

# Opioid Prescribing Practices after Pediatric Urologic Surgery

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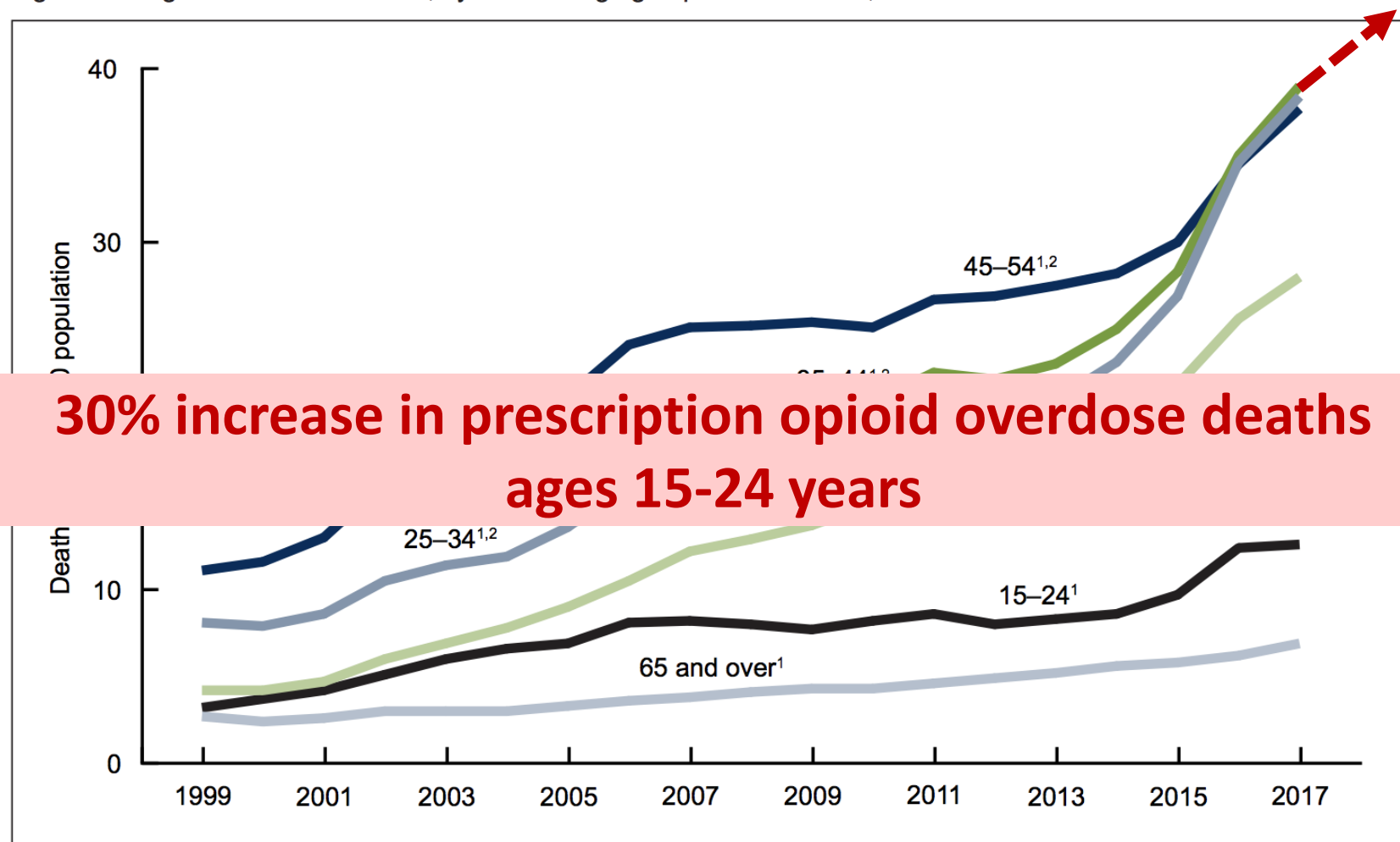


Kids deserve the best.

