Supplemental Material B: Example Simulation Scenario

Decompensating Patient Scenario: Post Op Tonsillectomy &Adenoidectomy

Scenario: A 6-year-old T&A post-op patient, needing some oxygen after surgery. Patient initially on 30% FiO2 via cool aerosol. The nurse (RN) calls the respiratory therapist (RT) because the patient is desaturating and she would like the RT to assess the patient. RN already increased FiO2 to 40%.

RT enters the room and completes assessment of patient. Vital Signs: HR 120, RR 20, Pulse Ox 88 %, and BP: 98/68. Patient complains of pain & RN gives pain medication via IV access. RT increases FiO2 and sets up tandem cool aerosols at 50%. No change in patient assessment or vital signs. Breath sounds clear with good air movement.

Patient is still complaining of pain. RT increases FiO2 to 70% More pain meds given by RN. RT calls the physician to further evaluate the patient and discuss the next steps.

Vital Signs: HR 114, RR18, and Pulse Ox still 88%. RT suggests calling the Critical Assessment Team (CAT) for further assistance/evaluation due to increased FiO2 requirement.

More pain meds were given by RN. RT increases FiO2 to 100% while waiting for CAT team.Vital Signs: HR 98, RR14, with no change in Pulse Ox. Simulation operator begins a slow decrease in HR and RR.

Patient becomes unconscious and apneic with HR in the 70s and Pulse Ox 79%.

RT obtains self-inflating bag, properly positions patient with assistance of RN, and begins manual ventilation. CODE called.