ACGME Program Requirements for Graduate Medical Education in General Surgery
Summary and Impact of Major Requirement Revisions

Requirement #: **Int. B.**

Requirement Revision (significant change only):

General surgeons possess comprehensive specialized knowledge and skills that enable them to provide patient-centered care related to the evaluation, diagnosis, and operative and non-operative treatment across the five phases of care (pre-habilitation, pre-operative, operative, immediate recovery, and long-term recovery/follow-up). This includes the management of complications across the spectrum of ages for elective, urgent, and emergent conditions. General surgeons have expertise in evaluating and managing the whole patient, including medical and psychosocial concerns. The practice of general surgery includes surgical disorders of the abdomen and its contents, the alimentary tract, skin, soft tissues, breast, and endocrine organs; and patient populations inclusive of oncologic, vascular, pediatric, palliative care, trauma, and critical care. Some general surgeons pursue additional training in such fields as pediatric surgery, surgical critical care, surgical oncology, vascular surgery, trauma surgery, hospice and palliative medicine, transplant surgery, and other areas of specialized focus. The practice further involves adequate knowledge and experience for the assessment and requisite emergency surgical stabilization and management of severe conditions of the cardiothoracic, gynecologic, neurologic, otolaryngologic, and urologic systems and indications for specialty consultations.

To provide optimal comprehensive care, the general surgeon must effectively function in interprofessional and multidisciplinary teams, frequently serving in a leadership role. General surgeons are collaborative leaders who lead by example and effectively practice interprofessional team-based care.

General surgeons analyze the scientific literature, evaluate their surgical outcomes, and utilize data management science for continuous quality improvement. They communicate their conclusions to patients, patients' families and/or support systems, and colleagues with the goal of providing high-value and ethical patient-centered care. They are lifelong learners who adapt to advancing and emerging technologies and treatments. They understand and manage the business of medicine. They advocate for the sustainable and equitable delivery of surgical care. General surgeons have broad-based knowledge, strong critical thinking skills, and the flexibility to practice in a wide variety of inpatient and outpatient settings. General surgeons identify and mitigate comorbidities and social determinants of health as they relate to outcomes. They consult other specialists across their practice settings, including referral of patients to other levels of care when appropriate.

General surgeons use a broad set of communication skills with patients, patients' support teams, colleagues, treatment teams, communities, and health care managers and systems. This enables them to build relationships that optimize both their own and their teams' well-being. They find meaning, joy, and purpose in caring for patients. Through a collaborative and compassionate approach, general surgeons apply cognitive, scholarly, and technical skills for a relationship-oriented approach to comprehensive patient care.

1. Describe the Review Committee's rationale for this revision:

Every 10 years, the ACGME Review Committees are required to evaluate the applicable specialty-specific Program Requirements for revision. In 2017, the ACGME re-envisioned the process by which this is done. The new process, which includes scenario-based strategic planning, called for rigorous and creative consideration about what the specialty will look like in the future prior to proposing any revisions, recognizing the future is marked with significant uncertainty.

Seven themes emerged from the scenario planning, focus groups, and stakeholder group efforts that provided insight into the general surgeon of the future and the practice of general surgery:

1. **Comprehensive Clinical Care**
2. **Technology Integration**
3. **Outcomes-Based Practice**
4. **Effective Communication, Collaboration and Leadership**
5. **Professionalism, Diversity, Equity, and Inclusion**
6. **Educational Process**
7. **Community and Physician Advocacy**

The proposed definition of a general surgeon reflects those themes and the core functions and values of general surgery of today and of the future.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   The definition of a general surgeon is intended to educate the surgeon of the future, encourage and promote program improvements, promote innovation in education, establish a focus on the well-being of residents, and ultimately promote patient safety while ensuring high-quality care.

3. How will the proposed requirement or revision impact continuity of patient care?
   Reflected in the revised definition of a general surgeon are the tenets of continuity of care, comprehensive care, and a focus on interprofessional teamwork.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   Depending upon the types of facilities, organizational structure, number of personnel, and the organization of didactics currently present in each accredited program, there may be a need for additional resources.

5. How will the proposed revision impact other accredited programs?
   There should be no impact on other accredited programs.

Requirement #: **I.B.6.h)**

Requirement Revision (significant change only):

I.B.6.h) Chief residents (residents in the PGY-5 or residents in the PGY-4 and PGY-5 with approved chief rotations): must not be assigned to a participating site that sponsors or provides clinical training to another ACGME-accredited general surgery residency program. (Detail) (Core)

1. Describe the Review Committee's rationale for this revision:

The Review Committee feels that chief experience is essential to the development of the autonomous surgeon and that this experience must be one in which senior general surgery residents are afforded the opportunity to demonstrate appropriate competence on their way to autonomous practice. The Review Committee feels that rotating on required chief-level rotations at sites with other chief-level general surgery residents does not allow for experiences that promote progression to autonomous practice due to multiple individuals competing for primary responsibilities of the same patients.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   Having only one program's chief resident(s) on required chief rotations will allow for senior-level residents to have appropriate autonomy, as well as experiences in which chiefs are able to train more junior-level residents from the same program. Ensuring only one program's residents are rotating on required chief rotations should reduce any 'competition' for cases, improve communication, decrease hand-offs, and improve patient care.

3. How will the proposed requirement or revision impact continuity of patient care?
   There should be no negative impact to continuity of patient care, rather, patient care might be improved due to fewer transitions of care.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   If institutions are currently sending residents to essential content chief rotations at sites with other general surgery chief residents, they may need to arrange for new sites.

5. How will the proposed revision impact other accredited programs?
   Other ACGME-accredited residency programs that have overlapping chief rotations at participating sites may need to reorganize the residency experience and/or identify additional sites.