# Disclosures

This work was partially funded by Blue Cross Blue Shield of Michigan

Figure 2. Drug overdose death rates, by selected age group: United States, 1999–2017



<sup>1</sup>Significant increasing trend from 1999 through 2017 with different rates of change over time,  $p < 0.005$ .

<sup>2</sup>2017 rates were significantly higher for age groups 25-34, 35-44, and 45-54 than for age groups 15-24, 55-64, and 65 and over,  $p < 0.05$ . The rate for age group 35-44 was significantly higher than the rate for age group 45-54 and statistically the same as the rate for age group 25-34.

NOTES: Deaths are classified using the *International Classification of Diseases, 10th Revision*. Drug-poisoning (overdose) deaths are identified using underlying cause-of-death codes X40-X44, X60-X64, X85, and Y10-Y14. Access data table for Figure 2 at:

[https://www.cdc.gov/nchs/data/databriefs/db329\\_tables-508.pdf#2](https://www.cdc.gov/nchs/data/databriefs/db329_tables-508.pdf#2).

SOURCE: NCHS, National Vital Statistics System, Mortality.

# U.S. opioid crisis is affecting children



Opioid-related  
overdose deaths

↑**250%**

*Gaither. JAMA Network Open. 2019.*

**Prescribing guidelines do not exist**

# Objectives

- To evaluate current prescribing practices after the most common ambulatory pediatric urology procedures
- To identify areas in need of improvement, with the goal of creating prescribing guidelines



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# Methods

2016-2017 opioid prescribing after...



