precisionos

VR Training Library

2025

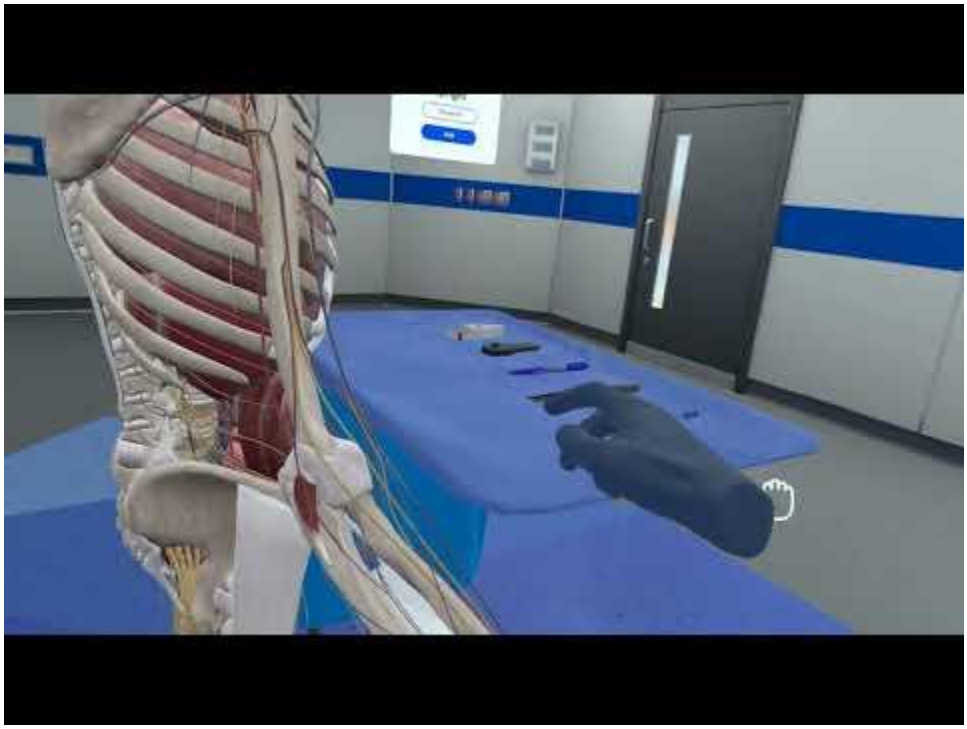
CONTENTS

This document contains all PrecisionOS surgical simulation cases along with their learning objectives and associated walkthrough videos.

Delphi – AI Agent

Meet Delphi: The Future of Interactive Orthopedic Learning.

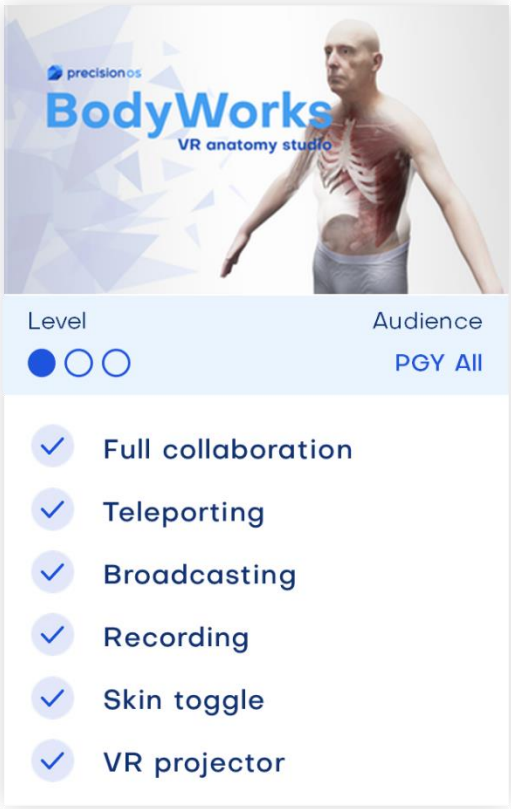
Delphi, our new AI agent, is transforming how you interact with our applications. Seamlessly integrated, it can manipulate visual models, highlight key structures, clarify complex anatomy, and create targeted questions. We're rolling out Delphi across our latest apps, ushering in an exciting new era for orthopedic education.



Fundamentals

BodyWorks: Anatomy Studio

Fully featured anatomical specimen for MSK specialties.



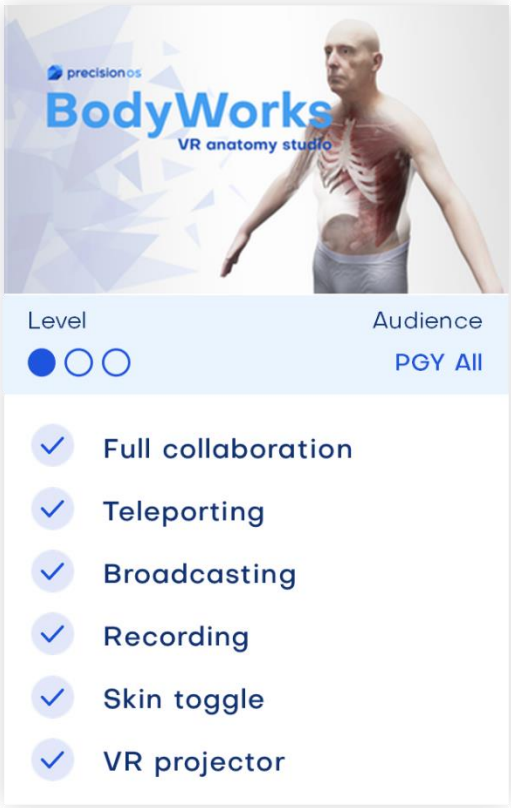
App Walkthrough Video:

Learning objectives:

1. Visualize relevant musculoskeletal, nervous, and circulatory structures throughout the human body.
2. Identify and explore pertinent anatomical structures within a zoomed anatomy model 3x life size.
3. Record video content for later use to facilitate education focused on human anatomy.

BodyWorks: Surgical Anatomy

A patient positioned in surgically relevant positions with a virtual retractor to hide and visualize deep structures in context.



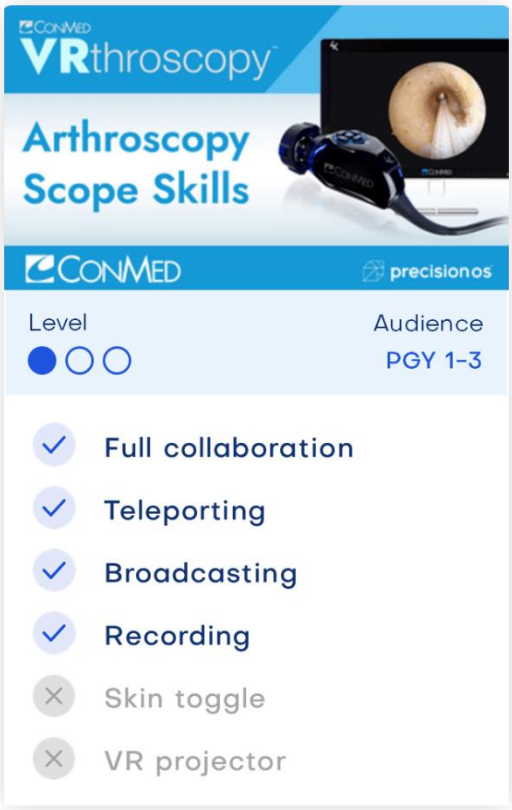
App Walkthrough Video:

Learning objectives:

1. Utilize the virtual retractor, in combination with limb manipulation to practice surgical approaches.
2. Select the patient position relevant to your case prep and educational needs.
3. Refine your visuospatial understanding of anatomy in the context of surgery.

Arthroscopy Scope Skills

Arthroscopy skills trainer



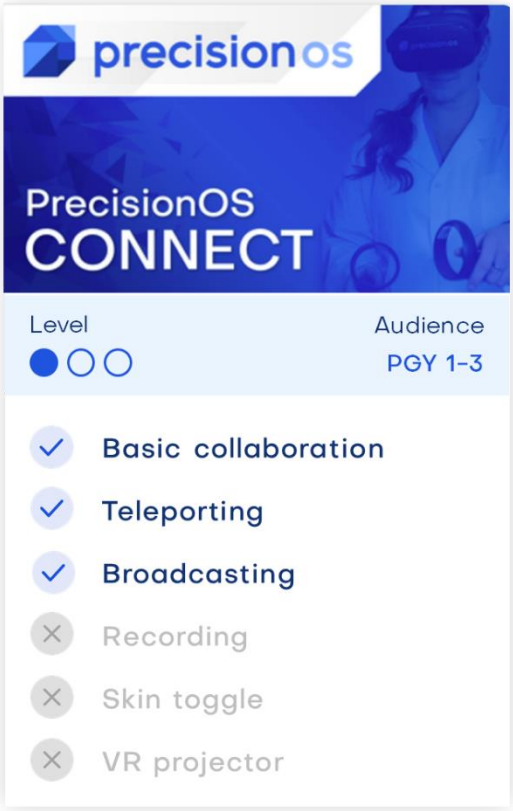
App Walkthrough Video:

Learning objectives:

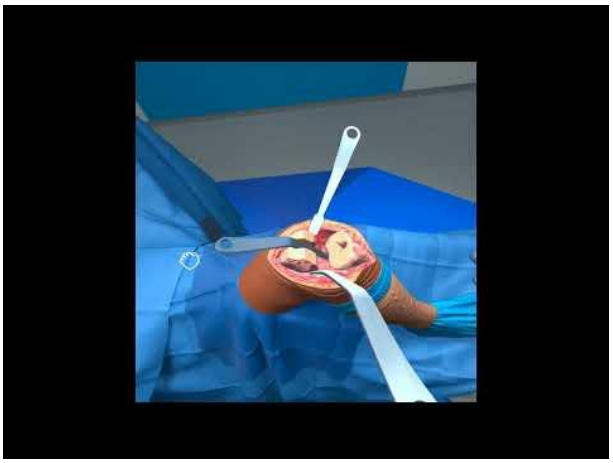
1. Utilize 30-degree and 70-degree arthroscopes to practice telescoping, rotating, pivoting, and periscoping.

PrecisionOS Connect: Tibial resection

Practice skills involved in a tibial resection with immediate feedback.



App Walkthrough Video:

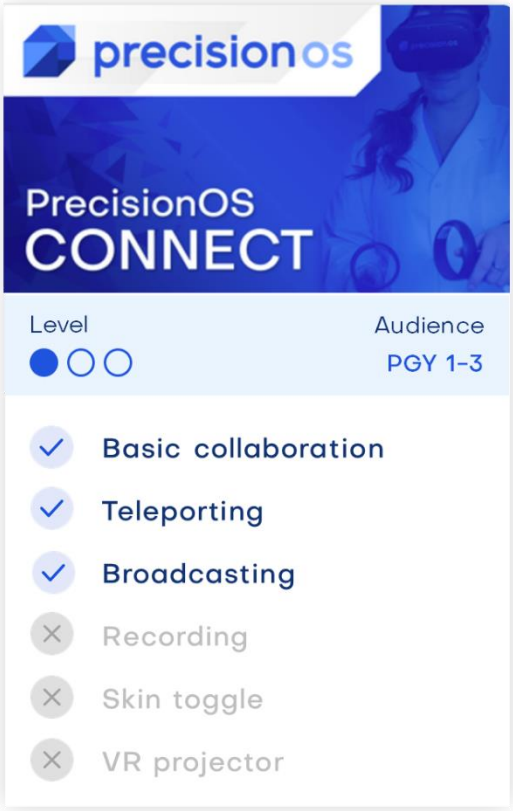


Learning objectives:

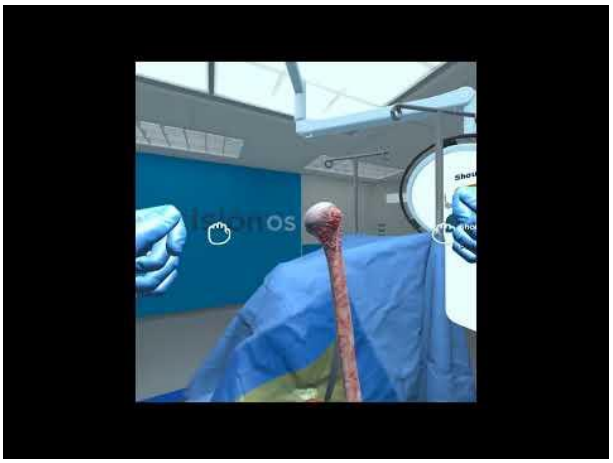
1. Perform a revision proximal tibial cut while minimizing tibial resection, and avoiding soft tissue injury.

PrecisionOS Connect: Humeral head resection

Practice skills involved in a humeral head resection with immediate feedback.



App Walkthrough Video:

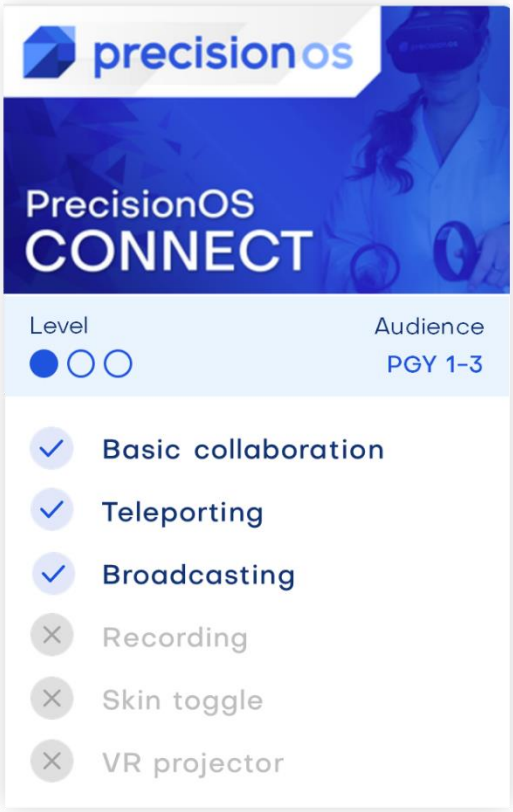


Learning objectives:

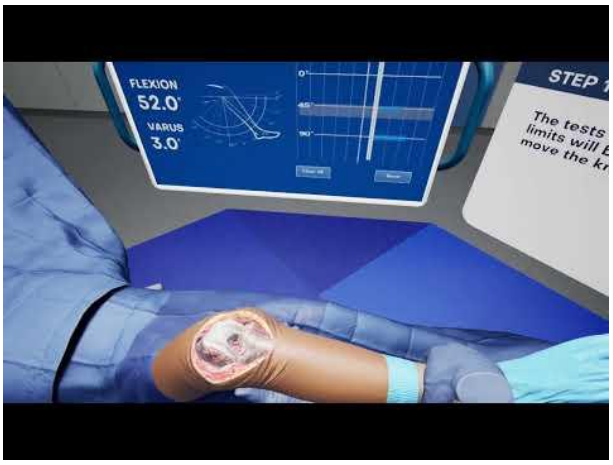
1. Perform a proximal humeral neck cut to varying NSA and version options.

PrecisionOS Connect: Knee range of motion

Practice skills involved in conducting a knee range of motion test with immediate feedback.



App Walkthrough Video:

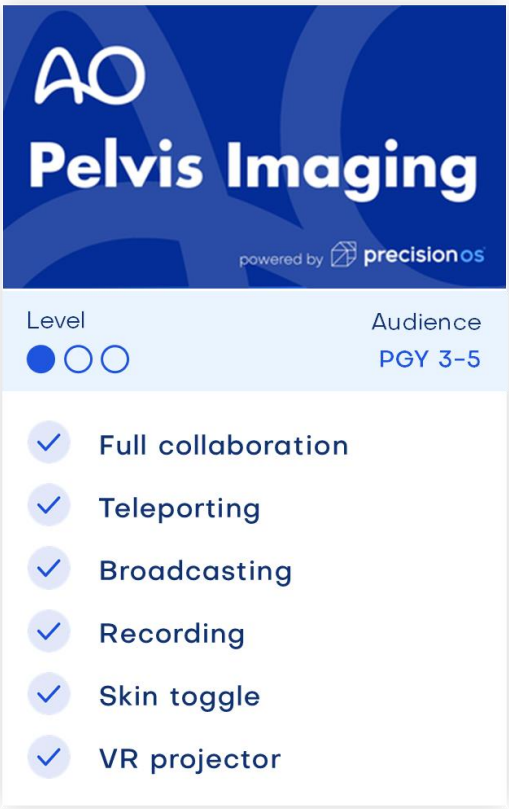


Learning objectives:

1. Perform range of motion tests on the knee at a variety of angles of flexion.

AO Pelvis Imaging: C-arm Tutorial

Intraoperative X-ray imaging and c-arm setup using a healthy pelvis.



