

Evaluation of physician and nursing adherence to sedation and analgesia protocol in mechanically ventilated patients

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RESULTS

INTRODUCTION

- ➤ Implementation of goal directed sedation and analgesia has shown to improve outcomes in mechanically ventilated patients.
- Our institution recently revised the sedation and analgesia protocol to include specific titration guidelines to assist nursing in providing standardized care.
- Prior to these changes, titration of sedatives and analgesics varied based on nursing assessments.
- The updated protocol allows physicians to order a patient specific titration regimen for each medication prescribed.
- The standardization of titration rates provides guidance to nursing to reach desired Critical Care Pain Observation Tool (CPOT) and Richmond Agitation Sedation Scale (RASS) scores.
- The purpose of this study was to evaluate physician and nursing adherence to the sedation and analgesia protocol in mechanically ventilated ICU patients.

METHODS

RETROSPECTIVE OBSERVATIONAL CHART REVIEW

- ➤ Generated list of sedation and analgesia protocol orders between March and September 2015 through QuadraMed® Computerized Patient Record
- > Randomly selected 50 protocol orders which met inclusion criteria
- Collected data including prescribing of sedation and analgesia protocol, documentation of CPOT and RASS reassessments, and subsequent titration of medications

PRIMARY OUTCOMES

- ➤ Measure <u>prescriber</u> adherence to the protocol based on 3 components:
- 1) Bolus Dosing 2) Goal CPOT / RASS Scores 3) Infusion Dosing
- Measure <u>nurse</u> adherence to the protocol based on overall charting:
- 1) Documented Scores: 2) Medication Titration: 3) Daily
 CPOT and RASS
 Sedatives and Analgesics Awakenings

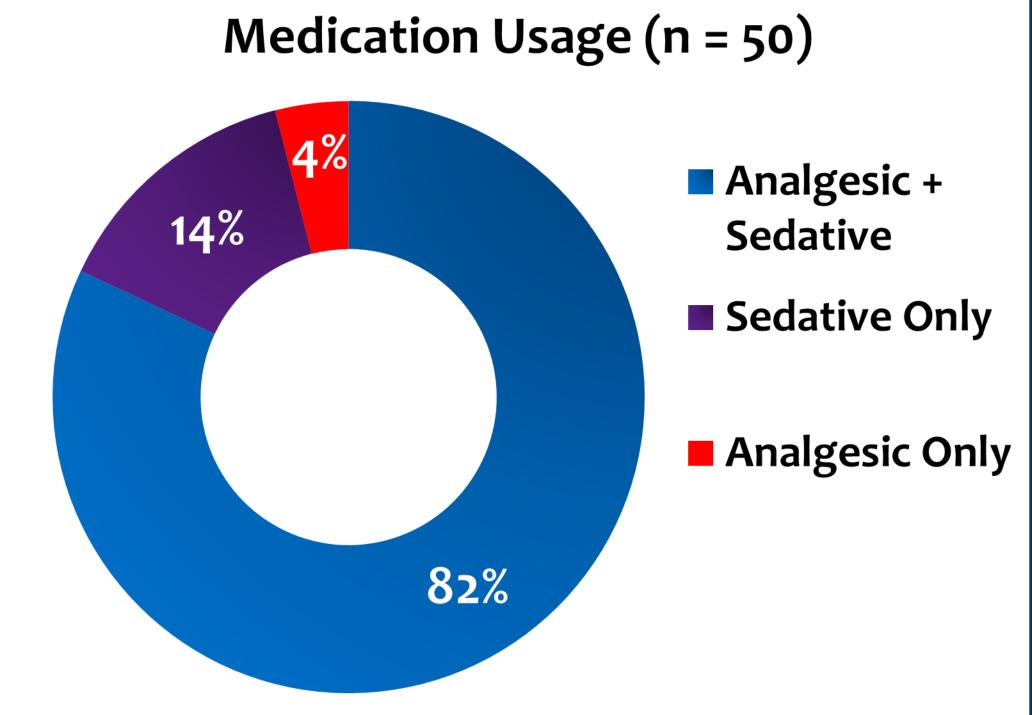
INCLUSION CRITERIA

EXCLUSION CRITERIA

➤ICU patients placed on the sedation and analgesia protocol
➤ Non-ve

➤ Patients less than 18 years of age
➤ Non-ventilated patients

algesia has shown Medicat atients.

