# Appendix B: NCAL Medical Center Reports

## Redwood City Medical Center Simulation Center

**Background**
Redwood City Medical Center's (RWC) first experience with simulation was the launch of the Perinatal Patient Safety Project in 2003 with Critical Event Team Training. With the success of simulation on the perinatal unit, RWC was one of the first medical centers to host a multidisciplinary, multi-medical center Train-the-Trainer workshop for both RWC and South San Francisco. From the early beginning of simulation in NCAL, RWC's leadership has been early adopters and supporters of simulation efforts across all disciplines. In 2007, with the implementation of Rapid Response Teams (RRT), simulations were conducted to rehearse the new roles and responsibilities of the med-surg and ICN teams. In 2009, RWC sponsored a second Train-the-Trainer workshop to expand its capability with additional trainers to support their simulation efforts. When the pediatrics services was moved form RWC, space was found for their Simulation Center.

**Objectives**
The aim of RWC's Simulation Center is to provide simulation scenarios for all staff, new graduates, licensed and unlicensed clinical care givers and physicians to improve recognition and respond to patients having clinical deterioration.

Simulation is used to educate clinical caregivers about identification of early warning signs signaling a patient condition change, practice responses to the deteriorating patient, and the methods to contact responsible clinicians in a reasonable time period. RWC's Simulation Center is used to increase opportunities for multiple clinical departments to conduct mandatory education and training of staff and stakeholders about emergency responses to the deteriorating patient.

**Approach**
RWC's goal is to continue moving from classroom lectures with cognitive testing to increasing the use of simulation experiences involving all domains: psychomotor (technical); critical thinking and interpersonal communication skills. RWC wants to maximize ways to promote realism in use of simulation technology and design educational interventions to accomplish training objectives congruent with best practices for care of a patient with specific emphasis on deterioration in clinical condition.

Simulation experiences will help to identify and develop personal caring values focused on individual growth, leadership responsibilities and ethical conduct. RWC simulation efforts will also focus on confident, proficient, and clinically competent reassessment and re-evaluation of outcomes associated with patient condition change.

RWC's simulation trainers have use of the complete SimFamily which provides highly complex, state-of-the-art physiological models of human patients. Scenarios with these simulators have shown to be useful in new staff development and promotion of ongoing essential behaviors and skill sets to manage critical emergencies. .

**Measurement**

The collection and analysis of information related to simulation education serves to validate use of high fidelity technology and processes for improving care of patient deterioration. These can include:

- Increase staff satisfactory completion of competency validation essential performance criteria for accurate recognition, appropriate response and notification of indicated team members in a timely manner
- Increase consistent utilization of appropriate chain of command for communication regarding patient deterioration in condition
- Increase RRT calls proportionately to monthly competency validation and remediation. Baseline: Inpatient. Education Laerdal Simulation Multidisciplinary San Mateo Area (RWC & SSF) Critical Event Team Training (CETT) for Trainers-Running Scenarios Using Simulators held September 22 through 24, 2009. Videotape of case scenarios illustrating deteriorating patient condition, progression to need for Rapid Response Team and later Code Blue; created CD-DVD Independent Study Program version for ongoing staff education and training (permission to duplicate pending KP NCAL Simulation Coordinators approval)
- Review of Participant Evaluations indicated benefits to assimilating concepts and transferring skills to real world clinical situations involving deteriorating patient condition.
- Heartfelt "Thank You" cards have been sent home of individual staff nurses who call an RRT to show appreciation.
- Decrease Code Blues proportionately to above through early recognition of patient deteriorating condition changes

**Status**

The simulation trainers continue to offer trainings to improved communication techniques and clinical skill training competency validation. Simulation validation includes the deteriorating patient, dysrhythmia recognition, Rapid Response and Code Blue exercises to rehearse procedures and implement policies. Using the structured communication model of SBAR, teams work together to learn how to summarize the concerns of the patient's condition and situation. Simulation has also been used for training on critical thinking, Inpatient Code Gray, recognition of stroke signs and symptoms and administration of t-Pa.

**Future**

RWC will continue to offer communication skills training so nurses can continue to effectively report information to medical and nursing staff. The use of KPHC has had some challenges for staff. Through simulation, scenarios can be run to test critical notification alerts to physicians and coach staff on how to use KPHC to chart patient care appropriately. The simulation program supports several domains in the medical center. The perioperative service department has used simulation to improve their briefing skills in the OR and have plans to train more with the simulation techniques. Maternal child health continues to run high fidelity scenarios with the newly purchased simulation equipment.