

CEPOP National Webinar: *Combating the Opioid Epidemic Through Safe Disposal Strategies*

Monday, November 18, 2019

1:00pm – 2:00pm ET



Today's Agenda

- **Welcome and Introductory Remarks**
- **Providing Communities Safe Disposal Resources to Combat Misuse & Diversion**
General Arthur T. Dean, *Chairman and CEO, Community Anti-Drug Coalitions of America*
- **The What, Why and How of Safe Opioid Disposal**
Chad Brummett, MD, *University of Michigan Medical School and Michigan Opioid Prescribing Engagement Network*
- **Improving Opioid Disposal in Pediatric Patients**
Jennifer Cooper, PhD, *Nationwide Children's Hospital and The Ohio State University*
- **Facilitated Question & Answer with our Speakers**
- **Concluding Remarks**

The Collaborative for Effective Prescription Opioid Policies (CEPOP)



- 85 national organizations representing public and private-sector stakeholders.
- Convened by CADCA and The Honorable Mary Bono in October 2014.
- Dedicated to a comprehensive and coordinated opioid epidemic response.
- www.CEPOPonline.org

The Collaborative for Effective Prescription Opioid Policies (CEPOP)



CEPOP Working Groups

- Prevention
- Safe Use
- Safe Disposal and Anti-Diversion

PROVIDING COMMUNITIES SAFE DISPOSAL RESOURCES TO COMBAT MISUSE & DIVERSION

Gen. Arthur T. Dean

Chairman & CEO, CADCA





The What, Why and How of Safe Opioid Disposal

Chad Brummett, MD

The What, Why and How of Safe Opioid Disposal

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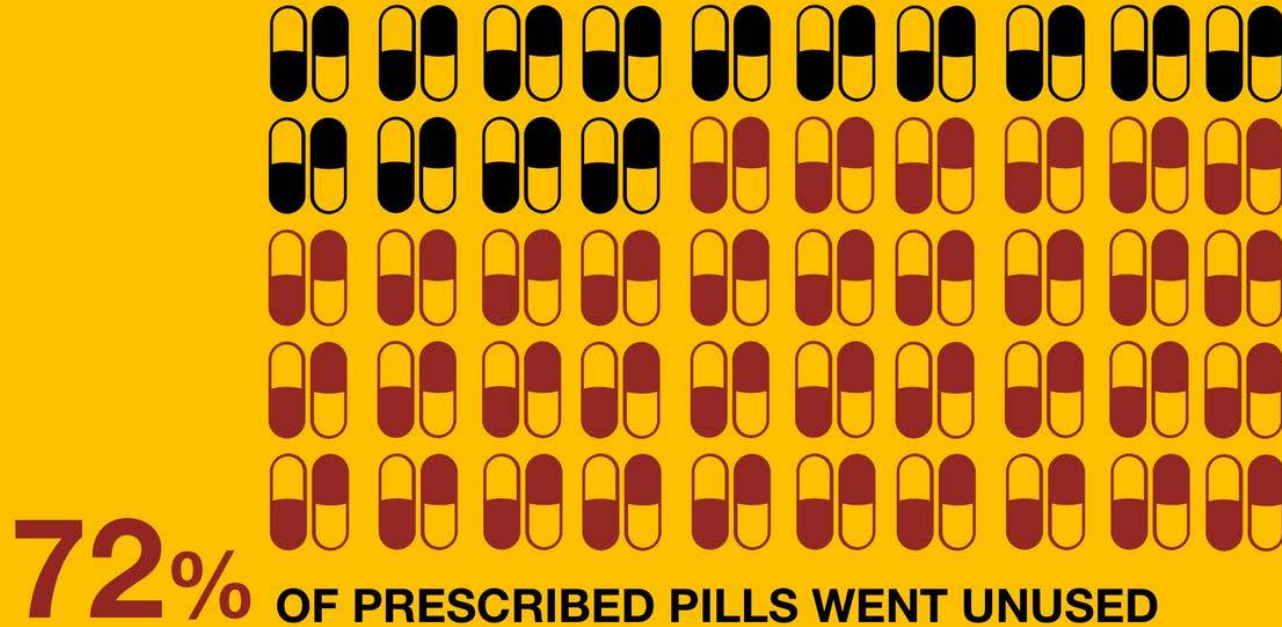
www.michigan-OPEN.org

<http://medicine.umich.edu/dept/pain-research>

Twitter: @drchadb



Most Opioids Prescribed for Outpatient General Surgery Procedures Go Unused



Hill et al. *Ann Surg.* Sept 2016.

