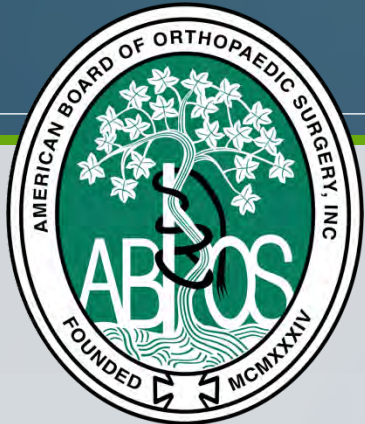


ABOS Knowledge, Skills, and Behavior Program

ABOS KSB Program

David F. Martin, MD, ABOS Executive Director

Mona Saniei, MPH, ABOS Graduate and Professional Education Specialist



American Board of
Orthopaedic Surgery

*Establishing Education & Performance
Standards for Orthopaedic Surgeons*

ABOS KSB Requirement

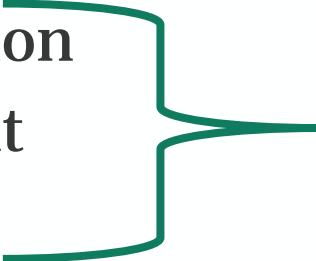
- Beginning academic year 2025/26- July 1, 2025
- Graduating Residents taking Part I Certifying Exam 2026
- Participation
 - Surgical Skills and Professional Behavior Assessments
 - Resident driven

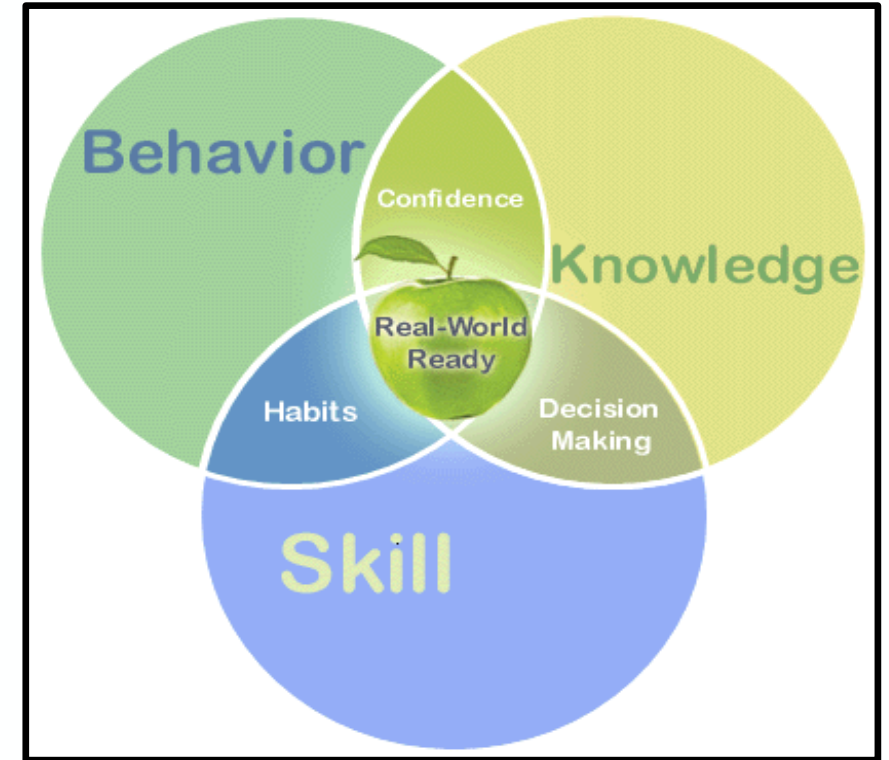


ABOS Knowledge, Skills, and Behavior Program

- Surgical Education Shift
 - Time-Based  Competency-Based
 - Goal: Time + Competency

- Deficiencies exists in:

- Documentation
 - Measurement
 - Teaching
-  **Competence**



- ABOS Goal: provide assessment tools for the measurement of:
 - ***Knowledge, Surgical Skills, and Professional Behavior***

ABOS KSB Program

- ***Knowledge***
 - Measured by the Orthopaedic In-Training Examination.
- ***Surgical Skills***
 - Measured by [O-P Surgical Skills Assessment](#).
- ***Professional Behavior***
 - Measured by [ABOS Behavior Tool](#) (ABOSBT).
 - 2 Types: End-of-Rotation & 360



How It Works-Surgical Skills

Surgical Skills

- 1 Resident Requests Assessment
- 2 Attending Completes Assessment
- 3 Resident Receives Feedback

Completed *Surgical Skills* assessments are sent back to the resident in real-time.

