Associations between tapering or discontinuing opioids and subsequent pain-related primary care visits

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The Research Question

• Is there a difference in pain-related health care utilization for patients who were on stable long-term opioid therapy who taper to a lower dose compared to those who discontinue (taper off)?



Research Design and Method

- Design: Retrospective cohort study
- Data: administrative data from the Optum Labs Data Warehouse 2015-2019 that contains de-identified medical and pharmacy claims and eligibility information for commercial and Medicare Advantage enrollees in the US.
- Sample: Adults who were prescribed stable opioid doses (≥50 morphine milligram equivalents [MME]/day) over a 12-month baseline period
- Tapering: ≥15% relative dose reduction from baseline, subclassified as taperedand-continued (MME>0) vs. tapered-and-discontinued (MME=0)
- Outcome Measures: Total monthly outpatient primary care visits, ED visits, or hospitalizations for pain-related diagnoses
- *Modeling:* negative binomial regression as a function of tapering, compared to non-tapered reference group, adjusted for baseline utilization, sociodemographics, and comorbidities.



What the Research Found

- 47,033 patients were observed for 67,784 baseline periods
- Tapering occurred during follow-up in 14,923 (22.0%) patient-periods
 - Tapered-and-Continued opioids [11,690 periods (17.2%)]
 - **ED visits** for pain **increased** (aIRR 1.23, 95% CI: 1.14-1.32)
 - Hospitalizations for pain increased (aIRR 1.14, 95% CI: 1.03-1.27)
 - Tapered-and-Discontinued opioids [3,233 periods (4.8%)]
 - Primary care visits for pain decreased (aIRR 0.68, 95% CI: 0.61-0.76)



What this means for Clinical Practice

Opioid tapering with lower-dose continuation *may* precipitate an *increase* in pain-related high acuity health care utilization

Opioid discontinuation *may* lead to *decreased* pain-related primary care utilization

Primary care clinicians can reinforce primary care as the primary location for both pain care after taper or discontinue and for all other care even when pain care is no longer managed in primary care, to not miss needed healthcare.

