2010 Report on Healthcare Associated Infections in Pennsylvania

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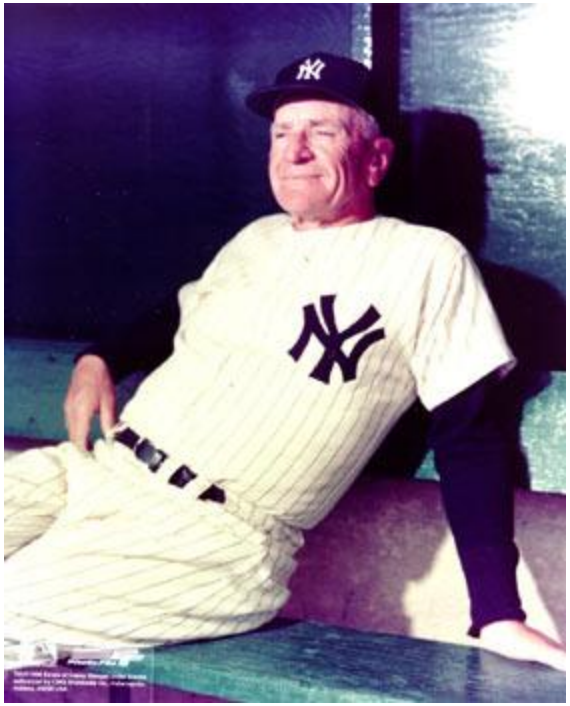
"The secret to successful managing is to keep the five guys who don't like you away from the four guys who haven't made up their mind."



Casey Stengel

Topics

- 2010 HAI Report
- Addition of Surgical Procedure for Benchmarking
- Identification of Hospitals not Meeting Benchmarks

Act 52 Requirements

- Publish report on patterns of HAIs in PA
- Annually
- Overall trends in HAIs
- Compare hospitals
  - Change over time
  - To other similar hospitals
- Compare PA to the rest of the country

HAI Reports

- This is the 3rd publicly released report
- 2008: last half of the year
- 2009 : establishes the baseline
- 2010: first report to allow assessment of trends

- Intent is to publish annual reports in early summer
- Delayed due to clearance

HAI Report - Overall

	2009	2010	Change
No. of Hospitals	250	251	
No. of HAIs	25,914	23,601	-9.1%
No. of Patient Days	10,920,596	10,289,079	-5.8%
HAI Rate (per 1,000 patient days)	2.37	2.29	-3.4%
HAIs Prevented	-	**784**	

HAI Rates (per 1,000 patient days)
(Categories with >100 reported HAIs)

	2009	2010	% Change
Surgical Site	0.57	0.60	**+5.3%**
Urinary Tract	0.56	0.54	-3.6
Gastrointestinal	0.44	0.40	-9.1
Bloodstream	0.30	0.25	-16.7
Pneumonia	0.26	0.25	-3.8
Skin/Soft Tissue	0.07	0.08	+14.3
Lower Respiratory	0.08	0.08	0
Eye, Ear, Nose, Throat	0.06	0.06	0

Catheter Associated UTIs

	2009	2010	Change
No. of Hospitals with Catheter Use	227	229	
CAUTIs	3,935	3,245	-17.5%
Catheter Days	1,995,114	1,894,709	-5.0%
Device Utilization Ratio	0.20	0.18	-10.0%
Rate per 1,000 CDs	1.97	1.71	-13.2%
No. Prevented		488	
No. (%) Hospitals SIR Sig. Better	44 (19.4%)	36 (15.7%)	-19.1%
No. (%) Hospitals SIR Sig. Worse	32 (14.1%)	22 (9.6%)	-31.9%

Central Line Associated BSIs

	2009	2010	Change
No. of Hospitals with Central Line Days	219	219	
CLABSIs	2,175	1,606	-26.2%
Central Line Days	1,763,902	1,732,994	-1.8%
Device Utilization Ratio	0.16	0.17	+6.3%
Rate per 1,000 CLDs	1.23	0.93	-24.4%
No. Prevented		525	
No. (%) Sign. Better (ICU-Ward)	22 (10.0%)	10 (4.6%)	-54.5%
No. (%) Sign. Worse (ICU-Ward)	19 (8.7%)	14 (6.4%)	-26.3%

Surgical Site Infections 2009

Procedure Type	# of Hospitals	# of Hospitals with SSI	% with 0 SSI at Baseline	# of Procedures	# of SSIs	Rate per 100 procedures
Cardiac	64	29 (45%)	55%	7,046	83	1.18
CBGB	61	54 (89%)	11%	11,129	276	2.48
CBGC	57	17 (30%)	70%	2,063	27	1.31
Hip Pro	152	91 (60%)	40%	21,871	304	1.39
Knee Pro	151	96 (64%)	36%	38,006	355	0.93
Abd Hyst	145	81 (56%)	44%	14,064	224	1.59
Total	**166**	**136**		**94,179**	**1,269**	**1.35**

