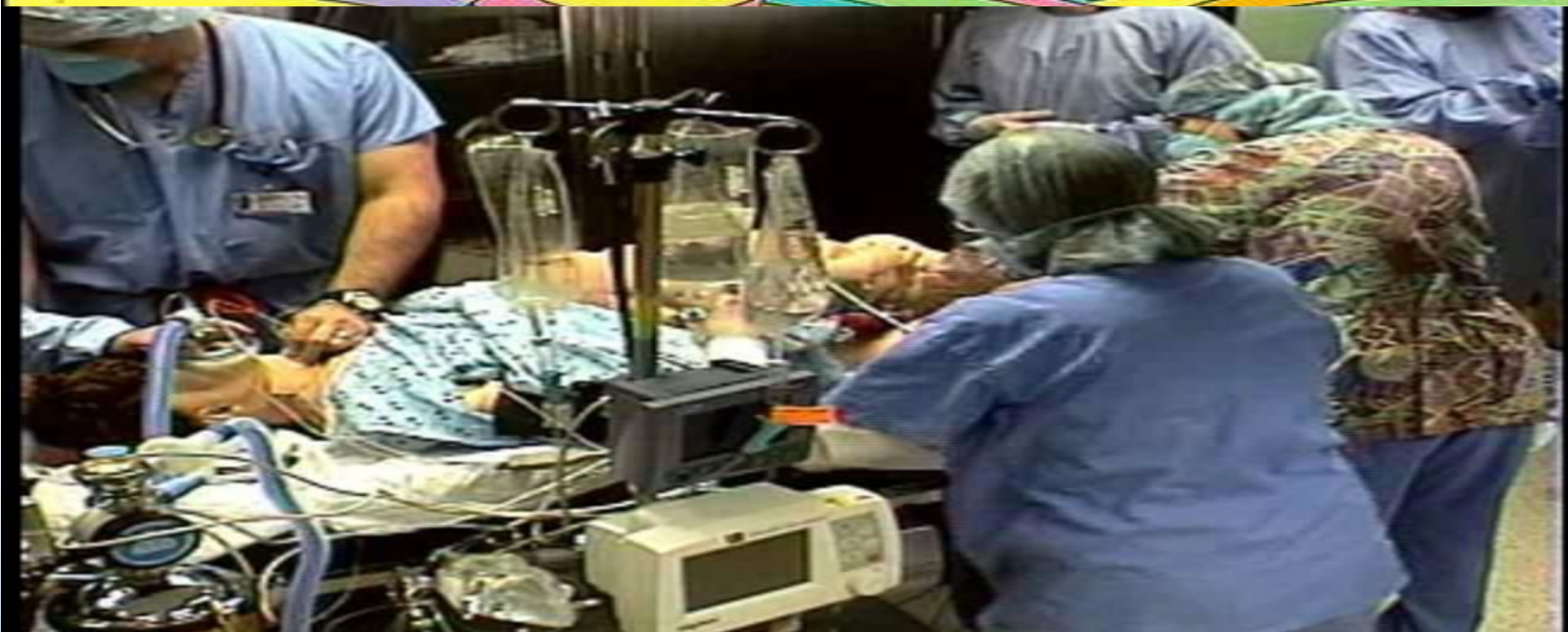


# **Hospital-Based Simulation and Competency Assessment : Obstetric and Medical Surgical Nurses**

KAREN STEIN, MSED, RN, CCRN

Oh, the Places  
You'll  
Go!

IN SIMULATION



Before surgery are you hoping they are competent?





# BACKGROUND

- The nurse is accountable for following all the established protocols in their respective unit. The hospital is responsible to assess nursing competency
- **Goals of competency:**
- Evaluate individual performance
- Evaluate group performance
- Meet regulatory standards
- Address risk problems

# SIMULATION

- Addresses three domains of skill set required for competency:
  - Technical
  - Critical Thinking
  - Interpersonal

- **Technical Skill**: Psychomotor skill observed in simulation.
- **Critical Thinking**: Observable in simulated setting. Problem-solving, priority setting, planning, resource allocation, clinical reasoning and most importantly, reflective practice
- **Interpersonal Skills**: Best observed in team training. Communication (closed-loop, listening skills) customer service, delegation, collaboration, leadership, and respect for team members

# Development of Simulation Course

- Pre-course work—online
  - Content to review
    - Teamwork
    - Medical/Nursing content
  - Pre-quiz
  - Pre-course survey
- Post course work—online
  - Course evaluation

