Opioids are overprescribed and can be eliminated for a number of children’s operations

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Purpose
Though surgery is a leading source of opioids among children, procedure-specific patterns of postoperative use, storage, and disposal are unknown. We sought to evaluate these outcomes after eight pediatric procedures.

Methods
We prospectively surveyed parents of children age 0-17 years who underwent appendectomy, umbilical or inguinal hernia repair, orchiopexy, circumcision, tonsillectomy, adenoidectomy, and upper extremity fracture fixation at a tertiary children’s hospital (N=634, 3/26/18-7/31/18). Patients received a pain journal at discharge. Parents were contacted by phone, email, or follow-up clinic at 7-21 days postoperatively to assess pain control, medication use, postoperative education, and opioid storage and disposal. Opioid prescription quantity (number of doses to account for weight-based dosing) was obtained by chart review. Descriptive statistics were performed. This project was deemed exempt by the IRB.

Results
Among 412 respondents (65% response rate), 217 received an opioid prescription (53%). Patients reported good (71%) or adequate (24%) pain control and frequent use of acetaminophen (81%) and/or ibuprofen (92%). Excess medication was prescribed to 73% of patients (158/217). Prescriptions exceeded use for all procedures (Figure). For 4 procedures, most patients took no opioid: adenoidectomy (45/48, 94%), inguinal hernia (47/51, 92%), appendectomy (21/23, 91%), and umbilical hernia (18/20, 90%). Among these, 1 parent requested a refill after adenoidectomy. Only 37% and 48% of all parents reported receiving education on opioid storage and disposal, respectively. Opioids were stored in a locked location (23%, 45/200), unlocked location (66%, 132/200), or in the open (11%, 23/200). Only 27% of parents disposed of extra medication (43/159).

Conclusion
Excess opioids are frequently prescribed after children’s surgery. This study offers evidence for procedure-specific opioid prescribing recommendations, specifically suggesting elimination of opioids for umbilical hernia, inguinal hernia, appendectomy, and adenoidectomy. To address unsafe opioid management in the home, a multidisciplinary approach to standardize both education content and delivery is necessary.
Opioid Reduction: Empowering Pediatric Surgeons to Combat the Opioid Epidemic Using Evidence-based Strategies (cont.)