

OBJECTIVE

- Evaluate parent/guardian use of an at-home medication disposal product for disposal of unused opioids for post-surgical pain

BACKGROUND

- Disposing of unused opioids prescribed for acute post-surgical pain is an important, but potentially difficult and confusing task for parents/guardians of pediatric surgical patients.
- Adult research has shown that educational brochures can increase the disposal rate (11% to 22%).¹
- Recent pediatric research that provide parents with an opioid disposal method improved the rate of disposal (65% to 86%).²

METHODS

- For patients prescribed opioids for post-surgical pain, their parents/guardians were given a packet of an at-home disposal agent along with an instructional flyer (see right).
- Families seen by anesthesia during their first post-surgical visit were queried about opioid use, leftover opioids, and disposal of leftover opioids.
- Families without a post-operative clinic appointment were contacted by telephone around 4 weeks post-surgery.
- Parents who did not dispose of leftover opioids were given a reminder call in 2 weeks.



TABLES

Number of products dispensed	347
Given PreOp	330 (95%)
Given PostOp	17 (5%)

Surgery cancelled	12
Pending surgery or post-op clinic visit	28

Number of patients eligible for follow-up	307
Contacted	277 (90%)
Lost to follow-up	30 (10%)

Contacted patients	277
Instructed to save opioid for upcoming surgery	4 (1%)
No opioid to dispose	28 (10%)
All opioid used	14 (50%)
Opioid not filled	14 (50%)
Has leftover opioid	245 (88%)
Disposed	228 (93%)
Disposed without reminder	179 (79%)
Disposed after reminder	49 (21%)
Did not dispose	10 (4%)

RESULTS

- Thus far, 93% (228 out of 277) parents have disposed of their leftover opioid. All but 2 families used the at-home disposal product.
- Rate of disposal at initial follow-up was 70%; this increased to 83% at time of the reminder call ($p = 0.046$).

DISCUSSION

- Parents/guardians will make use of an at-home medication disposal product; making this an effective method of improving the frequency at which parents dispose of unused opioids.
- Our product was cost-effective for our system at \$1.90 per patient in addition to time spent by staff.
- We would suggest that wider implementation of these programs would benefit all patients to whom a controlled substance is prescribed.

CONCLUSIONS

- Providing parents with an at-home opioid disposal product is an effective method to improve proper opioid disposal.

REFERENCES

- Hasak, Jessica M., et al. "Empowering post-surgical patients to improve opioid disposal: A before and after quality improvement study." Journal of the American College of Surgeons 226.3 (2018): 235-240.
- Lawrence, Amy E., et al. "Effect of Drug Disposal Bag Provision on Proper Disposal of Unused Opioids by Families of Pediatric Surgical Patients: A Randomized Clinical Trial." JAMA pediatrics (2019): e191695-e191695.