Shambavi Rao BS Department of Gynecologic Oncology, OB-GYN Medical Student

The Postoperative Opioid Reduction Initiative: A Quality Improvement Initiative for Gynecologic Surgeries at a Tertiary Care Center

Shambavi Rao, BS; Stephanie B. Pham, BS; Jersey Burns, MD; Sarah Allen, MD; Linsdey Alpeter, MD; David Shalowitz, MD, MS

Opioid prescriptions have quadrupled while opioid overdoses have tripled since 1999. Prescribed opioids for postoperative pain continues to be the leading cause of overdose deaths. We developed and implemented an evidence-based strategy for reducing routine opioid prescription after gynecologic surgery based on local patients' needs and utilization. The "Opioid Prescription Reduction Initiative" (OPRI) was implemented to reduce opioid prescriptions by 50%, maintain adequate analgesia and reduce refill request rates to less than 25%. We conducted a pre- and post-implementation cohort study. Patients were surveyed via telephone on postoperative day 7 and 14. Data collected included total opioids prescribed at discharge, total opioids used, mean pain scores and refill requests. Data was confirmed by electronic medical record and North Carolina Prescription Monitoring Program. Analyses were stratified by laparotomy, minimally invasive surgery (MIS) and minor procedure. T-tests were used to compare sample means. The implementation of OPRI resulted in a decrease in mean number of opioid pills prescribed (oxycodone 5 mg) at discharge from 20 to 7.9 for laparotomy (n=19 pre, 22 post; p<0.01), 12.2 to 3.3 for MIS (n=35 pre, 25 post; p<0.01) and 5 to 0 for minor procedure (n=22 pre, 11 post; p=0.68). Protocol adherence was 73% for laparotomy, 76% for MIS and 100% for minor procedure. Mean pain scores on POD7 and POD14 remained less than 5 and refill requests remained less than 25% before and after implementation of OPRI. Implementation of OPRI led to greater than 50% reduction of opioids prescribed at discharge while maintaining adequate patient analgesia and low opioid refill requests.