Why are EPAs being implemented? Because EPAs...

- Prioritize demonstrated competence as the outcome of training
- Create an efficient model for frequent formative feedback focused on progressive autonomy
- Establish a clinically relevant and relatable mechanism for assessment of trainee competence
- May help mitigate assessment bias by anchoring assessment on discretely observed behaviors in daily clinical workflow
- Provide a common mental model for trainees and faculty for core training outcomes
What are the characteristics of an EPA? An EPA...

- Facilitates competency-based medical education (CBME)
- Is part of the regular clinical work of a surgeon
- Defines units of professional practice (tasks) that may be entrusted to a learner once they have demonstrated the required competence
- Can be directly observed
- Involves the use of relevant knowledge, skills, and behaviors
- Enables a shift of focus from individual competencies to the work that must be done
- In aggregate can define the core scope of a specialty

- Turns the equation into a partnership between learner and evaluator
  - Empowers learner to seek out the evaluation opportunity
  - Asks evaluator to assess TRUST, changing the frame and conversation
  - Provides clear anchors for evaluator (as part of workflow) that are meaningful and substantial
# How are EPAs observed and evaluated?

<table>
<thead>
<tr>
<th>Entrustment Level</th>
<th>Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Limited Participation</strong></td>
<td>What a learner should know directly out of medical school.</td>
</tr>
<tr>
<td>Knows information, has very basic skills</td>
<td>Attending can show and tell.</td>
</tr>
<tr>
<td><strong>Direct Supervision</strong></td>
<td>The learner can use the tools but may not know exactly what, where, or how to do it.</td>
</tr>
<tr>
<td>Knows the steps of the task/operation but requires direction in executing, does not understand nuances of a basic case</td>
<td>Attending gives active help through the case to maintain forward progression.</td>
</tr>
<tr>
<td><strong>Indirect Supervision</strong></td>
<td>The learner can perform the task or operation in straightforward circumstances.</td>
</tr>
<tr>
<td>Can do straightforward tasks/operations but will not recognize more complex variations, does not understand nuances of an advanced case</td>
<td>Attending gives passive help.</td>
</tr>
<tr>
<td></td>
<td>This may be while scrubbed for more complex cases or a check-in for more routine cases.</td>
</tr>
<tr>
<td><strong>Practice Ready</strong></td>
<td>Can treat all patients with straightforward disease and has a strong understanding of surgical options and technique for less common scenarios.</td>
</tr>
<tr>
<td>Can manage more complex operations and take care of most cases</td>
<td>Attending is available at the request of the learner but not routinely needed for common presentations, though input may be needed for more complex presentations.</td>
</tr>
</tbody>
</table>
### Example: Intraoperative/Procedural Phase Generic Behavioral Elements

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intraoperative/Procedural Phase</strong></td>
<td>Can describe basic anatomy pertinent to operation/procedure</td>
</tr>
<tr>
<td></td>
<td>Difficulty coordinating hands to accomplish dissection of normal planes</td>
</tr>
<tr>
<td></td>
<td>Can identify normal anatomic structures in straightforward setting</td>
</tr>
<tr>
<td><strong>Limited Participation</strong></td>
<td>Can articulate but not necessarily identify key anatomic landmarks</td>
</tr>
<tr>
<td></td>
<td>Sometimes does not use both hands in a coordinated manner, often tentative</td>
</tr>
<tr>
<td></td>
<td>Can do less critical parts of the operation/procedure independently</td>
</tr>
<tr>
<td><strong>Direct Supervision</strong></td>
<td>Can perform key steps of operation/procedure in straightforward settings</td>
</tr>
<tr>
<td></td>
<td>Smooth instrument handling with effective use of both hands</td>
</tr>
<tr>
<td></td>
<td>Can do adjunctive maneuvers when needed in straightforward settings</td>
</tr>
<tr>
<td><strong>Indirect Supervision</strong></td>
<td>Can do operation/procedure safely including all steps in essentially all patients</td>
</tr>
<tr>
<td></td>
<td>Recognizes when deviation from initial plan indicated</td>
</tr>
<tr>
<td></td>
<td>Smooth movements but may lack economy of motion in most difficult cases</td>
</tr>
</tbody>
</table>
### Example: Evaluate and manage a patient with acute limb ischemia