Drills created to emphasize teamwork

2 hour unit version

4 hour simulation version runs alternate months

# During the Simulation Course

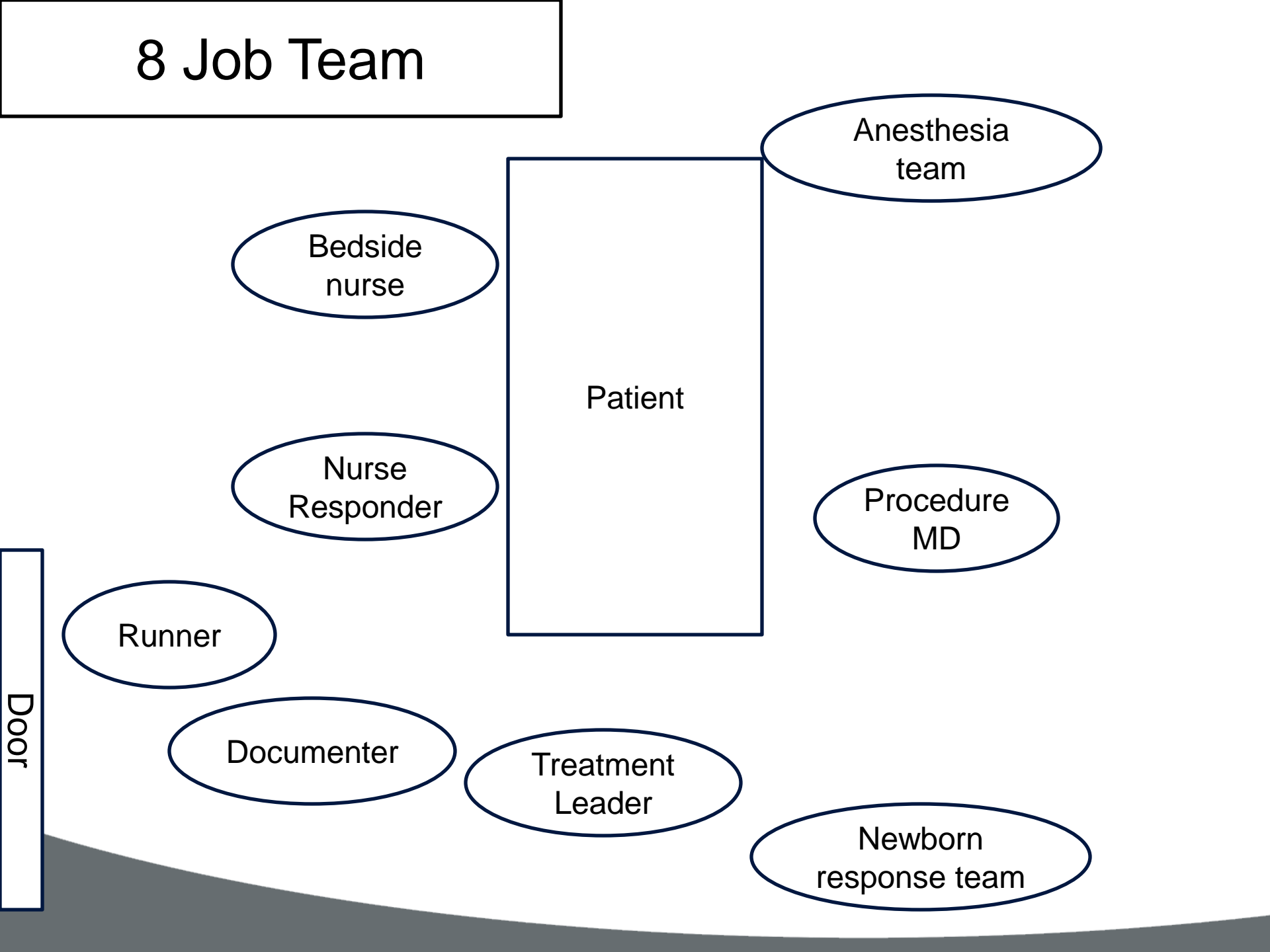
- Introductory slides
- Orientation
- Scenarios and Debriefing
  - Team debriefs itself
  - Video review
  - Structured form for debriefing
    - Short version
    - Long version
- Scenario list includes: shoulder dystocia, maternal seizure, maternal cardiac arrest, prolonged fetal bradycardia, maternal respiratory arrest, anaphylaxis, postpartum hemorrhage, abruption, adult arrest, malignant hyperthermia
- Scenarios take 5-12 minutes. Scenario + debriefing takes about 45 minutes.
- Video review is a great tool
- Emphasis on teams practicing for debriefing in real life
- Long and Short scoring systems with cheat sheet for key points