How it Works-Professional Behavior

Professional Behavior

After Completing Rotation

1 Resident Requests Assessment



2 Faculty Complete Assessment



3 Program Director and Program Coordinator Receive Feedback

Yearly 360 Evaluation

1 ABOS Sends Evaluation to Faculty, APPs, nurses, fellow residents, and others



2 They complete evaluation



3 Program Director and Program Coordinator Receive Feedback

Professional Behavior feedback goes directly to Program Director/Program Coordinator and/or APD.



What Residents Need to Do

- *Surgical Skills*
 - PGY-2 – PGY-5: **2 Surgical Skills Assessments per week or 8 a month**
 - PGY-1 residents-Surgical Skills may not be appropriate, **program dependent**
 - Professional Behavior for PGY 1 is encouraged

Residents have 48 hours from procedure date to request assessment

What Residents Need to Do

- Professional Behavior
 - PGY 1-5 Request End-of-Rotation Professional Behavior Assessments
 - Goal of 6-8 a year

Faculty Expectations

- Respond to resident Surgical Skills Assessment requests in a timely fashion (Completion within 72 hours)
- Respond to resident Professional Behavior Assessment requests in a timely fashion (Completion within 2 weeks)
- Respond to annual ABOS KSB 360 Resident Professional Behavior Assessment requests in a timely fashion (Completion within 2 weeks)

Surgical Procedures for Assessment

ABOS/CORD KSB Surgical Procedures – March 16, 2021

Orthopaedic Subspecialty	Tier 1: CORE Procedures	Tier 2: SUBSPECIALTY Procedures
Adult Reconstruction	<ol style="list-style-type: none"> Primary Total Hip Arthroplasty Primary Total Knee Arthroplasty 	<ol style="list-style-type: none"> Revision Total Hip Arthroplasty Revision Total Knee Arthroplasty
Foot and Ankle	<ol style="list-style-type: none"> Tibial Shaft Fx Unimalleolar/Bimalleolar (Syndesmosis) Fx 	<ol style="list-style-type: none"> Ankle Arthroscopy Ankle/Subtalar/Midfoot/Metatarsal Phalangeal of Great Toe Fusion Ankle/Foot Ligament/Tendon Repair/Reconstruction Bunion Correction Tibial Pilon Fx Hindfoot Fx Midfoot Fx/Dislocation Fx Nonunion/Malunion
Hand	<ol style="list-style-type: none"> Carpal Tunnel Release Trigger Finger Release Radius/Ulna Shaft Fx Distal Radius Fx Carpal/Metacarpal/Phalangeal Fx/Dislocation 	<ol style="list-style-type: none"> Wrist/Hand Bone Procedure (e.g., Fusion, Excision) Wrist/Hand Soft Tissue Repair/Reconstruction Proximal Radius/Ulna Fx
Oncology	<ol style="list-style-type: none"> Prophylactic Fixation of impending pathologic Femur Fx Below Knee Amputation 	<ol style="list-style-type: none"> Biopsy of Bone Lesion Biopsy of Soft Tissue Lesion Benign Bone Tumor Curettage and Grafting Benign Soft Tissue Resection

March 16, 2021

Tier 1: CORE Procedures	Tier 2: SUBSPECIALTY Procedures
Distal Tibia Fx	<ol style="list-style-type: none"> Epiphysiodesis Pelvic/Femoral Osteotomy Hip Arthrotomy/Drainage Hip/Knee/Ankle Tendon Lengthening Slipped Capital Femoral Epiphysis Supracondylar Humerus Fx
Shoulder Arthroscopy (e.g., Debridement, Acromioclavicular Decompression) Humerus Fx / Elbow Dislocation Radius/Ulna Shaft Fx	<ol style="list-style-type: none"> Rotator Cuff Repair Advanced Shoulder Arthroscopy (e.g., Capsulorrhaphy, Labral Repair) Total/Reverse/Hemi Shoulder Arthroplasty Distal Biceps Tendon Repair UCL Repair/Reconstruction Ulnar Nerve Decompression Clavicle Fx Proximal Humerus Fx Humeral Shaft Fx Proximal Radius/Ulna Fx
Spine	<ol style="list-style-type: none"> Spine Exposure
	<ol style="list-style-type: none"> Single-Level Spine Fusion Multi-Level Spine Fusion Spinal Decompression/Laminectomy Discectomy Sugar Tongs/Halo Application

