

## News from the ACGME: Case Minimum Changes

### Part 1: Philosophy and Background (First of a three-part article series)

Competency-based medical education (CBME) has been established as a national priority by the Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Medical Specialties (ABMS) for all medical professions.<sup>1,2</sup> CBME asks the question: what is required during the graduate medical education process to become a competent physician in each specialty? This question is then used to establish a framework of specific competencies to provide clear goals for learners. CBME is designed to ensure that all graduates are competent in the essential domains that have been defined by their profession. As such, the framework of CBME consists not just of the traditional emphasis on medical knowledge but also on patient care skills and professional behaviors. The emphasis on these three domains within the graduate medical education experience is designed to prepare trainees for independent practice of orthopaedics with safeguards to protect the public.

In Orthopaedic Surgery, the initial CBME assessment framework has been set up with Knowledge, Skills and Behavior (KSB) program, with participation required by the American Board of Orthopaedic Surgery for all programs as of July 1, 2025. The KSB program provides assessment tools for faculty to give residents feedback regarding their progress at regular intervals longitudinally over the course of training. However, it does not establish specific criteria for evaluation. The next step is to establish the “curriculum.”

We are surgeons. A central component of building the curriculum for orthopaedic surgery training, therefore, is to define the surgical procedures that are required during residency. This group of procedures needs to span both the **breadth** and the **depth** of orthopaedic surgery.

The **breadth** of orthopaedic surgery is analogous to a liberal arts education, which includes sciences, arts, and humanities to allow broad exposures to many areas of knowledge. Similarly, in orthopaedic surgery every resident needs to have exposure to every subspecialty area and anatomic area treated. Trainees do not need to become an expert in each area, but they should experience a minimum case exposure for a well-rounded orthopaedic education.

In addition to the broad exposure to the **breadth** of orthopaedic surgery, trainees should also gain greater **depth** of experience in key procedures common to all of orthopaedics. These are common orthopaedic procedures that are core to our profession, in which each resident should be competent at the time of graduation. This group of common, core, and competent procedures are the **3C procedures**, which require a **depth** of surgical skill for each orthopaedic surgery resident.

The ACGME Orthopaedic Surgery Review Committee (RC) established case minimum over a decade ago. (Table 1). This first attempt at defining the common core procedures within our profession has often been viewed as a “low bar,” meaning that this list fails to adequately address both **breadth** and **depth** within orthopaedic residency training. It is now time for a case minimum review and update, bringing minimums into the era of CBME.

Table 1: Current case minimums, orthopaedic surgery

| Category  | Minimum |
|---|---------|
| Knee arthroscopy  | 30      |
| Shoulder arthroscopy                                      | 20      |
| ACL reconstruction  | 10      |
| THA   | 30      |
| TKA   | 30      |
| Hip fractures   | 30      |
| Carpal tunnel release                                     | 10      |
| Spine decompression/posterior spine fusion                | 15      |
| Ankle fracture fixation                                   | 15      |
| Closed reduction forearm/wrist                            | 20      |
| Ankle and hind and mid-foot arthro                        | 5       |
| Suprachondylar humerus perc                               | 5       |
| Operative treatment of femoral and tibial shaft fractures | 25      |
| All pediatric procedures                                  | 200     |
| All oncology procedures                                   | 10      |

The ACGME orthopaedic surgery RC has been hard at work in establishing new case minimums for orthopaedic surgery. The case minimums will represent the **breadth** of orthopaedic surgery, with requirements in nine anatomic/specialty areas, as well as the **depth** of orthopaedic surgery in sixteen 3C categories as shown in Table 2. The proposed numbers associated with this framework will be available for public comment starting in April 17, 2023 and the final recommendations may change from the list below.

Table 2: Proposed Categories of Case Minimums

| Breadth of Orthopedic Surgery (Anatomic and Subspecialty areas) | Depth of Orthopedic Surgery (3C procedures)                 |
|---|---|
| Pelvis/Hip  | Primary TKA   |
| Femur/Knee  | Primary THA   |
| Leg/Ankle/Foot  | Knee arthroscopy  |
| Shoulder  | Shoulder arthroscopy  |
| Humerus/Elbow   | Femur/Tibia IM nailing                                      |
| Forearm/Wrist/Hand  | Operative management of Femoral Neck/IT fracture            |
| Spine   | Operative management of forearm/distal radius fracture      |
| Pediatrics*   | Operative management of rotational ankle fracture           |
| Oncology*   | Operative management of pediatric distal humerus fracture   |
|   | Application of external fixator*                            |
|   | Prophylactic fracture fixation                              |
|   | Closed management of fracture/dislocation with manipulation |
|   | Deep metal removal*   |
|   | Carpal tunnel decompression                                 |
|   | Lower extremity major tendon repair                         |

|  |  |
|--|--|
|  | Irrigation and Debridement (fractures, joint/arthroplasty sepsis)* |
|  | Fasciotomy   |
|  | Lower Limb amputation  |

All cases will count towards anatomic area minimums, except for those indicated with \*.

### **ACGME Orthopaedic Review Committee**

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1. CBME: A Promising Framework. [https://www.abms.org/newsroom/cbme-a-promising-framework/#:~:text=Competency%2Dbased%20medical%20education%20\(CBME,Plenary%20at%20ABMS%20Conference%202023.](https://www.abms.org/newsroom/cbme-a-promising-framework/#:~:text=Competency%2Dbased%20medical%20education%20(CBME,Plenary%20at%20ABMS%20Conference%202023.)
2. ACGME2021 Session Summary: Moving Urgently toward Competency-Based Assessment in GME. <https://www.acgme.org/newsroom/blog/2021/3/acgme2021-session-summary-moving-urgently-toward-competency-based-assessment-in-gme/>