

# MP34: Organized BLUS Course Objectively Improves Trainee Performance in a Single Session

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# Introduction and Background

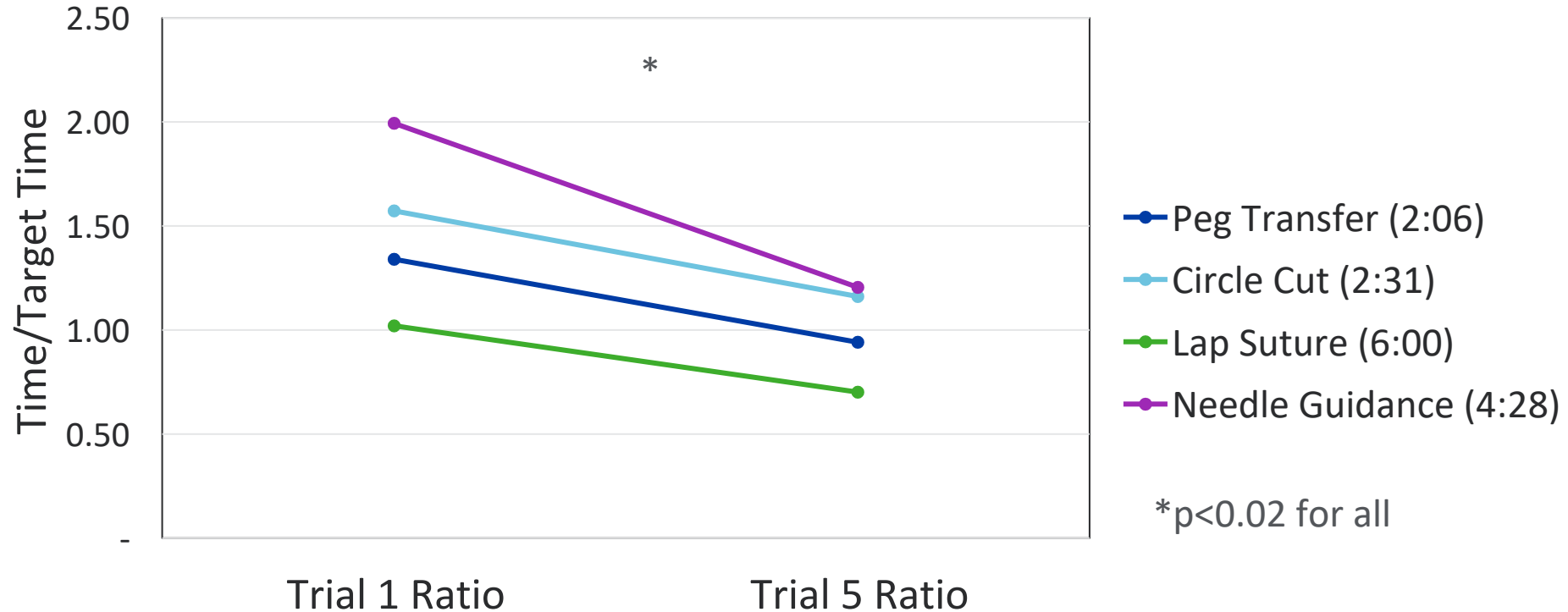
- BLUS (Basic Laparoscopic Urologic Skills) curriculum was developed by the AUA in 2009 and evaluated at the AUA in 2010 and 2011.
- Construct validity was established through EDGE (Electronic Data Generation and Evaluation) technology and GOALS (Global Objective Assessment of Laparoscopic Skills) and through CSATS assessment as well
- It has since been adapted by EAU to 'E-BLUS' and is taught and used as an evaluation tool for European urology residents since 2013, using the Pi score (performance improvement)
- Residents are requiring more simulation-based training, but BLUS (and similar) is not incorporated into residency training in the United States

# Methods

- BLUS course offered for urology residents attending 2018 AUA Fundamentals of Urology Course
- Two Parts – didactic and BLUS HoT (Hands-on Training)
- Evaluation by Pi score and CSATS
- 55 residents separated into 2 groups; participated over 2 days
- 5 Tasks – peg transfer, circle cut, needle guidance, lap suturing, vessel ‘clip & cut’

