



Penn Medicine

Penn Medicine Opioid Task Force

Examining Opioid Stewardship for Renal Colic Management

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August 19, 2021



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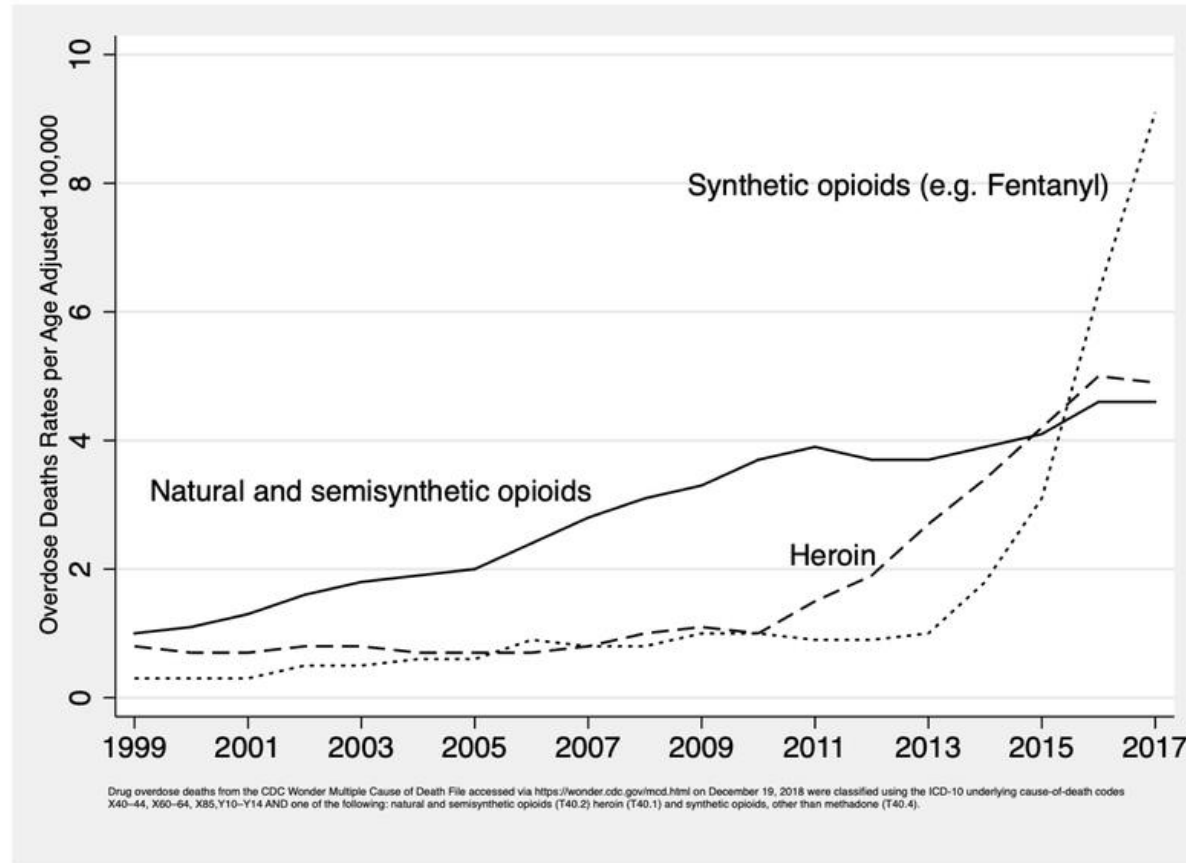
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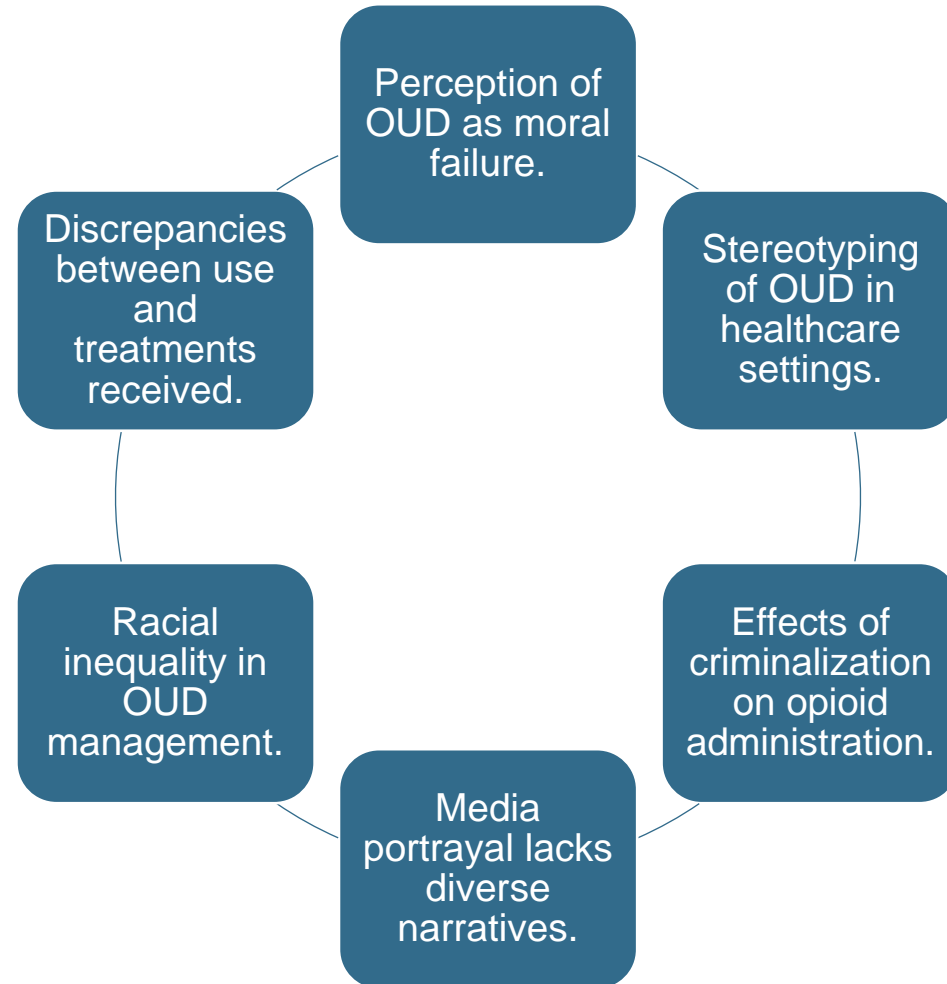


