# Delays to Imaging and Surgery in Adolescent Athletes with Anterior Cruciate Ligament Injury

Poster #28

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#### Disclosures

No relevant financial disclosures





#### Background

- In adolescent athletes with ACL injury, ACL reconstruction is recommended to restore stability to knee
- Delays to MRI and ACL reconstruction can lead to new injuries over time
- Understanding which factors influence duration from injury to surgery is paramount





#### Objective

 To determine the patient demographic factors that influence the durations between, MRI, and surgery in adolescent athletes with ACL tears





Insurance Type

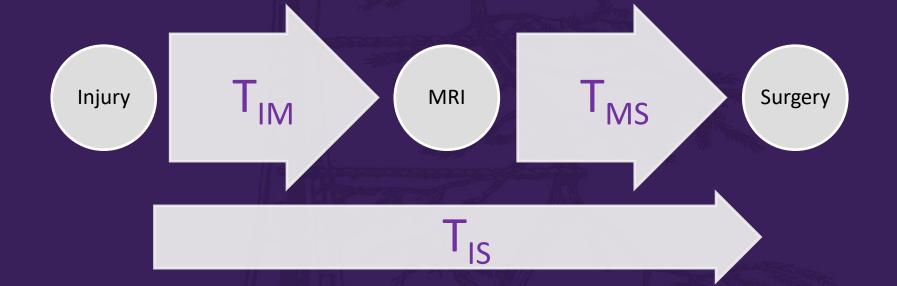
Gender

Body Mass Index

Race/Ethnicity











#### Results

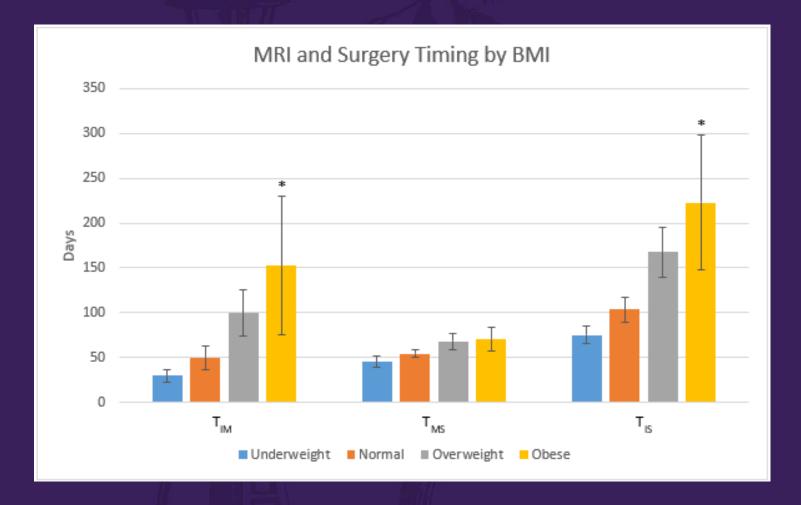
- 154 patients
- 57% female
- Mean age 15
- Median T<sub>IM</sub>: 20 days
- Median T<sub>MS</sub>: 45 days
- Median T<sub>Is</sub>: 75 days

Eligible subjects (N=154) Aged 10-19 undergoing ACL Excluded (N=42) reconstruction (N=196) - Prior surgery of same knee (N=0) - Lack of athletic participation (N=6)- Demographic information incomplete (N=40)





#### Results

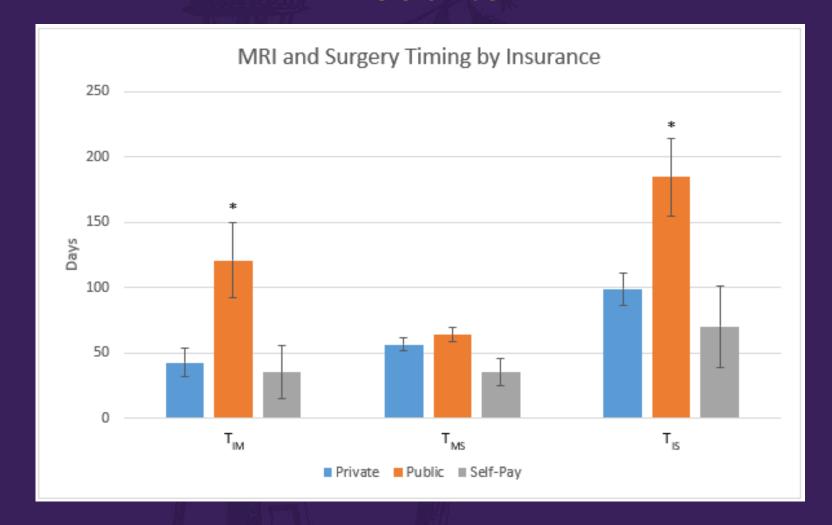


This figure illustrates the average time in days for each investigated time interval when accounting for BMI. Obese BMI was associated with significant delays from injury to MRI and injury to surgery. BMI values of <18.5 are underweight, 18.5-24.9 are normal, 25-29.9 are overweight, and  $\geq 30$  are obese.





#### Results



This figure illustrates the average time in days for each investigated time interval when accounting for insurance type. Public insurance was associated with significant delays from injury to MRI and injury to surgery.





#### Conclusion

 Athletes with ACL injuries that have public insurance or higher BMI experience increased time to MRI and surgical care compared to patients with private insurance or normal BMI





### Significance

- Understanding what factors play a role in healthcare timing is paramount
- Delays in diagnosis and treatment for contributes to healthcare inequality





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## Thank you!





