Patterns of Opioid Dispensing and Associated Wage Replacement Duration in Workers With Accepted Claims for Low Back Pain: A Retrospective Cohort Study

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Introduction When unable to work due to low back pain a worker may seek income support and funding for healthcare from an income support system such as workers’ compensation. Clinical practice guidelines recommend opioids for low back pain are only used for a short duration, at a low dose and with a plan to cease use.

Objectives This study aimed to identify patterns of opioid dispensing in Australian workers with low back pain and determine the association of dispensing patterns with wage replacement duration.

Methods Australian workers’ compensation claimants with low back pain and at least one day of wage replacement were included. We used group-based trajectory modelling to identify opioid dispensing patterns over a two and half year period from reported low back pain onset. Quantile regression was then used to compare wage replacement duration between each dispensing pattern group.

Results One third of workers with low back pain (N = 3205, 33.3%) received at least one opioid dispense during their claim. Three dispensing patterns were identified. The majority had a short-term low-volume opioid dispensing pattern (N = 2166, 67.6%), while 798 (24.9%) had a long-term moderate-volume pattern and 241 (7.5%) had a long-term high-volume pattern. Workers dispensed opioids had significantly longer wage replacement duration than those not dispensed opioids (median (weeks): 63.6 versus 7.1 respectively). In addition, moderate- and high-volume long-term dispensing had significantly longer wage replacement duration compared with short-term dispensing (median (weeks): 126.9, 126.0 and 30.7 respectively).

Conclusion Our study found a high use of opioids for long durations among compensated Australian workers with low back pain. Multifaceted strategies to limit long-term use of opioids are needed. These could include implementation of clinical care standards and indicators that can be used to monitor and regulate opioid use, and implementing financial mechanisms to stem long-term opioid use.