

Education to Practice

Bridging the Gap

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Clinical Nurse Educator
Perioperative Services

- Registered Nurse at CHI St. Elizabeth for 28 years
- BSN from Mount Mercy University
- Current MSN Student with Chamberlain University
- CNOR- Certified Perioperative Nurse
- Vice President of Cornhusker Chapter of AORN
- Experience in the OR and Perioperative Education



Objectives:

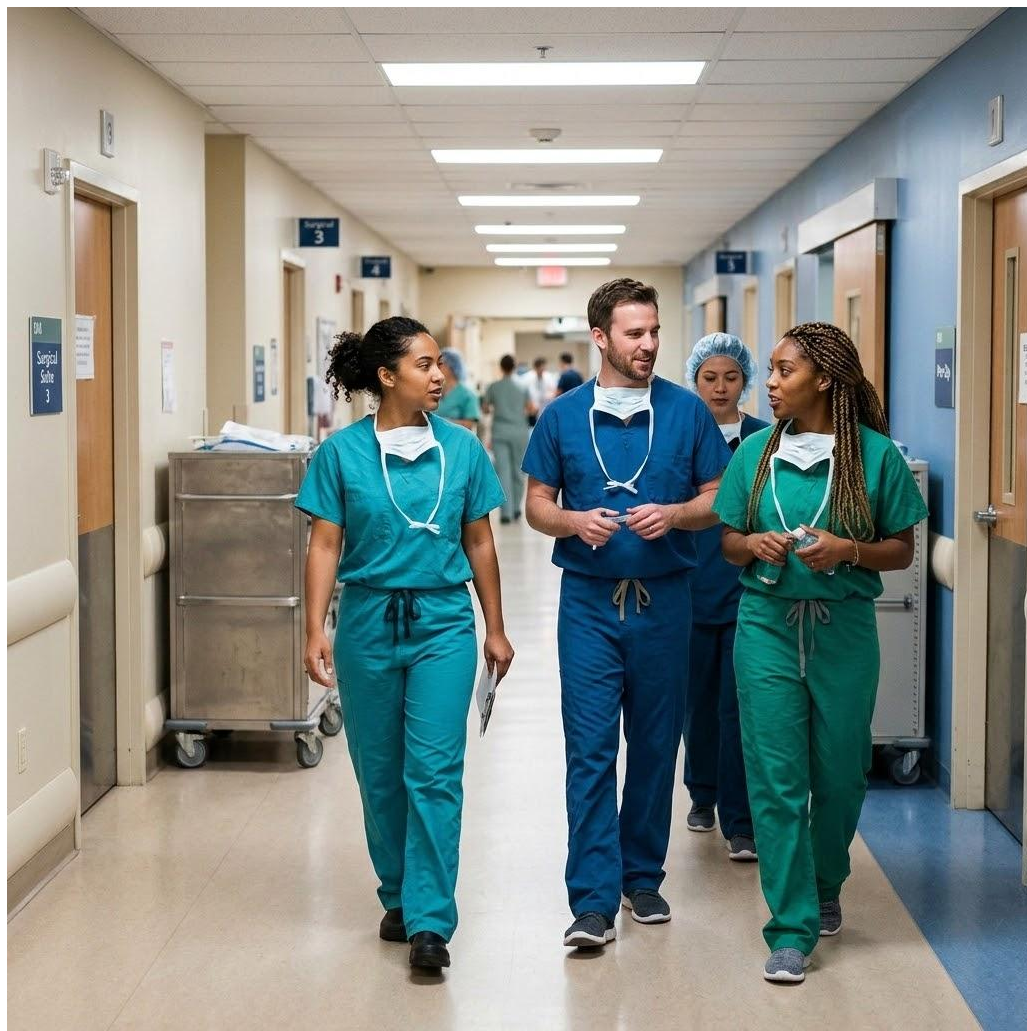
- Examine education challenges
- Explore strategies to make education more effective
- Review Evidence Based Models available for guidance
- Evaluate examples of education

EDUCATION

=

SUCCESSFUL OUTCOMES





WHY?

What caused the
process to fail?



