**Title:** Impact of Provider Prescribing Patterns in United States: A Claims Database Analysis.

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**BACKGROUND:**

In the midst of our national opioid crisis, recommendations have encouraged judicious stewardship of opioid prescription through the expanded use of non-opioid analgesic medications. Trends of opioids have been well documented; however, these data have limited information in regard to provider practice variation. Therefore, the primary aim of our study is to identify prescribing provider practice variation using a large national database. The second aim of our study is to compare these data with a national overdose dataset to identify potential patterns in prescribing and overdose rates.

**METHODS:**

Study Design

A cross-sectional, retrospective review will be conducted using the Centers for Medicare & Medicaid Services (CMS) and national overdose data. CMS data presents information on the individual opioid prescribing rates of health providers that participate 2013-2016. These data is a prescriber-level data set that provides data on the number and percentage of prescription claims (includes new prescriptions and refills) for opioid drugs, and contains information on each provider’s name, specialty, state, and ZIP code. Secondary overdose dataset contains summaries of prescription records for 250 common opioid and non-opioid drugs written by 25,000 unique licensed medical professionals in 2014 in the United States for citizens.

Data Analysis

Figures:

1. Trends 2013-2016 Opioid Claims- Line Chart

2. Histogram of proportion of provider subspecialty

3. Heat map of opioid claims

4. Heat Map of opioid mortality.

5/6 TBD