Several factors drive the opioid crisis in Philadelphia and beyond.

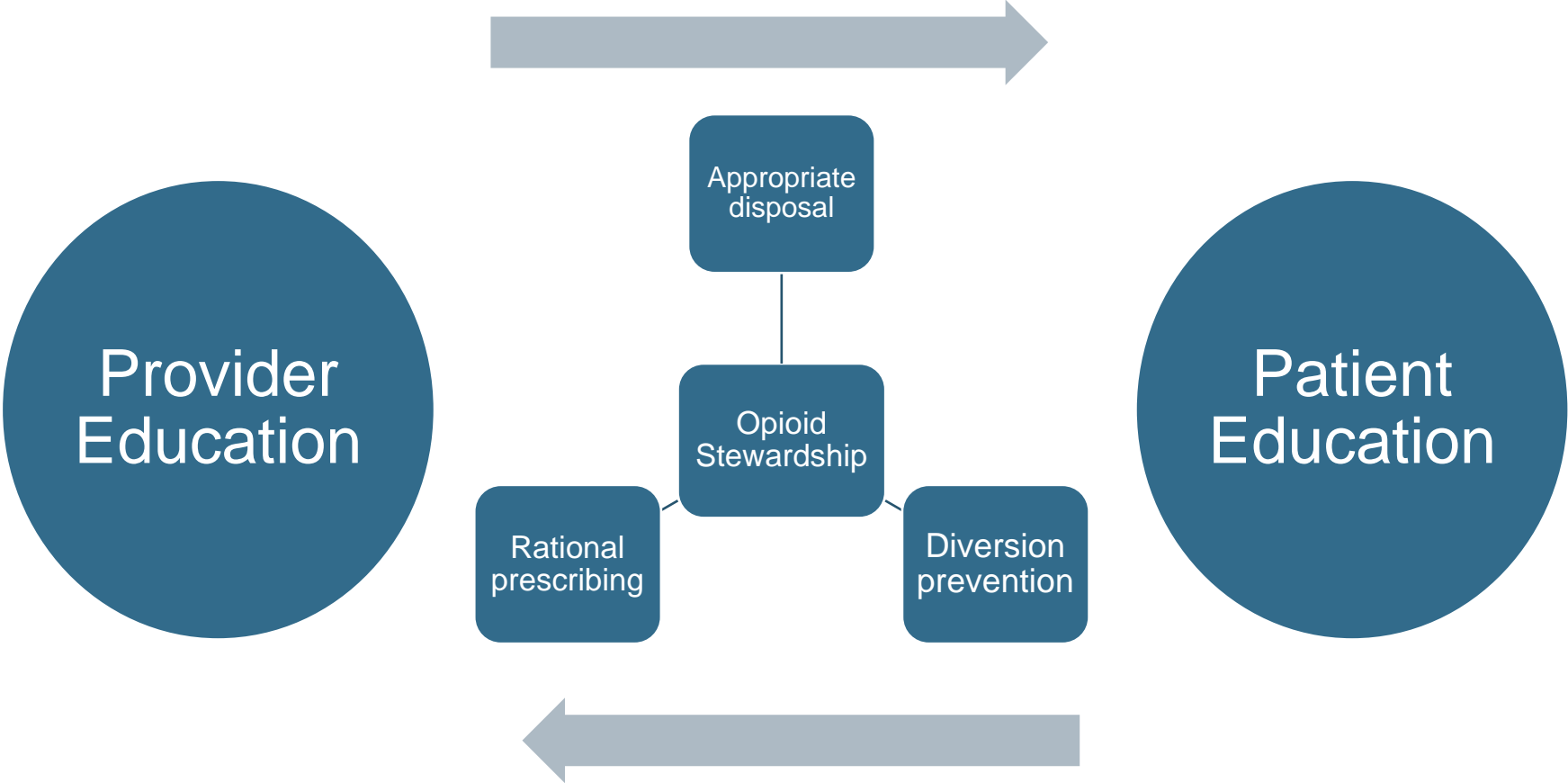
Estimated Overdose Death Rate for Various Opioids



The opioid epidemic as well as narcotic prescribing patterns reflect bias.



