

UC Davis
Internal Medicine

Title

How is Pain Discussed in Physician Handoffs?

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Introduction

Approximately 20% of the US adult population experiences chronic pain.¹ In one study, 59% of hospitalized patients reported pain, with 10% reporting inadequately controlled pain.² Yet, little research has been conducted on how physicians communicate with each other about pain, especially during end-of-shift handoffs. Research question: how do resident and attending physicians discuss pain in end-of shift handoffs?

Methods

Two types of handoffs were analyzed:

- 1) Transcribed verbal end-of-shift handoffs between medical residents
- 2) Written handoffs between attending hospitalists, pulled from the electronic medical record

- Sample: patients admitted to UCDH inpatient wards. Verbal handoffs were recorded from 2-3 resident teams twice daily, written handoffs were pulled from the electronic health record, for two weeks.
- Patient demographics and self-reported pain scores (on a scale of 0-10) were also collected in conjunction with each transcript.
- Handoffs and handoff transcripts were closely read to identify the contexts in which pain was discussed, leading to the following definition:

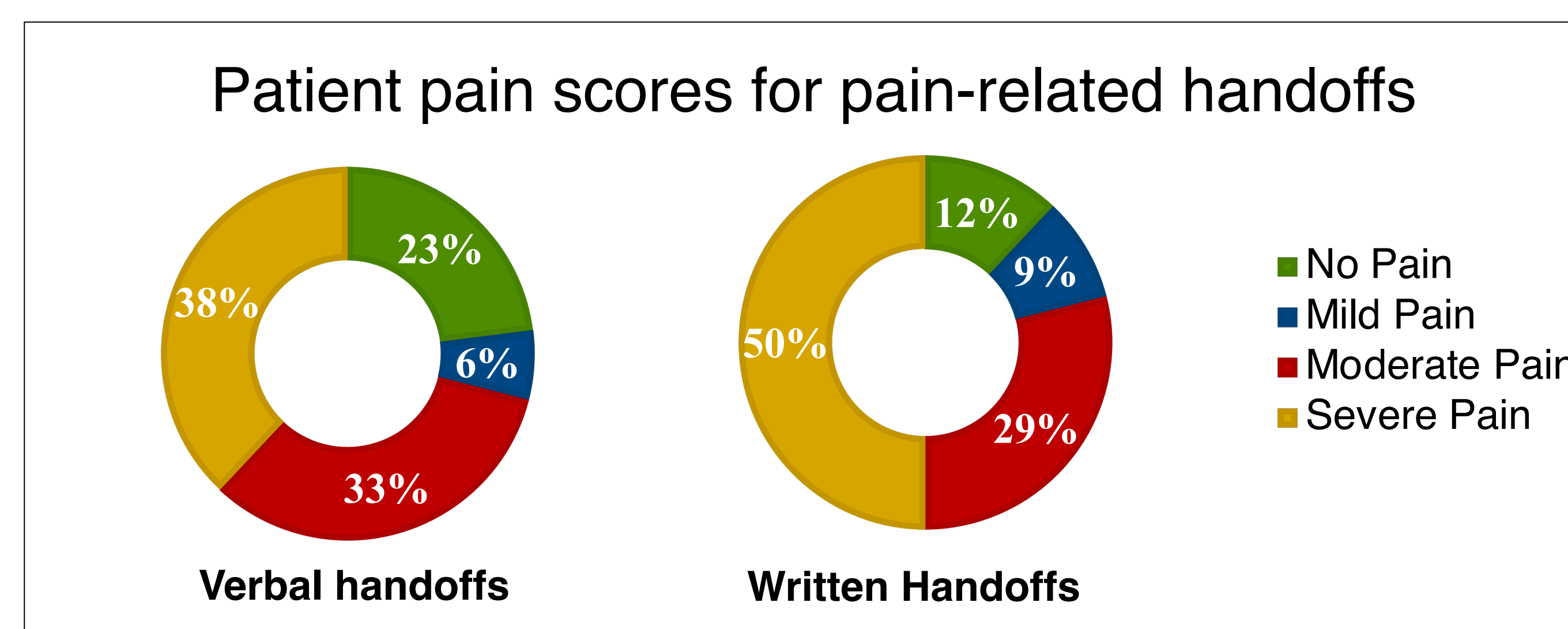
Pain-related handoff: includes any mention of a patient's physical pain (or lack thereof). Includes discussion of of opioid and non-opioid pain medications.