March 16, 2021

Orthopaedic Subspecialty	Tier 1: CORE Procedures	Tier 2: SUBSPECIALTY Procedures
Medicine	<ol style="list-style-type: none"> Quadriceps/Patellar/Achilles Tendon Repair Arthroscopic Meniscectomy Meniscal Repair ACL Reconstruction 	<ol style="list-style-type: none"> Rotator Cuff Repair UCL Repair/Reconstruction Hip Arthroscopy LCL/MCL/PCL Repair/Reconstruction
Orthopaedic Surgery		
Upper	<ol style="list-style-type: none"> Distal Humerus Fx / Elbow Dislocation Radius/Ulna Shaft Fx Distal Radius Fx Carpal/Metacarpal/Phalangeal Fx/Dislocation 	<ol style="list-style-type: none"> Clavicle Fx Proximal Humerus Fx Humeral Shaft Fx Proximal Radius/Ulna Fx
Lower	<ol style="list-style-type: none"> Femoral Neck Fx Intertrochanteric Fx Femoral Shaft Fx Distal Femoral Fx Tibial Plateau Fx Tibial Shaft Fx Unimalleolar/Bimalleolar (Syndesmosis) Fx 	<ol style="list-style-type: none"> Pelvis Fx/Dislocation Acetabular Fx Patella Fx Tibial Pilon Fx Hindfoot Fx Midfoot Fx/Dislocation Fx Nonunion/Malunion
General	<ol style="list-style-type: none"> Fasciotomy Unilateral External Fixation Debridement of Open Fx Hardware Removal 	

35 Core

53 Subspecialty



Tier 1, Tier 2 & Other

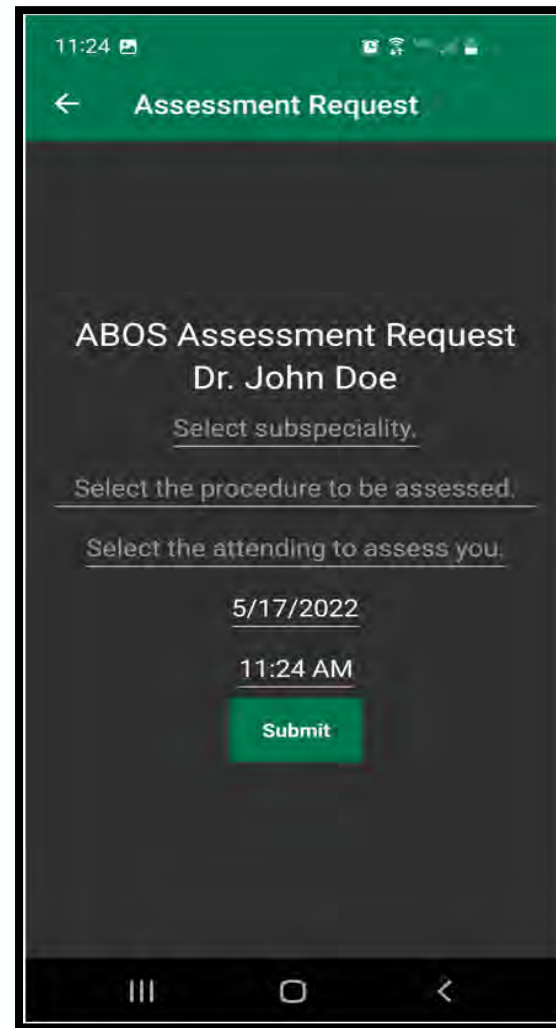
Tier 1: Graduating residents to be expected to be at a competent level in performing.

Tier 2: Important enough for a resident to be expected to have been exposed to at some level.

Other: Can be utilized to measure surgical skills, but do not rise to the importance of Tier 1 or Tier 2.



