

## **Quality Story 1: Changing Providers for Oncology Procedural Sedation**

### **Goals:**

- Use sedation providers on all patients on the Oncology service needing procedural sedation for a 6-month trial.
- Improve flow, patient satisfaction, and safety for pediatric oncology patients needing procedural sedation

### **Metrics:**

- Efficiency measures: decrease duration of sedation (goal <25 min), time oncologist was out of clinic for procedure (goal <15min), time Oncology RN out of clinic for procedure (goal <30min)
- Safety measures: sedation adverse events during the trial period as percentage (goal<3%)
- Satisfaction outcomes: Oncology provider and Patient/Family satisfaction with process of performing sedation in sedation suite. Use Likert scale highly satisfied (goal >75% for Oncology MD, >90% for families/patients).

### **Project Description: Interventions and Outcomes**

Prior to trial, Oncologists were providing sedation/recovery for most of their own patients with Ketamine and Versed in small poorly equipped clinic room. While compliant with the hospital sedation policy, we proposed that it would be safer to have a dedicated skilled sedation physician providing sedation for the proceduralist. Our service recommended that deep sedation with Propofol and Fentanyl may provide a better experience in their patients without compromising safety. To develop buy-in from Oncology and engage hospital leadership and hospital quality/safety we emailed national oncology groups and sedation providers (through the list serve) to identify current and best practices for Oncology sedation. In addition to using a dedicated sedation provider, we proposed changing the location of the procedure from a small procedure room in the Oncology clinic to the new six-bed sedation suite. These rooms are larger, have more patient rescue capabilities, and have back-up staff nearby if. We anticipated that patient satisfaction and safety would be maintained if all procedures were done in the sedation suite with sedation providers. We also anticipated that efficiency would improve as multiple patients could be housed in the larger sedation suite allowing several patients to be screened and recovered at one time (compared to a single Oncology procedure room). Outcome metrics defined above.

**Post-Trial Outcomes Metrics:**

- 9 of 13 Sites responded by email that sedation involved in 100% of Oncology procedures.
- Decrease from mean of 45-minutes procedure time to 25-minutes, increasing throughput
- Mean time at bedside for Oncology provider = 15 minutes (down from 25min pre-trial)
- Mean amount of time at bedside for Oncology RN = 20 min (down from 45min pre-trial)
- No change in adverse event rate with propofol/fentanyl compared to Ketamine (3% pre/post)
- 90% of Oncology patients highly satisfied with new process and medications (Likert scale)
- 75% of Oncology MD highly satisfied with new process (Likert scale)
- 90% of Oncology RN highly satisfied with new process (Likert scale) due to no longer monitoring/recovering sedated patients

**Challenges encountered:** Mainly process/flow issues of moving patients between the clinic and sedation area (alleviated by developing a collaborative process map). Some patients felt the procedures would be more family-centered if done in the clinic. Vocal minority of Oncology providers felt the process impeded their efficiency in clinic since they had to leave clinic and could not multi-task. Some resistance to new process as Oncology had confidence in their regimen and outcomes.

**Lessons learned:** Ultimately, early engagement of Oncology and hospital leadership and quality/safety officers to emphasize employing best practices helped nurture a collaborative process. Using quality officer input and email survey results regarding national practice patterns helped open door to sedation service involvement. This project helped build open lines of communication between the groups, improved patient safety, and improved efficiency for both the Oncology and Sedation providers.