

A DNP Project to Implement an Opioid Prescribing Guideline in Transitional Care Unit

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Background: Chronic Opioid Use

- > 3 months of use
- Ineffective for most types of pain
- More adverse outcomes
- 3.5% of Minnesotans are chronic opioid users

(Krebs, 2018; MDH, 2018)

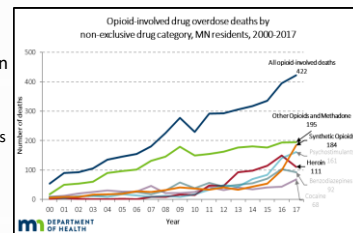


Figure 2. Overdose death, adapted from "Total Opioid Overdose Deaths, 2017", by Minnesota Department of Health, Injury and Violence Prevention Unit, 2018. Retrieved from: <https://www.health.state.mn.us/epidemiology/overdose/death.html>

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Project Impetus

- 2018/2019: Allina Health Pain Management Executive Steering Committee priorities for all service lines:
 - Guideline adoption
 - Patient and provider education (including CMEs)
- Allina Senior Health Clinical Practice Council
 - Adoption: 2018 MDH/OPWG guideline recommendations for post-acute pain period, including education
 - Include a nurse education component

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MDH 2018 Opioid Prescribing Guideline Background

- **Post-acute Pain period**
 - 4-45 days after injurious event
 - Critical period to halt transition from opioid naïve to chronic opioid use
- **Recommendations to prevent transition**
 - Limit cumulative opioid exposure during this period
 - Use screening tools to identify individuals at higher risk of transitioning to chronic use

(MDH, 2018)

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Setting

- Allina Senior Health providers (35 CNPs, 18 Physicians)
- 50 bed TCU in the metro area
 - Typical population: older adults getting elective joint replacements
 - TCU nursing staff (37 nurses total)
 - Post-acute pain period

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Project Aim

- Reduce the incidence of chronic opioid use by implementing MDH guidelines in the post-acute pain period:
 - Decrease cumulative opioid exposure (dosage reductions)
 - Provider education regarding screening tools (identify at risk individuals & refer)
 - Patient education regarding opioids and pain management (via nursing education)

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Interventions



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Provider Education and Dosage Recommendations


- Provider Education from MDH/OPWG guideline
 - 30 minute, in-person education session by DNP student
 - Content
 - Background
 - Screening tools
 - Specific opioid dosage recommendations
 - Resource folder



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Nursing Education Session


- 60 minute, in-person education session by DNP student
- Content
 - Surrogate to providing direct patient education in post-acute pain period
 - Content
 - Risks
 - Safe opioid use
 - Pain expectations
 - Multimodal pain management



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Outcomes & Measures

- Reduce cumulative opioid exposure
 - By 3 months after provider education session: 15% reduction in average (mean) E-prescription of opioid dose (MME) at discharge from TCU compared with the 5months preceding completion of provider education
 - By 3 months after provider education session: 80% of opioid E-prescriptions at discharge will be below a total size of 200 MME
- Increase use of MDH guideline identified screening tools to identify at risk individuals
 - Provider surveys before and after training to assess perceptions regarding screening
- Increase nursing administered patient education regarding opioid usage
 - Nursing staff surveys before and after training to assess perceptions regarding patient education




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Results of Provider Survey Regarding MDH Guidelines

- Reached 53% (N = 28) of Allina Senior health providers
- Scores on Likert scale: 1 (disagree completely) to 5 (agree completely)


Survey Question	Prettest mean	Posttest mean	T-test	p value
I am familiar with the recommended biopsychosocial screening tools for mental health, substance abuse, & catastrophic thinking.	2.79	4.17	-5.29	0.00
Biopsychosocial screening tools are useful in managing patients using opioids for pain management.	2.54	3.71	-4.51	0.00
I am familiar with the dosage recommendations for opioid prescribing.	4.00	4.42	-2.63	0.01
Following the recommendations of an opioid prescribing guideline is an important part of practice	4.50	4.71	-1.36	0.18



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Provider Survey: Barriers to Use of Screening Tools