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ANNALS OF SURGERY
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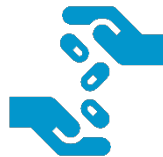
Why Dispose?

Risks



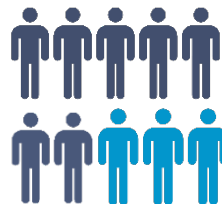
Every 10 minutes a child visits the ER for accidental medication poisoning

Misuse



3 of 5 teens say it's easy to get prescription opioids from their parents' medicine cabinet

7 out of 10 people who misuse opioids got them from friends or family

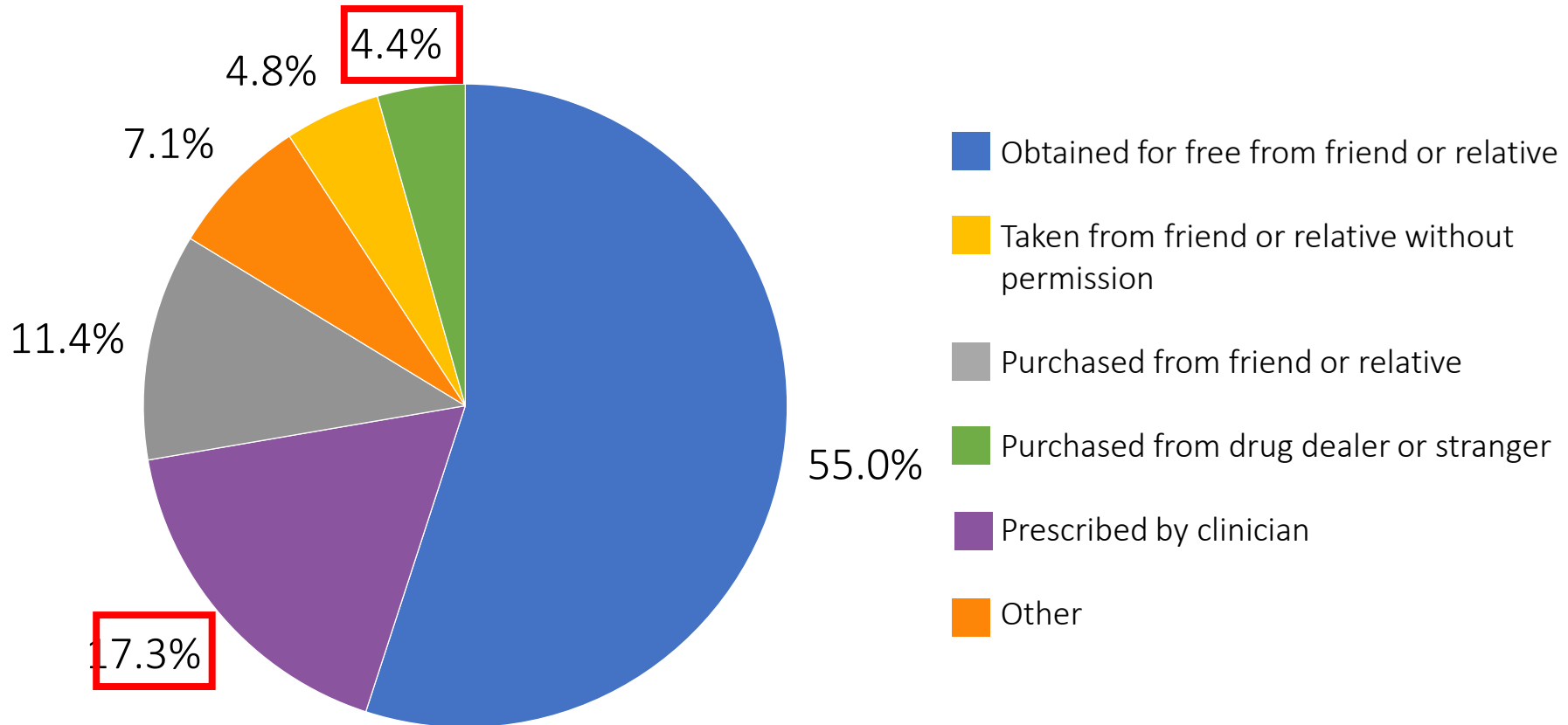


Abuse



3 of 4 heroin users started with prescription opioid use

Sources of Prescription Opioid Abuse



Source: CDC 2011/Drugfree.org

