Infection Control and Ambulatory Surgery Centers

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Objectives

- Understand the purpose of a risk assessment
- Describe the process of creating a risk assessment
- Define properties of a risk assessment

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Disclosure

- Nothing to disclose

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Risk Assessment

- What?
- Why?
- When?
- How?

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Risk Assessment

- "…a systematic examination of a task, job or process that you carry out at work for the purpose of identifying significant hazards, the risk of someone being harmed and deciding what further control measures you must take to reduce risk to an acceptable level."

* Dictionary.com

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What?

- Identify risks and hazards
- Identify process failure
- Identify effects of breakdown or failure
- Prioritize risks and hazards
- In a perfect world, proactive

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Why?

- Required by AHJ
- CMS has granted AAAHC, TJC, AAAASF, IMQ and HFAP the authority to determine if ASCs are in compliant with Medicare CFC
- Provide safest care possible
- Bottom line - $$$

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Hepatitis-C Outbreak Nevada 2007-2008

- Endoscopy clinic
- 8 patients with clinic acquired HCV
- Transmission from contaminated single use vial used on multiple patients
- 63,000 patient exposures and notifications
- Estimated cost of outbreak $16 million - $21 million

http://www.southernnevadahealthdistrict.org/download/outbreaks/final-hepc-investigation-report.pdfck to add text

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Setting	Year Investigated	Pathogen(s)	Infection(s)	Patient Notification Performed (# notified)	Infection Control Breaches
Primary Care Clinic	2009	Staphylococcus aureus	Joint Infection	No	1) Mishandling of multi-dose vials used for >1 patient (e.g., handling in the immediate patient treatment area and failure to store according to manufacturer instructions)2) Inadequate hand hygiene 3) Incorrect cleaning and disinfection of medical equipment

IDSA. Methicillin-susceptible *Staphylococcus aureus* Infections After Intra-Articular Injections at a Primary Care Clinic

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Setting	Year Investigated	Pathogen(s)	Infection(s)	Patient Notification Performed (# notified)	Infection Control Breaches
Multiple Gastroenterology Clinics	2007	Hepatitis C Virus, Hepatitis B Virus	Hepatitis	Yes (4,490)	1) Syringe reuse (i.e., double dipping)†2) Contents from single-dose vials used for >1 patient

Gutelius B, Perz JF, Parker MM, et al. Multiple Clusters of Hepatitis Virus Infections Associated with Anesthesia for Outpatient Endoscopy Procedures. Gastroenterology 2010;139(1):163-170.

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Setting	Year Investigated	Pathogen(s)	Infection(s)	Patient Notification Performed (# notified)	Infection Control Breaches
Outpatient Pain Clinic	2009	Staphylococcus aureus	Bloodstream Infection Meningitis Epidural/Presacral Abscess	Yes (110)	1) Syringe reuse (i.e., double dipping)†2) Contents from single-dose vials used for >1 patient 3) Healthcare providers did not wear facemasks when performing spinal injection procedures

Radcliffe R, Meites E, Briscoe J et al. Severe methicillin-susceptible *Staphylococcus aureus* infections associated with epidural injections at an outpatient pain clinic. AJIC 2011; Jul 20

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When?

- As part of the paperwork necessary to open ASC
- To establish goals
- When breach occurs
- Annually

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How?

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Identify Risks and Rank Them

- AAAHC standard – risk assessment becomes the basis for infection control program
- TJC requires written infection control plan based on the risk assessment

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CMS 416.51
Condition for Coverage

- The ASC must maintain an infection control program that seeks to minimize infections and communicable diseases

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ASC Infection Control Program

- Based on nationally recognized guidelines
- Be directed by designated HWC with IP training
- Part of the Quality Improvement program
- Be ongoing
- Include actions to prevent, identify and manage infections and communicable diseases

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Risk Assessment

- Fluid document
- Based on patient population
- Geographic location
- Socioeconomic factors
- Community conditions

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Risk Assessment

- Basically four answers
  - What can go wrong?
  - How bad?
  - How often?
  - Is there a need for action?

