VERASENSE SIMULATION MODULES:
A Surgeon's Experience

OrthoSensor, Inc. offers surgical simulations on the Touch Surgery mobile application, serving as training modules for VERASENSE Sensor-Assisted Total Knee Arthroplasty (TKA).

Given the innovative nature of VERASENSE, OrthoSensor envisioned an immersive and mobile-based training experience for global surgical users and sales reps which replicates the real procedure. Focused education was developed around nine scenarios which surgeons encounter during soft tissue balancing in TKA.

THE MODULES

OrthoSensor’s clinical team, along with Chief Medical Officer Dr. Martin Roche, mapped out a curriculum of content structured in three portions:

- **GENERAL PRE-LEARNING**, which helps users to understand the relevant anatomy within the knee joint that impact soft tissue balancing using VERASENSE;

- **PROCEDURAL STEPS**, which depict the steps involved in using the OrthoSensor VERASENSE Sensor-Assisted Technology; and

- **ALGORITHM TO DEAL WITH THE NINE IMBALANCE SCENARIOS**, which helps users understand the appropriate surgical techniques to achieve a balanced knee.

In addition, anonymized surgical videos are embedded into the simulation, offering a side-by-side visualization of the procedure alongside the VERASENSE intraoperative display, allowing for a new dimension of learning.

THE IMPACT

Reaching Global Audiences

OrthoSensor successfully launched their educational content to a global audience, reaching users across North America, Europe, Asia Pacific, Latin America, Middle East and Africa.

Since the simulation was released in January, month-to-month user growth has continuously climbed across all user cohorts including surgeons, medical trainees, hospital staff and industry representatives.

Visit [WWW.VERASENSESIMULATION.COM](http://WWW.VERASENSESIMULATION.COM) to download the touch surgery mobile app via:
Dr. Julien Bardou-Jacquet is the first surgeon to utilize VERASENSE in France. He considers himself ‘self-taught’ in the VERASENSE surgical technique and soft tissue balancing principles through the digital surgical simulations provided on the Touch Surgery platform.

“One week before my first VERASENSE case, I completed the Learn and Test on the app. The night before the case, I completed the rest of the modules to familiarize myself with this new technology. There is a very practical, concrete side to the proposed cases.” Going into his first case, Dr. Bardou-Jacquet had questions about the use of the technology in TKA, “How to hold the knee and the talus during the test; for my first case, which plane to extend for a tight knee on the medial side in flexion and for a tight knee on the medial side only in extension.”

He credits the VERASENSE simulations with providing him with an understanding of the surgical technique. According to Dr. Bardou-Jacquet, “The most useful was the animation that shows how to hold the knee and the ankle to test ligament balance of the knee. The other modules were, of course, very helpful to have in mind the day of the surgery – the most common cases of imbalance in the knee and how to deal with them.”

“As with the number of different imbalance scenarios that can occur intra-operatively,” he states, “when assessing both medial vs lateral and flexion vs extension balance, the VERASENSE modules provide data-supported solutions for each scenario.”

As a soft tissue balancing tool for TKA, VERASENSE provides intra-operative data previously unquantified by surgeons and only available through subjective assessments. The key to optimizing soft tissue balancing is understanding and utilizing the data to intelligently and reproducibly inform surgical decisions.

The VERASENSE Simulations are not only helpful when used prior to a surgeon’s first case, it also serves as a continuing reference even after completing a few VERASENSE cases. “It is always helpful to study one or two modules before a surgery if you don’t practice it every day,” said Dr. Bardou-Jacquet.

Dr. Bardou-Jacquet finds the VERASENSE Simulation Modules an easy way to learn about new technology, “This app is very useful and above all easy to use, even fun, so it’s a good app for all the surgeons,” he adds, “In a digital environment where technology helps us execute surgery in the operating theatre, having a comprehensive mobile app helps me to deal with the myriad of numbers during surgery.”

Dr. Julien Bardou-Jacquet
Clinique Tivoli Ducos, Bordeaux, France

ENGAGEMENT AND FEEDBACK FROM SURGEONS

Receptivity to the simulation has been extremely high - around 90% of users are returning users. Feedback from the surgical community has been overwhelmingly positive, allowing new users to become versed with the device and its clinical benefits in their own time.

DOWNLOAD THE TOUCH SURGERY MOBILE APP

to access the VERASENSE Simulation Modules by visiting www.verasesesimulation.com