

Background

- With the implementation of national prescribing guidelines and efforts from various organizations, there has been an increase in opioid tapering and discontinuation in the US.
- However, the safety of tapering strategies with respect to the mental health of patients who are on long-term opioid therapy (LTOT), especially older adults, has not been well established.

Objective

- Evaluate the relationship between opioid tapering velocity and mental health crisis in older adult Medicare beneficiaries with chronic non-cancer pain (CNCP) who are on LTOT.

Methods

- Data: 2012-2018 Medicare 5% administrative claims data.
- Study design: Nested case-control study.
- Study cohort: ≥ 65 years with CNCP who were on new LTOT, continuously enrolled without cancer diagnosis and hospice use.
- Case definition: Mental health crisis (MHC) – Emergency department visit or hospitalization with depression or anxiety as the primary or secondary diagnosis, or suicidal ideation or attempt in any diagnosis position.
- Cases and controls: Matched 1:2 on age (± 1 year) and time of cohort entry (± 30 days) using incidence density sampling.
- Key independent variable: Opioid tapering velocity – measured during 120 days hazard period prior to index date.
- Conditional logistic regression: Assess the relationship of interest after accounting for known confounders.

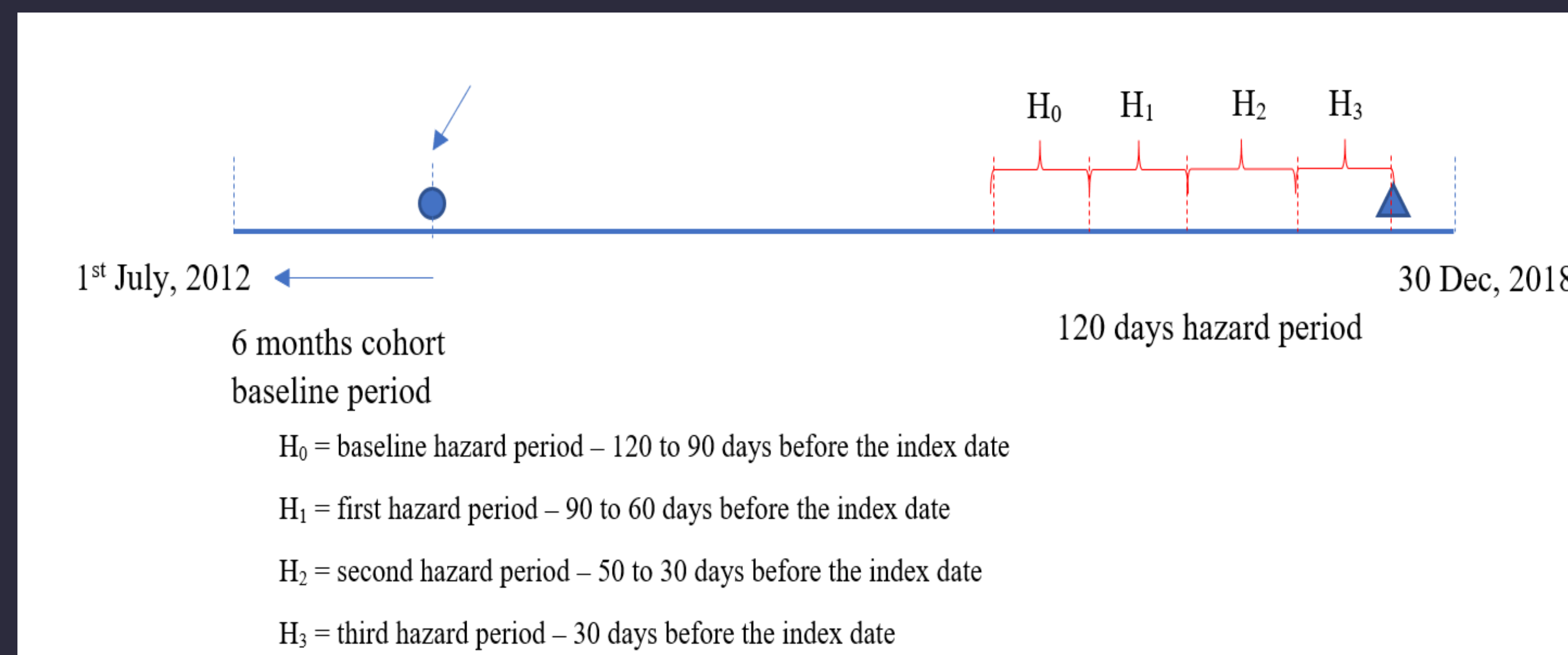


Figure 1: Methodological diagram of the study

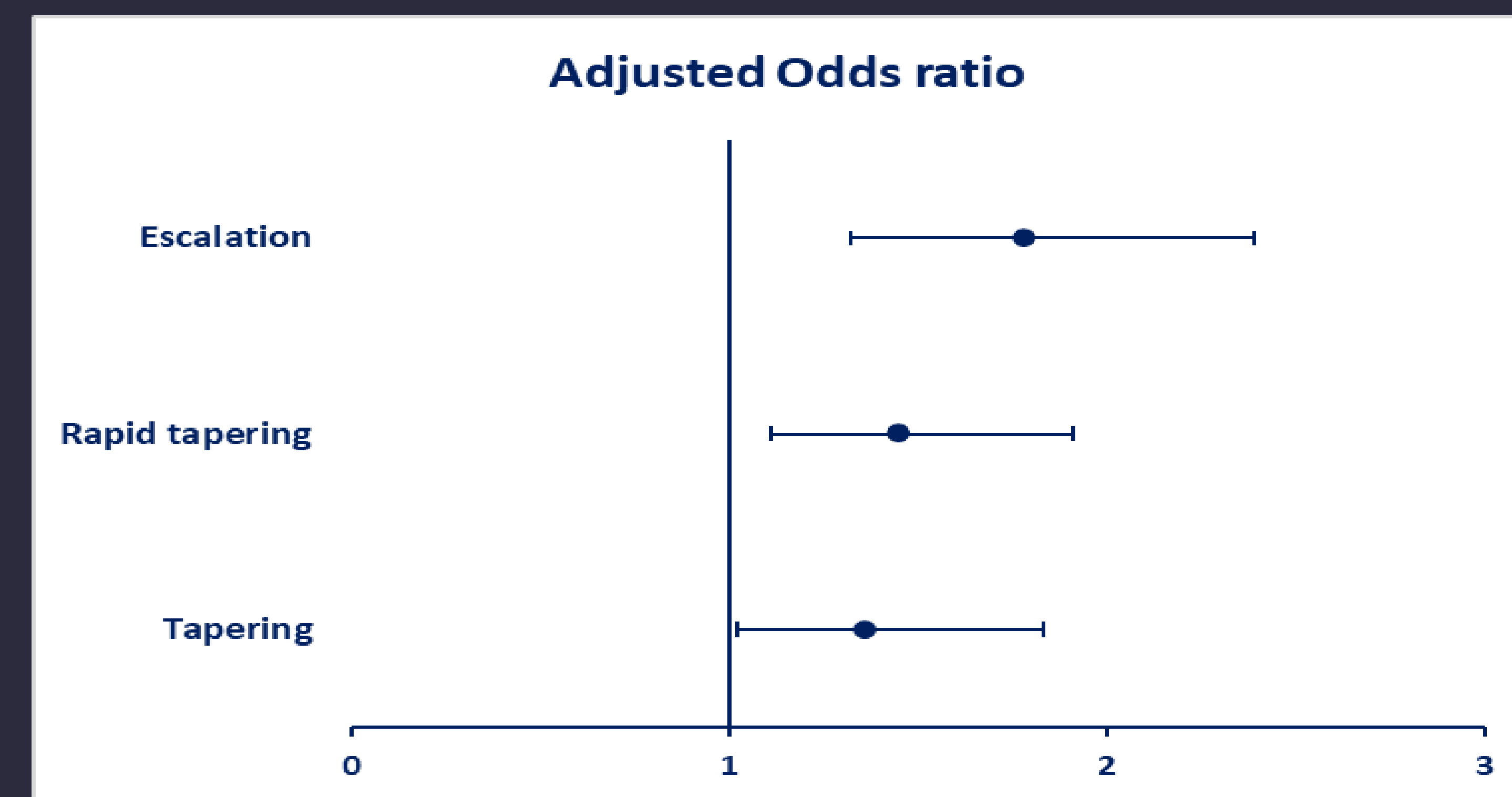


Figure 2: Adjusted relationship between opioid tapering velocity and MHC

Results

