

# COMPARISON OF POSTOP PAIN AND DELIRIUM CONTROL IN PATIENTS WITH ACUTE HIP FRACTURES WITH AND WITHOUT FASCIA ILIACA BLOCKS

## Background

Hip Fractures can have complications such as pain control management and delirium. Delirium can be associated with poor recovery outcomes[1]. Patients with inadequately treated pain control are also significantly more likely to develop delirium in the hospital setting[2]. Delirium is a known risk factor for increased mortality in this patient population [3]. As such early and adequate pain control in hip fracture patients in the ED setting is of the utmost importance.

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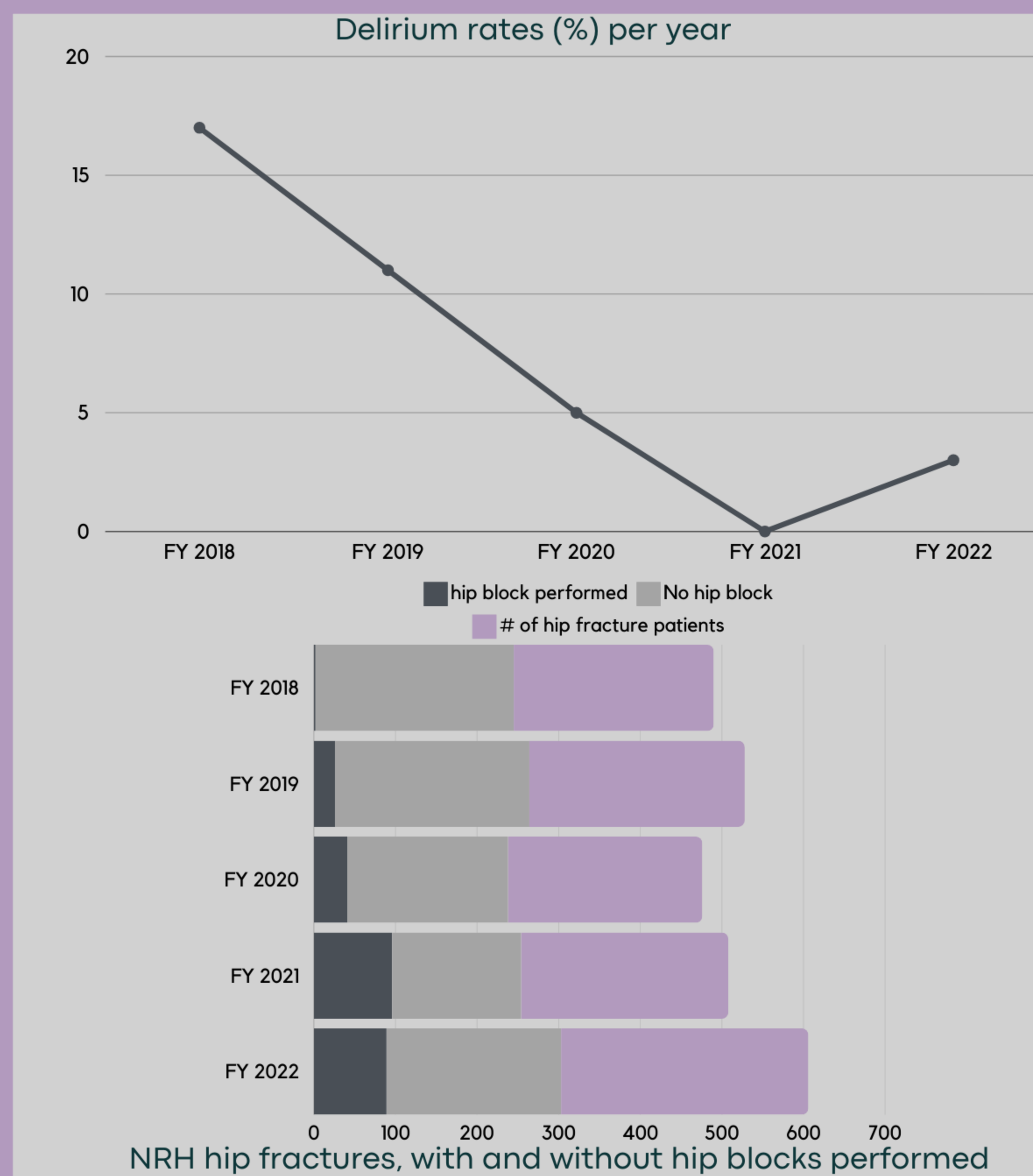
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## Considerations

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## Introduction

Hip fractures, especially in geriatric patient populations, have been known to have several complications and early interventions are critical in management of patient care. This retrospective review evaluated the effectiveness of hip blocks administered in the Emergency Department. A retrospective comparison reviewing delirium, length of stay, and pain control between patients administered hip blocks versus patients without hip blocks was conducted. A secondary outcome of patients able to discharge back to home was also evaluated. This review found correlation in lower MME (morphine milliequivalents), shorter length of stays, and overall fewer delirium cases with the implementation in fascia iliaca blocks for hip fracture patients in the Norman Regional Emergency Department.



