

## Decreased Risk of 90-Day Post-Op Complications (MUA)

### *THE USE OF ELECTRONIC SENSOR DEVICE TO AUGMENT LIGAMENT BALANCING LEADS TO A LOWER RATE OF ARTHROFIBROSIS AFTER TOTAL KNEE ARTHROPLASTY<sup>1</sup>*

#### PURPOSE

Manipulation under anesthesia (MUA) is a common treatment for stiffness and arthrofibrosis post-TKA. Studies show a higher degree of success when treatment is performed earlier (<3 mo.) post-TKA<sup>2</sup>; however, bundled payments models focusing on a 90-day episode of care may not provide reimbursement within this timeframe.

MUA rates were compared for manual TKA versus VERASENSE Sensor-Assisted TKA to determine if consistent soft-tissue balance had any effect on the rates of 90-day post-op complications.

#### METHODS

##### MUA RATE: VERASENSE VS. NON-SENSOR

- 252 sensor-assisted vs. 690 non-sensor
- All cases were performed by the same surgeon.
- There were no significant cohort demographic or co-morbidity differences.
- No difference in outcomes was seen based on implant type, age or BMI.

#### RESULTS

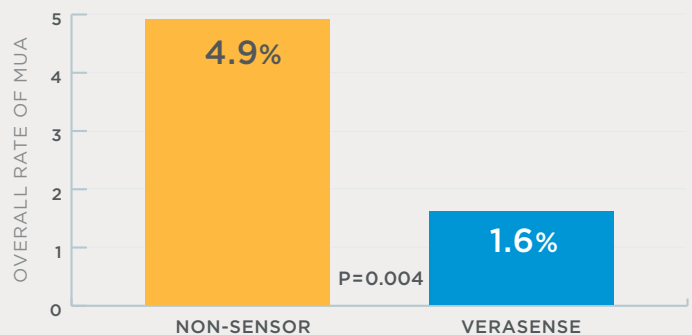
##### VERASENSE: STATISTICALLY-SIGNIFICANT REDUCTION IN MUA

- 67% decrease in rate of MUA
- 62% of observed MUAs were within the 90-day post-op interval

#### CONCLUSIONS

VERASENSE CAN MITIGATE 90-DAY POST-OP COMPLICATIONS THROUGH SOFT-TISSUE BALANCE.

A DECREASE IN MUAS SHOULD REDUCE OVERALL TKA READMISSIONS AND LESSEN THE COSTS AND RISKS CURRENTLY UNDER FOCUS THROUGH CMS'S COMPREHENSIVE JOINT REPLACEMENT PAYMENT PROGRAM.



1. Geller JA, Lakra A, Murtaugh T. The Use of Electronic Sensor Device to Augment Ligament Balancing Leads to a Lower Rate of Arthrofibrosis After Total Knee Arthroplasty. *J Arthroplasty*. 2017 May;32(5):1502-1504

2. Fitzsimmons SE, Vazquez EA, Bronson MJ. How to Treat the Stiff Total Knee Arthroplasty?: A Systematic Review. *Clinical Orthopaedics and Related Research*. 2010;468(4):1096-1106.