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Title

Pain-related Healthcare Utilization Associated with Opioid Tapering

Priority 1 (Research Category)

Pain management

Presenters

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Abstract

Context: Tapering of long-term opioid therapy (LTOT) increased after publication of the 2016 CDC opioid guidelines, followed by anecdotal reports of exacerbated pain among tapered patients. However, two systematic reviews of limited evidence from multidisciplinary pain control programs found similar or better pain ratings after tapering versus baseline.

Objective: To evaluate the association between opioid dose tapering and subsequent emergency (ED) visits, outpatient primary care visits and hospitalizations for pain among patients prescribed LTOT.

Study Design: Retrospective cohort study.

Dataset: 2015-2019 de-identified administrative data from the Optum Labs Data Warehouse, including medical and pharmacy claims and eligibility information for commercial and Medicare Advantage enrollees, representing a mixture of ages and geographical regions.

Population: Adults ≥18 years old who were prescribed stable doses of LTOT ≥50 morphine milligram equivalents per day during a 12-month baseline period

Outcome Measures: Monthly counts of ED visits, primary care visits, and hospitalizations for pain up to 12 months after cohort entry. Pain visits were defined by diagnostic codes for musculoskeletal or other

specific chronic pain in the primary position on ED and hospitalization claims, or in any position for primary care visit claims.

Analysis: Monthly counts were modeled using negative binomial regression as a function of tapering (≥15% relative dose reduction during 6 overlapping 60-day periods after cohort entry), total baseline pain and non-pain ED visits, primary care visits and hospitalizations, and adjusted for patient level-covariates (sociodemographics, comorbidities).

Results: Among 51,361 patients prescribed stable LTOT, 14,331 patients (27.9%) tapered after cohort entry. Tapering was associated with more subsequent ED visits (adjusted incidence rate ratio [aIRR] 1.18, 95% CI: 1.11-1.27) and fewer subsequent primary care visits (aIRR 0.95, CI: 0.92-0.99) for pain. Hospitalizations for pain control were unchanged (aIRR 1.04, CI: 0.95-1.15).

Conclusions: Among patients prescribed LTOT, opioid tapering was associated with subsequently more ED visits yet fewer primary care visits for pain, suggesting a shift in pain care from outpatient to the higher acuity emergency setting post-taper. The findings suggest tapering may have led to increased pain, disruption of primary care relationships, or some combination of these effects.