Effective Clinical Benchmarking and Infection Control

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Why Benchmark?

- Method to gather information
- Continuous QA/PI
- Identify opportunities for improvement
- Remain transparent
- Prepare for potential future CMS regulations
- Allows ASC's to show they are on par with national data
- Part of Accreditation
- Trends

"Sometimes you don't know what you don't know" Cindy Coleman

Where to Benchmark

- ASC Associations Outcomes Monitoring Project
- ASC Quality Collaboration
- Independent Companies
  - Patient satisfaction
  - Financial
  - Efficiency
  - Quality

Data Collection Methods

- Retroactively
  - Incomplete or inaccurate data
  - Increase staff time
- Daily and Active
  - Current
  - Reliable data
  - Data collected quickly

What to Benchmark?

- Quality
  - Post-op phone calls
  - Cancellations
  - Normothermia
  - Unexpected complications
  - Transfers
  - Patient falls, patient burn, surgical hair removal
  - Wrong site, side, patient, procedure, implant

What to Benchmark?

- Efficiency
  - OR turnover
  - OR utilization
  - On time start
- Financial
  - Claim denials
  - Op report complete <30 days
- Patient Satisfaction
- Infection Control

Why is there a need to benchmark infections?

Facts about Healthcare Associated Infections (HAI)

- 2 million/year

- Claims 100,000 lives per year
- Deadly and costly-extra $30,000/pt
- Healthy patients now with life-long disease

Center for Disease Control

Medical Infections

Infections kill more Americans each year than:

Car accidents

AIDS

Breast Cancer

Where Do You Start?

Risk Assessment

- Failure of Prevention Activities
- Basic Infection Prevention
- Policy & Procedure
- Exposure Plans
- Healthcare associated infections
- Employee Health
- Environment
- Antimicrobial Stewardship

Risk Assessment

Program Components	Probability					Risk/Impact (health, financial legal, regulatory)					Current Systems					Score
	Expect it	Likely	Maybe	Rare	Never	Loss of life/limb/ function	Temp. loss of function	Inpatient care needed	Moderate clinical/ financial	Minimal clinical/ financial	None	Poor	Fair	Good	Solid	
	4	3	2	1	0	5	4	3	2	1	5	4	3	2	1	
Failure of Prevention Activities																
Lack of hand hygiene																
Lack of staff education																
Lack of patient education																
Basic Infection Prevention																
Lack of standard precautions/PPE																
Lack of high level disinfection practices																
Lack of sterilization practices																
Failure to separate clean from dirty																
Failure to safe injection practices																

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	4	3	2	1	0	5	4	3	2	1	5	4	3	2	1	
Policy and Procedure																
Lack of current P&P																
Failure to follow established policy or procedure																
Exposure Plans																
Lack of B/BF exposure control plan																
Risk of exposure to TB																
Lack of emergency preparedness plan (exposure to infectious agents or diseases)																
Healthcare-associated infections																
Lack of surveillance process																
Sentinel Events																

Risk Assessment

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	4	3	2	1	0	5	4	3	2	1	5	4	3	2	1	
Employee Health																
Lack of staff immunization																
Risk of needlestick/sharps injury																
Environment																
Lack of acceptable environmental cleanliness																
Lack of sterilization monitoring																
Antimicrobial stewardship																
Lack of useful antibiotic																
Lack of antimicrobial use guidelines																
Lack of monitoring program																
Lack of feedback regarding antibiotic stewardship																

The Infection control (IC) Risk assessment grid is a visual to develop the IC program priorities and stratify risks.

The IC risk assessment is an ongoing, continual process. A more-focused review is done on an annual basis after reviewing the quarterly reports with the Safety Committee

Benchmarking in Infection Control

- Antibiotic Timeliness
- Hand Washing
- Staff Training (CMS requirement)
- Environmental Cleaning
  - Walls, furniture, door handles, telephones, toys
  - Magazines, computers
  - A/C intake & autoclave rooms
- Terminal cleaning of the OR
- OR/SPD temp & humidity levels

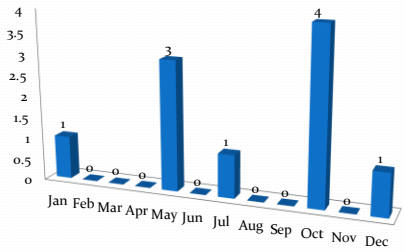
Benchmarking in Infection Control

- Sterile Processing
  - Flashing (Immediate Use)
  - Reasons for flashing
  - Documentation
- All actual infections and near miss infections
  - Learn from near misses
  - Procedure
  - Surgeon
  - Prep
  - Antibiotics received
  - SPD method

