.507 0.437 0.584 46 7% 2% 0.000 0.000 0.437						Yes	
Vermont Yes Yes 7 6 20.533 0.292 0.107 0.636 2					_		•
Washington Yes 63 136 239.070 0.569 0.477 0.673 39 5% 5% 0.000 0.320 0.50					•	163	
Washington No No 73 117 277.911 0.421 0.348 0.505 38 5% 3% 0.000 0.038 0.4						No	
West Virginia Yes No 38 71 154.915 0.421 0.358 0.358 21 10% 0% 0.000 0.000 0.421 0.421 0.346 0.358 0.578							

Wyoming	No	No	13	2	8.150	0.245	0.030	0.886	2		1					- 1
AII US			3,350	9,924	18,292.134	0.543	0.532	0.553	2,160	10%	4%	0.000	0.148	0.452	0.835	1.351

- 1. Data from all ICUs; excludes wards (and other non-critical care locations), NICUs, LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).
- 2. Yes indicates the presence of a state mandate to report CLABSI data from any ICU to NHSN at the beginning of 2012. M indicates midyear implementation of a mandate.
- 3. Yes indicates that the state health department reported the completion of either or both of the following validation studies of NHSN CLABSI data reported from any ICU during the reporting period: data quality assessment of missing or implausible values along with state health department followup with identified facilities, and detection of outlier facilities along with state health department followup with identified facilities.
- a legislative mandate for the particular HAI type and location.
- 4. Percent of facilities with at least one predicted ICU CLABSI that had an SIR significantly greater or less than the 2012 national ICU CLABSI SIR of 0.543. This is only calculated if at least 10 facilities had at least one predicted ICU CLABSI in 2012.
- 5. Facility-specific key percentiles were only calculated if at least 20 facilities had ≥1.0 predicted ICU CLABSI in 2012. If a facility's predicted number of ICU CLABSI was <1.0, a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

Table 3. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,

NHSN facilities reporting during 2012

3c. Central line-associated bloodstream infections (CLABSI), ward (non-critical care) locations¹

			3c	. Central lin	e-associated	<u>bloodstrea</u>			, ward (non-cri	tical care) locati	ions¹					
				No. of Ir	<u>rfections</u>		95% CI f	or SIR	<u>Fa</u>	cility-specific SI	<u>Rs</u>	Facility	-specific S	SIRs at K	ey Perce	ntiles ⁶
										% of facs with SIR sig higher than	% of facs with SIR sig lower than					
State				Observed	Predicted	SIR⁴	Lower	Upper		national SIR⁵	national SIR⁵	10%	25%		75%	90%
Alaska	No	No	6	14	20.039	0.699	0.382	1.172	3							
Alabama	No	No	18	89	98.953	0.899	0.722	1.107	7							
Arkansas	No	No	16	50	71.893	0.695	0.516	0.917	6							
Arizona	No	No	13	107	131.834	0.812	0.665	0.981	10	20%	0%					
California	Yes	Yes	342	1,423	2,608.309	0.546	0.518	0.575	244	11%	7%	0.000	0.131	0.461	0.803	1.238
Colorado	Yes	Yes	13	62	144.169	0.430	0.330	0.551	7							
Connecticut	No	No	1													
D.C.	No	Yes	4													
Delaware	No	Yes	4													
Florida	No	No	45	202	322.732	0.626	0.543	0.718	33	15%	3%	0.000	0.000	0.369	0.745	1.290
Georgia	No		26	171	210.141	0.814	0.696	0.945	16	31%	6%					
Hawaii	No	No	5	4	25.999	0.154	0.042	0.394	4							
lowa	No	No	19	4	9.396	0.426	0.116	1.090	2							
Idaho	No	No	1													
Illinois	No	No	44	260	422.490	0.615	0.543	0.695	32	16%	16%	0.155	0.233	0.500	0.884	1.259
Indiana	No	No	28	202	254.901	0.792	0.687	0.910	10	10%	0%					
Kansas	No	No	13	42	49.052	0.856	0.617	1.157	5							
Kentucky	No	No	14	79	64.022	1.234	0.977	1.538	5							
Louisiana	No	Yes	23	46	93.216	0.493	0.361	0.658	12	0%	0%					
Massachusetts	No	No	9	123	153.474	0.801	0.666	0.956	6							
Maryland	No	No	17	45	86.935	0.518	0.378	0.693	11	0%	0%					
Maine	No	No	6	44	48.385	0.909	0.661	1.221	3							
Michigan	No	Yes	31	49	132.886	0.369	0.273	0.488	13	0%	15%					
Minnesota	No	No	6	0	1.563	0.000		2.360	0							
Missouri	No	No	9	17	44.287	0.384	0.223	0.615	7							
Mississippi	No	No	16	85	90.277	0.942	0.752	1.164	7							
Montana	No		6	12	34.856	0.344	0.178	0.601	3							
North Carolina	No	No	36	152	269.255	0.565	0.478	0.662	21	5%	10%	0.000	0.170	0.503	0.738	0.839
North Dakota	No	No	1					****								
Nebraska	No	No	11	105	125.892	0.834	0.682	1.010	10	20%	0%					
New Hampshire	No	No	6	2	6.953	0.288	0.035	1.039	2	2070	0.0					
New Jersey	No	No	15	50	71.102	0.703	0.522	0.927	12	8%	0%					
New Mexico	I M	No	14	28	47.924	0.584	0.388	0.844	4	0,0	0,0					
Nevada	Yes	No	20	161	216.574	0.743	0.633	0.868	19	21%	5%					
New York	No	No	79	467	622.529	0.743	0.684	0.821	58	19%	5% 5%	0.000	0.298	0.664	1.106	2.023
Ohio	No No	No	25	100	219.598	0.750	0.004	0.554	20	5%	10%	0.000	0.000	0.358	0.432	1.118
Oklahoma	No	No	12	29	61.292	0.455	0.317	0.680	4	370	1070	0.000	0.000	0.556	0.432	1.110
Orianoma Oregon	No No	No	16	19	38.288	0.473	0.317	0.660	5							
0		Yes	174	652	30.200 1,336.054	0.496	0.299	0.775	118	3%	8%	0.000	0.132	0.343	0.613	0.931
Pennsylvania Puerto Rico	Yes	res No	174	58	57.339	1.012	0.451	1.308	9	3%	070	0.000	0.132	0.343	0.013	0.93
	No No		13	58	37.339	1.012	0.708	1.308	9							
Rhode Island	No	No	3	055	400 400	0.500	0.507	0.070		00/	00/	0.000	0.004	0.570	0.070	1.00
South Carolina	Yes	NI-	64	255	426.426	0.598	0.527	0.676	36	6%	6%	0.000	0.381	0.578	0.873	1.001
South Dakota	No	No	11	3	31.472	0.095	0.020	0.279	5	E 0/	5 0/	0.000	0.000	0.040	0.700	0.00
Tennessee	No	No	26	179	295.035	0.607	0.521	0.702	21	5%	5%	0.000	0.000	0.240	0.700	0.98
Texas	Yes	No	55	165	303.869	0.543	0.463	0.632	33	12%	6%	0.000	0.030	0.471	0.686	1.148
Utah	No	No	0													
Virginia	No	No	14	149	194.875	0.765	0.647	0.898	10	20%	20%					

Vermont	No	No	0					1								
Washington	Yes	No	12	45	66.230	0.679	0.496	0.909	9							
Wisconsin	No	No	43	69	153.883	0.448	0.349	0.567	23	0%	0%	0.000	0.000	0.293	0.539	0.805
West Virginia	No	No	14	14	68.744	0.204	0.111	0.342	7							
Wyoming	No	No	15	0	4.147	0.000		0.890	1							
All US			1,414	5,923	9,836.770	0.602	0.587	0.618	885	11%	7%	0.000	0.150	0.463	0.801	1.200

