



Examining Opioid Stewardship for Renal Colic Management

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BACKGROUND

AIMS

METHODS

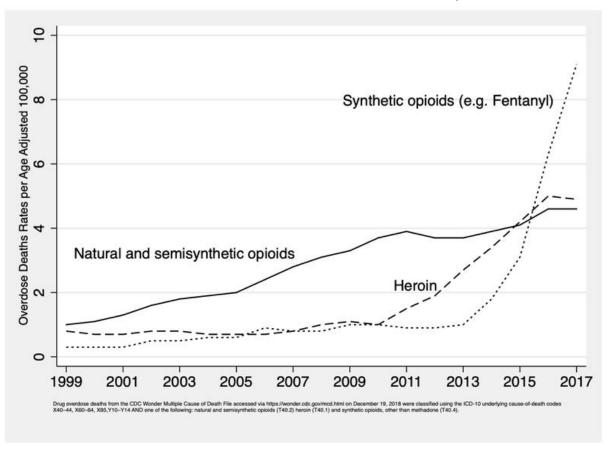
FINDINGS

TAKEAWAYS

LESSONS

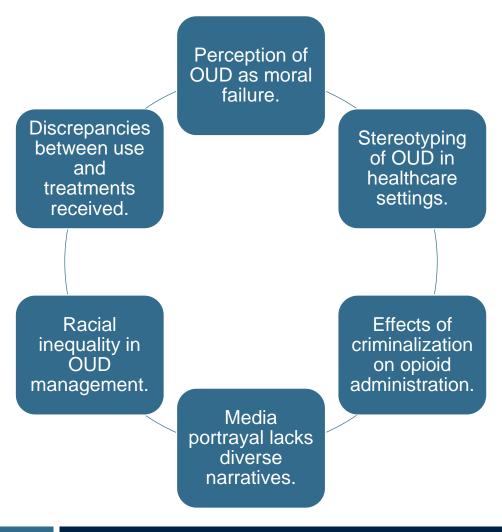
Several factors drive the opioid crisis in Philadelphia and beyond.

Estimated Overdose Death Rate for Various Opioids

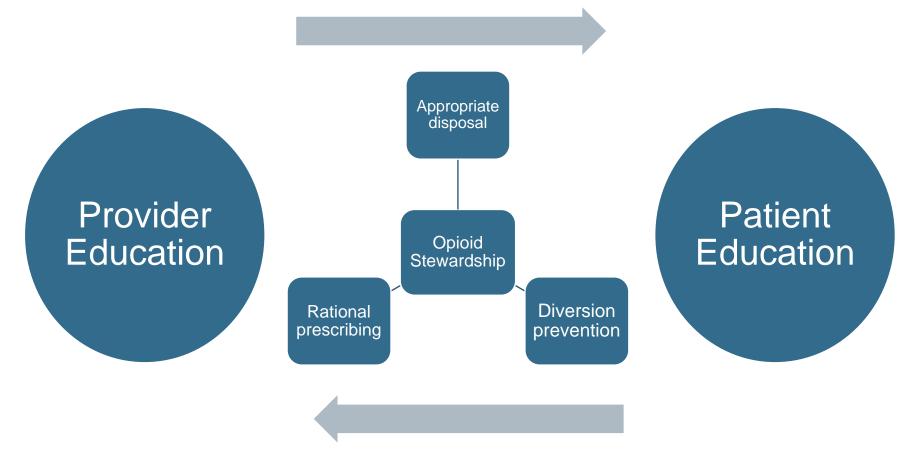


The opioid epidemic as well as narcotic prescribing patterns

reflect bias.

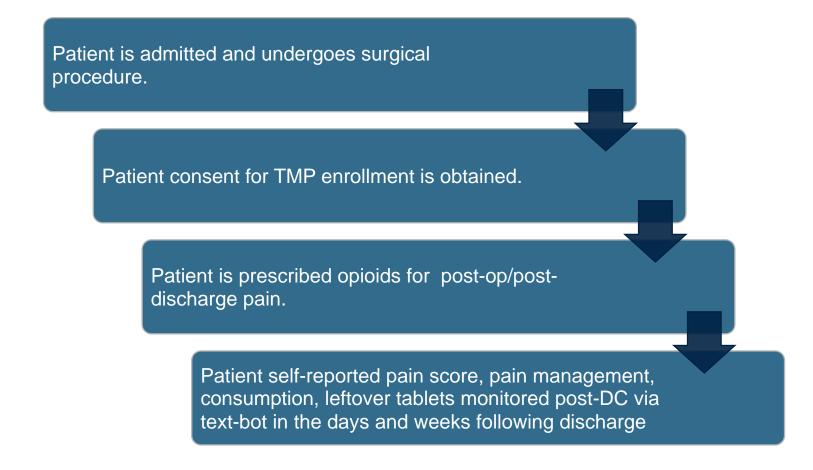


Opioid stewardship centers a preventative approach to curbing the opioid crisis.

