

Ramaswamy, P., Faruki AA., Munoz-Acuna, R. Neves S., Barry JK., Feinstein D., Ramachandran, K.

TAP TO GO BACK TO KIOSK MENU

### Introduction

Root Cause Analysis and Action (RCAA) is a structured tool created by the National Patient Safety Foundation. It is performed by a committee of stakeholders and experts who convene to learn from adverse events and unsafe conditions to take action to prevent their future occurrence. The actions that result from this process need to be sustainable system-based improvements to improve patient safety. The major steps of RCAA include creating a chronological flow diagram of the event and filling any gaps in knowledge regarding the event by interviewing as relevant parties involved in the incident. Then research internal policies/procedures and external documents pertinent to the event. Once the relevant facts are determined, a cause and effect diagram is developed to understand contributing factors that led to the event. Finally Root Cause/Contributing Factor statements are developed to create actionable items to enact systems changes to improve patient safety.

## Aim/Goal

- Determine the contributing factors, with a focus on the latent hazards in the system, which contributed to the occurrence of the event.
- Develop the solutions or proposed changes that, once implemented, will eliminate or reduce the hazard and therefore reduce the chance that a similar event could occur in the future.

### The Team

#### **Presenters:**

- Priya Ramaswamy M.D.
- Adeel Faruki M.D.
- Ronny Munoz-Acuna M.D.
- Chiedozie Uwandu M.D.
- Mark Jones M.D

