

PA Department of Health Healthcare Associated Infections Program

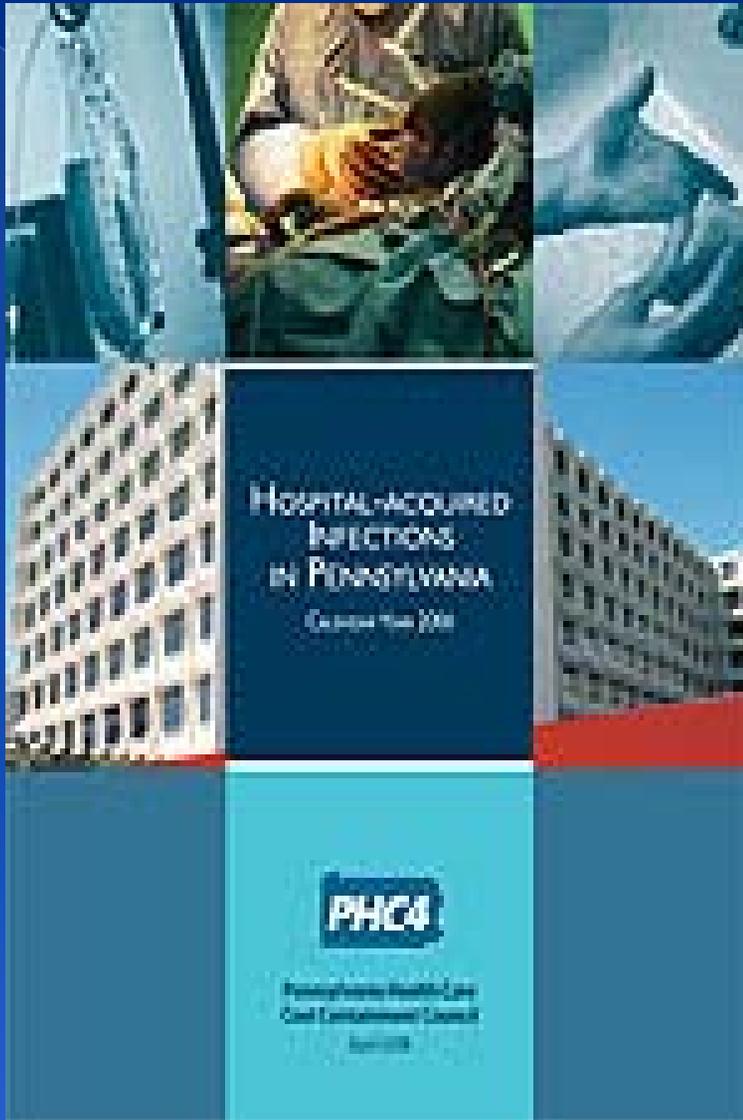
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Office of the Assistant Secretary for Health
Office of Healthcare Quality