Circumcision



Orchiopexy



Hernia/  
hydrocele

# Opioids Prescribed



94%

Circumcision

811  
circumcisions

Mean number  
of doses: 21.5



97%

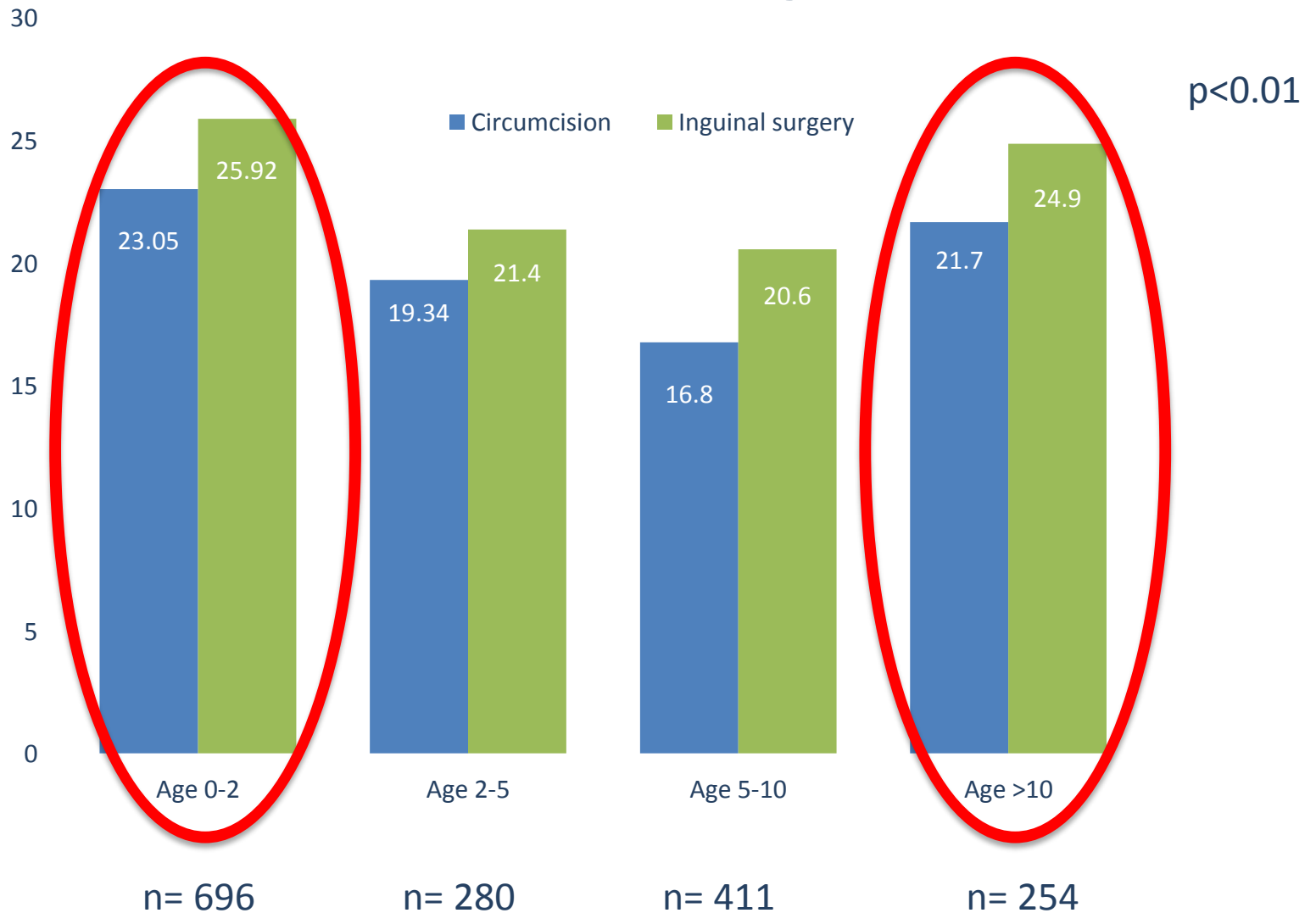
Inguinal  
Surgery

883 hernia,  
hydrocele,  
orchidopexy

Mean number  
of doses: 23.5

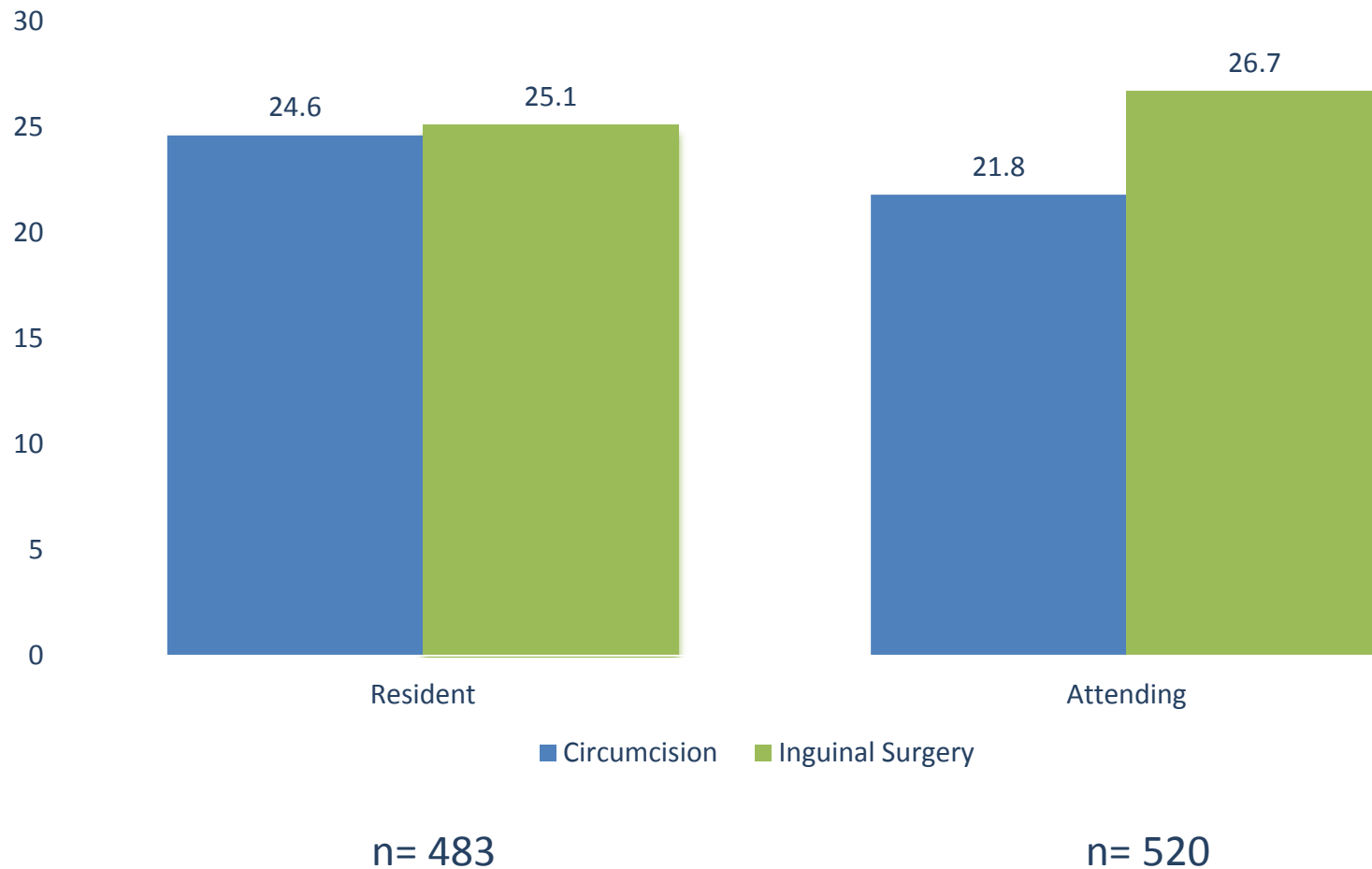
75% of patients received 15 opioid doses or more