BARRIERS

- Time
- Workflow
- Equipment
- Staffing
- Habits
- Communication



Making Education Effective:

Interactive

Job-specific

Relevant

Timely

Evidence-based

Competency-focused

Evaluated

Reinforced

**How do we ensure
Effective Education?**

Lewin's Theory

3 stages:

Unfreezing

Movement

Refreezing

Lewin's Theory

Patient Story

[South Florida mother says gauze left inside her after surgery](#)

PDSA



Kotter's 8 Steps

Create a sense of urgency: Leaders help stakeholders recognize and support the need for change

1



Form a powerful coalition: Leaders identify a core group of stakeholders as advocates to advance the change initiative

2



Create a vision for the change: Leaders and core stakeholders collaborate to create a vision for change

3



Communicate the vision for change: Leaders and core stakeholders communicate the vision within their spheres of influence to raise awareness and secure buy-in for the change

4



5



Remove obstacles to change to empower the change process: Leaders and stakeholders identify and remove barriers to change within their spheres of influence

6



Build momentum to continue the change: Leaders and stakeholders contribute to a culture where change is embraced to fulfill the vision

7



Make change stick by anchoring it to the organizational culture: Stakeholders establish a new culture that sustains the change initiative

8



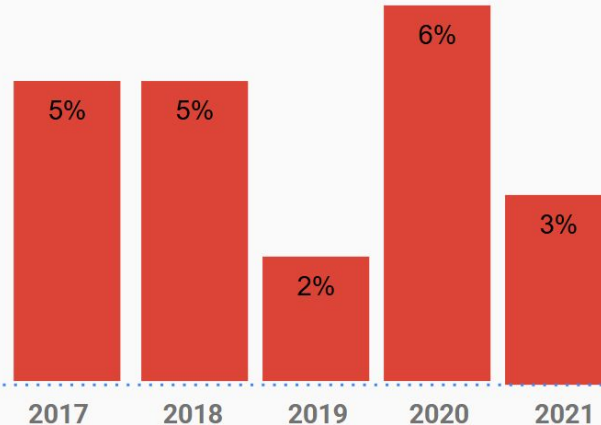
1. Create a sense of urgency:

Recognize the need for change

The problem

Percentage of colorectal SSIs in relation to colorectal cases.

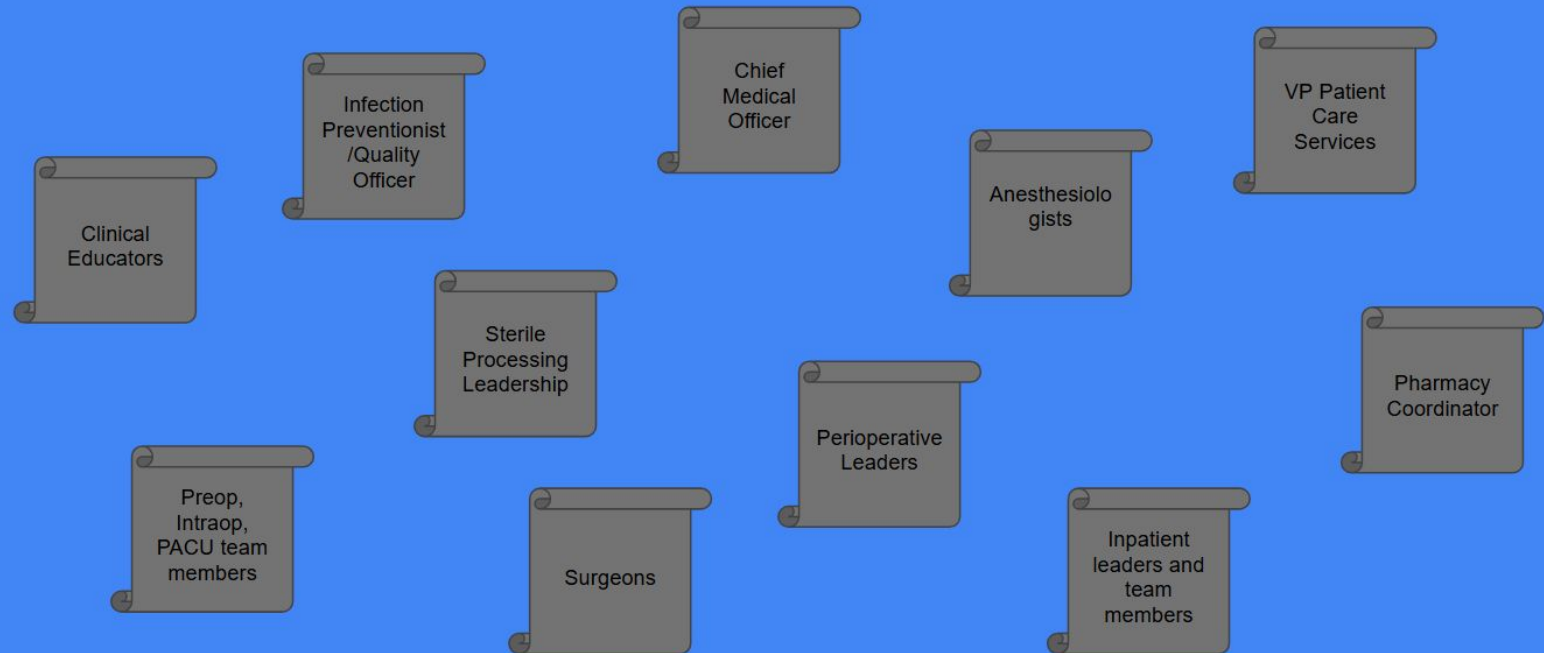
Let's discuss some ways to improve quality with best practices.