- The eligible cohort of the study was 42,091 beneficiaries. Majority of them were female (70.55%) with a mean age of 75.98 (SD = 8.02) years. Most were Non-Hispanic White (88.63%), had multiple CNCP conditions (61.96%) and 62.48% had a low CCI score.
- Of the eligible beneficiaries, 2,248 (5.34%) experienced MHC. Cases (n=952) were matched 1:2 with controls (n=1,904).
- In unadjusted analysis, rapid tapering (OR = 1.23, 95% CI: 0.97-1.55) was not significantly associated with MHC. However, significant relationships were found for tapering (OR = 1.43; 95% CI: 1.11–1.84) and dose escalation (OR = 1.92; 95% CI: 1.49 – 2.48).
- In adjusted analysis, all three (i.e., dose escalation, tapering, and rapid tapering) were significantly associated with MHC (Figure 2).

Conclusions

- Both tapering and rapid opioid tapering are associated with higher odds of experiencing MHC. Older adults are also at higher risk of MHC when the dose of opioids is escalated.
- Rapid or abrupt discontinuation and escalation of opioid dose should be avoided as much as possible.
- Patient-driven and gradual dose tapering or escalation should be promoted with frequent mental health monitoring, and psychosocial support.

Key references

- Agnoli A, Xing G, Tancredi DJ, Magnan E, Jerant A, Fenton JJ. Association of dose tapering with overdose or mental health crisis among patients prescribed long-term opioids. JAMA. 2021;326(5):411-419. doi:10.1001/jama.2021.11013
- Ramachandran S, Salkar M, Bentley JP, Eriator I, Yang Y. Patterns of long-term prescription opioid use among older adults in the United States: a study of Medicare administrative claims data. Pain Physician. 2021;24(1):31-40.

