precisionos

VR Packages

2025

CONTENTS

This document contains the available PrecisionOS surgical simulation packages along with their learning objectives and associated walkthrough videos.

FractureLab Package

Fracture care makes up over 40% of the surgical case requirements for orthopedic residents. With a significant technical breakthrough, PrecisionOS has unlocked the ability to generate a virtually unlimited number of fracture cases, ensuring that new, challenging cases are generated regularly.

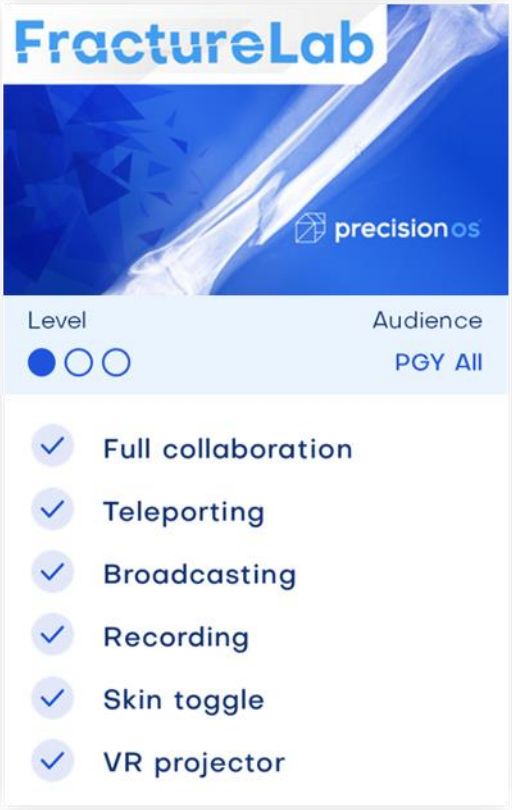
Practice pinning, plating and more on a virtual patient. Toggle structures ON or OFF to help triangulate surgical anatomy, practice identifying structures under flouro in a radiation-free, patient-safe environment.

This package contains the following applications:

1. FractureLab
2. Proximal Femoral Nail
3. Orthopedic Trauma
4. Connected Care Medical Module
5. SIGN IM Nail: Retrograde approach

FractureLab

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



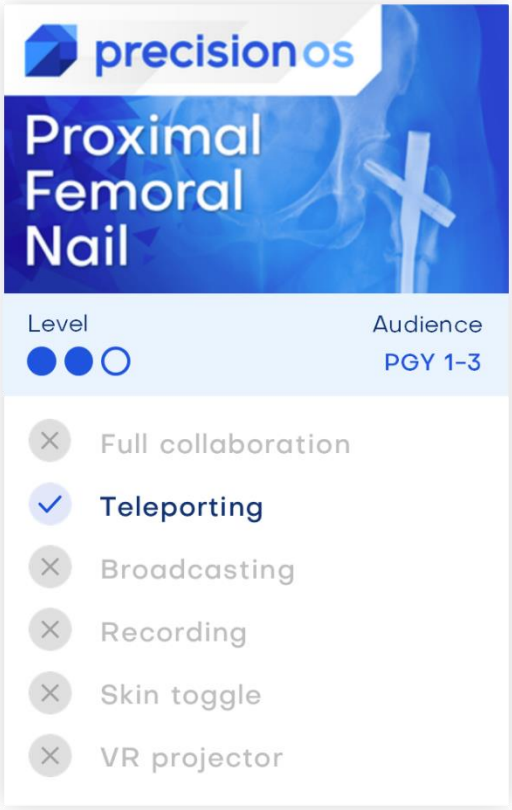
App Walkthrough Video:

Learning objectives:

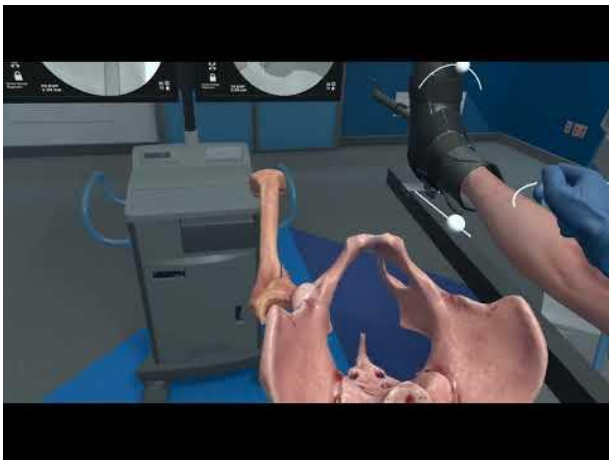
1. Choose from a catalogue of fracture cases
2. Utilize a C-arm to image fracture planes and guide placement of hardware devices.

