Management of Prescription Pain Medication After Hospitalization and Surgery

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Background

The management of prescription pain medications (PMs) for trauma patients requiring surgery remains a complex and poorly standardized issue. After the initial emergency department visit, patients often face weeks of pain before surgery, creating uncertainty about who—emergency physicians, trauma surgeons, or primary care providers—should manage their pain medications.

While guidelines emphasize the type, amount, and delivery of PM, they fail to assign responsibility for prescribing. The challenge is heightened by the dual risks of under-prescribing, compromising patient recovery and comfort, and over-prescribing, leading to opioid misuse.[1] Pain is a critical aspect of recovery, yet communication gaps among potential medication prescribers' complicate care.

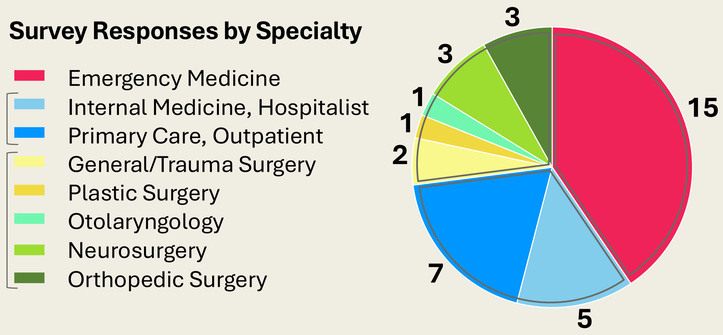
Objectives

Prior studies have suggested pre-established communication systems and tools to guide patients can improve coordination; but implementation is challenging.[2] This study aims to address these gaps and develop strategies for ensuring adequate PM management for trauma patients.

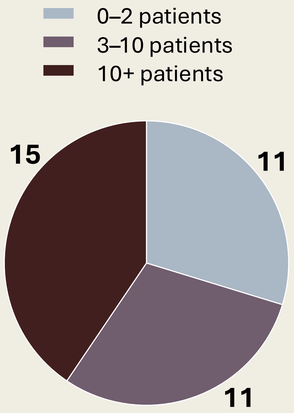
We probed physician's opinions regarding PM management responsibilities using a Research Electronic Data Capture (REDCap) survey of emergency department, surgery, and primary care physicians. This is the first step in a multi-step quality-improvement project deigned to propose a new standard of care detailing who should manage the PM of trauma patient's post-trauma and pre-operatively.

Results

Survey Responses by Specialty

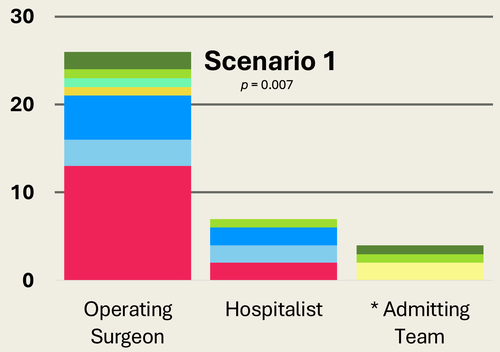


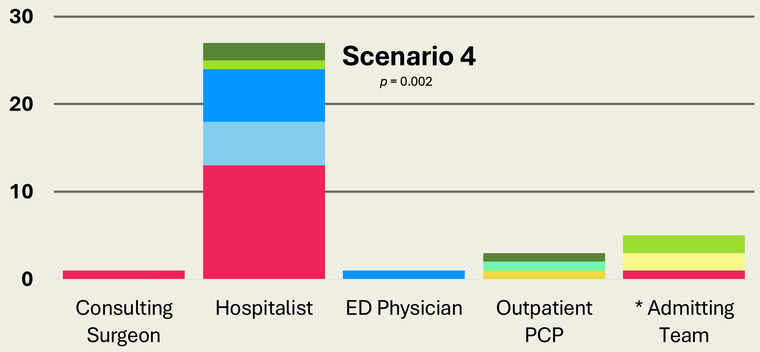
Survey Responses by Number of Trauma Patients Seen per Week