DID YOUR HEALTHCARE PROVIDER TALK TO YOU ABOUT MEDICATION DISPOSAL?



Patient Education

OPEN
OPIOID PRESCRIBING ENGAGEMENT NETWORK

Disposal Site
Near You



How to Store and Dispose?

Storage



Store opioids out of sight and reach of children, teen, and pets



Store opioids in private areas and lock up your pills if possible. Do not store in common rooms (ex: bathrooms) or purses



Keep a count of how many pills you have left

Disposal



Use a permanent medication drop box

➤ Michigan-OPEN.org/takebackmap



Drop off at a community Medication Take Back Event



Use household trash as last resort



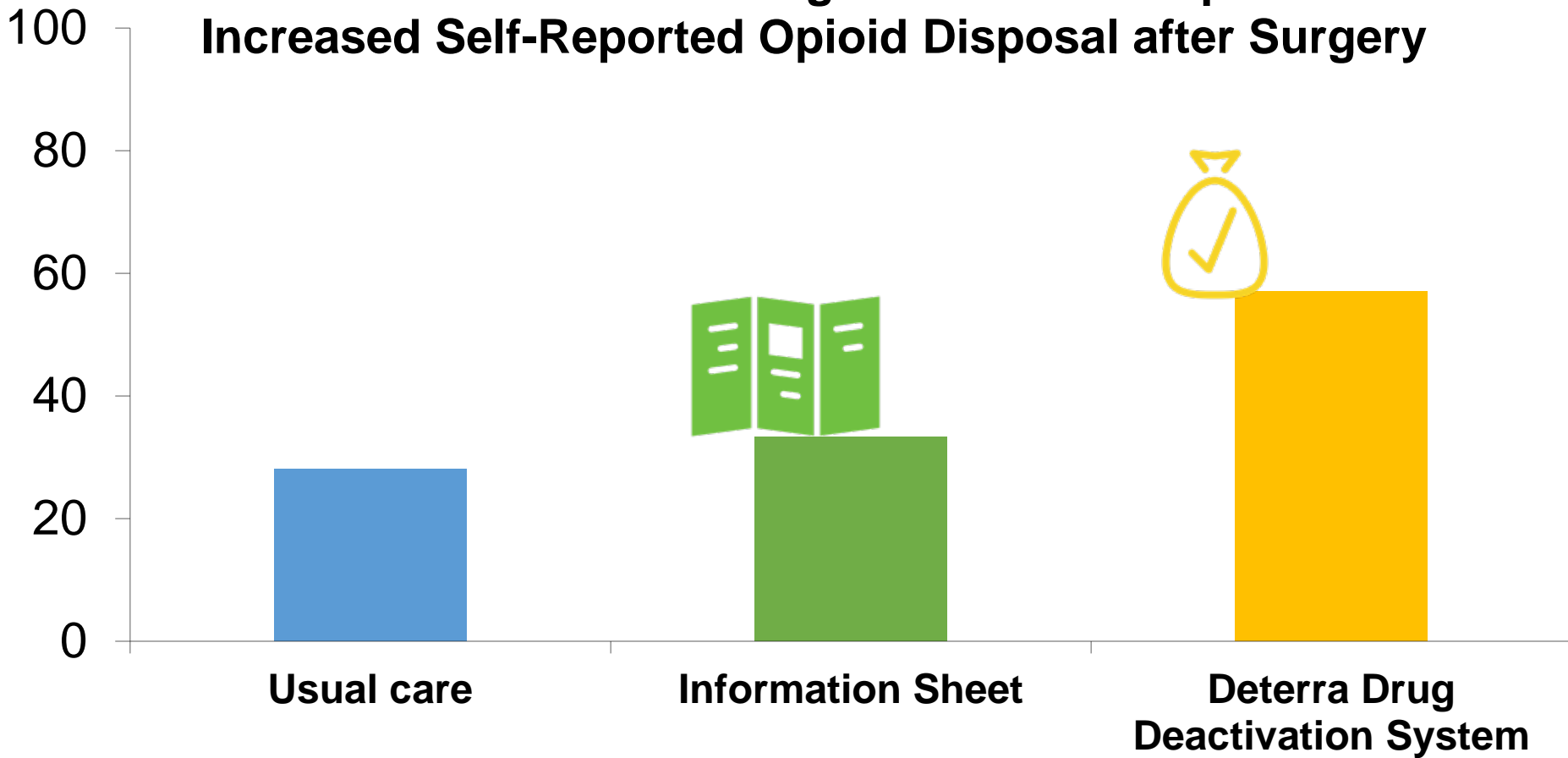
Scratch out personal information and dispose original container



