



# Surgical Outcomes System

## About Us

The Surgical Outcomes System is an orthopedic and sports medicine global registry, that is cloud-based and tablet-friendly. The intuitive platform enables surgeons to easily collect and analyze patient outcomes and procedures to address the demands of evidence-based medicine. The SOS™ global registry allows surgeons to remotely monitor their patients' outcomes over two years through patient-reported outcome questionnaires and clinician-reported objective measures. The SOS will automatically email surveys to patients at predefined time points. The primary purpose of the SOS is for monitoring and evaluating the outcomes of various standard of care orthopedic and sports medicine medical procedures, leading to the development of evidence-based protocols for treating patients. Secondary purposes of SOS include analysis and publication of results, patient education and cost-effectiveness of treatment procedures and products.

## Features and Benefits

- ▶ Cloud-based, HIPAA reviewed and IRB approved registry that allows for data collection, remote monitoring of patient data and comparative analysis of treatment outcome data.
- ▶ The SOS requires only a few steps for the surgeon to enroll a patient into a study.
- ▶ The SOS leverages technology, engaging patients in their own healthcare through the automated surveys, video links, images, reminders and alerts.
- ▶ Surgeons can use the SOS de-identified global average for marketing, providing evidence of successful surgical/treatment outcomes to their peers and future patients.
- ▶ The SOS is fully transportable. Both the patient portal and surgeon portal are accessible on PCs, tablets or smart devices.
- ▶ The SOS allows for real-time clinical review and decision making of global effectiveness of various orthopedic and sports medicine clinical procedures, leading to the development of evidence-based protocols for treating patients.
- ▶ Surgeons are able to create, save and edit "favorites." Favorites can be used to auto populate post-treatment details on surgeries that are performed routinely as a time-saving measure.
- ▶ The SOS is a "global registry" with the patient portal available in multiple languages.

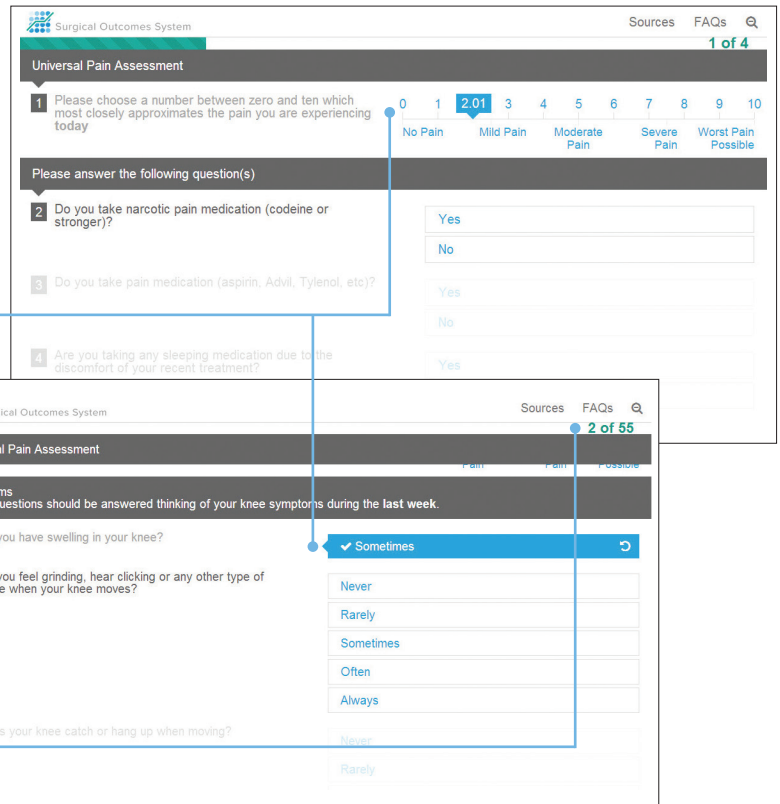
## Patient Portal

The patient portal is an intuitive, easy-to-use, web-based application for enrolled patients to submit health outcome data over two years posttreatment using validated patient-reported questionnaires. The patient portal is fully transportable and available on any smart device or tablet.