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



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

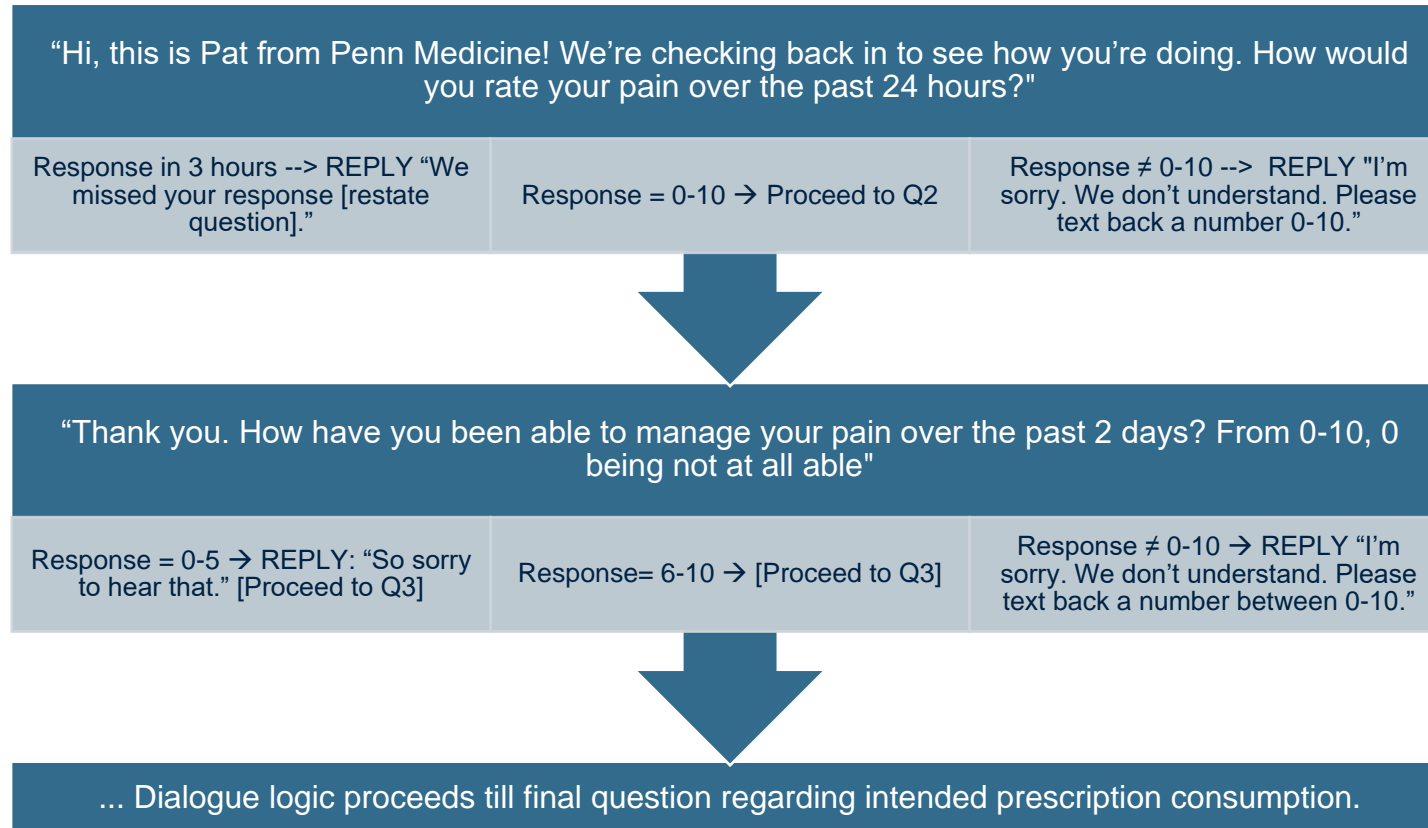
Patient is admitted and undergoes surgical procedure.

Patient consent for TMP enrollment is obtained.

