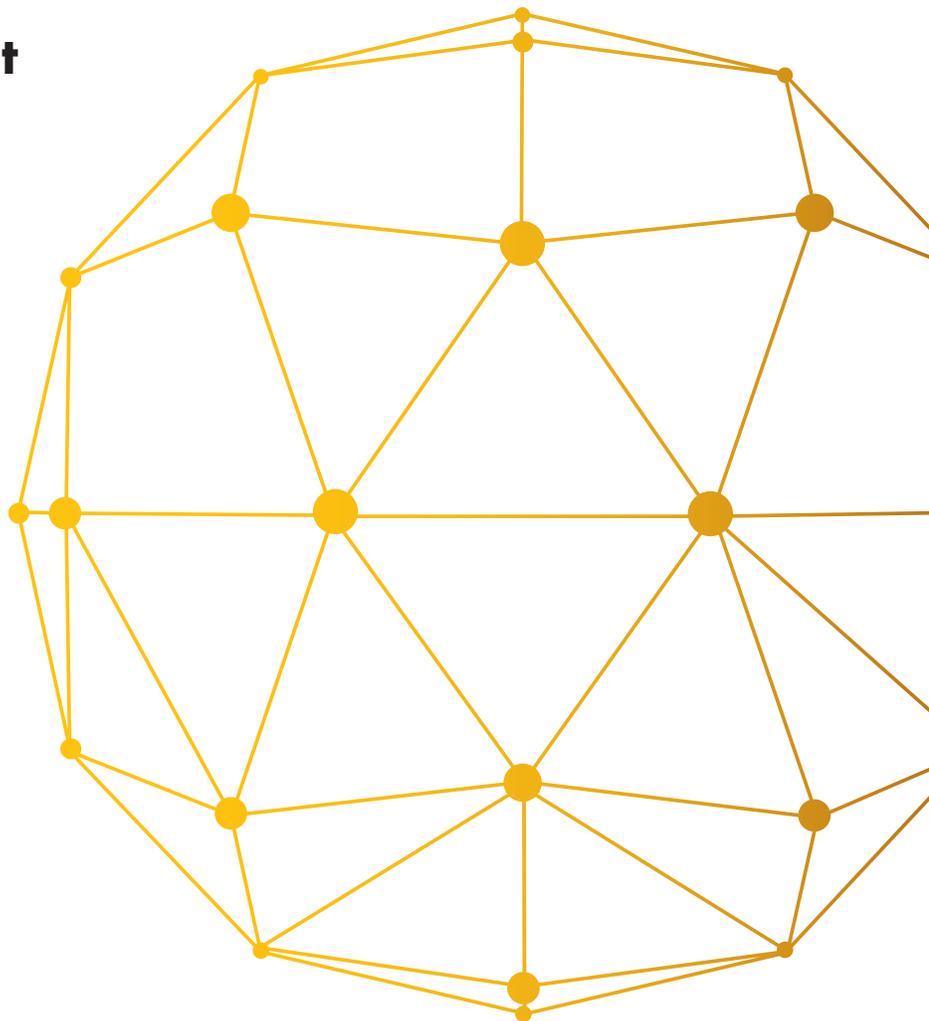


Blueprint[®]

3D Planning and PSI

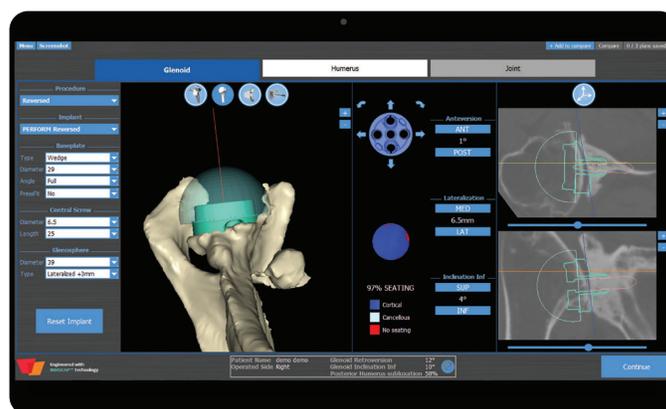
The value of Blueprint



Blueprint 3D Planning and PSI

Blueprint 3D Planning and PSI is a surgeon-controlled, 3D preoperative planning software with optional patient specific instrumentation.¹ Blueprint allows surgeons to perform real-time, precise virtual surgery for added confidence prior to stepping foot in the O.R.