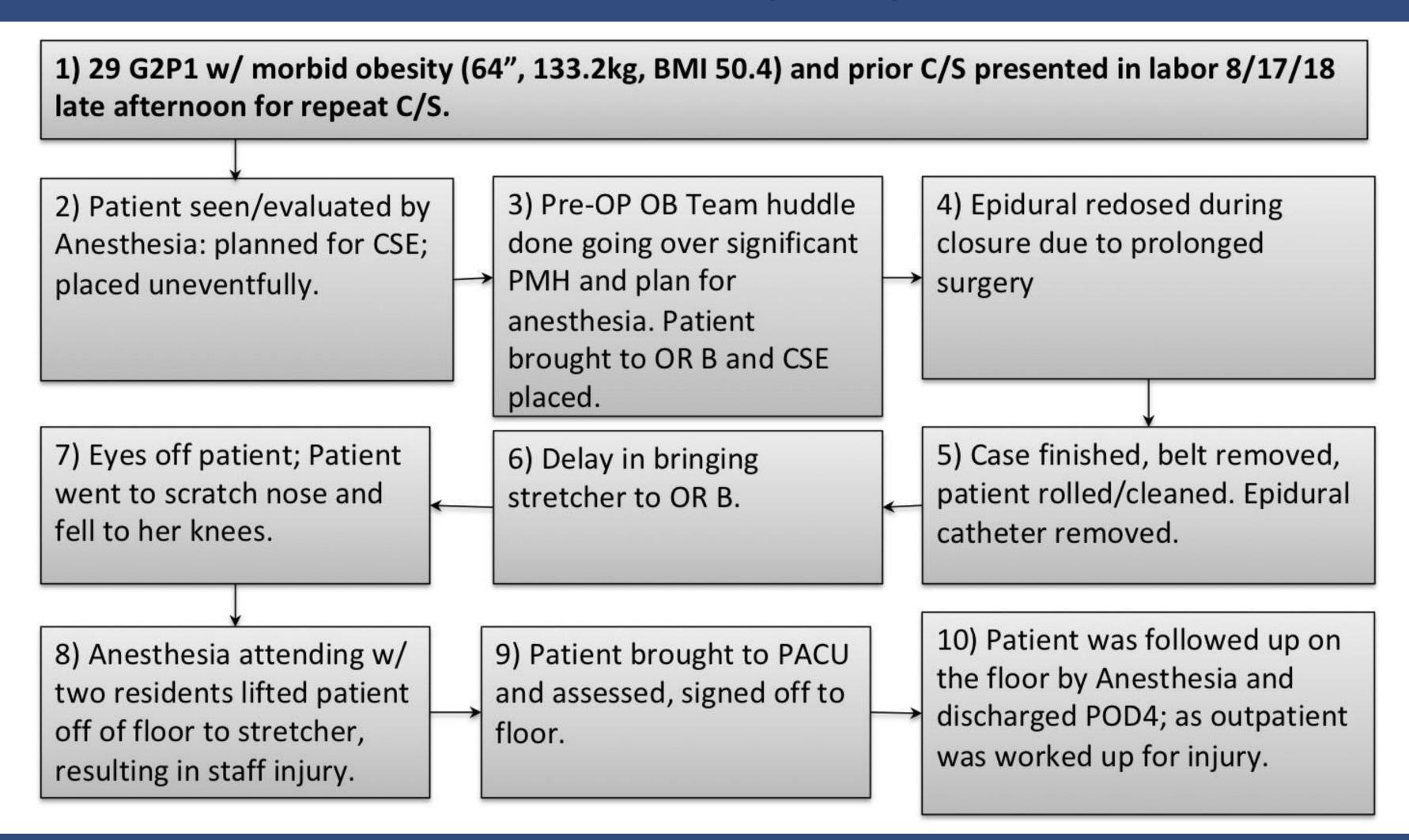
#### **Mentors:**

- Sara Neves M.D.
- David Feinstein M.D.
- Barry John Kelly M.D.
- Krish Ramachandran M.D

#### Event

- 29 year old female with past medical history significant for morbid obesity and prior C-Section (C/S) presents for repeat C/S under combined spinal epidural (CSE) anesthesia. The procedure was successful and