- 1. Data from all wards (for this table wards also include stepdown and specialty care areas [including hematology/oncology, bone marrow transplant]). This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).
- 2. Yes indicates the presence of a state mandate to report CLABSI data from any ward to NHSN at the beginning of 2012. M indicates midyear implementation of a mandate.
- 3. Yes indicates that the state health department reported the completion of either or both of the following validation studies of NHSN CLABSI data reported from any ward during the reporting period: data quality assessment of missing or implausible values along with state health department followup with identified facilities, and detection of outlier facilities along with state health department followup with identified facilities.
- a legislative mandate for the particular HAI type and location.
- 4. An SIR is only calculated for states in which at least 5 facilities reported CLABSI data from at least one ward in 2012.
- 5. Percent of facilities with at least one predicted ward CLABSI that had an SIR significantly greater or less than the 2012 national ward CLABSI SIR of 0.602. This is only calculated if at least 10 facilities had at least one predicted ward CLABSI in 2012.
- 6. Facility-specific key percentiles were only calculated if at least 20 facilities had ≥1.0 predicted ward CLABSI in 2012. If a facility's predicted number of ward CLABSI was <1.0, a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

Table 3. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,

NHSN facilities reporting during 2012

3d. Central line-associated bloodstream infections (CLABSI), neonatal critical care locations¹

						d bloodstr			SI), neonatal critica							
					nfections		95% CI		Facilit	y-specific SIRs						
State				Observed	Predicted		Lower	Upper				10%	25%		75%	90%
Alaska	No	No	2		F0 000	4 00-	0.700	4 000	^							
Alabama	No	No	12	59	56.890	1.037	0.789	1.338	9							
Arkansas	Yes	Yes	8	19	50.217	0.378	0.228	0.591	5							
Arizona	No	No	12	24	36.964	0.649	0.416	0.966	8							
California	Yes	Yes	129	137	381.315	0.359	0.302	0.425	74	4%	3%	0.000	0.000	0.227	0.525	0.939
Colorado	Yes	Yes	17	13	40.003	0.325	0.173	0.556	10	0%	0%					
Connecticut	M		12	12	29.981	0.400	0.207	0.699	4							
D.C.	Yes	Yes	6	11	29.036	0.379	0.189	0.678	5							
Delaware	M	Yes	2													
Florida	No	No	46	111	185.515	0.598	0.492	0.721	22	9%	5%	0.000	0.166	0.567	0.900	1.294
Georgia	No		30	67	121.224	0.553	0.428	0.702	20	5%	0%	0.120	0.280	0.455	1.007	1.417
Hawaii	Yes	Yes	2													
lowa	No	Yes	9	16	30.583	0.523	0.299	0.850	4							
Idaho	No	No	7	5	9.120	0.548	0.178	1.279	3							
Illinois	Yes	Yes	44	65	157.215	0.413	0.319	0.527	23	4%	9%	0.000	0.115	0.358	0.507	1.020
Indiana	M	Yes	26	49	69.194	0.708	0.524	0.936	14	21%	0%					
Kansas	No	No	10	11	29.373	0.374	0.187	0.670	5							
Kentucky	No	No	13	29	28.979	1.001	0.670	1.437	5							
Louisiana	No	Yes	24	72	76.820	0.937	0.733	1.180	16	19%	0%					
Massachusetts	Yes		10	19	37.480	0.507	0.305	0.792	9							
Maryland	Yes		17	31	61.873	0.501	0.340	0.711	13	0%	8%					
Maine	No		3													
Michigan	No	Yes	20	57	92.484	0.616	0.467	0.799	18	6%	0%					
Minnesota	No	No	8	11	24.587	0.447	0.223	0.801	6	0,0	• • • • • • • • • • • • • • • • • • • •					
Missouri	Yes	No	21	53	100.275	0.529	0.396	0.691	12	8%	0%					
Mississippi	No	No	14	34	29.562	1.150	0.796	1.607	6	070	0 /0					
Montana	No	140	5	4	5.385	0.743	0.202	1.902	3							
North Carolina	Yes	Yes	24	39	117.346	0.743	0.236	0.454	14	0%	21%					
North Dakota	No	No	6	12	12.414	0.332	0.499	1.689	4	0 70	2170					
Nebraska	No	No	6	10	12.780	0.782	0.499	1.439	5							
New Hampshire	Yes	Yes	0	10	12.700	0.762	0.373	1.439	5							
			3 24	45	77.046	0.504	0.406	0.700	16	0%	60/					
New Jersey	Yes	Yes	24 5	45	77.046	0.584	0.426	0.782	16	0%	6%					
New Mexico	М	Yes	9	20	17.456	1.146	0.700	1.770	3							
Nevada	Yes	No	~I	15	50.088	0.299	0.167	0.494	8	4.40/	201					
New York	Yes		53	135	200.778	0.672	0.564	0.796	43	14%	0%	0.000	0.390	0.680	1.212	1.720
Ohio	No	No	19	56	122.231	0.458	0.346	0.595	17	0%	0%					
Oklahoma	Yes	No	8	31	55.129	0.562	0.382	0.798	7							
Oregon	No		. 7	11	18.767	0.586	0.293	1.049	3							
Pennsylvania	Yes	Yes	44	77	134.982	0.570	0.450	0.713	26	4%	0%	0.000	0.234	0.619	0.849	1.057
Puerto Rico	No	No	5	7	6.101	1.147	0.461	2.364	3							
Rhode Island	No	No	1													
South Carolina	Yes		7	47	54.833	0.857	0.630	1.140	6							
South Dakota	No		3													
Tennessee	Yes	Yes	24	58	106.957	0.542	0.412	0.701	13	8%	0%					
Texas	Yes		121	216	355.654	0.607	0.529	0.694	65	9%	0%	0.000	0.000	0.528	0.843	1.249
Utah	Yes		13	38	41.015	0.926	0.656	1.272	7							
Virginia	No	No	24	38	85.120	0.446	0.316	0.613	15	7%	7%					
Vermont	Yes	Yes	1													
Washington	Yes		17	19	45.618	0.417	0.251	0.650	11	9%	0%					
Wisconsin	No	No	18	28	46.418	0.603	0.401	0.872	12	17%	0%					
West Virginia	М	No	4					l								

Wyoming	No	No	0					1			- 1					
All US			955	1,863	3,320.252	0.561	0.536	0.587	588	8%	2%	0.000	0.151	0.479	0.882	1.505

- 1. Data from all neonatal critical care units (NICU) including Level II/III and Level III nurseries. For purposes of this report, both umbilical-line and central-line associated bloodstream infections are considered CLABSIs.
- 2. Yes indicates the presence of a state mandate to report CLABSI data from any NICU to NHSN at the beginning of 2012. M indicates midyear implementation of a mandate.
- 3. Yes indicates that the state health department reported the completion of either or both of the following validation studies of NHSN CLABSI data reported from any NICU during the reporting period: data quality assessment of missing or implausible values along with state health department followup with identified facilities, and detection of outlier facilities along with state health department followup with identified facilities.
- a legislative mandate for the particular HAI type and location.
- 4. An SIR is only calculated for states with ≥ 1.0 predicted NICU CLABSI and at least 5 facilities reporting NICU CLABSI data.
- 5. Percent of facilities with at least one predicted NICU CLABSI that had an SIR significantly greater or less than the 2012 national NICU CLABSI SIR of 0.561. This is only calculated if at least 10 facilities had at least one predicted NICU CLABSI in 2012.
- 6. Facility-specific key percentiles were only calculated if at least 20 facilities had ≥1.0 predicted NICU CLABSI in 2012. If a facility's predicted number of NICU CLABSI was <1.0, a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

Table 4. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,

NHSN facilities reporting during 2012
4a. Catheter-associated urinary tract infections (CAUTI), all locations¹

