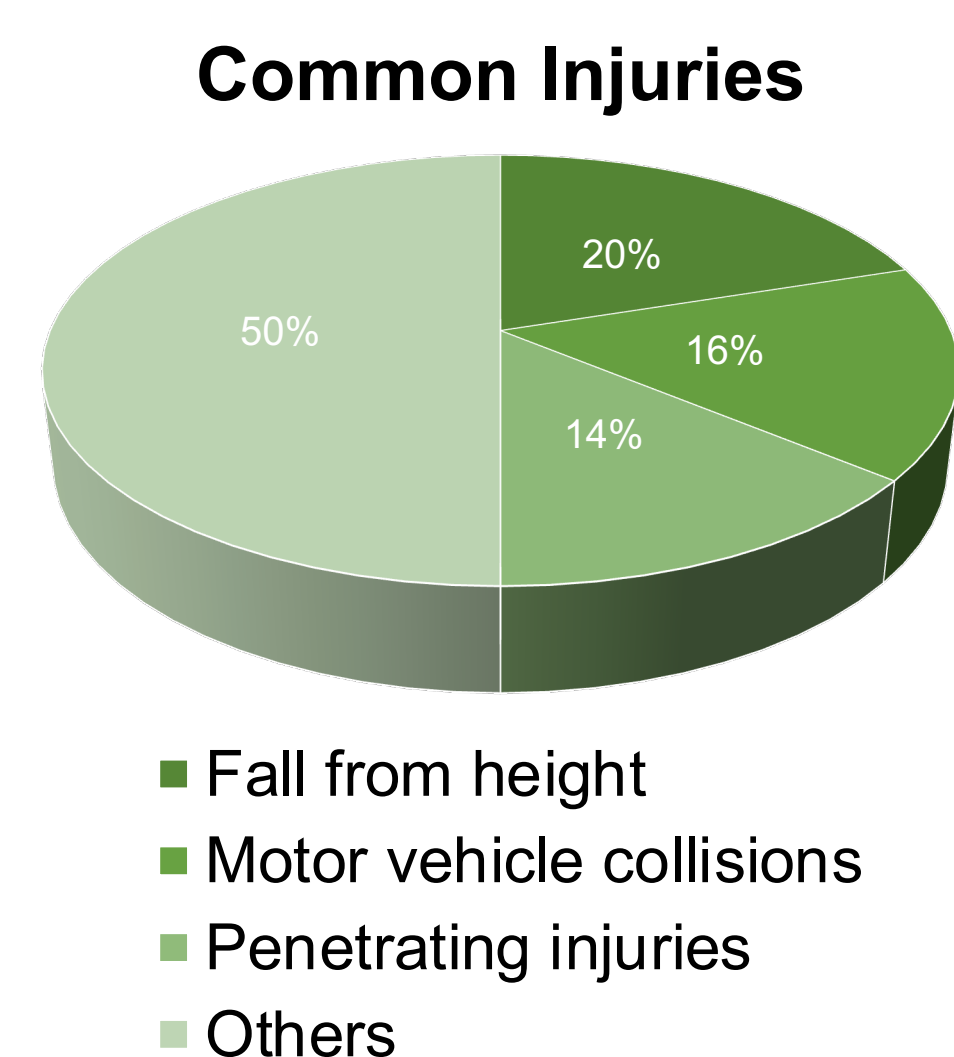


Introduction

- Sunnybrook Health Sciences Centre: level 1 American College of Surgeons certified trauma center in Canada with over 2,000 trauma team activations/year
- Multiple concomitant injuries: orthopedic fractures, soft tissue, nerve, vascular, and traumatic brain injuries
- Patients have prolonged intensive care unit admission, multiple surgical procedures, therefore potential for significant and prolonged pain
- In 2021, a Trauma Recovery Clinic was established at Sunnybrook Health Sciences, a one-of-a-kind multidisciplinary clinic focused on helping trauma patients rehabilitate and transition to community care
- The Trauma Pain Clinic (TPC) within the Trauma Recovery Clinic was established to help manage transitional pain needs of trauma patients
- Patients are screened by an intake officer at 4 weeks following discharge from hospital and are referred to the TPC if their pain numerical rating scale is >4
- Given the paucity of published data available on the pain needs of trauma patients following discharge, we have undertaken this quality improvement initiative to better understand the patient population and its needs.