## Objective

Utilizing the primary outcomes of opioid use, delirium rates, and length of hospital stay, review the effect of Emergency Department fascia iliaca patients with hip fractures when compared with standard pain control methods in the same patient population.

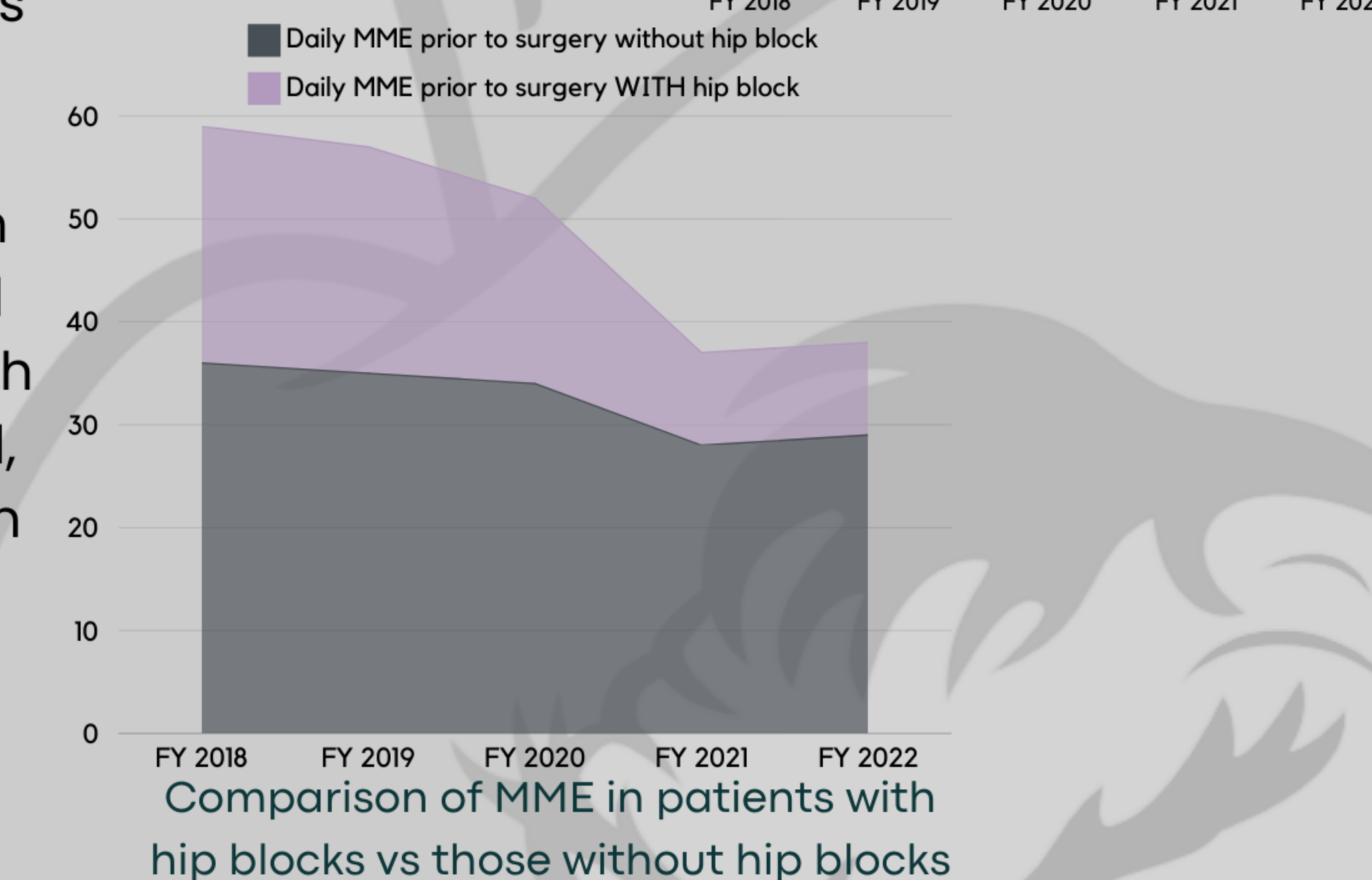
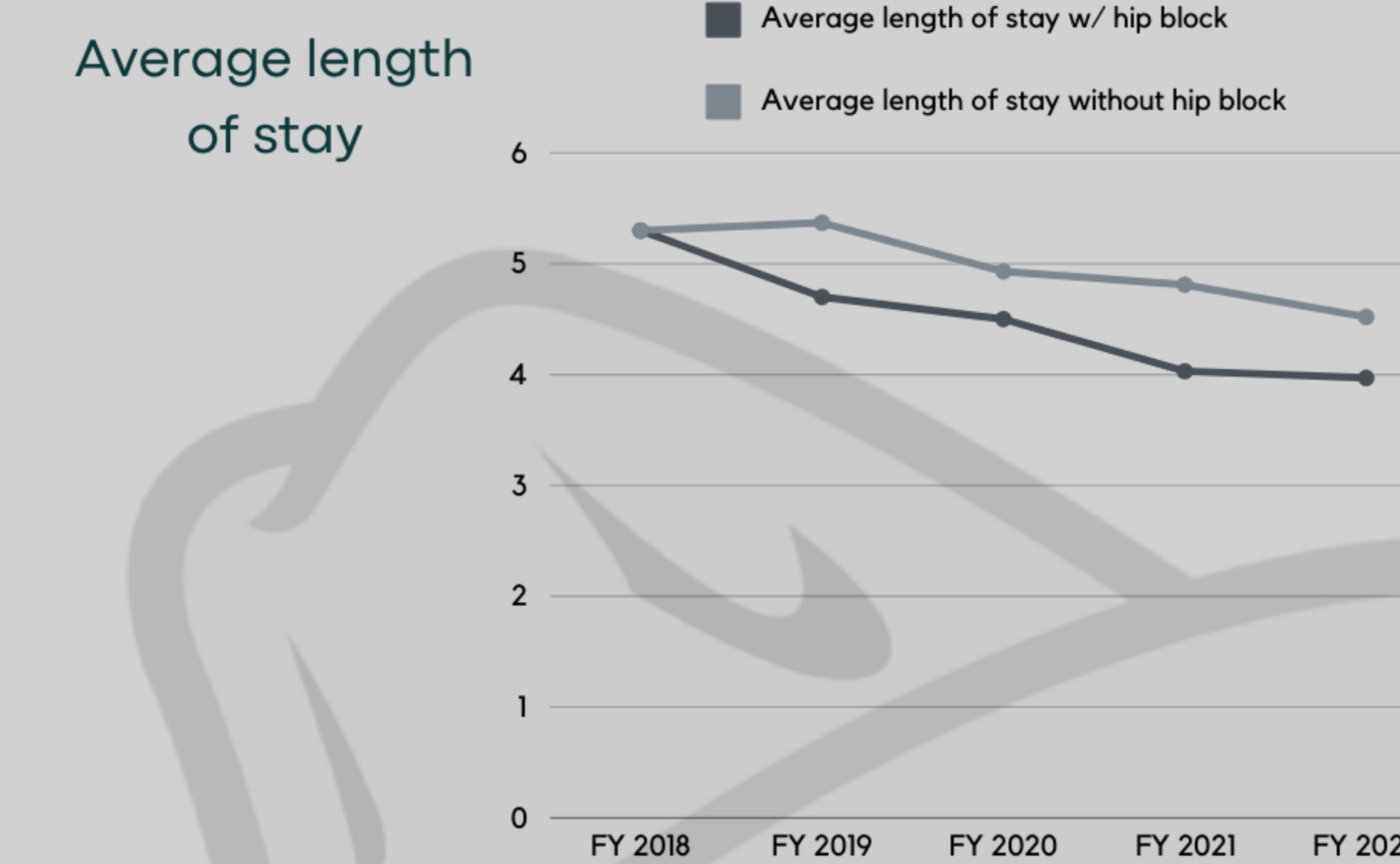
## Methodology