					4a. Catheter-a	ssociated	urinary trac	t infection	s (CAUTI), all locat	ions¹						
				No. of In	<u>fections</u>		95% CI f	or SIR	Facilit	y-specific SIRs						
									No. of facs with at least 1 predicted							
State				Observed	Predicted	SIR	Lower	Upper	CAUTI			10%	25%		75%	90%
Alaska	No	No	12	42	31.680	1.326	0.955	1.792	5	70/	000/	0.000	0.040	0.507	4 007	4 500
Alabama	Yes	.,	90	735	983.452	0.747	0.694	0.803	76	7%	20%	0.000	0.249	0.597	1.037	1.520
Arkansas	М	Yes	51	376	339.668	1.107	0.998	1.225	38	13%	8%	0.000	0.000	0.747	1.201	1.689
Arizona	No	No	58	592	532.390	1.112	1.024	1.205	46	11%	15%	0.000	0.212	0.727	1.369	1.655
California	No	No	338	2,960	3,492.632	0.847	0.817	0.879	299	11%	19%	0.000	0.256	0.664	1.284	2.033
Colorado	No	No	50	338	368.563	0.917	0.822	1.020	33	12%	12%	0.033	0.286	0.817	1.357	1.826
Connecticut	M		30	500	272.426	1.835	1.678	2.004	27	44%	0%	0.314	0.804	1.609	2.537	3.579
D.C.	No	No	7	164	124.647	1.316	1.122	1.533	7							
Delaware	М	Yes	8	97	91.888	1.056	0.856	1.288	8							
Florida	No	No	187	1,820	2,159.008	0.843	0.805	0.883	178	9%	16%	0.000	0.279	0.675	1.215	1.732
Georgia	No	No	107	938	930.446	1.008	0.945	1.075	76	11%	8%	0.000	0.167	0.767	1.196	1.881
Hawaii	М	Yes	15	112	113.609	0.986	0.812	1.186	13	15%	8%					
lowa	No	Yes	68	180	190.261	0.946	0.813	1.095	32	6%	9%	0.000	0.000	0.451	0.731	1.551
Idaho	No	No	15	72	62.909	1.145	0.895	1.441	9							
Illinois	No	No	147	1,178	1,150.683	1.024	0.966	1.084	115	13%	11%	0.000	0.226	0.859	1.439	2.087
Indiana	M	Yes	104	763	726.702	1.050	0.977	1.127	66	6%	3%	0.000	0.000	0.634	1.172	1.607
Kansas	No	Yes	52	231	241.605	0.956	0.837	1.088	26	12%	4%	0.000	0.500	0.784	1.153	2.257
Kentucky	No	No	72	581	493.640	1.177	1.083	1.277	50	18%	18%	0.000	0.186	0.592	1.328	2.460
Louisiana	No	Yes	78	437	518.309	0.843	0.766	0.926	59	10%	15%	0.000	0.134	0.594	1.065	1.931
Massachusetts	No	No	66	923	636.815	1.449	1.357	1.546	59	15%	5%	0.000	0.374	0.924	1.474	2.500
Maryland	No	No	38	703	372.493	1.887	1.750	2.032	34	18%	9%	0.025	0.440	0.825	1.577	3.001
Maine	No	No	22	180	94.321	1.908	1.640	2.208	13	31%	0%					
Michigan	No	Yes	97	1,004	1,000.861	1.003	0.942	1.067	73	14%	18%	0.000	0.314	0.722	1.412	2.504
Minnesota	No	No	51	405	266.856	1.518	1.373	1.673	29	24%	3%	0.000	0.306	1.164	2.165	2.939
Missouri	No	No	75	561	583.331	0.962	0.884	1.045	54	9%	11%	0.000	0.388	0.701	1.136	2.037
Mississippi	No	No	46	415	348.847	1.190	1.078	1.310	35	23%	11%	0.000	0.205	0.679	1.330	1.938
Montana	No		13	76	82.938	0.916	0.722	1.147	10	0%	10%					
North Carolina	Yes	Yes	100	1,052	963.849	1.091	1.026	1.159	80	8%	8%	0.000	0.199	0.697	1.286	1.546
North Dakota	No	No	6	42	67.032	0.627	0.452	0.847	6							
Nebraska	No	No	20	207	205.286	1.008	0.876	1.155	18	11%	11%					
New Hampshire	Yes	Yes	23	88	91.928	0.957	0.768	1.179	14	7%	7%					
New Jersey	Yes	Yes	72	703	802.337	0.876	0.813	0.943	71	14%	18%	0.000	0.379	0.834	1.330	1.809
New Mexico	No	No	34	118	121.579	0.971	0.803	1.162	19	11%	0%					
Nevada	No	No	24	485	487.108	0.996	0.909	1.088	20	15%	25%	0.000	0.331	0.884	0.982	1.706
New York	No	No	175	2,858	2,104.475	1.358	1.309	1.409	155	28%	11%	0.000	0.502	1.172	1.814	2.308
Ohio	No	No	135	1,170	1,294.598	0.904	0.853	0.957	108	12%	10%	0.000	0.274	0.686	1.332	1.883
Oklahoma	No	No	61	226	362.177	0.624	0.545	0.711	40	3%	10%	0.000	0.000	0.434	0.778	1.317
Oregon	No	No	46	348	246.341	1.413	1.268	1.569	28	11%	0%	0.000	0.671	1.013	1.595	1.861
Pennsylvania	Yes	Yes	190	2,481	2,766.981	0.897	0.862	0.933	159	8%	21%	0.000	0.414	0.704	1.115	1.686
Puerto Rico	No	No	18	245	246.372	0.994	0.874	1.127	17	12%	18%					
Rhode Island	No	No	10	149	109.049	1.366	1.156	1.604	10	30%	10%					
South Carolina	No	No	64	818	561.280	1.457	1.359	1.561	51	20%	8%	0.000	0.227	0.735	1.565	3.016
South Dakota	No	No	18	55	85.527	0.643	0.484	0.837	12	0%	8%	2.220				
Tennessee	Yes	Yes	95	1,164	845.061	1.377	1.299	1.459	68	16%	6%	0.000	0.388	1.071	1.650	2.283
Texas	No	No	284	1,982	2,095.116	0.946	0.905	0.989	221	12%	15%	0.000	0.179	0.594	1.194	1.833
Utah	I M	Yes	26	256	141.122	1.814	1.599	2.050	17	29%	0%	0.000	0.170	0.004	1.154	1.000
Virginia	No No	No	81	606	679.587	0.892	0.822	0.966	64	8%	14%	0.000	0.000	0.474	0.938	1.601
Virginia Vermont	No No	No	5	32	26.404	1.212	0.822	1.711		070	1770	0.000	0.000	0.717	0.500	1.001
A CHIHOHII	I INO	INO	ગ	32	20.404	1.212	0.029	1.7 1 1	3		I					

Washington	No	No	61	402	374.430	1.074	0.971	1.184	44	16%	14%	0.000	0.361	0.804	1.240	2.048
Wisconsin	No	No	85	406	511.023	0.794	0.719	0.876	61	5%	13%	0.000	0.273	0.633	1.066	1.542
West Virginia	M	No	43	208	297.449	0.699	0.607	0.801	28	4%	14%	0.000	0.128	0.509	1.070	1.651
Wyoming	No	No	24	20	23.323	0.858	0.524	1.324	9							
AII US			3,597	32,504	31,720.411	1.025	1.014	1.036	2,793	13%	13%	0.000	0.292	0.741	1.332	2.043

- 1. Data from all ICUs and wards (and other non-critical care locations). This excludes NICUs, LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).
- 2. Yes indicates the presence of a state mandate to report CAUTI data from any location to NHSN at the beginning of 2012. M indicates midyear implementation of a mandate.
- 3. Yes indicates that the state health department reported the completion of either or both of the following validation studies of NHSN CAUTI data reported from any location during the reporting period: data quality assessment of missing or implausible values along with state health department followup with identified facilities, and detection of outlier facilities along with state health department followup with identified facilities.
- a legislative mandate for the particular HAI type and location.
- 4. Percent of facilities with at least one predicted CAUTI that had an SIR significantly greater or less than the 2012 national CAUTI SIR of 1.025. This is only calculated if at least 10 facilities had at least one predicted CAUTI in 2012.
- 5. Facility-specific key percentiles were only calculated if at least 20 facilities had ≥1.0 predicted CAUTI in 2012. If a facility's predicted number of CAUTI was <1.0, a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