Mix with unappealing substances (ex: coffee grounds) and throw away

****DO NOT flush opioids down the toilet**

Activated Charcoal Bag for In-Home Disposal Increased Self-Reported Opioid Disposal after Surgery



Patient & Community Education

Stopping the opioid epidemic starts with educating our communities.

Share Michigan OPEN's brochures, flyers, and posters with your patients and fellow providers.

Brochures



Surgery: Opioids and Pain Management
Ask questions and know the facts before using opioids for your pain.

- What is an opioid?
- Understanding the risks of using opioids
- Understanding pain after surgery
- Using opioids safely
- Safe storage & disposal of opioids

Also available in Spanish and Arabic through our Customization Request Form.

Customized materials with your organization's logo are available by request, free of charge. Materials will be sent as a PDF for you to print using your preferred method.

Please complete the request form below, and a member of the Michigan OPEN team will be in contact with you to confirm your request and collect your organization's logo.

Customization Request Form

First Name *

Last Name *

Organization *

OPEN

OPIOID PRESCRIBING ENGAGEMENT NETWORK

<https://michigan-open.org/>



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Improving Opioid Disposal in Pediatric Patients

Jennifer Cooper, PhD

Improving Opioid Disposal in Pediatric Patients



Jennifer Cooper, PhD

Principal Investigator, Center for Surgical Outcomes Research and Center for Innovation in Pediatric Practice, Abigail Wexner Research Institute at Nationwide Children's Hospital
Assistant Professor of Pediatrics and Epidemiology, The Ohio State University



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Disclosures

- This work was supported by The Ohio State University Opiate Innovation Fund and Award Number UL1TR002733 from the National Center for Advancing Translational Sciences.
- No other disclosures

Importance of opioid disposal

- Opioids are an important component of pain management in children recovering from severe injuries or surgery, but these medications are often prescribed in excess and rarely disposed of appropriately¹⁻⁵
 - <30% of surgical patients dispose of their excess opioids
- Lack of prompt and proper opioid disposal places children at risk of accidental ingestion and enables diversion for non-medical use
- US FDA recommends utilizing take-back options for disposal of unused or expired opioids
 - If these are inaccessible, flushing is recommended

1. Voepel-Lewis T, et al. *JAMA Pediatrics*. 2015.
2. Monitto CL, et al. *Anesthesia and Analgesia*. 2017.
3. Hill MV, et al. *Annals of Surgery*. 2017.
4. Bicket MC, et al. *JAMA Surgery*. 2017.
5. Kennedy-Hendricks A, et al. *JAMA Internal Medicine*. 2016.