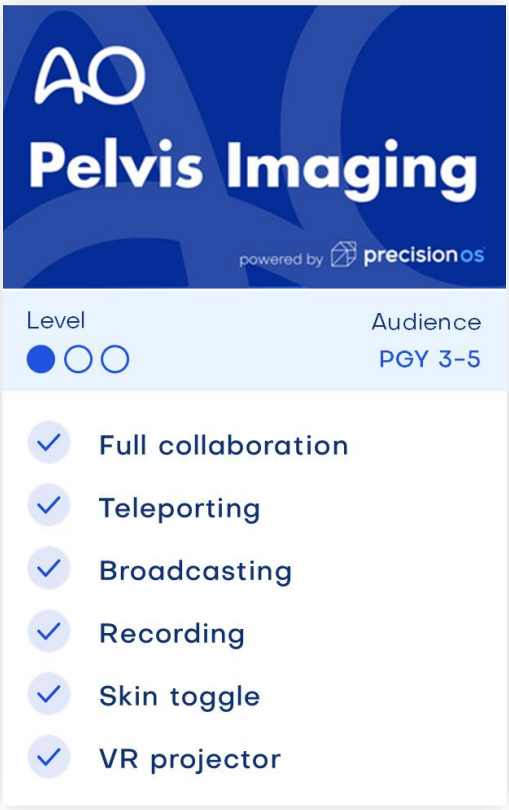
App Walkthrough Video:

Learning objectives:

1. Operate the CIARTIC Move C-arm and summarize it's features for intraoperative patient imaging.

AO Pelvis Imaging: Pelvis Imaging

Intraoperative X-ray imaging of a fractured pelvis – learn the AO-recommended standard projections.



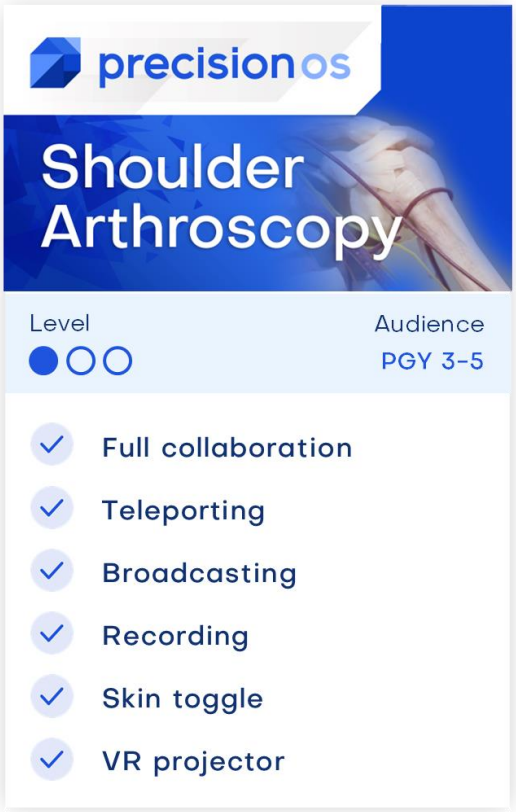
App Walkthrough Video:

Learning objectives:

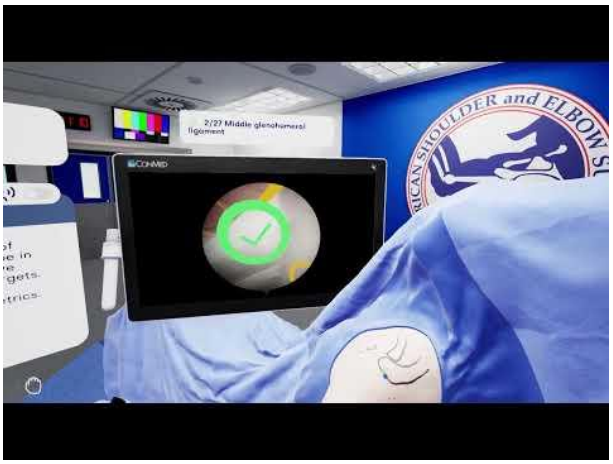
1. Recognize appropriate patient positioning for standard radiographic projections of the hip.
2. Capture suitable interoperative X-rays of the hip to make a differential diagnosis.

Diagnostic Shoulder Arthroscopy: Beach Chair Left Shoulder

The learner manipulates an arthroscope to identify over twenty anatomical structures inside the left shoulder



App Walkthrough Video:

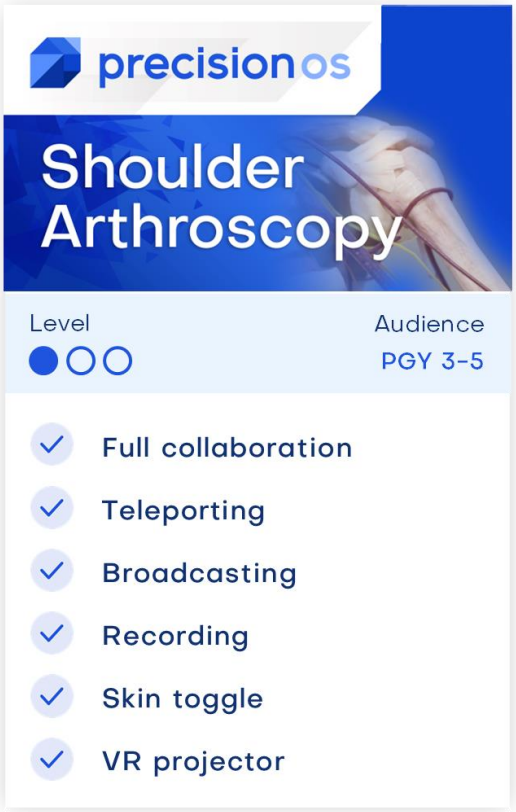


Learning objectives:

1. Utilize a spinal needle to position and form portals for left shoulder arthroscopy.
2. Insert the arthroscope and manipulate it to visualize a variety of anatomical landmarks within the left shoulder joint.

Diagnostic Shoulder Arthroscopy: Beach Chair Right Shoulder

The learner manipulates an arthroscope to identify over twenty anatomical structures inside the right shoulder



Case Setup:

*See Left Shoulder case for a walkthrough video

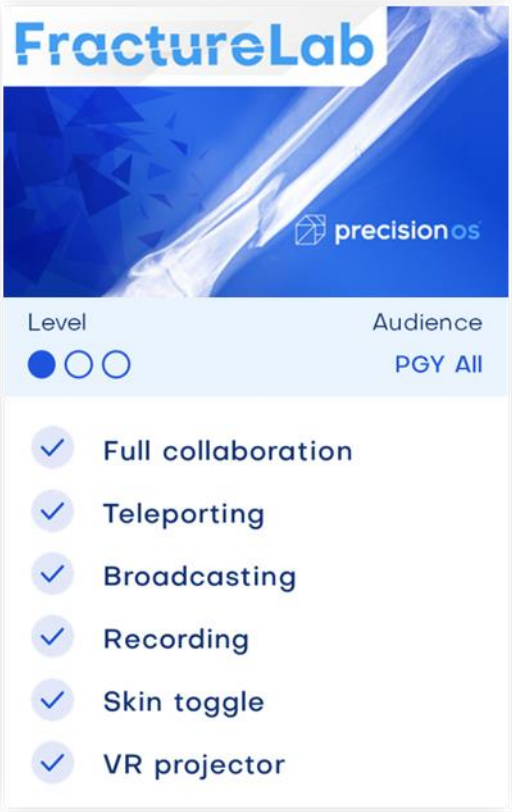
Learning objectives:

1. Utilize a spinal needle to position and form portals for right shoulder arthroscopy.
2. Insert the arthroscope and manipulate it to visualize a variety of anatomical landmarks within the right shoulder joint.

Trauma

FractureLab

Download and practice fracture cases directly within the virtual O.R from an ever-expanding case catalogue.



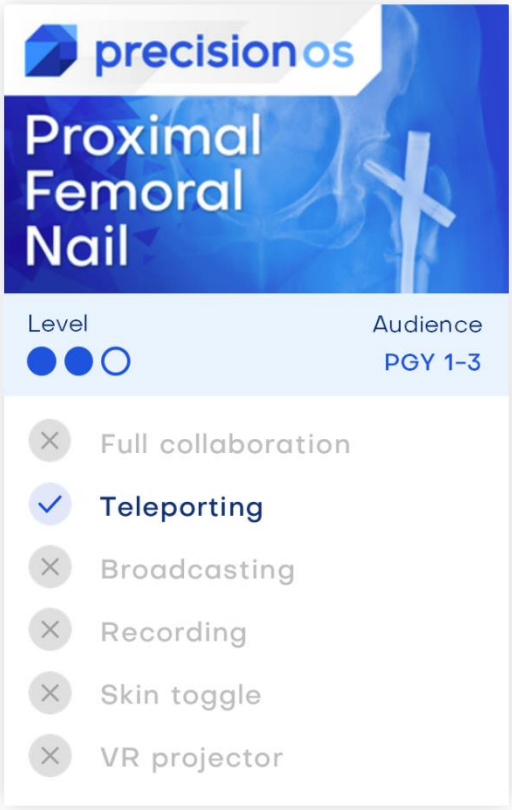
App Walkthrough Video:

Learning objectives:

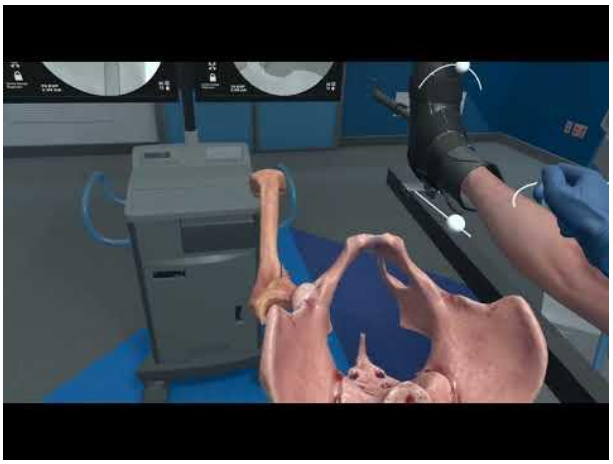
1. Choose from a catalogue of fracture cases
2. Utilize a C-arm to image fracture planes and guide placement of hardware devices.

Proximal Femoral Nail

Basic triangulation skills, C-Arm, K-wire, screw insertion of an intertrochanteric hip fracture.



App Walkthrough Video:



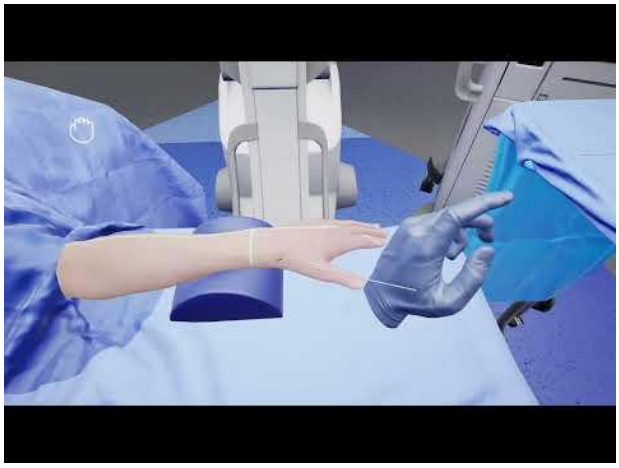
Learning objectives:

1. Carry out the reduction maneuvers and insertion of internal fixation devices.
2. Demonstrate knowledge of the anatomy and surgical approaches used in managing intertrochanteric hip fractures.

Orthopedic Trauma: Distal radius

Closed reduction and percutaneous pinning of a distal radius fracture.

App Walkthrough Video:

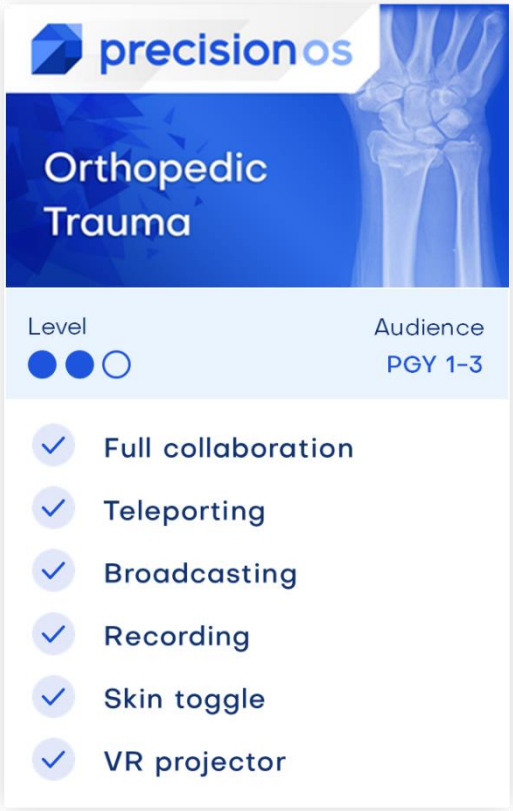


Learning objectives:

1. Utilize a C-arm to image fracture planes and guide placement of hardware devices.
2. Manipulate and position the wrist to facilitate the insertion of K-wires percutaneously to stabilize and fixate a Colles' fracture.

Orthopedic Trauma: Medial malleolus

Open reduction and internal fixation of a medial malleolus fracture.



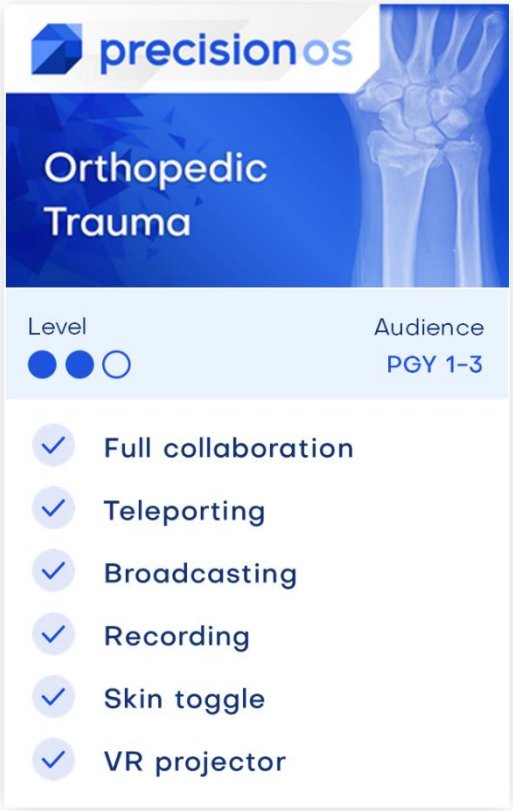
App Walkthrough Video:

Learning objectives:

1. Utilize a C-arm to image fracture planes and guide placement of hardware devices.
2. Manipulate and position the ankle to facilitate the insertion of K-wires to stabilize and fixate a medial malleolus fracture.

Orthopedic Trauma: Syndesmosis injury

Open reduction and preliminary fixation of a syndesmosis injury.



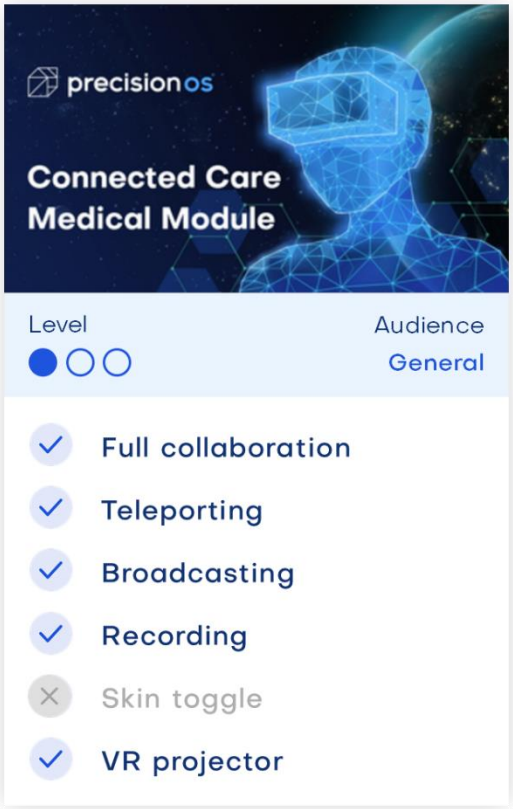
App Walkthrough Video:

Learning objectives:

1. Utilize a C-arm to image fracture planes and guide placement of hardware devices.
2. Manipulate and position the ankle to facilitate the insertion of K-wires for preliminary fixation of a syndesmosis injury

Connected Care Medical Module: CPR

A non-surgical environment covering the basics of chest compressions for CPR



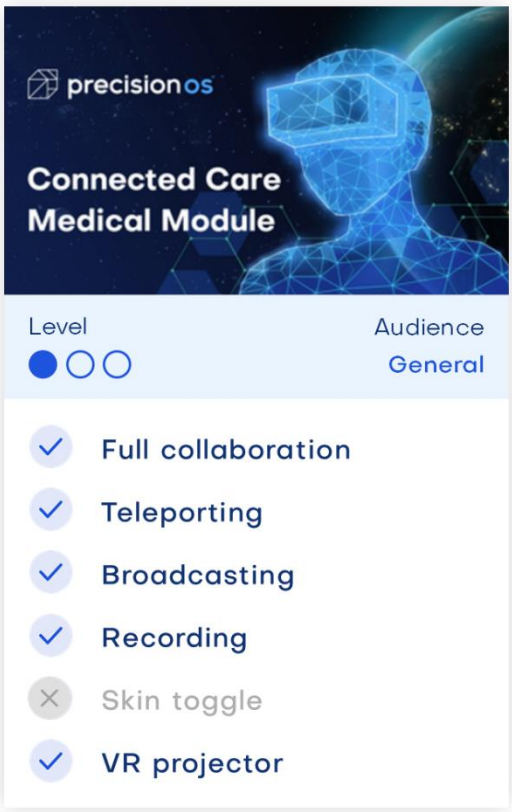
App Walkthrough Video:

Learning objectives:

1. Identify when, and on who chest compressions should be done.
2. Use correct chest compression technique on an unconscious patient to buy time for emergency services to arrive.

