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Jacob N. Hunnicutt
University of Massachusetts Medical School

Et al.

RESIDENT AND FACILITY-LEVEL CORRELATIONS OF LONG-TERM OPIOID USE IN UNITED STATES NURSING HOMES

Jacob N. Hunnicutt, MPH[1]; Christine Ulbricht, PhD[1]; Anne Hume, PharmD[2]; Kate Lapane, PhD[1]
[1]University of Massachusetts Medical School; [2]University of Rhode Island, Kingston, RI

Background: There is limited information on the prevalence and multilevel risk factors of long-term opioid use in older nursing home residents despite their high burden of pain and vulnerability to adverse drug events.

Objectives: To estimate the prevalence and correlates of long-term opioid use in United States (US) nursing homes.

Methods: We used comprehensive administrative/claims data (Minimum Data Set 3.0; Medicare Part D) from 2012 to conduct a cross-sectional study of 369,180 long-stay nursing home residents who were Medicare beneficiaries, ≥65 years old, and had no cancer. Resident factors of interest included demographics and physical/cognitive impairment, and facility factors included US census region and structural characteristics (eg, bed size, ownership). Long-term opioid use was defined as ≥90 cumulative days of opioid use during a 120 day observation window - defined using fill dates and days'. Modified Poisson models were used to estimate adjusted prevalence ratios (aPR) and 95% confidence intervals (CI) between resident/ facility-level characteristics and long-term opioid use.

Results: Nearly one third of long-stay residents used any opioid, with 14.5% using opioids long-term. Among long-term users, 35.3% received a long-acting opioid, with 17.1% receiving high (≥90 mg/day oral morphine equivalents) daily doses. Hydrocodone (49.0%), tramadol (31.3%), and fentanyl (24.8%) were most commonly used. The prevalence of long-term use was higher in women (vs. men; aPR=1.20, 95% CI: 1.18-1.23) and those with no/mild cognitive impairment (vs. other; aPR=1.18, 95% CI: 1.16-1.20) or severe physical impairment (aPR=1.25; 95% CI: (1.22-1.27), and in government-owned nursing homes (vs. for-profit; aPR=1.10, 95% CI: 1.05-1.16). Long-term use varied by region (10.6% [Northeast] to 17.7% [Midwest]) and across facilities (median: 13.3% interquartile range: 6.7%-21.3%).

Conclusions: Long-term opioid use is substantially higher in nursing home residents than what has been previously reported in community-dwelling older adults. Further investigations of opioid safety in this frail population are needed.

Contact:
Jacob Hunnicutt, MPH
PhD Candidate, Clinical and Population Health Research
University of Massachusetts Medical School
Jacob.Hunnicutt@umassmed.edu