

# The Impact of Alternative to Opioids (ALTO) Protocol on Opioid Reduction in the Community Emergency Department – and the Impact of the COVID-19 Pandemic on the ALTO Protocol in the Emergency Department

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## RESEARCH QUESTIONS

**Project 1:**  
In patients visiting the Emergency Department (ED), is an Alternative To Opioid protocol for pain management effective in reducing opioid administration in the ED? Additionally, will implementation of the protocol cause any effects on patient satisfaction with pain control, left without being seen rates, door to doctor time, or turnaround time in the ED?

**Project 2:**  
In patients visiting the Emergency Department (ED) during the COVID-19 pandemic, does the Alternative to Opioid (ALTO) protocol for pain management remain effective at reducing opioid prescription from the ED? Additionally, will the protocol cause any effects on ED opioid administration, patient satisfaction with pain control, ED length of stay, and the rate of patients leaving without being seen (LWOBS)?

## BACKGROUND

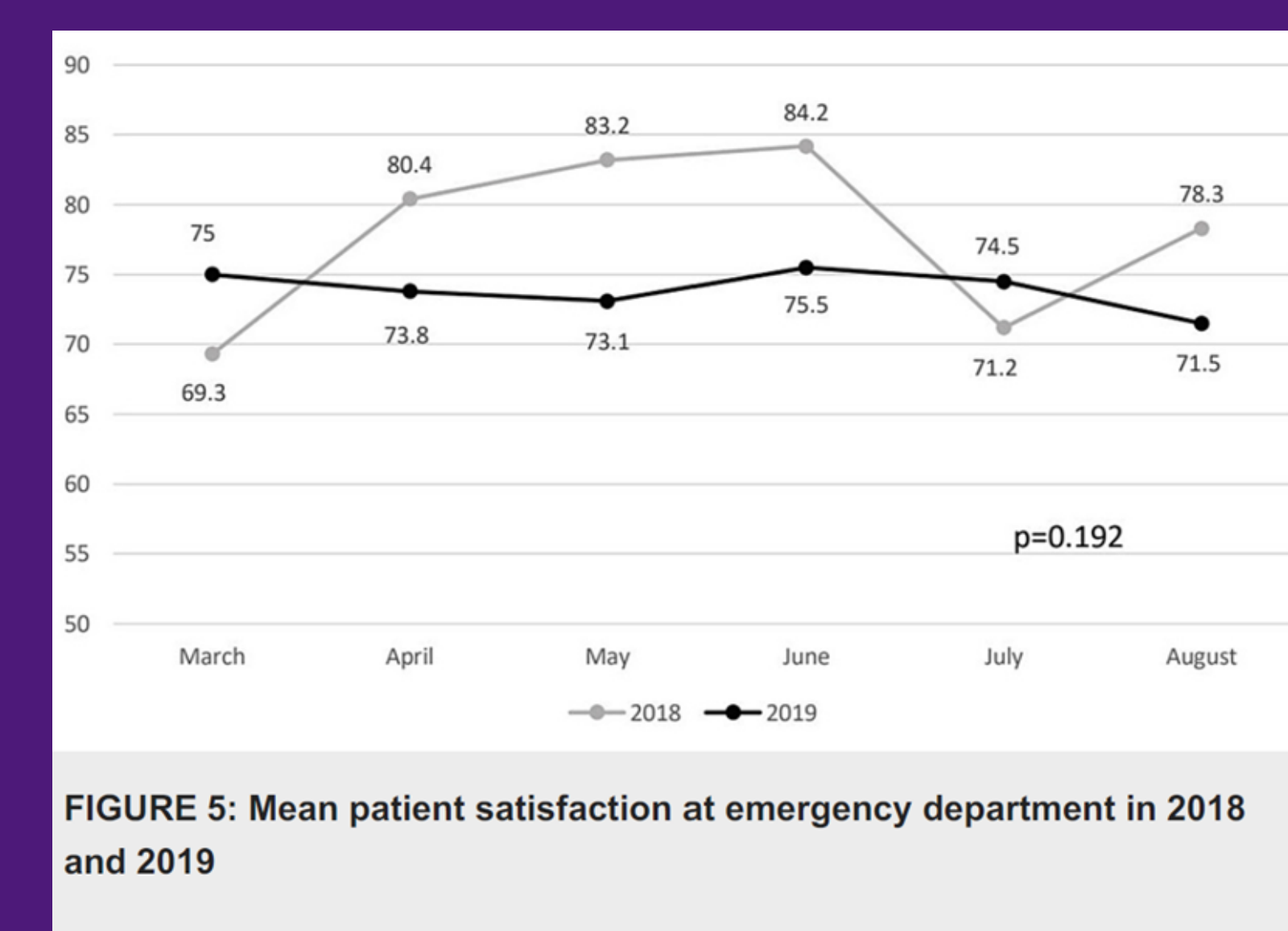
It is well known that the U.S. continues to be in the midst of an opioid epidemic. Up to 78% of patients visiting the emergency department (ED) present with the complaint of pain, making it one of the most common complaints. Over the last decade opioid related misuse, abuse, and deaths have continued to climb. The need for aggressive harm reduction and alternative pain control is at an all time high.