Table 4. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,

NHSN facilities reporting during 2012

4b. Catheter-associated urinary tract infections (CAUTI), critical care locations¹

					rections	atou umui	95% CI f		JTI), critical care I	ty-specific SIRs						
State				Observed	Predicted	SIR	Lower	Upper	raciii	ty-specific Siks		10%	25%		75%	90%
Alaska	No	No	10	13	16.612	0.783	0.417	1.338	3			1070			, ,	
Alabama	No	No	74	439	566.994	0.774	0.704	0.850	51	6%	16%	0.000	0.317	0.588	1.039	1.888
Arkansas	l M	Yes	45	280	244.880	1.143	1.013	1.285	31	13%	6%	0.000	0.387	0.984	1.394	1.712
Arizona	No	No	55	528	441.510	1.196	1.096	1.302	46	9%	13%	0.000	0.212	0.737	1.434	1.678
California	No	No	312	2,093	2,087.435	1.003	0.960	1.047	275	10%	13%	0.000	0.272	0.776	1.496	2.202
Colorado	No	No	48	262	258.257	1.014	0.895	1.145	30	10%	10%	0.110	0.320	0.943	1.434	2.023
Connecticut	I M		30	500	272.426	1.835	1.678	2.004	27	37%	4%	0.314	0.804	1.609	2.537	3.579
D.C.	No	No	7	135	100.660	1.341	1.124	1.587	7							
Delaware	I M	Yes	8	71	54.311	1.307	1.021	1.649	8							
Florida	No	No	183	1,544	1,790.018	0.863	0.820	0.907	174	9%	14%	0.000	0.345	0.724	1.258	2.067
Georgia	No	No	104	741	737.637	1.005	0.934	1.080	73	11%	11%	0.000	0.198	0.728	1.255	1.834
Hawaii	I M	Yes	14	68	81.993	0.829	0.644	1.051	12	0%	8%	0.000	000	020	00	
lowa	No	Yes	36	149	142.863	1.043	0.882	1.225	23	9%	17%	0.000	0.000	0.407	0.732	1.929
Idaho	No	No	11	58	52.188	1.111	0.844	1.437	9	070	17 70	0.000	0.000	0.101	0.702	1.020
Illinois	No	No	138	899	828.558	1.085	1.015	1.158	110	11%	8%	0.000	0.296	0.904	1.530	2.168
Indiana	I M	Yes	92	541	483.802	1.118	1.026	1.217	55	5%	4%	0.000	0.245	0.640	1.250	1.610
Kansas	No	Yes	44	175	196.002	0.893	0.765	1.035	19	5%	5%	0.000	0.2.10	0.010	1.200	1.010
Kentucky	No	No	71	448	370.174	1.210	1.101	1.328	44	20%	16%	0.000	0.242	0.649	1.600	2.438
Louisiana	No	Yes	73	332	397.048	0.836	0.749	0.931	53	6%	19%	0.000	0.179	0.557	1.091	2.094
Massachusetts	No No	No	65	837	509.644	1.642	1.533	1.757	57	16%	5%	0.000	0.397	0.924	1.495	2.310
Maryland	No	No	34	588	264.066	2.227	2.050	2.414	30	20%	10%	0.062	0.431	0.881	1.626	3.504
Maine	No	No	22	113	59.106	1.912	1.576	2.299	10	20%	0%	0.002	0.401	0.001	1.020	3.304
Michigan	No	Yes	95	911	865.681	1.052	0.985	1.123	62	13%	19%	0.032	0.376	0.723	1.344	2.642
Minnesota	No	No	48	402	261.599	1.537	1.390	1.695	26	23%	4%	0.002	0.379	1.269	2.220	3.015
Missouri	No	No	74	491	513.815	0.956	0.873	1.044	52	10%	12%	0.000	0.423	0.807	1.510	2.116
Mississippi	No No	No	43	271	245.326	1.105	0.073	1.244	33	15%	9%	0.000	0.423	0.740	1.297	2.081
Montana	No No	140	11	36	26.262	1.371	0.960	1.898	9	1370	370	0.000	0.104	0.740	1.231	2.001
North Carolina	Yes	Yes	90	795	710.449	1.119	1.043	1.200	74	9%	4%	0.000	0.000	0.730	1.305	1.823
North Dakota	No	No	90	34	52.515	0.647	0.448	0.905	6	3 70	4 /0	0.000	0.000	0.730	1.303	1.020
Nebraska	No No	No	18	112	76.382	1.466	1.207	1.764	13	31%	0%					
New Hampshire	Yes	Yes	23	61	70.362 54.928	1.111	0.849	1.704	12	8%	8%					
New Jersey	Yes	Yes	72	573	625.706	0.916	0.849	0.994	71	13%	15%	0.000	0.383	0.851	1.212	1.836
New Mexico	No	No	30	99	101.296	0.977	0.794	1.190	17	12%	12%	0.000	0.363	0.651	1.212	1.030
Nevada	No No	No	22	300	249.653	1.202	1.070	1.190	17	18%	12%					
New York	No No	No	173	2,094	1,533.998	1.365	1.307	1.425	147	22%	10%	0.000	0.366	1.129	1.846	2.364
Ohio	No No			1,014	1,089.479	0.931	0.874	0.990		8%	9%		0.360	0.715	1.243	1.892
Onio Oklahoma	No No	No No	133 53	1,014	306.832	0.931	0.556	0.990	102 34	0%	9% 15%	0.000	0.000	0.715	1.243	1.692
-										18%	-					
Oregon	No	No	44	215	165.870	1.296	1.129	1.482	22	9%	0% 17%	0.000	0.764	1.311	1.817	2.209
Pennsylvania	Yes	Yes	158	1,128	1,249.728	0.903 0.990	0.851 0.818	0.957	119	9% 13%	0%	0.000	0.304	0.776	1.403	1.881
Puerto Rico	No	No	17	116	117.175			1.187	16		0% 0%					
Rhode Island	No	No	10	93	67.635	1.375	1.110	1.685	10	20%		0.000	0.007	0.750	4 000	2.00
South Carolina	No No	No	55 44	596	346.687	1.719	1.584	1.863	40	20%	3%	0.000	0.297	0.752	1.993	3.284
South Dakota	No	No	11	35	39.596	0.884	0.616	1.229	4	000/	00/	0.000	0.000	4 45 4	4 705	0.405
Tennessee	Yes	Yes	93	1,001	688.035	1.455	1.366	1.548	66	20%	6%	0.000	0.389	1.154	1.785	2.495
Texas	No	No	271	1,681	1,749.281	0.961	0.916	1.008	207	11%	14%	0.000	0.177	0.648	1.273	1.97
Utah V::-:-	M	Yes	26	253	137.252	1.843	1.623	2.085	17	29%	0%	0.000	0.000	0.500	0.050	4.50
Virginia	No	No	81	448	494.953	0.905	0.823	0.993	61	8%	11%	0.000	0.000	0.596	0.956	1.53
Vermont	No	No	5	32	26.404	1.212	0.829	1.711	3	4.00					4 =	
Washington	No	No	61	325	270.307	1.202	1.075	1.340	42	14%	7%	0.000	0.436	1.024	1.542	2.457
Wisconsin	No	No	69	274	296.664	0.924	0.817	1.040	43	5%	7%	0.000	0.486	0.895	1.395	1.797

West Virginia	М	No	38	171	206.911	0.826	0.707	0.960	23	4%	13%	0.000	0.119	0.580	1.642	1.988
Wyoming	No	No	13	5	10.439	0.479	0.156	1.118	2							
AII US			3,319	24,577	22,536.843	1.091	1.077	1.104	2,497	12%	11%	0.000	0.320	0.801	1.450	2.200

- 1. Data from all ICUs; excludes wards (and other non-critical care locations), NICUs, LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).
- 2. Yes indicates the presence of a state mandate to report CAUTI data from any ICU to NHSN at the beginning of 2012. M indicates midyear implementation of a mandate.
- 3. Yes indicates that the state health department reported the completion of either or both of the following validation studies of NHSN CAUTI data reported from any ICU during the reporting period: data quality assessment of missing or implausible values along with state health department followup with identified facilities, and detection of outlier facilities along with state health department followup with identified facilities.
- a legislative mandate for the particular HAI type and location.
- 4. Percent of facilities with at least one predicted ICU CAUTI that had an SIR significantly greater or less than the 2012 national ICU CAUTI SIR of 1.091. This is only calculated if at least 10 facilities had at least one predicted ICU CAUTI in 2012.
- 5. Facility-specific key percentiles were only calculated if at least 20 facilities had ≥1.0 predicted ICU CAUTI in 2012. If a facility's predicted number of ICU CAUTI was <1.0, a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

