

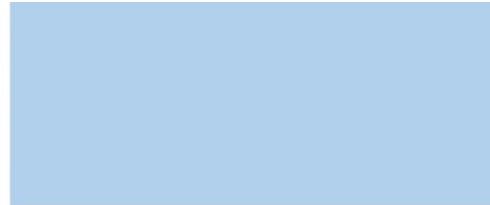


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# ABCD System

## Healthcare-Associated Infection (HAI) Catheter- Associated Urinary Tract Infection (CAUTI) Data Feedback Report Q1 2015 – Q3 2015



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*Data for this report was pulled November 24, 2015 from the National Healthcare Safety Network (NHSN).*



**Table 1: CCN Crosswalk**

OrgID	CCN	Org Name
A	XXXXXX	AAAA
B	XXXXXX	BBBB
C	XXXXXX	CCCC
D	XXXXXX	DDDD

#### How the Cumulative Attributable Difference (CAD) is calculated:

For CAUTI:<sup>1</sup>

##### *Hospital-Level CAD*

$$\begin{aligned}
 &= \text{Observed Infections ICU} - (\text{Expected Infections ICU} * \text{SIR threshold}) \\
 &+ \text{Observed Infections Ward} - (\text{Expected Infections Ward} * \text{SIR threshold})
 \end{aligned}$$

How to interpret and use the CAD:

The CAD is the number of infections that need to be prevented in order to reach a targeted SIR threshold.

- A **positive** CAD indicates the number of infection above the targeted SIR threshold. This indicates areas for improvement.
- A **negative** CAD indicates the number of infection below the targeted SIR threshold.

The CAD can be used to identify and rank hospitals with an excess number of infections.

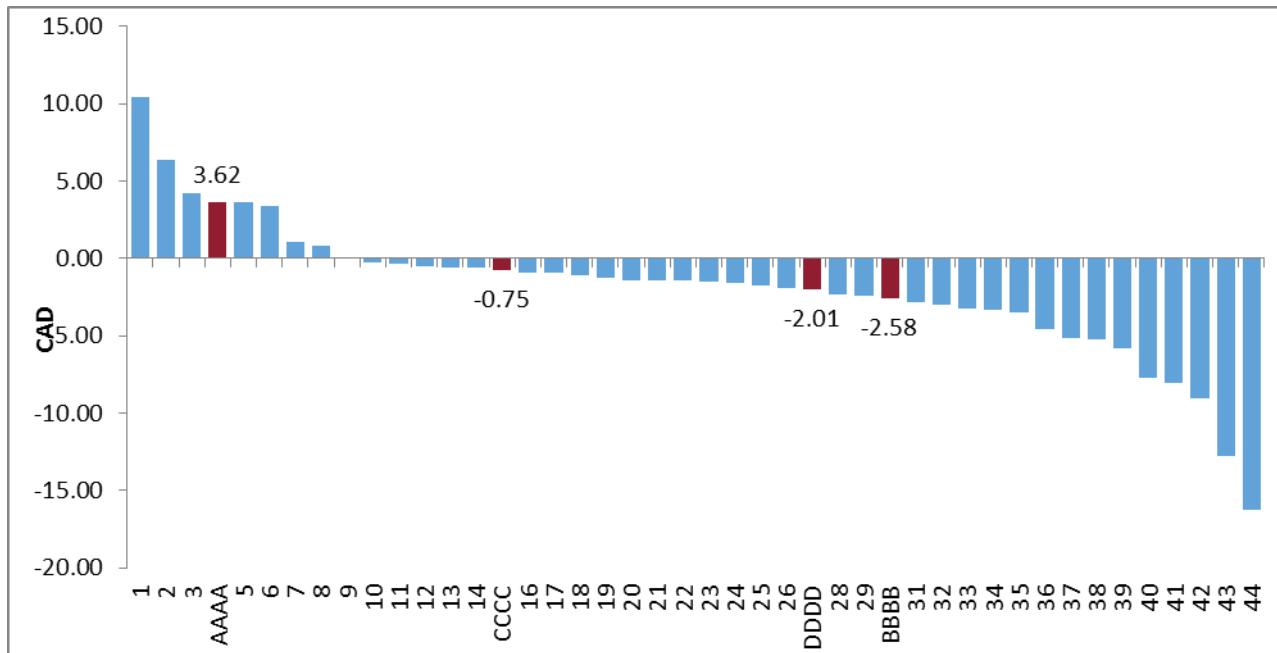
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<sup>1</sup> The SIR threshold used for CAUTI was 0.750.

