

Help Me Mend This Broken Heart

Clinical Simulation on a Pipe-Cleaner Budget

Presented by: Laura Lewicki, RN, CNCC (c)
Lori Garchinski, RN, BSN, CNCC (c)

Objectives

- Review background regarding need for this simulation
- Review the process of organizing clinical simulation
- Discuss method of creating a real-to-life scenario
- Discuss effectiveness of this simulation experience

Why did we need a mock sternotomy?

- Emergent sternotomies are occurring more frequently—often at the bedside
- CVT Surgeon request
- Bedside surgical procedure

Objectives of Mock Sternotomy

- Develop and maintain competency
 - The SICU nurse does not replace the OR nurse
 - Remind nursing staff that surgical procedures require the OR staff
 - In our facility any time a chest is opened the OR needs to be notified.

Emergent Sternotomies

- Cardiac tamponade
- Excessive bleeding
 - Antiplatelet medications pre-op → post-operative bleeding (Ley)
- Internal defibrillation/cardiac massage

The process

- Consult with CVT surgeon
 - Stabilize the patient in SICU & then send the patient to the OR

The process

- Research
 - Appropriate manikin



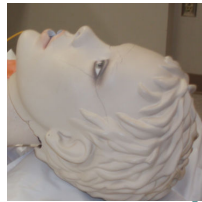
The process

- Purchase a used manikin



The process

- Cutting the manikin



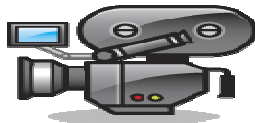
The process

- Inside the chest



The process

- Availability to staff



The process

- Write a script

The Process

- Consult a team
 - CVT surgeon
 - Intensivist
 - CVT OR nurse
 - Perfusionist
 - Respiratory Therapy
 - Nursing Staff
 - Medical Media

The Day of the Shoot

- Scene Set up
- Appropriate staff actors
- Introduction to instruments
- Internal paddles
- Opening and closing remarks

The premiere

- Posters to announce premiere and all staff were invited
- Participants were invited by special invitation
- Manikin attended

The movie

Bedside Emergent Sternotomy

Budget

Manikins	\$25
Foam	10
Pipe Cleaners	2

All other supplies used were easily available on the unit.

Total cost	\$37
Staff cost	Priceless

Improvements

- Hold a rehearsal

Benefits of clinical simulation

- Excellence in critical care nursing practice (AACN 2005)
- Development of collaborative skills.
- Maintaining clinical competency (Critical Care Nurse 2006)
- Retention of nurses

Benefits of this simulation

- Understanding of instruments
- Reduced anxiety

Staff Education

- Most of SICU able to view DVD over the next several weeks
- All new SICU staff are shown the DVD during their open heart orientation

Outcomes



References

- American Association of Critical Care Nurses. *AACN Standards for Establishing and Sustaining Healthy Work Environments: A Journey to Excellence*. 2005.
- Fox, K. et al. Benefits and Risks of the Combination of Clopidogrel and Aspirin in Patients Undergoing Surgical Revascularization for Non-ST-Elevation Acute Coronary Syndrome: The Clopidogrel in Unstable Angina to Prevent Recurrent Ischemic Events (CURE) Trial. *Circulation Journal of the American Heart Association*. 2004.
- Ley, S. Jill Quality Care Outcomes in Cardiac Surgery: The Role of Evidence-based Practice. *AACN Clinical Issues* Volume 12, Number 4, pp. 606-617. 2001.
- Ulrich, B. et al. Healthy Work Environments Critical Care Nurses' Work Environments: A Baseline Status Report. *Critical Care Nurse*, 26 (5). June 26, 2007.
- Wiegand, Debra J., Carlson, Karen K. *AACN Procedure Manual for Critical Care*, 5th Edition. 2005.