

PREVENTION COLLABORATIVES IN CONTEXT OF PUBLIC REPORTING

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Program Goals and Objectives

- ◆ Develop and implement meaningful and useful HAI reporting system for the Public, Hospital, and Department
- ◆ The ultimate goal is the prevention of the HAI indicators selected
- ◆ The system will be used to evaluate potential interventions, risk factors, and risk adjustment strategies for those factors that are not amenable to change
- ◆ The NYSDOH will support regional research efforts in the area of infection prevention and control
- ◆ The HAI reporting system will be used to evaluate impact of quality initiatives

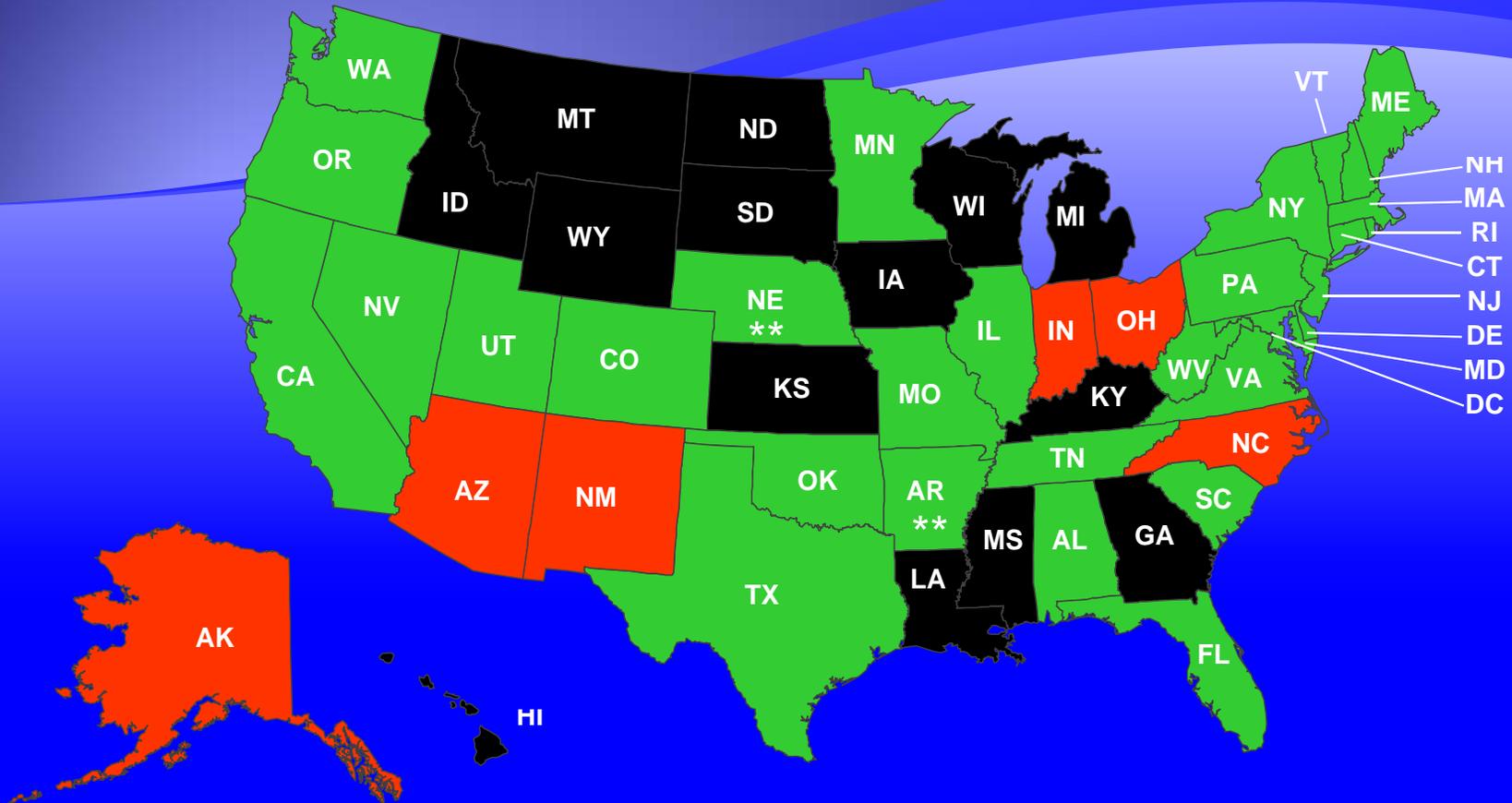
Selection of the Reporting System - National Healthcare Safety Network