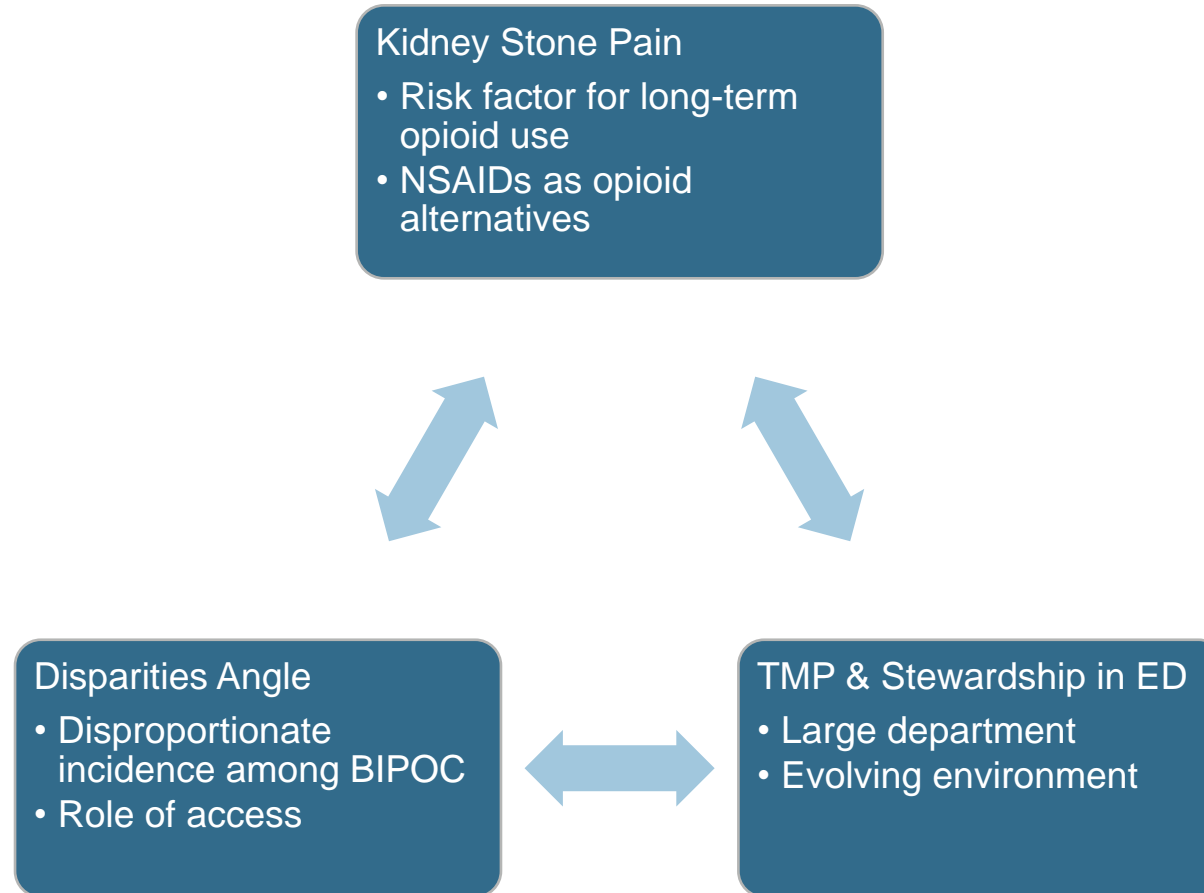
Patient is prescribed opioids for post-op/post-discharge pain.

Patient self-reported pain score, pain management, consumption, leftover tablets monitored post-DC via text-bot in the days and weeks following discharge

Example of TMP dialogue.



Program evaluation within kidney stone pain population is of interest.



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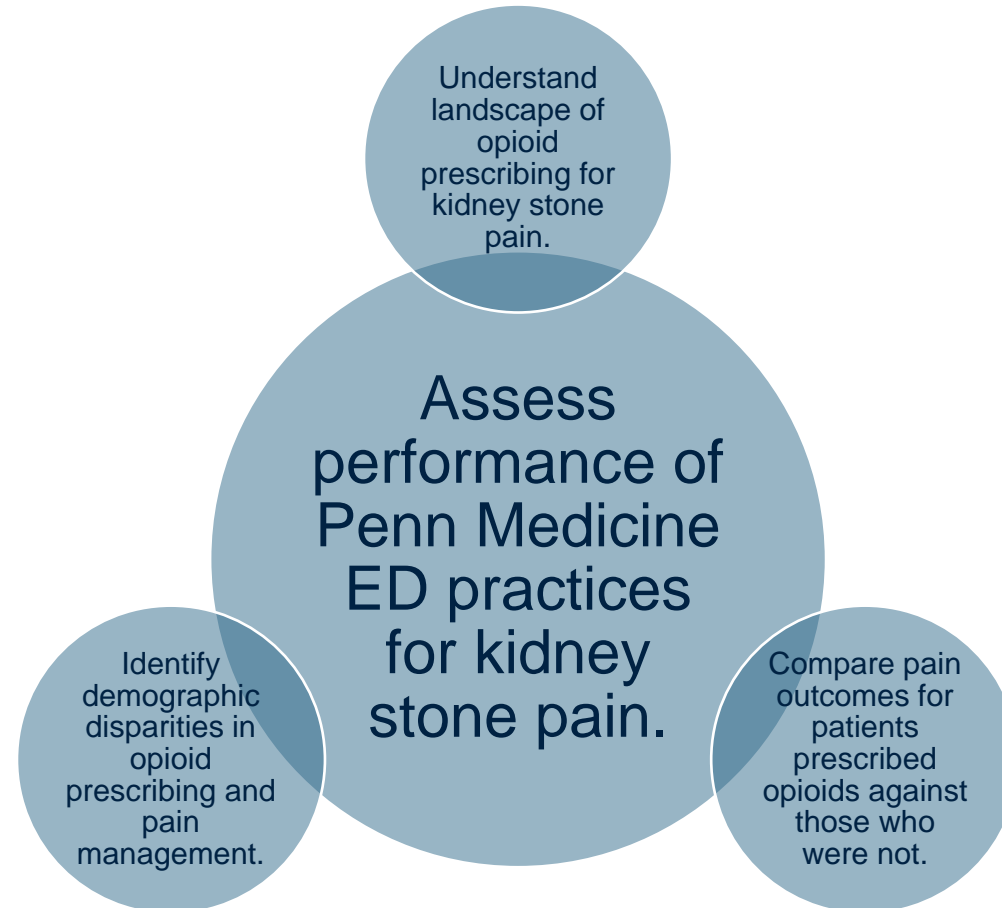
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Three major sub-aims characterized the activities for this project.