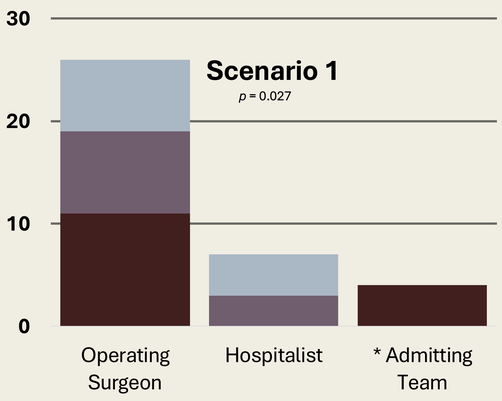


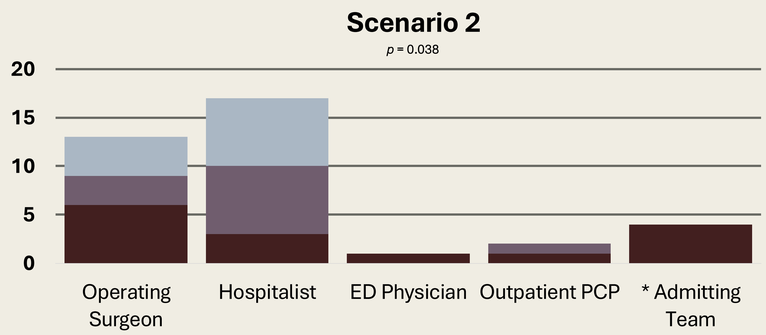
The two pie-charts show a breakdown of all 37 physicians surveyed based on specialty and number of trauma patients seen per week.

The four graphs below show survey scenario results with significant *p*-values ($p < 0.05$), indicating areas where physician characteristics influenced survey responses.









* Not included in original survey options (written-in answers)

Methods

Eight specialties were chosen based on role in the care of trauma patients, and160 OU Health physicians from those specialties were asked to participate in a survey via email. The survey was administered via REDCap online survey database and consisted of introductory material and five randomized scenarios a trauma patient might experience. 37 physician responses were organized into 2×2 or 2×3 matrixes and analyzed with chi-squared tests. Data in sparse categories was clumped together for analysis (Figures 1–3).

The five survey scenarios are given below.

Scenario 1
- Trauma
- **Emergent surgery**
- **Admitted**
- Post-Op PM?

Scenario 2
- Trauma
- **Admitted**
- **Discharged**
- **Outpatient surgery**
- Pre-Op PM?

Scenario 3
- Trauma
- **Discharged**
- **Outpatient surgery**
- Post-Op PM?

Scenario 4
- Trauma
- **Admitted**
- **No surgery (surgeon consulted)**
- PM?

Scenario 5
- Trauma
- **Discharged**
- **No surgery (surgeon consulted)**
- PM?

Discussion

Survey responses revealed notable differences in physician opinions regarding responsibility for prescribing perioperative PM to trauma patients. In outpatient scenarios (3 and 5), there was near-universal agreement: the operating surgeon was favored when outpatient surgery was scheduled, while the ED physician was favored when no surgery was scheduled. In contrast, inpatient scenarios (1, 2, and 4) showed much less consensus. Physicians were divided between the surgeon, hospitalist, and admitting team, depending on whether the patient underwent surgery, was discharged for later surgery, or was discharged without surgery. Statistical analysis demonstrated that both physician specialty and frequency of trauma patients seen were significantly associated with response patterns, while years in practice were not. These findings suggest that differences in role perception, rather than experience, drive variation in practice. This work represents an early step in clarifying responsibility for PM in trauma care and highlights areas for quality improvement and further study.

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References

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2 Bérubé M, Côté C, Gagnon MA, Moore L, Tremblay L, Turgeon AF, Evans D, Berry G, Turcotte V, Belzile ÉL, Dale C, Orrantia E, Verret M, Dercksen J, Martel MO, Dupuis S, Chatillon CE, Lauzier F. Interdisciplinary strategies to prevent long-term and detrimental opioid use following trauma: a stakeholder consensus study. Pain Med. 2023 Aug 1;24(8):933-940. doi: 10.1093/pm/pnad037. PMID: 36944264; PMCID: PMC10391591.

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