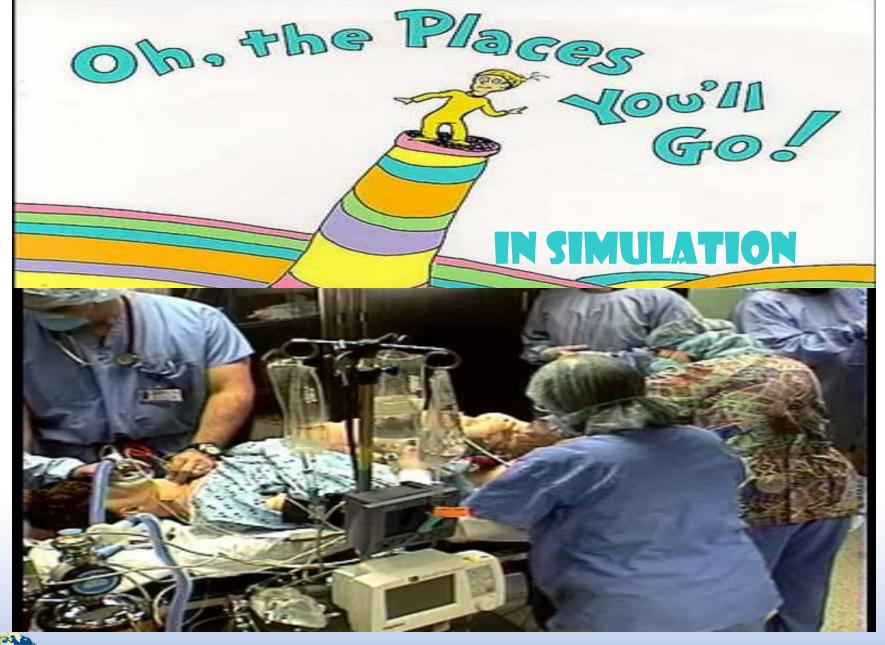
# Hospital-Based Simulation and Competency Assessment: Obstetric and Medical Surgical Nurses

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# 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.
- <u>Critical Thinking</u>: 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)	select one	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	resp as a	Call for/dismiss personnel and family, call for/facilitate equipment acquisition, call for/facilitate patient transfer, get results
Documentor	Nursing of these	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

leader on maternal issues

newborn.

Obtain SBAR from obstetric team, assess analgesia, assess airway,

communicate anesthesia plan to team, collaborate with treatment

Obtain SBAR from obstetric team, assess newborn, resuscitate

assess IV access and gauge, perform anesthesia procedures,

Anesthesia

Newborn Resuscitation

Team

Team

#### 8 Job Team Anesthesia team Bedside nurse **Patient** Nurse Procedure Responder MD Runner Door Documenter Treatment Leader Newborn response team

