VELYS™
Robotic-Assisted Solution

Bon Secours

VELYS™ ROBOTIC-ASSISTED SOLUTION PATIENT EXPERIENCE CASE STUDY IN COLLABORATION WITH DR. COLIN A. MUDRICK OF BON SECOURS SAINT MARY'S HOSPITAL

Improved Patient Outcomes Drive Higher Patient Volume!

> *"VELYS™ Robotic-Assisted Solution has given us the ability to consistently, dynamically balance knees intra-operatively based on individual anatomy, which in turn has allowed for significantly improved clinical outcomes and faster recovery."*
>
> **Dr. Colin A. Mudrick**

Background

Dr. Mudrick is a board-certified hip and knee orthopaedic specialist at Bon Secours Saint Mary's Hospital in Richmond, VA. He is affiliated with Bon Secours and Tuckahoe Orthopedics. He shared his experience about using the VELYS™ Robotic-Assisted Solution in an interview conducted in December 2022. The following content is adapted from this interview.

Patient Outcomes Drive Procedure Volume

Faster patient recovery
With the elimination of jigs and a low profile saw without haptic boundaries, the VELYS™ Robotic-Assisted Solution has allowed Dr. Mudrick to **perform 100% of total knees** using mid and/or subvastus approaches. Dr. Mudrick has observed a reduced number of days patients have required the use of a mobility assist device post-operatively.

Increased TKA volume due to patient referrals
Since implementing the VELYS™ Robotic-Assisted Solution, Bon Secours TKA procedure volume has grown by **16% in the past year***, driven by word-of-mouth patient recommendations stemming from their positive patient experiences.

Customized patient experience
Dr. Mudrick and his care team continue to seek a better, more personalized patient experience and the idea of recreating patients' unique anatomy using robotic technology aligns with their goals and serves as a natural marketing campaign.

Enables Procedure Efficiency Comparable to Manual Procedures

Time neutral or time savings
After 20-30 cases, Dr. Mudrick found his procedures became time neutral with cases performed with the VELYS™ Robotic-Assisted Solution. Now having performed approximately nearly 200 cases*, Dr. Mudrick has even observed **time-savings in his robotic TKA procedures.**

Short learning curve
Dr. Mudrick noted there was a short learning curve for the VELYS™ Robotic-Assisted Solution. For Dr. Mudrick and his staff, the **learning curve was approximately 10-15 cases** as a result of changing from manual instrumentation, to a tibia first approach with patient specific alignment.

*Procedure growth statistic was corroborated by DePuy Synthes implant sales data from May 2023 and reaffirmed by Dr. Mudrick and his team.

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Small size drives operational efficiency
Dr. Mudrick values that the VELYS™ Robotic-Assisted Solution is incredibly portable. Weighing in at **under 100 pounds**, it is easy to move between rooms, and it is possible to utilize **1 VELYS™ Robotic-Assisted Solution to perform >6 knees in 1 day** with flip rooms. Because of its small profile, it is also easily stored when not in use.

Does not require specialized imaging such as CT Scans
Dr. Mudrick has found that the VELYS™ Robotic-Assisted Solution streamlines and improves the patient experience by eliminating the need to schedule CT scans and acquire insurance authorizations.

Improves Procedure Technique and Facilitates Customization

Patient-specific alignment (PSA)
Dr. Mudrick has found that the VELYS™ Robotic-Assisted Solution and the ATTUNE™ Knee System facilitate PSA, increasing predictability/reproducibility thereby reducing outliers. It also enables consideration of anatomic rotation, which was previously impossible.

Continuous technique improvement
The VELYS™ Robotic-Assisted Solution enables surgeons to explore new TKA approaches, including minimally invasive surgery, and refine their techniques beyond previous limitations, fostering confidence, according to Dr. Mudrick.

Closest to performing a non-robotic TKA
The VELYS™ Robotic-Assisted Solution offers a natural feel and easy transition for surgeons who are new to robotic-assisted devices. Dr. Mudrick believes it is the closest to performing a conventional manual knee without a jig.

Versatility adds to value
The VELYS™ Robotic-Assisted Solution provides versatility, adding value to various techniques, including measured resection and gap balancing, while still allowing for mechanical alignment if the surgeon desires, according to Dr. Mudrick.

Real-time data enables natural balancing
The VELYS™ Robotic-Assisted Solution offers real-time data that enables balancing through the range of motion, which Dr. Mudrick considers key to improved patient outcomes.

> *“ No other company offers real-time intra-operative data which allows us to achieve a ligamentous balance through range of motion in a knee that’s already been exposed...the menisci are out, the osteophytes are out, the ACL’s released - that knee behaves differently, and with a tibia first technique, you can then balance the knee in both extension and flexion with the patella reduced before the femur is cut. In my opinion this is the closest we have been to an anatomic gap balanced technique. ”*
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> **Dr. Colin A. Mudrick**

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