Current App & Resident Interface



Email/Text to Faculty

ABOS Resident Skills Assessment Request



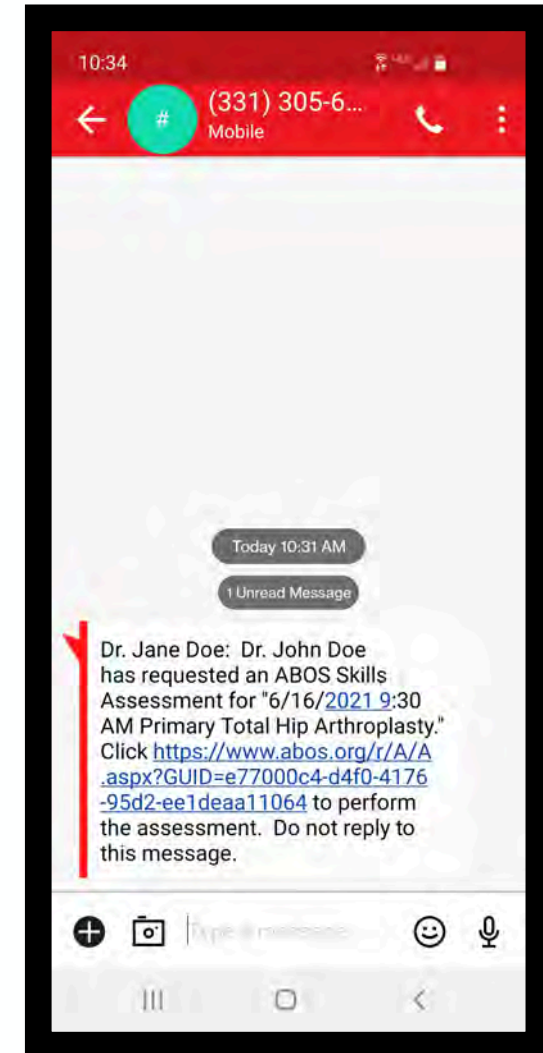
ABOS No Reply <noreply@abos.org>

To [REDACTED]

Reply Reply All Forward ...

Wed 6/16/2021 10:50 AM

Dr. Jane Doe: Dr. James Doe has requested an ABOS Skills Assessment for "6/16/2021 9:49 AM Primary Total Hip Arthroplasty." Click <https://www.abos.org/r/A/A.aspx?GUID=5d29a1da-b6ee-4837-ba58-311aaaffdaf2> to perform the assessment. Do not reply to this message.



Surgical Skills Assessment

Dr. Jane Doe ABOS Skills Assessment (OP-Score) of Dr. James Doe for 6/16/2021 9:49 AM Primary Total Hip Arthroplasty

4 (of 11) Knowledge of Specific Procedural Steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

- ☐ 1: I had to do.
- ☐ 2: I had to talk them through.
- ☐ 3: I had to prompt them from time to time.
- ☐ 4: I needed to be in the room just in case.
- ☐ 5: I did not need to be there.

Previous

Definitions

- 1: I had to do - i.e., requires complete hands-on guidance, did not do, or was not given the opportunity to do.
- 2: I had to talk them through - i.e., able to perform tasks, but requires constant direction.
- 3: I had to prompt them from time to time - i.e., demonstrates some independence, but requires intermittent direction.
- 4: I needed to be in the room just in case - i.e., independence, but still requires supervision for safe practice.
- 5: I did not need to be there - i.e., complete independence, understands risks and performs safely, practice ready.

8 Facets of Surgical Procedure

1. Pre-procedure plan: Gathers/assesses required information to reach diagnosis and determine correct procedure required.
2. Case preparation: Patient correctly prepared and positioned, describes approach and lists required instruments, prepared to deal with probable complications.
3. Knowledge of specific procedural steps: Can sequence steps of procedure, articulates potential risks, and means to avoid/overcome them.
4. Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues.
5. Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended.
6. Post-procedure plan: Appropriate complete post procedure plan.
7. Efficiency and flow: Obvious planned course of procedure with economy of movement and flow.
8. Communication: Professional and effective communication/utilization of staff.



Professional Behavior Assessment

Dr. Jane Doe ABOS Professional Behavior Assessment of Dr. James Doe for 6/16/2021 10:14 AM

2. The resident effectively communicates with patients and with people who are important to those patients (Shows Compassion/Empathy, Demonstrates Communication and Listening skills, Shows Respect for Patient needs)

- ☐ 1. Strongly Disagree
- ☐ 2. Somewhat Disagree
- ☐ 3. Neutral
- ☐ 4. Somewhat Agree
- ☒ 5. Strongly Agree

Previous

Next

Shows Compassion/Empathy (ie. Collaborates with patient, enhances the relationship)

Demonstrates Communication and Listening skills (ie. Attentive, shows patience, respect patient autonomy and empower them to make informed decisions, manages communication challenges with patients and families)

Shows Respect for Patient needs (ie. Respects patients' viewpoints and considers his/her opinions when determining healthcare decisions, regards the patient as a unique individual, treats the patient in the context of his/her family and social environment, takes time to educate the patient and their family)

Benefits

Resident

- Identify procedures you should be competent/exposed to before graduating
- Steer assessments towards what you need and where you want to be
- Residents want more real-time feedback
- Formative & Summative
- Documentation

Program Director

- Immediate documentation
- Surgical Skills and Professional Behavior Tool maps to Milestones
- Future: Reduce administrative burden on residents
- Reports to help you identify competency of resident before signing off they are ready to sit for Part I exam

Faculty

- Text Message/Email requests
- No Portal/Login
- “Quiet Hours”-No texts at night.
- Opportunity to improve teaching/communication



MYTH VS. FACT

MYTH

- Data will be used for hiring or credentialing
 - ABOS will not share this data
- Data will follow to Fellowship
 - Data is not validated nor intended for Fellowship apps or recruitment.

