# Examining the Potential Benefit of Proactive Inpatient Psychiatric

# Consultation in Physical Medicine and Rehabilitation Patients

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# Background

The CDC estimates that there were ~223,000 traumatic brain injury (TBI)-related hospitalizations in 2019 (CDC 2022).

It is well-known that patients who experience TBI are susceptible to psychiatric conditions (with frequencies documented from 18-83%) such as

- Substance Use Disorders (McHugo 2017)
- Depression (Deb 1999)
- Anxiety (Koponen 2011)
- Post-Traumatic Stress Disorder (Alway 2016)

Studies have shown that proactive psychiatric consultation models have led to multiple benefits in both patient treatment outcomes and hospital metrics, such as reducing length of stay (LOS) (Sledge, 2015).

# Purpose

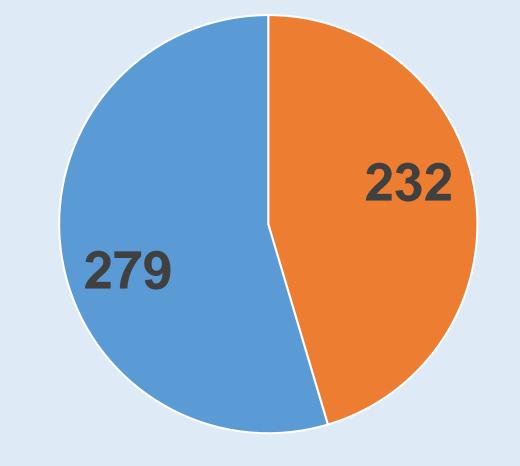
Identify the number of patients who had overlapping psychiatric and physical medicine and rehabilitation (PM&R) consults in order to help determine whether there would be a potential benefit to proactive psychiatric consultation in this patient population.

#### Methods

We tracked every patient who received a PM&R consult in the year 2021 and identified those who also received a psychiatric consultation during the same admission. We then reviewed every indication for psychiatric consultation that was ordered in the electronic health record (Epic).

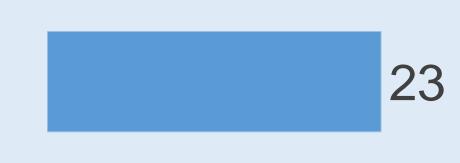
### Results

 Of the 511 patients who received a PM&R consult, 232 also received a psychiatric consultation (45%)

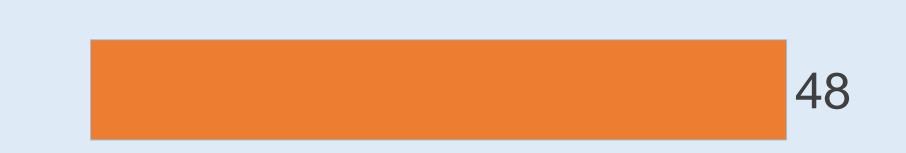


Received Psychiatric Consultation (45%)
Did Not Receive Psychiatric Consultation (55%)