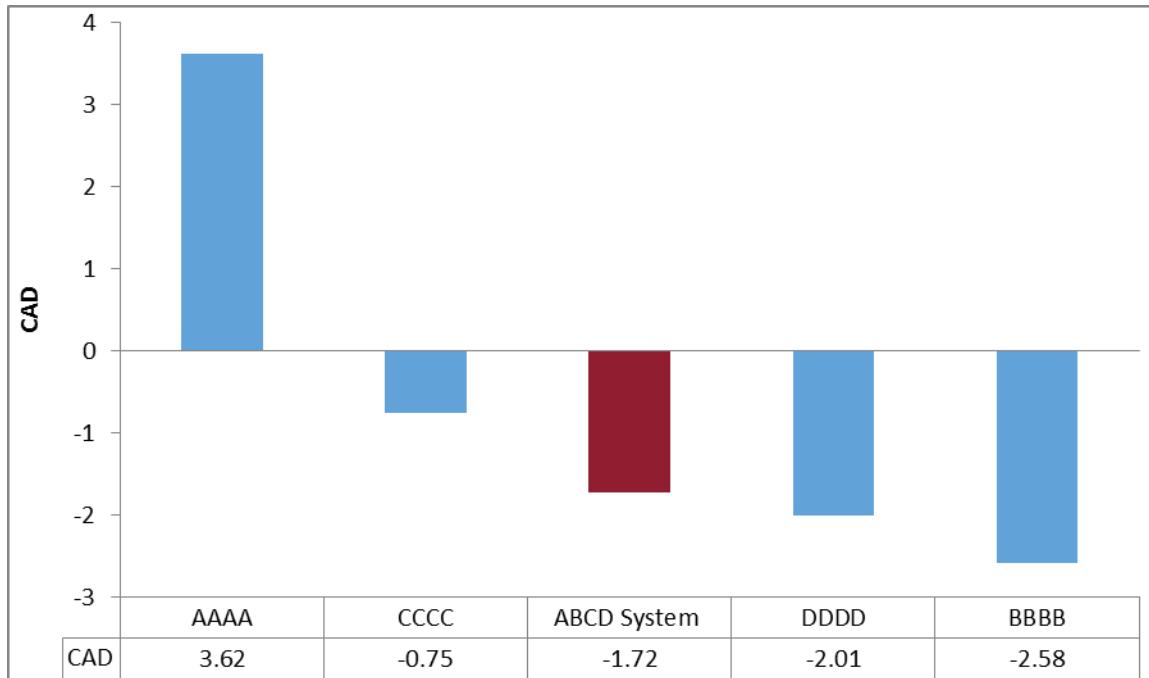


## CAUTI

**Figure 1: Rank Ordered Hospital-level CAUTI CAD Compared to Hospitals in the HAI Project**



**Figure 2: Rank Ordered Hospital-level CAUTI CAD Compared to the System**




**Table 2: Ranked Ordered Hospital-Level CAUTI CAD Data**

Name	FAC CAD	Unit	Location Type	Expected Infections	Observed Infections	SIR <sup>2</sup>	Catheter Days	Patient Days	Device Utilization Ratio <sup>3</sup>		CAD	Number of Pathogens (CNS,YS,SA,ES,KS,EC) <sup>4</sup> <sup>5</sup>
									Facility	Pooled Mean <sup>6</sup>		
AAAA	3.62	1	CC:N	5.65	7	1.24	1,488	3,124	48	0.69	2.76	7 ( 4, 0, 0, 1, 0, 1)
		2	WARD:S	1.07	3	2.81	594	7,228	8	0.22	2.20	3 ( 0, 0, 1, 0, 0, 1)
		3	CC:C	2.33	3	1.29	1,164	2,025	57	0.52	1.25	4 ( 1, 0, 0, 2, 0, 0)
		4	STEP	1.27	2	1.58	667	3,533	19	0.24	1.05	2 ( 0, 0, 1, 0, 0, 1)
		5	STEP	0.28	1	NA	148	709	21	0.24	0.79	1 ( 0, 0, 0, 0, 0, 1)
		6	CC:MS	0.35	1	NA	151	266	57	0.65	0.74	1 ( 0, 0, 1, 0, 0, 0)
		7	STEP	0.67	1	NA	351	3,557	10	0.24	0.50	1 ( 0, 0, 0, 0, 1, 0)
		8	WARD:ORT	0.69	1	NA	431	3,591	12	0.24	0.48	1 ( 1, 0, 0, 0, 0, 0)
		9	CC:CT	2.19	2	0.91	1,287	1,792	72	0.65	0.36	2 ( 2, 0, 0, 0, 0, 0)
		10	WARD:REHAB	0.90	1	NA	236	6,163	4	0.08	0.33	1 ( 1, 0, 0, 0, 0, 0)
		11	WARD:N	1.11	1	0.90	357	7,242	5	0.17	0.17	2 ( 0, 0, 1, 0, 0, 0)
		12	WARD:VS	1.18	1	0.85	368	3,772	10	0.16	0.12	1 ( 0, 0, 0, 0, 0, 0)
		13	WARD:M	1.19	1	0.84	627	9,360	7	0.15	0.11	1 ( 0, 0, 0, 0, 0, 0)
		14	WARD:S	1.39	1	0.72	772	6,973	11	0.22	-0.04	1 ( 0, 0, 1, 0, 0, 0)
		15	STEP	0.08	0	NA	41	438	9	0.24	-0.06	NA
		16	WARD:N	0.07	0	NA	24	894	3	0.17	-0.06	NA
		17	WARD:VS	0.10	0	NA	32	499	6	0.16	-0.08	NA
		18	STEP	0.17	0	NA	91	563	16	0.24	-0.13	NA
		19	WARD:ORT	1.61	1	0.62	1,006	5,538	18	0.24	-0.21	1 ( 0, 0, 0, 0, 0, 0)
		20	WARD:ONC_H ONC	0.50	0	NA	210	7,059	3	0.14	-0.38	NA
		21	WARD:S	1.87	1	0.54	1,038	7,526	14	0.22	-0.40	2 ( 0, 0, 0, 1, 1, 0)
		22	CC:N	0.94	0	.	247	409	60	0.69	-0.70	NA
		23	CC:T	1.04	0	0.00	305	361	84	0.75	-0.78	NA
		24	STEP	2.62	1	0.38	1,380	6,614	21	0.24	-0.97	1 ( 0, 0, 0, 1, 0, 0)
		25	CC:T	5.50	3	0.55	1,618	2,445	66	0.75	-1.13	3 ( 1, 0, 0, 1, 1, 0)
		26	CC:MS	3.08	0	0.00	1,341	2,499	54	0.65	-2.31	NA
CCCC	-0.75	1	CC:MS	1.11	2	1.80	854	1,523	56	0.54	1.17	2 ( 0, 0, 0, 1, 1, 0)
		2	WARD:MS	0.46	0	NA	288	6,230	5	0.17	-0.35	NA
		3	WARD:S	0.51	0	NA	286	2,843	10	0.22	-0.39	NA
		4	STEP	1.58	0	0.00	833	8,475	10	0.24	-1.19	NA
DDDD	-2.01	1	CC:MS	0.74	1	NA	568	2,355	24	0.54	0.45	1 ( 0, 0, 0, 1, 0, 0)
		2	WARD:M	0.26	0	NA	138	5,063	3	0.15	-0.20	NA
		3	WARD:MS	0.29	0	NA	184	5,632	3	0.17	-0.22	NA
		4	WARD:M	0.41	0	NA	214	6,912	3	0.15	-0.30	NA