ROLES	RESPONSIBILITIES
Treatment Leader (Ob, CCM, Anes as appropriate)	Obtain SBAR from appropriate person, assess team organization/composition, assess data, direct treatment, set priorities, collaborate with anesthesia team on pt plan, triage pt
Bedside Nurse (usually patient's nurse)	Stay by patient, attach monitoring, deliver SBAR to responders, report IV size/location, adjust IV rate, draw up and administer meds
Runner	Obtain meds and equipment, deliver to appropriate person
Nurse Responder	Call for/dismiss personnel and family, call for/facilitate equipment acquisition, call for/facilitate patient transfer, get results
Documentor	Obtain record sheet, document (team leader, situation, vital signs and clinical data, treatments), brief personnel who come later
Procedure MD	Examine patient, inform team of maternal/fetal assessment, perform procedures
Anesthesia Team	Obtain SBAR from obstetric team, assess analgesia, assess airway, assess IV access and gauge, perform anesthesia procedures, communicate anesthesia plan to team, collaborate with treatment leader on maternal issues
Newborn Resuscitation Team	Obtain SBAR from obstetric team, assess newborn, resuscitate newborn.

Nursing responders select one of these as appropriate

# 8 Job Team



Anesthesia  
team

Bedside  
nurse

Patient

Nurse  
Responder

Procedure  
MD

Runner

Documenter

Treatment  
Leader

Newborn  
response team

Door



Station	Team Member	Items	Task Completed
<b>Anesthesiology</b>		Assess analgesia	Y
		Make anesthesia plan with team leader	n
		Communicate anesthesia plan to team	n
<b>Anesthesiology asst</b>		Learn airway plan from anesthesia 1	y
		Assemble needed equipment	y
<b>Patient's nurse</b>		Stay by patient	y
		Check vital signs	y
		Check maternal heart rate	y
		Report vital signs to team leader and data manager	y
		Assess and establish IV access (what size?/working?/what is running?)	y
		Adjust IV rate	y
<b>Documentor/Data Manager</b>		Deliver medications	y
		Obtain record sheet	y
		Obtain situation/background	y
		Record team leader	n
		Acquire chart, essential data	y
		Prompt VS data from Bedside asst	y
<b>Treatment leader</b>		Document Treatments	y
		Identify self	n
		Ensure team assumed all roles	n
		Obtain situation/background	y
		Establish a differential and make diagnostic assessment	y
		Make anesthesia plan with anesthesiologist	n
		Notify team of plan for treatment and anesthesia	n
		Determine treatment	y
		Give order to treat accurately and precisely	n
	Definitive intervention/s	y	
<b>Nursing Leader</b>		Identify self	n
		Ensure team assumed all roles	n
		Control traffic	y
		Facilitate equipment acquisition	y
		Facilitate patient transfer	y
<b>Procedure MD</b>		Assess fetal status	y
		Report fetal status to treatment leader	y
		Assess maternal status	y
		Report maternal status to treatment leader	y
<b>Runner</b>		Get medications	y
		Get equipment	y
		Deliver necessary items to appropriate personnel	y

**Scenario Outcome:**

		By Role	
<b>All Tasks</b>			<b>74%</b>
	Task Completed positives:		29
	total spots		39
<b>Organizational Tasks</b>			<b>79%</b>
	Task Completed positives:		27
	total spots		34
<b>Therapeutic Tasks</b>			<b>67%</b>
	Task Completed positives:		2
	total spots		3

# High risk/Problem-prone Med/Surg

## Examples:

- Malignant Hyperthermia in the OR
- Mock Code
- Condition C : pneumothorax
- Post Partum Hemorrhage on floor