The format of the patient portal is either multiple choice or scale-rating type, which makes the use of the interface easy and intuitive.

The patient can change his/her selection throughout the submission process. Questions cannot be skipped.

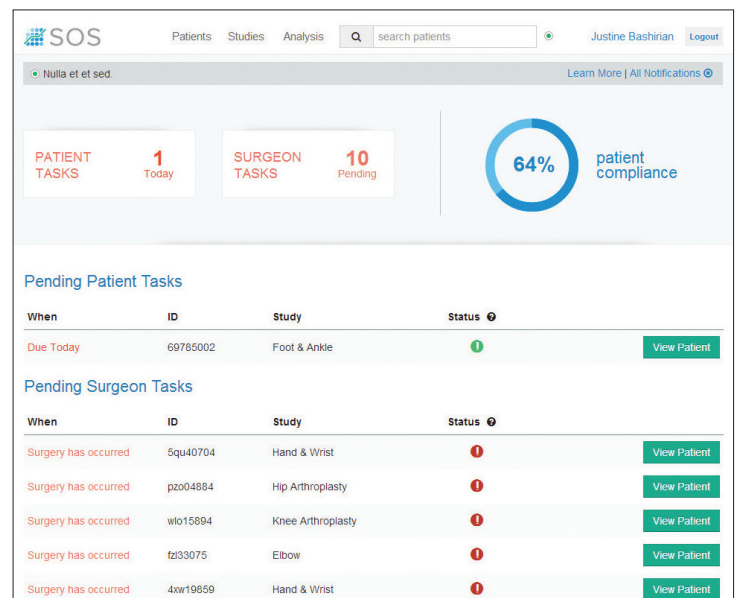
The system indicates survey progress.



## User Dashboard

The surgeon portal is divided into three panels: Patients, Studies, and Analysis. Intuitive navigation and interactive features make the surgeon portal easy to use, while providing all necessary tools to monitor the patient's health progress over time and analyze the outcome data.

- ▶ All features and data are fully transportable and accessible from the SOS™ surgeon portal through a PC, smart device or tablet
- ▶ Patient compliance is highlighted upon login, providing accountability to achieve the goal of at least 80 percent
- ▶ Pending patient tasks and surgeon tasks are organized based on time deadline, keeping sites organized for follow-up
- ▶ Sites are able to view patient details through a direct click from the dashboard
- ▶ Patient search capability is available using custom ID, study or patient email address



# Patients

The Current Patients panel displays all enrolled patients by custom ID, email address and corresponding enrolled studies. Patients can be searched and organized by custom ID, email address or study.

Colored icons provide a visual reference as to which case is up-to-date and which case has missing data.

Enrolling a new patient is simple and fast, requiring only 15 seconds to enter demographic information.

ID	Email	Studies	PS	SS	Action
5qu40704	destiny@yahoo.com	Hand & Wrist	●	●	View Patient
pzo04884	hip_arthroplasty@arthrex.com	Hip Arthroplasty	●	●	View Patient
ljr24318	hip_arthroscopy@arthrex.com	Hip Arthroscopy	●	●	View Patient
wlo15894	knee_arthroplasty@arthrex.com	Knee Arthroplasty	●	●	View Patient
91612151	knee_arthroscopy@arthrex.com	Knee Arthroscopy	●	●	View Patient
afn27634	shoulder_arthroplasty@arthrex.com	Shoulder Arthro...	●	●	View Patient
wl975143	shoulder_arthroscopy@arthrex.com	Shoulder Arthro...	●	●	View Patient
fz33075	eibow@arthrex.com	Elbow	●	●	View Patient

**Recent Activity**

- September 16, 2013: 2 years Survey Submission
- September 16, 2012: 1 year Survey Submission
- March 15, 2012: 6 months Survey Submission
- December 16, 2011: 3 months Survey Submission
- October 29, 2011: 6 weeks Survey Submission
- October 01, 2011: 2 weeks Survey Submission
- September 19, 2011: Clinic Visit
- September 19, 2011: Complication
- September 17, 2011: Surgery
- September 16, 2011: Pre-surgery Survey Submission