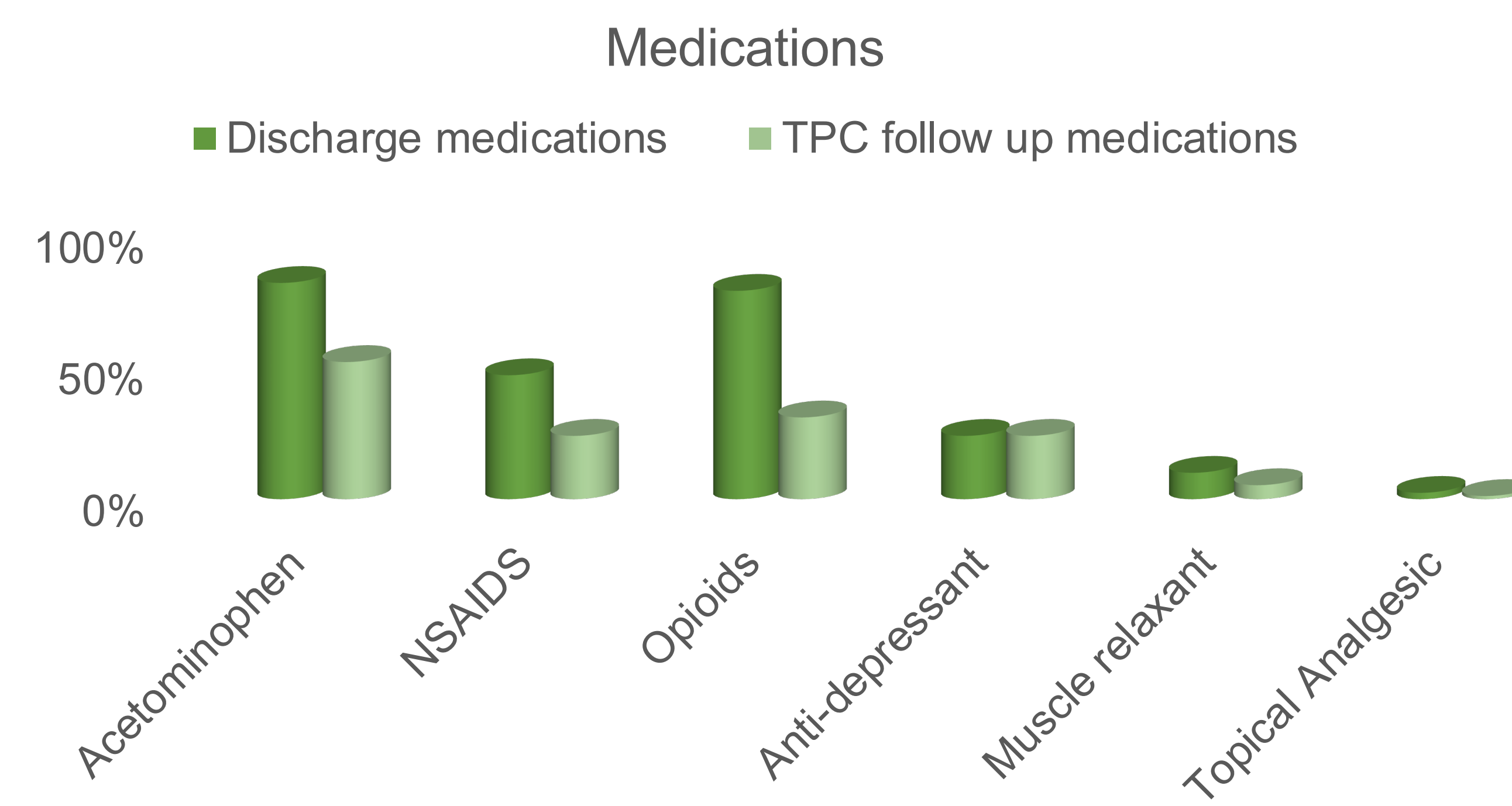
Methods

- Quality improvement initiatives are exempt from IRB approval by local guidelines
- Patient intake questionnaires for clinical care in the TPC were collected for new patient referrals between May 2021 and Oct 2022
- Patient medical records were also reviewed for additional data
- Intake questionnaire consisted of :
 1. demographic information (age, social habits, employment status)
 2. pain patterns (body pain diagram)
 3. validated pain and function questionnaire - Brief Pain Inventory (BPI)
 4. analgesic medication at discharge and use at time of TPC intake
 5. history of surgical interventions
- Descriptive analyses were carried out using SAS (Version 9.4)