FACT

- Program Director has ultimate discretion
- Participation will be a requirement to sit for ABOS Part I.



Integrated ABOS KSB App/Web Portal

- ACGME Case Logs/ABOS KSB Platform
 - Residents submit case log for ACGME and request ABOS KSB assessment in the same place.
- **ABOS staff will contact** your residency program when the integrated platform is available. You will receive notice once your app is updated.
- Updates will start end of summer 2023-spanning several months.



Coming to a Program near you!

11:33

ABOS
Resident Surgical Skills
and Professional Behavior
Assessment

Username


Password

LOGIN

Forgot Username?

Forgot Password?

Do not have an account? Contact ABOS.



11:34

About

Add Case

Search Cases

Assessments

Professional Behavior

Search For CPT Codes

11:09

Add Case

Dr. Resident One

Resident Year (of Case) 1

Case ID Optional

Case Date 4/10/2023

Site Armed Forces Medical Exam

Attending Pick Attending Physician

Role Level 2

Patient Type Adult (18 and older)

Primary CPT 00211 Search CPT

☒ Involved Microsurgery

☒ Oncology Patient

Add More CPT

Optional Secondary CPT

Comments

Enter optional comments here.

☐ KSB Assessment Request

Submit

11:34

Professional Behavior

ABOS
Professional Behavior

Dr Resident One

Select the attending to assess you.

6/21/23
11:34 AM


SUBMIT



ABOS Resident Dashboard





ABOS Dashboard (www.abos.org)


Dr. John Doe  [Update](#)


Profile


[msamier@abos.org](#)
919-929-7103


 **Inbox** →

 **Resident Activities Portal** →

 **ABOS KSB Information** →

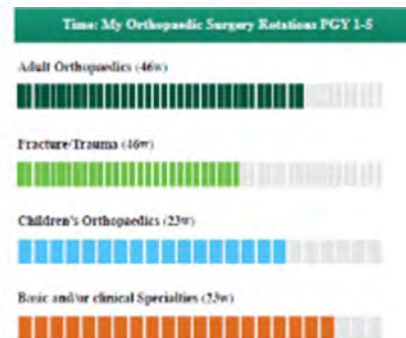
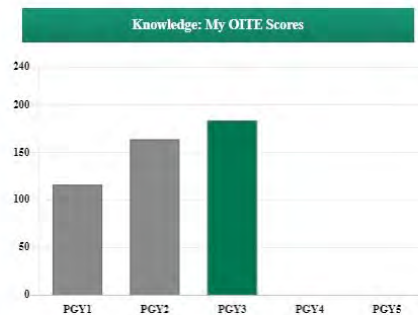
 **Part I Application** →