Surgical Site Infections 2009

Procedure Type	# of Hospitals	#(%) Significantly Better Than Predicted	#(%) Significantly Worse Than Predicted
Cardiac	64	0	3
CBGB	61	5 (9.7%)	5 (9.7%)
CBGC	57	0	3 (5.3%)
Hip Pro	152	1 (0.7%)	4 (2.6%)
Knee Pro	151	2 (1.3%)	7 (4.6%)
Abd Hyst	145	1 (0.7%)	7 (4.8%)
Total	**166***	**8* (4.8%)**	**26* (15.7%)**

*Same hospital can appear in multiple categories

Risk Adjustment

- CLABSI & CAUTI
  - Indirect risk adjustment
  - DUR, location, med school affiliation, bed size
  - DUR & med school affiliation used in final model
- SSI
  - Risk index (ASA score, duration, wound class)
  - Age also assessed
  - Table 25 shows rates by risk index
  - In some categories, penalizes hospitals with higher risk patients

CMS IPPS (Current and Proposed Requirements)

HAI Event	*Facility Type*	*Start Date*
CLABSI	Acute Care Hospitals Adult, Pediatric, and Neonatal ICUs	January 2011
CAUTI	Acute Care Hospitals Adult and Pediatric ICUs	January 2012
SSI	Acute Care Hospitals Colon and abdominal hysterectomy procedures	January 2012
CAUTI	Inpatient Rehabilitation Facilities	October 2012
CLABSI (proposed)	Long Term Care Hospitals	October 2012
CAUTI (proposed)	Long Term Care Hospitals	October 2012
MRSA Bacteremia	Acute Care Hospitals Facility-wide	January 2013
C. difficile LabID Event	Acute Care Hospitals Facility-wide	January 2013
HCW Influenza Vaccination	Acute Care Hospitals, OP Surgery, ASCs	January 2013
SSI (proposed)	Outpatient Surgery/ASCs	January 2014

Healthcare Facility HAI Reporting to CMS via NHSN (Current and Proposed Requirements)

HAI Event	Facility Type	Start Date
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Knee Pro	151	96	38,006	355	0.93
Abd Hyst	145	81	14,064	224	1.59
Colon	174*	121	14,039*	797	***5.68***

*Data from PHC4

Colon Surgery

- PADOH proposed to HAI advisory committee to add colon surgery as benchmark condition
  - Add as 7th surgical benchmark
  - Add colon and remove one of the others
    - Overall number stays at 6 benchmarked SSIs
- Final recommendation
  - Add colon
  - Information used by hospitals
  - CMS likely to expand list of SSIs

Act 52 Provision

- Section 408: Duties of the Department of Health
  - (8) The development, in consultation with the authority and the council, of reasonable benchmarks to measure the progress health care facilities make toward reducing health care-associated infections. Beginning in 2010, all health care facilities shall be measured against these benchmarks.

Act 52 Provision (continued)

- Section 408 (8)
  - A health care facility with a rate of healthcare associated infections that does not meet the benchmark appropriate to that type of facility shall be required to submit a plan of correction to the department within 60 days of receiving notification that the rate does not meet the benchmark……

SIRs for 2010

Category	10%	25%	50%	75%	90%
CAUTI	0.00	0.36	0.79	1.40	2.41
CLABSI					
ICU-Ward	0.00	0.00	0.55	1.28	1.85
NICU	0.00	0.00	0.34	1.15	2.65
SCA	0.00	0.37	1.14	1.60	2.22
LTAC	0.24	0.49	0.74	1.26	1.93

Hospitals not meeting benchmarks

- Those hospitals above the 90th percentile
- For both SIR and Rate
- In both 2009 & 2010
- Hospitals to be notified by the end of the calendar year

Ongoing issues

- Measuring small hospitals difficult
- Large hospitals have greater tendency to be significantly better or worse
- Separate psych & drug/alcohol rehab facilities?
- How to measure hospitals with no
  - Urinary catheters
  - Central lines
  - Surgery
- Other major HAI categories
  - e.g VAP

Questions

- Should there be other analyses?
- Should we include rates?
  - Note for small hospitals rates over time are very misleading
- Alternative display models
- Regional data?

Four Rules of Life:
1. Show Up 2. Pay attention 3. Tell the truth
4. Don't be upset at the results

Dr. Joan Borysenko

If you focus on results, you will never change.
If you focus on change, you will get results.

Jack Dixon