Impact of educational interventions

- Studies evaluating the provision of educational materials describing recommended methods for safe disposal to adult surgical patients have had mixed results¹⁻⁴
- Lack of consistent impact may be due to the inconvenience of recommended methods of disposal or patients' desire to retain opioids for future pain

1. Maughan BC, et al. *Drug and Alcohol Dependence*. 2016.

2. Rose P, et al. *Canadian Journal of Anaesthesia*. 2016.

3. Hasak JM, et al. *JACS*. 2018.

4. Cabo J, et al. *The Journal of Urology*. 2019.

Drug disposal bags

- Activated charcoal adsorbs medication in pills, liquids, or patches, allowing for safe disposal in home garbage
- Numerous government organizations, health systems, and pharmacy chains are now distributing these bags or similar products
- Unclear whether providing these bags to pediatric surgical patients increases proper postoperative opioid disposal



Study Population and Intervention

- Included parents/guardians of children aged 1-17 who were having otolaryngologic or urologic surgery and were expected to be prescribed an opioid at discharge

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Helping Hand™

Important Things to Know When Taking Opioids Page 4 of 4

Important Facts

Opioid (OH pee awid) is the most commonly used pain medicine. Opioid medicines are used for many types of pain. Some of these are exercise, injury, and distraction.

There are 4 important points to remember: Monitor, Secure, Transition, and Dispose.

Monitor

- There are laws that control how much pain medicine a provider has ordered this as prescribed because the child can take this medicine.
- Know where the medicine is. You will always know how much is left.
- There is potential for abuse. If used when needed because of everyone, opioid addiction, injury and even death.
- Be on the lookout for "strangers" who are looking to steal or sell your medicine.
- It is important to keep your medicine in the original container.
- Possible side effects (from pain medicine):
 - Constipation - It is recommended to take stool softeners while taking pain medicine.
 - Nausea or vomiting - and drowsiness.
 - Drowsiness - If your child is drowsy, do not let them drive or operate machinery where the child must be alert.
 - Itchiness

Dispose

Fact - 70% of people who take pain medicine do not dispose of their unused medicines properly. Tell your child it is time to do so.

Do not use this medicine after the expiration date on the container. Opioids should be disposed of when they are no longer needed.

- Disposal Locations
 - Visit www.dea.gov or call the National Poison Center at 1-800-882-9585
 - a nearby Drug Take-Back Program
 - a mail-back authorized by the DEA
 - Visit www.rxdrugdisposal.com for a location (Picture 2).

If you are unable to dispose of your medicine, flushing is recommended.

- buprenorphine
- diazepam
- fentanyl
- hydrocodone
- hydromorphone

For patches, fold adhesive side to side and flush.

If you have any questions, be sure to ask your doctor, nurse, or pharmacist.

Continued on page 2.

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Request an appointment: MyChart
For Medical Professionals: Quality | Research | Giving | Careers