Connected Care Medical Module: Dislocated shoulder

A non-surgical environment covering how to reseat an anteriorly dislocated shoulder.



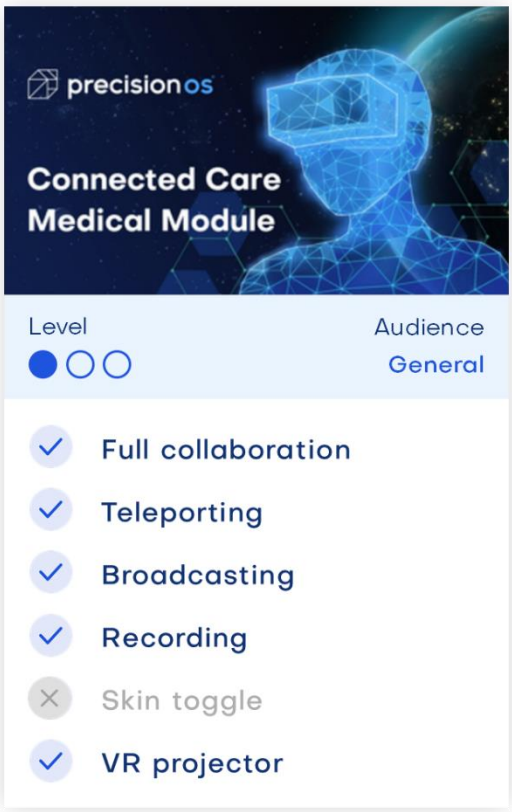
App Walkthrough Video:

Learning objectives:

1. Describe and demonstrate the process to move a front dislocated shoulder back into position.

Connected Care Medical Module: Tension pneumothorax

A non-surgical environment covering how to resolve a tension pneumothorax using a decompression needle



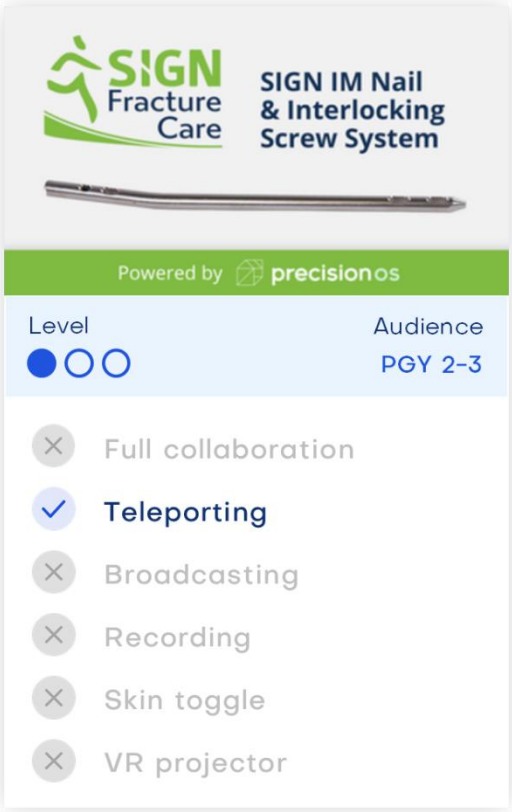
App Walkthrough Video:

Learning objectives:

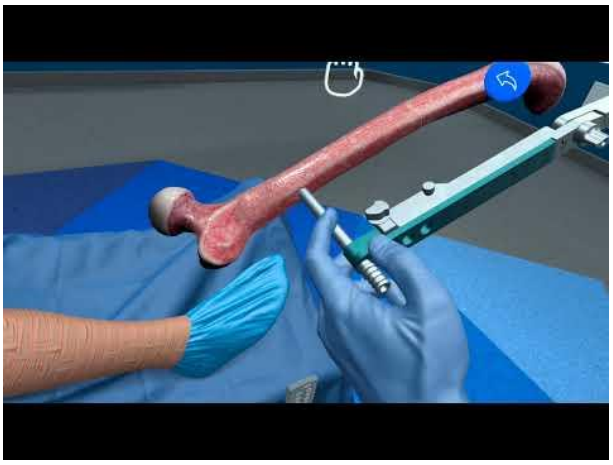
1. Recognize the symptoms related to a collapsed lung
2. Place a decompression needle to resolve a collapsed lung

SIGN IM Nail: Retrograde approach

Retrograde Intramedullary femoral nail insertion by [SIGN Fracture Care](), developed for low-middle income country use.



App Walkthrough Video:



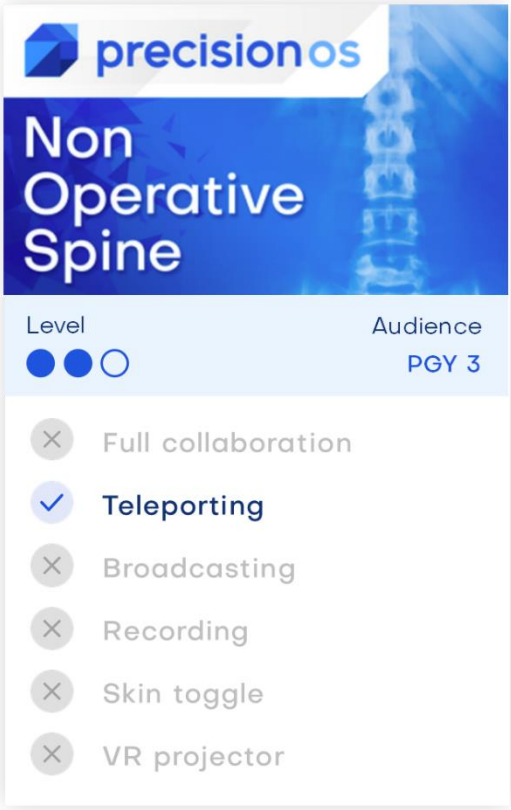
Learning objectives:

1. Describe operative set up and equipment requirements for an intramedullary nail in treatment of a closed, mid-diaphyseal femur fracture.
2. Perform a retrograde intramedullary nail fixation of a mid-diaphyseal femur fracture.

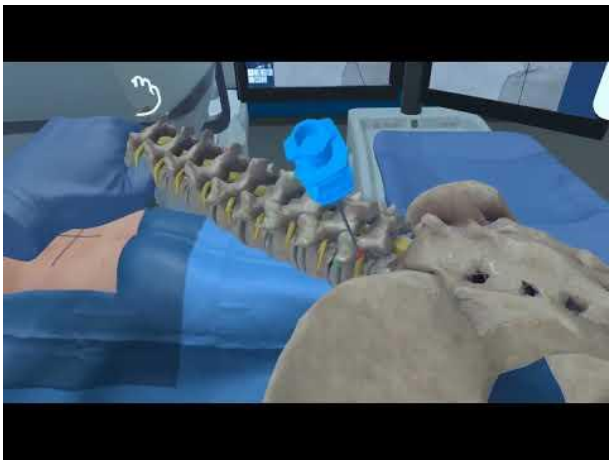
Spine

Minimally Invasive Spine Landmarking

Introduction to imaging and spinal needle insertion to reinforce spine landmarks.



App Walkthrough Video:

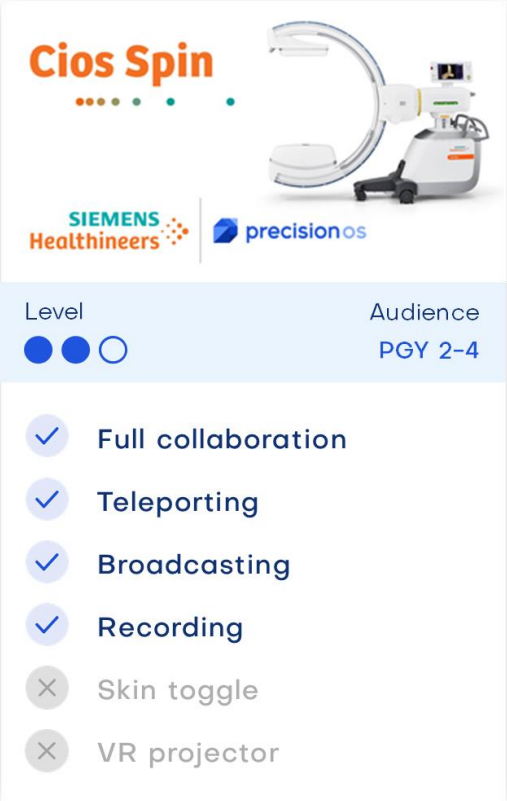


Learning objectives:

1. Demonstrate visuospatial skills for 3D orientation using simulated fluoroscopy to localize relevant structures for non-operative management of degenerative spine disorders.

C-arm Setup: Setup

Prepare and manipulate a C-arm for spine imaging



Case Setup:

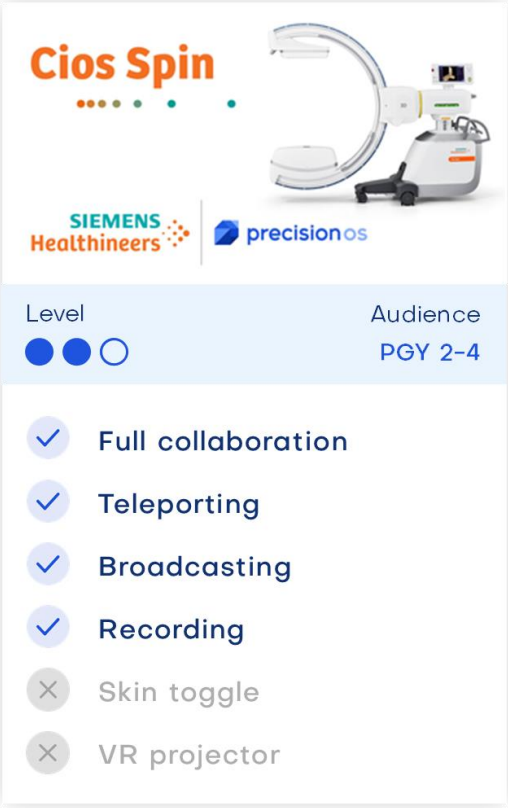
*See Hyperlordosis case for a walkthrough video

Learning objectives:

1. Locate the major components of a C-arm machine.
2. Prepare a C-arm for a spine procedure.
3. Position the C-arm relative to a patient, save position presets and acquire intraoperative images.

C-arm Setup: Optimizing 2D images

Acquire and enhance intraoperative spine images captured on C-arm for spine imaging



Case Setup:

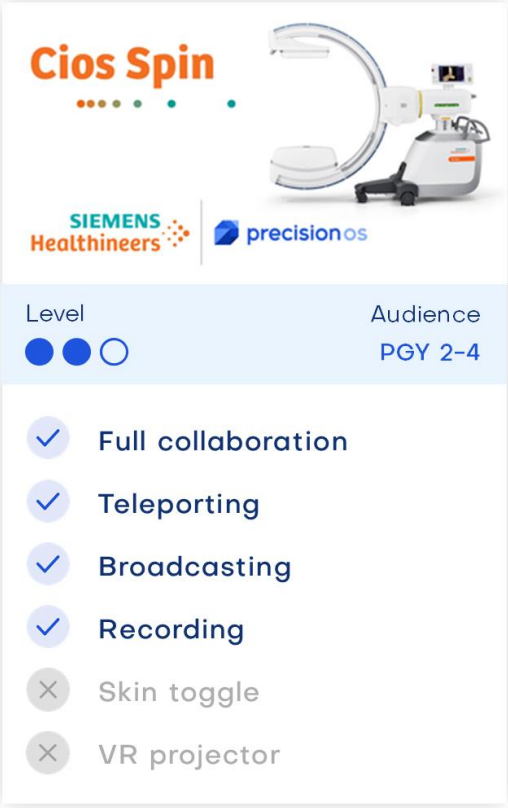
*See Hyperlordosis case for a walkthrough video

Learning objectives:

1. Describer how captured spine images can be manipulated.
2. Use the Spot/Adapt function to optimize radiation dosage to focus specific anatomy.

C-arm Setup: 3D features

Capture a 3D spine scan using a C-arm to visualize pedicle screw hardware intraoperatively



Case Setup:

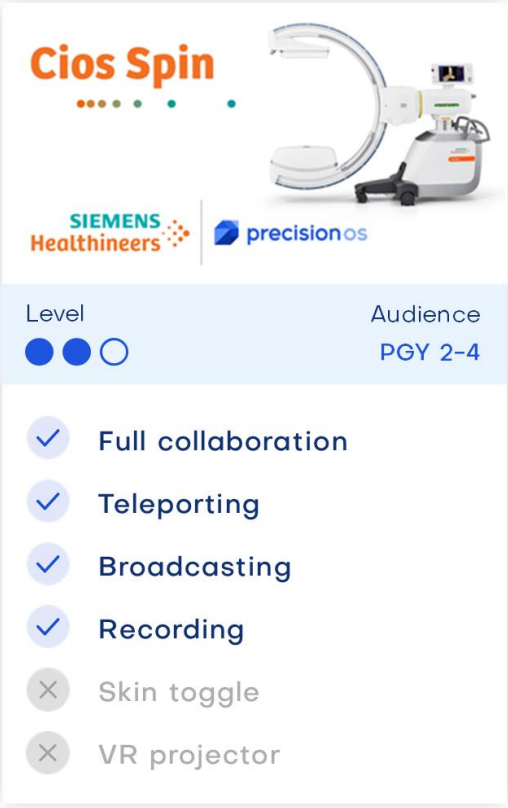
*See Hyperlordosis case for a walkthrough video

Learning objectives:

1. Demonstrate how to capture and refine 3D images of the spine.
2. Describe the benefits of imaging functions that can visualize screws intraoperatively.

Pedicle Screw insertion: Hyperlordosis

Manipulate a C-arm for spine imaging to insert pedicle screws into a patient with hyperlordosis



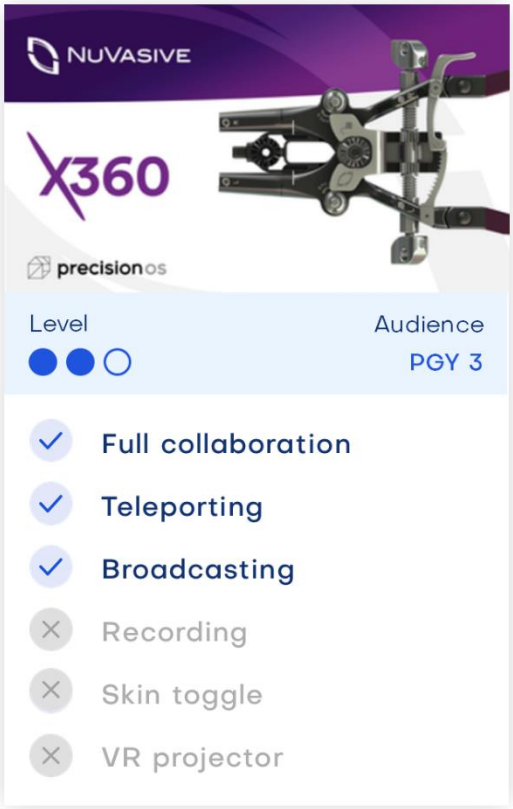
App Walkthrough Video:

Learning objectives:

1. Visualize L1 access on a patient with hyperlordosis using a C-arm.
2. Insert a pedicle screw into L1 of a patient with hyperlordosis and confirm correct placement with intraoperative C-arm imaging.

Lateral Interbody Fusion: Patient positioning

Position and recognize the appropriate setup for a lateral spine procedure.



