

# The Implementation of Sensors and Compliance Counseling in Scoliosis Patients



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## Background

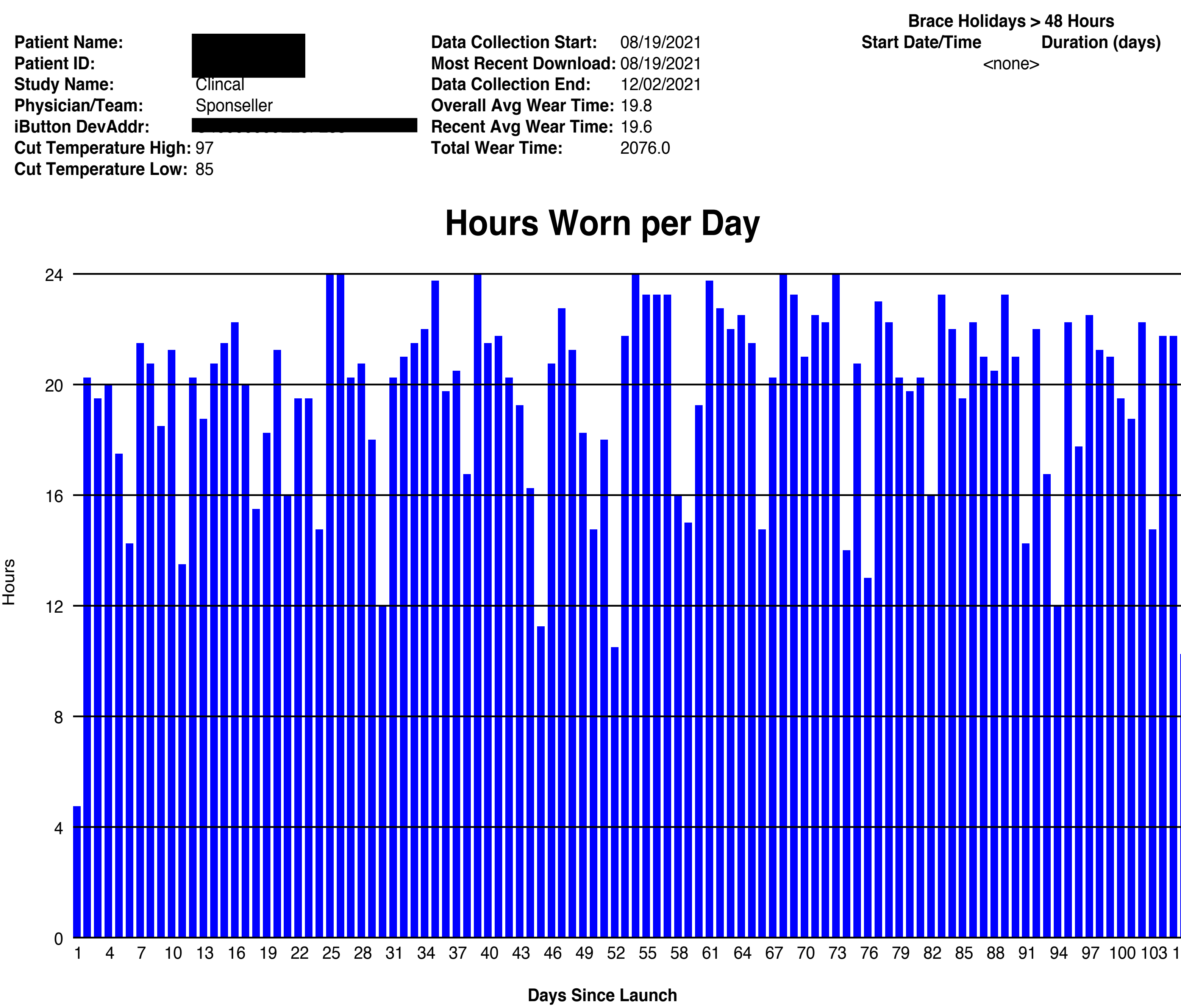
- First line treatment for scoliosis is often bracing
- Braces need to be worn as close to 22 hours/day in order to be most effective
- Adherence rates are low – between 27-45%<sup>3,4,5</sup>
- Sensors that measure wear time are placed in braces to help increase adherence rates – wear time can increase by 3.2-5.24 hours<sup>1,2</sup>
- Sensors combined with compliance counseling can decrease the need for surgery by 11%<sup>1</sup>