Find A Doctor Conditions We Treat Specialties Locations


Specialties > Comprehensive Pain Management Clinic > Pain Management

Opioid Safety

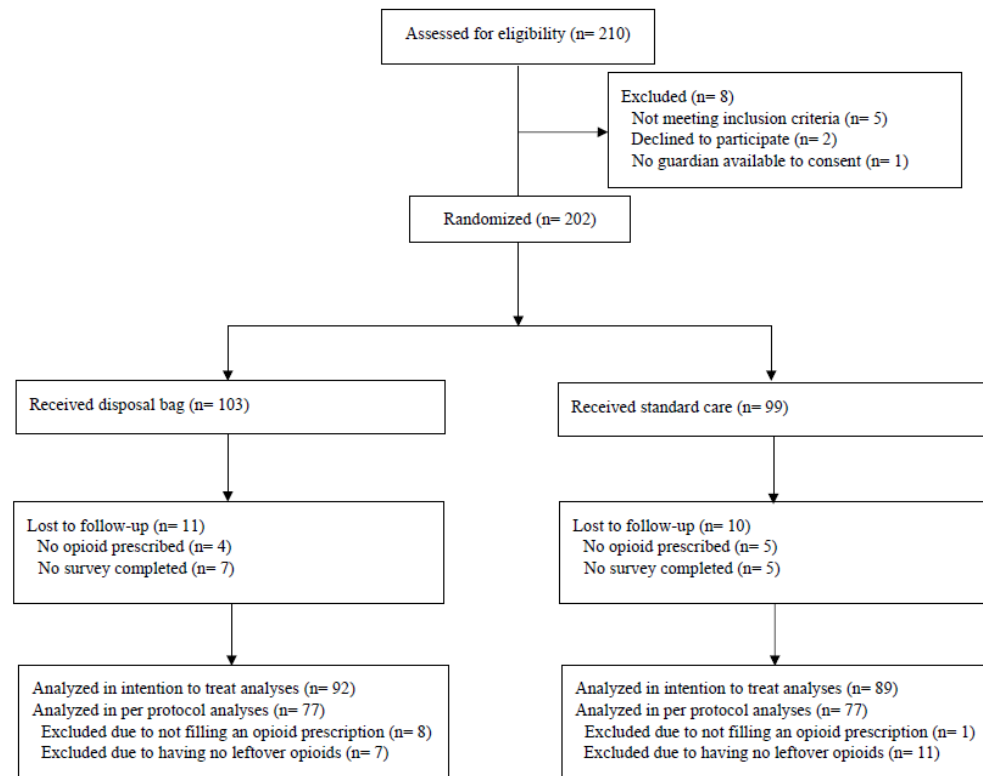
Opioid Safety Protocol for Home

Opioid Safety Protocol For The Home

While opioids are an effective option for pain relief following surgery or for the treatment of a chronic condition, they can also lead to addictive behavior and substance abuse problems in adolescents if not properly managed and stored.



Flow of Participants in Trial



Study Population Characteristics

| | Disposal Bag (N= 103) | Standard Care (N= 99) |
|--|-----------------------|-----------------------|
| Patient age in years (median, interquartile range) | 6 (5-9) | 7 (6-10) |
| Surgical procedure | | |
| Tonsillectomy with or without adenoidectomy | 75 (72.8) | 79 (79.8) |
| Inguinal hernia repair | 12 (11.7) | 5 (5.1) |
| Orchiopexy | 10 (9.7) | 3 (3.0) |
| Other | 27 (26.2) | 26 (26.3) |
| Type of opioid prescribed (N=193) | | |
| Hydrocodone | 72 (72.7) | 78 (83.0) |
| Oxycodone | 27 (26.5) | 16 (17.0) |
| Opioid formulation (N=193) | | |
| Pills | 3 (3.0) | 5 (5.3) |
| Liquid | 96 (97.0) | 89 (94.7) |
| Anyone with chronic pain in household | 18 (17.5) | 12 (12.1) |
| Anyone using prescribed opioids in household | 3 (2.9) | 6 (6.1) |

Outcomes

| | Disposal Bag (N= 92) | Standard Care (N= 89) | P |
|---|----------------------|-----------------------|------------------|
| Intention to treat analysis | | | |
| Proper opioid disposal | 66 (71.7) | 50 (56.2) | 0.03 |
| Opioid disposal by any method | 67 (72.8) | 54 (60.7) | 0.01 |
| Filled opioid prescription | 84 (91.3) | 88 (98.9) | 0.03 |
| Any opioids leftover after pain had resolved | 77 (83.7) | 77 (86.5) | 0.37 |
| Method of disposal (N=67, 54) | | | <0.001 |
| Drug disposal bag | 60 (89.6) | 0 (0) | |
| Toilet/sink | 6 (9.0) | 34 (63.0) | |
| Threw in trash after combining with unpalatable substance | 0 (0) | 7 (13.0) | |
| Took to drug takeback event | 0 (0) | 2 (3.7) | |
| Took to law enforcement agency or authorized pharmacy | 0 (0) | 7 (13.0) | |
| Threw away in trash as is | 1 (1.5) | 3 (5.6) | |
| Dumped in backyard | 0 (0) | 1 (1.9) | |
| Used disposal bag to dispose of other medications | 10 (10.9) | --- | --- |
| Per protocol analysis | | | |
| Proper opioid disposal (N=77, 77) | 66 (85.7) | 50 (64.9) | 0.003 |
| Opioid disposal by any method (N=77, 77) | 67 (87.0) | 54 (70.1) | 0.01 |