**Pain Scale**

Time Window	5qu40704	Justine Bashirian	Global
Pre-surgery	~2	~2	~2
2 weeks	~2	~2	~2
6 weeks	~7	~7	~7
3 months	~4	~4	~4
6 months	~4	~4	~4
1 year	~5	~5	~5
2 years	~3	~3	~3

**Alerts**

- The patient's response triggered an alert. [Read Alert](#)
- The patient's response triggered an alert. [Read Alert](#)
- The patient's response triggered an alert. [Read Alert](#)
- The patient's response triggered an alert. [Read Alert](#)
- The patient's response triggered an alert. [Read Alert](#)

By clicking on the "View patient" button, sites are able to view the patient's record in a timeline fashion, highlighting events such as survey submissions, surgeries, clinic visits or complications.

Sites can easily add an event, edit patient information, and view patient outcomes compared to the site outcomes and the global de-identified average within the enrolled study.

## Patients (Cont.)

Sites are able to enter treatment detail in 30 seconds or less with the intuitive dropdown menus.

Surgeons are able to create, save and edit "favorite" templates, allowing for autopopulation of treatment detail.

**Edit Surgery on November 04, 2013** [\(Change Date...\)](#) Update Event

Filter Menu

**Rotator Cuff (Complete Tear)** Procedures: Double row repair Anchor repair technique used: SpeedBridge - Medial knots not tied

Primary or Revision: Select

Open: Yes  No

Procedures: Double row repair X

Anchor repair technique used: SpeedBridge - Medial knots not tied X Remove

**Patient baseline and case details**

**Diagnosis**

**Operations**

- Surgical time and personnel
- Rotator Cuff (Complete Tear)
- Rotator Cuff (Partial Tear)
- Subacromial Decompression
- Tendon Transfer
- Biceps
- Coracoidplasty
- Distal Clavicle Excision
- AC Joint Stabilization
- Os Acromiale
- Osteotomy
- Cartilage treatment
- Osteochondral Treatment
- Other intra-articular
- Fracture Management (ORIF)
- Miscellaneous

**Operations - Labrum & Instability**

**Other type grafts and bone graft details**

**Implants**

**Injections/Applications**

**Favorites**

Speedbridge

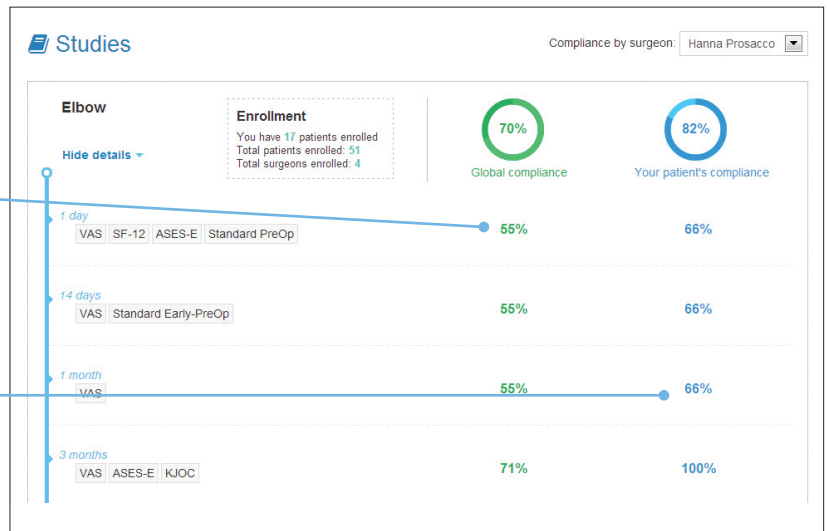
Add Favorite +

## Studies

Surgeons are able to view a summary of enrolled patients per study, as well as patient compliance per time point.

Number of patients enrolled and patient compliance of surveys are benchmarked with the global information.