Case Setup:

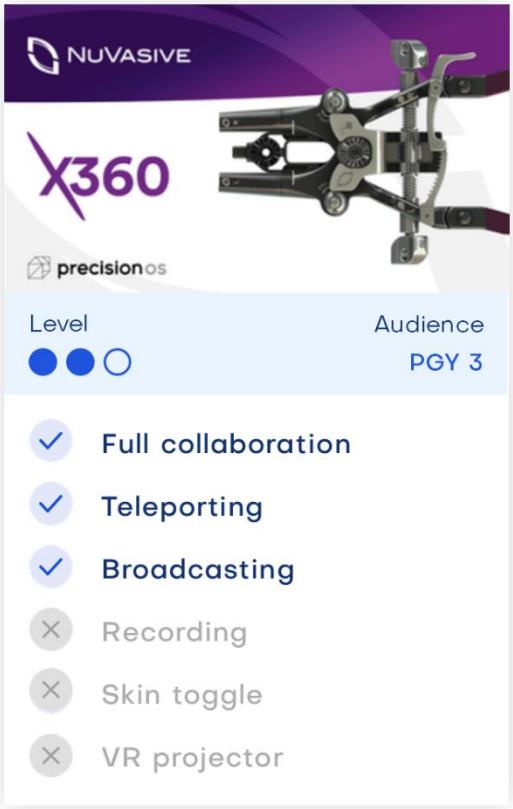
*See XLIF case for a walkthrough video

Learning objectives:

1. Properly position a patient for extreme lateral interbody fusion (XLIF) procedures.
2. Review the fundamentals of patient positioning in the O.R. as it relates to XLIF and XALIF procedures.

Anterior Lumbar Interbody Fusion

Anterio lumbar interbody fusion focusing on a L5-S1 case.



Case Setup:

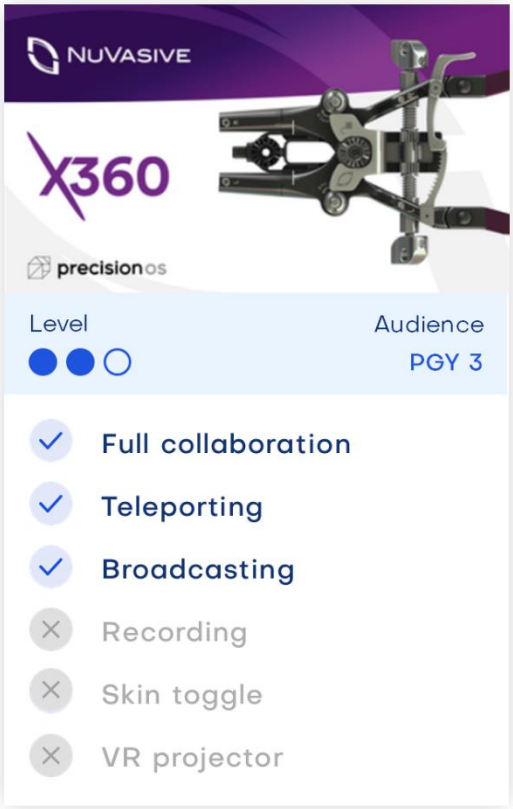
*See XLIF case for a walkthrough video

Learning objectives:

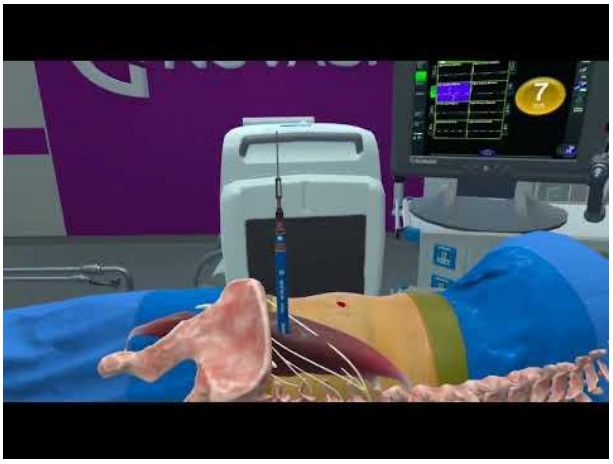
1. Describe the XALIF procedure for accessing L5-S1 in the lateral decubitus position.
2. Perform an XALIF surgical approach for: disc access, removal and placement of the interbody fusion cages with intraoperative fluoroscopy.

Extreme Lateral Interbody Fusion

Extreme Lateral interbody fusion focusing on an L4-L5 degenerative disc.



App Walkthrough Video:

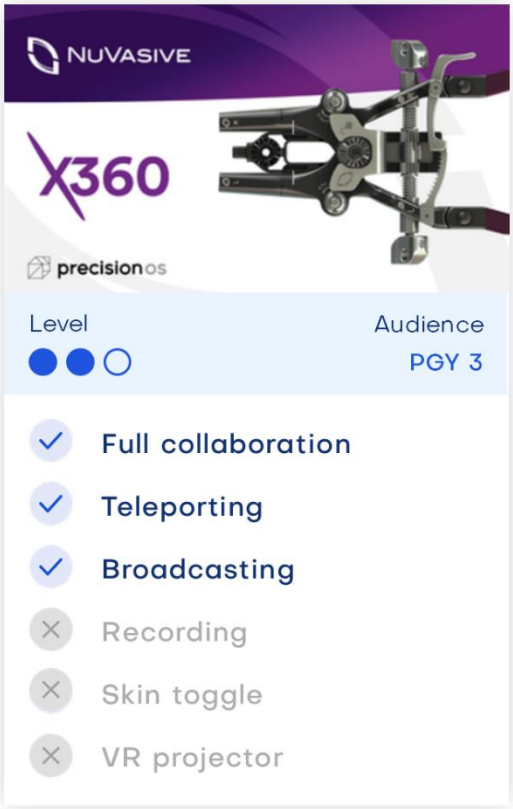


Learning objectives:

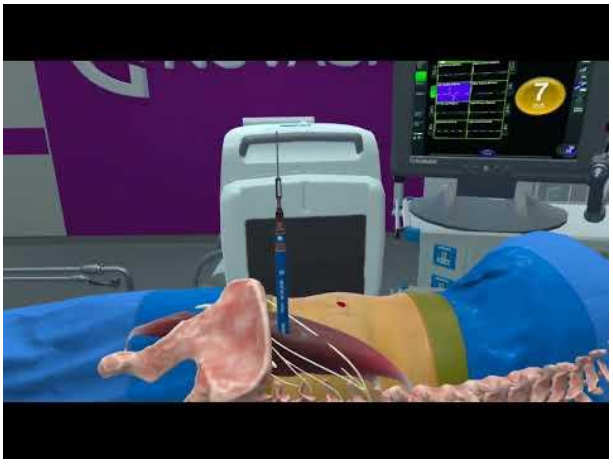
1. Describe XLIF procedure for accessing L4-L5 in the lateral decubitus position.
2. Perform an XLIF surgical approach for: disc access, removal and placement of the interbody fusion cages with intraoperative fluoroscopy.

Lateral Pedicle Screw Insertion

Lateral interbody fusion focusing on pedicle screw insertion.



App Walkthrough Video:



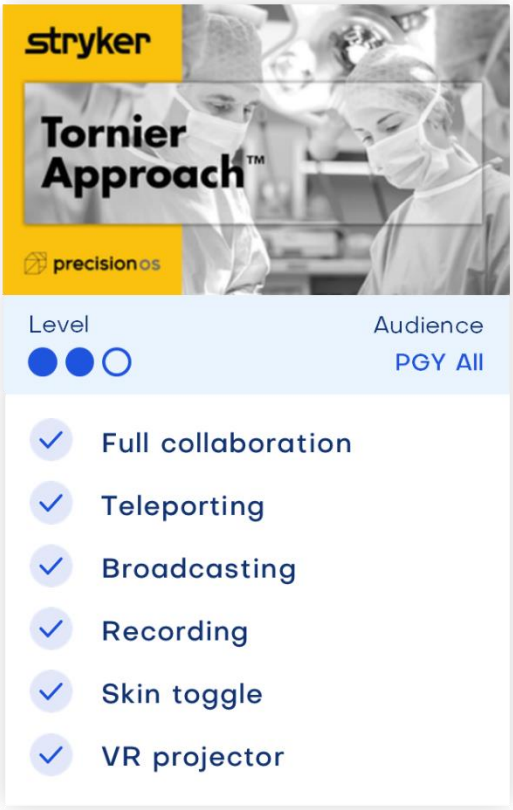
Learning objectives:

1. Summarize X-Fixation's adapted posterior fixation technique from the lateral position for insertion of pedicle screws.

Shoulder and Elbow

Deltopectoral approach and humeral cut

Deltopectoral approach up to and including resecting the humeral head.



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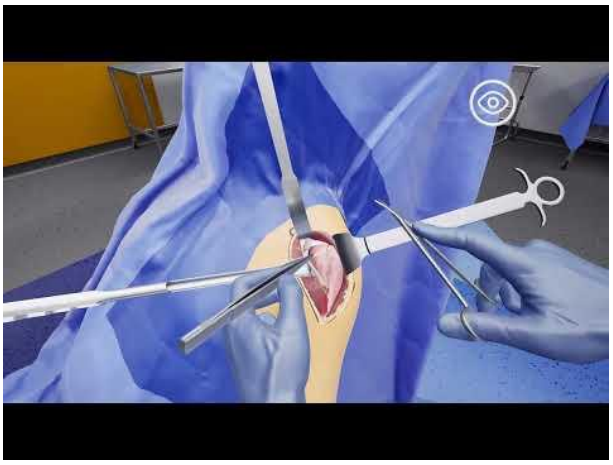
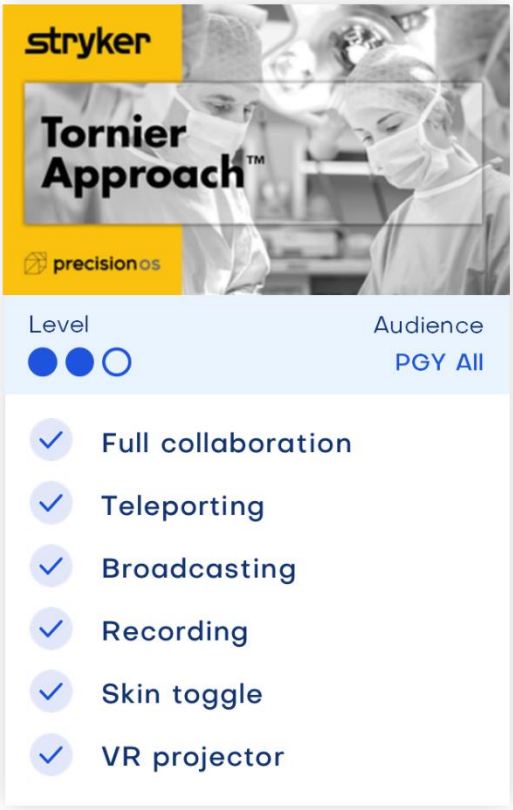


Learning objectives:

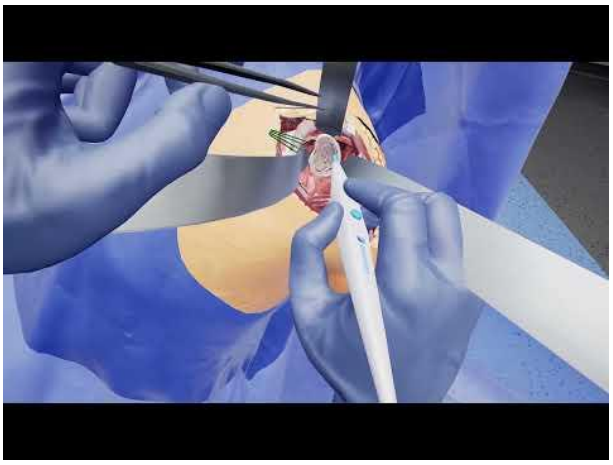
1. Perform the deltopectoral surgical approach and obtain optimum glenoid exposure.
2. Position retractors appropriately for adequate exposure throughout the case.

Glenoid exposure

Retractor placement and dissection for glenoid exposure in total shoulder or trauma surgery.



App Walkthrough Video:

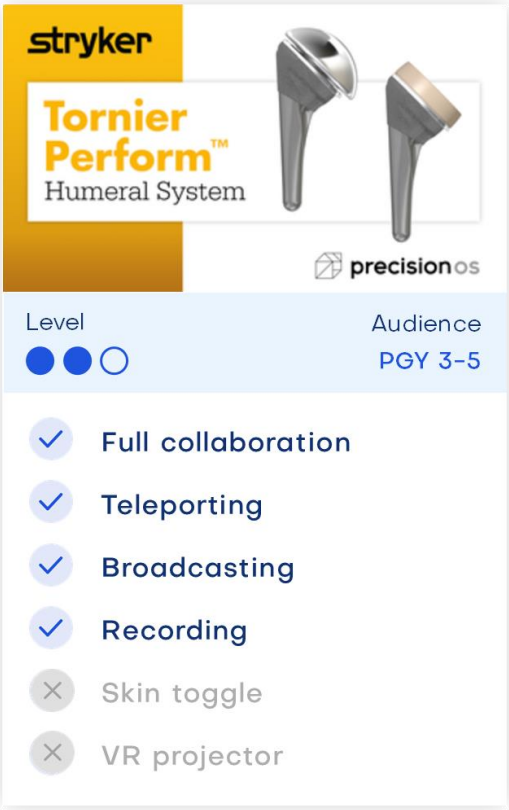


Learning objectives:

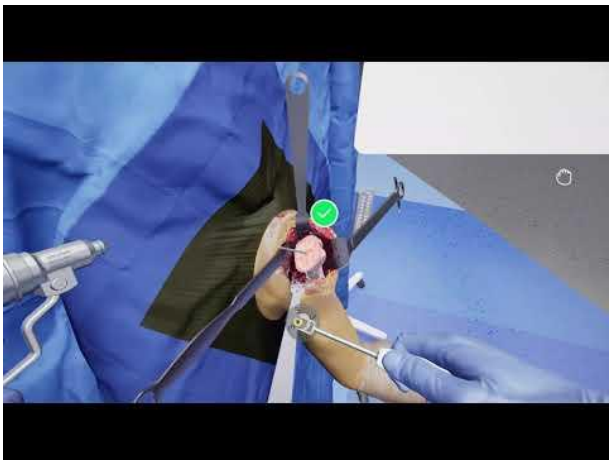
1. Perform the key steps in achieving glenoid exposure for trauma or elective shoulder surgery.

Humerus Preparation and Stem Implant (Anatomic & Reverse)

Humerus preparation for both anatomic and reverse procedures in total shoulder arthroplasty.



App Walkthrough Video:

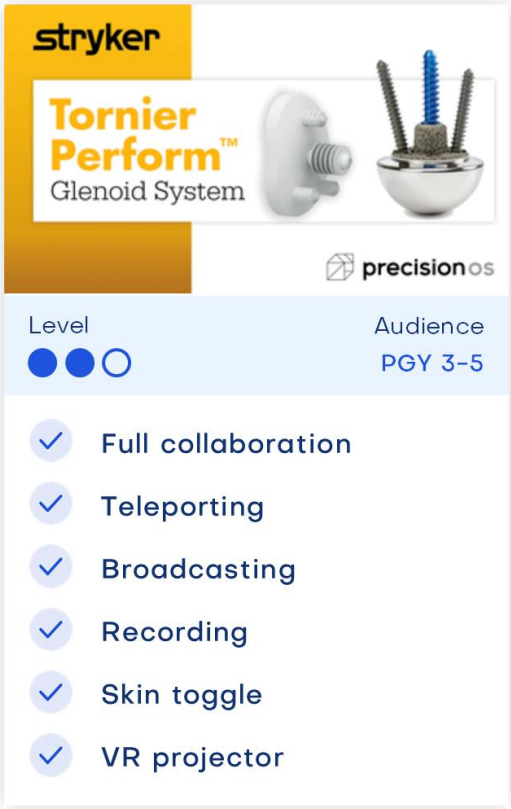


Learning objectives:

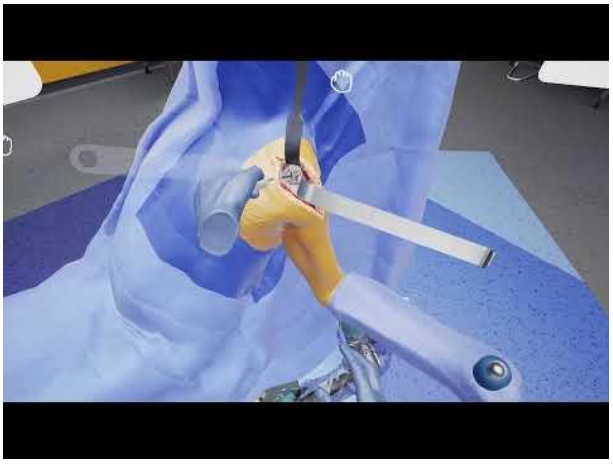
1. Describe operative set up and equipment requirements for performing a shoulder replacement.
2. Perform the humeral side of a shoulder replacement with attention to bony resection and implant insertion techniques.

Glenoid Preparation: Anatomic

Glenoid preparation for an anatomic procedure in total shoulder arthroplasty.