## **Clinical Expectations**

Calculate of papersonal temporal process teams of contribution of papersonal temporal contribution of	Shoulder Dystocia	Anaphylaxis	Seizure	Postpartum hemorrhage	Maternal Arrest	Fetal Bradycardia	Abruption	Respiratory Arrest	
crisis response team crisis response crisis response crisis response crisis response crisis response crisis respon	Shoulder dystocia recognized	Called for appropriate help or	Called for appropriate help or	Called for appropriate help or	Called cardiopulmonary	Intrauterine fetal	Care team discusses team	Called for appropriate help or	
splately saff respiratory districts generated coule specially of blood for several times during the several times during the several times during the several times during the several proposition of the several		crisis response team	crisis response team	crisis response team	arrest team correctly	of the following: oxytocin off, facemask O2, maternal position, hydration)	organization, evaluation plan, and possible interventions before the patient arrives	crisis response team	
Triggering egent discontinued Maintained oxygeration inspected for internal lucerations.  Triggering egent discontinued Maintained oxygeration inspected for internal lucerations.  Triggering egent discontinued Maintained oxygeration inspected for internal lucerations.  Anney assessed Anney assessed Anney assessed Maintained Spatial control of placeria is instanced for a secondary of the properties of the place of placeria is instanced.  Administrated majority of placeria is instanced or placeria is instanced.  Administrated majority of placeria is instanced.  Administrated placeria is instanced.  Administrated majority of placeria is instanced.  Administrated placeria is respirately for placeria is instanced.  Administrated majority of placeria is instanced.  Administrated placeria is respirately for placeria is instanced.  Administrated placeria is respirately for placeria is instanced.  Administrated majority of placeria is instanced.  Administrated placeria is respirately for placeria in the place of placeria is respirately for placeria in the placeria is respirately for placeria is respirately for placeria in the placeria in the placeria is respirately for placeria in the place				quantity of blood lost several			Team gets briefing from EMS	with cricoid pressure with	
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sewborn resuscitation team called  100% oxygen administered administered sulfate assage of time communicated to team and Rapid volume expansion sulfate assage of time communicated to team and Rapid volume expansion sulfate assage of time communicated to team and Rapid volume expansion sulfate assage of time communicated to team and Rapid volume expansion sulfate assage of time communicated to team and Rapid volume expansion sulfate assage of time communicated to team and Rapid volume expansion access obtained figure, the communicated to team and Rapid volume expansion access obtained figure, the communicated for team and Rapid volume expansion access obtained figure, the communicated for the anterior of the anterior of the anterior observed observed observed of the anterior observed of the anterior observed of the anterior observed observ	AcRoberts leg positioning	Airway assessed	Assessed oxygenation	Evaluated for atony			confirmed no fetal heart	(gluconate or chloride) 10mL of 10% solution over 3	
austrage of time communicated to team and Raipid volume expansion Assessed blood pressure fluid resuccitation performed registered of the performed trational displacement of the anterior included, restriction displacement of the anterior included, restriction displacement of the anterior included, restriction displacement of the anterior included. The performed trational displacement of the anterior included restriction and displacement of the anterior included. The performed trational displacement of the anterior included restriction and displacement of the anterior included restriction and displacement of the anterior included restriction and displacement of the anterior arm, fix divide, etc.  Blood crossmatched Blood product resuscitation or ordered o	Suprapubic pressure	Airway maintained	Minimized aspiration risk					Patient intubated	
Hematologic/coagulation lab displacement of the anterior househor stroubler, episional makes and the properties of the properties	Newborn resuscitation team called								
volational displacement of the anterior hootider, rotational displacement of the bootier or shoulder, positional, delivery of bootiers are fixed displacement of the bootiers or shoulder, episitions, delivery of source administered  Newborn resuscitation equipment set up of Diphenhydramine administered  Newborn resuscitation equipment set up of this set of a set of the s		Rapid volume expansion	Assessed blood pressure	Fluid resuscitation performed	Prepared for cesarean section	Airway evaluated		Creatinine level sent	
administered    Sood product resuscitation equipment set up   Diphenhydramine administered   Blood product resuscitation ordered   Order	rotational displacement of the anterior shoulder, rotational displacement of the posterior shoulder, episiotomy, delivery of posterior arm, fx clavicle, etc.		Fetal status assessed	assessment sent			most likely cause	Fetal status assessed	
Inhaled beta-2 agonist administered					,	section	patient likely has large volume blood loss given abruption and term fetal demise		
administered administered considered speed of proceeding with delivery clear delivery considered superior to administration delivery clear delivery considered deliver	Newborn resuscitation equipment set up	Diphenhydramine administered							
uterfornic medications, called treatment leader ascertained patient's hypertension and asthma history.  Fetal status assessed  Fetal stat	-	administered		administered	considered	speed of proceeding with delivery	assessment sent		
morphine for analgesia during equipment set up uterine evacuation.  Decision to move patient to OR General anesthesia/imtubation Team used transfer checklist if they plan to transfer patient to another institution or another inst		H2 blocker administered		utertonic medications, treatment leader ascertained patient's hypertension and			Blood crossmatched		
OR OR prepared for possible surgical intervention  OR prepared under intervent		Fetal status assessed		morphine for analgesia during		Wedge placed			
surgical intervention intubation considers induction of labor vs. cearana delivery for maternal reasons  Anesthesia told surgeon to obtain and Anesthesia told surgeon to proceed in clear language of cagulation status and surfability for regional anesthesia for labor and delivery.  All Tasks Task Completed positives: Task Completed p							if they plan to transfer patient		
proceed in clear language concluding the proceed in clear language concluding the proceed in clear language concluding status and suitability for regional anesthesia for labor and delivery.  Newborn resuscitation equipment set up equipment set up all Tasks Task Completed positives:						intubation	considers induction of labor vs. cesarean delivery for maternal reasons		
All Tasks Task Completed positives: Task Completed pos							Anesthesiologist discuss coagulation status and suitability for regional anesthesia for labor and		
Task Completed positives: Task Completed pos									
Fask Completed positives: Task Completed pos	All Tasks	All Tasks	All Tasks	All Tasks	All Tasks	All Tasks	All Tasks	All Tasks	
uuan apuna total apuna total apuna total apuna									
	total spots	total spots	total spots	total spots	total spots	total spots	total spots	total spots	