Displaying patient compliance per time point allows sites to pinpoint areas of opportunity.

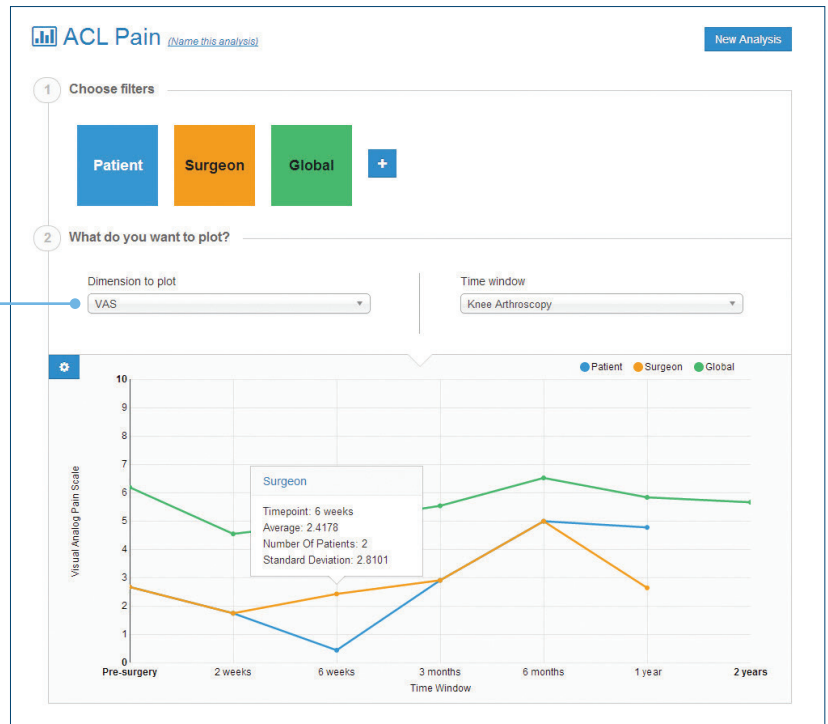
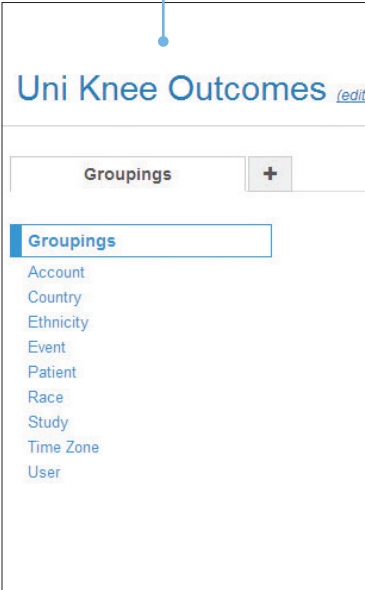
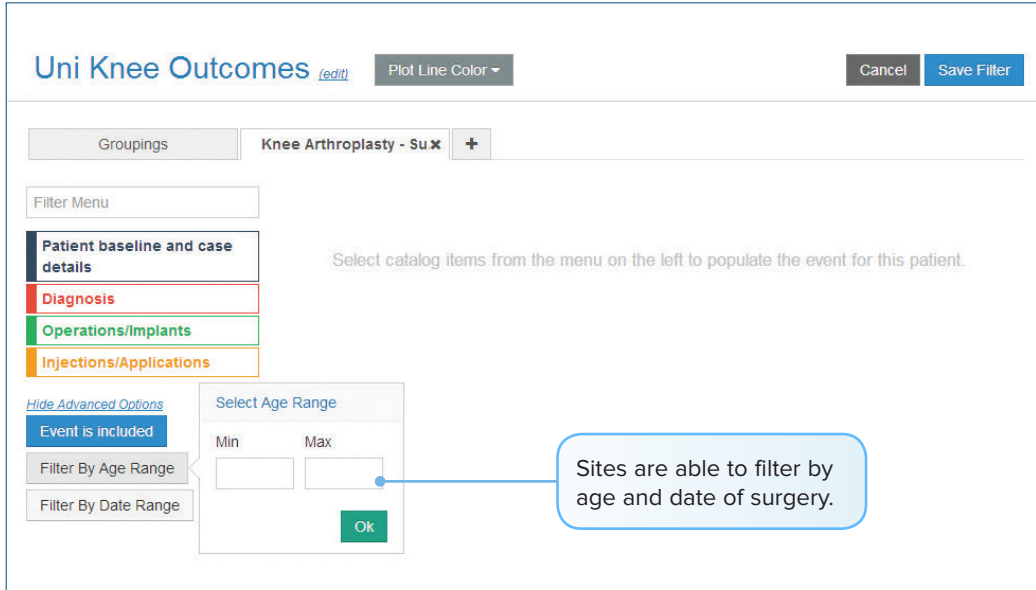