Data Collection for Infections

Date	Procedure	Surgeon	Prep	OR #	Personnel	Antibiotics y/n n/a	Pt previous infections
2/2/2011	Lap Chole	Green	Chlorprep	2	Kim, Cheryl	yes	no
5/14/2011	Diagnostic Lap	Black	Chlorprep	3	Melissa, Julie	no	no
6/2/2011	Knee Arthroscopy	Blue	Chlorprep	3	Kim, Cheryl	no	no
7/6/2011	Shoulder Arthroscopy	White	Chlorprep	3	Melissa, Kristin	no	no
8/2/2011	Lap Chole	Green	Chlorprep	2	Melissa, Kim	no	no

Infection Tracking



Cancellations Monitor

Day of Surgery Cancellations	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	YTD
Medical Condition													
Physician Responsibility													
Patient Responsibility													

Post op Phone Call

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Next Day									
# pts	268	294	329	293	278	313	253		
# reached	237	255	285	254	244	278	215		
% reached	88%	87%	87%	87%	88%	89%	85%		
30 days									
# pts	297	267	294	324	282	278	313		
# reached	211	182	210	255	190	202	213		
% reached	71%	68%	71%	79%	67%	73%	68%		
1 yr									
# pts	63	57	63	64	57	79	50		
# reached	38	35	34	38	28	47	36		
% reached	60%	61%	54%	59%	49%	59%	72%		

1st Q	
# pts	891
# reached	777
next day	87%
30 days	70%
1 year	59%

2nd Q	
# pts	884
# reached	776
next day	88%
30 days	72%
1 year	56%

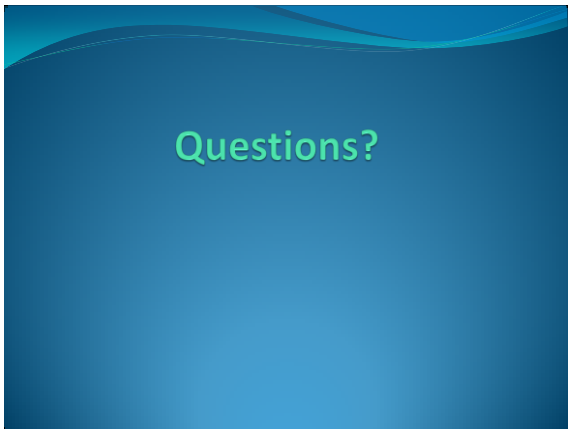
3rd Q	
# pts	253
# reached	215
next day	28%
30 days	23%
1 year	24%

Outcomes Monitoring

PATIENT NAME	BRIEF DESCRIPTION	PROCEDURE	SURGEON	DETAILED DESCRIPTION	OUTCOME	AGE	PREOP DIAGNOSIS	ANESTHESIA TYPE	DATE OF ARRIVAL	DATE OF DISCHARGE
	PAVC pain	D&C suction, paracervical block		PACU Stay: 8:58 am - 12:13 am, aar=2 * agb 9-7/36-5 HCT.	Given percocet to relieve pain. Discharged from ER to home & asked to follow up with Dr. Morrison	18	Missed abortion	General	1/5/2011	1/5/2011
	Bleeding	Tonsillectomy		Uneventful PACU stay 0805 - 0945. ER unit 6 days post-op. Vomiting blood		3	Hypertrophy tonsils & adenoids	General	1/31/2011	2/6/2011
	Sleep apnea. Temp 100. Dehydration.	Tonsillectomy		PACU 8:32 - 10:08. 10:30 juice well tolerated.	Given IV fluids & D/C home.	3	Tonsillar & adenoidal hypertrophy. Sleep apnea.	General	2/21/2011	2/22/2011
	Can't Void	RUSI		PACU 10:07 - 12:06. Voided 12:02 w/out difficulty.		48	Chronic sinusitis, deviated septum, hypertrophied turbinates	General	2/22/2011	2/22/2011
	Flank pain & CP	Fulal ligation		PACU 11:30 - 12:30 Pain level upon d/c "1". No issues noted.	D/C home	28	Undesired fertility	General	3/1/2011	2/7/2011
	Bleeding	Tonsillectomy		PSC - PACU 10:37-11:48.	Returned to surgery at WRMC	20	Hypertrophy tonsils	General	3/1/2011	3/10/2011
	PAVC pain, Bleeding	suction D&C		PACU Stay 10:10 - 11:25. Pain level "2" upon discharge. Labs okay.	D/C home & asked to F/U w/ Dr. Hoats 3/2/11	33	Missed abortion	General	3/11/2011	3/16/2011

How will you benefit from this

- Patient safety
- Determine trends with follow up
- Find solution to a problem
- Assist with accreditation
- Financial


Questions?