#### Intraoperative Phase - Open

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1 Limited Participation | Demonstrates understanding of operative field sterility and sharps safety  
Can perform straightforward suturing and knot-tying  
Can describe potential for compartment syndrome |
| 2 Direct Supervision | Demonstrates respect for tissues  
Can perform a portion of anastomosis with frequent prompting and assistance  
Describes most potential operative errors and likely operative findings |
| 3 Indirect Supervision | Demonstrates efficient and safe dissection and control of vessels  
Can perform thrombectomy, endarterectomy, and patch with minimal assist  
Can describe correct response to bleeding or arterial dissection |
| 4 Practice Ready | Proficient in instrument handling and operative conduct  
Anticipates patient-specific complications and nuances  
Can use alternative exposures in re-operative and complex settings |
How are EPAs developed?

A scope council defines the core activities of the specialty as able to be assessed in all programs.

A writing group defines the functions expected for that particular core activity, or EPA, maps those to milestones, and writes specific behaviors for each entrustment level for each EPA.

Reactor panels are used to refine the product for consistency, clarity, and relevance.

EPAs may be piloted at multiple sites and further feedback gathered and incorporated into refined and field-tested final product.

Approval of the final product by the certifying specialty board.
Do EPAs replace milestones and competencies?

- No, EPAs provide a means of assessing a trainee’s progress towards autonomy and full entrustment in relevant clinical workflow contexts that reflect competence.

- EPAs are mapped to sub-competencies to inform milestones assessments by CCCs.

- Programs should continue to use other assessments, particularly for sub-competencies that aren’t easily observed in clinical workflow and in line with RRC requirements.
EPAs incorporate and reflect competencies and milestones.

- **Domain of Competence**: Patient Care, Medical Knowledge, Communication
  - **Competency**
    - Patient Care: $PC_1$, $PC_2$, $PC_3$
    - Medical Knowledge: $MK_2$
    - Communication: $ICS_3$
  - **Milestone**: $M_{0-4}$

**Entrustable Professional Activity (EPA)**
Vascular surgery EPAs

Collectively, these are meant to define the core of the specialty as able to be assessed in all training programs.
ABS specialty board EPA timeline

- **Vascular Surgery Board**: 15 EPAs
  - Launching fall 2024

- **Pediatric Surgery Board**: 20 EPAs (19 required, 1 optional)
  - Planned launch summer/fall 2025

- **Trauma, Burns, and Surgical Critical Care Board**: 13 EPAs (9 required, 4 optional)
  - Planned launch summer/fall 2025

- **Complex General Surgical Oncology Board**: 12 EPAs
  - Planned launch summer/fall 2025
What about the mobile app?

How will trainees be assessed on EPAs?

- A mobile app is available to programs free of charge (sponsored by the ABS)
- Involves 4 possible entrustment levels, defined as the level of entrustment which would be granted to the trainee the next time based on what was just witnessed
- Involves multiple phases of care (e.g., preop, intraop, postop)

What does the app do?

- Utilizes drop-down menus and behavioral anchors to allow efficient assessment
- Allows for additional narrative feedback via dictation or typing function
- Includes analytics for trainees, faculty, CCCs, and program leadership to review
Can my program use an alternative collection method?

- Yes, programs may use whatever collection method they choose
  - Programs will need to collect data via locally available electronic or other methods
  - Alternate tools must be approved by and developed in conjunction with the ABS

- Trainees from programs so affected will still be required to turn in a composite EPA performance profile when they apply to take any written ABS initial certification examination
How will data be housed and processed?