- This study focused on pain-related handoffs, which were sorted into 3 categories (see results).

Results

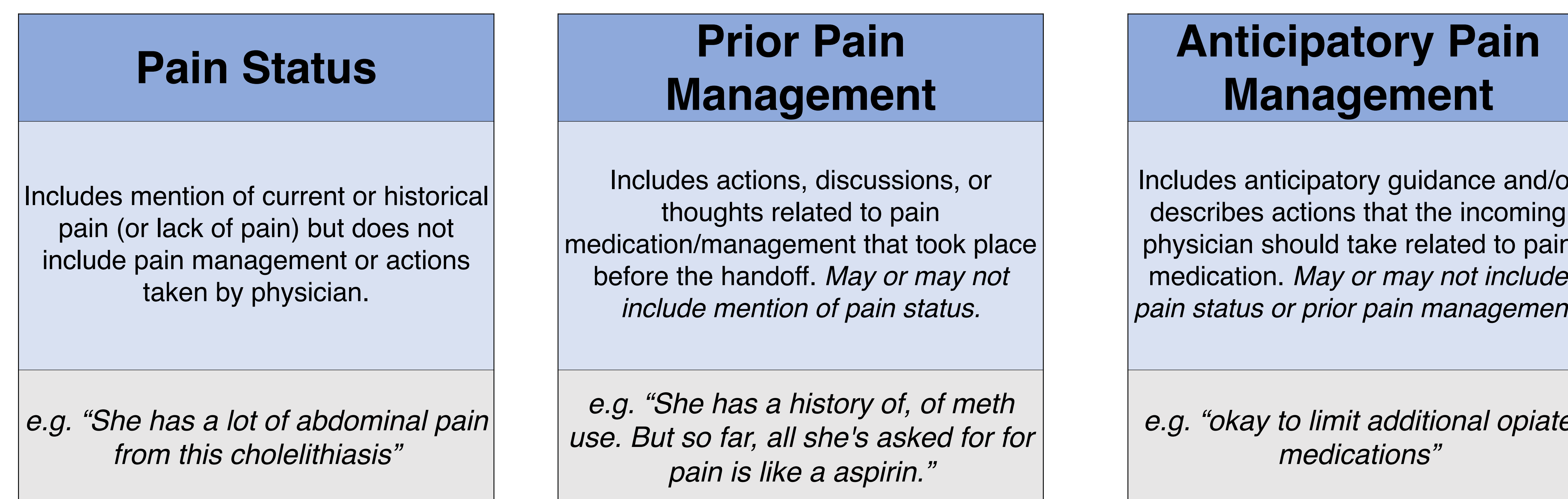
	Total # Handoffs	# Patients	# Pain-related handoffs (%)	Mean patient pain score 0-10
Verbal handoffs	299	165	69 (23)	5.4
Written handoffs	1150	165	159 (14)	6.4