# Mean number of opioid doses by age





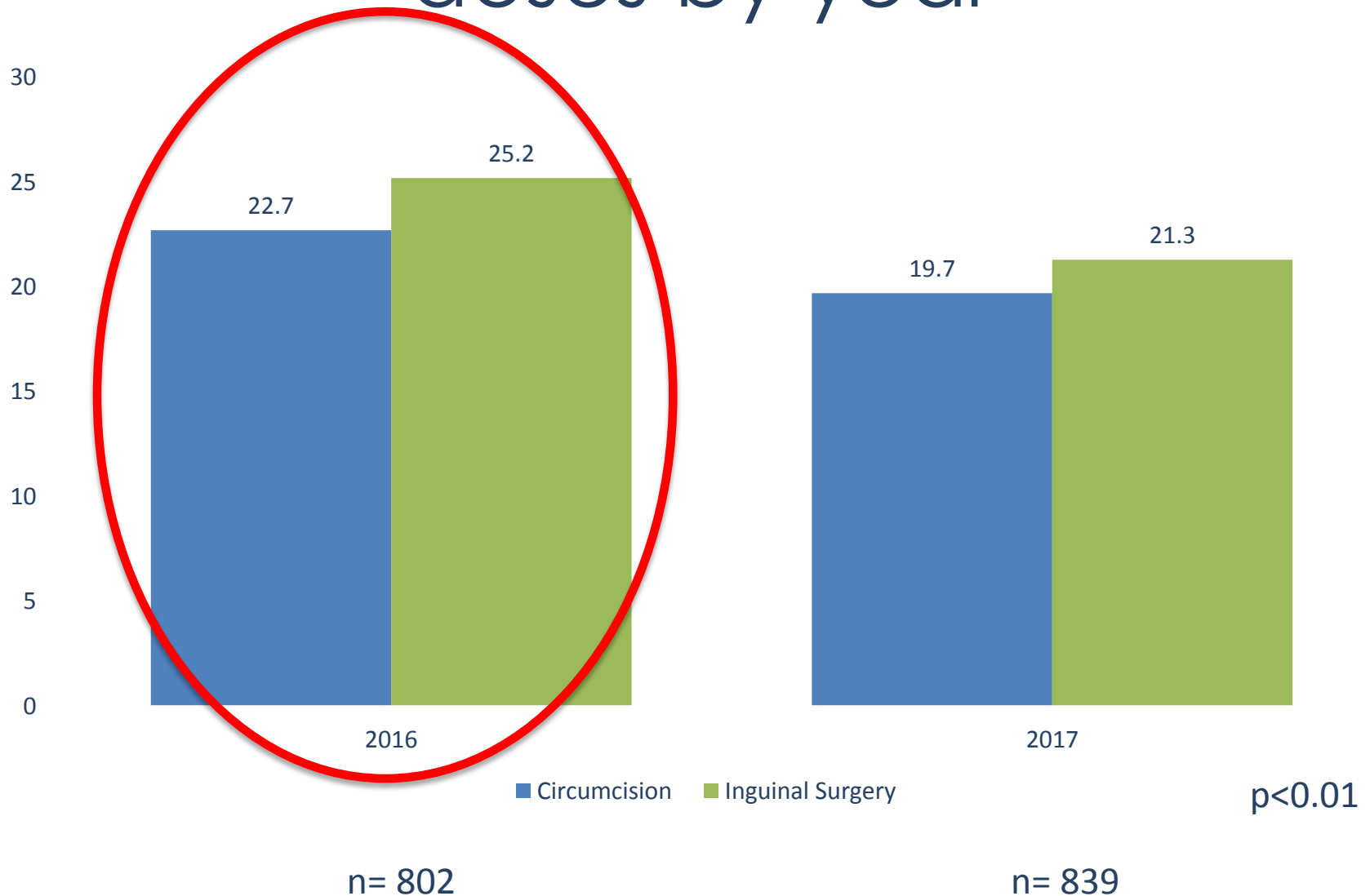
# Mean number of opioid doses by prescriber