Conclusions from Trial

- Providing a drug disposal bag to the caregivers of children receiving postoperative opioids increases the likelihood of opioid disposal.
- High rate of opioid disposal in our control group likely reflects our institution's efforts to instruct all families about proper opioid use, storage, and disposal
- Providing a drug disposal bag to families may emphasize the dangers of opioid use, leading some to avoid filling their child's prescription
- Key limitations:
 - Ambulatory surgical patients only
 - Most children were young and 97% received liquid medication

Second Opioid Disposal Study

- Prospective pre/post cohort study in our institution's outpatient pharmacies
 - Included all parents/guardians filling an opioid prescription for their child (age<18 years) and young adult patients (age≥18 years) filling their own opioid prescriptions at one of our outpatient pharmacies
 - First 6 weeks: Standard education (no disposal bag)
 - Second 6 weeks: Standard education, disposal bag, and instructions on its use
 - Follow-up survey to assess opioid use and disposal completed at 4-7 weeks

Study Population Characteristics

| | Disposal Bag (N= 83) | Standard Care (N= 63) |
|---------------------------------------|----------------------|-----------------------|
| Type of participant | | |
| Parent/guardian | 78 (94.0) | 61 (96.8) |
| Patient (≥ 18 years) | 5 (6.0) | 2 (3.2) |
| Age of the patient prescribed opioids | 11 (7-15) | 11 (5-15) |
| Reason opioids were prescribed | | |
| Procedure/surgery | 66 (79.5) | 57 (90.5) |
| Injury/burn | 15 (18.1) | 3 (4.8) |
| Chronic or recurrent pain | 7 (8.4) | 7 (11.1) |
| Opioid formulation | | |
| Liquid | 45 (54.2) | 37 (58.7) |
| Pills | 38 (45.8) | 26 (41.3) |

Outcomes

| | Disposal Bag (N= 83) | Standard Care (N= 63) | P |
|---|----------------------|-----------------------|------------------|
| Any opioids leftover after pain had resolved | 60 (72.3) | 48 (76.2) | 0.87 |
| Opioid disposal (N=60, 48) | 43 (71.7) | 25 (52.1) | 0.04 |
| Method of disposal (N=43, 25) | | | <0.001 |
| Drug disposal bag | 41 (95.4) | 0 (0) | |
| Toilet/sink | 0 (0) | 17 (68.0) | |
| Threw in trash after combining with unpalatable substance | 0 (0) | 1 (4.0) | |
| Took to drug takeback event | 0 (0) | 2 (8.0) | |
| Took to law enforcement agency or authorized pharmacy | 2 (4.7) | 4 (16.0) | |
| Threw away in trash as is | 0 (0) | 1 (4.0) | |
| Used disposal bag to dispose of other medications | 10 (12.1) | --- | --- |

Overall Conclusions

- In comparison to adults, leftover opioids seem more likely to be disposed of in the pediatric population.
- Providing a drug disposal bag to the caregivers of children receiving opioids increases the likelihood of excess opioid disposal.
- Greater availability of drug disposal products can complement prescribing reduction efforts in the ongoing fight to reduce opioid misuse.

Thank You!

Please reach out with any thoughts or questions:
jennifer.cooper@nationwidechildrens.org

OPEN QUESTION & ANSWER

Please enter any questions into the WebEx chat box on the right-hand side of your video screen or email

Matthew.Rubin@FaegreBD.com.



Thanks from CEPOP!



Please contact Matt Rubin
with any questions on
CEPOP or today's program.

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