Table 4. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,

NHSN facilities reporting during 2012

4c. Catheter-associated urinary tract infections (CAUTI), ward (non-critical care) locations¹

						urmary trac			vard (non-critical							
.					<u>fections</u>		95% CI f		<u>Facilit</u>	y-specific SIRs		400/	0=0/		==0/	000/
State				Observed	Predicted	1.001	Lower	Upper				10%	25%		75%	90%
Alaska	No	No	6	29	15.069	1.924	1.289	2.764	3	00/	5 0/	0.000	0.457	0.500	0.000	4.00
Alabama	Yes	.,	89	296	416.657	0.710	0.632	0.796	63	8%	5%	0.000	0.157	0.582	0.962	1.635
Arkansas	No	Yes	19	96	94.787	1.013	0.820	1.237	16	6%	0%					
Arizona	No	No	13	64	90.880	0.704	0.542	0.899	8							
California	No	No	177	867	1,405.197	0.617	0.577	0.659	145	7%	17%	0.000	0.095	0.446	0.847	1.658
Colorado	No	No	17	76	110.306	0.689	0.543	0.862	11	9%	9%					
Connecticut	No	No	0													
D.C.	No	No	4													
Delaware	No	Yes	7	26	37.578	0.692	0.452	1.014	7							
Florida	No	No	47	276	368.990	0.748	0.662	0.842	40	5%	10%	0.000	0.000	0.374	1.092	1.500
Georgia	No	No	23	197	192.809	1.022	0.884	1.175	17	12%	0%					
Hawaii	No	No	7	44	31.616	1.392	1.011	1.868	6							
lowa	No	No	47	31	47.398	0.654	0.444	0.928	15	0%	0%					
Idaho	No	No	5	14	10.722	1.306	0.714	2.191	1							
Illinois	No	No	41	279	322.125	0.866	0.767	0.974	27	7%	15%	0.000	0.125	0.550	1.162	1.673
Indiana	No	No	41	222	242.900	0.914	0.798	1.042	24	13%	8%	0.000	0.292	0.784	1.122	1.445
Kansas	No	No	24	56	45.603	1.228	0.928	1.595	13	23%	8%					
Kentucky	No	No	26	133	123.465	1.077	0.902	1.277	19	21%	5%					
Louisiana	No	Yes	24	105	121.261	0.866	0.708	1.048	18	6%	0%					
Massachusetts	No	No	8	86	127.171	0.676	0.541	0.835	5		• • •					
Maryland	No	No	18	115	108.427	1.061	0.876	1.273	16	6%	0%					
Maine	No	No	6	67	35.214	1.903	1.474	2.416	4	070	0 70					
Michigan	No	Yes	38	93	135.180	0.688	0.555	0.843	19	16%	16%					
Minnesota	No	No	8	3	5.258	0.571	0.118	1.667	1	1070	1070					
Missouri	No	No	14	70	69.515	1.007	0.785	1.007	10	0%	0%					
Mississippi	No	No	20	144	103.521	1.391	1.173	1.638	13	23%	0%					
Montana		INO	11	40	56.676	0.706	0.504	0.961	6	2370	0 70					
North Carolina	No No	Yes	40	257	253.400	1.014	0.894		28	11%	4%	0.000	0.458	0.747	1.259	1.547
			40	257	253.400	1.014	0.694	1.146	20	11%	4 %	0.000	0.456	0.747	1.259	1.547
North Dakota	No	No	10	0.5	400.004	0.707	0.500	0.004	47	00/	00/					
Nebraska	No	No	18	95	128.904	0.737	0.596	0.901	17	0%	6%					
New Hampshire	No	No	/	27	37.000	0.730	0.481	1.062	5	4.40/	400/	0.044	0.000	0.004	4 500	4 750
New Jersey	No	No	22	130	176.631	0.736	0.615	0.874	21	14%	19%	0.014	0.268	0.624	1.593	1.758
New Mexico	No	No	15	19	20.283	0.937	0.564	1.463	6	100/	2.404					
Nevada	No	No	19	185	237.455	0.779	0.671	0.900	17	12%	24%					
New York	No	No	85	764	570.477	1.339	1.246	1.438	75	24%	7%	0.132	0.633	1.115	1.775	2.405
Ohio	No	No	31	156	205.118	0.761	0.646	0.890	23	17%	22%	0.000	0.114	0.655	1.512	2.027
Oklahoma	No	No	17	29	55.345	0.524	0.351	0.753	10	0%	10%					
Oregon	No	No	16	133	80.471	1.653	1.384	1.959	8							
Pennsylvania	Yes	Yes	189	1,353	1,517.253	0.892	0.845	0.941	151	13%	11%	0.000	0.293	0.681	1.075	1.764
Puerto Rico	No	No	12	129	129.197	0.998	0.834	1.186	12	25%	0%					
Rhode Island	No	No	4													
South Carolina	No	No	42	222	214.593	1.035	0.903	1.180	31	13%	6%	0.000	0.110	0.672	1.187	1.744
South Dakota	No	No	15	20	45.932	0.435	0.266	0.673	9							
Tennessee	No	No	18	163	157.025	1.038	0.885	1.210	14	7%	7%					
Texas	No	No	71	301	345.835	0.870	0.775	0.974	45	9%	9%	0.000	0.000	0.459	0.670	1.378
Utah	No	No	1													
Virginia	No	No	15	158	184.634	0.856	0.728	1.000	14	7%	21%					
Vermont	No	No	0													
Washington	No	No	14	77	104.122	0.740	0.584	0.924	11	0%	9%					
Wisconsin	No	No	54	132	214.359	0.616	0.515	0.730	37	0%	8%	0.000	0.057	0.385	0.783	1.003
West Virginia	M	No	19	37	90.538	0.409	0.288	0.563	12	0%	25%				2 30	

Wyoming	No	No	19	15	12.884	1.164	0.651	1.920	6		I					
Ali US			1,484	7,927	9,183.568	0.863	0.844	0.882	1,069	11%	10%	0.000	0.227	0.636	1.168	1.863

- 1. Data from all wards (for this table wards also include stepdown and specialty care areas [including hematology/oncology, bone marrow transplant]). This excludes NICU, LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).
- 2. Yes indicates the presence of a state mandate to report CAUTI data from any ward to NHSN at the beginning of 2012. M indicates midyear implementation of a mandate.
- 3. Yes indicates that the state health department reported the completion of either or both of the following validation studies of NHSN CAUTI data reported from any ward during the reporting period: data quality assessment of missing or implausible values along with state health department followup with identified facilities, and detection of outlier facilities along with state health department followup with identified facilities.
- a legislative mandate for the particular HAI type and location.
- 4. An SIR is only calculated for states in which at least 5 facilities reported CAUTI data from at least one ward in 2012.
- 5. Percent of facilities with at least one predicted ward CAUTI that had an SIR significantly greater or less than the 2012 national ward CAUTI SIR of 0.863. This is only calculated if at least 10 facilities had at least one predicted ward CAUTI in 2012.
- 6. Facility-specific key percentiles were only calculated if at least 20 facilities had ≥1.0 predicted ward CAUTI in 2012. If a facility's predicted number of ward CAUTI was <1.0, a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