Retrospective review of patients treated at Norman Regional Hospital for acute hip fractures in the Emergency Department with subsequent acute surgical intervention. To be included in the study the fracture must have occurred within 24 hours of hospital presentation and have radiographic evidence of a fracture of the hip joint. Exclusion criteria included patients on blood thinning medications, cellulitis of the hip, open fractures, and those unable to give consent. Patients who received a fascia iliaca hip block in this patient population were compared with patients who received standard opioid pain control while in the hospital. Measurements evaluated were delirium rates, average length of stay, and pain control during the hospital visit.

- Interviews
- Hospital historical data analysis

## Analysis

The year 2018 was a good baseline comparison as relatively few hip blocks were conducted with subsequent years of 2019-2022 having significantly more hip blocks conducted in the Emergency Department. At this facility, overall patient improvement was noted in hip fracture patients who received hip blocks with overall shorter length of hospital stay, better pain control, and decreased delirium rates when compared to a similar patient population with hip fractures.



## Limitations

This study was conducted at one regional level III hospital. It further did not take age, socioeconomic status, or comorbidities into account. A larger patient population at multiple centers could lend more power to the study. Further accounting for other patient factors could lend more insight into the significance of the results of this study.

## Conclusion

Patients at NRH who underwent fascia iliaca hip blocks for hip fractures had a lower rate of delirium while in the hospital, a lower average length of stay, and required less opioids when compared to hip fracture patients who did not undergo hip blocks in the ED.

## References

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