2. Form a powerful coalition:

SSI Multidisciplinary Team

Working together to decrease surgical site infections



3. Create a vision for the change

Core A location



Clean Closure Process:

Items needed:

- ★ Alexis
- ★ extra mayo stand drape
- ★ Sterile-Z Mayo Stand Cover
- ★ Clean Closure Set
- ★ gown and gloves for surgeon and assistant
- ★ Laparotomy drape
- ★ Towels
- ★ light handles
- ★ cautery
- ★ suction tubing
- ★ Closing suture and dressings

1. Leave Alexis on the main backtable.
2. Set up the Clean Closure Sterile Field on an extra mayo stand.
3. Place clean closure set, gown and gloves, laparotomy drape, light handles, cautery, suction tubing, closing suture and dressings on the Clean Closure Sterile Field and then cover with the Sterile-Z Mayo Stand Drape.

Procedure Hints:

- After an abdominal incision is made, the surgeon will place Alexis.
- (procedure)
- After anastomosis
 - ★ irrigate wound
 - ★ remove Alexis
 - ★ remove light handles, suction, and cautery (keep your tip for counts)
 - ★ everyone including surgeon and assistant will drop and rescrub
 - ★ circulator will pop the Sterile-Z drape for Clean Closure Sterile Field
 - ★ Surgeon, Assistant, and first scrub:
 - regown / reglove
 - overlay new towels & Laparotomy Drape
 - add suction / cautery / light handles as needed
 - close
 - ★ First scrub & Circulator:
 - begin counting
 - (First scrub does not assist or go back to the Clean Closure Sterile Field after counting unless they are needed and would then rescrub and gown again).

Document in Epic - Site Completion Tab:

- ★ Check boxes.... bowel wound closure protocol was followed



Campus: _____ Date: _____

By initialing the boxes below, the validator indicates the team member is able to perform the skill(s) safely and independently without coaching

D = Demonstration
CBT = Computer-based Training
SD = Staff Development/Class

R = Reading (online or paper materials)
O = Observation
T = Test/Exam

VT = Verbal Discussion with Teachback
SIM = Simulation
NA = Not Applicable

Competency Assessment		Method	Date	Facilitator Initials	Comments
Identify the supplies needed for Clean Closure:		D, VT, O			
Set up the Clean Closure Sterile Field (scrub personnel only)		D, VT, SIM			
Demonstrate the Clean Closure Process:		D, VT, SIM			
Describe documentation in EHR (nurses only)		VT, R			
Initials	Signature	Initials	Signature		

My signature below reflects that I have completed and understand all of the above orientation requirements. The completion of the checklist above indicates I have performed the skills safely and independently without coaching.

Employee Signature

Print Name

Date _____

Educator / Leader Signature

Print Name _____

Date _____

This document must be scanned to MidwestHR@commonspirit.org for placement in the employee's personnel file.

Reading / Visual Aides (paper materials)



CLOSING

☒ Lines/Drains
 ☒ Site Completion
 ☒ Post-op Skin
 ☒ PND5
 ☒ Diagnosis
 ☒ Family Section
 ☒ Patient Disposition
 ☐ Verify
 ☒ SBAR Handoff
 ☒ Report Given

Site Completion

Case Completion is currently read-only.

