

among the opioid prescribed and opioid non-prescribed groups in year of visit, race, insurance types, geographic regions, physician specialty and visit reasons ( $P<0.0001$ ). Opioid group was older, had more diseases, higher number of yearly visits, higher number of prescription medications and longer visit time than non-prescribed narcotic group ( $P<0.0001$ ). Associated characteristics with receiving an opioid prescription included being American Indian/Alaska Natives (AIAN), male, self-paid, from Southern U.S., younger than 60 years old, having surgical care prescribers, receiving multiple medications, having at least 4 visits yearly, pre/post-surgery visit, having nervous system and musculoskeletal system/connective tissue diseases ( $P<0.0001$ ).

**CONCLUSIONS:** Caution is advised before prescribing opioids to the population with high rate of substance abuse such as AIAN. Future studies must focus on the exact causes of the high rate of prescribing opioids in Southern U.S., young population and those who self-paid for opioids.

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## F7 Prevalence of Concurrent Opioid and Benzodiazepine Use Among 19 Million Commercial Members

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**BACKGROUND:** Several organizations/agencies (e.g., CMS, CDC, FDA) have reported concerns about the concurrent use of opioids and benzodiazepines (BZD). Advanced knowledge around prevalence of concurrent use can help insurers plan for potential quality measures or other prescribing restrictions.

**OBJECTIVE:** To describe the prevalence of concurrent opioid and BZD use in a commercial population.

**METHODS:** Pharmacy claims data from ~19 million commercial members was queried to identify members 18 or older with 2 or more opioid claims filled on 2 or more separate days with a 15 days supply or more. Buprenorphine/naloxone combination products were excluded and opioid containing cough/cold products were included. Members were also required to have 2 or more BZD claims on 2 or more separate days. Members were assigned an index date based on the earliest opioid or BZD claim. The measurement period for examining concurrent use was defined as the index date through the end of the calendar year or disenrollment, whichever came first. Concurrent use of opioids and BZD was defined as 30 or more cumulative days of overlap based on days supply found on the claims. Using medical claims data, concurrent use was also examined after excluding members with one or more medical claim cancer diagnosis code in 2015.

**RESULTS:** 3,992,900 members out of ~19 million (21.0%) had at least one opioid or BZD claim in 2015. 2,668,934 (66.8%) had only opioid claims, 674,880 (16.9%) had only BZD and 649,086 (16.3%) had both opioids and BZD. 93.2% (3,723,372) of the members were 18 or older and 884,407 (23.8%) had 2 or more opioid claims on separate days with 15 days supply or more. 234,966 (26.6%) of the 884,807 also had 2 or more BZD on separate days in 2015 with 25% (221,264) having at least 1 day of overlapping supply and 152,083 (17.2%) having 30 or more cumulative overlapping days of opioids and BZD. 107,372 (12.1%) of the 884,407 members had one or more medical claim cancer diagnosis codes. After excluding the cancer members, the rate of concurrent opioid and BZD use for 30 or more days did not change, 132,308 (17.0%) of 777,435.

**CONCLUSIONS:** One of every 6 commercial opioid users without cancer and 7 per 1,000 overall commercial members had evidence of concurrent opioid and BZD for 30 or more days in 2015. Combination opioids and BZD use has been shown to increase risk of overdose and death. Health insurers should consider identifying at risk members and developing clinical programs to help reduce the rate of combination use.

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## F12 Budget Impact Analysis Comparing Aripiprazole and Aripiprazole Lauroxil Based on Real-World Dosage Patterns

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**BACKGROUND:** Aripiprazole and aripiprazole lauroxil are two long-acting injectable antipsychotics (LAIs) approved for the treatment of schizophrenia. Aripiprazole lauroxil is a prodrug of aripiprazole.

**OBJECTIVE:** The objective of this analysis was to evaluate the cost of utilizing aripiprazole and aripiprazole lauroxil in patients with schizophrenia based on real-world dose mix, timing, and market share information.

**METHODS:** An economic model based on a hypothetical health plan of 1,000,000 members was developed. The proportion of members with schizophrenia and the subset taking an LAI were based on prior research. The model estimated costs of treatment based on IMS Health market share data and wholesale average costs of the two drugs. Market share and dose mix for each LAI was based on IMS Health National Sales Perspectives™ data from October 2015 to September 2016. The dose mix for aripiprazole lauroxil 882 mg 4 weeks and 6 weeks was adjusted to match national utilization patterns based on IMS Health anonymized patient-level data from October 2015 to March 2016.

**RESULTS:** In a hypothetical cohort of 1,000,000 patients, 1.1% were assumed to have schizophrenia and of those, 13% would be taking an LAI. Based on market share data, 187 patients were assigned to treatment with aripiprazole while 14 were assigned to treatment with aripiprazole lauroxil. Dose mix for aripiprazole indicated that 83.9% of patients were taking the 400 mg dose while 16.1% were taking the 300 mg dose, both every 4 weeks. Both doses were taken every 4 weeks. Dose mix for aripiprazole lauroxil showed that 15.4% of patients were taking the 441 mg dose every 4 weeks, 32.4% were taking the 662 mg dose every 4 weeks, 2.1% were taking the 882 dose every 6 weeks, and 50.1% were taking the 882 mg dose every 4 weeks. The weighted average cost of treatment per patient per month was \$1,784 with aripiprazole and \$1,894 with aripiprazole lauroxil.

**CONCLUSIONS:** Use of aripiprazole lauroxil resulted in higher drug costs compared to aripiprazole in this model based on real-world dose utilization patterns.

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