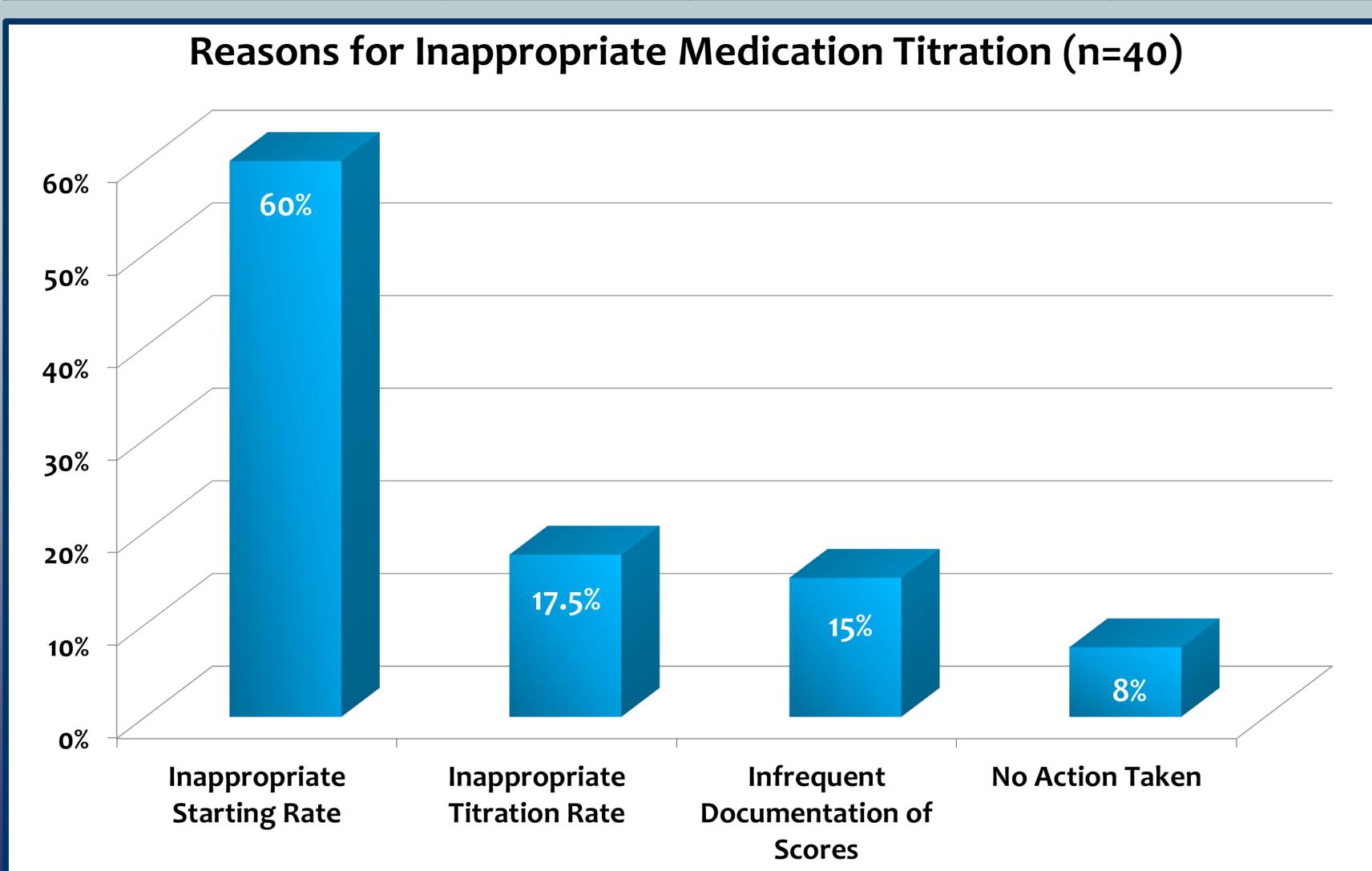


Fentanyl + Midazolam	
Fentanyl + Propofol	
Fentanyl + Lorazepam	5
Morphine + Lorazepam	2
Fentanyl only	2
Propofol only	3
Dexmedetomidine only	4
	Fentanyl + Propofol Fentanyl + Lorazepam Morphine + Lorazepam Fentanyl only Propofol only