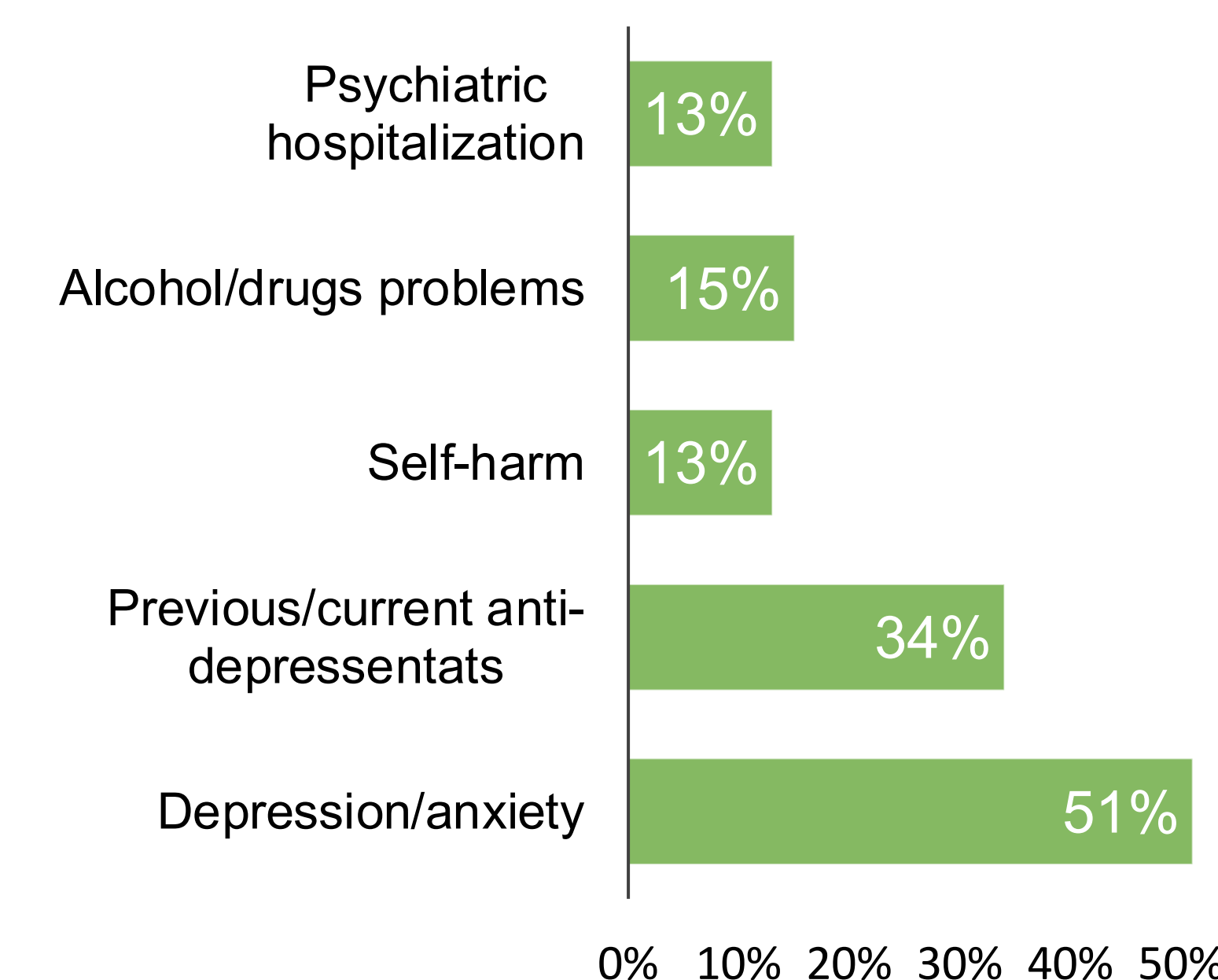
OBJECTIVE: Analyze characteristics of the initial patient cohort referred to the TPC to help provide improved services for transitional pain care