## Aims

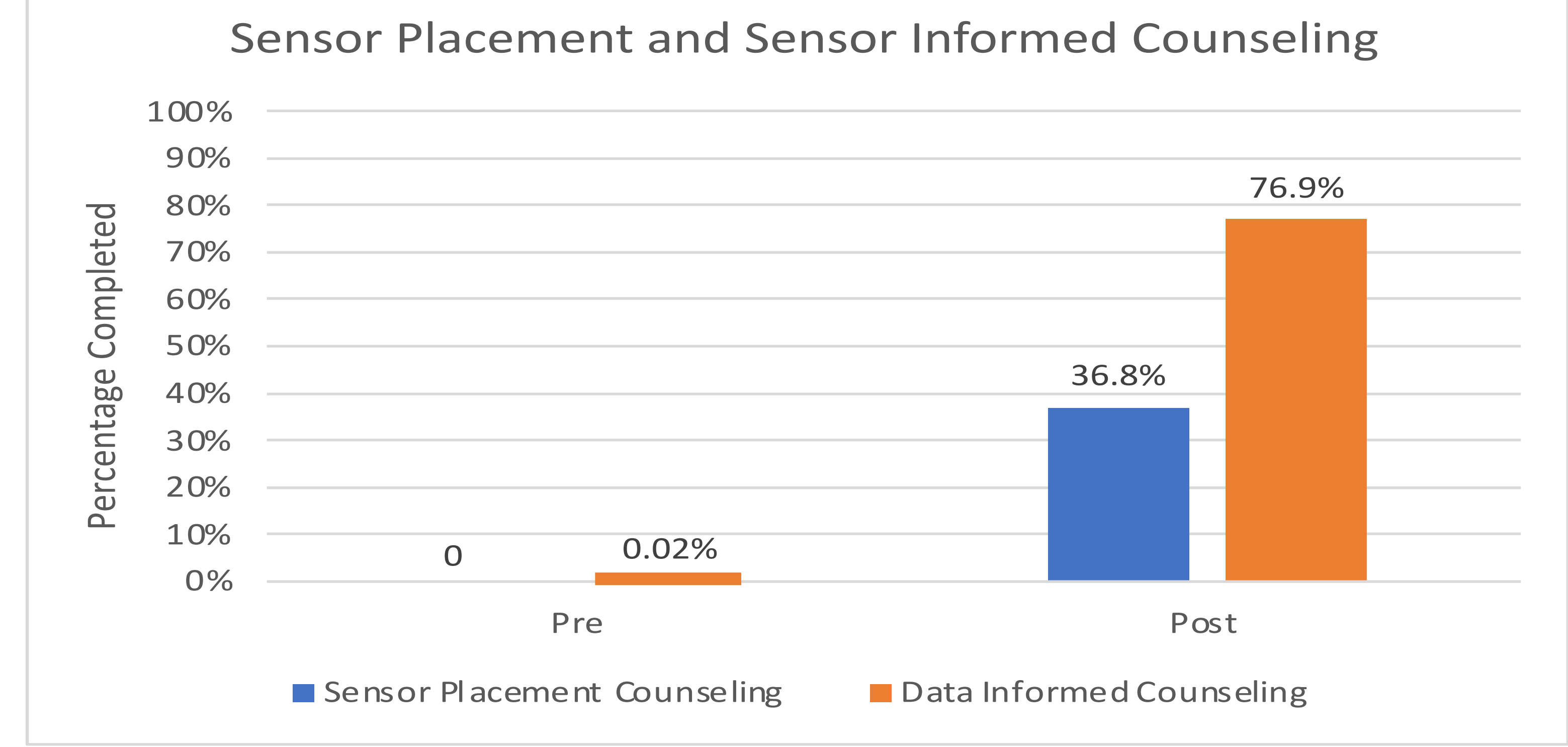
- Aim 1:** By December 2021, there will be an increase in the number of families who receive counseling about the importance of and strategies to ensure sensor placement.
- Aim 2:** By December 2021, there will be an increase in the number of families whose follow up visit counseling was informed by brace sensor data

## Methods/Innovation Details

- Dedicated laptop, hardware/software acquired
- EPIC smart texts created for counseling on sensor placement and for patients with sensors
- In-service to the pediatric orthopedic team about project and provider role
- Informal in-service done to medical assistants about their role and help
- Step by step instruction sheet on generating sensor report
- Academic detailing
- Two-month pre and post intervention chart review done on patients with all scoliosis types



## Results



- 36.8 % increase in the number of patients who received counseling on sensor placement
- 76.9% increase in the number of visits informed by individualized brace data

## Implications for Practice

- A new workflow needs to be implemented
- The entire clinic team must be on board – medical assistants, nurses, residents, and students, to help ensure sustainability
- Brace sensors and compliance counseling should be used as the standard of care for all patients with scoliosis

## References

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