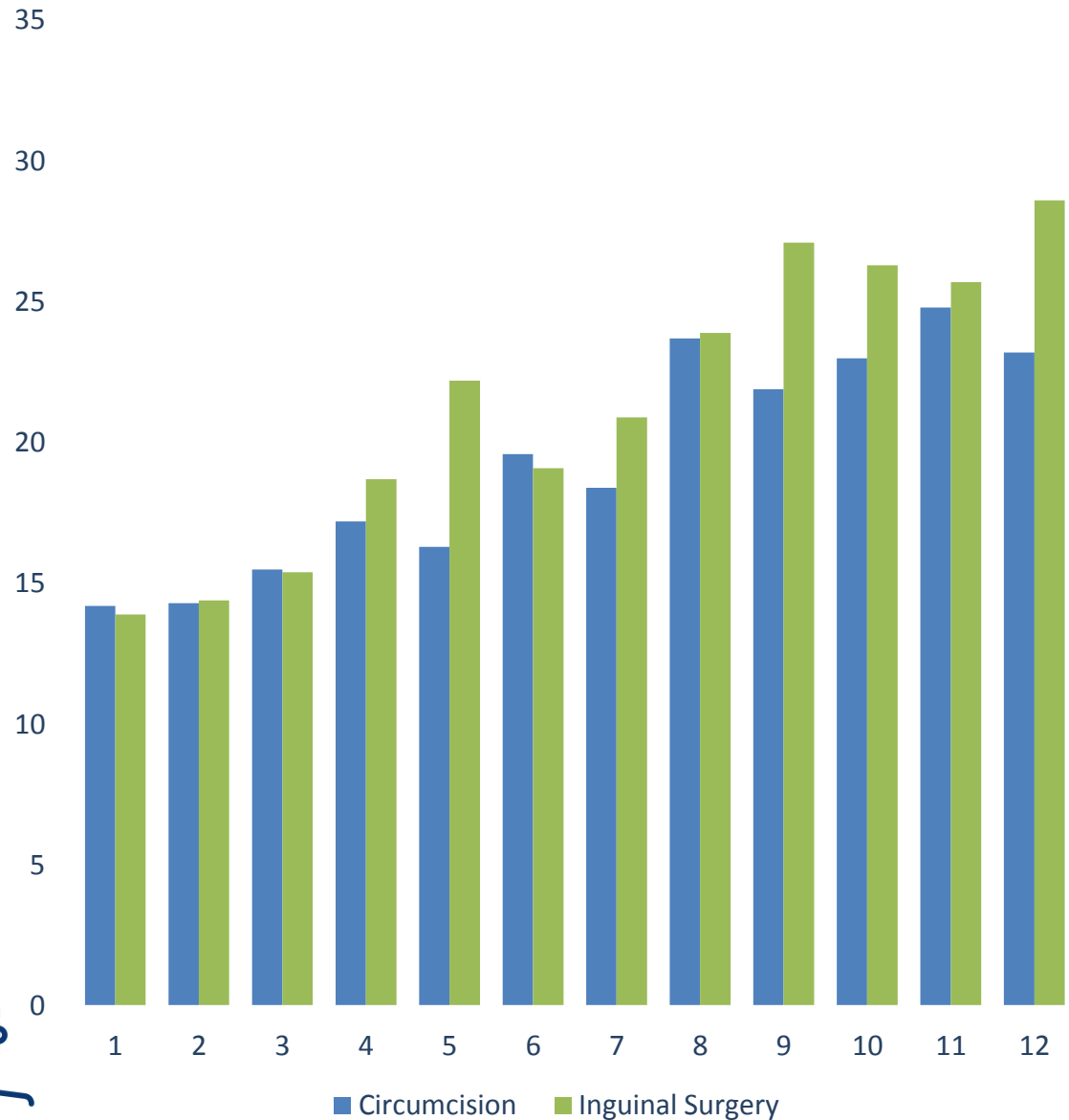
# Mean number of opioid doses by institution