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



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

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

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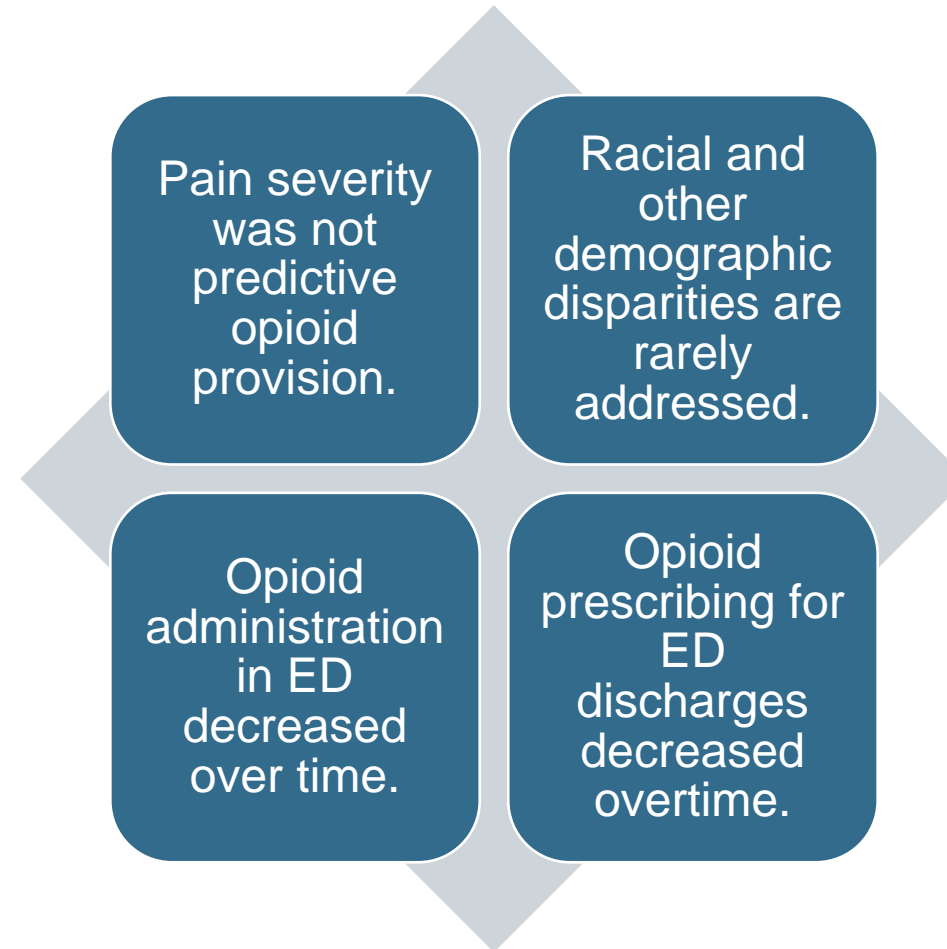
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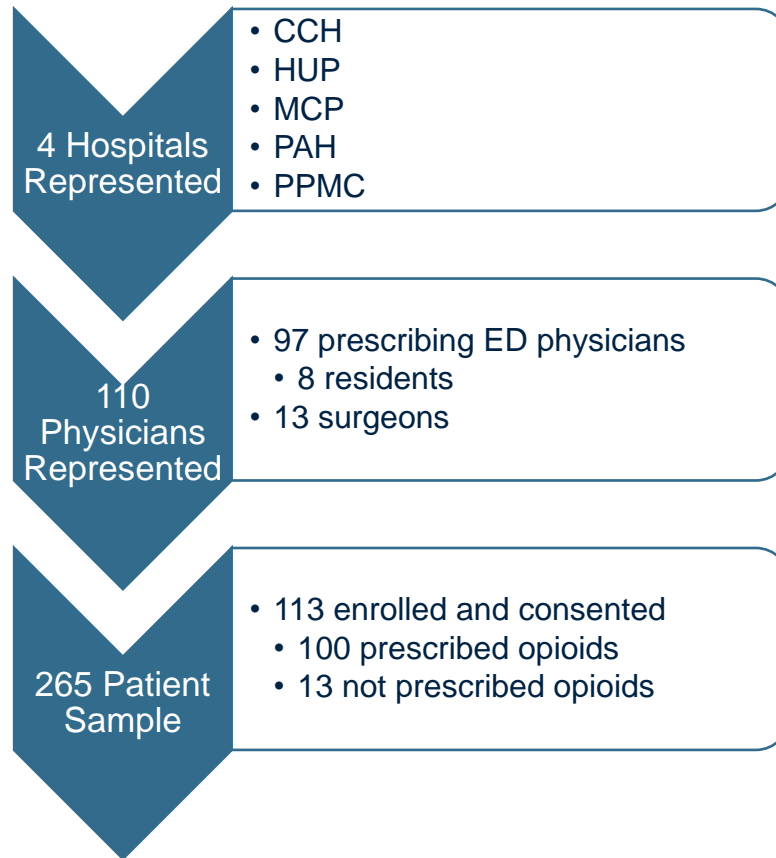
ACKNOWLEDGEMENTS



Four major themes emerged within existing literature.