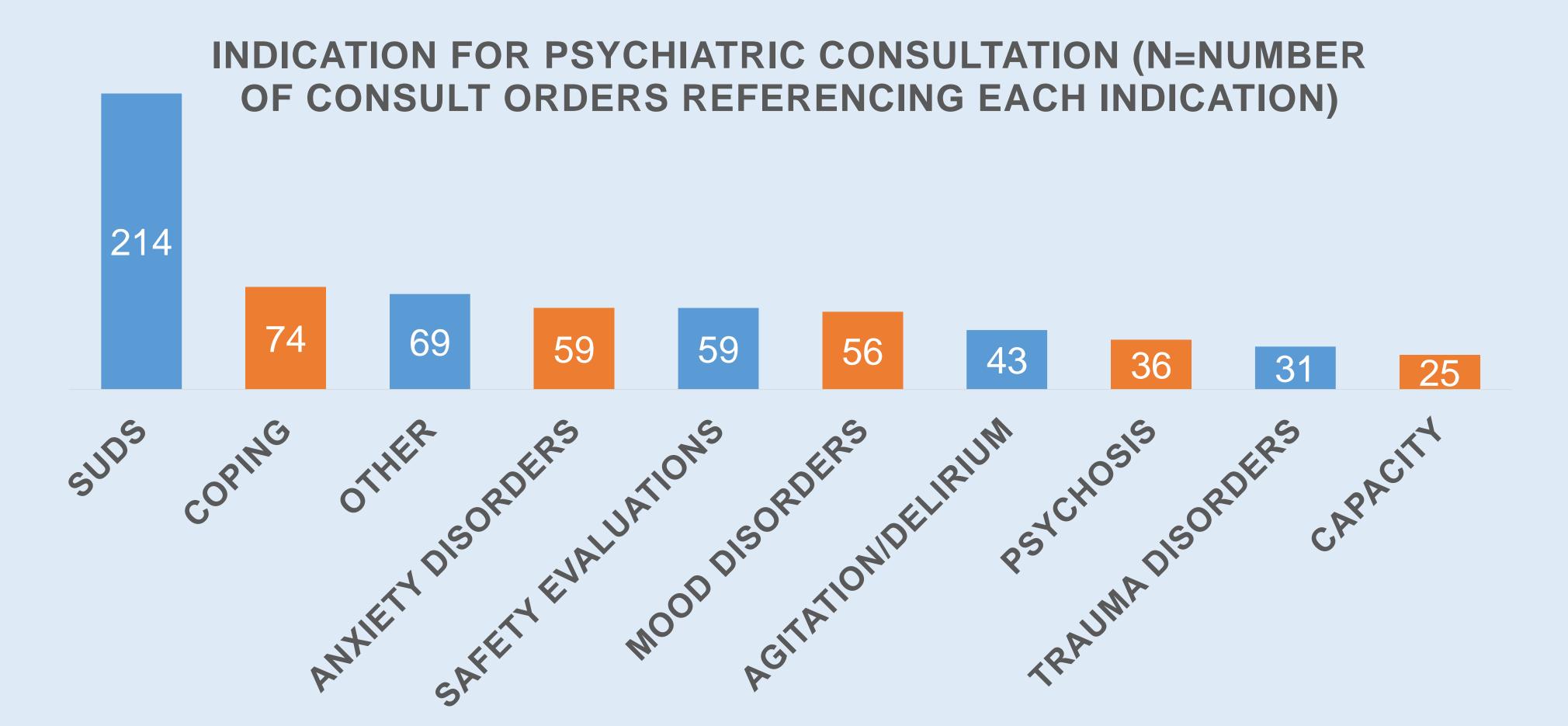
 Average LOS for patients not receiving psychiatric consultation: 23 days



 Average LOS for patients receiving psychiatric consultation: 48 days



- 666 indications for psychiatric consultation were noted in these orders:
- 32% for assessment and/or treatment of substance use disorders (SUDS)
  - alcohol > stimulants > opiates > cannabis
- 22% for mood, anxiety, or trauma disorders
- 11% specifically requesting psychotherapy for coping with injury
- 9% requesting assessment of suicidal or homicidal ideation.



#### Discussion

Nearly half of patients who were referred to the PM&R consult service were referred to the psychiatric consult service.

This finding affirms prior literature on the overlap of psychiatric conditions in patients who experience physical trauma such as TBI.

Length of stay was higher for patients requiring psychiatric consultation as their clinical course was likely complicated by their psychiatric comorbidity.

Proactive psychiatric consultation may improve patient outcomes and performance metrics among this patient population. Opportunities include

- Early recognition and treatment of psychiatric illness,
- Reducing length of stay,
- Reducing need for 1:1 sitter
- Reducing need for physical and chemical restraint, and
- Establishing outpatient mental health followup appointments upon discharge.

Early collaboration with our PM&R colleagues can likely result in improved functional outcomes for their patients with co-occurring psychiatric illness.

#### References

- Centers for Disease Control and Prevention. National Center for Health Statistics: Mortality Data on CDC WONDER. Accessed 2022, <a href="https://wonder.cdc.gov/mcd.html">https://wonder.cdc.gov/mcd.html</a>
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- Koponen et al, 2011, PMID: 21870901.
- Alway et al, 2016, PMID: 26176500.
- Sledge et al, 2015, PMID: 26022134.