App Walkthrough Video:

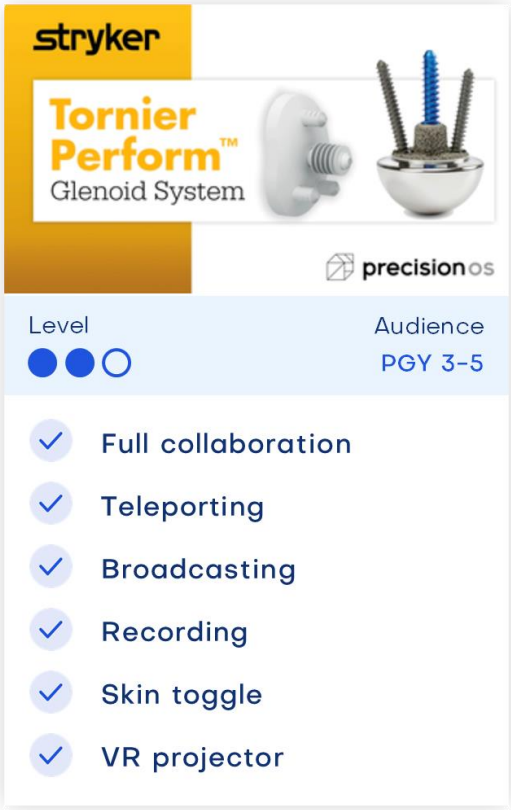


Learning objectives:

1. List the necessary steps to prepare an anatomic glenoid in total shoulder arthroplasty.
2. Utilize a variety of surgical instruments to prepare and size the glenoid for an anatomic implant.

Glenoid Preparation: Reverse

Glenoid preparation for an unaugmented reverse procedure in total shoulder arthroplasty.



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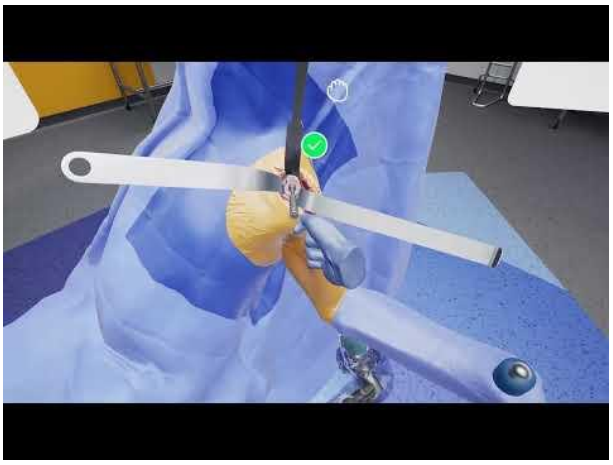
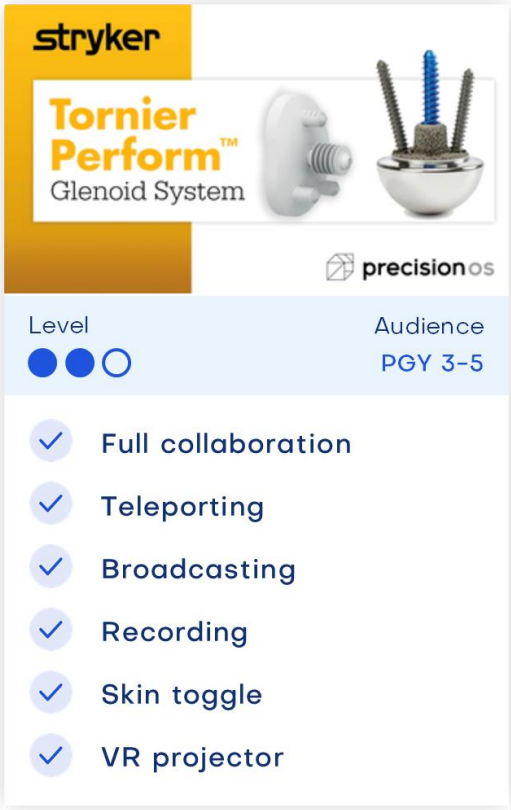


Learning objectives:

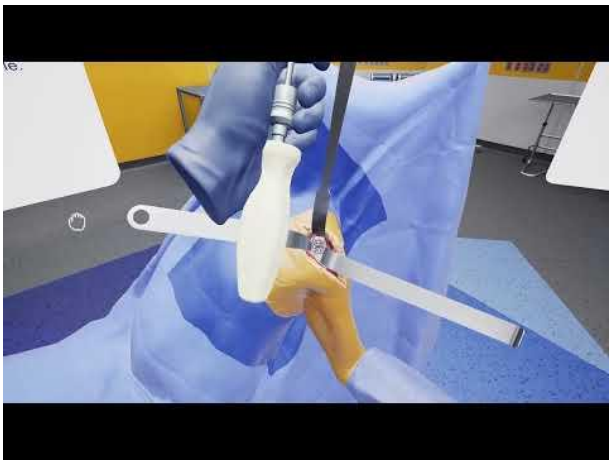
1. List the necessary steps to prepare a reverse glenoid in total shoulder arthroplasty.
2. Utilize a variety of surgical instruments to prepare and size the glenoid for a reverse glenoid.

Glenoid Preparation: Reverse full-wedge

Glenoid preparation for a reverse full-wedge procedure in total shoulder arthroplasty.



App Walkthrough Video:

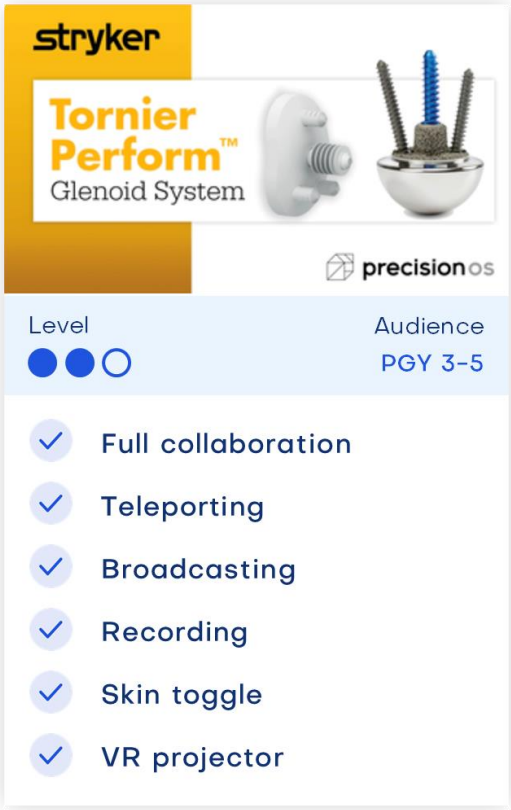


Learning objectives:

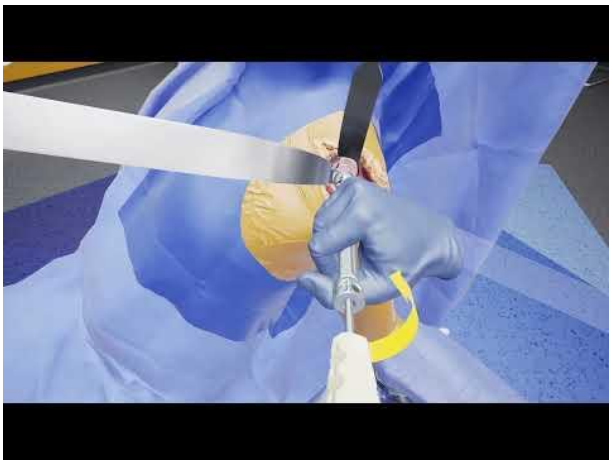
1. List the necessary steps to prepare a reversed full-wedge augmented glenoid in total shoulder arthroplasty.
2. Utilize a variety of surgical instruments to prepare, size and measure for a reversed shoulder implant.

Glenoid Preparation: Reverse half-wedge

Glenoid preparation for a reverse half-wedge procedure in total shoulder arthroplasty.



App Walkthrough Video:

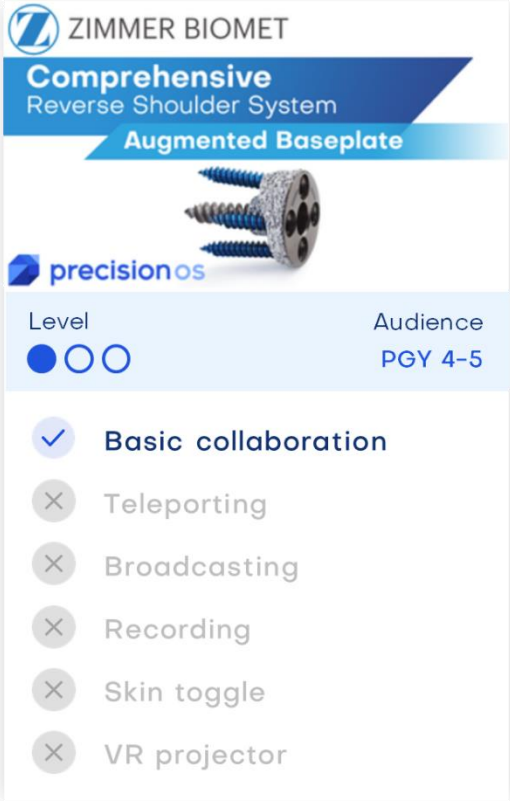


Learning objectives:

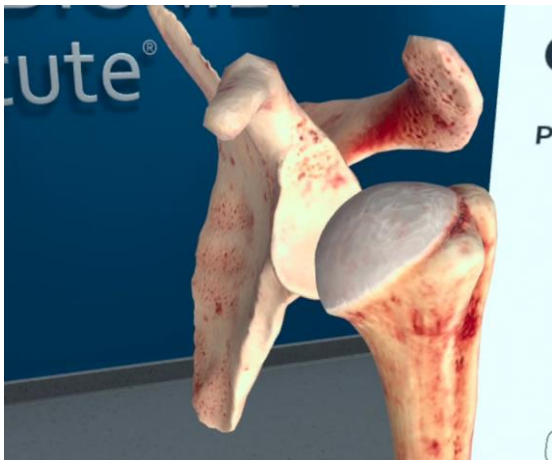
1. List the necessary steps to prepare a reversed half-wedge glenoid in total shoulder arthroplasty.
2. Utilize a variety of surgical instruments to prepare, size and measure for a reversed half-wedge glenoid.

Glenoid Exposure – Total/Reverse Shoulder Arthroplasty

Expose the glenoid from the point of subscapularis release.



Case Setup:



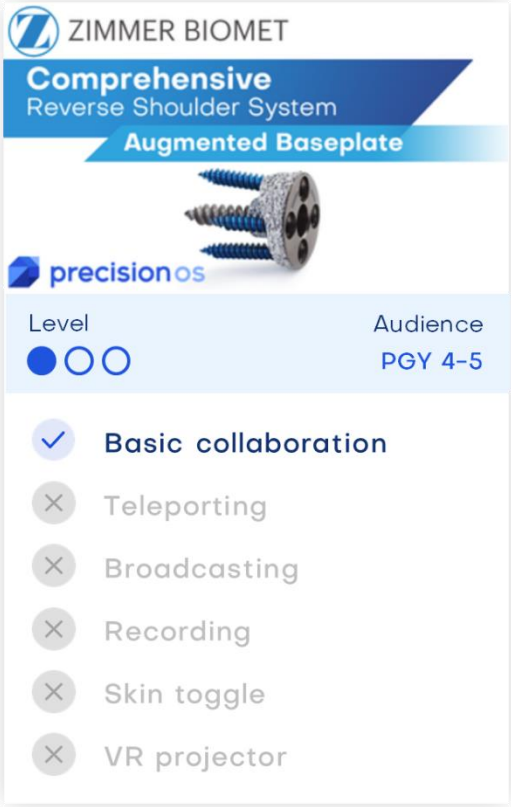
*See Normal case for a walkthrough video

Learning objectives:

1. Perform the steps to achieve glenoid exposure for trauma or elective shoulder surgery.

Reverse Shoulder: Normal Glenoid

Reverse total shoulder arthroplasty for a normal glenoid.



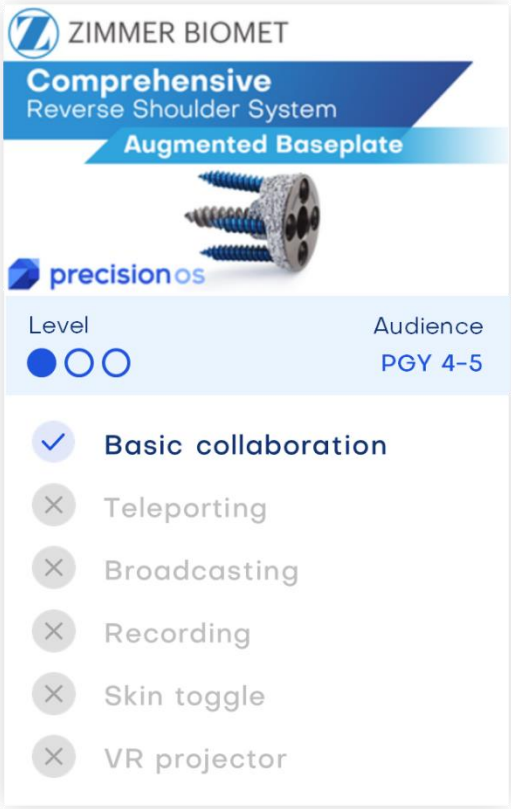
App Walkthrough Video:

Learning objectives:

1. Install a baseplate upon an unremarkable glenoid with no erosion, an average superior inclination of 8–9° and retroversion of 6–7°.

Reverse Shoulder: Walch B1 Glenoid

Reverse total shoulder arthroplasty for a Walch B1 type glenoid.



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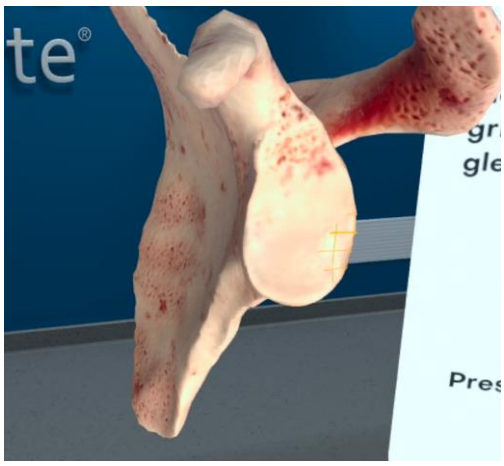


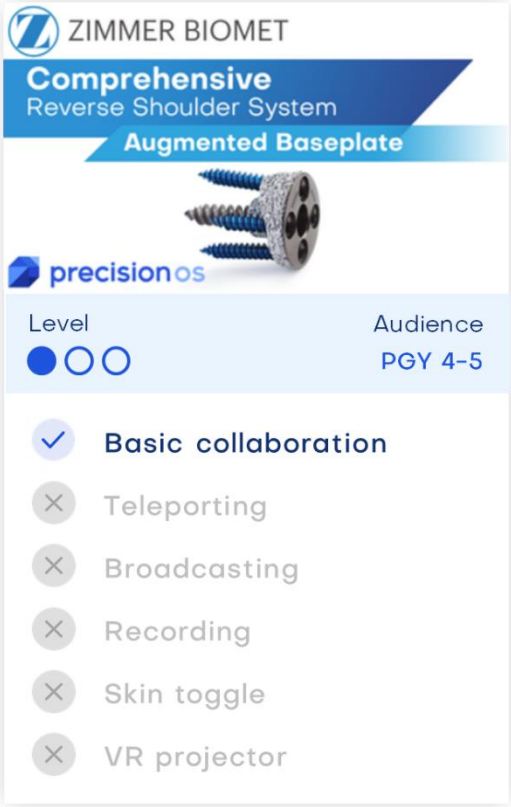
*See Normal case for a walkthrough video

Learning objectives:

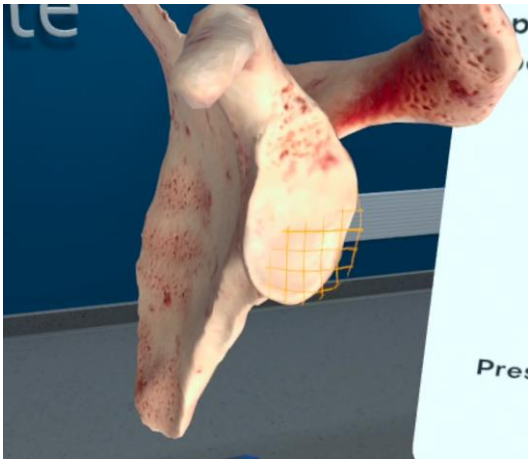
1. Install a baseplate upon Walch B1 glenoid which is perched on the posterior glenoid with some glenoid sclerosis.

Reverse Shoulder: Walch B2 Glenoid

Reverse total shoulder arthroplasty for a Walch B2 type glenoid.