- ◆ Standard definitions
- ◆ Standard surveillance methods
- ◆ Standardized risk adjustment
- ◆ Standard protocols
- ◆ National benchmarks/comparison data

Benefits of NHSN

- ◆ Hospitals can use for array patient and employee infection-related indicators
- ◆ Limits NYSDOH access to information specifically granted by facility
- ◆ Hospital sees exactly what DOH sees
- ◆ Bi-directional flow of information is a priority
- ◆ Benefit to facilities in networks
 - ◆ Group functionality can be used for multiple purposes
 - ◆ National system so more likely to be adopted by neighboring states if legislation is passed elsewhere

HAI Reporting Laws and Regulations



Changes in definition beginning January 1, 2008

- ◆ CDC eliminated “r.b.” criteria – single positive culture for a normal skin contaminant – with or without treatment
- ◆ NYSDOH eliminated Clinical Sepsis
- ◆ NYSDOH developed custom field to eliminate events when multiple blood cultures obtained but only one positive (pathogen) but not treated

Comparison of Central Line Associated Blood Stream Infection (CLABSI) Rates by ICU Type and by Criteria, New York State, 2008

ICU Type	All Reported CLABSI			CLABSI by New Criteria ¹		
	# CLABSI	# Central Line Days	Rate	# CLABSI	# Central Line Days	Rate
Coronary	111	50,858	2.2	111	50,858	2.2
Cardiothoracic Surgical	109	73,679	1.5	106	73,679	1.4
Medical	245	87,785	2.8	239	87,785	2.7
Medical Surgical (Major Teaching)	117	48,030	2.4	113	48,030	2.4
Medical Surgical (All Other)	359	174,178	2.1	354	174,178	2.0
Surgical	220	75,544	2.9	211	75,544	2.8
Neurological	42	17,577	2.4	40	17,577	2.3
Pediatric	103	29,698	3.5	101	29,698	3.4

Data reported as of April 8, 2009.

¹ Excludes untreated events with single contaminated specimen.

Comparison of Central Line Associated Blood Stream Infection (CLABSI) in Level III/RPC Neonatal Intensive Care Units (NICU) by Birth Weight Category and by Criteria, New York State, 2008

Birth Weight Category	All Reported CLABSI			CLABSIs by New Criteria ¹		
	# CLABSI	# Central Line Days	Rate	# CLABSI	# Central Line Days	Rate
<750g	52	13,157	3.9	51	13,157	3.9
751-1000g	55	14,409	3.8	52	14,409	3.6
1001-1500g	24	12,990	1.8	24	12,990	1.8
1501-2500g	20	8,297	2.4	20	8,297	2.4
2501g <	15	6,764	2.2	15	6,764	2.2
Total	166	55,617	3.0	162	55,617	2.9

Data reported as of April 8, 2009.

¹ Excludes clinical sepsis and untreated events with single contaminated specimen.