# Mean number of opioid doses by year



# Mean number of opioid doses by prescribing surgeon



# Increased opioid prescribing was associated with



Younger age

**OR 0.907**

95% CI 0.87-0.94

P-value: <0.001



Pill form

**OR 3.040**

95% CI 1.75-5.29

P-value <0.001



Earlier year

**OR 0.691**

95% CI 0.53-0.89

P-value 0.005

# Conclusions

- 96% of children were given an opioid prescription after outpatient surgery
  - 75% received 15 doses or more
- Younger patients (<2 years) were prescribed the most
  - Followed by older patients (>10 years)

# Future Directions



Multi-institutional  
engagement



Prescribing  
guidelines

# Thank you



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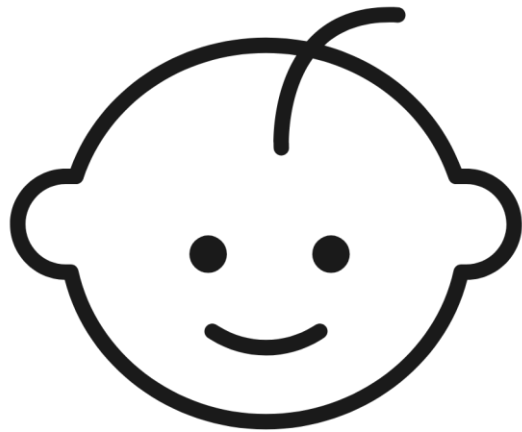
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Kids deserve the best.





