Response: Re: Effectiveness of Long-Term Opioid Therapy for Chronic Low Back Pain

To the Editor: In a letter regarding our publication,[1] Waters and Simon contend that our study design and results did not support the conclusion that clinicians should consider tapering opioid dosage among long-term opioid therapy (LTOT) users in accordance with clinical practice guidelines.[2] Our study was conducted to address the scant evidence from randomized controlled trials on the long-term effects of opioid therapy.[3] Given that there are known harms with opioid therapy, the performance of long-term trials is limited both by methodological issues and ethical concerns. When randomized controlled trials are not feasible, cohort studies are generally considered the best alternative for deriving evidence to drive clinical decision making. Beyond conducting long-term follow-up, our cohort study used propensity score matching of treatment groups to control for potential confounders. This matching included several variables not often measured in clinical trials involving low back pain, such as pain catastrophizing, pain self-efficacy, widespread pain, health-related quality of life, wage replacement benefits, and litigation.[3]

Our results consistently demonstrated that LTOT was not associated with any benefits pertaining to pain intensity, back-related disability, or pain impact, including in analyses that also considered the duration of opioid therapy, dose response, and complete treatment adherence over 12 months (analogous to per-protocol treatment in a clinical trial). Thus, it is unclear why Waters and Simon believe that these cohort study results do not further support Recommendation 5 of the Centers for Disease Control and Prevention (CDC) Guideline for Prescribing Opioids for Pain.[4] Therein, with respect to patients already using LTOT, it states that "If benefits do not outweigh risks of continued opioid therapy, clinicians should optimize other therapies and work closely with patients to gradually taper to lower dosages or, if warranted based on the individual circumstances of the patient, appropriately taper and discontinue opioids."

Waters and Simon also raise the question of whether tapering or discontinuing LTOT is beneficial. Their cited studies on the associations of rapid opioid tapering with drug overdose and mental health crisis (depression, anxiety, suicide attempt),[5] and of opioid discontinuation with overdose death,[6] have been widely recognized. Consequently, the updated 2022 CDC guideline[4] incorporated this new evidence on opioid tapering and discontinuation to help mitigate misapplication of its prior 2016 guideline for prescribing opioids for chronic pain.[7] However, the current guideline continues to recommend opioid tapering or discontinuation among patients using LTOT for chronic pain if the benefits of opioid therapy do not outweigh its risks.

Finally, although beyond the scope of our study, Waters and Simon advocate for greater consideration of buprenorphine as an alternative to continued opioid use or tapering. Indeed, the current CDC guideline states that "Emerging evidence suggests that patients for whom risks of continued high-dose opioid use outweigh benefits but who are unable to taper and who do not meet criteria for opioid use disorder might benefit from transition to buprenorphine."[4] Buprenorphine is a partial agonist opioid that may be used to treat pain and opioid use disorder while less often causing respiratory depression and lowering overdose risk compared with full agonist opioids. Nevertheless, transitioning patients to buprenorphine is not a simple matter because it requires specific timing of the initial buprenorphine dose depending on factors such as whether patients are using short- or long-acting full agonist opioids, and whether low-dose initiation of buprenorphine may be used for patients not yet in opioid withdrawal. Consequently, to address such issues, the current CDC guideline promotes the Providers Clinical Support System (https://pcssnow.org/) that offers training, technical assistance, and mentors to assist clinicians who are unfamiliar with initiation of buprenorphine.[4]

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References

1. Licciardone JC, Rama K, Nguyen A, Prado CR, Stanteen C, Aryal S. Effectiveness of long-term opioid therapy for chronic low back pain. J Am Board Fam Med 2024;37:59–72.
2. Waters RC, Simon CB. Re: Effectiveness of long-term opioid therapy for chronic low back pain. J Am Board Fam Med 2024.
3. Busse JW, Wang L, Kamaleldin M, et al. Opioids for chronic noncancer pain: a systematic review and meta-analysis. JAMA 2018;320:2448–60.
4. Dowell D, Ragan KR, Jones CM, Baldwin GT, Chou R. CDC clinical practice guideline for prescribing opioids for pain - United States, 2022. MMWR Recomm Rep 2022;71:1–95.
5. Agnoli A, Xing G, Tancredi DJ, Magnan E, Jerant A, Fenton JJ. Association of dose tapering with overdose or

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mental health crisis among patients prescribed long-term opioids. JAMA 2021;326:411–9.

6. James JR, Scott JM, Klein JW, et al. Mortality after discontinuation of primary care-based chronic opioid therapy for pain: a retrospective cohort study. J Gen Intern Med 2019;34:2749–55.

7. Dowell D, Haegerich TM, Chou R. CDC guideline for prescribing opioids for chronic pain - United States, 2016. MMWR Recomm Rep 2016;65:1–49.

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