Transparency Barriers & Excuses

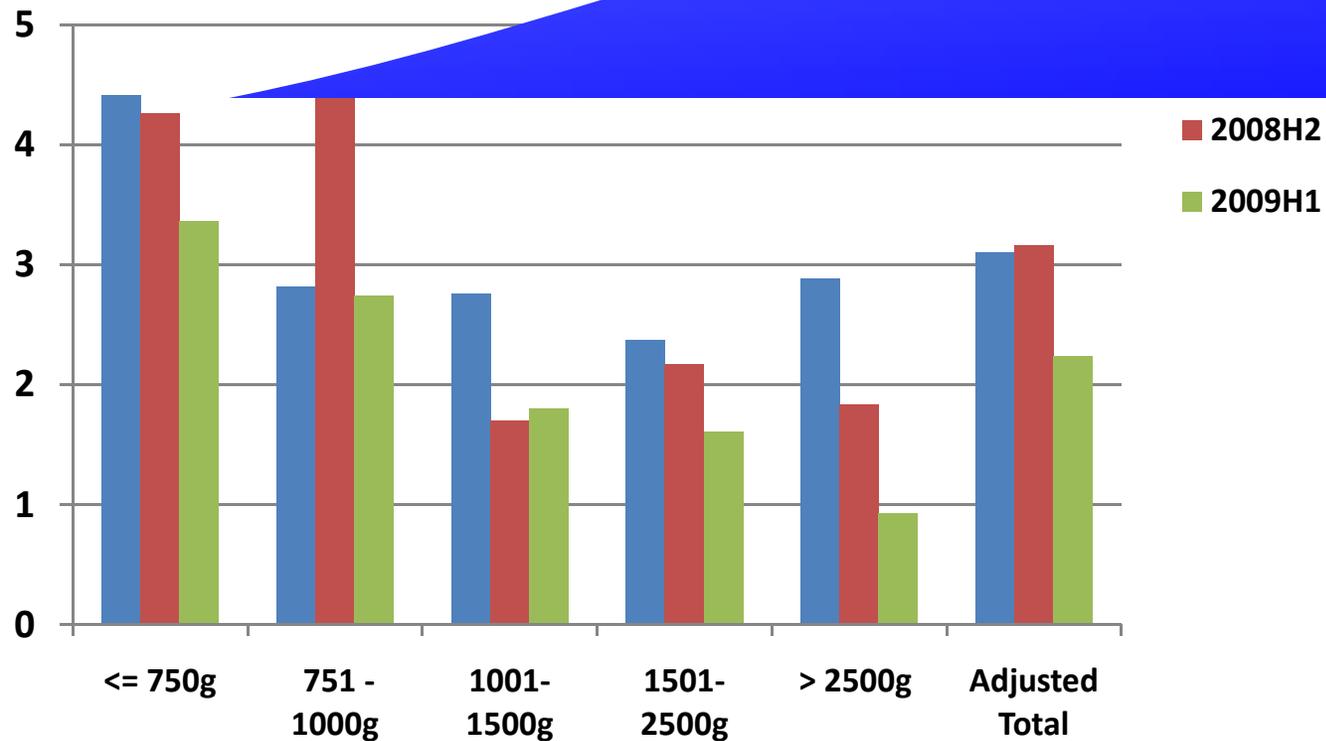
- **Typical excuses I have used and have heard used:**
 - The data is wrong - inconsistent definitions
 - Our patients are sicker (old severity of illness argument)
 - Our hospital is busier than yours
 - Our patient population is different than yours
 - Your data makes our unit look bad !
 - My CEO, CFO, hospital attorney say I can't share data
 - It can't be true I am in a world famous medical center

Richard Brill, MD; National Children's Hospital,
NACHRI Co-Chair PICU Collaborative

On-Site Audit Objectives

- ◆ Ensure reliability and consistency of surveillance definitions and methods
- ◆ Evaluate current risk adjustment methods and improve, if necessary
- ◆ Evaluate intervention strategies designed to reduce or eliminate specific infections
- ◆ Provide on-site education on the definitions, surveillance mechanisms and use of the NHSN

Time Trend in RPC NICU CLABSI by Six Month Interval and Birthweight Group



Birthweight	First Half 2008		Second Half 2008		First Half 2009	
	CLABSI/CLdays	Rate	CLABSI/CLdays	Rate	CLABSI/CLdays	Rate
750g or less	23/5204	4.4	22/5158	4.3	20/5955	3.4
751 - 1000g	14/4962	2.8	28/6208	4.5*H	14/5095	2.7
1001-1500g	14/5070	2.8	8/4715	1.7	10/5538	1.8
1501-2500g	8/3370	2.4	7/3219	2.2	6/3721	1.6
2501g or more	8/2776	2.9	6/3274	1.8	3/3210	0.9*L
Adjusted Total		3.1		3.2		2.2*L

Data as of October 5, 2009, excludes clinical sepsis and untreated events with single contaminated specimen

*H or *L and adjusted values are compared to First Half 2008

Survey - 2008

- ◆ During audits
- ◆ Survey of prevention practices conducted
- ◆ Can be used as tool to monitor compliance with prevention practices

Is central line insertion bundle used?