Summary

Abdomen

Post-Op Dressing

DermaBond [70]

Incision site completely closed?

Bowel wound closure protocol followed:

Wound Protector used:

All team members changed sterile gowns and gloves:

Clean towels and instruments:

Comments

⬆

⬆

✓ Accept

4. Communicate the vision for change



Implement a clean closure procedure for colorectal cases to enhance the surgical outcome of our patients.

Clean Closure.....Why now?

CHI St. Elizabeth currently has a SSI Bundle in place, which involves a set of evidenced-based practices to reduce SSI rates. However, closure of the surgical incision is one aspect of surgical care that is not well defined, which presents an opportunity to improve care by identifying and implementing an evidence-based clean closure procedures for high-risk procedures. (eg, colorectal surgery)

Clean Closure Key Components:

- Incisional skin barrier (eg. Alexis)
- Prior to closing, rescrub (gown and gloves)
- Separate closing sterile field/instruments (Clean Closure Set)

Ask your OR Team for these supplies

5. Remove Obstacles



Clean Closure Tray for colon procedures:

- Always have the clean closure instruments opened, covered, & ready for use at the start of procedure closing. (AORN Guideline - Sterile Technique 6.3)
- Use a wound protector for procedures that enter the bowel. (AORN Guideline - Sterile Technique 3.10)
- Just prior to the closing process, push back current back table and used instruments.
- Surgical team will change gloves. (AORN Guideline - Sterile Technique 3.9)
- Only use new instruments from clean closure tray for closing. (AORN Guideline - Sterile Technique 3.9)
- Be sure to document components of clean closure process implemented under the Site Completion Tab in Epic.

6. Create short-term wins



7. Build momentum to continue the change

Colon SSI Prevention Bundle Checklist - SBAR

1/28/2025

Situation	Patient documentation of all colon bundle elements is not consistently completed.
Background	SSI Prevention is a part of our Scorecard for PSIs (Patient Safety Indicators).
Assessment	Documentation of each element of the Colon SSI Prevention Bundle Checklist needs to be addressed in the EMR. The audit tool for Colon SSI Prevention is being used in Pre/Post as a resource focused checklist to be sure all elements of the bundle are being addressed in the EMR.
Recommendation	Place a hard copy of the Colon SSI Prevention Bundle Checklist on the patient paper chart as a resource tool to verify that all elements of the bundle are being addressed in each phase of care for the <u>colon surgical patient</u> . Turn completed sheets into your manager. The checklist is not a part of the medical record.



Patient Sticker

Colon Surgical Site Infection Prevention Bundle Checklist
Facility: CHI Health St. Elizabeth

Date: _____ Surgeon: _____ Anesthesia/CRNA: _____

Person Completing Checklist: _____

Preop RN: _____ Intraop RN: _____ Inpatient Unit RN: _____

Answer should be **YES** or **No** for all items (or mark **NA** if not applicable). Do not leave an item unmarked.
Expectation to use Safety/First Tool STOP and RESOLVE or ARCC

Pre-Op Period	Yes	No	NA	Comments
Bowel Prep	Patient completed preoperative bowel prep as instructed per verbal acknowledgement: 238gm bottle of polyethylene glycol powder (Miralax) AND 4 bisacodyl (Dulcolax) laxative tablets AND Two 32oz Gatorade (or equivalent electrolyte supplement drink)			
Oral antibiotics	Patient completed oral antibiotics prior to procedure as prescribed per verbal acknowledgement: Neomycin Sulfate 1gm AND EITHER Erythromycin Base 1gm OR Metronidazole (500mg or 1gm)			
CHG Shower the night before and day of surgery (at home)	Patient completed a shower the night before AND day of surgery with Hibiclens, antimicrobial soap or CHG per verbal acknowledgement			
CHG baths (at hospital)	CHG bath was completed the night before surgery			
Glycemic Control	CHG bath was completed the morning of surgery			
The MIV CHI Glucose Protocol guidelines recommend screening patients who have not been screened for diabetes that fit the criteria for screening: 1. Age 45 and older OR 2. BMI ≥ 30 OR 3. BMI ≥ 25 (≥ 23 for patients of Asian Descent) and who have one or more of the following risk factors: 1st degree relative with diabetes; a history of CVD Disease; HTN ≥ 140/90 or being treated; Hyperlipidemia; Diagnosis of PCOS	Glucose test performed; monitor and maintain serum glucose level <180mg/dl			
Hair removal	Clippers (not razors) was used outside the Operating Room if hair removal is needed			
Warm the patient	Active warming preoperatively to monitor and maintain patient's temperature at or above ≥ 96.8 F/36.0 C is performed			