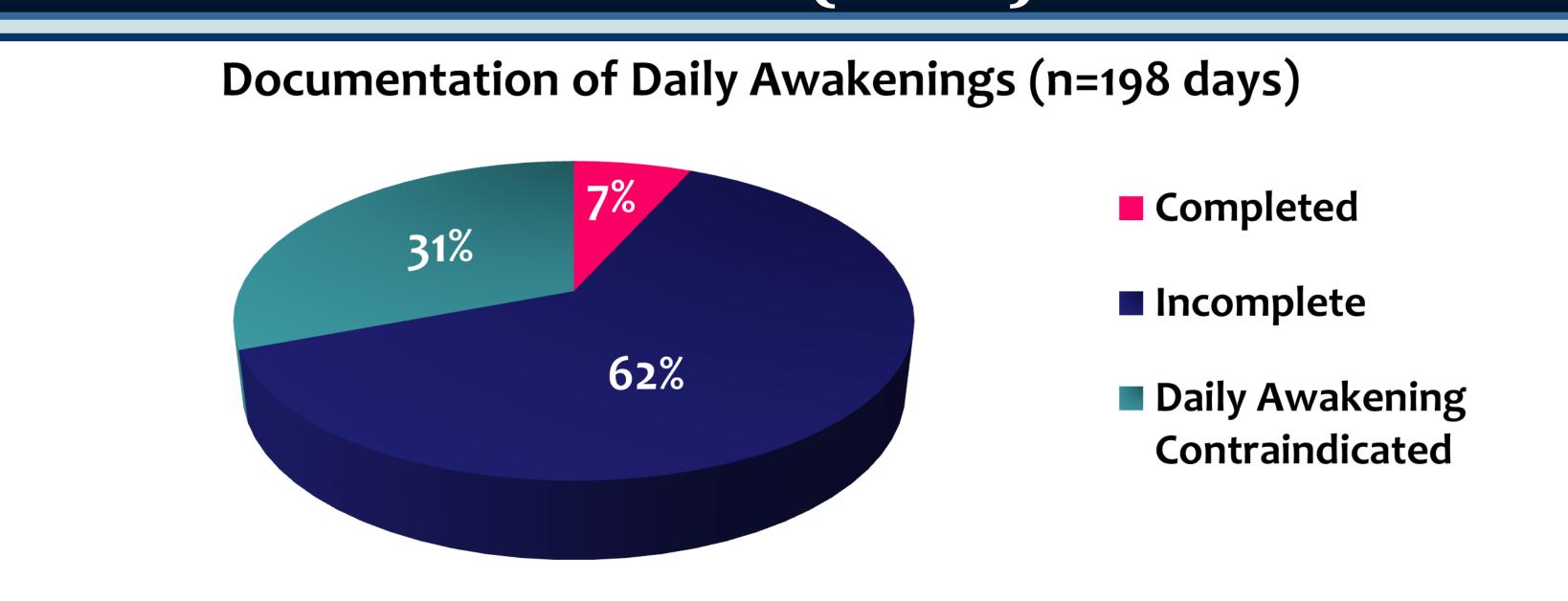
Duration (n=50)			
< 72 hours	24		
≥ 72 hours	26		

Primary Outcomes (n=50)			
Physician Prescribing	% Adherence		
Component 1 of 3	0		
Component 2 of 3	12%		
Component 3 of 3	88%		
Nursing Documentation			

Nursing Documentation					
Documented Scores	% Adherence	Medication Titration	% Adherence		
CPOT at least q 8hours	55	Analgesics	57		
RASS at least q 8hours	77	Sedatives	56		



RESULTS (cont.)



DISCUSSION

- Overall, the rate of prescriber adherence to the sedation and analgesia protocol was high.
- Most commonly omitted component was bolus dosing regimen
- Nursing adherence rate for documentation was higher for RASS compared to CPOT scores.
- Frequency of documentation varied from every 4 to 12 hours.
- ➤ Most common reason for nursing non-compliance was deviation from the prescribed starting rate.
- ➤ Nursing adherence to documentation of daily awakenings was not consistent.
- Next Steps
- Present findings at ICU committee for further discussion and evaluation
- Revise sedation and analgesia protocol to include standard reassessment times
- Reeducate nursing staff on appropriate documentation of medication titration and daily awakenings.

CONCLUSION

The study identified deviations from the protocol, which may warrant further evaluation and reeducation to improve adherence.

DISCLOSURE

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation: Khushbu P. Thaker, Mini Varghese, Ashmi A. Philips, Rani P. Madduri, and Keith Goldstein: Nothing to disclose.

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