NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

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## Title

Low-Value Opioid Prescribing Trends for Acute Low-Back Pain in Rural Virginia Between 2019-2021

## **Priority 1 (Research Category)**

Acute and emergency care

## **Presenters**

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## **Abstract**

Despite declining opioid prescribing in the last decade, low-value opioid prescribing for acute pain (LVOP) (inconsistent with professional guidelines) has persisted. It is unclear how the COVID-19 pandemic impacted LVOP, particularly among vulnerable communities. Objective: A) Evaluate LVOP in Virginia during 2019-2021, and B) determine variation in LVOP for rural patients and those with low income in Virginia from 2019-2021. Study Design and Analysis: Retrospective cohort study. We used the Milliman MedInsight Health Waste Calculator to identify LVOP. Using difference-in-difference analysis [represented by incidence rate ratios (IRRs)], we compared the observed versus predicted LVOP rates before and after Mar. 2020, stratified by rurality and payer. Dataset: Virginia All-Payers Claims Database. Population Studied: Adult patients (18+ years) continuously enrolled for 12+ months with Medicaid (M), Medicare Advantage (MA), and commercial payers. Outcome Measures: LVOP rates per 1000 patients. IRRs for pre-pandemic (1/1/19-2/28/20) and pandemic (3/1/20-12/31/21) periods. Results: Among our cohort (n= 853,775, age 59 years, 56% female, 12% rural, 13% Medicaid), 74% of claims were low-value. LVOP decreased by 14% annually from 2019 to 2021, which is 5% greater than predicted decline (IRR: 0.906 [95%CI, 0.859, 0.955], p<.001) and overall 23% less than the predicted rates during the pandemic (IRR: 0.767 [95% CI, 0.673, 0.896], p<.001). Pre-pandemic, LVOP was 49% greater in rural than non-rural areas (IRR: 1.487 [95% CI, 1.316,1.681] P<.001) and 110% and 415% greater in M and MA than commercial payers (IRR: 2.099 [95% CI, 1.596, 2.762], p<.001 and IRR: 5.151 [95% CI, 4.028 6.588], p<.001, respectively). The pandemic affected rural vs. non-rural areas the same (IRR: 1.009 [95% CI, 0.943, 1.079], P=0.80). However, the pandemic effect between M and MA vs. commercial were significantly different (IRR: 0.549 [95%CI, 0.476, 0.633], p<.001 and IRR: 1.195 [95%CI, 1.069, 1.337], p<.01, respectively). Conclusion: A decline in rates of LVOP is encouraging. The pandemic did not affect disparity in rural LVOP but had an LVOP-reducing effect on low-income (M) and an LVOP-increasing effect on older adults (MA) compared to the commercially insured from 2019-2021. Significantly greater

rural rates of LVOP for acute low-back pain may contribute to the disproportionate rates of opioid-related harms. Our findings raise concerns about avoidable harm in disadvantaged populations.

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