www.hhs.gov/ash/initiatives/hai/
www.hhs.gov/ash/ohq/



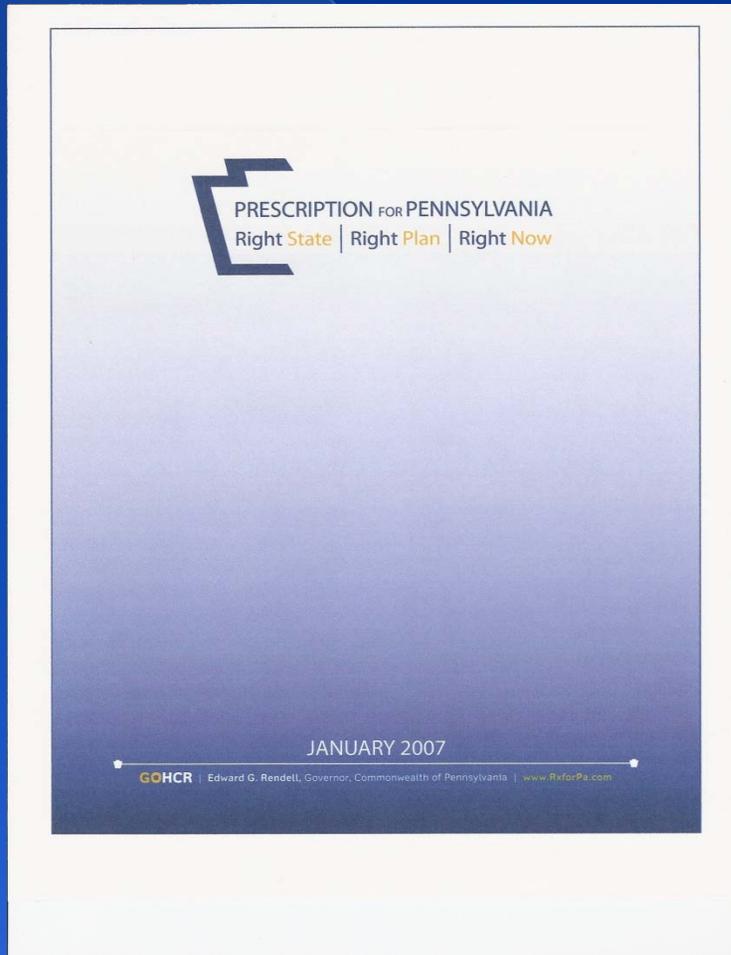


2006 Report
30,237 Hospitalizations
with an HAI
3,084 deaths (10%)
\$4.3 billion in costs



Rx for Pennsylvania – January 2007

Governor's Office of Healthcare Reform



Quality Component:

- Hospitals implement procedures to eliminate virtually all HAIs:
initial focus:
MRSA, SSI, VAP, CLABSI
- Fund regional best practice training
Eliminate incentives for paying added costs of HAIs
- Reporting of HAIs from long term care facilities
- Nursing facilities to report HAIs



Act 52 (Aug 2007)

(Implementing Legislation of Rx for PA)

- Facility-wide reporting of in-patient HAIs
 - › Hospitals (250) to report using NHSN*
 - › Begin 180 days post-enactment (Feb 14, 2008)
 - › Data available to PADOH, Patient Safety Authority, and PHC4
 - › Date & system for nursing homes (722) unspecified
- MDRO Screening
- HAI Advisory Committee
- Establish and monitor benchmarks
- PADOH to produce annual report:
 - › Assess trends by hospital
 - › Compare hospitals
 - › Compare PA to national data

*only 33 using at time of enactment



HAI Advisory Panel

- Solicited nominations
- Authority Board confirmed 15 members-September 2007
- Long-term care subcommittee
- Panel has addressed:
 - › Hospital reporting requirements
 - › Nursing home reporting requirements & criteria
 - › Nursing home reporting mechanism
 - › Hospital HAI rate setting
 - › Hospital Benchmarking
 - › Nursing Home Benchmarking



PADOH HAI Program Staff

- ◉ In 2007, 28-30 positions authorized within two offices:
- ◉ HAIAR (*Healthcare-Associated Infections & Antimicrobial Resistance*)
 - Section in Bureau of Epidemiology
 - Responsible for rate analysis of HAI data & report generation
 - ARRA funding & ACA funding
- ◉ HAIP (*Healthcare-Associated Infection Prevention*)
 - Section in the Office of Quality Assurance
 - Responsible for enforcement of Act 52
 - NHSN Help for PA facilities



PA DOH HAI Program Staff

In 2011, 16 positions remain

HAIP

- Director
- 1 Supervisors
- 4 Data Analysts
- 5 Nurse Service Consultants
- 1 Clerical

HAIAR

- Physician
- 2 Epidemiologists
- 1 EPI Research Associate
- (1 CSTE fellow)



PA DOH HAIP Role

- Act 52 Enforcement
 - Internal data validation - *more*
 - HAIP audits/site visits
 - Compliance with infection control plan
 - Verify use of correct definitions of HAIs
 - Review HAI reporting
 - Surveillance processes



Data Validation

- The Data Integrity & Validation (DIV) report is released quarterly by HAIP.
- The DIV addresses both definite errors and questionable data.
 - Feedback to Hospitals on adequacy of reported data that could affect rate analysis.
 - Gives hospitals a chance to ensure accurate data is used to calculate SIRs & State Rates.