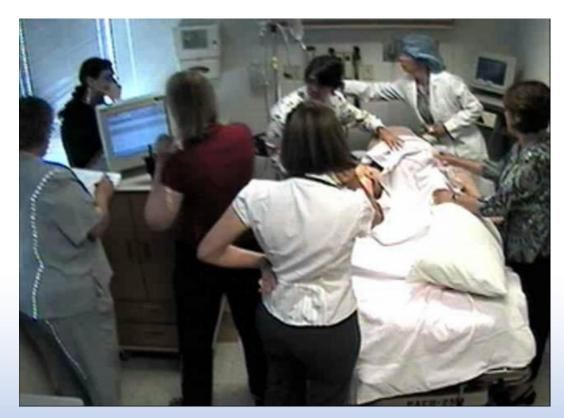
<b>Team Task Completion Checklist Obstetric Crisis Sim</b>	ulation Training Course, WISER	
Station Team Member	Items	Task Completed
Anesthesiology	Assess analgesia	Υ
	Make anesthesia plan with team leader	n
	Communicate anesthesia plan to team	n
Anesthesiology asst	Learn airway plan from anesthesia 1	У
	Assemble needed equipment	У
Patient's nurse	Stay by patient	У
	Check vital signs	У
	Check maternal heart rate	У
	Report vital signs to team leader and data manager	У
Assess and	l establish IV access (what size?/working?/what is running?)	У
	Adjust IV rate	У
	Deliver medications	У
Documentor/Data Manager	Obtain record sheet	У
	Obtain situation/background	У
	Record team leader	n
	Acquire chart, essential data	У
	Prompt VS data from Bedside asst Document Treatments	У
Treatment leader	Identify self	у
realment leader	Ensure team assumed all roles	n
		n
	Obtain situation/background	У
	Establish a differential and make diagnostic assessment	у
	Make anesthesia plan with anesthesiologist Notify team of plan for treatment and anesthesia	n
	Determine treatment	n y
	Give order to treat accurately and precisely	n
	Definitive intervention/s	 У
Nursing Leader	Identify self	n
	Ensure team assumed all roles	n
	Control traffic	у
	Facilitate equipment acquisition	y
	Facilitate patient transfer	v
Procedure MD	Assess fetal status	У
	Report fetal status to treatment leader	У
	Assess maternal status	У
	Report maternal status to treatment leader	У
Runner	Get medications	у
	Get equipment	у
	Deliver necessary items to appropriate personnel	у
Saamania Outaana		
Scenario Outcome:		By Polo
	All Tasks	By Role <b>74%</b>
	Task Completed positives:	29
	total spots	39
	<u> </u>	
	Organizational Tasks	79%
	Task Completed positives:	27
	total spots	34
	The annual of the Table	
	Therapeutic Tasks  Task Completed positives:	67%
	·	2
	total spots	3