Proximal Femoral Nail

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



App Walkthrough Video:

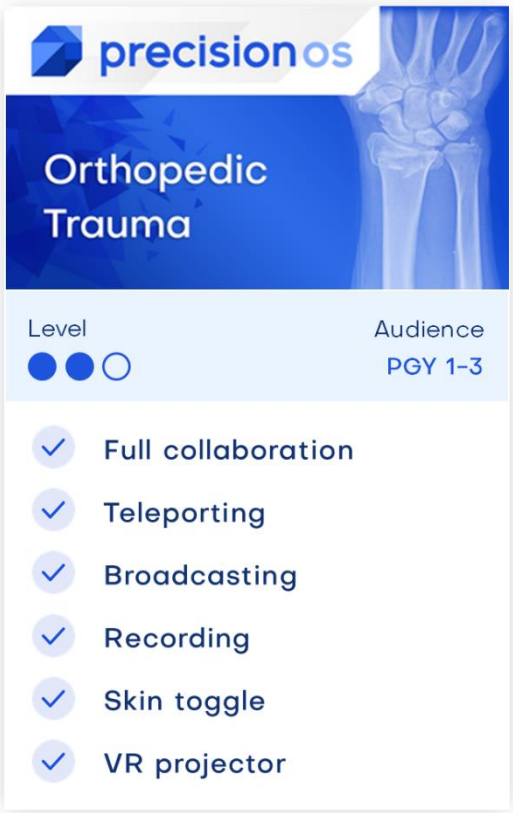


Learning objectives:

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:

Closed reduction and percutaneous pinning of a distal radius fracture.



App Walkthrough Videos:

Case 1: Distal radius

Case 2: Medial malleolus

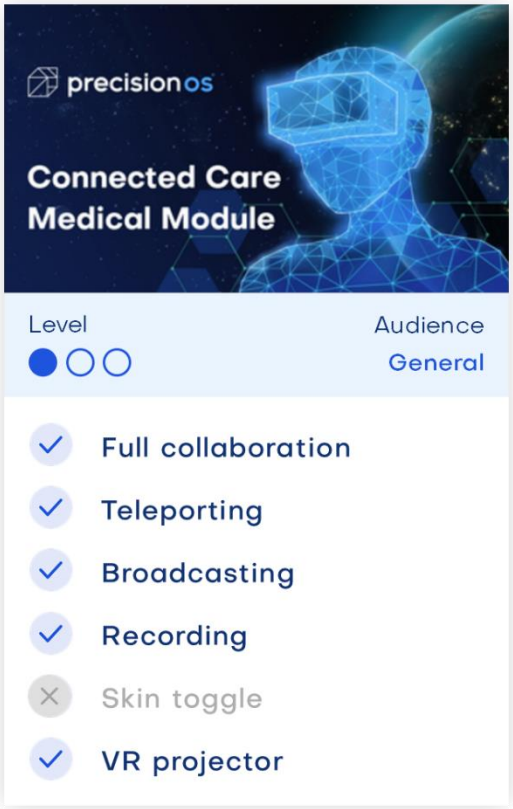
Case 3: Syndesmosis injury

Learning objectives:

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

Connected Care Medical Module:

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



App Walkthrough Videos:

Case 1: CPR

Case 2: Dislocated shoulder

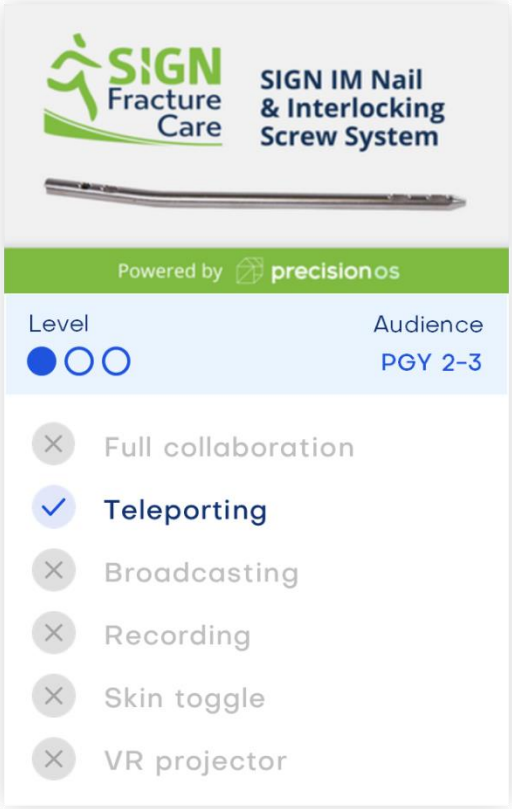
Case 3: Tension pneumothorax

Learning objectives:

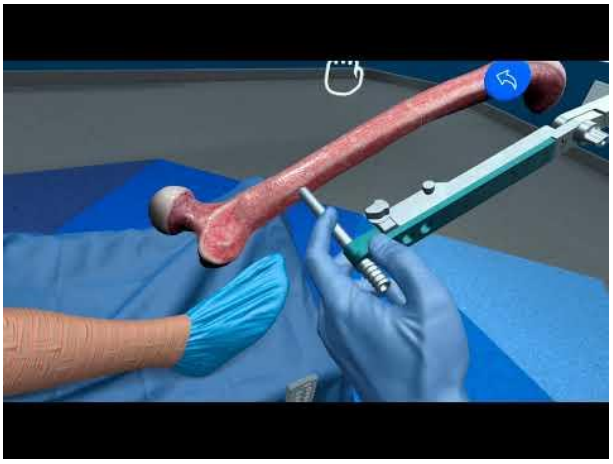
1. Identify acute emergency scenarios and practice appropriate techniques for rescue.

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.

BodyWorks with Delphi

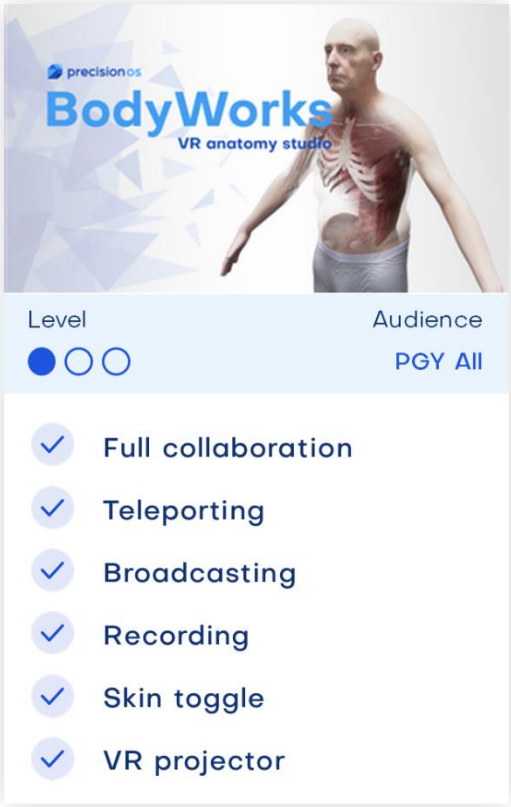
Learning Anatomy is complex and challenging, but BodyWorks brings it to life in 3D to help you triangulate and understand how structures impact each other.

Focus on key areas of the musculoskeletal system, learn about the deltopectoral approach, study organs, directional planes, and manipulate an upright and prone patient to prepare for OR cases and exams. Additionally, you can create video content for your research papers, CV, or other educational needs, impressing your team while mastering anatomy.

PrecisionOS just released Delphi, our conversation AI Anatomy tutor. Ask Delphi to quiz you, help you navigate through the app or highlight key structures you need to learn more about.