Case Setup:



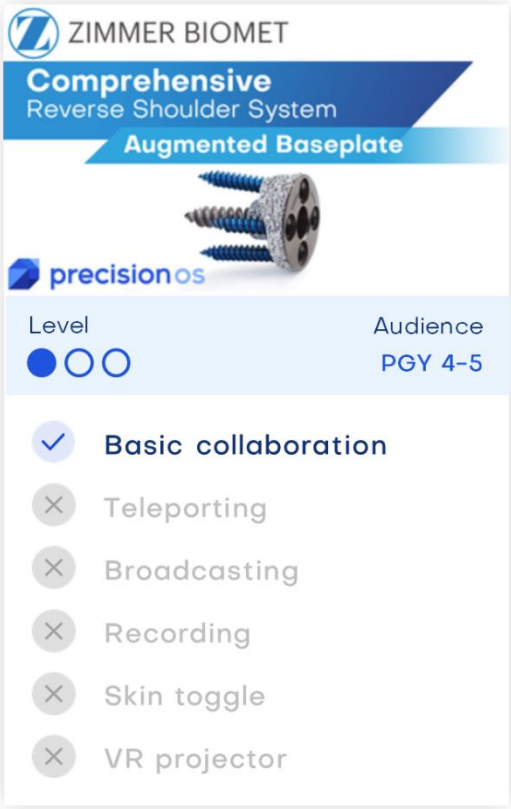
*See Normal case for a walkthrough video

Learning objectives:

1. Install a baseplate upon Walch B2 glenoid which is biconcave and has an anterior paleoglenoid and posteroinferior neoglenoid.

Reverse Shoulder: Walch B3 Glenoid

Reverse total shoulder arthroplasty for a Walch B3 type glenoid.



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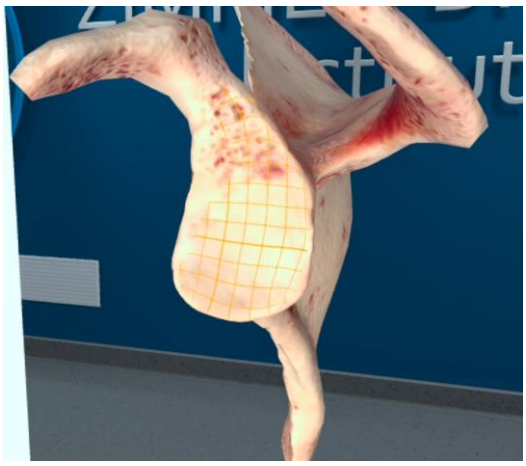


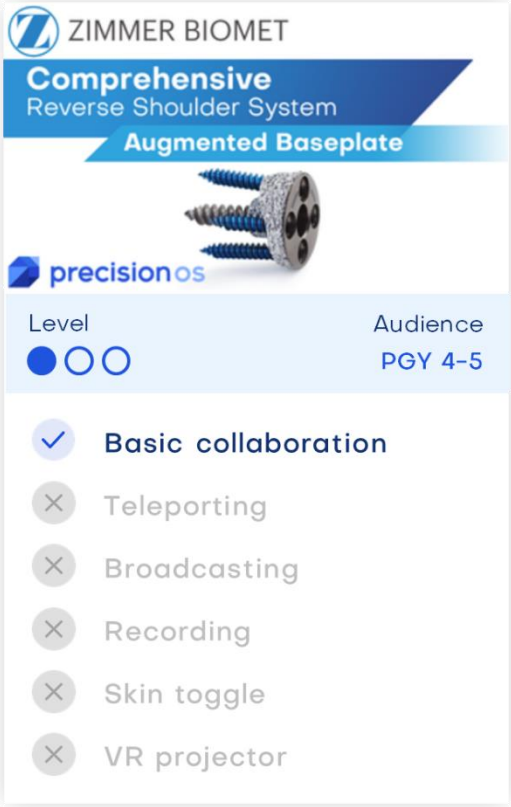
*See Normal case for a walkthrough video

Learning objectives:

1. Install a baseplate upon Walch B2 glenoid which is monoconcave with greater than 15° of retroversion and ~70% posterior humeral head subluxation.

Reverse Shoulder: Favard E0 Glenoid

Reverse total shoulder arthroplasty for a Favard E0 type glenoid.



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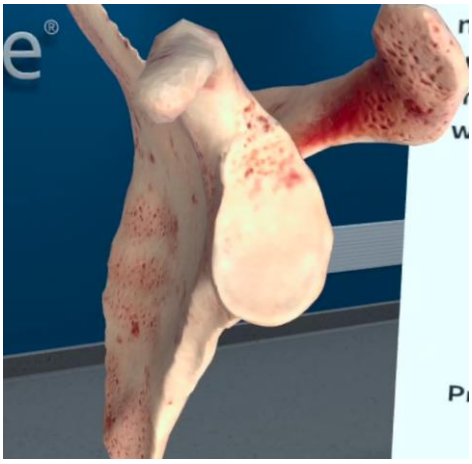


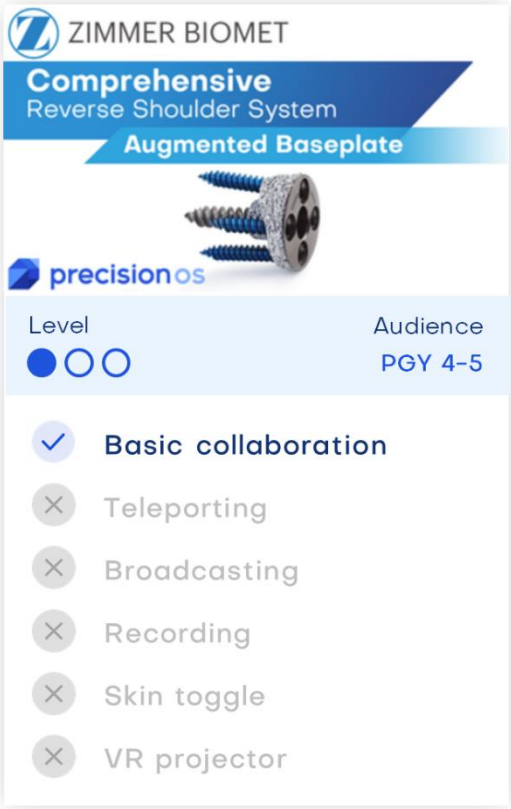
*See Normal case for a walkthrough video

Learning objectives:

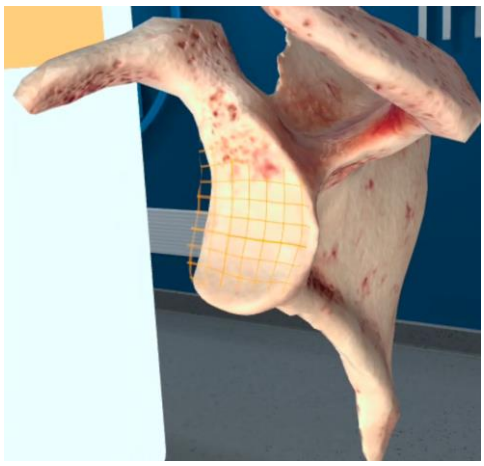
1. Install a baseplate upon a Favard E0 glenoid, which presents in patients with an upward migration of the humeral head without erosion of the glenoid.

Reverse Shoulder: Favard E1 Glenoid

Reverse total shoulder arthroplasty for a Favard E1 type glenoid.



Case Setup:



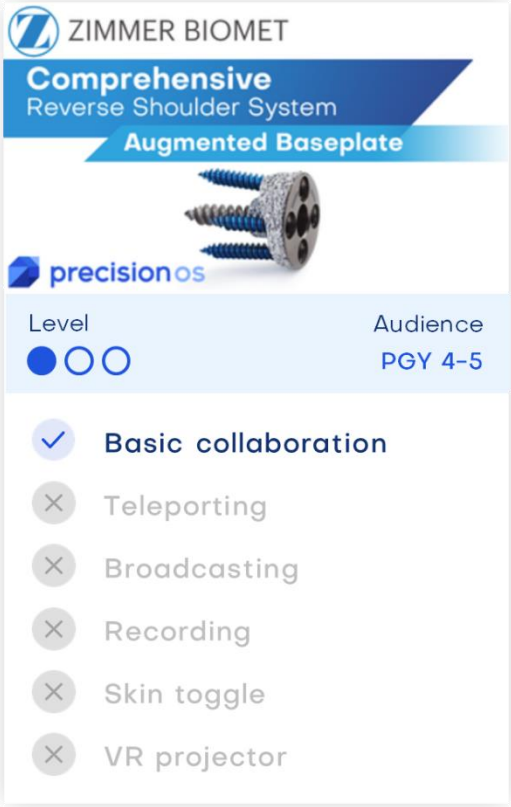
*See Normal case for a walkthrough video

Learning objectives:

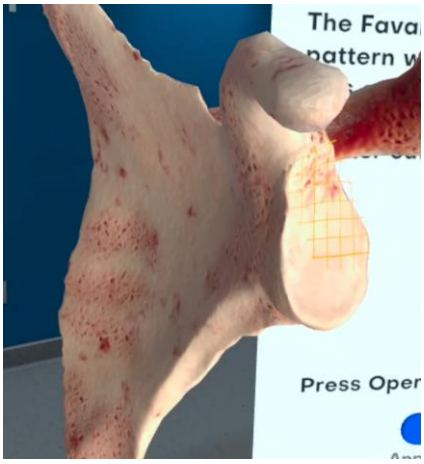
1. Install a baseplate upon a Favard E1 glenoid, which has a concentric medial central erosion of the glenoid with the rim well preserved.

Reverse Shoulder: Favard E2 Glenoid

Reverse total shoulder arthroplasty for a Favard E2 type glenoid.



Case Setup:



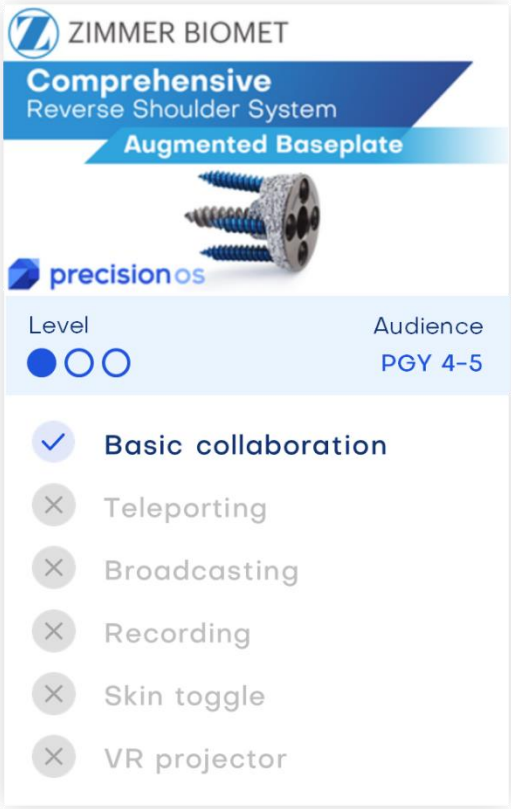
*See Normal case for a walkthrough video

Learning objectives:

1. Install a baseplate upon a Favard E2 glenoid that has an erosion patter which is posterosuperior.

Reverse Shoulder: Favard E3 Glenoid

Reverse total shoulder arthroplasty for a Favard E3 type glenoid.



Case Setup:

*See Normal case for a walkthrough video

Learning objectives:

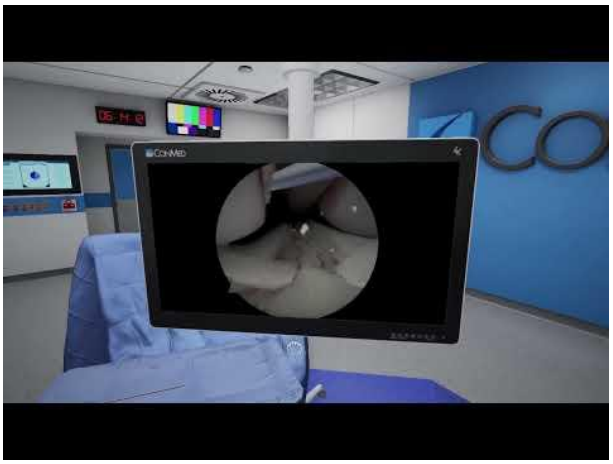
1. Install a baseplate upon a Favard E3 glenoid, which has erosion that extends along nearly the entire glenoid face.

Sports

Anteromedial ACL Reconstruction

Arthroscopic ACL reconstruction including femoral and tibial tunnel positioning and graft fixation.

App Walkthrough Video:



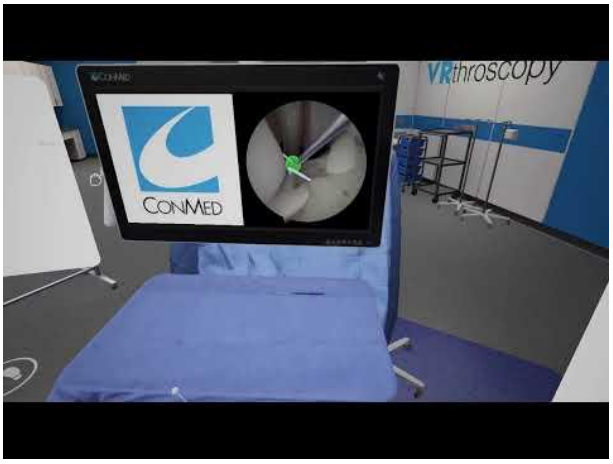
Learning objectives:

1. Utilize limb positioning, and arthroscopic triangulation skills to enable anatomic graft fixation.
2. Summarize the complete approach to an anteromedial ACL reconstruction.

All inside ACL Reconstruction

Arthroscopic ACL reconstruction featuring an all-inside approach.

App Walkthrough Video:



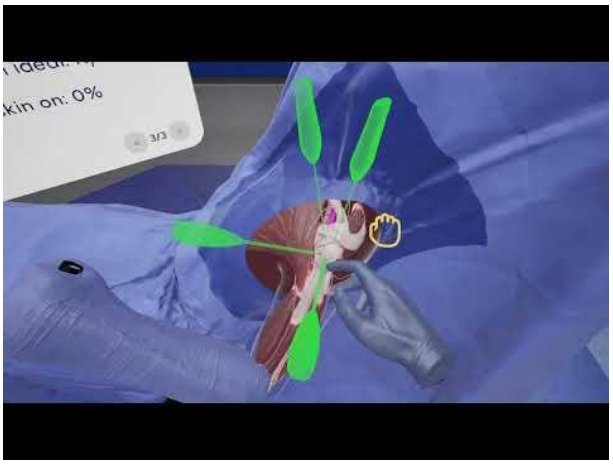
Learning objectives:

1. Utilize arthroscopic triangulation skills to position and place graft sockets that mimic anatomic ACL.
2. Summarize the complete approach to an all-inside ACL reconstruction.

Rotator Cuff Repair

Arthroscopic double row repair including anchor placement and suture management.

App Walkthrough Video:



Learning objectives:

1. Describe operative set up and equipment requirements for performing an arthroscopic double row rotator cuff repair.
2. Visualize the subacromial space and position suture anchors to repair torn supraspinatus and infraspinatus tendons.

Hip Arthroscopy: Femoroacetabular Impingement

Arthroscopically address femoroacetabular impingement.

App Walkthrough Video:

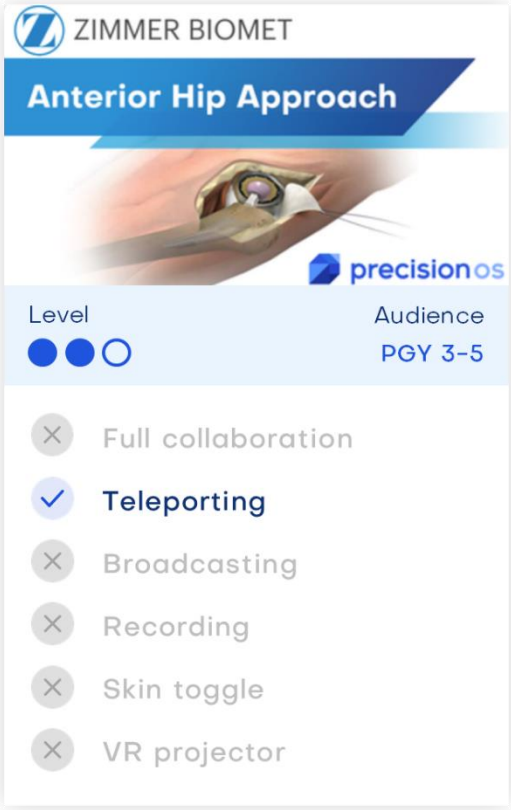
Learning objectives:

1. Demonstrate visuospatial skills for 3D orientation using simulated fluoroscopy and arthroscopic viewing portals about the hip.
2. Recognize how to position instruments appropriately identify and remove impinging bone in FAI.