The courses not only assist with competencies but they can improve practice



# Quality Initiatives linked with course





Quality Initiatives linked with course

Post partum Hemorrhage kit  
with all needed medications  
located in accudose



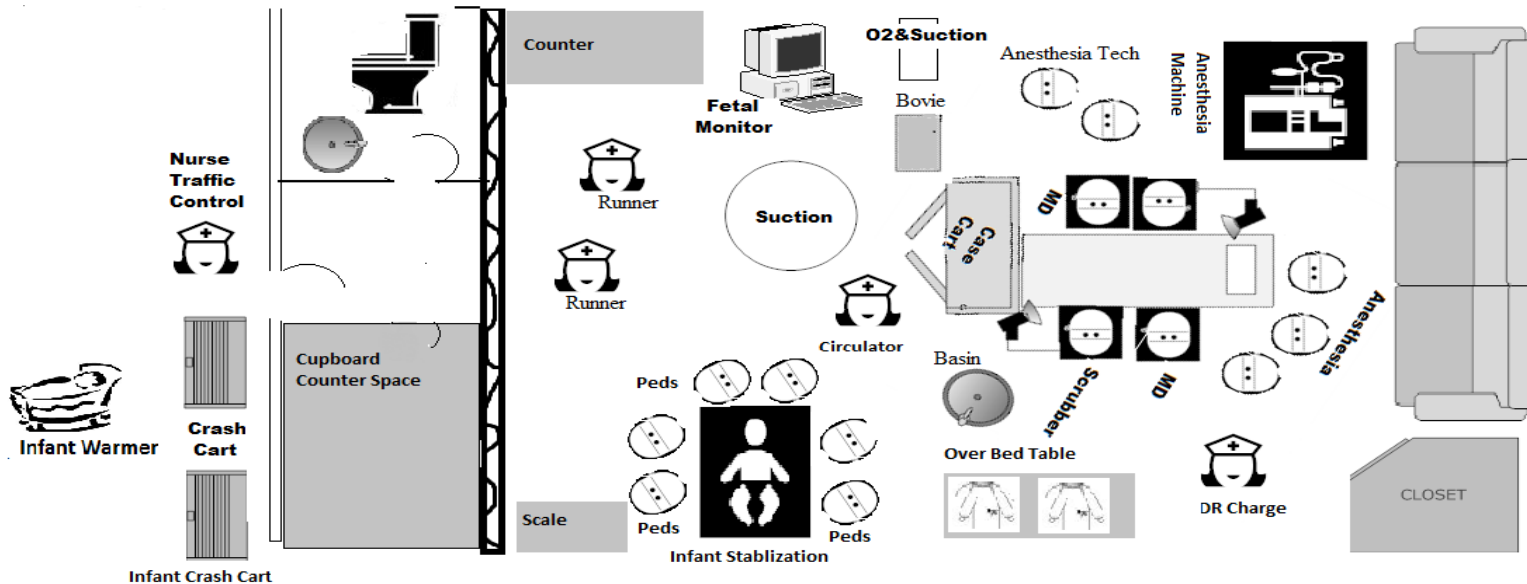
# Quality initiatives linked with course

## Emergency C/Section in LDR

Number	Supply	Location
1	STAT C/Section Cart supplies Gowns, masks, booties, caps, scrub brushes	OR Hallway
1	Ring Stand	OR Hallway
1	Bovie with grounding pad	OR Hallway
1	Portable light	OR Hallway
1	Anesthesia Machine	OR Hallway
1	O <sub>2</sub> / compressed air set-up (to be placed outside LDR in hallway next to radiant warmer)	OR Hallway
1	Adult crash cart (outside LDR in hallway)	OR Hallway
1	NICU crash cart (outside LDR in hallway)	OR Hallway
1	Radiant warmer (plugged in hallway outside of LDR)	Inside OR in Alcove
1	Suction machine (self-contained)	In one of the OR's
1	1000 mL warmed Normal Saline for irrigation	OR Warmer
1	1000 mL warmed Sterile Water for irrigation	OR Warmer



# Quality Initiatives linked with course



# Key points for a successful course

- Stay attuned to participants' learning needs
- Plan your scenarios (and adapt) based on what the team or individual needs to work on
  - Repeat a scenario if the group/individual needs it for mastery and confidence
- Give praise generously
- Debriefing is key component to course
- Allow for their discussion
- Link participants prior experience
- Deflect defensiveness and keep it safe and fun

# How do you identify simulated competencies on your unit?

- Job Description
- Organizational mission
- Quality data respective to your unit
- Scope of practice
- New procedures/equipment
- High risk/problem prone nursing activities
- Risk data
- Remember: any competency may be tweaked to include age, culture, etc.

# IN SIMULATION.....

**Oh the places you'll go,  
Today is your day!  
Your mountain is waiting,  
So ...get on your way!**

**--Dr. Seuss**