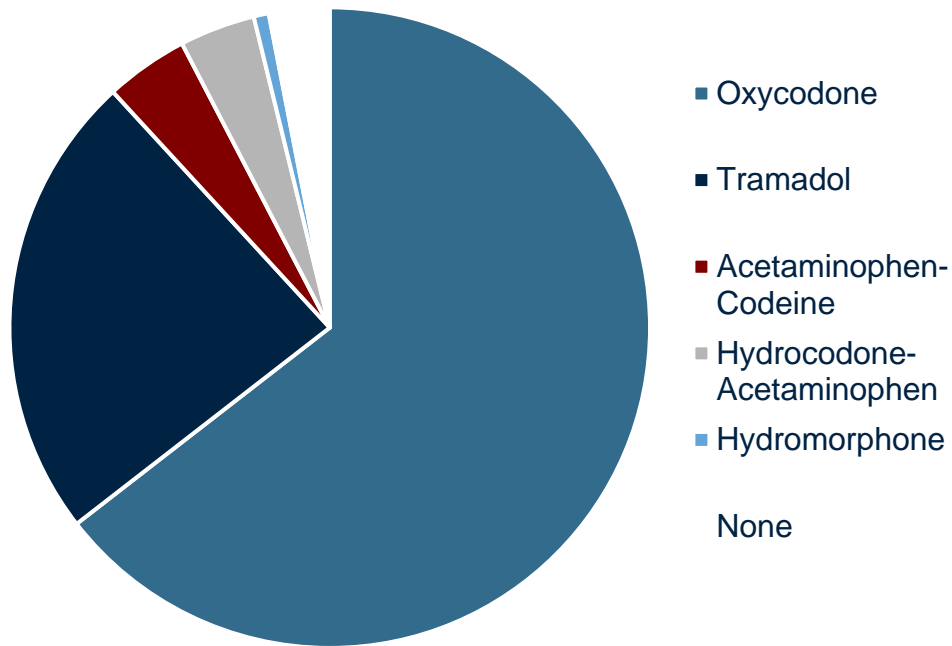


Retrospective survey of program characteristics within kidney stone pain population.

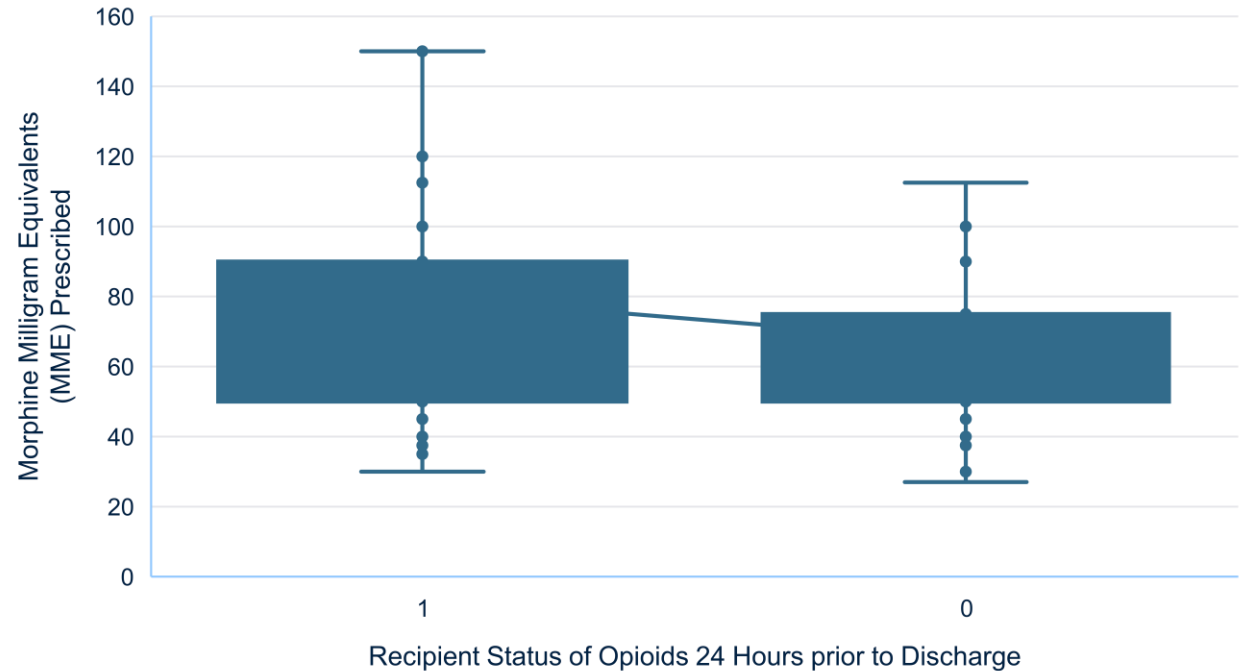


Physician opioid administration and prescribing patterns are of note.