Table 5. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,

NHSN facilities reporting during 2012

5a. Surgical site infections (SSI) following colon surgery¹

							infection			olon surgery1							
					No. of Infe	ections		95% CI	for SIR	Facilit	y-specific SIRs						
State			Number of Facilities	Number of	Observed	Predicted	eib.	Lower	Unnor	No. of facs with at least 1 predicted			10%	25%		75%	90%
State Alaska	No	No	Reporting 9	Procedures 517	Observed 23	14.614	SIR 1.574	0.997	Upper 2.362	SSI 5			1076	25%		15%	90%
Alabama	Yes	Yes	74	5,622	99	174.033	0.569	0.462	0.693	36	0%	6%	0.000	0.060	0.518	0.803	1.224
Arkansas	M	Yes	40	2,853	81	82.554	0.981	0.779	1.220	22	14%	0%	0.000	0.432	0.974	1.503	2.334
Arizona	No	No	54	6,107	204	182.230	1.119	0.971	1.284	41	12%	5%	0.000	0.432	1.087	1.555	2.002
California	Yes	110	317	27,909	599	854.823	0.701	0.646	0.759	201	8%	10%	0.000	0.000	0.585	1.092	1.723
Colorado	M	Yes	57	4,568	98	132.086	0.742	0.602	0.904	32	3%	6%	0.000	0.305	0.829	1.129	1.453
Connecticut	M	100	30	3,589	100	100.711	0.993	0.808	1.208	22	27%	9%	0.000	0.543	1.007	1.598	2.914
D.C.	No	No	7	996	16	32.740	0.489	0.279	0.794	5							
Delaware	M	Yes	7	1.050	21	31.141	0.674	0.417	1.031	5							
Florida	No	No	180	20,599	437	607.844	0.719	0.653	0.790	149	7%	5%	0.000	0.000	0.565	0.994	1.719
Georgia	No	No	99	8,668	212	255.922	0.828	0.721	0.948	57	11%	4%	0.000	0.327	0.756	1.139	1.919
Hawaii	М	Yes	13	946	27	27.801	0.971	0.640	1.413	8							
lowa	No	No	34	2,767	75	75.472	0.994	0.782	1.246	22	5%	0%	0.000	0.000	0.808	1.457	1.877
Idaho	No		15	1,258	27	37.587	0.718	0.473	1.045	9							
Illinois	М	No	140	11,570	211	351.275	0.601	0.522	0.687	89	3%	7%	0.000	0.000	0.502	0.884	1.338
Indiana	М	Yes	105	6,935	216	208.678	1.035	0.902	1.183	49	10%	2%	0.000	0.443	0.924	1.570	1.889
Kansas	No	Yes	43	2,762	79	84.453	0.935	0.741	1.166	19	5%	0%					
Kentucky	No	No	65	4,730	115	146.092	0.787	0.650	0.945	34	12%	6%	0.000	0.229	0.716	1.294	2.425
Louisiana	No	Yes	75	4,571	133	134.334	0.990	0.829	1.173	34	12%	3%	0.000	0.000	0.789	1.277	1.939
Massachusetts	No	No	62	6,710	160	196.514	0.814	0.693	0.951	40	10%	3%	0.000	0.299	0.621	1.396	2.081
Maryland	No	No	10	1,021	28	32.102	0.872	0.579	1.261	6							
Maine	No	No	24	1,351	48	39.390	1.219	0.898	1.616	9							
Michigan	No	Yes	91	10,179	252	293.831	0.858	0.755	0.970	60	12%	12%	0.000	0.214	0.647	1.385	1.810
Minnesota	No	No	49	5,207	106	158.589	0.668	0.547	0.808	24	4%	8%	0.321	0.425	0.710	1.028	1.279
Missouri	No	No	72	7,771	148	231.391	0.640	0.541	0.751	41	7%	12%	0.000	0.319	0.563	0.889	1.395
Mississippi	No	No	41	2,850	66	81.567	0.809	0.626	1.029	23	13%	9%	0.000	0.000	0.714	1.549	1.757
Montana	No	No	14	879	11	23.372	0.471	0.264	0.779	8							
North Carolina	Yes	Yes	93	8,912	207	267.769	0.773	0.671	0.886	58	7%	2%	0.000	0.339	0.600	1.250	1.920
North Dakota	No	No	6	815	33	19.655	1.679	1.156	2.358	6							
Nebraska	No	No	20	1,849	66	55.109	1.198	0.926	1.524	13	31%	0%					
New Hampshire	Yes	Yes	26	1,364	26	42.329	0.614	0.401	0.900	12	0%	8%					
New Jersey	Yes	Yes	71	8,124	150	241.885	0.620	0.525	0.728	58	5%	10%	0.000	0.000	0.472	0.887	1.519
New Mexico	No	No	27	1,401	24	40.820	0.588	0.377	0.875	7							
Nevada	No	No	22	1,938	61	54.876	1.112	0.850	1.428	16	19%	0%					
New York	Yes		175	16,358	407	492.222	0.827	0.748	0.911	117	8%	1%	0.000	0.275	0.809	1.269	1.857
Ohio	No	No	127	13,661	299	411.756	0.726	0.646	0.813	89	3%	6%	0.000	0.145	0.540	0.927	1.337
Oklahoma	No	No	61	4,001	89	110.643	0.804	0.646	0.990	23	13%	4%	0.000	0.267	0.738	1.040	1.819
Oregon	Yes	Yes	49	3,850	87	115.394	0.754	0.604	0.930	24	0%	0%	0.000	0.156	0.777	1.126	1.789
Pennsylvania	Yes	Yes	162	15,555	375	478.244	0.784	0.707	0.868	105	8%	1%	0.000	0.399	0.617	1.043	1.743
Puerto Rico	No	No	0	0													
Rhode Island	No	No	11	1,159	41	29.665	1.382	0.992	1.875	10	30%	0%					
South Carolina	Yes		57	4,401	136	131.913	1.031	0.865	1.220	29	17%	3%	0.000	0.547	0.838	1.445	2.412
South Dakota	No	No	14	934	26	24.159	1.076	0.703	1.577	6	400/		0.000	0.000	0.000	4.000	4 7 15
Tennessee	Yes	No	90	6,729	191	206.446	0.925	0.799	1.066	51	10%	8%	0.000	0.000	0.638	1.299	1.713
Texas	No	No	281	20,500	462	620.612	0.744	0.678	0.816	168	7%	7%	0.000	0.000	0.596	1.282	1.932
Utah Virginia	M	Yes	30	2,000	86	57.174	1.504	1.203	1.858	16	31%	0%	0.000	0.000	0.000	1.004	1.000
Virginia Verment	No	No	76	6,730	155	203.585	0.761	0.646	0.891	44	7%	5%	0.000	0.230	0.800	1.081	1.683
Vermont	No	No	6	451 5 644	23	12.147	1.893	1.200	2.841	4	00/	5%	0.000	0.000	0.577	1 000	1 740
Washington	M	No	62	5,644	110	162.010	0.679	0.558	0.818	38	8%		0.000	0.000	0.577	1.028	1.712
Wisconsin	No	No	77	5,733	136	164.882	0.825	0.692	0.976	45	9%	0%	0.000	0.271	0.618	0.961	2.000

West Virginia	М	No	36	1,958	54	56.477	0.956	0.718	1.248	12	0%	8%					
Wyoming	No	No	12	310	9	7.139	1.261	0.658	2.200	2							
AII US			3,318	288,362	6,845	8,598.058	0.796	0.777	0.815	2,003	8%	5%	0.000	0.205	0.661	1.200	1.807

- 1. SSIs included are those classified as deep incisional or organ/space infections following NHSN-defined colon surgery, detected during the same admission as the surgical procedure or upon readmission to the same facility.
- 2. Yes indicates the presence of a state mandate to report SSIs following colon surgery to NHSN at the beginning of 2012. M indicates midyear implementation of a mandate.
- 3. Yes indicates that the state health department reported the completion of either or both of the following validation studies of NHSN colon surgery SSI data during the reporting period: data quality assessment of missing or implausible values along with state health department followup with identified facilities, and detection of outlier facilities along with state health department followup with identified facilities. Yes^ indicates that the state completed one or both of these activities and also conducted an audit of medical records. Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the given HAI.
- 4. Percent of facilities with at least one predicted colon surgery SSI that had an SIR significantly greater or less than the 2012 national colon surgery SIR of 0.796. This is only calculated if at least 10 facilities had at least one predicted colon surgery SSI in 2012.
- 5. Facility-specific key percentiles were only calculated if at least 20 facilities had ≥1.0 predicted colon surgery SSI in 2012. If a facility's predicted number of colon surgery SSI was <1.0, a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

Table 5. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures, NHSN facilities reporting during 2012