The Blueprint advantage



Precise and reproducible 3D measurements^{1,4}

Automated 3D reconstruction and measurement calculations

Improved decision-making^{4,10}

Better understand glenoid, humeral and soft tissue deformities

Enable accurate glenoid positioning^{9,15}

A critical component of glenoid implant longevity

Available at no additional cost*

Part of the enhanced Stryker service offering

We invite you to experience our industry-altering software technology.

*Blueprint access dependent upon account-specific factors.

Precise and reproducible 3D measurements

Automated 3D reconstruction and measurement calculations

Blueprint's automated 3D measurements have been shown to be both precise and reproducible, showing excellent correlation to manual or semi-manual methods.¹

Precise

More accurate measurements of glenoid version and inclination¹

- In one study, 3D planning showed more accurate measurements of glenoid version in half the cases studied.^{1,2,3,4}
- Studies show that 2D evaluation under-estimates glenoid retroversion up to 15° in A1 and B2 glenoids compared to 3D measurements.^{2,5,6}



Figure 1. Blueprint uses thousands of data points from the glenoid face and scapular body to create a best fit glenoid sphere (A), automatically calculate glenoid version (B), and inclination (C).¹

Reproducible

Computer-assisted planning has been shown to increase intraoperative re-creation of the preoperative plan⁴

- Fully automated anatomical measurements eliminate interobserver and intraobserver discrepancies.¹
- Blueprint is not dependent on third-party manual segmentation or reference point selection.
- 3D reconstruction is independent of patient gantry angle.
- Blueprint's 3D measurements and reconstructions are independent of surgeon experience.¹

Informed decision making

Better understand glenoid, humeral and soft tissue deformities

Blueprint provides the necessary tools for surgeons to understand patient pathology, anticipate intraoperative challenges and evaluate the range of implant types that could be used.¹

3D construct visualization

Appreciate the patient's anatomy before the case with 3D landmarks

- Planning with Blueprint has been shown to change the choice of implant between anatomic and reversed in 14% of cases.⁴
- Blueprint allows for easier identification of Walch glenoid types to help facilitate diagnoses and implant selection.⁹

Sagittal CT views allow for visualization of fatty infiltration of the rotator cuff

- RTC muscle fatty infiltration was found to be associated with postoperative humeral head subluxation, glenoid loosening and worse long-term clinical outcomes after anatomic TSA.¹⁰

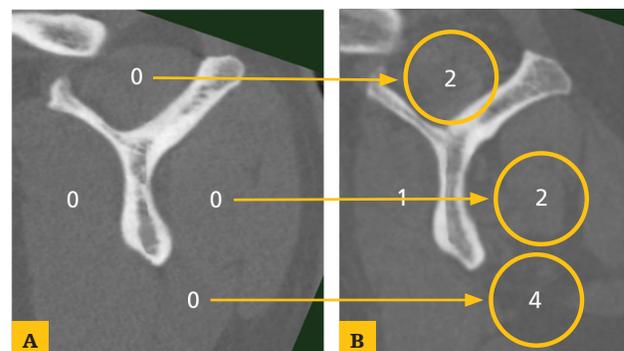


Figure 2. Progression of fatty infiltration in rotator cuff muscles can be seen moving from image A to B.¹⁰

3D virtual implantation

Select the projected implant size and position

- Blueprint allows surgeons to potentially save critical O.R. time by eliminating intraoperative sizing steps.¹

Avoidance of vault perforation and reduction in bone removal^{11,12,13}

- When the entire scapula is used as a reference, glenoid vault perforation is less frequent and implant accuracy is improved.¹¹



Figure 3. Blueprint allows for proper positioning of the implant to avoid vault perforation and minimize reaming.

Plan refinement

Blueprint generates a real-time glimpse into how factors such as implant selection, placement and osteoarthritic osteophytes may affect postoperative ROM.¹