## METHODS

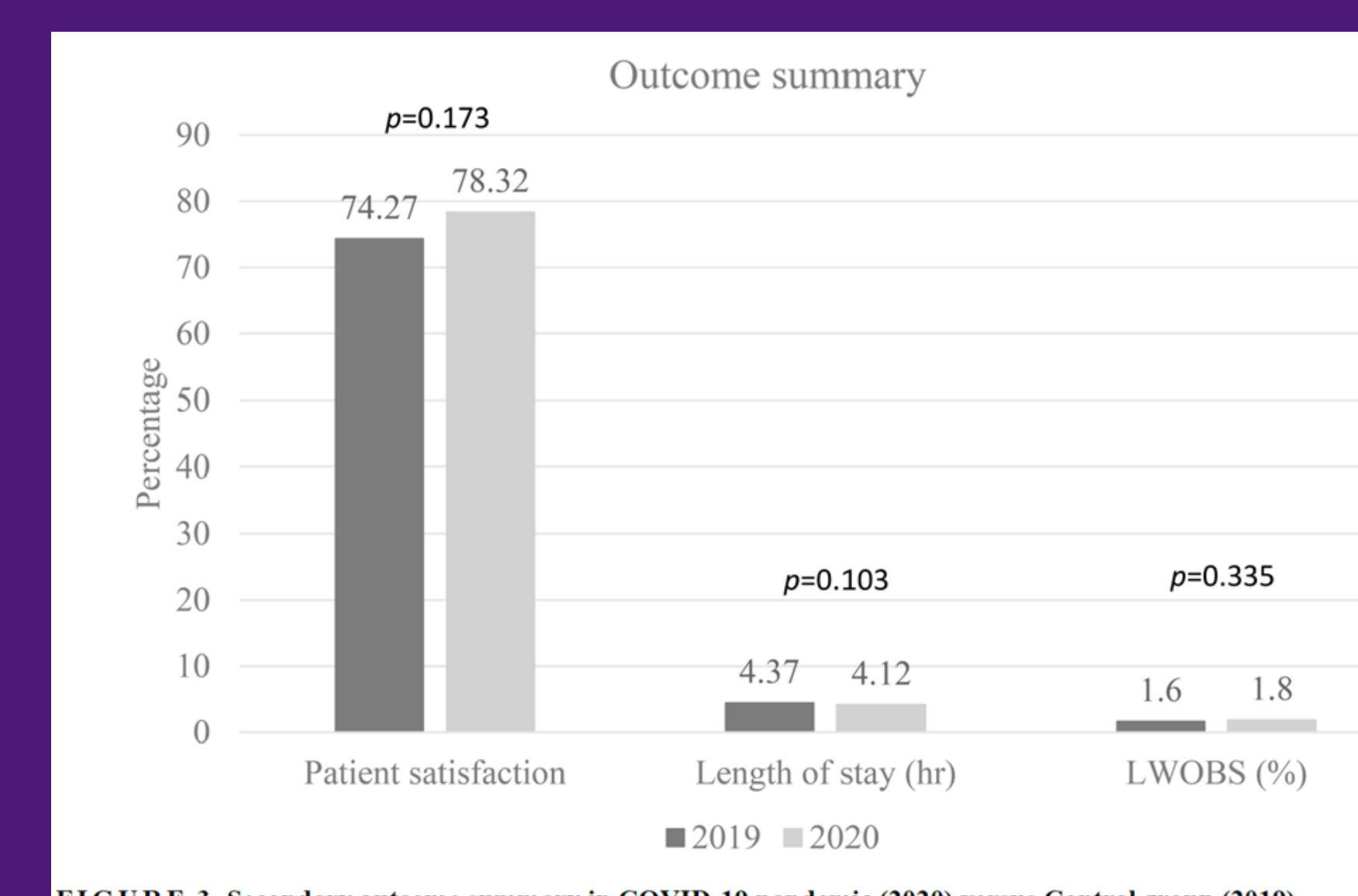
Retrospective, single center, cohort studies investigating patients receiving pain medication in an urban level three trauma center during six-month time periods: 1) Pre- and Post-ALTO protocol implementation and 2) Pre- and Post-COVID-19 Pandemic. Primary outcomes were ED opioid use/prescription.