[Table 1] Handoff characteristics

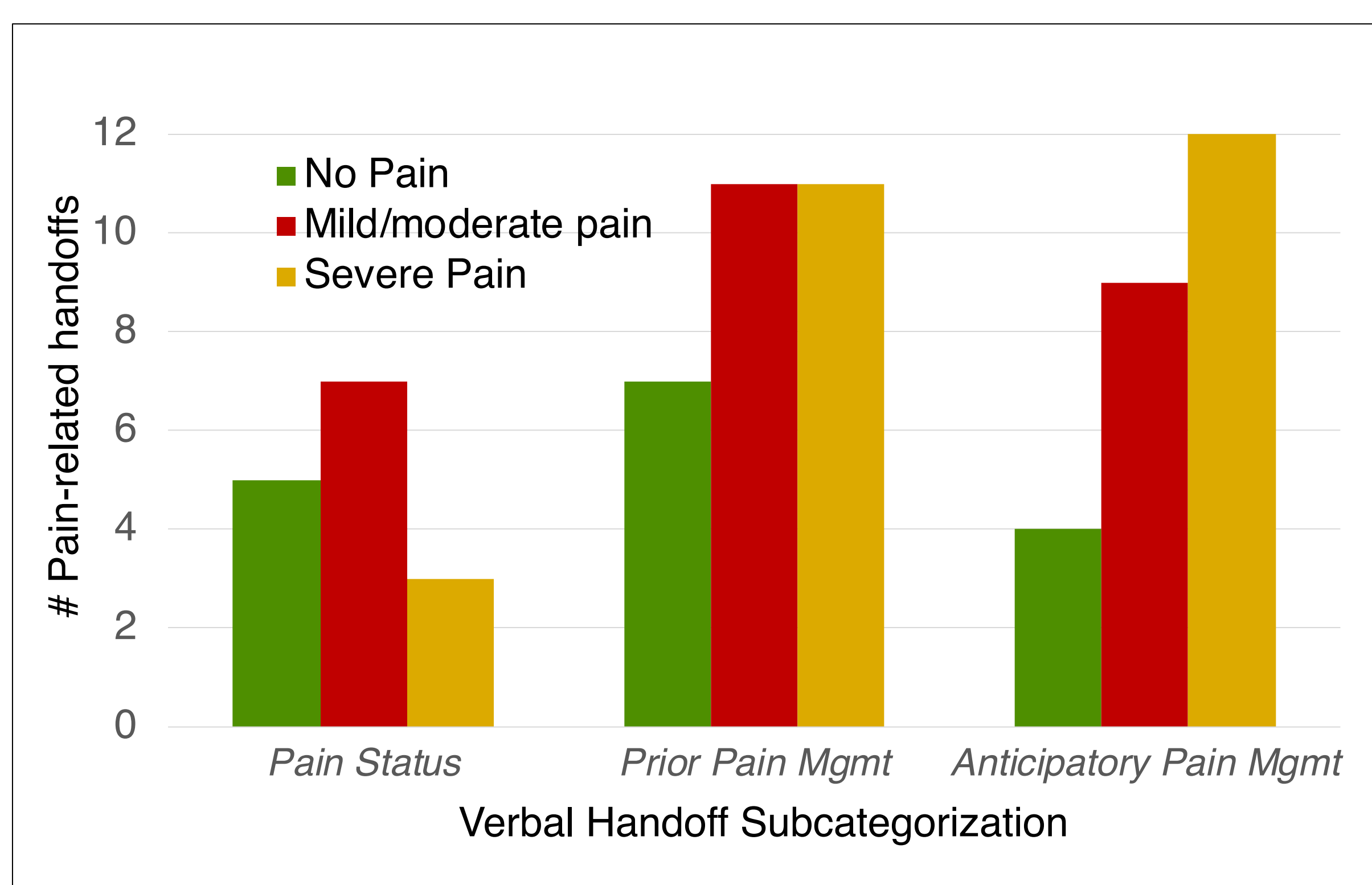


[Figure 1] Pain-related handoff pain scores. No pain is a pain score of 0, mild pain is 1-3, moderate pain is 4-7, and severe pain is 8-10 on a 10 point scale