* National Patient Safety Agency; March 2007

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Risk Assessment

- Team project – members affected by the process
- Clearly define the process
- Limit the scope
- Changes and recommendations must be addressed

* infectioncontroltoday.com/risk-management/two-new-aahc-institute-tools-help-protect-patients-avoid-risk

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Risk Assessment

- Not all subjects apply to all facilities
- Using a "tool" can be very helpful
- Many organizations and websites have tools
- Follow the same logic

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Program Components	Probability of Performance-Failure				Impact (Clinical/Financial/Resources)			Infection Prevention Systems				Score	Goal
Potential Risks/Problems	High	Med	Low	Never	High	Moderate	Minimal	Poor	Fair	Good	Excellent	≥7	
	3	2	1	0	3	2	1	3	2	1	0		
Mandatory (no opting out) Local, State and Federal Regulation (add 7 to all items in this column)													
Procedures HAI's													
Surgical Site Infections													
SSI-Ortho Join Replacement													
SSI-plastic surgery													
SSI-ophthalmology													
SSI-													
SSI-													
SSI-													

Premiersafetyinstitute.org

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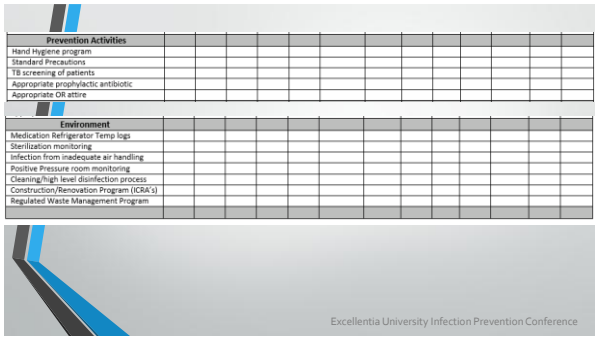

Prevention Activities													
Hand Hygiene program													
Standard Precautions													
TB screening of patients													
Appropriate prophylactic antibiotic													
Appropriate OR attire													
Environment													
Medication Refrigerator Temp logs													
Sterilization monitoring													
Infection from inadequate air handling													
Positive Pressure room monitoring													
Cleaning/high level disinfection process													
Construction/Renovation Program (ICRA's)													
Regulated Waste Management Program													

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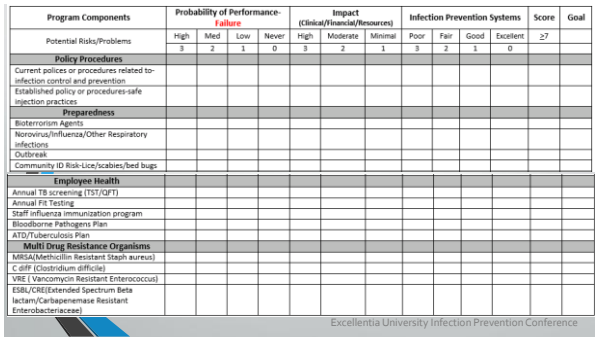

Program Components	Probability of Performance-Failure				Impact (Clinical/Financial/Resources)			Infection Prevention Systems				Score	Goal
Potential Risks/Problems	High	Med	Low	Never	High	Moderate	Minimal	Poor	Fair	Good	Excellent	>7	
	3	2	1	0	3	2	1	3	2	1	0		
Policy Procedures													
Current polices or procedures related to-infection control and prevention													
Established policy or procedures-safe injection practices													
Preparedness													
Bioterrorism Agents													
Norovirus/Influenza/Other Respiratory Infections													
Outbreak													
Community ID Risk-Lice/scabies/bed bugs													
Employee Health													
Annual TB screening (TST/QFT)													
Annual Fit Testing													
Staff influenza immunization program													
Bloodborne Pathogens Plan													
ATD/Tuberculosis Plan													
Multi Drug Resistance Organisms													
MRSA(Methicillin Resistant Staph aureus)													
C diff (Clostridium difficile)													
VRE (Vancomycin Resistant Enterococcus)													
ESBL/CRE(Extended Spectrum Beta lactam/Carbapenemase Resistant Enterobacteriaceae)													

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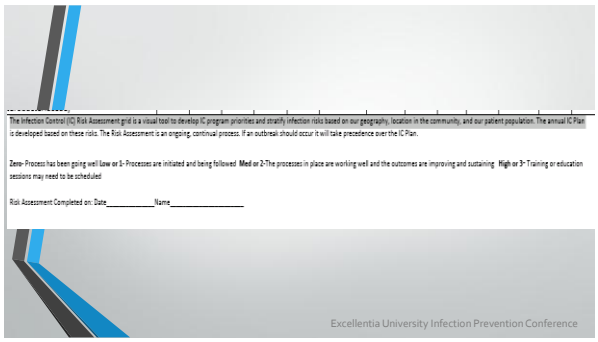

The Infection Control (IC) Risk Assessment grid is a visual tool to develop IC program priorities and stratify infection risks based on our geography, location in the community, and our patient population. The annual IC Plan is developed based on these risks. The Risk Assessment is an ongoing, continual process. If an outbreak should occur it will take precedence over the IC Plan.

