Reviewer's comments:

Specific comments

Title and Abstract • Include study design in the abstract.

Thank you for your feedback. We have added the study design to the abstract (Methods).

Page 2; Lines 14-15: Patients presenting to the E.D. for non-emergent LBP from 2010 to 2017 were retrospectively identified from the National Hospital Ambulatory Medical Care Survey (NHAMCS) database.

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Introduction • The scientific background and rationale for the investigation needs to be emphasized.

Thank you for your suggestion. We agree and have elaborated on the critical nature of the high prevalence of opioid prescription for low back pain in the introduction, as outlined below.

Page 4; lines 19-23: Further guidelines were mandated by the American Academy of Emergency Medicine (AAEM), recommending opioids as a second-line treatment.[1] Despite the calls for regulation, evidence of deviation from guideline recommendations persists. Indeed, Hayden et al.[2] reported 5% of previously opioid-naïve patients who present to the emergency department for low back pain become prolonged opioid users.

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## Methods

• Mention the study design.

Thank you for your feedback. We have added the study design (retrospective cohort) to the abstract and methods sections as outlined below.

**Page 5; lines 10-11:** This was a retrospective study. The National Hospital Ambulatory Medical Care Survey (NHAMCS) was reviewed between the years 2010 and 2017.

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• The inclusion/exclusion criteria should be more detailed described. Statistical methods and results

Thank you for your feedback. We have elaborated on the inclusion/exclusion process in the methods section as outlined below

Page 5; lines 22-23 and Page 5; lines 1-4: Patients were included if they presented to one of the aforementioned ambulatory care settings captured by the NHAMCS with a complain of back pain. Patients with back pain were identified using the following string codes as a chief complaint: 1) "Back symptoms"; 2) "Back pain, ache, soreness, discomfort"; 3) "Back cramps, contractures, spasms"; 4) "Low back pain, ache, soreness, discomfort"; and 5) "Low back cramps, contractures, spasms". Patients were excluded if they were under the age of 18 or were admitted for inpatient hospital stay.

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• What is the basis for the selection of statistical tests? Did the data (study variables) follow normal distribution?

Thank you for your feedback. The present study's primary analyses (described in the results) were the trends analysis outlining patterns of opioid-based medication prescription and the multivariable regression investigating the risk factors associated with an opioid prescription for non-emergency low back pain. Both tests do not require normality and have been previously used in a similar manner by a plethora of contemporary investigations[3–10].

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## **EDITORIAL OFFICE'S COMMENTS**

Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

(1) Science editor: 1 Scientific quality: The manuscript describes a clinical and translational research of the trends and risk factors for opioid administration for non-emergent lower back pain presenting to the emergency department from 2010-2017. The topic is within the scope of the WJO. (1) Classification: Grade B and Grade C; (2) Summary of the Peer-Review Report: The current paper aims to demonstrate the aims to determine trends in non-emergent ED visits for back pain; annual trends in opioid administration for patients presenting to the ED for back pain; and factors associated with receiving an opioid-based medication for non-emergent LBP in the ED. The data is interesting, and it has a relevant rationale.

Thank you for your invested time and effort. We acknowledge that the Editors' and reviewers' comments have lead to substantial improvements in the work at hand.

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(2) (2) The authors did not provide original pictures. Please provide the original figure documents.
Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor;
Thank you. We have created images with PowerPoint to allow for ease of editing.
(3) (3) PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout;
Thank you for your feedback. We have added the DOIs and PMIDs to our references.
(4) (4) The "Article Highlights" section is missing. Please add the "Article Highlights" section at the end of the main text.

## Company editor-in-chief: .

The title of the manuscript is too long and must be shortened to meet the requirement of the journal (Title: The title should be no more than 18 words).

Thank you for your feedback. We have added a highlights section per your recommendation.

Thank you for your feedback. We have changed the title accordingly.

Trends and Risk Factors for Opioid Administration for Non-Emergent Lower Back Pain

## References

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