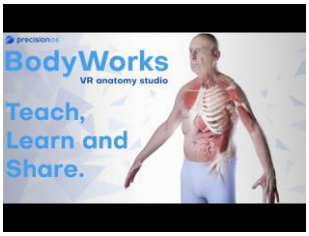
BodyWorks with Delphi

BodyWorks is a fully featured anatomy application focused on surgical education. Our integrated AI agent, Delphi, can manipulate visual models, highlight key structures, clarify complex anatomy, and even create targeted questions.



App Walkthrough Videos:

Case 1: Anatomy Studio



Delphi – AI Agent

Case 2: Surgical Anatomy

Learning objectives:

1. Visualize relevant musculoskeletal, nervous, and circulatory structures throughout the human body.
2. Refine your visuospatial understanding of anatomy in the context of surgery.

Sports/Arthroscopy Package

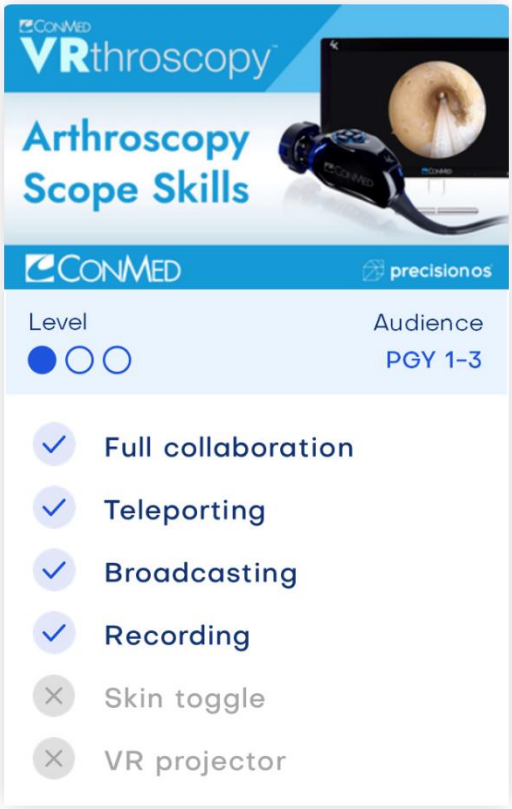
Mastering the scope is tough with the OR time you're getting during residency, and you can't use most simulators at home. Spending just 10 minutes a week in our sports apps will elevate your skills so you show up OR ready every time.

This package contains the following applications:

1. Arthroscopy Scope Skills
2. Anteromedial ACL Reconstruction
3. All inside ACL Reconstruction
4. Rotator Cuff Repair
5. Hip Arthroscopy: Femoroacetabular Impingement
6. Diagnostic Shoulder Arthroscopy

Arthroscopy Scope Skills

Arthroscopy skills trainer



App Walkthrough Video:

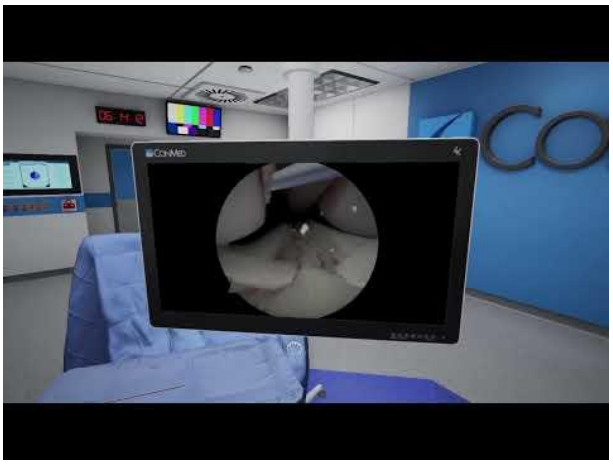
Learning objectives:

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

Anteromedial ACL Reconstruction

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

App Walkthrough Video:



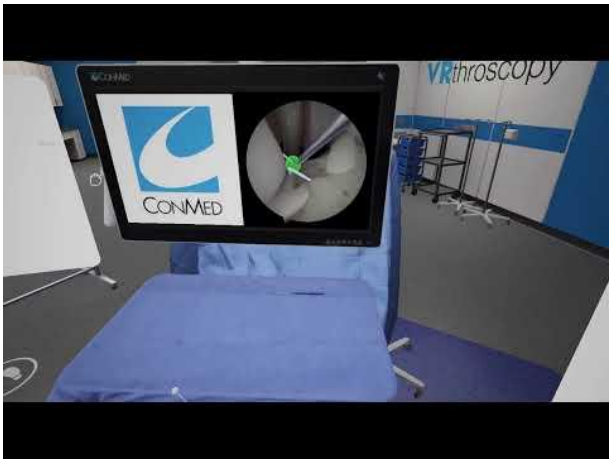
Learning objectives:

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:



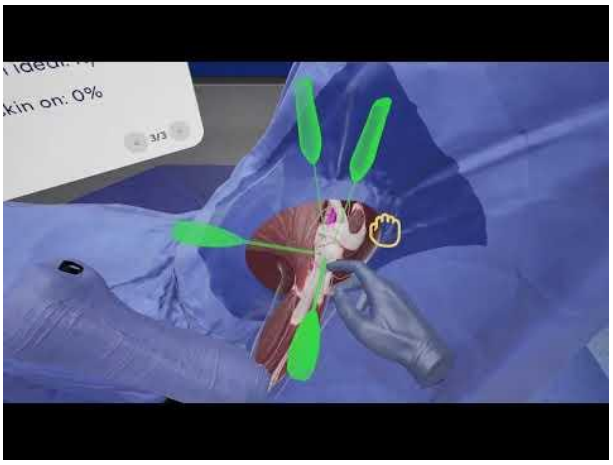
Learning objectives:

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.

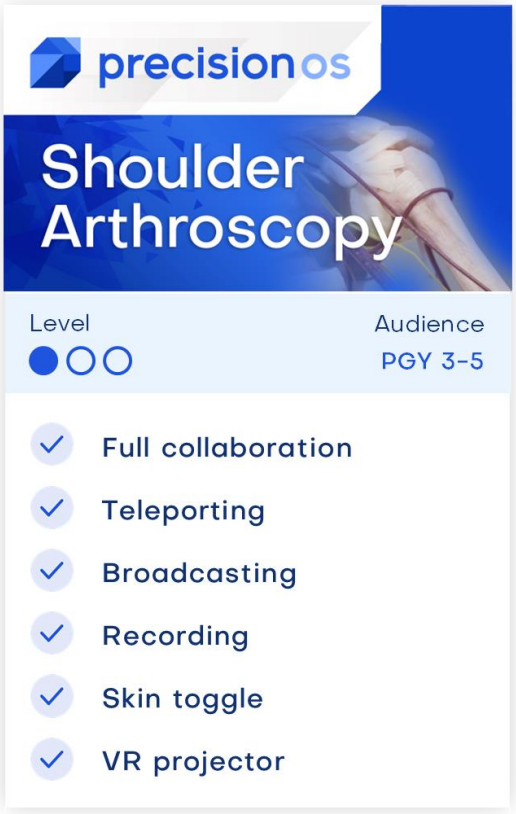
App Walkthrough Video:

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.

Diagnostic Shoulder Arthroscopy:

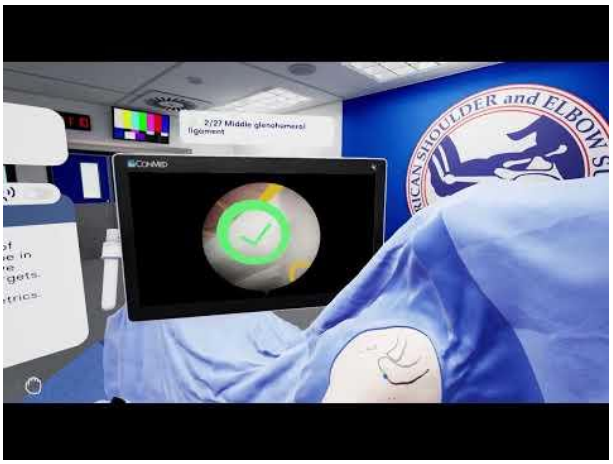
The learner manipulates an arthroscope to identify over twenty anatomical structures inside the left shoulder



App Walkthrough Video:

Case 1: Beach Chair Left Shoulder

Case 2: Beach Chair Right Shoulder



Learning objectives:

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