## Analysis

The Patient Analysis panel provides a graphical representation of the outcomes data. Sites are able to perform comparative analysis on individual outcomes, site outcomes or the global de-identified average by choosing filters. Data can be exported in raw data format or graphical format, and emailed as an image to patients for educational purposes.

Multiple patient events can be filtered within the same study or across studies, such as surgery details, complications, clinic visits, or survey submissions. Unlimited analyses can be performed.

Sites are able to analyze “groupings,” including or excluding criteria such as patients, study group, accounts, countries or demographics.

Surgeons interested in utilizing the Surgical Outcomes System™ should contact [SOS@arthrex.com](mailto:SOS@arthrex.com), or their local Arthrex sales representative for more information.

## Workflow

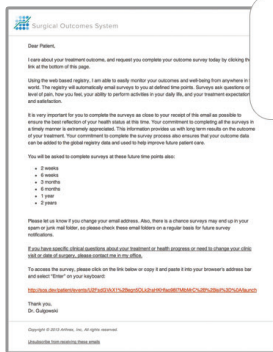


**BEGIN**  
Patient agrees to participate

**1.** Surgeon or designated staff **logs on** to outcome portal and **enrolls patient** into the study

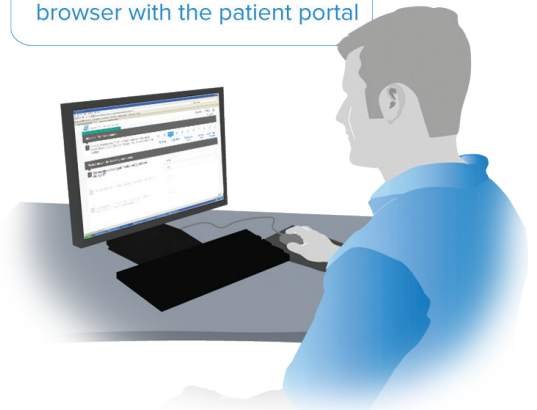
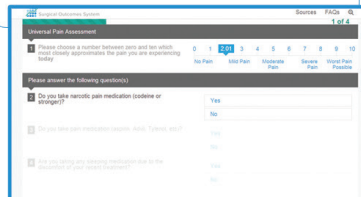


**2.** System **sends e-mail** notifications to patient at predefined time milestones



**3.** Patient clicks on a **link in the e-mail** which launches a web browser with the patient portal

**4.** Patient **answers questions** online

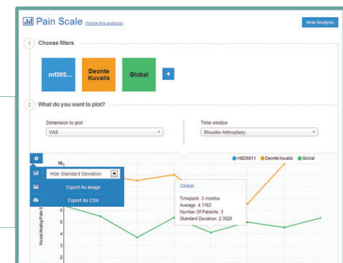


**5.** Surgeon or staff enters surgery related **post-op information** immediately following surgery

**6.** Surgeon **can review** patient's subjective and objective outcomes



**7.** Surgeon has the option to **compare patient outcomes** to the global average





# Surgical Outcomes System

Advancing Evidence-Based Medicine

*This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique.*

*In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's Directions For Use.*