<sup>2</sup> If a hospital had an expected value less than 1, an SIR cannot be calculated. This is indicated by not applicable (NA) in the table.

<sup>3</sup> The Device Utilization Ratio (DUR) is the total number of catheter days/total patient days for the unit.

<sup>4</sup> (CNS,YS,SA,ES,KS,EC) = number of CNS, Yeast (both candida and non-candida species), Staph aureus, Enterococcus species, K. pneumoniae/K. oxytoca, E. coli.

<sup>5</sup> If a hospital had zero observed infections for the time period, no pathogens can be identified. This is indicated by not applicable (NA) in the table.

<sup>6</sup> Device utilization pooled means for NICUs are broken out by birth weight, so they are not reported here. Device utilization pooled means for ONCs are broken out by permanent and temporary central line usage, so they are not reported here. This is indicated by not applicable (NA) in the table.



Name	FAC CAD	Unit	Location Type	Expected Infections	Observed Infections	SIR <sup>2</sup>	Catheter Days	Patient Days	Device Utilization Ratio <sup>3</sup>		CAD	Number of Pathogens (CNS,YS,SA,ES,KS,EC) <sup>4</sup> <sup>5</sup>
									Facility	Pooled Mean <sup>6</sup>		
		5	WARD:S	1.06	0	0.00	591	9,749	6	0.22	-0.80	NA
		6	STEP	1.24	0	0.00	654	6,420	10	0.24	-0.93	NA
BBBB	-2.58	1	WARD:ONC_H ONC_PED	0.07	1	NA	19	3,229	1	0.03	0.95	2 ( 0, 0, 1, 0, 0, 1)
		2	WARD:MS_PED	0.01	0	NA	4	3,300	0	0.05	0.00	NA
		3	WARD:M	0.03	0	NA	14	7,375	0	0.15	-0.02	NA
		4	WARD:MS_PED	0.04	0	NA	31	4,402	1	0.05	-0.03	NA
		5	WARD:PP	0.04	0	NA	47	7,085	1	0.13	-0.03	NA
		6	WARD:MS	1.62	1	0.62	1,011	5,533	18	0.17	-0.21	1 ( 1, 0, 0, 0, 0, 0)
		7	CC:CT_PED	0.46	0	NA	170	2,607	7	0.21	-0.34	NA
		8	CC:MS	0.53	0	NA	232	612	38	0.65	-0.40	NA
		9	CC:MS_PED	0.76	0	NA	270	2,481	11	0.21	-0.57	NA
		10	WARD:PP	1.24	0	0.00	1,554	6,223	25	0.13	-0.93	NA
		11	WARD:PP	1.31	0	0.00	1,643	6,194	27	0.13	-0.99	NA