Data Validation

- Data Integrity & Validation (DIV) Report

The report addresses 5 areas of NHSN data:

1. Events
2. Device Associated Denominator Data
3. Procedure Records
4. Orphan Records (benchmarked events lacking denominator data)
5. Missing Data in NHSN for one or more months



Benchmark Conditions

- Central Line Associated Bloodstream Infections - housewide
- Catheter Associated Urinary Tract Infections - housewide
- Surgical Site Infections
 - › Cardiac procedures
 - › CBGB & CBGC
 - › Hip prosthesis
 - › Knee prosthesis
 - › Abdominal hysterectomy



HAIs in PA 2008-2010 Overall

	<u>2008[^]</u>	<u>2009</u>	<u>2010</u>
Total HAIs	13,771	25,914	23,601
Patient days	4.85 m	10.92 m	10.29 m
Rate/1,000 pt days	2.84	2.49*/2.37	2.29
Percent reduction	-	12.5%*	3.4%
No. prevented		3,695	784

[^] 6 months

*adjusted rate



HAIs in PA 2008-2010

CAUTI & CLABSI

	<u>2008[^]</u>	<u>2009</u>	<u>2010</u>
Total CAUTI	2,357	3,935	3,245
Rate/1k device days	2.30	1.97	1.71
Percent reduction	-	14.3%	13.2%
No. prevented		654	488/1,113
Total CLABSI	1,356	2,175	1,606
Rate/1k device days	1.59	1.23	0.93
Percent reduction	-	22.6%	24.4%
No. prevented		630	525/1,149

[^] 6 months



HAIs in PA



Surgical Site Infections 2008-2009

Procedure	SSIs 2008	SSIs 2009	# Proc 2008	# Proc 2009	Rate 2008	Rate 2009	% Change
CARD	33	83	3,206	7,046	1.03	1.18	+14.6
CBGC	16	27	789	2,063	2.03	1.31	-35.5
CBGB	130	276	5,397	11,129	2.41	2.48	+2.9
HPRO	143	304	10,331	21,871	1.38	1.39	+0.7
KPRO	163	355	17,688	38,006	0.92	0.93	+1.0
Abd Hyst	123	224	7,229	14,064	1.70	1.59	-6.5
Total	608	1,269	44,640	94,179	1.36	1.35	-1.1



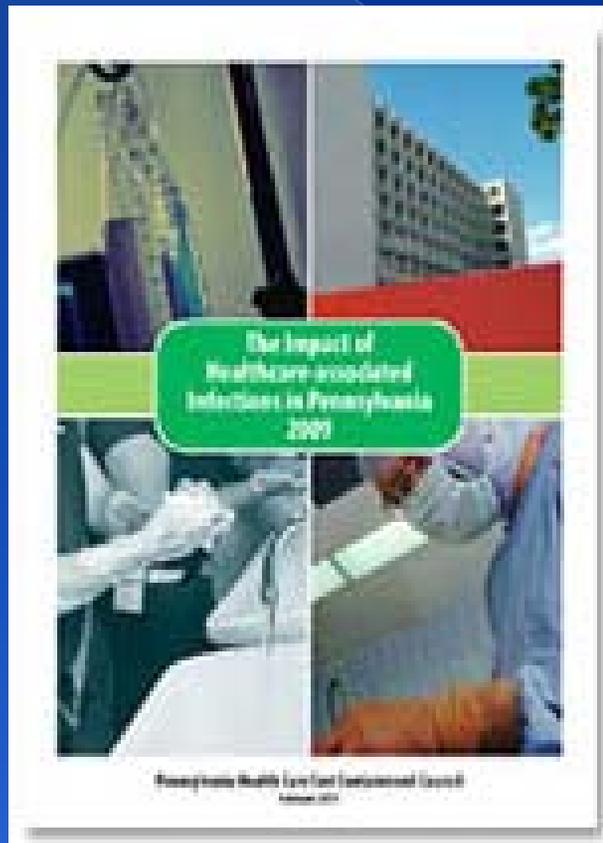
HAI Analysis in PA

Inter-hospital Comparisons

- Use of risk adjusted SIRs for benchmarks
- CAUTI & CLABSI risk adjustment
 - > Med school affiliation & DUR
- SSI risk adjustment
 - > Risk index



PHC4 HAI Report 2009 Released Feb 2011



- Used NHSN and Hospital Discharge Data
- Assessed
 - › Costs
 - › Mortality
 - › Length of stay
 - › Readmissions



Prevention Collaboratives

- ARRA Funded
 - › *C. difficile* in SE PA
 - › Surgical site infections in SW PA
- CUSP through hospital association
- New effort for flu vaccination as condition of employment



Issues

- ◉ Measuring small hospitals & non-acute care hospitals
- ◉ Long term care facility data analysis
- ◉ Identifying poorly performing hospitals
- ◉ Harmonization with CMS IPPS measures
- ◉ Erosion of federal and state resources



Thanks & Appreciation to:

- Patient Safety Authority & PHC4
- CDC & HHS
- Personnel in HAIP and HAIAR
- HAI Advisory Committee
- Infection Preventionists throughout Pennsylvania