 **Part I Blueprint** →

 **Part I Rules and Procedures** →

ABOS Knowledge, Skills, and Behavior

My Progress

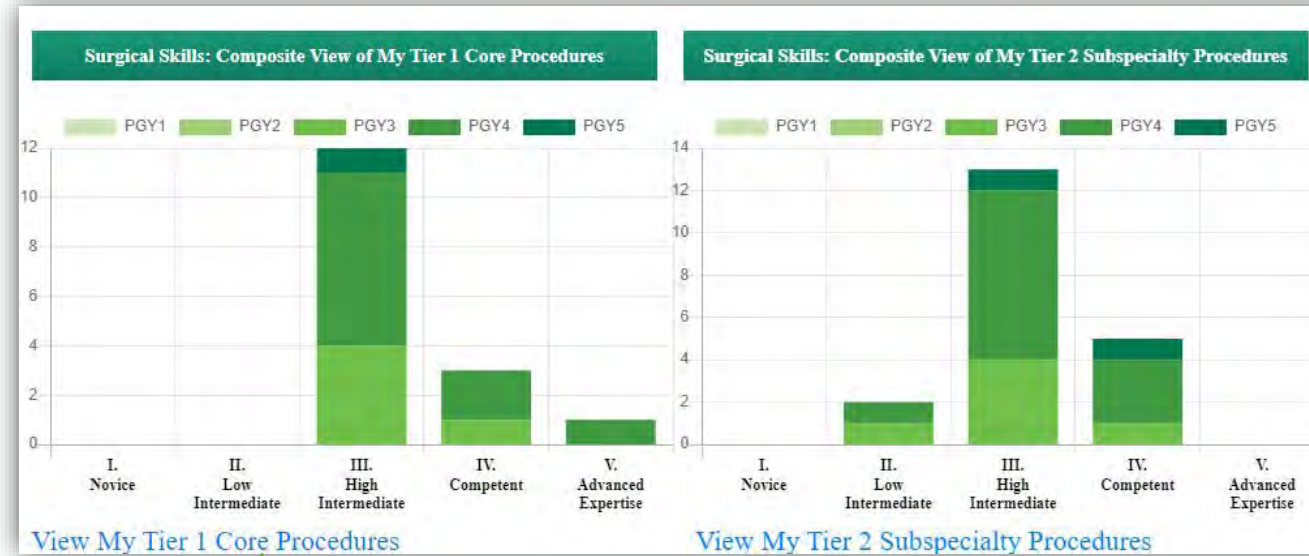


- Longitudinal Progress

- Multi-Purpose

- Rules and Procedures
 - Link to Resident Assessment Request Portal
 - Surgical Skills Assessment Ratings
 - Professional Behavior Assessment Ratings
 - OITE Performance
 - Part I Examination Application

ABOS Resident Dashboard Visuals



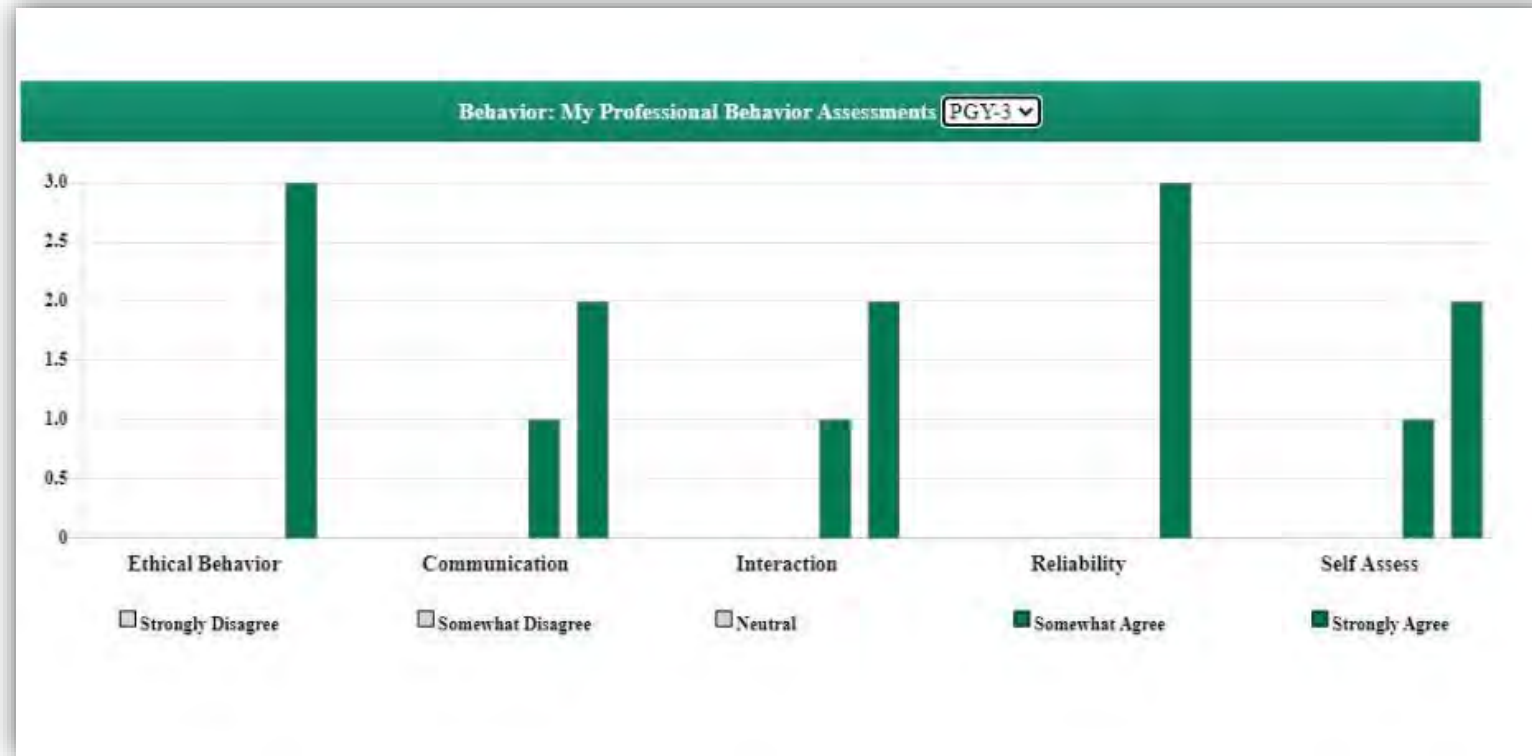
My Tier 1 Core Procedures

Procedure	No of Evaluations	Level Of Competence Achieved
Primary Total Hip Arthroplasty	12	5
Spine Exposure	3	5
Trigger Finger Release	1	5
Below Knee Amputation	2	4

