

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	State Level Variation in Opioid Prescribing after Knee Arthroscopy among the Opioid-Naïve in the United States: 2015-2019
<b>AUTHORS</b>	Ukert, Benjamin; Huang, Yanlan; Sennett, Brian; Delgado, Kit

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Jay Lee University of Michigan
<b>REVIEW RETURNED</b>	06-Feb-2020

<b>GENERAL COMMENTS</b>	<p>This is well-conducted retrospective study using administrative claims data to describe state-level variation in opioid prescribing after arthroscopic knee surgery. Its major strengths is the clarity of the research question and clear presentation of its findings. It's major weakness is the discussion and conclusions, which should avoid suggesting that these data indicate opioid prescribing as excessive, or that reductions in opioid prescribing are possible. These conclusions are not supported by the data. Wide variation in prescribing only suggest the potential for reductions in opioid prescribing. Reductions in opioid prescribing would require patient-reported opioid consumption data, as well as implementation of specific interventions to reduce opioid prescribing.</p>
-------------------------	--

<b>REVIEWER</b>	BEATA STANLEY ST, VINCENT'S HOSPITAL, MELBOURNE, AUSTRALIA
<b>REVIEW RETURNED</b>	02-May-2020

<b>GENERAL COMMENTS</b>	<p>WELL WRITTEN PAPER ON TOPICAL ISSUE BUT THE CONCLUSIONS ARE NOT REFLECTIVE OF 2020, THEY ARE REFLECTIVE OF 2015 PATTERN OF OPIOID PRESCRIBING.</p> <p>THE DATA PRESENTED HERE IS QUITE OLD (2012 TO 2015), WHY NOT PRESENT THE MOST RECENT DATA?</p> <p>A LOT HAS CHANGED SINCE 2015, THERE ARE DIFFERENT LAWS AND POLICIES THAT HAVE BEEN INTRODUCED SINCE 2015 ON THE TOPIC OF OPIOID PRESCRIBING. I FEEL YOUR FINDINGS ARE LITTLE OUT OF DATE AND THEREFORE THE CONCLUSIONS ARE NOT VALID OR OF SIGNIFICANCE FOR 2020.</p> <p>YOUR CONCLUSIONS ARE NOT REFLECTIVE OF 2020 SINCE YOUR DATA IS FROM 2012-2015 WHEN THE REGULATIONS AND GUIDELINES AROUND OPIOID PRESCRIBING WERE DIFFERENT.</p> <p>I SUGGEST ADDING MORE RECENT RESULTS TO MAKE THE PAPER MORE OF VALUE FOR 2020.</p>
-------------------------	---

	IT IS A WELL WRITTEN PAPER THOUGH AND IF YOU WISH TO PUBLISH THE RESULTS FROM 2012-2015, YOU SHOULD NOT MAKE CONCLUSIONS ON THE CURRENT 2020 OPIOID PRESCRIBING PRACTICES BECAUSE A LOT HAS CHANGED IN THE LAST 5 YEARS. YOUR CONCLUSIONS ARE TO DO WITH THE 2012-2015 PERIOD NOT 2020.
--	---

**VERSION 1 – AUTHOR RESPONSE**

Referee 1:

Thank you for your thoughtful comment. We have adjusted our discussion and conclusion section to highlight that the data only implies the potential for reduction in opioid prescribing. We also abstain from using the word excessive.

We have also addressed the potential for continuous reduction of opioid prescribing by updating our data for the 2015-2019 time period. All of our findings remain mostly unchanged, suggesting that there remain opportunities to reduce opioid prescribing.

Referee 2:

Response: Thank you for your thoughtful comments. Our initial analysis relied on 2012-2015 data because it was the most recent data available to us. We recently were able to obtain new data spanning from January 2015 to June 2019. To address your concerns on the relevance on recent prescribing trends, we have replaced the original data analysis with the more data. Our original findings remain valid for the most recent time period, suggesting that our discussion is reflective of the trends in prescribing in 2020.

**VERSION 2 – REVIEW**

<b>REVIEWER</b>	BEATA STANLEY ST. VINCENT'S HOSPITAL, AUSTRALIA
<b>REVIEW RETURNED</b>	03-Jul-2020
<b>GENERAL COMMENTS</b>	THANK YOU FOR MAKING THE DESIRED CHANGES. THE ARTICLE IS AN INTERESTING AND INFORMATIVE READ.