# Pi Scores – Time

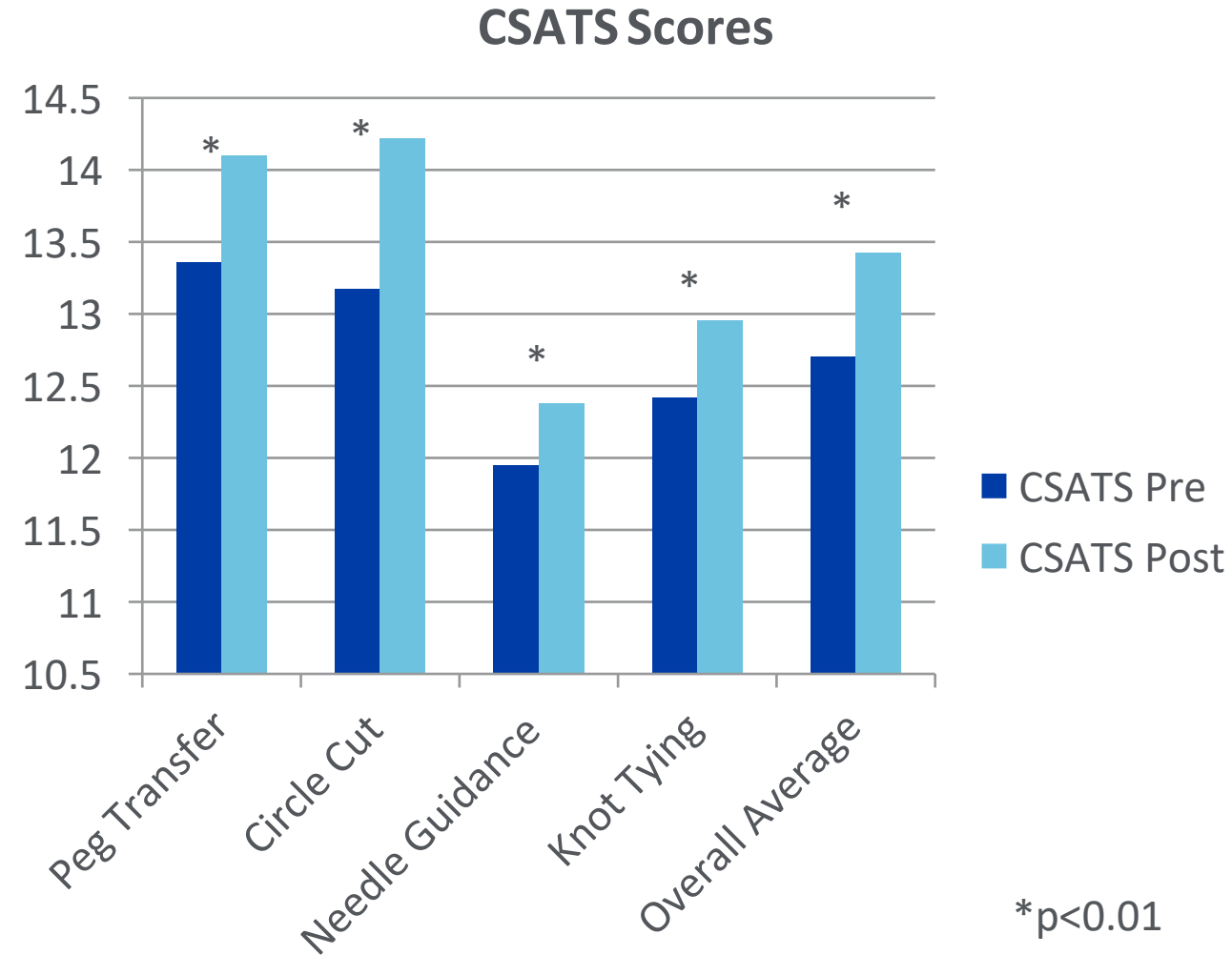
## Achieving Target Times



Target times used to evaluate procedures. All had significant decreases with an average of 25% improvement in average times for all trainees (p<0.001). This was used to calculate the 'time score' aspect of the validated Pi (Performance Improvement) scoring tool.

# CSATS Scores

- Statistically significant improvement for all tasks ( $p < 0.01$ )
- Median improvement of 0.7 (IQR 0.3-1.1) across all tasks
- No significant difference in CSATS scores between
  - groups 1 & 2
  - males & females
- **Needle Guidance correlates best ( $R=0.71$ )**



# Conclusions and Future Directions

- **A single BLUS training session shows residents can significantly improve by validated improvement tools (Pi Score) and objective scoring tools (CSATS)**
- **Demographics (age, sex, previous experience) did not correlate with baseline scores or improvements**
- **BLUS and similar skills curriculum should be incorporated into residency training programs to teach and evaluate resident competency**

# References

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# Thank You