- The SIMPL Collaborative, as the app developer, provides secure data storage stakeholder-specific dashboards for trainees, program directors, faculty, and residency administrators.

- The ABS does not have identified data until trainees turn in their composite EPA profile as a requirement for application to any written ABS initial certification examination.
How will the ABS EPA app relate to the SIMPL OR operative assessment tool some programs are already using on a subscription model?

- The ABS EPA app can be accessed on a mobile device via the SIMPL app.
- The ABS EPA app is being provided to all programs at the ABS’s expense.
  - This does not include the subscription service offered by the SIMPL Collaborative for the SIMPL OR operative assessment or any other subscription model products.
  - Programs can choose to subscribe to these offerings separately with the SIMPL Collaborative.
How will the data be useful to programs, trainees, and faculty?

Trainees will receive frequent formative feedback and behaviorally anchored data defining specific ways they can progress toward autonomous capability.

Faculty will be able to see the entrustment profile of trainees they have not worked with recently to inform decisions on real-time entrustment.

CCCs will have multiple data points based on direct observation, in temporal proximity to the performance observed, across nearly all milestones to factor into summative CCC decision-making.

Program directors will have compiled data over the entire course of training on which to base attestations required at the completion of training.
How will the ABS evaluate the adoption, impact and quality of this initiative?

● The ABS will monitor de-identified overall usage and engagement data by program

● The ABS will identify best practice models and provide resources to programs struggling with implementation

● The ABS Research Committee has developed a research agenda
  ○ This committee will also review proposals to allow substantiation, refinement, and critical review of the EPA model to guide future improvements and modifications
What does the ABS expect of programs regarding use of the EPA model?

- **ABS Exam Application:** All applicants to written ABS initial certification examinations **will be required** to turn in a composite profile across all EPAs when they apply for the exam
  - **General Surgery:** Beginning with the 2028 GSQE
  - **Vascular Surgery:** Beginning with the 2029 VSQE
  - **Other ABS specialties:** TBD

- **Every trainee should be assessed on every EPA in every phase**

- **All faculty should be trained to function as assessors** to promote reliability and validity of the assessment
How does the rollout of EPAs affect trainees other than those who will be applying to take the ABS GSQE in 2028 or VSQE in 2029?

- Although the requirement for an EPA profile as part of the ABS QE application process will not occur until 2028 (general surgery) and 2029 (vascular surgery), **use of EPAs for trainees at all PGY-levels is strongly encouraged as a best-practice strategy** to promote consistent habits of meaningful assessment and feedback and to provide other assessment economies.

- To decrease administrative burden and in recognition of the changing educational environment in those programs that have already adopted EPAs:
  - Current residents from U.S. programs who are actively engaged in EPAs (actively collecting assessments) are not required to complete the GME section of the application.
  - Residents from programs that are not actively engaged in EPAs (have not collected any assessments), residents from Canadian programs, and residents who completed training prior to 2024 but did not apply to their qualifying exam previously will still be required to complete the GME section of the application.
Specifically, are there requirements or recommendations for the number and distribution of assessments?

- Early data suggests 5-10 EPA microassessments may provide a foundation for CCC decision-making regarding entrustability for a given subcompetency domain.

- A minimum of at least 2 EPA evaluations per week for each trainee would provide approximately 50 evaluations/resident over 6 months to inform CCC meetings.

- The overall number of EPA evaluations may vary in relation to the number of EPAs in a given specialty.
Will trainees be required to achieve practice-ready entrustment in all of their specialty’s EPAs?

- Yes, that is the goal for the core elements of the specialty in a competency-based model

- The EPA model should be seen as a continuous quality improvement strategy for the developing trainee; it charts a journey with frequent waypoints and doesn’t just define the endpoint
  - A single assessment of competency will not be sufficient

- The specialty boards of the ABS will monitor progress and collective performance with EPAs over the next several years to further inform acceptable performance endpoints
Faculty are busy; what do EPAs accomplish to relieve rather than impose faculty and program burden?