**5% of teens developed persistent use after surgery**



Accidental  
ingestion

Intentional  
misuse and  
self-harm

# Children Are Vulnerable

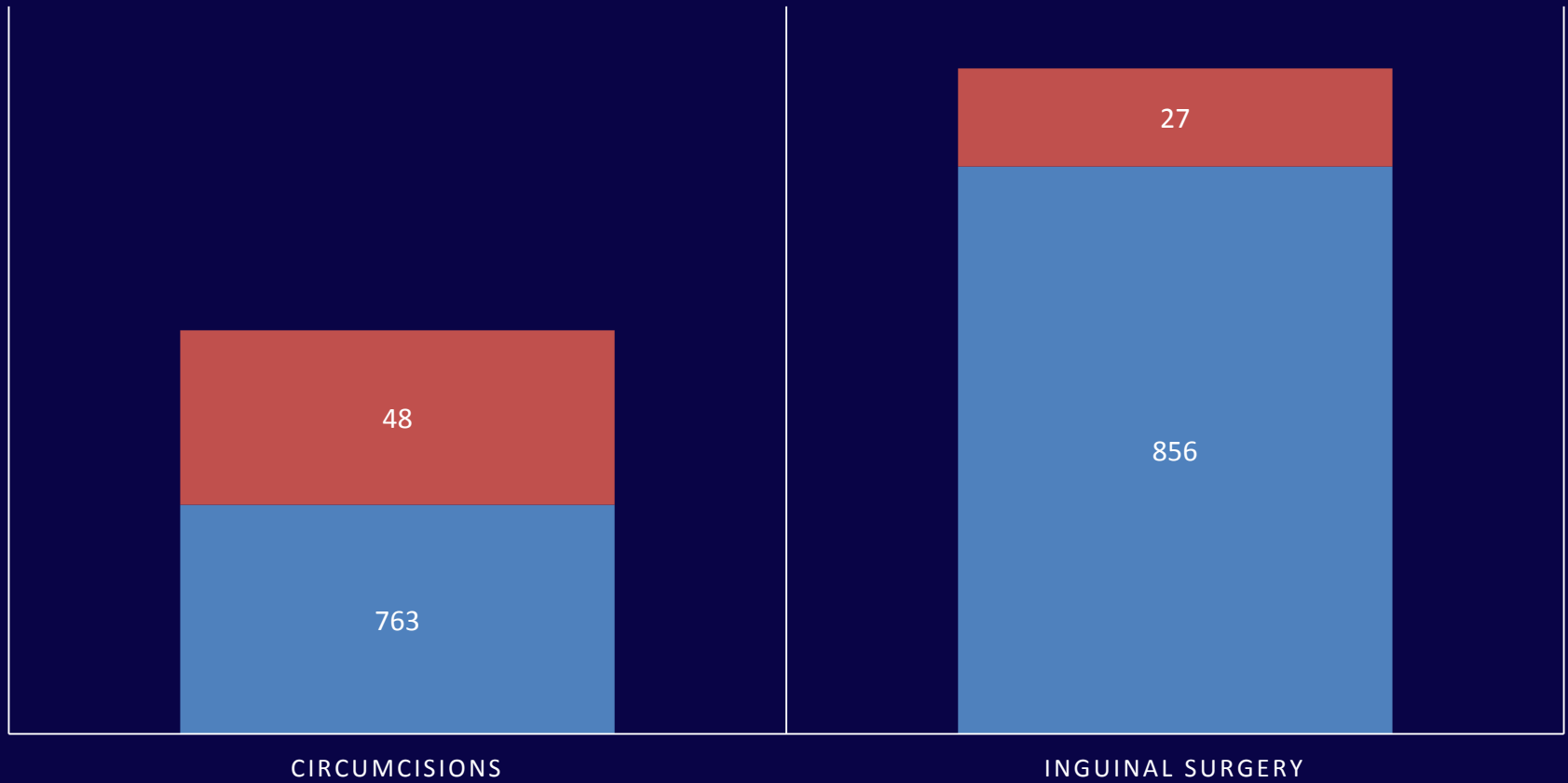
# Limitations and Future

# Introduction

- Surgery is a leading cause of excess opioid prescription
- Opioids are not commonly safely stored or disposed of
  - Children at risk for accidental ingestion
  - Opioid overdose is increasing in children
- Prescribing practices are variable



■ Opioids   ■ No opioids



# Results

- 811 circumcisions, 883 inguinal surgeries
- Graph with percentages receiving opioid
- Graphs with all results
- Include photos of baby, toddler, small kid, older kid

