

## PROBLEM

Nursing Staff have raised concern that post operative portable x-ray examinations done in the Post Anesthesia Care Unit (PACU) at the Memorial Campus is disruptive to patient care (flow) and puts them at risk for exposure to radiation during the process.

## SCOPE IN & OUT

**IN** Memorial Campus, PACU Portable Exams, X-Ray Portables Monday – Friday  
**OUT** Other Campuses, Non-X-Ray Exams, Weekends & Holidays

## BACKGROUND

85%

% of Staff that felt that exposure to radiation was a major safety concern

100%

% of Staff surveyed felt at risk for exposure to radiation

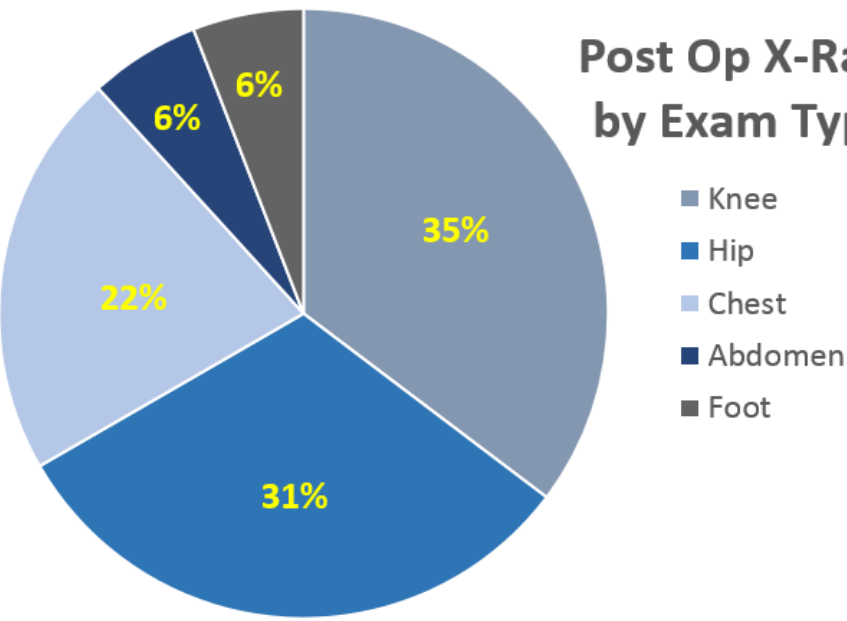
85%

% of Staff that felt post-op x-rays disrupted patient care (flow)

90%

% of Staff felt that they lacked information / knowledge about radiation

### Post Op X-Rays by Exam Type



Annual Volume of portable x-rays performed on post-op patients in the PACU:  
**1,350**

## ROOT CAUSES IDENTIFIED

Problem	Cause	Countermeasure
Staff are concerned over potential exposure to radiation and its harmful effects	Lack of knowledge. Nurses have not received information/education on radiation safety	Provide dedicated Radiation Safety Education to PACU Staff (Nurses & Techs)
Potential exposure to nearby patients	Proximity of patient bays (stretchers) makes it difficult to isolate patients	Utilize lead aprons (interim) Quote additional safety devices Isolate patients requiring x-rays
Patient care activities (flow) are disrupted by post-operative x-rays	Nursing staff are not aware of how far they should move during imaging. Not aware of how long area is "active" with radiation	Educate Nursing Staff

## PDSA CYCLES

### PLAN - Countermeasure

Develop a PACU based educational activity aimed at staff with the following objectives:


- Become knowledgeable of Radiation Safety
- Know who/how to contact Radiology with any concerns
- Understand the risks of scatter radiation

### DO - Implementation

- An educational presentation was developed specifically for the PACU Staff
- Staff educated in January 2019

### STUDY - Conclusion

- The education was followed up with another Survey Monkey® to measure impact

 **Baseline Knowledge Score: from 48% to 88%**  
**Felt Safe/No Longer Concern: 100%**  
**My questions/concerns addressed: 100%**

### ACT – Follow Up / Actions

- Provide laminated information of contact for Radiation Safety
- Provide e-Version of presentation to PACU Nurse Manager

## LESSONS LEARNED

- Open & Frequent communication with Radiology & PACU Staff reduces frustration and improves employee satisfaction
- Educating Staff on the actual risks (not perceived risks) of radiation has reduced anxiety among PACU Staff – which should improve employee engagement

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## SMART GOAL:

Increase the knowledge & comfort of staff working in the PACU regarding radiation safety practices.