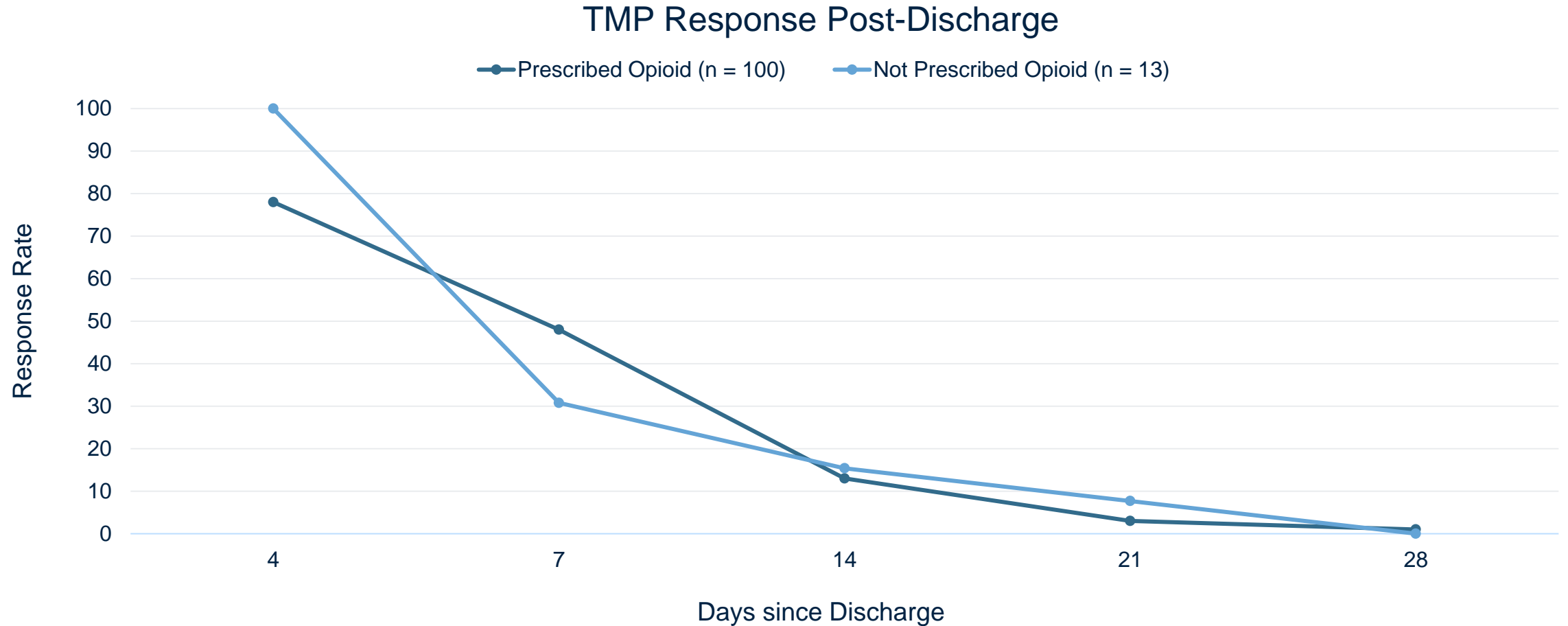
Administered Opioid Breakdown



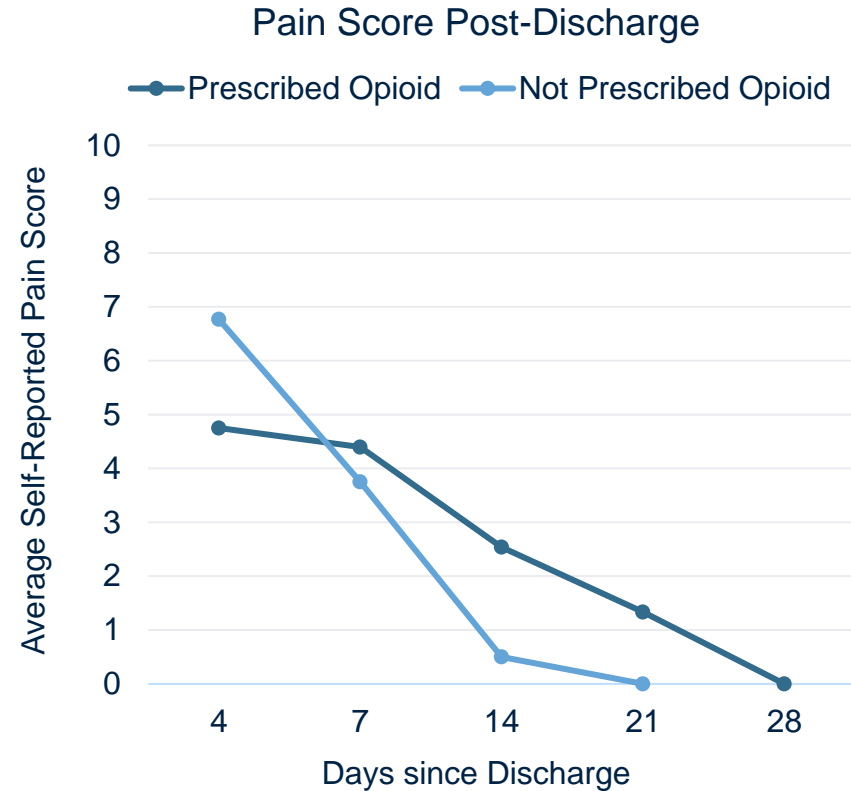
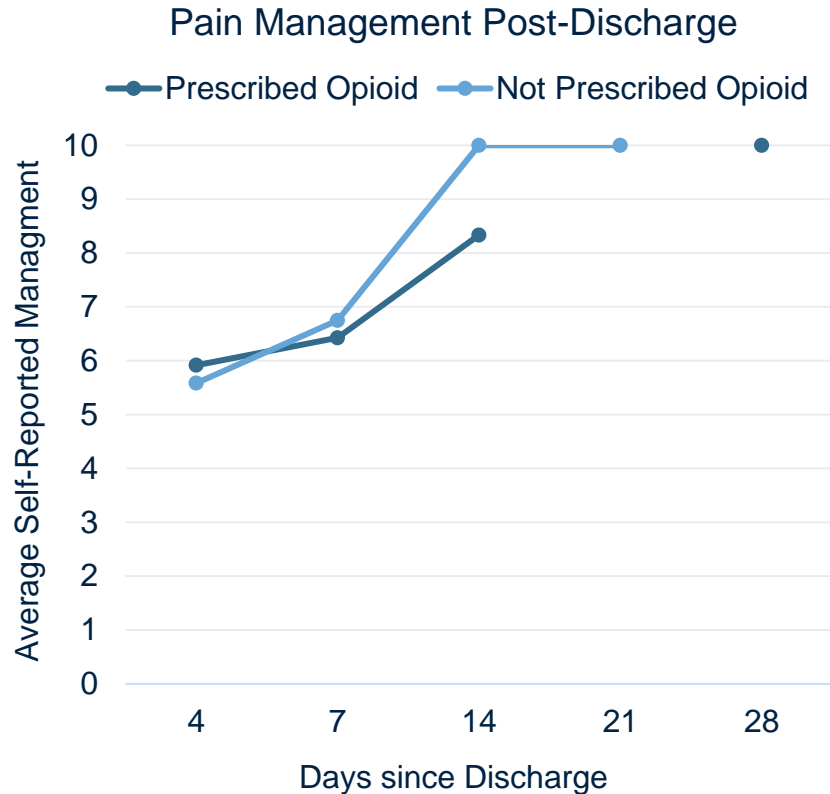
Post Discharge Opioid Prescribing versus Opioid Administration prior to Discharge



