Figure Legends

Figure 1. Study Flow Diagram. *9 in before group and 6 in after group declined to answer what they did with excess medication; **Brochure recommended methods of disposal include throwing away in the trash with an unpalatable substance or returning to police or pharmacy

eFigure1. Educational Brochure. Reprinted courtesy of the Division of Plastic and Reconstructive Surgery, Washington University, St Louis, MO
eFigure2. Study Questionnaire. Reprinted courtesy of the Division of Plastic and Reconstructive Surgery, Washington University, St Louis, MO
eFigure3. Improved Educational Brochure with Single Method of Disposal. Reprinted courtesy

of the Division of Plastic and Reconstructive Surgery, Washington University, St Louis, MO

The Solution

We can ALL be involved!

- Physicians can prescribe appropriate amount of narcotic pain medication following surgery.
- Medical staff can increase education on proper disposal of narcotic pain medication.
- Patients can commit to properly disposing of leftover prescription narcotic pain medication.

Options for disposal:

Drug disposal at designated locations.

Use the following links to help find a location nearby: www.deadiversion.usdoj.gov/drug_disposal www.americanmedicinechest.com www.disposemymeds.org www.rxdrugdropbox.org

Self-disposal at home is another option.

How to Dispose of Narcotics Properly at Home.



Remove medication from the original container.



Mix with undesirable household substance:

- Coffee Grounds
- ✤ Dirt
- Kitty Litter
- Dish Detergent



Place into a non-transparent container with a lid or sealable bag.



Conceal all personal information on the original medicine bottle (marker or scratch off)



Dispose of the sealed container and medicine bottles in the trash!

Combating the Opioid Epidemic

YOU can help us solve a growing problem!



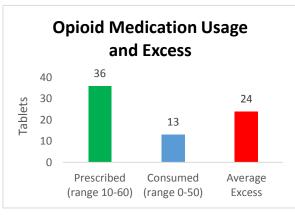
Division of Plastic & Reconstructive Surgery

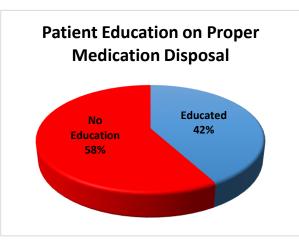


The Problem

- Opioids are the primary cause of overdose in the US and more opioids are prescribed in the US than any other country.
- 33,000 deaths in 2015 attributed to opioid overdose, more than from heroin or cocaine combined.
- Legitimate use of prescribed opioids can lead to dependence, abuse, and addiction.
- Abuse by young persons often starts at a party or with friends after being stolen from family members' prescription bottles.
- Many heroin users state that opioid medication use preceded their use of heroin.
- 2015 deaths from heroin exceeded those from gun homicides, increasing 248% from 2010 2014.
- In 2016, the CDC reported 91 people in the United States die every day from opioid overdoes.

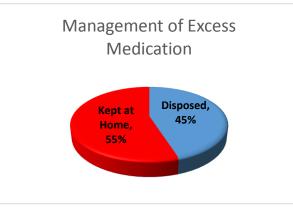
This cycle of over-prescribing and improper disposal holds true **here at home** as is illustrated below:





Based on a narcotic usage study performed on surgical patients at the Washington University Hospitals from Apr-Dec 2016

So, what happens to these leftover narcotic pain medications?



Questionnaire results of those who stated they were educated on proper medication disposal

Conclusions:

- 1. Pain medications are often overprescribed.
- 2. Education on proper disposal of narcotic medications is lacking.
- 3. Even when educated, patients often do not dispose of medications properly.
- 4. Options are available to dispose of these abusive medications easily and responsibly!



If you have completed this survey at a previous visit, please <u>DO NOT</u> fill out today.

OPIOID MEDICATION QUESTIONNAIRE

Year of birth: _____

Gender:

- □ Male
- □ Female
- □ Other/Decline

Approximately, how long has it been since your surgery?

- \Box 2 weeks
- \square > 2 weeks but less than one month
- $\Box \geq$ one month but less than 3 months
- $\Box \geq 3 \text{ months}$

Did you receive the following educational brochure (see picture) regarding opioid medication?

- □ Yes
- □ No

Were you taking opioid/narcotic medication before surgery?

- \Box Yes **STOP** questionnaire. Thank you.
- \Box No- Continue to next question.

Did you use all of your prescribed opioid medication following your surgery?

- □ Yes **STOP** questionnaire. Thank you.
- \Box No Continue to next question.

Did you keep the excess medication?

- \Box Yes **STOP** questionnaire. Thank you.
- \Box No Continue to next question.

What did you do with the excess medication?

- □ Disposed of medication (please check a below box):
 - □ Threw away in garbage
 - □ Flushed down the toilet
 - □ Returned to the police
 - □ Returned to the pharmacy
 - Other mechanism:
 - Pass medication on to a friend or relative.
- □ Other/Decline



Thank you for your participation. We appreciate your efforts.

SIDE A



...get rid of your left over pain medications!

(See how on reverse side)

3 Easy Steps To Dispose Unused Pain Medications:









Courtesy of: National Zip-Out Unused Opioids Foundation Copyright © 2017 All Rights Reserved

SIDE B