Appendix B: NCAL Medical Center Reports

Walnut Creek Simulation Center

Background
Kaiser Walnut Creek (WCR) has been performing simulation in-situ since 2006. The Clinical Education Department has over site of simulation for the facility. All of the Clinical Education and Development Team (CNS and Educators) at WCR have completed the Laerdal training and BASC instructor programs, including specialized courses in debriefing.

Objectives
To provide a variety of simulation training based upon the needs of the organization.

Approach
The WCR's simulation team is multidisciplinary and includes physician champions, clinical educators, and administrative support that are knowledgeable in the pedagogy of simulation. The team is made up of experts from a variety of medical disciplines and covers the spectrum of patient care from the Emergency Department, Anesthesia/OR, Adult patient services, Pediatrics and Maternal Child Health. Education and training is built upon the model and practice of the "hands on experience" and didactic model of the CETT.

WCR has a proactive approach to simulation. The facility has preformed multiple simulated scenarios to test and capture potential patient safety errors prior to an adverse event occurring.

Measurement
Based upon findings from an in-situ Critical Event Team Training (CETT), it was identified that the process regarding managing a chemotherapy hypersensitivity reaction was not written into the Chemotherapy Administration Policy. In addition, medications and supplies to treat such an emergent event were not readily available to the staff. As a result of in-situ multidisciplinary simulation, the Standard of Care and Practice for Chemotherapy Administration was enhanced and a hypersensitivity kit was created.

A follow-up class of Critical Event Team Training was performed. During the second process, the nurses identified the hypersensitivity kit needed further revision and enhancement to make the supplies easier to find. One month ago, a patient had a hypersensitivity reaction on the floor and during the debriefing the nurses stated because of the simulation and follow up education they felt knowledgeable about how to care emergently for the patient and how to access the hypersensitivity kit. With this change in practice, nurses who are administering chemotherapy on other floors now take the hypersensitivity reaction kit with them. The pharmacy and Therapeutics committee reviewed the enhanced policy and process and put forth the recommendation that the process should be implemented in the out patient infusion clinic.

WCR was able to identify and trap errors in the cath lab. A proactive example of using simulation to identify and trap systems errors included performing simulation in the cardiac catheterization laboratory prior to opening the new service line. Several multidisciplinary Critical Event Team

Trainings were done in the ED and cardiac catheterization laboratory. These teams had never worked together and the room and equipment had not been used. After performing simulated heart catheterization we identified and trapped a variety of communication, team dynamic and systems issues which could have been threats to patient and employee safety. Also, identified was a problem with reading the PYXIS machine when the lights in the lab dimmed to perform the test. The light was on a separate switch which was installed decreasing the potential that a medication error would occur. Additionally, a Respiratory Therapist involved in the simulation noted that the oxygen hoses needed to run across the floor in order to attach the ventilator. This posed a potential hazard to nurses who frequently crossed this area in the dark. A simple pulley system was mounted to the ceiling and to prevent any chance of work place safety injury from occurring.

During one of the first in-situ simulations on a medical/surgical floor, it was noted that staff nurses would delegate the task of calling a physician to a secondary RN or to a unit assistant. This presented a barrier to patient care because often the physician receiving the call had questions that could not be answered by the nurse calling. Through debriefing and review of symptoms presented in SBAR, the Clinical Education Department readily identified the need for the primary RN to call and SBAR a report to the physician during an emergent event. Because this clinical practice was so widespread the Clinical Education Department standardized this communication process into every simulation briefing.

During a post partum hemorrhage scenario, the primary RN gave an SBAR report to the physician and because she was further able to answer the questions, the physician readily identified that this patient was bleeding and she was needed at the bedside immediately.

Future

Critical Event Team training is performed several times a month and covers the entire age continuum from neonatal, pediatric, maternal child health through to end of life.
The simulation events reach the spectrum of medical disciplines from the Emergency Department, OR/Anesthesia, Interventional Services, and Oncology through all of pediatric and adult medical surgical departments. Simulation has allowed us to trap and mitigate errors in team communication, medication administration, early recognition of decompensation and rescue, systems issues, and threats to workplace safety. We have reduced errors in incorrect use of equipment such as defibrillators, and suction/airway supplies. The results of the project are sustainable because the teams cross train.