ROM and bony impingement identification

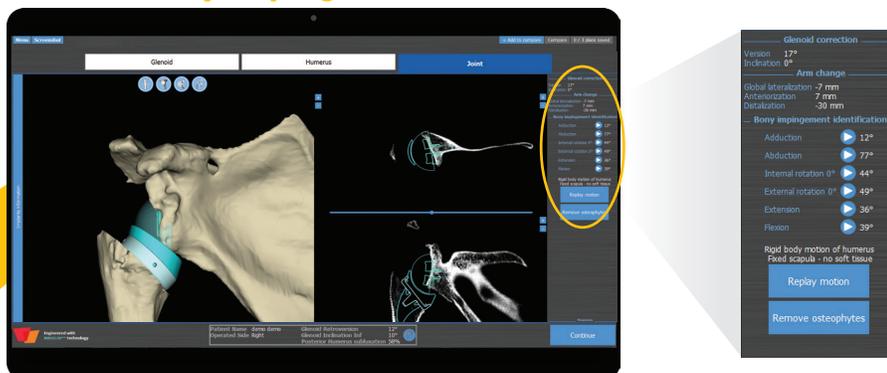


Figure 4. For all primary reverse procedures, Blueprint measures postoperative ROM values based off surgeon implant selection and positioning.

Modify plan



Figure 5. Modify your plan using Blueprint's osteophyte removal tool and eccentric baseplates to achieve greater ROM measurements.

Refine plan

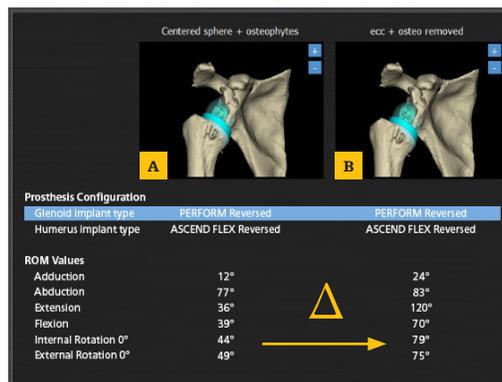


Figure 6. Blueprint allows for comparison of up to three plans side-by-side to identify which implant combinations increase postoperative ROM.

Enable accurate glenoid positioning

A critical component of glenoid implant longevity

Blueprint 3D Planning and PSI has been shown to improve the accuracy of glenoid component positioning and preserve bone.¹⁵

- Excessive reaming has been shown to decrease implant survivorship.^{12,15}
- Blueprint helps surgeons visualize advanced glenoid deformities and preserve critical subchondral bone for increased survivorship.⁹
- Blueprint allows surgeons to quantify, position the glenoid implant and avoid glenoid vault perforation.¹⁵

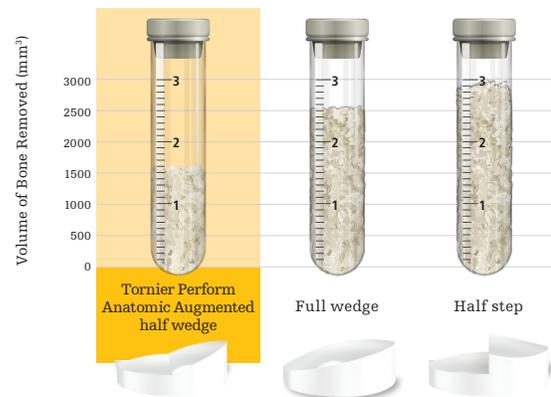


Figure 7. Stryker implants, combined with Blueprint; help to preserve critical subchondral bone for increased survivorship.

Blueprint patient-specific instrumentation precisely transfers the preoperative plan to the O.R.^{14,16,15,17}