**Project 1:**  
ALTO protocol implementation was associated with a significant reduction in opioid administration without impacting patient satisfaction with pain control or ED flow.

**Project 2:**  
In the setting of the COVID-19 pandemic, outpatient opioid usage was found to be reduced. No secondary effects on patient satisfaction, opioid use in the Ed, length of stay, or the rate of patients who LWOBS was found.



Poster QR Code



For More Information

## RESULTS

### Project 1:

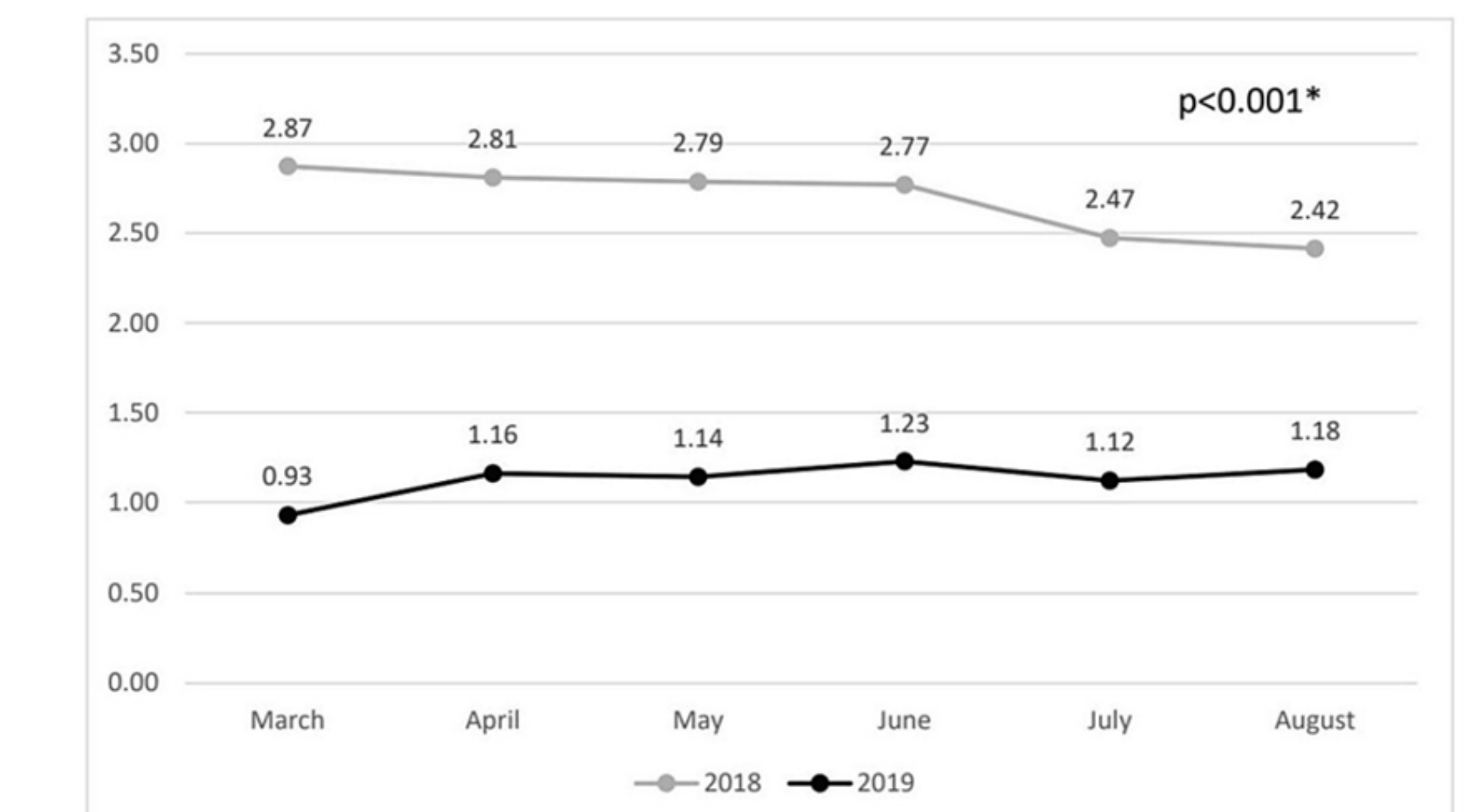


FIGURE 1: Mean morphine milligram equivalents (MME) administered per patient visit at emergency department by month in 2018 and 2019