- EPA use will allow elimination or attenuation of other assessment structures that are not based on immediate assessment of directly observed performance.

- By engaging with EPAs, programs will readily accomplish a number of RRC and ACGME program requirements, including those related to meaningful trainee assessment and faculty development.

- EPAs will make CCC discussions more efficient and grounded.

- EPAs can be completed in 1-2 minutes or less on a mobile device and are efficient for faculty workflow.
What are specific examples of faculty assessment burden that EPAs could help improve?

- Some programs have **significantly shortened their end of rotation evaluations to 2-5 focused questions**, given the breadth of data EPAs will have already covered.

- Some programs noted **CCC meetings were shortened by 50-75%** when the discussions were informed by EPA frequent micro-assessment data.
Milestone mapping gaps in EPAs

- Because EPAs are based on directly observed performance in daily clinical work contexts, they cover most, but not all, milestone subcompetency domains
  - Examples of areas not covered may include themes such as self-maintenance, performance of administrative tasks, and longitudinal learning or project management
Who else besides surgical faculty can complete an EPA assessment?

- Some programs have recruited non-surgical specialists to complete EPAs for performances they are more likely to witness than a surgical faculty member
  - Such faculty should be developed to perform the assessments similar to the surgical faculty

- APPs can complete EPAs if they have participated in EPA faculty development programs and are assessing behaviors they are entrusted to perform independently themselves
Can trainees complete EPAs on more junior trainees?

- **Trainees may not function as a substitute for faculty in completing EPAs**

- Chief residents and senior fellows who have participated in EPA training and faculty development and have themselves been entrusted at the highest levels may complete EPAs on more junior trainees to provide feedback IN ADDITION to that provided by the faculty member.
How will programs develop faculty and trainees for use of the EPAs?

- Engagement opportunities already available include recorded and ongoing webinars and townhalls and participation in the ABS EPA Program Champions initiative
  - Become an ABS EPA Program Champion
  - Upcoming & Past ABS EPA Events

- The ABS has developed additional materials to prepare programs, faculty, and residents for implementation, including checklists, timelines, videos, train-the-trainer courses, and more
  - ABS EPA Resources
Entrustable Professional Activities (EPAs)

In February 2016, the ABS announced the move to competency-based assessment of surgical trainees with the introduction of the ABS Entrustable Professional Activities (EPA) Project, which was initiated in July 2014 for General surgery residency programs and will expand to all ABS specialties by 2024.

**WHAT IS EPA?**

EPAs are units of work a physician performs that can be directly observed.

Entrustable Professional Activities (EPAs) were developed to provide the opportunity for frequent, structured, feedback-oriented and workplace-based assessment in the course of daily clinical work. EPAs are an important component of the competency-based approach to resident evaluation (CBE). They offer the opportunity to provide feedback, competency evaluation, and remediation when necessary to the course of regular patient care, and address some of the challenges in traditional methods of assessing competence (learning, behavior, and performance).

It is important to note that EPAs are NOT checklists. They are a complement to checklists and serve as a way to translate the broad concept of competency into meaningful activities.

- EPAs are units of work a physician performs that can be directly observed, such as asking a patient about their dietary intake, assessing a wound, and determining a patient’s compliance with a medication regimen.
- Surgical EPAs are specific to surgical procedures, such as performing a gastrostomy or a cholecystectomy.
- Postoperative care EPAs may include assessing a patient’s response to surgery or management of postoperative complications.

A scale of EPAs for a specialty can define the core clinical activities that a resident should achieve in an observed environment and move to patient care. Measurement EPA completion in clinical practices allows EPA scores to provide meaningful feedback to residents, their programs, and the ABS.

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**Questions?**

Contact us at epas@absurgery.org

Don’t forget to check out the new EPA section of the ABS website!