Revised 02/2025 All information contained herein is strictly confidential and intended for quality improvement

Intra-Operative Period	Yes	No	NA	Comments
Skin Prep	Skin around the incision site was washed and cleaned using a 2% CHG product with alcohol. Site allowed to dry completely prior to application of adhesive drape.			
Limited OR traffic	Traffic in the OR is kept at a minimum by limiting unnecessary door opening			
Antimicrobial prophylaxis	Antibiotic administered within 60 minutes of incision: Cefazolin 2gm (3gm if >120kg) AND Metronidazole 500mg OR-if allergy Levofloxacin 500mg AND Metronidazole 500mg OR Metronidazole 500mg AND Gentamicin 5mg/kg			
Antimicrobial Re-dose	Weight based re-dosing of antimicrobial agents occurred as appropriate to maintain therapeutic levels throughout the surgery. Refer to "Guidelines for Antimicrobial Prophylaxis in Surgery in Adults" for recommendations on redosing. (i.e. Cefazolin - redose at 3 hours)			
Glycemia monitoring if meets criteria and/or at risk for hyperglycemia (check 60 min after incision, then at least every 2 hours)	Serum glucose monitored and maintained < 180mg/dl.			
Insulin infusion considered for glucose levels ≥ 160 mg/dl.				
Normothermia	Body temperature maintained ≥ 96.8 F/36.0 C			
Fascial Wound Protector	Wound protector used to decrease the risk of wound contamination at the incision site			
Wound closure protocol	• Surgeon announced "time to close" to initiate closure process • Gown / Gloves were changed by team • Dedicated wound closure tray was used for closure of fascia and skin • Standardized intraoperative application of wound dressing • Surgeon confirms wound classification			

Post-Operative Period	Yes	No	NA	Comments
Discontinue Antibiotics	Antibiotics were discontinued when patient left the OR; no routine post-op doses			
Glucose monitoring	Serum glucose level <180mg/dl during the hospitalization			
Wound dressing management	First removal of sterile wound dressing performed by a provider on postop day 2 (48 hours after surgery). This may be longer if an antimicrobial dressing was used.			
Patient/Family SSI prevention education	Patient/family education and reinforcement of SSI preventative measures throughout hospital stay and before discharge. Patient and family/caregiver provided with written education on post discharge wound care.			

PLEASE RETURN ALL COMPLETED AUDITS TO YOUR MANAGER

8. Make the change stick by anchoring it to the organizational culture



Preparing for Your Surgery

Two Weeks Before

- If applicable, stop smoking or smoke fewer cigarettes to reduce potential for respiratory complications. Smoking is associated with poor wound healing.

One Week Before

- Do not shave or wax abdominal hair one week before your surgery. This can increase the risk of wound infections.

Follow Your Doctors Recommendations regarding stopping over the counter drugs, recreational (street) drugs or herbal supplements.

Shower Instructions for the Evening before AND Morning of surgery

- Wash your face, head and genital area with your regular soap.
- Make sure you rinse thoroughly.
- Using the foam side of the soap sponge provided in the CHI bag, wash your body in this order:

1. Neck and chest
2. Both shoulders, arms, and hands
3. Abdomen and then the groin area (minus the genitals)
4. Right leg and foot
5. Left leg and foot
6. Back of neck, back, and then buttocks

- Do not use the brush side and rinse your body thoroughly to prevent irritation to the skin.
- If allergic to Hibiclens or Chlorhexidine Gluconate, use an antibacterial soap.



Front

Back

Evening Before Surgery Instructions

- Drink plenty of clear fluids the day before the surgery.
- Follow the bowel prep instructions from your surgeon regarding drinking and eating.
- Drink two bottles of Ensure Clear pre-surgery drink the evening before surgery, included in the CHI bag from your surgeon's office. (If you are diabetic you will not drink the Ensure the evening before surgery.)
- After your evening shower, dress in freshly washed clothes or pajamas. Use fresh, clean sheets and pillowcases on your bed.
- Do not allow your pets to sleep in or on your bed.