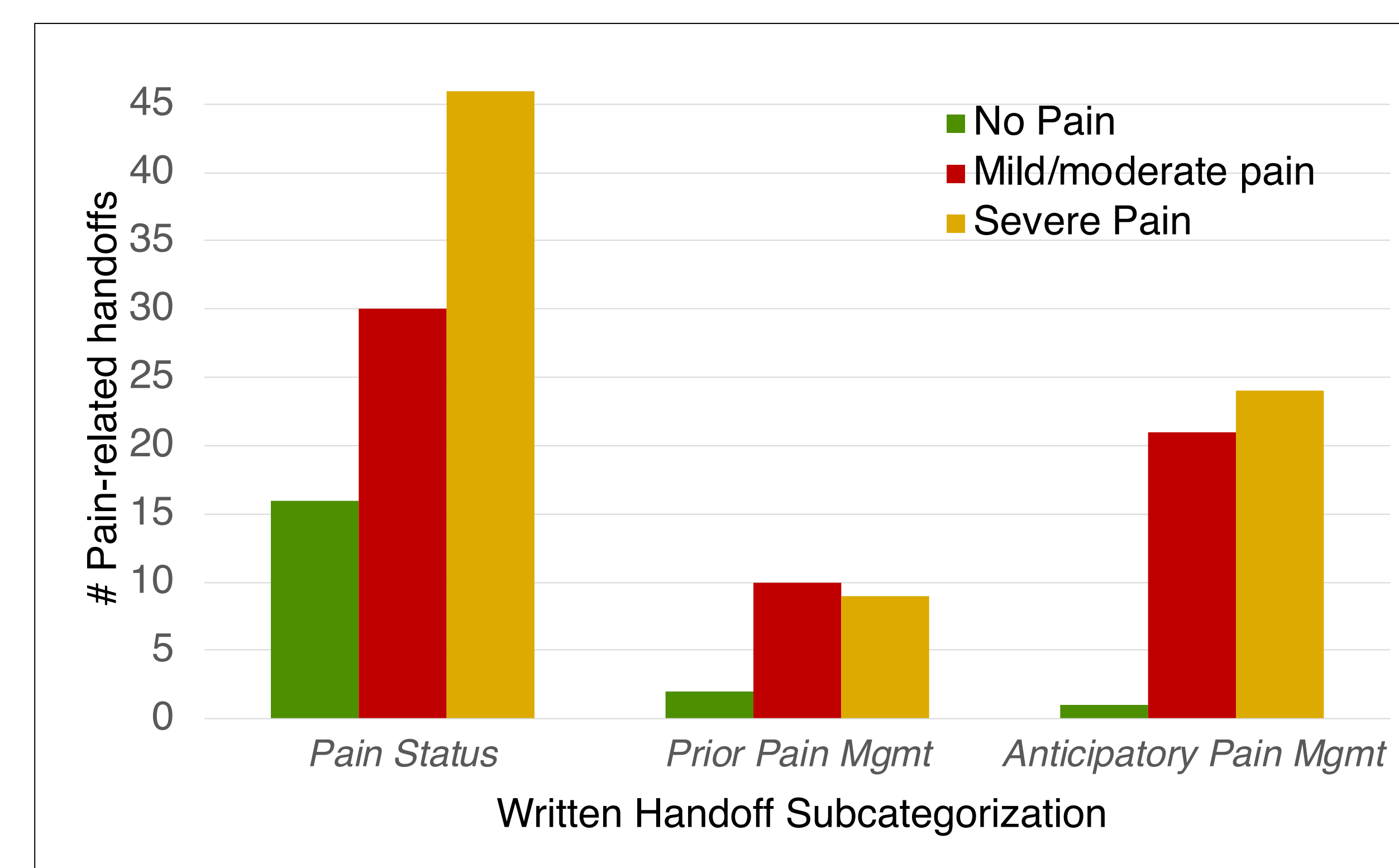
Subcategorization of pain-related handoffs



[Figure 2] Subcategorization of pain-related handoffs. Pain-related verbal and written handoffs were categorized into three mutually exclusive subcategories.



[Figure 3] Comparison of pain-related verbal handoff subcategorizations based on patient pain score



[Figure 4] Comparison of pain-related written handoff subcategorizations based on patient pain score

Discussion

- Pain is discussed in less than a quarter of handoffs, despite more than half of patients experiencing some level of pain.
- Prior and anticipatory pain management discussions are more common in residents' verbal handoffs for patients with pain (Figure 3).
- Attendings' written discussions of pain focus primarily on pain status regardless of patient pain scores (Figure 4).
- Differences in written and verbal handoff data could be attributed to differences in physician level of experience and/or medium/length of communication.

Conclusions/Future Study

- Physicians do not discuss pain in a majority of handoffs, even when patients experience severe pain
- Discussions of pain differ between verbal and written handoffs, and potentially differ depending on patient pain score
- Future work will focus on qualitative analysis of individual handoffs to identify further context of pain-related discussion

Acknowledgements

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1. Dahlhamer J, Lucas J, Zelaya C, et al. Prevalence of Chronic Pain and High-Impact Chronic Pain Among Adults - United States, 2016. *MMWR Morb Mortal Wkly Rep.* 2018;67:1001-6.
2. Whelan CT, Jin L, Meltzer D. Pain and Satisfaction With Pain Control in Hospitalized Medical Patients: No Such Thing as Low Risk. *Archives of Internal Medicine.* 2004;164:175-80.