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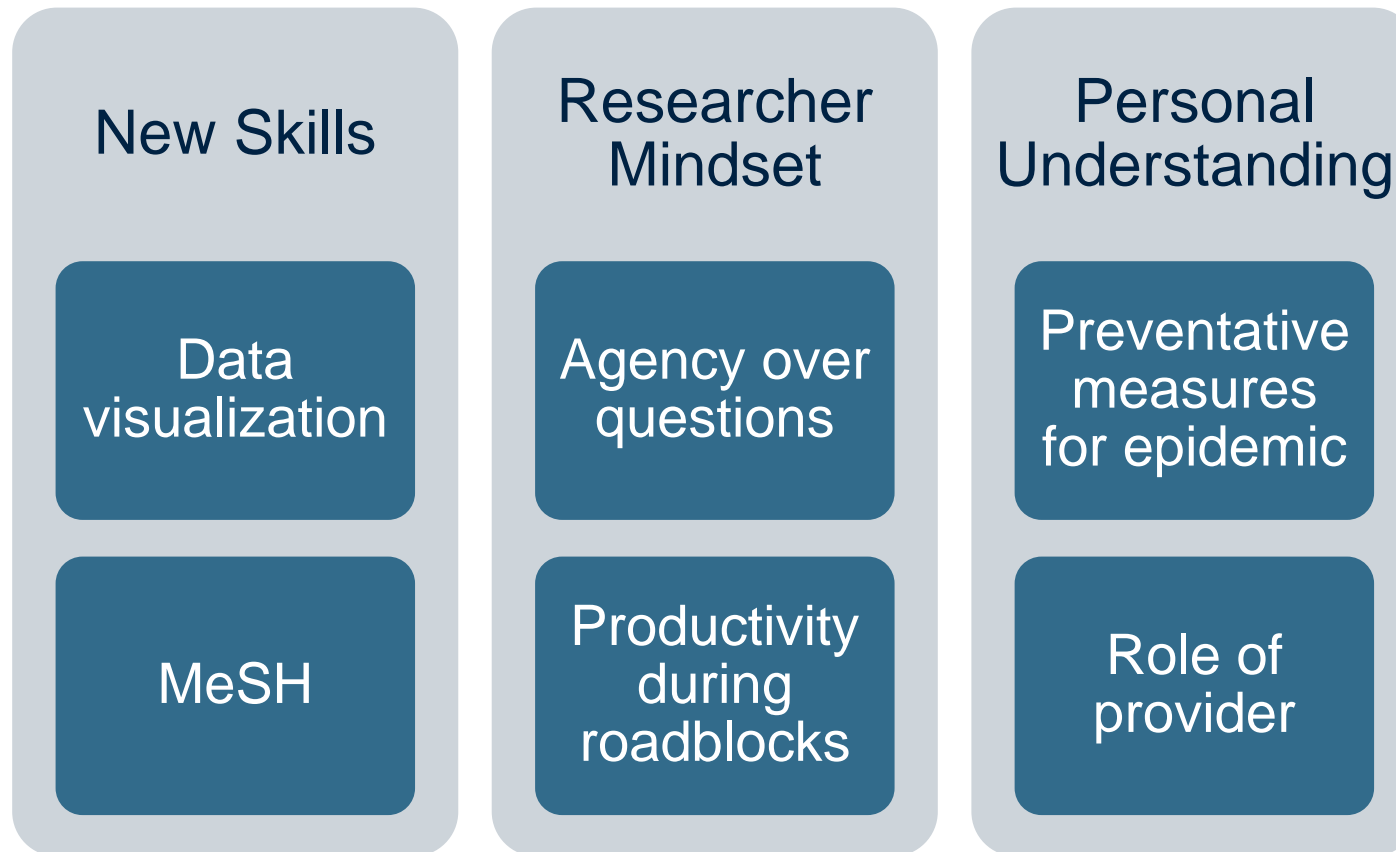
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This project was a welcome change of pace from past work, providing ample room for growth.



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Acknowledgements & Q/A