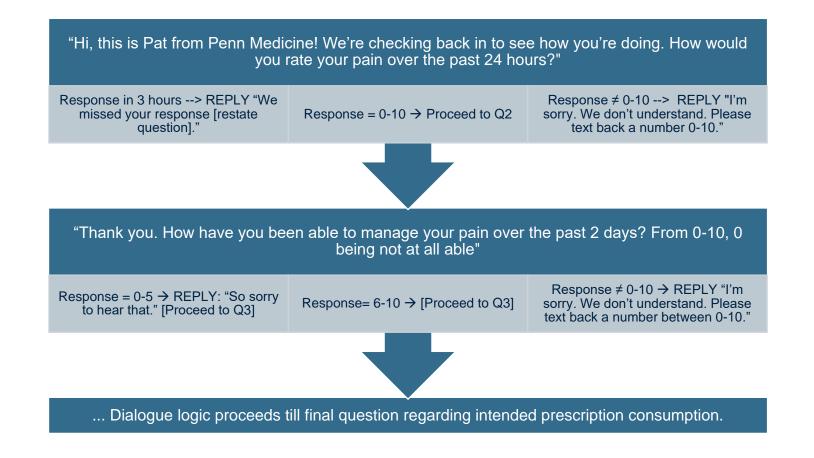


Stem The Tide: Opioid Stewardship Measurement Implementation Guide. AHA Center for Health Innovation 2020.

Penn Medicine's Text Messaging Program (TMP) is a multidepartmental opioid stewardship effort.



Example of TMP dialogue.



Program evaluation within kidney stone pain population is of interest.

Kidney Stone Pain

- Risk factor for long-term opioid use
- NSAIDs as opioid alternatives



Disparities Angle

- Disproportionate incidence among BIPOC
- Role of access



TMP & Stewardship in ED

- Large department
- Evolving environment

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Three major sub-aims characterized the activities for this project.

Understand landscape of opioid prescribing for kidney stone pain. Assess performance of Penn Medicine ED practices for kidney Identify Compare pain demographic outcomes for stone pain. disparities in patients opioid prescribed prescribing and opioids against those who pain management. were not.

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Literature review and exploratory data analysis were central methodologies for this project.

Literature Review

- Identified in PubMed
 - MeSH search strategy
- Evaluated across criteria
 - Administration
 - Prescribing
 - Stewardship
 - Racial or demographic acknowledgement

Exploratory Data Analysis

- Excel
 - Variable identification
 - Time-Series
- R
 - Descriptive statistics
 - Subsetting

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Four major themes emerged within existing literature.

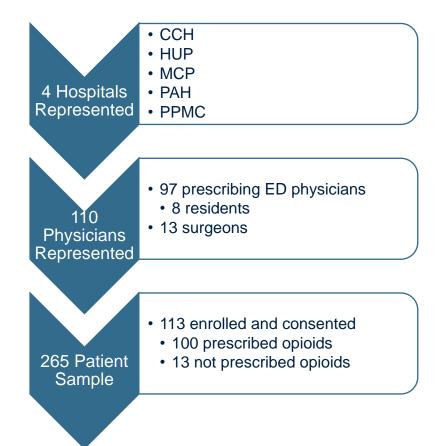
Pain severity
was not
predictive
opioid
provision.

Racial and other demographic disparities are rarely addressed.

Opioid administration in ED decreased over time.

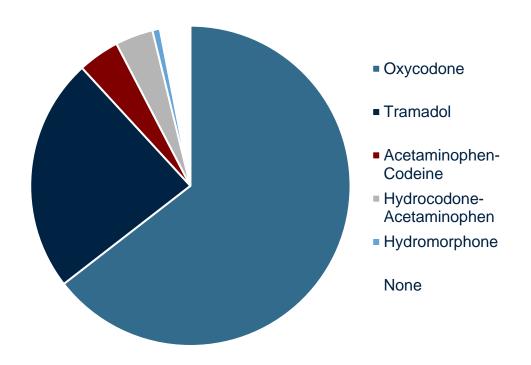
Opioid prescribing for ED discharges decreased overtime.

Retrospective survey of program characteristics within kidney stone pain population.