5b. Surgical site infections (SSI) following abdominal hysterectomy surgery¹

							is (551) f			hysterectomy surge		Т					
1				ļ	No. of Inf	ections		95% CI	IOF SIK	<u>Facility</u>	specific SIRs						
			Number of														
1			Facilities	Number of													
State				Procedures		Predicted	SIR	Lower	Upper				10%	25%		75%	90%
Alaska	No	No	9	٠. ٥	2	5.303	0.377	0.067	1.187	2							
Alabama	Yes	Yes	64		30	55.163	0.544	0.367	0.776	20	0%	0%	0.000	0.000	0.578	0.910	1.016
Arkansas	М	Yes	39	· · · · · ·	19	23.613	0.805	0.484	1.257	7							
Arizona	No	No	51	5,984	57	46.452	1.227	0.929	1.590	15	13%	0%					
California	Yes		305	· · · · · ·	168	217.787	0.771	0.659	0.897	77	3%	0%	0.000	0.000	0.675	1.390	1.842
Colorado	Yes	Yes	56		24	29.847	0.804	0.515	1.196	9							
Connecticut	М		28		32	30.619	1.045	0.715	1.475	11	9%	0%					
D.C.	No	No	7		11	7.893	1.394	0.782	2.307	3							
Delaware	М	Yes	7	,	8	7.576	1.056	0.525	1.905	2							
Florida	No	No	170	,	126	131.326	0.959	0.799	1.142	48	10%	0%	0.000	0.445	0.795	1.517	2.837
Georgia	No	No	91	11,456	72	83.123	0.866	0.678	1.091	31	3%	3%	0.000	0.000	0.820	1.706	2.335
Hawaii	М	Yes	10		5	4.540	1.101	0.434	2.316	1							
lowa	No	No	32		21	17.506	1.200	0.742	1.834	5							
Idaho	No		14		0	6.649	0.000		0.451	2							
Illinois	М	No	137	11,606	86	94.884	0.906	0.725	1.119	32	9%	0%	0.000	0.000	0.713	1.676	2.237
Indiana	M	Yes	98	,	28	53.850	0.520	0.345	0.752	17	6%	0%					
Kansas	No	Yes	41	2,634	12	18.438	0.651	0.376	1.054	5							
Kentucky	No	No	61	4,942	33	41.813	0.789	0.543	1.108	13	8%	0%					
Louisiana	No	Yes	81	5,574	45	41.839	1.076	0.784	1.439	10	10%	0%					
Massachusetts	Yes	Yes	61	5,723	33	43.026	0.767	0.528	1.077	12	8%	0%					
Maryland	No	No	8	1,616	28	12.857	2.178	1.447	3.148	3							
Maine	No	No	21	770	4	5.231	0.765	0.261	1.750	1							
Michigan	No	Yes	86	9,063	78	72.844	1.071	0.846	1.336	26	8%	0%	0.000	0.325	0.895	1.486	2.755
Minnesota	No	No	50	5,222	43	39.959	1.076	0.779	1.450	11	9%	0%					
Missouri	Yes	No	69	7,297	38	55.453	0.685	0.485	0.941	15	0%	0%					
Mississippi	No	No	43	4,002	40	30.195	1.325	0.946	1.804	10	20%	0%					
Montana	No	No	14	821	5	6.166	0.811	0.319	1.705	2							
North Carolina	Yes	Yes	89	9,625	58	75.861	0.765	0.581	0.988	24	8%	0%	0.000	0.000	0.533	0.901	1.840
North Dakota	No	No	6	611	5	4.765	1.049	0.413	2.206	2							
Nebraska	No	No	20	1,874	15	14.479	1.036	0.579	1.709	5							
New Hampshire	Yes	Yes	23	1,125	5	9.225	0.542	0.214	1.140	3							
New Jersey	Yes	Yes	66	8,437	66	65.435	1.009	0.780	1.283	21	14%	5%	0.000	0.000	0.763	1.802	2.624
New Mexico	No	No	24	1,707	9	12.652	0.711	0.371	1.241	3							
Nevada	No	No	19	1,833	9	14.219	0.633	0.330	1.105	4							
New York	M		162	18,977	201	150.948	1.332	1.154	1.529	53	15%	0%	0.000	0.334	0.972	1.747	2.908
Ohio	No	No	123	12,728	89	103.100	0.863	0.693	1.062	34	3%	0%	0.000	0.000	0.715	1.495	1.930
Oklahoma	No	No	59	4,034	20	29.408	0.680	0.415	1.050	7							
Oregon	Yes	Yes	46	3,526	12	28.750	0.417	0.241	0.676	8							
Pennsylvania	Yes	Yes	148	14,045	109	114.736	0.950	0.780	1.146	35	6%	3%	0.000	0.406	0.714	1.483	2.142
Puerto Rico	No	No	0	-													
Rhode Island	No	No	11	1,259	15	9.050	1.657	0.927	2.734	1							
South Carolina	Yes		54	6,059	51	45.502	1.121	0.834	1.474	13	8%	0%					
South Dakota	No	No	14		4	6.346	0.630	0.215	1.442	1							
Tennessee	Yes	No	90	8,850	59	67.279	0.877	0.668	1.131	19	5%	0%					
Texas	No	No	281	26,510	157	206.389	0.761	0.646	0.889	64	3%	2%	0.000	0.000	0.591	1.401	1.714
Utah	М	Yes	30	2,647	19	20.853	0.911	0.548	1.423	10	10%	0%					
Virginia	No	No	67	7,398	51	57.780	0.883	0.657	1.161	19	11%	0%					
Vermont	Yes		11	593	4	5.204	0.769	0.263	1.759	1		l					
Washington	I м	No	60	6,089	27	44.646	0.605	0.398	0.880	12	0%	8%					

West Virginia	М	No	32	2,331	10	20.085	0.498	0.270	0.845	6							- 1
Wyoming	No	No	13	372	2	2.889	0.692	0.123	2.179	0							
All US			3,172	299,412	2,086	2,335.919	0.893	0.855	0.932	748	7%	1%	0.000	0.000	0.713	1.362	2.045

- 1. SSIs included are those classified as deep incisional or organ/space infections following NHSN-defined abdominal hysterectomy surgery, detected during the same admission as the surgical procedure or upon readmission to the same facility.
- 2. Yes indicates the presence of a state mandate to report SSIs following abdominal hysterectomy surgery to NHSN at the beginning of 2012. M indicates midyear implementation of a mandate.
- 3. Yes indicates that the state health department reported the completion of either or both of the following validation studies of NHSN abdominal hysterectomy SSI data during the reporting period: data quality assessment assessment of missing or implausible values along with state health department followup with identified facilities, and detection of outlier facilities along with state health department followup with identified facilities. Yes indicates that the state completed one or both of these activities and also conducted an audit of medical records. Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the given HAI.
- 4. Percent of facilities with at least one predicted abdominal hysterectomy SIR of 0.893. This is only calculated if at least 10 facilities had at least one predicted abdominal hysterectomy SSI in 2012.
- 5. Facility-specific key percentiles were only calculated if at least 20 facilities had ≥1.0 predicted abdominal hysterectomy SSI in 2012. If a facility's predicted number of abdominal hysterectomy SSI was <1.0, a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

Table 6. Changes in national standardized infection ratios (SIRs), 2011 compared to 2012: central line-associated bloodstream infections (CLABSI), catheter-associated urinary tract infections (CAUTI), and surgical site infections (SSI) following Surgical Care Improvement Project procedures

All Facilities Reporting to NHSN Continuously Reporting Facilities¹ No. of Continuous **Significant** Significant 2012 SIR 2011 SIR Change? Change? p-value Reporters p-value CLABSI, all locations² 0.591 3,401 0.0000 0.563 **Decrease** 0.0000 **Decrease** CLABSI, ICU³ 0.555 0.543 No Change 0.1061 3,268 No Change 0.1133 CLABSI, Ward4 0.645 0.602 Decrease 0.0002 1,153 Decrease 0.0000 CLABSI, NICU⁵ 0.561 0.0000 900 0.0000 0.646 Decrease Decrease CAUTI, all locations⁶ 0.934 1.025 0.0000 1,776 0.0000 Increase Increase CAUTI, ICU³ 0.990 1,523 0.0000 1.091 Increase 0.0000 Increase 921 CAUTI, Ward⁴ 0.853 0.863 No Change 0.5209 No Change 0.5639 SSI, combined SCIP procedures⁷ 0.838 0.802 Decrease 0.0040 2,118 **Decrease** 0.0002 SSI. Hip arthroplasty 0.906 0.838 Decrease 0.0266 1,239 Decrease 0.0047 SSI, Knee arthroplasty 0.890 0.774 Decrease 0.0001 1,445 0.0001 Decrease SSI, Coronary artery bypass graft8 0.791 0.710 Decrease 0.0221 533 0.0255 Decrease SSI, Cardiac surgery 0.709 0.679 No Change 0.7056 274 No Change 0.5375 SSI, Peripheral vascular bypass surgery 0.737 0.740 No Change 1.0000 86 No Change 0.7389 SSI, Abdominal aortic aneurysm repair 0.538 0.316 No Change 0.2064 144 No Change 0.0988 SSI, Colon surgery 0.791 0.796 No Change 0.8283 No Change 0.3992 1,143 SSI, Rectal surgery 0.748 0.760 No Change 0.9423 237 No Change 0.7701 SSI, Abdominal hysterectomy 0.833 0.893 No Change 0.1554 1,203 No Change 0.9778 SSI, Vaginal hysterectomy 0.904 0.893 No Change 0.9487 493 No Change 0.9462

^{1.} Continuous reporters include all facilities that reported any CLABSI or CAUTI data for any location during both 2011 and 2012 or SSI data for any of the 10 SCIP procedures during both 2011 and 2012.