### Project 2:

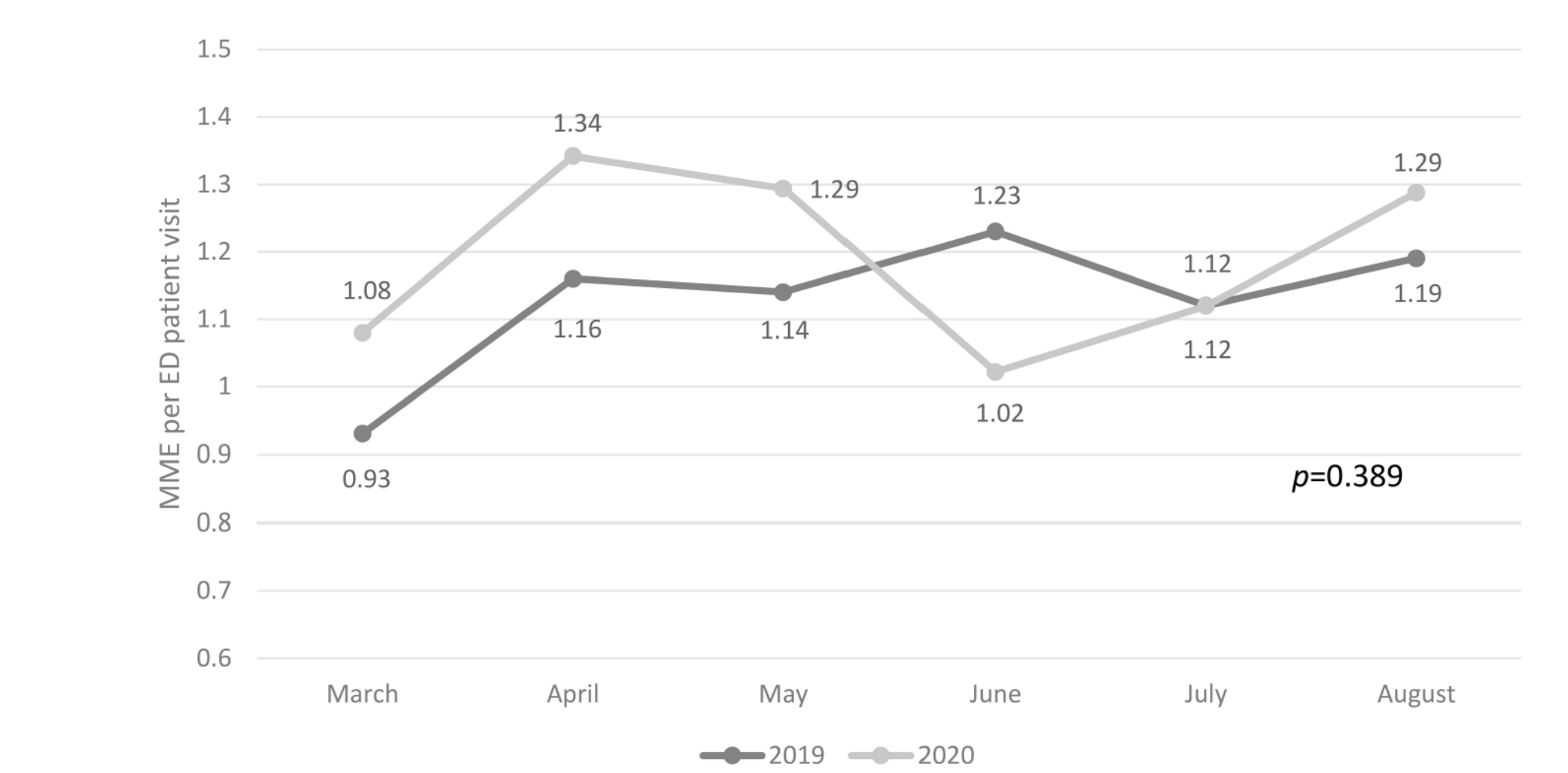


FIGURE 1: Mean morphine milligram equivalents (MME) administered per patient visit at ED by month in COVID-19 pandemic (2020) versus Control group (2019)

## FUTURE DIRECTIONS

Investigation is needed to identify how the changes of the COVID pandemic have affected opioid prescription rates in EDs that now experience overcrowding, prolonged wait times, and boarding rates that have not previously been experienced.

Ample opportunity to investigate the root cause for alterations in utilization and prescribing patterns in EDs nationwide

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