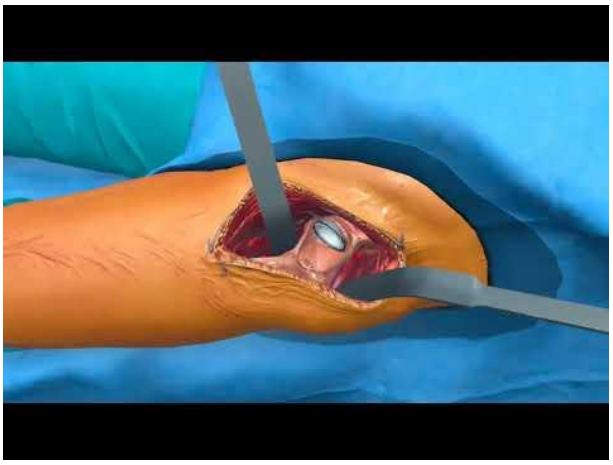
Hip and Knee

Direct Anterior Hip Approach

Total hip arthroplasty using a direct anterior approach.



App Walkthrough Video:

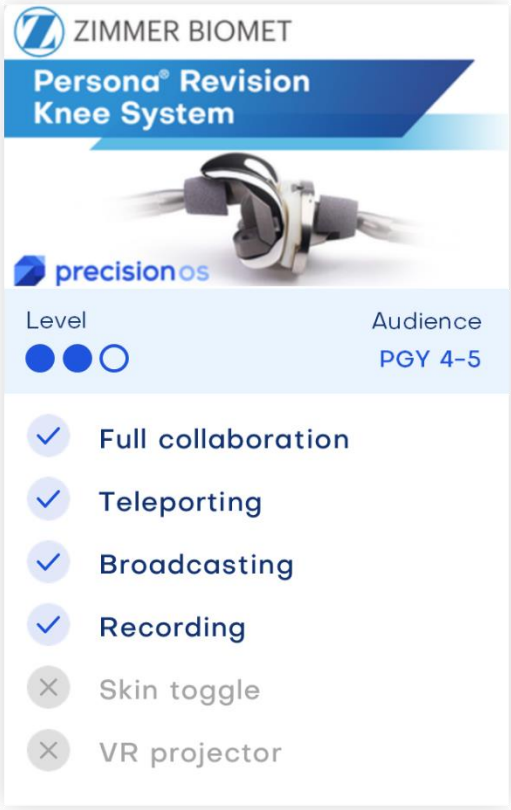


Learning objectives:

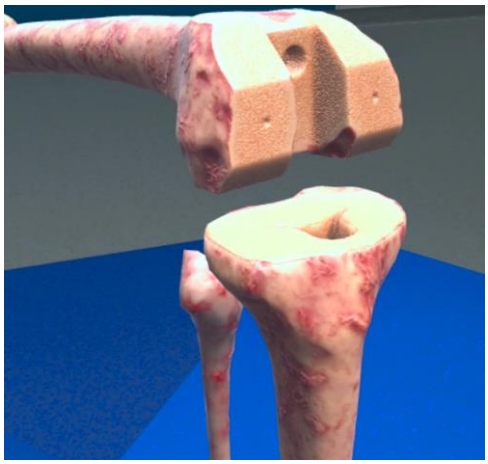
1. Perform an anterior hip approach, and recognize intervals, structures at risk, and the proper use of retractors to obtain adequate acetabular exposure.
2. Describe standard total hip arthroplasty through an anterior hip approach.

Revision Knee: Tibial central cone & revision femur

Nine cases revising tibial and femoral bone cuts, balancing flexion and extension and implant sizing.



Case Setup:



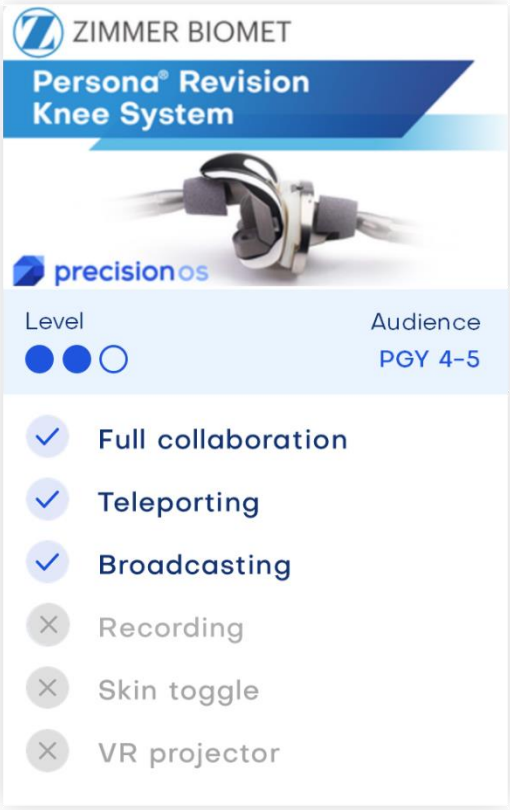
*Example Tibial walkthrough video
*Example Femur walkthrough video

Learning objectives:

1. Perform a revision total knee arthroplasty for a failed primary total knee for a central tibial defect requiring a cone, the femur is a revision.
2. Restate the direct sequences of key steps in revision knee arthroplasty.

Revision Knee: Tibial offset & revision femur

Nine cases revising tibial and femoral bone cuts, balancing flexion and extension and implant sizing.



Case Setup:

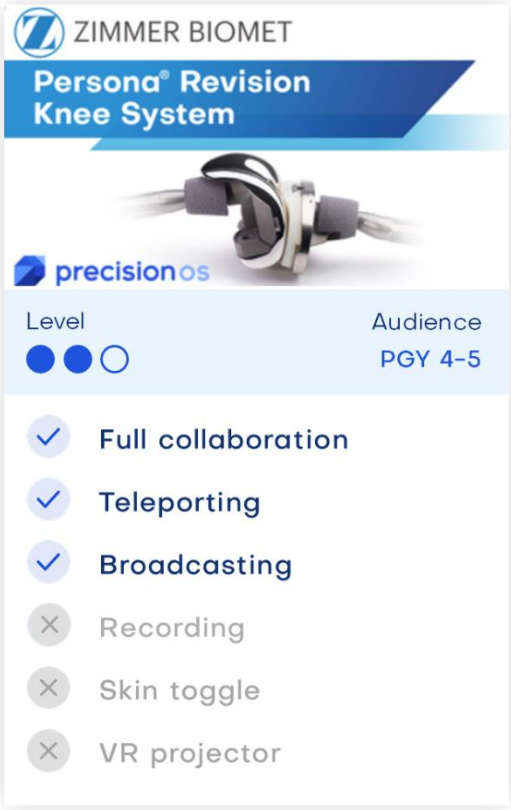
*Example Tibial walkthrough video
*Example Femur walkthrough video

Learning objectives:

1. Perform a revision total knee arthroplasty for a failed primary total knee requiring an offset tibial stem, the femur is a revision.
2. Restate the direct sequences of key steps in revision knee arthroplasty.

Revision Knee: Medial tibial augment & revision femur

Nine cases revising tibial and femoral bone cuts, balancing flexion and extension and implant sizing.



Case Setup:

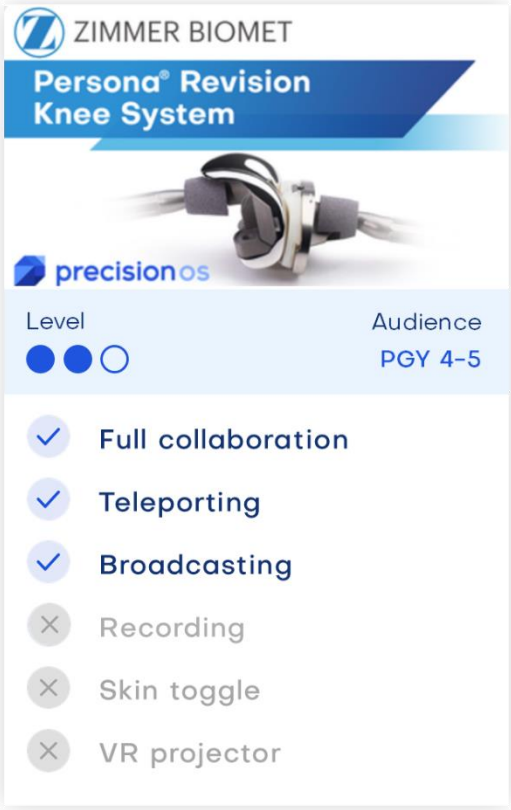
*Example Tibial walkthrough video
*Example Femur walkthrough video

Learning objectives:

1. Perform a revision total knee arthroplasty for a failed primary total knee involving a medial tibia defect that requires an augment, the femur is a revision.
2. Restate the direct sequences of key steps in revision knee arthroplasty.

Revision Knee: Tibial central cone & femoral offset cone

Nine cases revising tibial and femoral bone cuts, balancing flexion and extension and implant sizing.



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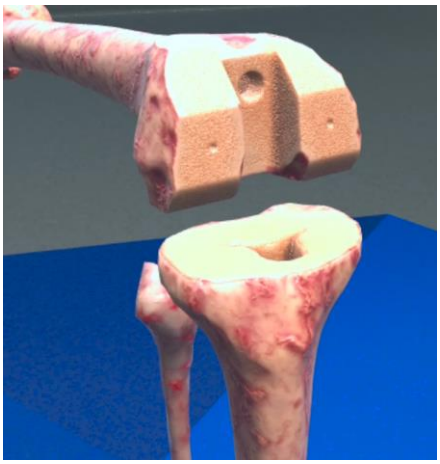


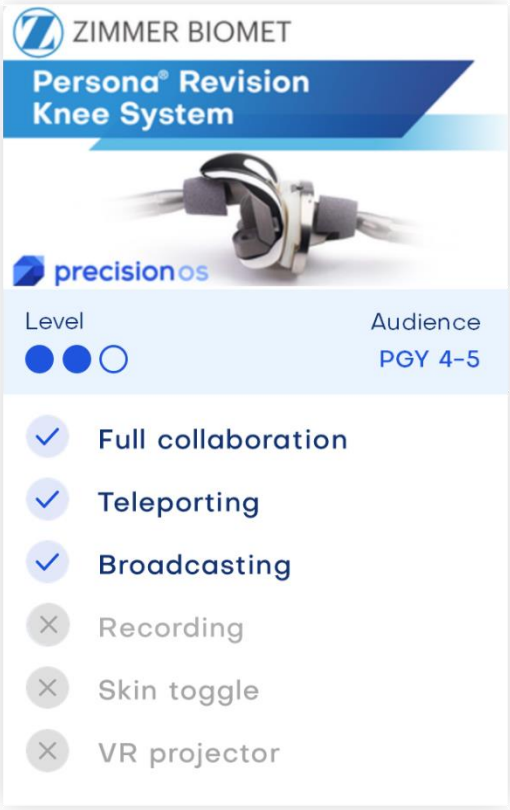
*Example Tibial walkthrough video
*Example Femur walkthrough video

Learning objectives:

1. Perform a revision total knee arthroplasty for a failed primary total knee involving a central tibial defect requiring a cone, the femur revision requires an offset femoral stem and cone.
2. Restate the direct sequences of key steps in revision knee arthroplasty.

Revision Knee: Tibial offset & femoral offset

Nine cases revising tibial and femoral bone cuts, balancing flexion and extension and implant sizing.



App Walkthrough Video:

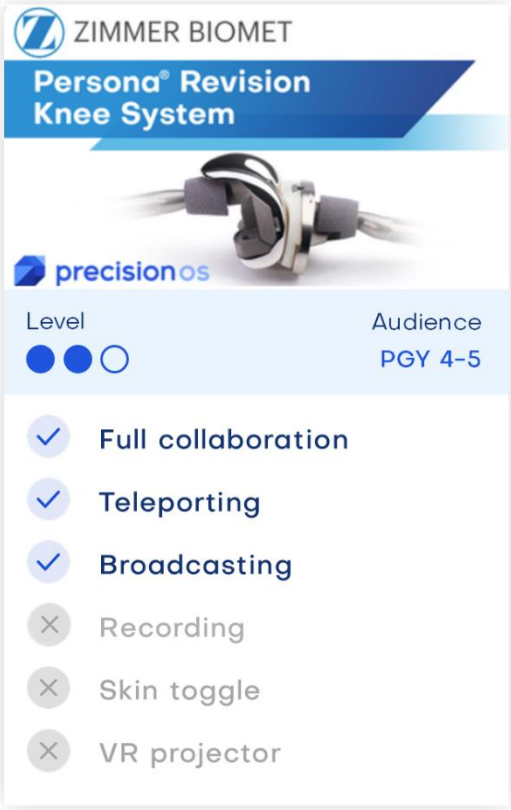
*Example Tibial walkthrough video
*Example Femur walkthrough video

Learning objectives:

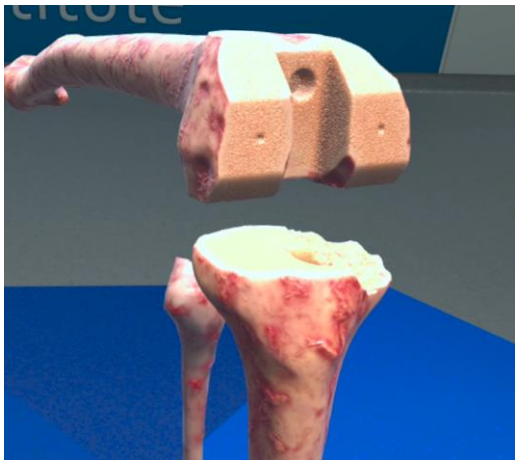
1. Perform a revision total knee arthroplasty for a failed primary total knee requires both tibial and femoral offset stems.
2. Restate the direct sequences of key steps in revision knee arthroplasty.

Revision Knee: Tibial augment & femoral offset

Nine cases revising tibial and femoral bone cuts, balancing flexion and extension and implant sizing.



App Walkthrough Video:



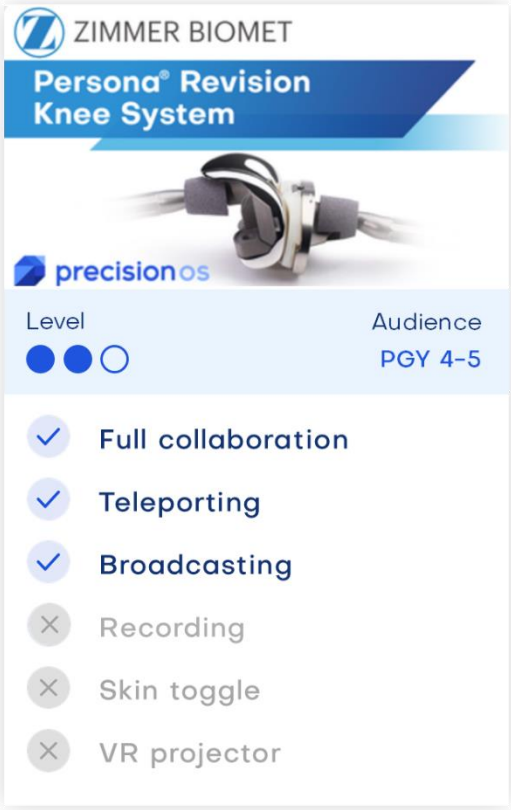
*Example Tibial walkthrough video
*Example Femur walkthrough video

Learning objectives:

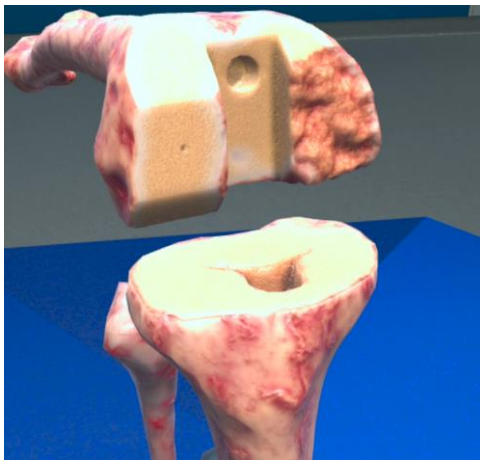
1. Perform a revision total knee arthroplasty for a failed primary total knee involves a medial tibial defect requiring augment, and femoral offset stem and cone.
2. Restate the direct sequences of key steps in revision knee arthroplasty.

Revision Knee: Tibial central cone & femoral augment

Nine cases revising tibial and femoral bone cuts, balancing flexion and extension and implant sizing.



