Defining opioid naïve and implications for monitoring opioid use: A population-based study in Alberta, Canada

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## Abstract

Purpose: Reducing initial exposure of "opioid naïve" patients to opioids is a public health priority. Identifying opioid naïve patients is difficult, as numerous definitions are used. The objective is to summarize current definitions and evaluate their impact on opioid naïve measures in Alberta. Methods: Using dispense data (2017-2021) and definitions guided by a scoping review, we determined the number of "opioid naïve" patients using descriptive analyses. Three definitions were identified: 1) no opioid use within the previous 30 days/6 months/1 year, based on dispensation date; 2) definition 1, based on dispensation date plus days of supply; 3) exclusion of codeine from definitions 1 and 2. Results: Of over a dozen definitions of opioid naïve identified in the scoping review, most used an 'opioid free' period (commonly 30 days/6 months/1 year). Other definitions included "availability of drug" based on days of supply and/or excluded certain opioid products. Approximately 36.4% of Albertans (n=1,551,075) had an opioid dispensation in 2017-2021. The average age was 46.6±18.8 and 52.8% were female. Results were most affected by the "opioid free" period, with 97.4%, 83.2% and 65.6% being classified as opioid naïve using time windows from definition 1. Definitions 2 and 3 did not materially change the results. Conclusions: The most convenient definition for "opioid naïve" was definition 1 using a 1-year window, which aligns with the Canadian Institutes for Health Information definition. Irrespective of definition used, a large proportion of opioid users would be considered opioid naïve despite initiatives to curb opioid prescription in Alberta.

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