Zero- Process has been going well Low or 1- Processes are initiated and being followed Med or 2-The processes in place are working well and the outcomes are improving and sustaining High or 3- Training or education sessions may need to be scheduled

Risk Assessment Completed on: Date_____Name_____

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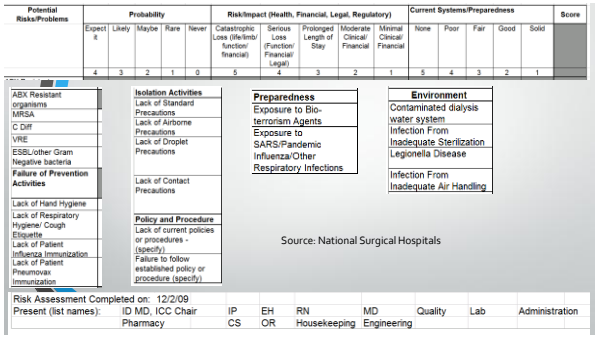

Potential Risks/Problems	Probability					Risk/Impact (Health, Financial, Legal, Regulatory)					Current Systems/Preparedness					Score
	Expect it	Likely	Maybe	Rare	Never	Catastrophic Loss (life/limb/ function/ financial)	Serious Loss (Function/ Financial/ Legal)	Prolonged Length of Stay	Moderate Clinical/ Financial	Minimal Clinical/ Financial	None	Poor	Fair	Good	Solid	
	4	3	2	1	0	5	4	3	2	1	5	4	3	2	1	

ABX Resistant organisms	Isolation Activities	Preparedness	Environment	
MRSA	Lack of Standard Precautions	Exposure to Bio-terrorism Agents	Contaminated dialysis water system	
C Diff	Lack of Airborne Precautions	Exposure to SARS/Pandemic Influenza/Other Respiratory Infections	Infection From Inadequate Sterilization	
VRE	Lack of Droplet Precautions		Legionella Disease	
ESBL/other Gram Negative bacteria				
Failure of Prevention Activities	Lack of Contact Precautions		Infection From Inadequate Air Handling	
Lack of Hand Hygiene				
Lack of Respiratory Hygiene/ Cough Etiquette	**Policy and Procedure**			
Lack of Patient Influenza Immunization	Lack of current policies or procedures - (specify)			
Lack of Patient Pneumovax immunization	Failure to follow established policy or procedure (specify)			

Source: National Surgical Hospitals

Risk Assessment Completed on: 12/2/09								
Present (list names):	ID MD, ICC Chair	IP	EH	RN	MD	Quality	Lab	Administration
	Pharmacy	CS	OR	Housekeeping	Engineering			

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Risk Assessment Completed

- IP Program developed
- Working towards completing goals
- Something happens

Excellentia University Infection Prevention Conference

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Event	Probability of Occurrence (1=High 2=Moderate 3=Low)	Severity of Infection (majority of cases) (1=Catastrophic, 2= Critical 3=Marginal, 4= Low 5=Negligible)	Ability to Detect Infection (1=Poor 2=Fair 3=Good)	Control Measures (1=Poor 2=Fair 3=Good)	New Risk Priority Number	Monitoring Frequency	Comments
Hand hygiene breaches	3	3	2	3	11	Monthly	
Contact Precaution Breaches	3	2	3	3	11	Monthly	
*Heater-Cooler associated SSI	1	4	2	2	9	Monthly, As necessary	
Total hip and knee replacement SSI	2	4	1	2	9	Weekly	
CABG SSI	3	4	1	2	10	Weekly	
Sharps Injuries/ BBP Exp.	3	2	2	3	10	Monthly	
Spinal Fusion SSI (Neuro)	3	4	1	2	10	Weekly	
Construction breaches	3	3	2	1	9	Weekly	
HLD Sterilization	2	3	2	2	9	Monthly	
Hysterectomy SSI	2	3	1	3	9	Monthly	
Craniotomy SSI	1	4	3	1	9	Weekly	
Spinal Fusion SSI (Ortho)	1	4	1	2	8	Weekly	
Colon SSI	2	3	1	2	8	Weekly	
CRE and other emerging MDROs	2	3	1	2	8	As necessary	Include KPC and NDM1

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Prioritize and Develop Goals

Team Goals 11.2.18

Transmission based precautions:

- Interest in expanding observations to floor staff and ancillary services, trial

Education:

- OR education per POD- IP standard education, collaborate with POD educators
- Increase involvement with RNFA group, share SSI data
- Consider education rounds with areas- specific topic of interest, provide education
- Did you know Q&A- education PSQ liaisons, maybe electronic dissemination
- Review OR observation tool for necessary edits

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Prioritize and Develop Goals

Hand hygiene:

- Vitrics dressing care with hand hygiene updates
- Family and visitor hand hygiene observation trial
  - Create proposal
  - Identify trial areas
  - Reconvene small HH team
  - Plan to trial by end of Q1
- Complete behavior modification placards
- HH super-users observers- help get unbiased data
- HH education blitz- similar to initial roll out

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Prioritize and Develop Goals

EVS:

- Revisit roles and responsibilities in ORs that have changed (W&I, POD 1, new areas in PVT)
  - Pre and post roles and responsibilities glow germ assessment

HLD/Reprocessing:

- HLD education on SABA
- Involve end users in pre-cleaning audits

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Prioritize and Develop Goals

SSI:

- Reduction of HYST SSI, capture process
- Incorporate pieces from COLO study (HB), normo-thermia and glucose
- Site prep- annual vendor training
- Internal IP SSI team- around

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Goals

Area/Issue	Team members	Goal	Current state	Desired state	Gaps identified	Action plan	Progress	Priority (H/M/L)
*Transmission based precautions	Jodi		• YTD housewide compliance 67%.	Improved compliance rates	• gowns not worn, or not tied			
	Lisa		Only conducted within inpatient areas	Expanded observation areas: ED, Ors, Procedural areas, Radiology	Resources to conduct observations	New IP position		
	New IP position		Only IP conducts observations	Expand observer capabilities	Small number of observers	Vendor observation platform after Hand Hygiene audits		
			One-size isolation gowns	Appropriate size gowns available for all HCW	Gowns not sized to accommodate all sizes	Trial new 2XL isolation gows		
Environmental Services	Jodi		• Roles and responsibilities incomplete in ED and several inpatient areas	Complete and roll out roles and responsibilities to all inpatient areas	Confusion exists between nursing and EVS services on cleaning roles and responsibilities	Optimize temporary nursing roles and responsibilities document for areas without EVS R&R document		
	Laken	Wet times...	Not capturing wet time compliance	Quarterly EVS reports				

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Goals

Prevention of SSI	Angie , Pam, Laken		• CAMG SSI YTD rate 4.25 COLO SSI YTD rate 4.3 HYST SSI YTD rate 1.7 TKA SSI YTD 1.1		• Data lag time from procedures coded to EPIC abstraction • Antibiotic order and administration changes post EPIC, antibiotic timing concerns • Surgical site prep routine education			
	Robert, Angie, Casey, Lisa		• Lack of denominators for non-mandatory reporting procedures (i.e. CRAN, CSEC, TKA, TURN)		• Billing system challenges post EPIC (numerator and denominator)			
					• Inconsistent attention to process owners for routine maintenance, cleaning and disinfection of			
					Unknown impact of non-reportable procedures.			
	Casey, Angie, Laken		Current tool does not capture all necessary data points.	Revised OR observation tool.				
	Trace, Robert, Angie, Casey, Laken, (Lyd- ad hoc, wandering)		IPS performoming chart reviews and sending emails to surgeons, sometimes with minimal surgeon responses	Automate post OC surveillance communications to surgeon groups	• Inconsistent surgeon response to post OC surv emails • Increased ability for IPS to conduct post OC surv in EPIC process for staffing and constructing emails (high effort/low yield)	• Small SSI team to develop standard email communication for post OC surv to appropriate surgeon groups • Robert to develop an automated process to distribute emails to respective surgeons and to IPS		

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Situational Risk Assessment

- Evaluate hazard
- Compare to standards or references
- What safeguards currently in place
- Likelihood of harm

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Situational Risk Assessment

- Department involved
- Describe potential hazard and impacted population
- List participants in risk assessment
- Any standard or reference involving the situation
- Current safeguards

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Situational Risk Assessment

- Likelihood of harm
- Conclusions
- Review/approval
- Action plan

Qualitative assessment of breach	Decision regarding patient notification and testing
☐ Category A involves a gross error or demonstrated high-risk practice, includes obvious or likely blood/body fluid exposure	Patient notification and testing is warranted
☐ Category B involves a breach with lower likelihood of blood exposure	Consider the following factors in the decision regarding patient notification and testing: • Potential risk of transmission • Public concern • Duty to warn vs. harm of notification • Quantified risk Based on above considerations the following will occur: ☐ Testing and notification ☐ Testing; notification performed as needed ☐ No testing or notification required
☐ Less than minimal risk	Patient notification and testing not required