My Tier 2 Subspecialty Procedures

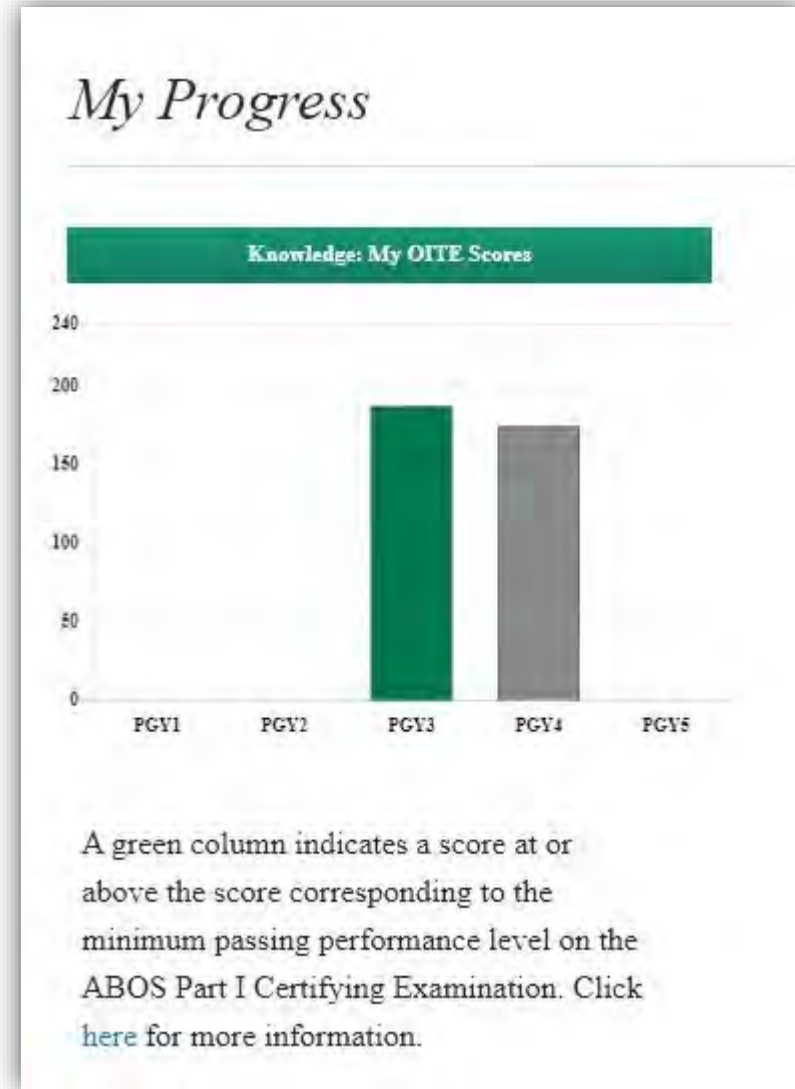
Procedure	No of Evaluations	Level Of Competence Achieved
Ankle Arthroscopy	3	4
Elbow: Distal Biceps Tendon Repair	1	3
Pediatric: SCFE	1	3
Revision Total Hip Arthroplasty	1	3
Biopsy of Bone Lesion	1	2
Subtalar Fusion	2	1
Shoulder: Rotator Cuff Repair	1	1

ABOS Resident Dashboard Visuals



Orthopaedic Knowledge

- Scaled Orthopaedic In-Training Examination (OITE) scores
- Common set of questions on ABOS Part I Examination and AAOS OITE
- Identify a minimum OITE score that roughly corresponds to a passing score on Part I Examination