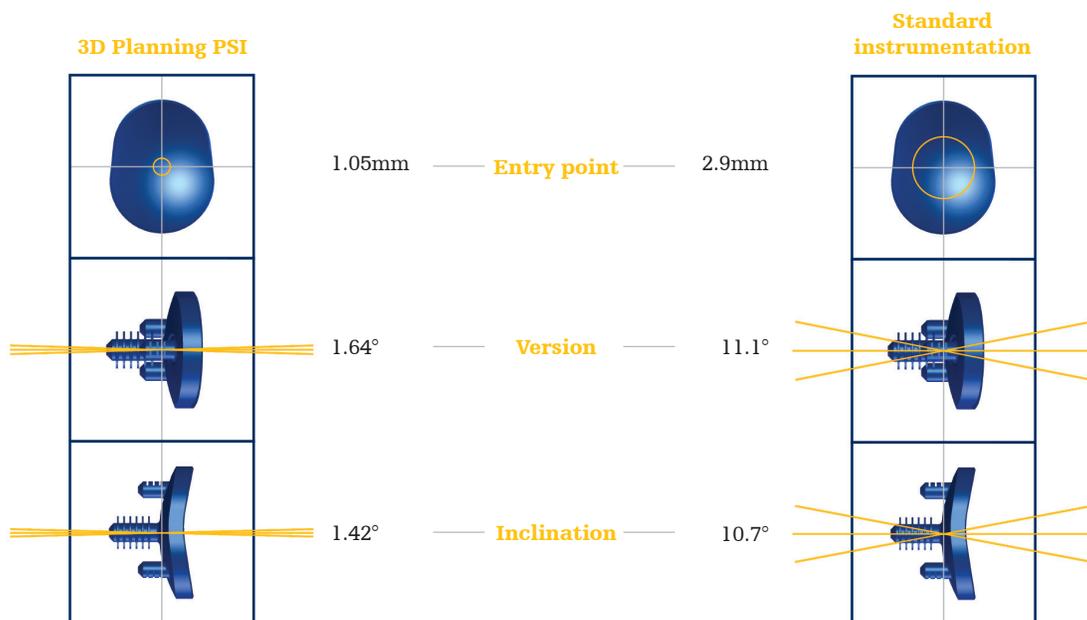


Figure 8. Blueprint PSI more accurately replicates guide entry point, version and inclination than standard instrumentation.

Available at no additional cost*

Part of the enhanced Stryker service offering

Stryker understands how valuable O.R. time is and is focused on increasing efficiency through cutting-edge technological innovation.

Blueprint is available at no additional cost for each primary Stryker shoulder arthroplasty case.

Blueprint provides the potential for time savings.

- Preoperative planning eliminates intraoperative sizing steps.
- Blueprint enables higher preoperative confidence, potentially leading to minimized excess kit shipping, sterilization costs and O.R. setup time.



*Blueprint access dependent upon account-specific factors.

The Stryker support advantage

Stryker is a global medical technology company focused exclusively on developing extremity and biologic solutions. We believe that this clear focus allows us to collaborate with our surgeon partners to make patient outcomes easier. Stryker has a variety of support options in place to help enhance our vision of making outcomes easier. These support programs include:



Medical education

Whether it is listening to one of our world-renowned faculty surgeons speak on the latest trends in shoulder arthroplasty, observing a Blueprint case demonstration, or attending a hands-on training course, Stryker has programs designed to support our customers' educational needs.

Field marketing support

A dedicated field marketing team has been implemented to help facilitate CT scan center onboarding, educating hospital staff, case planning and supporting Blueprint shoulder arthroplasty cases.



Specialized sales force

A clinically driven, specialized shoulder arthroplasty sales force has been trained to provide the best service in the orthopaedic industry. From supporting cases to helping educate surgical/hospital staff, our sales force is here to support you in every step of the process.

Rebuilding lives, together

Our Upper Extremities portfolio is backed by a commitment to improving patient outcomes, simplifying complex procedures and embracing innovation in new, industry-leading ways. Together, we help rebuild lives, delivering the solutions you need to lead, plus the specialized support you expect. Count on our specialists to work for you—and beside you—as we rebuild lives, together.

Tornier Flex Shoulder System

Through its proximal fixation design, the Tornier Flex Shoulder System addresses the need for simplified anatomic reconstruction and revision. This convertible shoulder system has the capability to convert directly to a reverse shoulder without removing the stem and allows for bone preservation.



Tornier Simpliciti Shoulder System

The Tornier Simpliciti Shoulder System takes bone preservation to the next level. This canal-sparing humeral prosthesis was built on the philosophy of bone preservation for simplified anatomic reconstructions and ease of revision.

Tornier Perform Anatomic Glenoid

Proper glenoid component placement that matches native glenoid anatomy and preserves bone are key factors to increasing glenoid component survivorship.* Tornier Perform Anatomic helps to preserve bone and match patient anatomy by:

- providing multiple backside radius of curvatures for each implant size.
- reducing glenoid reaming through proper selection of the implant size and reamers.



Tornier Perform Anatomic Augmented Glenoid

The Tornier Perform Anatomic Augmented Glenoid is designed with defect mimicking augmentation to restore the joint line, correct glenoid version and preserve bone for the most challenging glenoid morphologies.

Tornier Perform Reversed Glenoid

Designed to address cuff tear arthropathy and osteoarthritis, Tornier Perform Reversed Glenoid mimics Walch and Sirveaux glenoid defects to address bone loss. Tornier Perform Reversed Glenoid is designed with Adaptis Integrated Porous Metal for bony ingrowth and is fixated with an independent central screw and additional peripheral screws to make a durable construct.



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Tornier data on file

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