after the case finished the patient fell off of the operating room table onto the floor. The patient was subsequently lifted off of the floor by 3 anesthesia providers which resulted in injury to patient and staff.

### **Event Story Map**



For more information, contact:

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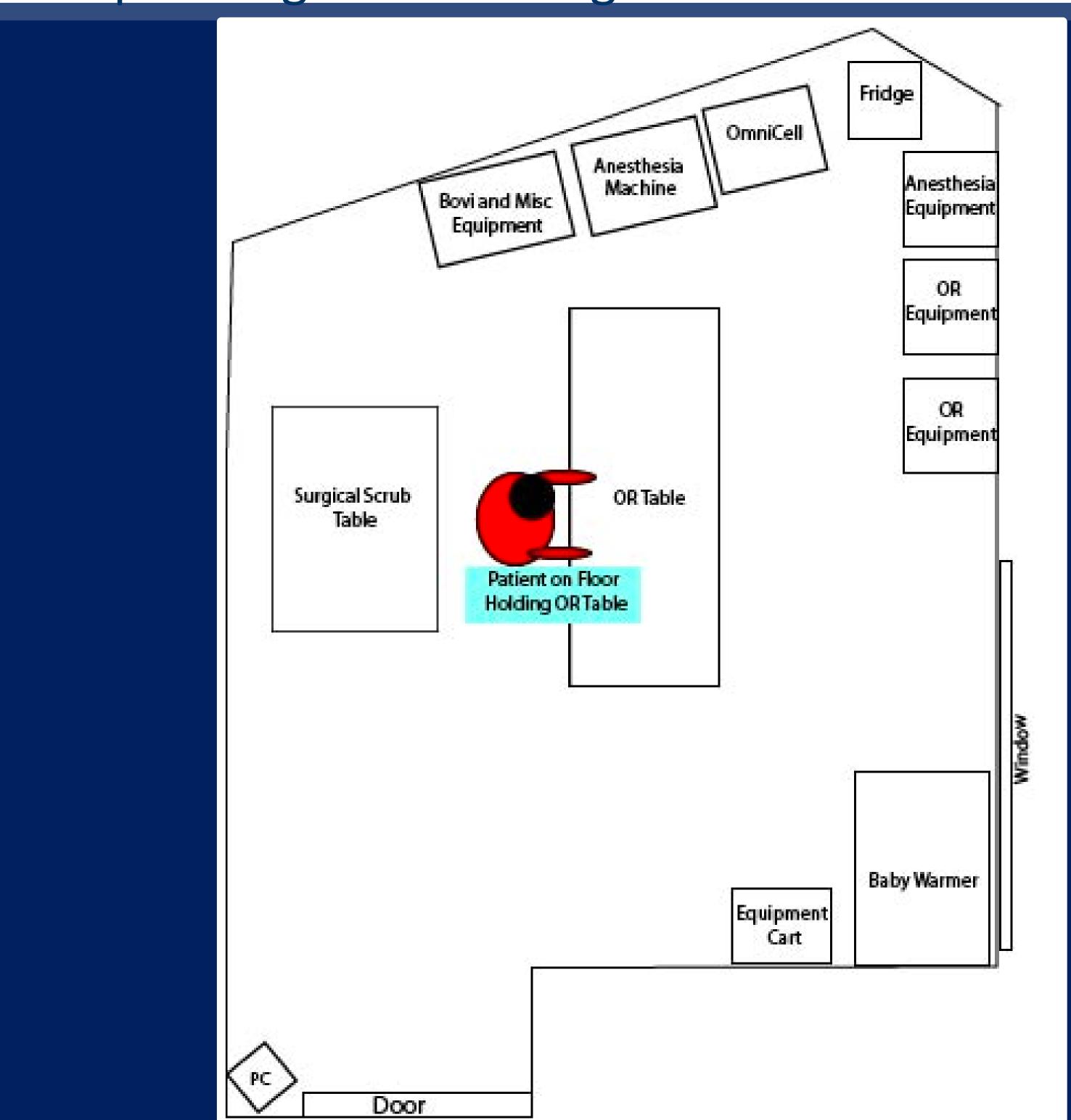