ABOS Part I Examination Blueprint

ABOS Part I Certification Examination Blueprint

Table of Contents

General Principles	10-21%
Biostatistics/Epidemiology	0.5-1.5%
Legal/Ethical/Systems-based Practice	0.5-1.5%
Basic Science Principles	3-5%
Anatomy and Surgical Approaches	3-5%
Multiple Trauma	1-2%
Metabolic Bone Disease	0.5-1.5%
Medical Aspects of Sports Medicine	0.5-1.5%
Perioperative Management	1-3%
Adult Spine	6.75-12.25%
Cervical	2.5-5.5%
Thoracic	0.25-0.75%
Lumbar	3-4%
Nonspecific site	1-2%
Upper Extremities	12.75-35.25%
Scapula/Clavicle/Acromioclavicular/Sternoclavicular	0.5-1.5%
Shoulder joint	3.75-10.25%
Humerus	0.25-0.75%
Elbow joint	2.25-5.75%
Forearm	0.5-1.5%
Wrist	3-8%
Hand	2.5-7.5%
Lower Extremities	17.75-46.25%
Pelvis	1-2%
Hip	3.25-7.75%
Femur	1.25-2.75%
Knee	5.25-14.75%
Tibia/fibula	2-4%
Ankle/Leg	3-9%
Foot	2-6%
Pediatrics	7.75-16.25%
Upper Extremity	1.25-2.75%
Lower Extremity	3-6%
Spine	1-2%
Sports	1-2%
General	1-2%
Neuromuscular	0.5-1.5%

ABOS Part I Certification Examination Blueprint

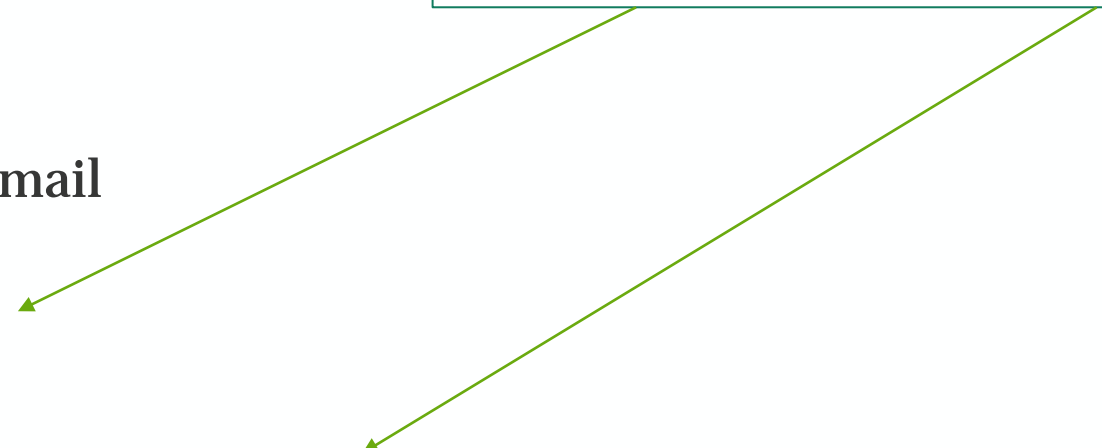
General Principles	10-21%
Biostatistics/Epidemiology	0.5-1.5%
Interpretation of epidemiologic information [disease prevalence and incidence, disease outcomes (eg, fatality rates), associations (eg, risk factors), health impact (eg, risk differences and ratios), sensitivity, specificity, predictive values]	
Study design and interpretation [types of experimental studies (eg, clinical trials), types of observational studies (eg, cohort, case-control), sampling and sample size, subject selection and exposure allocation (eg, randomization)]	
Hypothesis testing and statistical interference [confidence intervals, statistical significance and type I error, statistical power and type II error]	
Legal/Ethical/Systems-based Practice	0.5-1.5%
Consent and informed consent to treatment, physician-patient relationship, death and dying, research issues, interactions with other health professionals, cultural competence, physician wellness/burnout, safety, quality, teamwork, cost, value-based care, diversity	
Basic Science Principles	3-5%
Biology (fracture healing, biologics, pharmacology), biomechanics (including gait), inflammatory cascades and coagulation	
Anatomy and Surgical Approaches	3-5%
Anatomy, surgical approaches, and soft-tissue coverage	
Multiple Trauma	1-2%
Acute respiratory distress syndrome, systemic inflammatory response syndrome, fat embolism syndrome, orthopaedic management of polytrauma patient, initial assessment (ABCs, head, spine), open fractures, bone grafts/bone graft substitutes, mangled extremity, host risk factors, shock, hemopneumothorax	
Metabolic Bone Disease	0.5-1.5%
Osteoporosis, vitamin D, diabetes, Paget's disease, hyperparathyroidism	



How to Get Started

- Logins
 - Once your program activates you:
 - ABOS Welcome to ABOS KSB Program Email
 - Username and create password
- ABOS Resident Dashboard
 - www.abos.org
- ABOS Surgical Skills/Professional Behavior Request Portal
 - www.abos.org/r

Two separate systems=passwords are independent of one another!



When in doubt: Use the Forgot Username/Forgot Password buttons on either page or contact ksb@abos.org