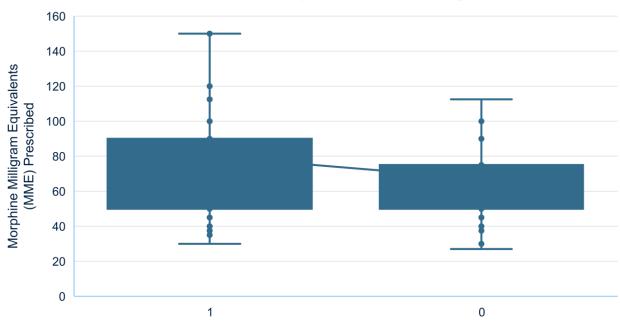


Physician opioid administration and prescribing patterns are of note.

Administered Opioid Breakdown



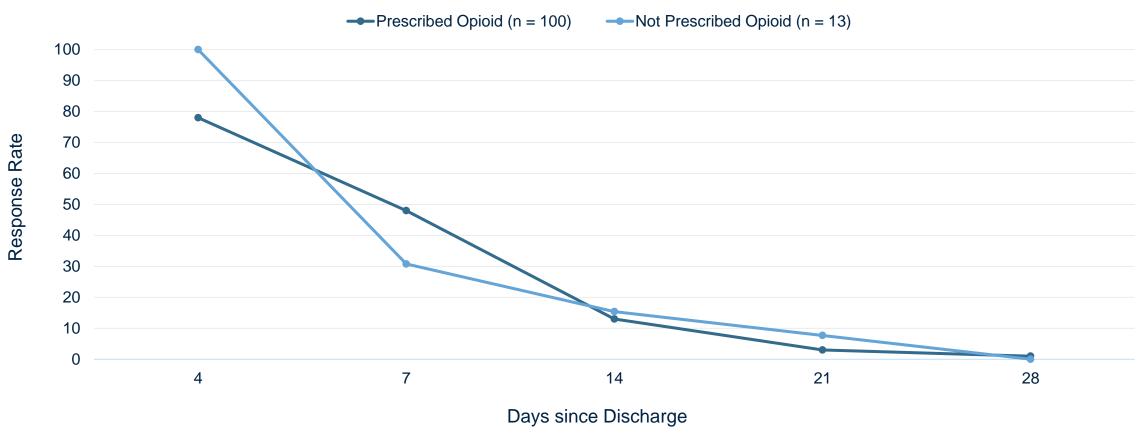
Post Discharge Opioid Prescribing versus Opioid Administration prior to Discharge



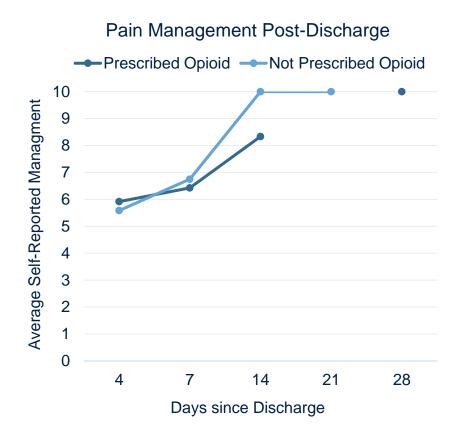
Recipient Status of Opioids 24 Hours prior to Discharge

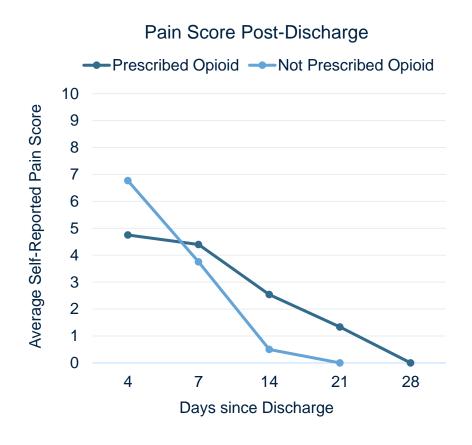
Messaging engagement declines over time.





Pain management and pain scores varies negligibly between opioid and non-opioid prescribed populations.





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These preliminary results serve as a launching pad for internal improvement, academic insights, and subsequent steps.

Internal QI

- Investigate physician prescribing motivations.
- Reinforce multi-week engagement in TMP.

Hypothesis Assessment

- Necessity of opioid prescribing for renal colic is ambiguous.
- TMP possesses successful aspects of stewardship model for renal colic management.

Next Steps

- Merge in demographic data.
- Characterize
 prescribing and pain
 patterns across
 patients' race, gender,
 and age.

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This project was a welcome change of pace from past work, providing ample room for growth.

New Skills

Data visualization

MeSH

Researcher Mindset

Agency over questions

Productivity during roadblocks

Personal Understanding

Preventative measures for epidemic

Role of provider

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Acknowledgements & Q/A