Results

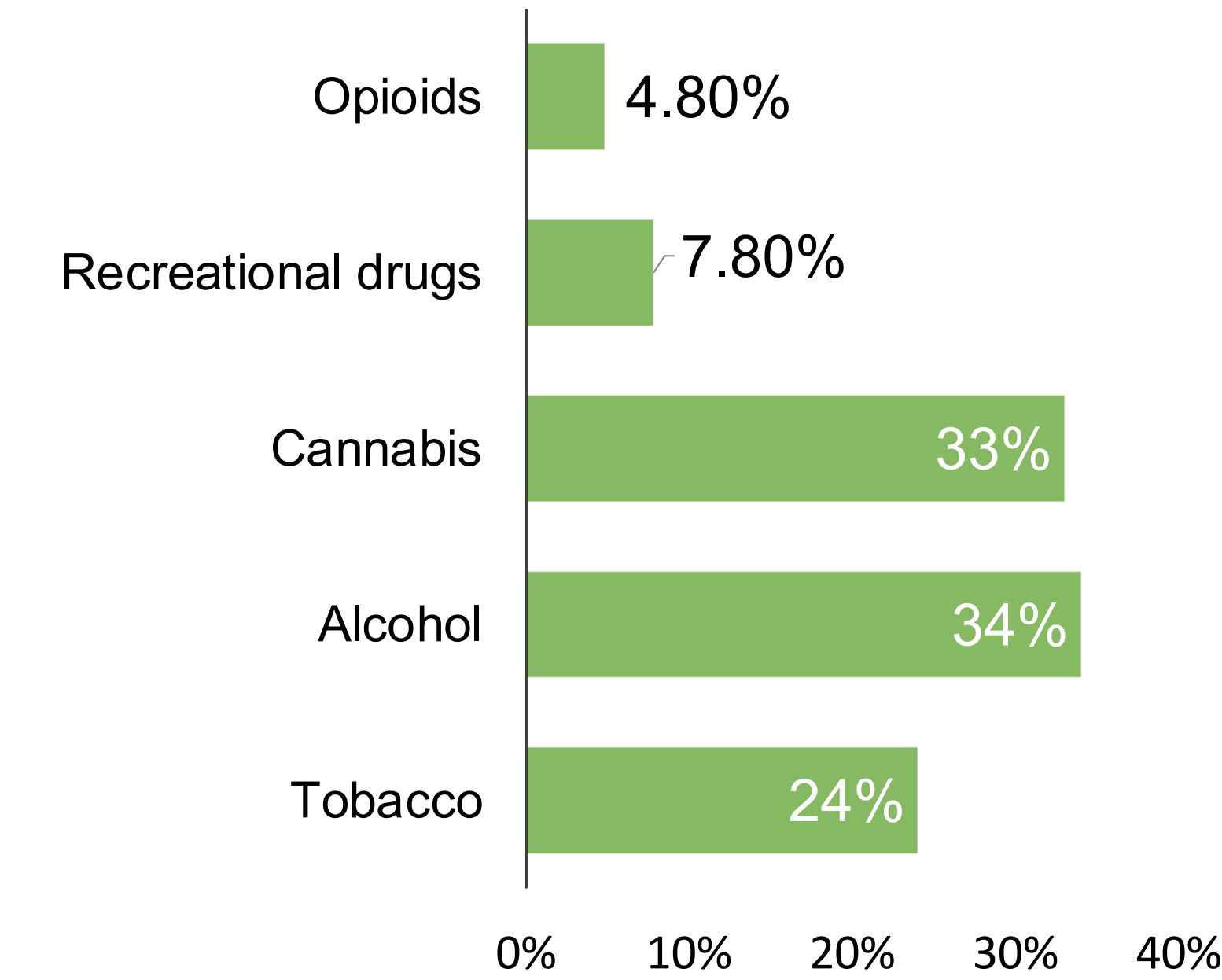
- 170 questionnaires collected
- Male: 65% ; Female: 35%
- Patients reporting 7/10 or greater for average pain on the brief pain inventory (BPI) accounted for 55%; while patients reporting 7/10 or greater for worst pain on the BPI accounted for 80%.
- An overwhelming number of patients (91%) were given follow-up appointments for further pain care



Psychosocial History



Prior Trauma Substances



Discussion

- Patients with traumatic injuries for trauma activation can range from soft tissue injuries to numerous and severe multisystemic injuries
- Patients are often provided multimodal analgesic treatment including **opioids** with nearly **80% of patients given opioid prescriptions at discharge**
- Approximately 60% of these patients were able to wean opioid use by the time of presentation to the TPC, **our data demonstrates a concerning trend of more than 30% of patients with persistent opioid use 1 month following hospital discharge**
- **Traumatic injury** has been associated with persistent opioid use and these patients have an increased risk of death in the 6-18 months after trauma.
- Long-term opioid therapy is also associated with increased risk for an opioid abuse or dependence diagnosis
- Mental health disorders have been noted to be associated with increased risk of chronic opioid use
- High rate of anxiety/depression identified in our population (51%) and prevalence of post-traumatic stress disorder following trauma
- Highlights a need to better address the pain and psychiatric barriers faced by patients following trauma to reduce the incidence of chronic opioid use.
- **Need for a multidisciplinary and multi-faceted approach to pain management of trauma patients following hospital discharge**

References

1. von Oelreich E, Eriksson M, Brattstrom O, et al. Risk factors and outcomes of chronic opioid use following trauma. Br J Surg 2020;107(4):413-21. doi: 10.1002/bjs.11507 [published Online First: 20200207]
2. Edlund MJ, Martin BC, Russo JE, et al. The role of opioid prescription in incident opioid abuse and dependence among individuals with chronic noncancer pain: the role of opioid prescription. Clin J Pain 2014;30(7):557-64. doi:10.1097/AJP.0000000000000021
3. Richardson LP, Russo JE, Katon W, et al. Mental health disorders and long-term opioid use among adolescents and young adults with chronic pain. J Adolesc Health 2012;50(6):553-8. doi: 10.1016/j.jadohealth.2011.11.011 [published Online First: 20120228]