^{2.} Data from all ICUs, wards (and other non-critical care locations), and NICUs. This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

^{3.} Data from all ICUs; excludes wards (and other non-critical care locations), NICUs, LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).

^{4.} Data from all wards (for this table wards also include stepdown and specialty care areas [including hematology/oncology, bone marrow transplant]). This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

^{5.} Data from all NICU locations, including Level II/III and Level III nurseries. For purposes of this report, both umbilical-line and central-line associated bloodstream infections are considered CLABSIs.

^{6.} Data from all ICUs and wards (and other non-critical care locations). This excludes NICUs, LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

^{7.} SSIs included are deep incisional or organ/space infections following select surgical procedures that were detected during the same admission as the surgical procedure

or upon readmission to the same facility. Eligible procedures and their NHSN/SCIP categories are listed in Appendix A.

8. Coronary artery bypass graft includes procedures with either chest only or chest and donor site incisions.

Table 7.	•	•	•	SIRs), 2011 compared to 2012:			
		-associated bloodstrear Il Facilities Reporting to			acilitios²		
	A A			Continuously Reporting Facilities ²			
State	2011 SIR	Significa 2012 SIR Change		No. of Continuous Reporters	p-value		
Alaska	0.794	1.109 No Change	0.1856	9 No Change	0.1847		
Alabama	0.689	0.659 No Change	0.5678	75 No Change	0.5676		
Arkansas	0.482	0.557 No Change	0.1913	47 No Change	0.1910		
Arizona	0.572	0.640 No Change	0.1717	56 No Change	0.1845		
California	0.563	0.533 Decrease	0.0468	346 Decrease	0.0483		
Colorado	0.585	0.471 Decrease	0.0311	50 Decrease	0.0272		
Connecticut	0.627	0.704 No Change	0.3009	30 No Change	0.3009		
D.C.	0.671	0.778 No Change	0.2506	8 No Change	0.2506		
Delaware	0.524	0.424 No Change	0.3368	8 No Change	0.3368		
Florida	0.541	0.554 No Change	0.5894	185 No Change	0.6806		
Georgia	0.815	0.666 Decrease	0.0003	102 Decrease	0.0003		
Hawaii	0.258	0.195 No Change	0.4401	14 No Change	0.4400		
Iowa	0.511	0.459 No Change	0.5587	40 No Change	0.5033		
Idaho	0.437	0.322 No Change	0.3617	12 No Change	0.3617		
Illinois	0.592	0.567 No Change	0.4390	144 No Change	0.4390		
Indiana	0.567	0.662 Increase	0.0221	85 Increase	0.0312		
Kansas	0.434	0.506 No Change	0.2949	41 No Change	0.3271		
Kentucky	0.728	0.893 Increase	0.0170	ľ	0.0152		
Louisiana	0.729	0.702 No Change	0.6341	73 No Change	0.6625		
Massachusetts	0.565	0.532 No Change	0.4743	*	0.4743		
Maryland	0.673	0.554 Decrease	0.0236	ľ	0.0231		
Maine	0.996	0.926 No Change	0.6618		0.6618		
Michigan	0.363	0.427 Increase	0.0322	92 Increase	0.0318		
Minnesota	0.409	0.482 No Change	0.2331	48 No Change	0.2072		
Missouri	0.469	0.459 No Change	0.8258	l	0.8258		
Mississippi	0.605	0.938 Increase	0.0000	ľ	0.0000		
Montana	0.422	0.488 No Change	0.5993		0.5993		
North Carolina	0.573	0.512 No Change	0.0791	92 No Change	0.1388		
North Dakota	0.346	0.368 No Change	0.8821	6 No Change	0.8821		
Nebraska	0.610	0.750 No Change	0.0816	l	0.0816		
New Hampshire	0.640	0.434 No Change	0.1507	24 No Change	0.0810		
New Jersey	0.695	0.711 No Change	0.7811	l	0.7811		
New Mexico	0.695	0.711 No Change	0.7811	72 No Change	0.7611		
		· ·		30 No Change			
Nevada New York	0.728	0.600 Decrease 0.639 Decrease	0.0125	23 Decrease 174 Decrease	0.0125		
	0.825		0.0000		0.0000		
Ohio	0.476	0.439 No Change	0.1895	l	0.0674		
Oklahoma	0.509	0.483 No Change	0.6417	l	0.6417		
Oregon	0.384	0.390 No Change	0.9359	*	0.9359		
Pennsylvania	0.483	0.490 No Change	0.7035	l	0.7183		
Puerto Rico	1.434	1.035 Decrease	0.0024		0.0024		
Rhode Island	0.710	0.639 No Change	0.6306	l	0.6306		
South Carolina	0.708	0.622 Decrease	0.0408		0.0440		
South Dakota	0.417	0.275 No Change	0.1580	l	0.1580		
Tennessee	0.698	0.569 Decrease	0.0005		0.0006		
Texas	0.559	0.555 No Change	0.8665	l	0.8496		
Utah	0.675	0.646 No Change	0.7844	l	0.7838		
Virginia	0.699	0.576 Decrease	0.0058		0.0059		
Vermont	0.246	0.249 No Change	1.0000	_ -	1.0000		
Washington	0.500	0.570 No Change	0.2012	l	0.2008		
Wisconsin	0.569	0.448 Decrease	0.0101		0.0101		
West Virginia	0.450	0.391 No Change	0.3318	38 No Change	0.3316		
Wyoming	0.291	0.163 No Change	0.6651	*	0.6670		
AII US	0.591	0.563 Decrease	0.0000	3401 Decrease	0.0000		

^{1.} Data from all ICUs, wards (and other non-critical care locations), and NICUs. This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

^{2.} Continuous reporters include all facilities with at least one location that reported any data for CLABSI during both 2011 and 2012.

Appendix A. List of procedures included in the Surgical Care Improvement Project (SCIP) and equivalent NHSN procedures, along with risk factors used in NHSN risk adjustment

SCIP Procedure	NHSN Procedure	Validated Parameters for Risk Model				
Vascular*	Abdominal aortic aneurysm repair	duration of procedure, wound class				
	Peripheral vascular bypass surgery	age, ASA, duration of procedure, medical school affiliation				
Coronary artery bypass graft	Coronary artery bypass graft with both chest and donor site incisions; Coronary artery bypass graft with chest incision only	age, ASA, duration of procedure, gender, medical school affiliation, age gender (interaction)				
Other cardiac	Cardiac surgery	age, duration of procedure, emergency				
Colon surgery	Colon surgery	age, ASA, duration, endoscope, medical school affiliation, hospital bed size, wound class				
	Rectal surgery	duration of procedure, gender, hospital bed size				
Hip arthroplasty	Hip arthroplasty	total/partial/revision, age, anesthesia, ASA, duration of procedure, medical school affiliation, hospital bed size, trauma				
Abdominal hysterectomy	Abdominal hysterectomy	age, ASA, duration of procedure, hospital bed size				
Knee arthroplasty	Knee arthroplasty	age, ASA, duration of procedure, gender, medical school affiliation, hospital bed size, trauma, revision				
Vaginal hysterectomy	Vaginal hysterectomy	age, duration of procedure, medical school affiliation				

^{*}This report does not include the carotid endarterectomy NHSN procedure category, which is included in the SCIP Vascular category.