Case Setup:



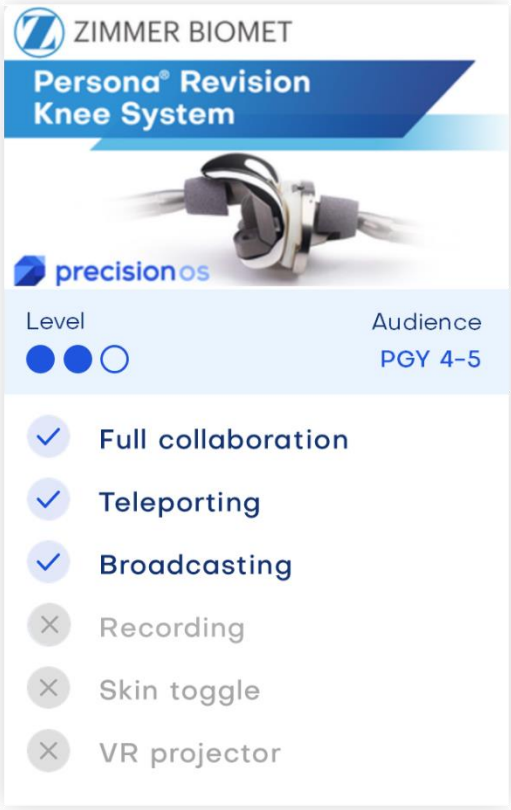
*Example Tibial walkthrough video
*Example Femur walkthrough video

Learning objectives:

1. Perform a revision total knee arthroplasty for a failed primary total knee involving a central tibial defect requiring a cone, the femur presents with a medial defect requiring an augment.
2. Restate the direct sequences of key steps in revision knee arthroplasty.

Revision Knee: Tibial offset & medial femoral augment

Nine cases revising tibial and femoral bone cuts, balancing flexion and extension and implant sizing.



Case Setup:

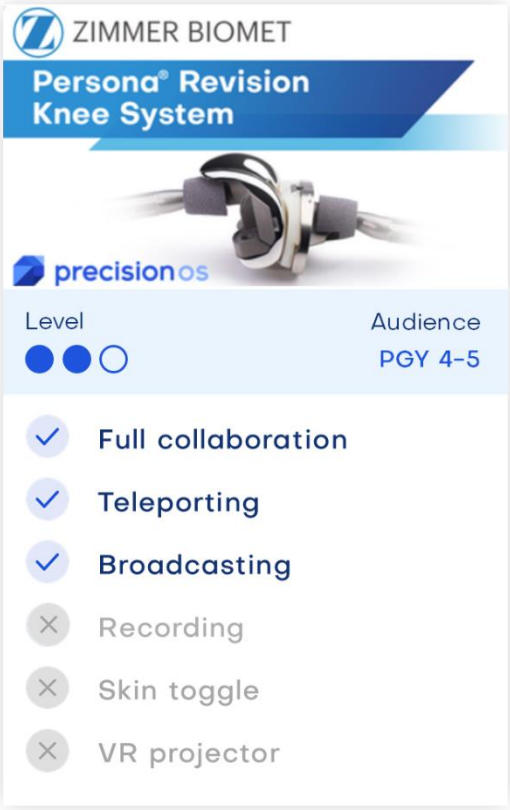
*Example Tibial walkthrough video
*Example Femur walkthrough video

Learning objectives:

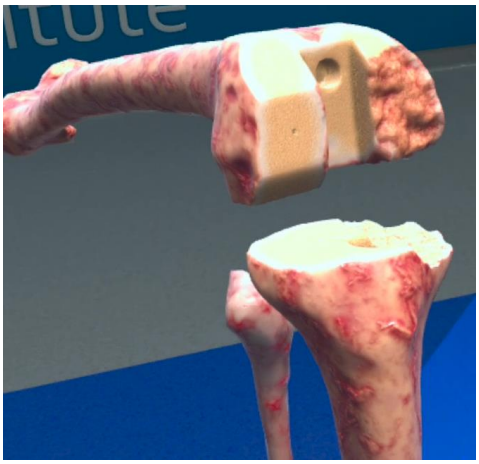
1. Perform a revision total knee arthroplasty for a failed primary total knee requiring an offset tibial stem, and femoral augment for a medial defect.
2. Restate the direct sequences of key steps in revision knee arthroplasty.

Revision Knee: Medial tibial augment & medial femoral augment

Nine cases revising tibial and femoral bone cuts, balancing flexion and extension and implant sizing.



Case Setup:



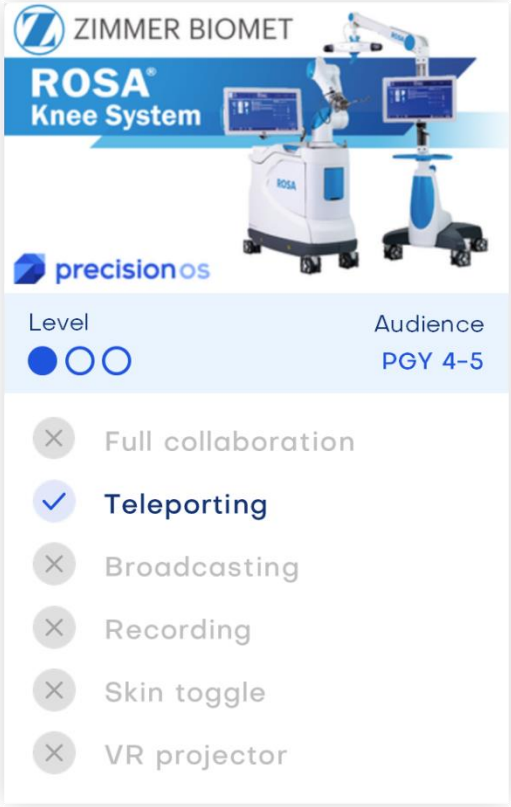
*Example Tibial walkthrough video
*Example Femur walkthrough video

Learning objectives:

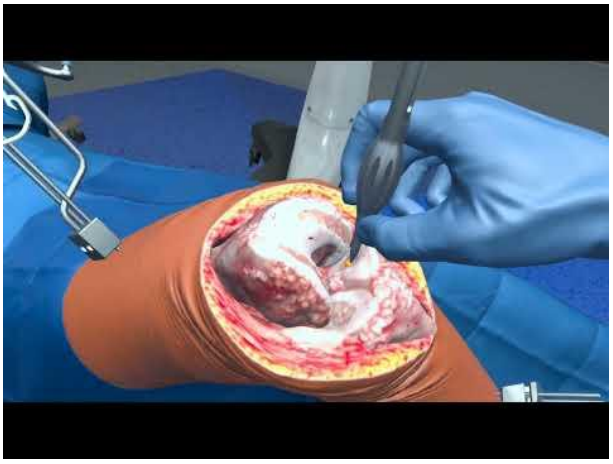
1. Perform a revision total knee arthroplasty for a failed primary total knee involves a medial defect on both tibia and femur requiring augments.
2. Restate the direct sequences of key steps in revision knee arthroplasty.

Robotic total knee

Robotically assisted total knee arthroplasty.



App Walkthrough Video:



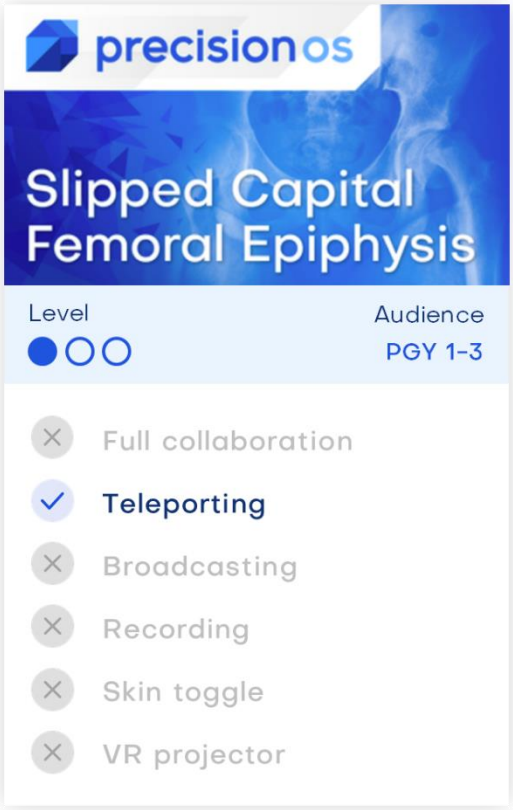
Learning objectives:

1. Perform a TKA using robotic assistance for a primary, varus, degenerative knee.
2. Describe varus and valgus alignment, range of motion, degrees of resection, rotation measurements through the epicondylar axis, and flexion and extension balancing.

Pediatrics

Slipped Capital Femoral Epiphysis: Mild

Develop C-Arm skills to understand starting points and screw placement for three different scenarios.



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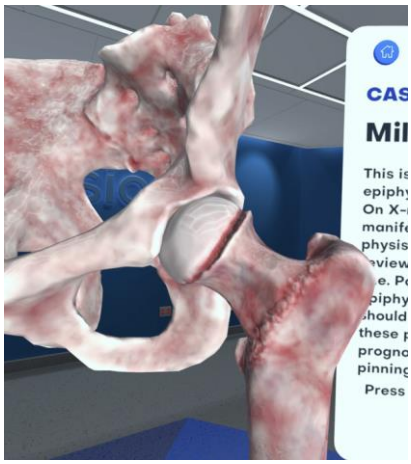


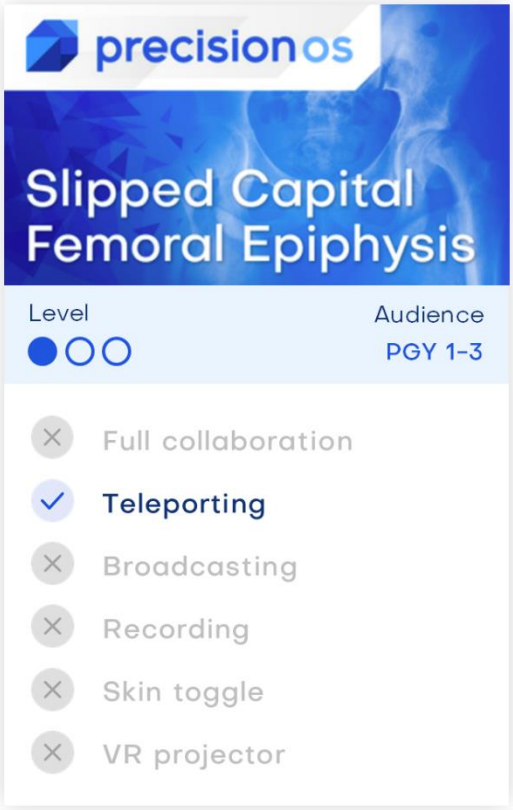
*See Moderate case for a walkthrough video

Learning objectives:

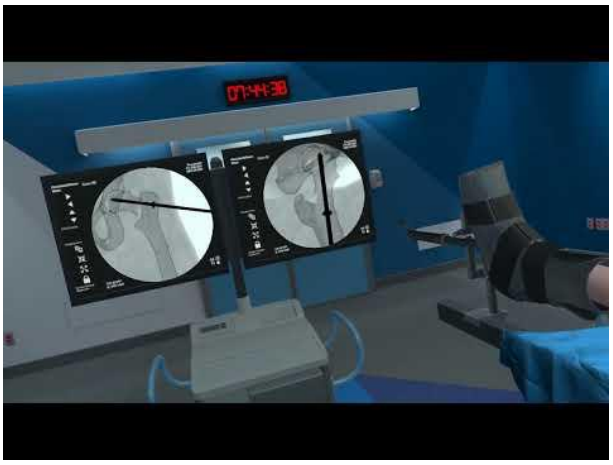
1. Describe operative set up and equipment requirements for in situ pinning of a mild SCFE.
2. Perform a SCFE percutaneous in situ fixation with a single cannulated screw, perpendicular to the physis with at least 5 threads across the physis.

Slipped Capital Femoral Epiphysis: Moderate

Develop C-Arm skills to understand starting points and screw placement for three different scenarios.



App Walkthrough Video:

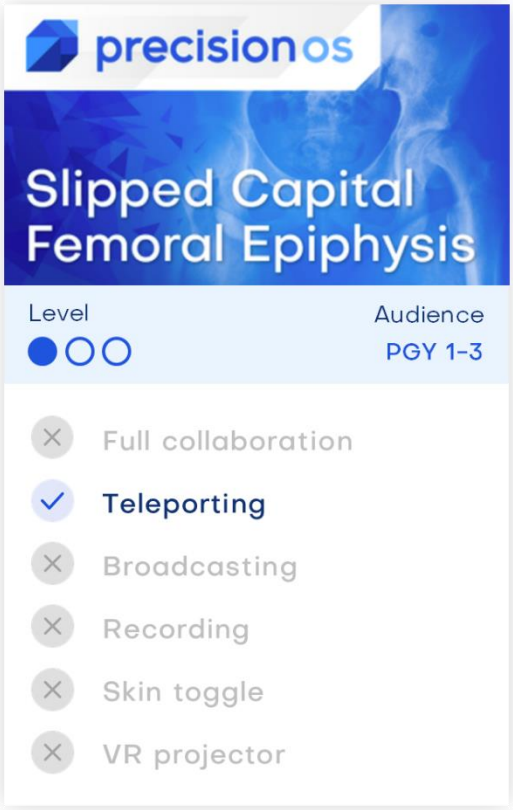


Learning objectives:

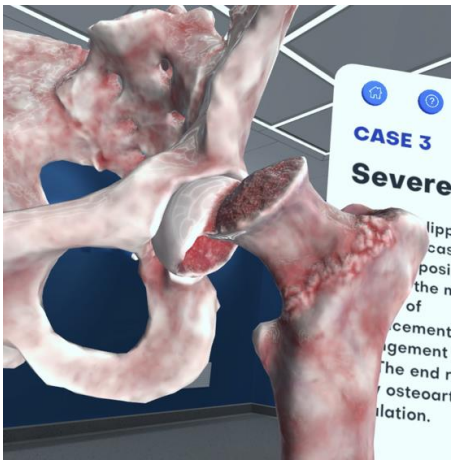
1. Describe operative set up and equipment requirements for in situ pinning of a moderate SCFE.
2. Perform a SCFE percutaneous in situ fixation with a single cannulated screw, perpendicular to the physis with at least 5 threads across the physis.

Slipped Capital Femoral Epiphysis: Severe

Develop C-Arm skills to understand starting points and screw placement for three different scenarios.



Case Setup:



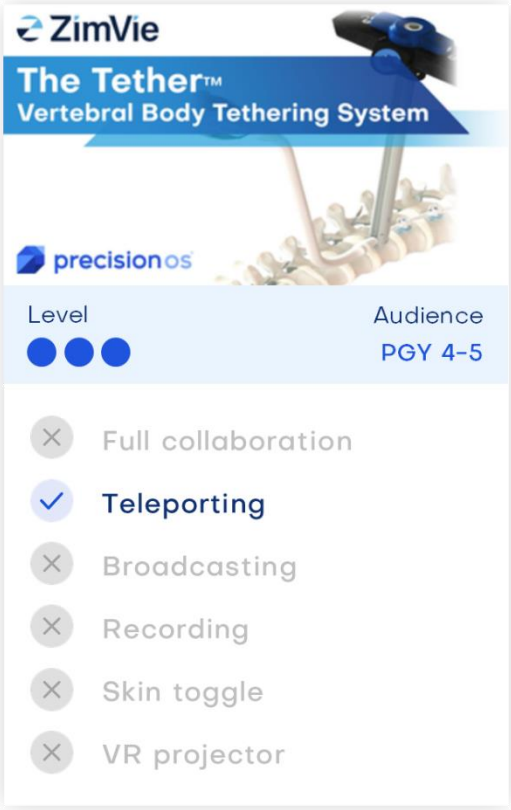
*See Moderate case for a walkthrough video

Learning objectives:

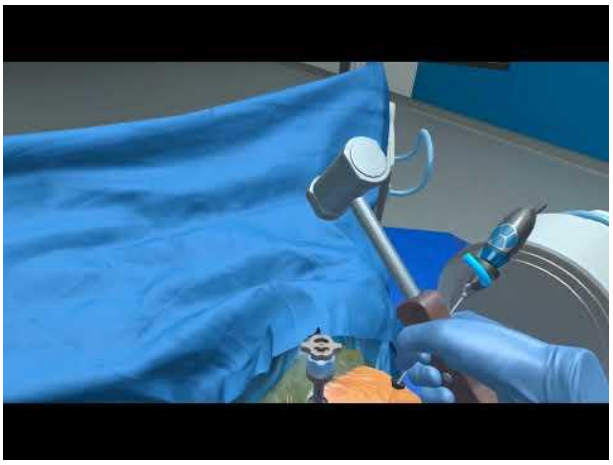
1. Describe operative set up and equipment requirements for in situ pinning of a severe SCFE.
2. Perform a SCFE percutaneous in situ fixation with a single cannulated screw, perpendicular to the physis with at least 5 threads across the physis.

Vertebral Body Tethering

Deformity correction of adolescent idiopathic scoliosis including using the C-Arm to correctly place vertebral screws.



App Walkthrough Video:



Learning objectives:

1. Recognize patient positioning and local spinal anatomy for the safe insertion of screws and tethers.
2. Perform a spinal tethering procedure for a Lenke 1 curve.