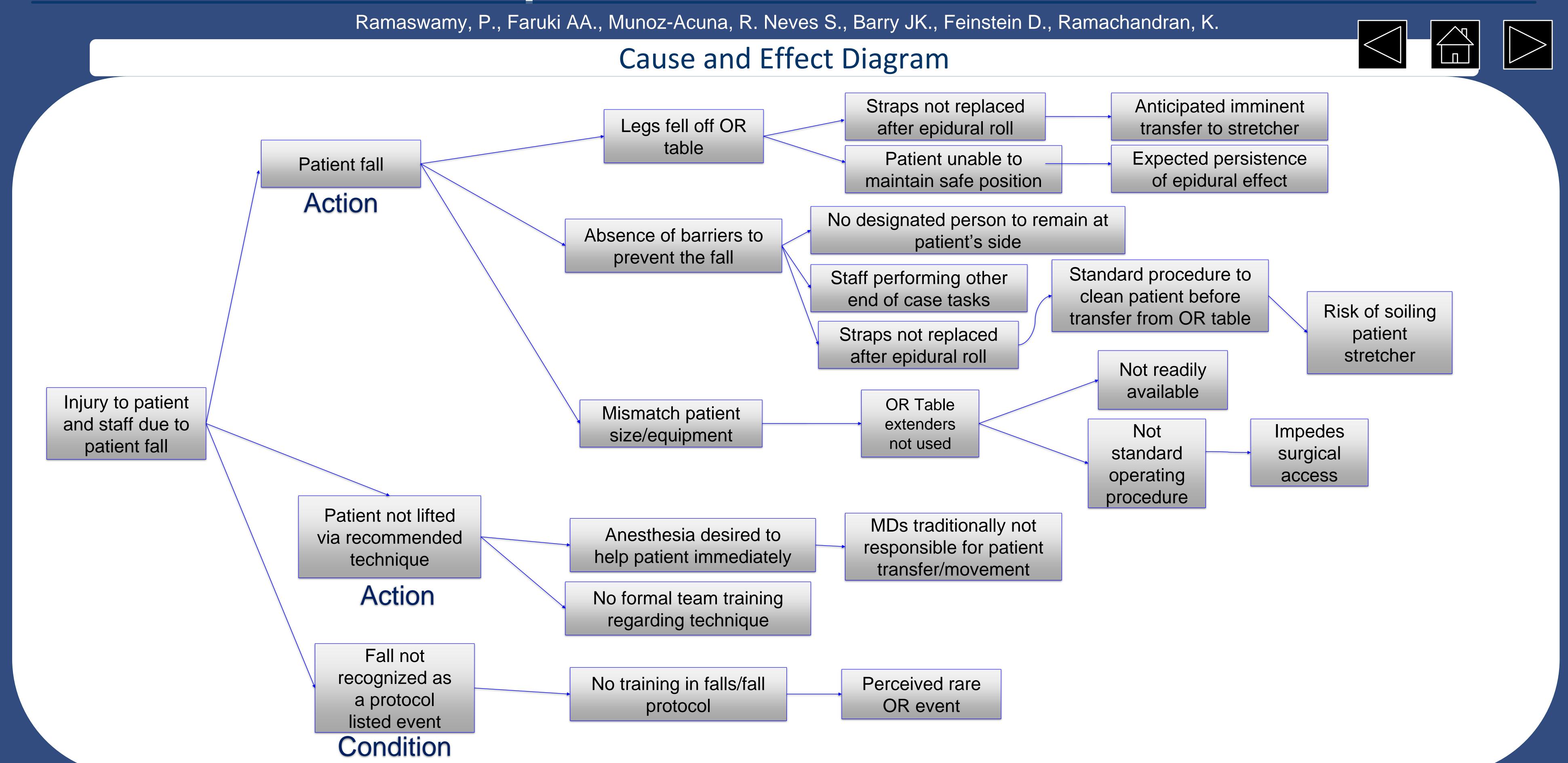


## Obstetric Operating Room B



## Operating Room B Diagram with Fallen Patient





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## Root Cause/Contributing Factors

RCCF Statement #1: The lack of restraints or attention to the patient while waiting for the transport bed, while the patient still had neuraxial blockade, increased the likelihood of a fall, resulting in an injury to the patient and the staff that had to lift her.

Suggestion	Re-restrain patient after cleaning unless stretcher is already present at the bedside
Responsible Person	OR Case Circulating Nurse and Anesthesia Provider
<b>Action Hierarchy</b>	Strong Action
Outcome Measure	Recording of compliance with restraint policy - as a checkbox in AIMS/PIMS after epidural removal that shows that restraint was replaced

RCCF Statement #2: The lack of training by anesthesia staff in proper mobilization of patient resulted in improper lifting technique, which increased the risk that the patient or staff would sustain further injury

Suggestion #1	MyPath module for fall protocol
Suggestion #2	Live sim patient mobility training or participation in nurses training for patient mobility training
Responsible Person	Residents and Staff
Action Hierarchy	#1: Weak Action #2: Intermediate-Strong Action
Outcome Measure	Recording of compliance with restraint policy - as a checkbox in AIMS/PIMS after epidural removal that shows that restraint was replaced

RCCF Statement #3: The lack of availability and awareness hoist equipment resulted in manual lifting of the patient, which resulted in staff injury.

Suggestion	Purchase and have a designated location of hoist equipment
Responsible Person	OB Nursing Coordinator
<b>Action Hierarchy</b>	Strong Action
	Official location of hoist equipment in OB floor with laminated instruction card for pager number for patient falls

#### Lessons Learned

- Improving patient safety in the operating room depends on robust research by multidisciplinary teams to identify team vulnerabilities and to develop means to optimize team performance.
- Improvements in patient safety in the OR require careful and systematic identification of error traps, and system and teamwork changes to eliminate them, or to prevent our human errors from reaching our patients
- OR safety does not only involve the patient undergoing a procedure but also accounts for the safety of the health providers.

### References

- National Patient Safety Foundation. *RCA2: Improving Root Cause Analyses and Actions to Prevent Harm*. Boston, MA: National Patient Safety Foundation; 2015.
- Chechil, J. (Ed.). (2018, November 9). SAFE TRANSFERS FROM FLOOR TO BED. Retrieved January 15, 2019, from https://portal.bidmc.org/Intranets/Clinical/Rehab-Services/SafePatientHandling/Safe-Transfers-From-Floor-To-Bed.aspx

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