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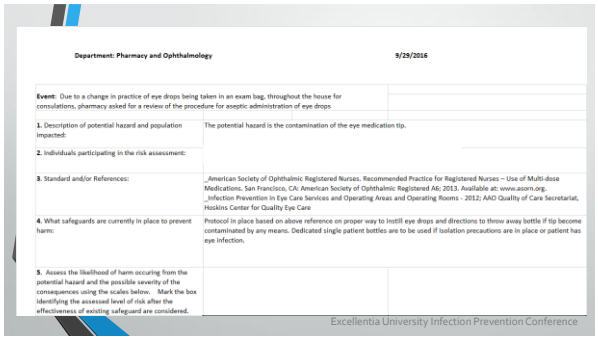

Department: Pharmacy and Ophthalmology	9/29/2016
Event: Due to a change in practice of eye drops being taken in an exam bag, throughout the house for consulations, pharmacy asked for a review of the procedure for aseptic administration of eye drops	
1. Description of potential hazard and population impacted:	The potential hazard is the contamination of the eye medication tip.
2. Individuals participating in the risk assessment:	
3. Standard and/or References:	_American Society of Ophthalmic Registered Nurses. Recommended Practice for Registered Nurses – Use of Multi-dose Medications. San Francisco, CA: American Society of Ophthalmic Registered AR; 2013. Available at: www.asorn.org. _Infection Prevention in Eye Care Services and Operating Areas and Operating Rooms - 2012; AAO Quality of Care Secretariat, Hoskins Center for Quality Eye Care
4. What safeguards are currently in place to prevent harm:	Protocol in place based on above reference on proper way to instill eye drops and directions to throw away bottle if tip become contaminated by any means. Dedicated single patient bottles are to be used if isolation precautions are in place or patient has eye infection.
5. Assess the likelihood of harm occuring from the potential hazard and the possible severity of the consequences using the scales below. Mark the box identifying the assessed level of risk after the effectiveness of existing safeguard are considered.	

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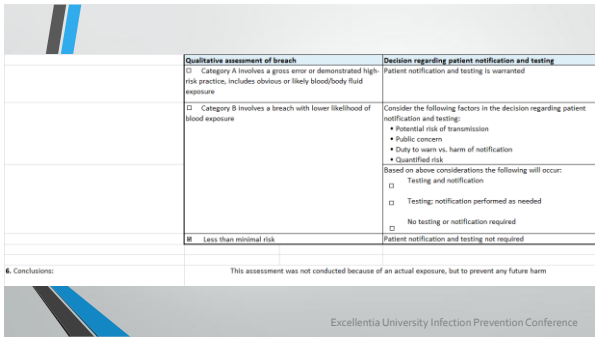

	Qualitative assessment of breach	Decision regarding patient notification and testing
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		Based on above considerations the following will occur: ☐ Testing and notification ☐ Testing; notification performed as needed ☐ No testing or notification required
	☒ Less than minimal risk	Patient notification and testing not required
6. Conclusions:	This assessment was not conducted because of an actual exposure, but to prevent any future harm	

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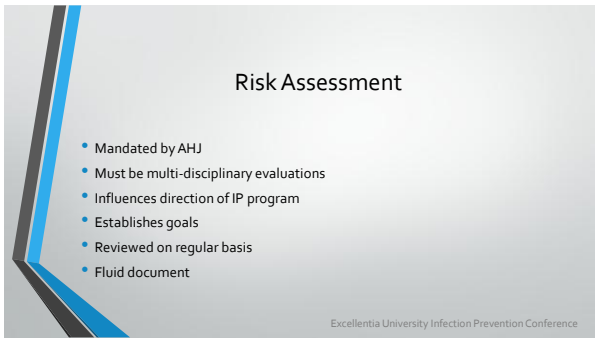

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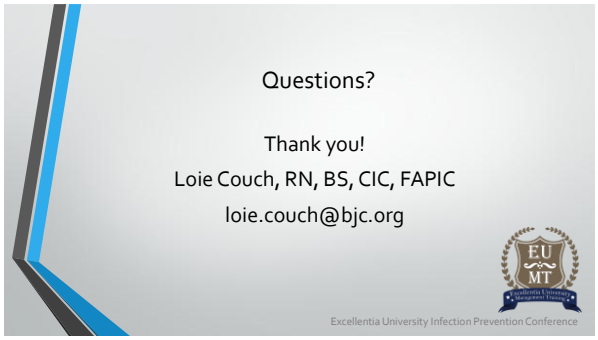
Questions?
Thank you!
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