Morning of Surgery Instructions

- After your morning shower, dress in freshly washed clothes.
- You may continue a clear liquid diet up to 4 hours prior to your surgery time.
 - o Exception: Drink one bottle of the Ensure Clear, finishing it 3 hours prior to surgery.
- If you will be arriving at the hospital 3 hours prior to your surgery, bring your drink with you to take at that time.
- If you eat or drink too close to your scheduled surgery, it will be canceled.
- Do not wear makeup
- Remove fingernail polish and do not have a manicure during the three days prior to surgery.
- Remove all jewelry including body piercings - ear, nose, tongue, eyebrow, genitalia and belly rings.
- Brush your teeth, but do not swallow any toothpaste or water.
- Take your medications as instructed by your doctor and/or the pre-surgery nurse who calls you from the hospital.
- If you take diabetes medication or have an insulin pump, ask your doctor for instruction on managing your medications before and after surgery. Your blood sugar will be checked before surgery and more often as needed.

After Your Surgery

How do I care for my incision and myself?

- Keep the incision clean and dry. Do not apply lotions and/or powder on or around the incision.
- You may shower as directed by your surgeon when showering is permitted. When able to shower let the water run over the incision and do not scrub.
- Do not soak, bathe, or swim until instructed by your surgeon.
- Take short frequent walks.
- Do not lift more than your surgeon recommends.
- Follow a diet approved by your surgeon following the surgery.
- Monitor for signs and symptoms of infection. Fever, redness, tenderness, drainage of pus, and increased pain.
- Call your doctor if you have a fever greater than 100.5° (F) or 38.1° (C).

Additional Instructions to Enhance Your Recovery from Colorectal Surgery

Your surgery is scheduled on:

At _____ ☐ a.m. ☐ p.m.

Please contact your surgeon with any questions

CHI Health St. Elizabeth
555 South 70th Street
Lincoln, NE 68510



Making Education Effective:

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Reinforced

Malignant Hyperthermia Education

- Same education
- All staff roles in ER, OR, LD

MH Triggering Agents



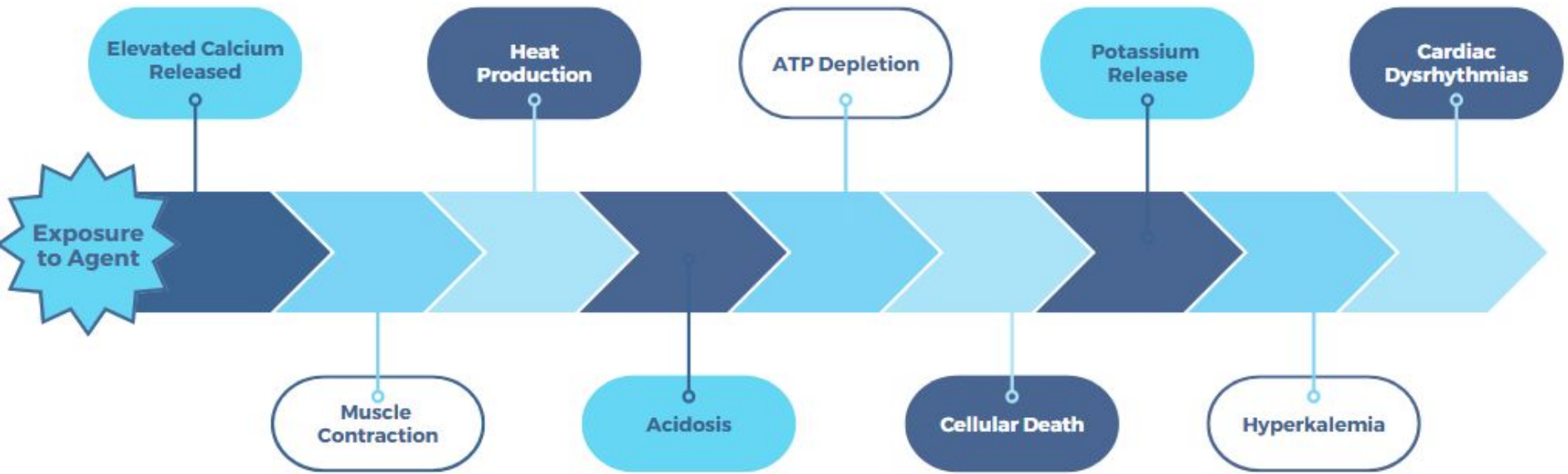
All "Anes" Halogenated
inhalational agents:

- Isoflurane
- Sevoflurane
- Desflurane
- Halothane
- Enflurane
- Methoxyflurane

Depolarizing Muscle
Relaxant: Succinylcholine

If patient has
risk factors, the
plan for care should
be discussed with
Anesthesia provider
and surgeon to
avoid using these
agents

Malignant Hyperthermia Pathway



Malignant Hyperthermia Education for Unlicensed Assistive Personnel

What is Malignant Hyperthermia (MH)?

Imagine if your body's "thermostat" went haywire as a result of medications used for intubation. This is essentially what happens in a **Malignant Hyperthermia (MH) crisis**.

It is a rare, but extremely serious genetic condition that can be triggered by certain gases and/or a medication given during general anesthesia.

MH crisis outcomes range from full recovery with prompt treatment to severe complication like brain damage, cardiac arrest, kidney failure, and death.

Why is it important for ME to know about MH?

Even though you don't give medications or directly treat patients in the same way a nurse or doctor does, you are a valuable member of the healthcare team.

Early recognition and rapid treatment is key to saving a patient's life.

Assisting the team quickly and efficiently with your extra set of hands can make a huge difference.

You may be asked to:

- Call for help: notifying other team member of an MH crisis.
- Call MHAUS: 1-800-644-9737
- Retrieve the MH Cart: a specialized cart that contains Dantrolene, which is the life-saving medication for an MH Crisis.
 - Know where the MH Cart is located (ask your supervisor/educator to show you)
 - Open supplies and prepare items as directed.
- Get Cooling Supplies:
 - Ice: Ice packs are applied to the patient's armpits, groin, and neck.
 - Cold IV Fluids: IV bags of cooled fluids are kept in designated refrigerators.

Kahoot for Malignant Hyperthermia



Kahoot

Malignant Hyperthermia

11 plays 54 participants

Questions (10)

Show answers



Kahoot session

Host live

Assign

Kahoot self-study

Learn

Flashcards

Play solo

Updated 1 year ago • Visibility: Public

The most specific early indicator of a malignant hyperthermia crisis is...



Which of the following medications/gasses could trigger an MH event



What is the first thing a surgical team should do when a decision is made to treat a patient for an MH emergency?



What medication is used to treat MH?



The background features a gradient from dark blue at the top to bright orange and red at the bottom. The top half is filled with numerous white stars of varying sizes. The bottom half shows a blue floor with a white grid pattern that recedes into the distance. The Jeopardy! logo is centered in the upper half, rendered in its characteristic white, blocky, 3D font with a slight shadow.

JEOPARDY!

SHARP SAFETY

CATEGORY:	S	H	A	R	P
A	\$200	\$200	\$200	\$200	\$200
M	\$400	\$400	\$400	\$400	\$400
O	\$600	\$600	\$600	\$600	\$600
U	\$800	\$800	\$800	\$800	\$800
N	\$1000	\$1000	\$1000	\$1000	\$1000
T	\$1000	\$1000	\$1000	\$1000	\$1000

\$800

A suture needle fell on the floor. What is the most appropriate way for the unscrubbed perioperative team member to pick up the suture needle?

- A. With a piece of tape**
- B. With ungloved hand**
- C. Using an instrument**
- D. With gloved hand**

[← BACK TO PANEL](#)

\$1000

True/False: It is not required to report all sharps injuries, since some are very minor.

← BACK TO PANEL

\$400

Double gloving for scrubbed personnel is recommended under which of the following circumstances??

- A. All surgical procedures
- B. Only in cases posing a high risk for glove perforation
- C. Strictly at the user's discretion
- D. None of the above

← BACK TO PANEL

Key Points:

- Education is necessary, but education alone is not enough.
- Data is powerful when paired with feedback, allowing for collaboration and process improvements.
- Keep education interactive and engaging.

Closing Question:

What will you ADD to the EDUCATION plan
at your next opportunity?

References:

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