Barrier	Percentage
Access	22%
Time	39%
Education	21%
Other	16%



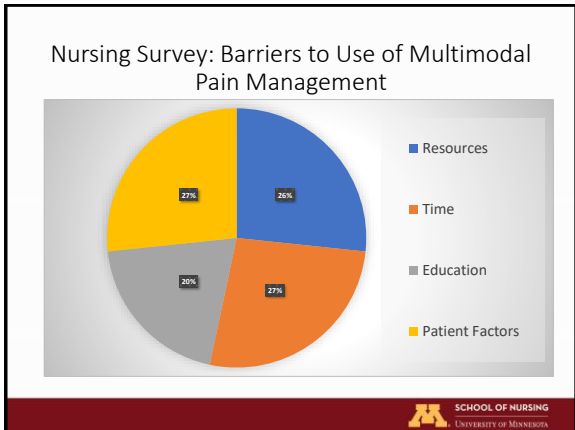
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Results of Nursing Survey Regarding Opioid and Multimodal Pain Management

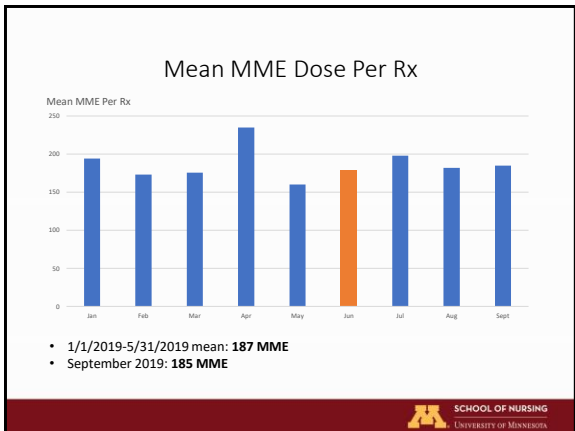
- Reached 22% (N = 8) of nurses
- Scores on Likert scale: 1 (disagree completely) to 5 (agree completely)

Survey Question	Pretest mean	Posttest mean	T-test	p value
I am familiar with the risks associated with opioid use & risk factors for problem opioid use	4.00	4.75	-3.00	0.01
I am familiar with the mechanisms of action of commonly used medications to treat pain	3.63	4.38	-1.80	0.10
I am familiar with the concept & benefits of multimodal pain management	3.75	4.75	-2.83	0.02
Educating patients on multimodal medication therapies leads to better pain management	4.38	4.88	-2.26	0.04
Educating patients on opioid therapy (risks, expectations, and multimodal therapies) is an important part of my nursing practice	4.50	4.88	-1.66	0.12

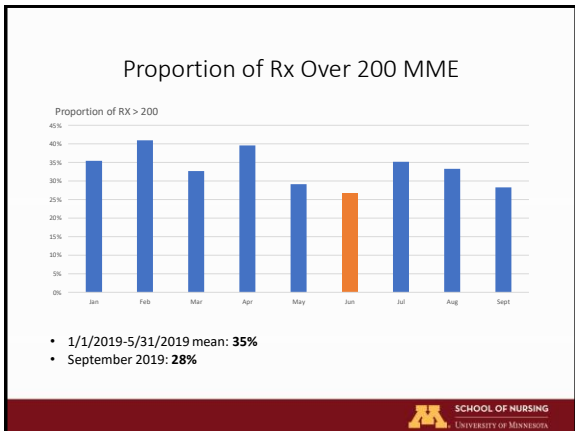
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Learning & Next Steps

- Rx dosages largely unchanged
 - Establish benchmarks for opioid prescribing
- Education increased knowledge and identified barriers
 - Implement training into provider and nurse onboarding
 - Make completing screening easier
 - Dot phrases, e-resources, track outcomes
 - Patient education
 - preoperative discussions

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References

Krebs, E. E., Gravelly, A., Nugent, S., Jensen, A. C., DeRonne, B., Goldsmith, E. S., Kroenke, K., Bair, M. J., Noorbaloochi, S. (2018). Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain: The SPACE Randomized Clinical Trial. *Journal of the American Medical Association*, 319(9), 872-882.

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