	Level II/III NICU (n=13)	Level III NICU (n=16)	RPC NICU (n=16)*	All
Yes	13 (100%)	14 (88%)	12 (75%)	39 (87%)
No	0 (0%)	2 (12%)	4 (25%)	6 (13%)

*Surveys were not available for 2 RPCs.

Chlorhexidine (CHG) location

	Level II/III NICU (n=13)	Level III NICU (n=16)	RPC NICU (n=16)	All
Incorporated in kit	11 (85%)	7 (44%)	7 (44%)	25 (56%)
Available in cart	0 (0%)	1 (6%)	2 (12%)	3 (7%)
Central location to assemble	0 (0%)	1 (6%)	1 (6%)	2 (4%)
Unknown	2 (15%)	7 (44%)	6 (38%)	15 (33%)

If central line insertion bundle is used,
does ICU monitor compliance with
bundle?

	Level II/III NICU (n=13)	Level III NICU (n=14)	RPC NICU (n=12)	All
Yes	10 (85%)	11 (69%)	9 (56%)	30 (67%)
No	3 (15%)	5 (31%)	7 (44%)	15 (33%)

If compliance is monitored, which elements of performance are monitored?

	Level II/III NICU (n=10)	Level III NICU (n=11)	RPC NICU (n=9)	All
Hand Hygiene	10 (100%)	11 (100%)	9 (100%)	30 (100%)
Maximal Barrier Precautions	10 (100%)	11 (100%)	9 (100%)	30 (100%)
Appropriate site selection	10 (100%)	9 (82%)	7 (78%)	26 (87%)
Daily review of line necessity	10 (92%)	8 (73%)	8 (89%)	26 (87%)

Is Chlorhexidine used for insertion of all Central Lines?

	Level II/III NICU (n=13)	Level III NICU (n=16)	RPC NICU (n=16)	All
Yes	3 (23%)	3 (19%)	1 (6%)	7 (16%)
No, excluded according to...	9 (69%)	13 (81%)	14 (88%)	36 (80%)
<i>Birth weight category</i>	<i>0 (0%)</i>	<i>1 (8%)</i>	<i>1 (7%)</i>	<i>2 (6%)</i>
<i>Gestational age</i>	<i>6 (67%)</i>	<i>6 (46%)</i>	<i>7 (50%)</i>	<i>19 (52%)</i>
<i>Other selection method</i>	<i>1 (11%)</i>	<i>6 (46%)</i>	<i>6 (43%)</i>	<i>13 (36%)</i>
<i>Do not use</i>	<i>2 (22%)</i>	<i>0 (0%)</i>	<i>0 (0%)</i>	<i>2 (6%)</i>
Unknown	1 (8%)	0 (0%)	1 (6%)	2 (4%)

Is central line maintenance bundle used?

	Level II/III NICU (n=13)	Level III NICU (n=16)	RPC NICU (n=16)	All
Yes	8 (62%)	10 (62%)	8 (50%)	26 (58%)
No	5 (38%)	6 (38%)	7 (44%)	18 (40%)
Other	0 (0%)	0 (0%)	1 (6%)	1 (2%)

Use of antimicrobial dressing?

	Level II/III NICU (n=13)	Level III NICU (n=16)	RPC NICU (n=16)	All
All patients	7 (54%)	4 (25%)	4 (25%)	15 (33%)
Select patients	2 (15%)	3 (19%)	2 (12%)	7 (16%)
Not used	3 (23%)	9 (56%)	10 (63%)	22 (49%)
Unable to determine	1 (8%)	0 (0%)	0 (0%)	1 (2%)

If yes, which antimicrobial dressings are used?

	Level II/III NICU (n=9)	Level III NICU (n=7)	RPC NICU (n=6)	All
BioPatch	9 (70%)	6 (38%)	6 (38%)	21 (47%)
Sage	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other Brand	0 (0%)	1 (6%)	0 (0%)	1 (2%)

Team Effort

- ◆ Carole Van Antwerpen
- ◆ Valerie Haley
- ◆ Boldt Tserenpuntag
- ◆ Jessica Nadeau
- ◆ Cindi Coluccio
- ◆ Trish Lewis
- ◆ Kijaifa Burr
- ◆ Kate Gase
- ◆ Marie Tsivitis
- ◆ Vic Tucci
- ◆ Diana Doughty
- ◆ Peggy Hazamy
- ◆ Participating hospitals