



## Healthcare Organization Commitment

### Contact Details

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#### Position

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#### Organization Name

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### Commitment Details

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#### Commitment Name

APSS #4: Monitoring for Opioid Induced Respiratory Depression

#### What Patient Safety Challenge does your Commitment address?

Challenge 4 - Monitoring for opioid-induced respiratory depression

#### Commitment Start Date

01/01/2016

#### How Many Hospitals Will This Commitment Represent

## Commitment Summary

Opioid-induced respiratory depression is a leading cause of preventable patient death and serious patient harm events across the medical industry. Hospital leadership must understand, appreciate and commit to eliminating these events. Implementing an effective program to reduce opioid-induced respiratory depression will require an organized plan which includes both effective monitoring and intervention limbs and also an effort to minimize use of unnecessary narcotics and sedatives.

## Commitment Description & Detail

As a tertiary-quaternary regional children's hospital, we have patients of many ages, types and conditions who require use of analgesics for pain, well beyond surgery alone. Thus, the comprehensive use of our Rapid Response Team and Pediatric Early Warning System assessment and monitoring of all non-ICU patients has led to an approximately 85% reduction in non-ICU codes of all types, sustained for nine consecutive years. All such events (N less than 10 per year) are rigorously investigated, including for possible medication-related contributions. There were none of the latter in the last year. All CHOC patients receiving narcotics are monitored for oxygen saturation at a minimum by policy. Utilizing best practice trigger methodology, all uses of naloxone are investigated for circumstances requiring usage. In alignment with the Patient Safety Movement Foundation Actionable Patient Safety Solutions (APSS) checklist, CHOC Children's Hospital has completed and reached our goal for the below checklist items.

## Action Plan

-Implement continuous electronic monitoring on all floors where patients are being administered opioids, per hospital policy. -Monitoring should consist of a minimum SET (Measure Through Motion and Low Perfusion) pulse oximetry with local and central alarms. Direct communication can be sent to bedside personnel versus in-house phone network. -Respiratory rate alarms are set at age-appropriate, evidence-based parameters to minimize alarm fatigue. -A rapid response notification system should be in place to alert staff if the patient is deteriorating. A plan for escalation of rapid response alarm to another staff member should also be in place. At CHOC, beginning in mid-2017, a "Watcher Program" for non-ICU patients was established, which identified patients at the earliest stages of deterioration and thus bore "watching." This occurs via a rapid briefing including multidisciplinary clinicians and establishment of a mitigation plan to be achieved within two hours. This is in addition to our PEWS and Rapid Response Team programs, and is meant to achieve even earlier detection of possible deterioration. -Hospital governance should commit to a plan that includes: Reviewing all reported preventable patient deaths and serious patient harm events over the previous 24 months where opioids were involved and may have contributed to the preventable event. A review of all previous closed malpractice claims related to opioid-induced respiratory depression should also be undertaken. -Identifying and prioritizing common contributing factors from those serious preventable

events. -Identifying continuous electronic monitoring technologies that notify staff of significant changes in a patient's respiratory condition which includes a rapid response approach that ensures appropriate interventions are initiated in a timely manner. -Providing the resources necessary to implement the chosen plan. -Continuing to report and assess both near misses and patient harm events for additional learning opportunities and improvement. -CHOC Children's Hospital has two hospital "champions" who are accountable for successful implementation, education and evaluation of efforts to both minimize the untoward side effects of narcotics and reduce the use of these agents overall. In addition, we are in early stages of joining with another children's hospital in an organized program designed to reduce controlled substance utilization across inpatient and outpatient networks. • CHOC has a Resuscitation Coordinator RN, who oversees all aspects of the resuscitation program, including, vitally, their prevention by intervening at the earliest signs of deterioration. This role also includes interfacing with local unit leaders to ensure ongoing full compliance with the patient monitoring plan as described above. CHOC also has a longstanding dedicated Pain Nurse Practitioner who coordinates the programmatic efforts at pain prevention and management. In children, extensive multidisciplinary efforts are expended at various forms of distraction therapy. In addition, the benefits of 24/7 parental presence cannot be ignored. -We are currently working to develop an educational plan for all staff, patients and family members that shares common contributing factors leading to opioid-induced respiratory depression as well as the implementation plan that strives to eliminate current risks associated with opioids. • Anesthesiology-directed Pain Service • Pain NP rounds daily • Orthopedic, Cardiovascular and General Surgery organized protocols to minimize narcotic use

### Commitment Timeline

This CHOC Children's program and checklist items are currently in place. Our commitment to this APSS will be ongoing and reported annually to PSMF.

### Impact Details

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#### Lives Saved

##### Methodology for Determining Lives Saved

The CHOC Non-ICU Code Prevention program, which incorporates all such patients, not just surgical, measures Non-ICU codes per 1000 hospital days. Of the six events last year, none were related to medications or post-operative patients; hence, a rate for this metric of zero. There is no known pediatric benchmark for comparison, so no true way to measure lives saved.