## High risk/Problem-prone Med/Surg Examples:

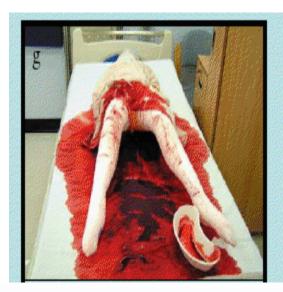
- Malignant Hyperthermia in the OR
- Mock Code
- Condition C : pneumothorax
- Post Partum Hemorrhage on floor



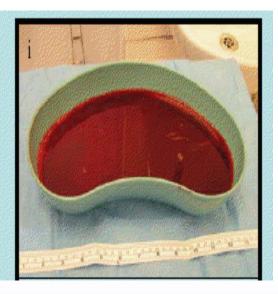
# The courses not only assist with competencies but they can improve practice



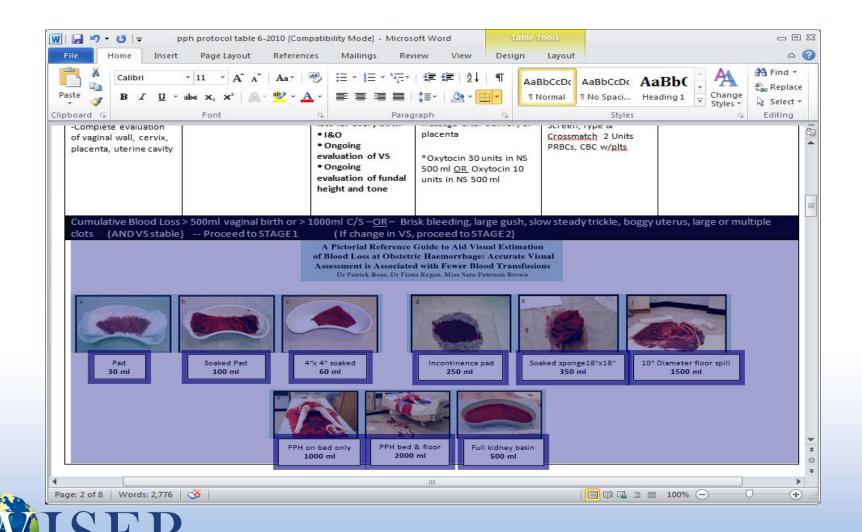












Simulation Improving Healthcare

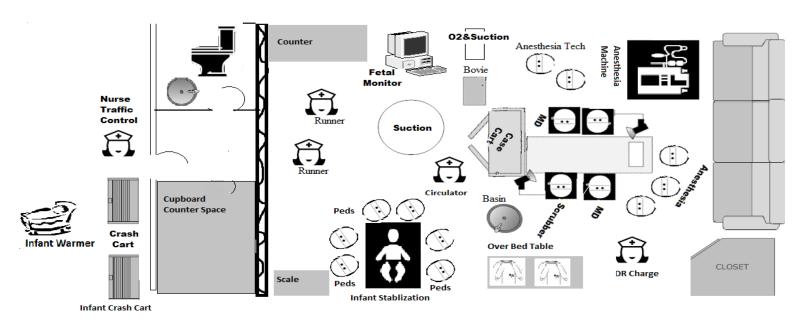
Post partum Hemorrhage kit with all needed medications located in accudose



#### **Emergency C/Section in LDR**

Number	Supply	Location
1	STAT C/Section Cart supplies	OR Hallway
	Gowns, masks, booties, caps, scrub brushes	
1	Ring Stand	OR Hallway
1	Bovie with grounding pad	OR Hallway
1	Portable light	OR Hallway
1	Anesthesia Machine	OR Hallway
1	O2 / compressed air set-up (to be placed	OR Hallway
	outside LDR in hallway next to radiant warmer)	
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	Inside OR in
	outside of LDR)	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







## 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

