Doctor Shopping: Towards a National Study using Commercial Claims

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Abstract. We present our findings using commercial claims data to replicate policy effects and trends in “doctor shopping” from published research using state prescription drug monitoring programs (PDMPs). Specifically, we examine the impact of requiring PDMP use on the “doctor shopping” rate through time. Initial results indicate that analyses from commercial claims correlate well with existing findings from state all-payer PDMP data.

Problem Description. State PDMPs were designed, in part, to help identify patients seeking controlled substances, particularly opioids, from multiple providers inappropriately by increasing electronic access to their all-payer prescription histories. 21 states during our study required prescribers to check their PDMP prior to prescribing controlled substances. Studies examining whether prescriber requirements to view PDMP information reduces the incidence of doctor shopping are limited to restrictive state PDMP data.

Methods. We utilized the Clinformatics Data Mart by OptumInsight which contains insurance claims from 2007 to 2017 sourced from a large national health insurer offering both commercial and Medicare Advantage plans. Patients closely reflected US census population trends for gender and geographic region. We mirrored existing studies1,2 by analyzing a) the quarterly rate of multiple provider episodes (MPEs) adjusted per state population and b) the change pre/post mandating PDMP use.

Results and Discussion. Approximately 19.8 million patients received a controlled substance prescription; of these, 15.3 million received an opioid. Approximately 185,000 patients visited at least four distinct pharmacies and four distinct prescribers within a 90-day period (i.e., “4x4” criteria); roughly 56,000 met “5x5” criteria. A previous study using Kentucky’s PDMP found a percent change of -52% post-PDMP mandate in total number of MPEs1; we observed a percent change of –35% using commercial claims data. Replications for Ohio (2011 and 2015 implementations) and West Virginia (2013) are on-going. Insurance claims may enable future analysis of doctor shopping policies nationally, including the impacts to patients with specific health conditions such as cancer (data typically unavailable to state PDMPs).

Figure 1. Multiple provider episode rates per 100,000 population in KY, OH, and WV. Control states are those where PDMP use is voluntary. Trends in observed pre/post-PDMP mandates were similar to Strickler et. al (2019), despite the difference in patient population (commercial enrollees versus all-payers, respectively).

References.