Requirement #: **I.D.1.e)-g)**

Requirement Revision (significant change only):

I.D.1.e) The primary clinical site must routinely care for patients with a broad spectrum of surgical diseases and conditions, including a substantial portion of the essential content areas in surgical education, incorporating a variety of surgical techniques. (Core)

Specialty-Specific Background and Intent: The essential content areas are: the abdomen and its contents; the alimentary tract; skin, soft tissues, and breast; endocrine surgery; head and neck surgery; non-cardiac thoracic surgery; pediatric surgery; surgical critical care; surgical oncology; trauma and non-operative trauma; and the vascular system.

I.D.1.f) The full spectrum of inpatient and outpatient surgical care of elective, urgent, and emergent surgical diagnostic and therapeutic procedures must be available for resident education. (Core)

I.D.1.g) The program must offer clinical experiences in a resource-limited environment. (Detail)

Specialty-Specific Background and Intent: Experience in a resource-limited environment includes working in health systems with deficiencies, whether institutional or organizational, in their ability to provide the full-scope of surgical care; providing care to areas where disease and mortality from potentially treatable illnesses is higher than in resource-rich areas; and care for resource-limited patients or those with barriers making it difficult for them to access care. Examples of a resource-limited experience include, but are not limited to, rotating at a rural clinic, providing care in "health care deserts," and providing care on tribal lands. Some international rotations may provide an experience in resource-limited environments. Caring for resource-limited patients is also expected, but does not include activities such as providing telemedicine to low-resource areas or providing care to low-income individuals at well-resourced sites.

1. Describe the Review Committee's rationale for this revision:
   The Review Committee acknowledges that graduates of general surgery programs must be provided broad exposure to a variety of patients, procedures, care teams, and environments as they progress toward being autonomous physicians. The Review Committee seeks to ensure that the primary clinical site meets the principal of these needs, with participating sites and experiences supplementing required education. General surgeons must have broad-based knowledge, strong critical thinking skills, and the flexibility to practice in a variety of settings and circumstances. The Review Committee seeks to prepare residents for the full variety and breadth of practice venues and settings.

   The Review Committee believes that the primary clinical site of surgery residency programs, where the majority of didactics are offered and resources are allocated, must be able to provide broad exposure to a spectrum of surgical diseases and conditions, with enough resources to provide a substantial portion of residents' training in the essential content areas. The Review Committee feels that participating sites should complement education and experiences not available at the primary clinical site.

   The Review Committee has also proposed that all programs must provide an experience in a resource-limited environment. This requirement is intended to ensure the general surgeons of the future are comfortable with providing care in under-resourced environments, as well as in those environments utilizing advanced technology. Exposure to the full spectrum of environments will allow residents to learn how to integrate their medical knowledge and skills, and appropriately use current and new technologies based on environment.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   The proposed requirements will ensure that general surgery residents are exposed to the full breadth of essential content, as well as depth of surgical procedures, in addition to providing exposure to a variety of patient types and practice environments.

3. How will the proposed requirement or revision impact continuity of patient care?

Ensuring the majority of the essential content is available at the primary clinical site should improve continuity of patient care.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   Programs that do not currently offer an experience in a resource-limited environment may have to identify a new site and any accompanying resources, such as faculty or transportation, to provide the experience. The Review Committee has provided examples of a variety of ways programs can meet the requirement outside of a formal rotation, including some global rotations.

5. How will the proposed revision impact other accredited programs?
   N/A

Requirement #: **II.B.2.f).(5)**

Requirement Revision (significant change only):

[Faculty members must:] utilize competency-based education models and evaluation tools. (Core)

Specialty-Specific Background and Intent: The Review Committee believes that assessments of the learner should be frequent, criterion-based, developmental, comprehensive, continuous, and occur in clinical training settings. The Committee believes it essential that all faculty members actively engage in competency-based assessment and feedback, incorporating tools such as Entrustable Professional Activities (EPAs), in order to provide real-time evaluation and feedback.

1. Describe the Review Committee's rationale for this revision:
   The Review Committee has proposed a framework and metrics to ensure residents are provided adequate exposure (breadth and depth) to essential content areas and procedural cases. The Review Committee believes that the integration of assessments that are continuous, frequent, developmental, and criterion based, and that take place in the clinical setting are important to the development of the surgeon.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   Residents will be provided frequent, continuous, measurable feedback on their progress on the essential components of surgical care. Regular feedback will improve the education as the resident, as well as potentially positively impact the quality of patient care and patient safety.

3. How will the proposed requirement or revision impact continuity of patient care?
   There should be no impact on the continuity of patient care.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?

The integration of competency-based education may require additional resources, such as education modules for faculty members and residents, as well as the implementation of new assessment tools.

5. How will the proposed revision impact other accredited programs?
   N/A

Requirement #: **IV.B.1.b).(2).(e), IV.B.1.d).(4)-(5)**

Requirement Revision (significant change only):

IV.B.1.b).(2).(e) Residents must demonstrate competence in the use of existing and emerging surgical and other relevant value-based technologies and treatments. (Outcome)

IV.B.1.d).(4) Residents should demonstrate competence in incorporating preventive health care skills to improve population health outcomes through ongoing community involvement such as injury prevention, cancer screening, and follow-up. (Outcome)

IV.B.1.d).(5) Residents should demonstrate competence in incorporating stewardship of resources and work to improve operational efficiency in both the inpatient and outpatient settings. (Outcome)

1. Describe the Review Committee's rationale for this revision:
   General surgeons must be mindful of the many dimensions of the outcomes of their care by monitoring patient safety, patient cost, patient access, and effectiveness of treatment.

   The proposed requirements reflect the importance of monitoring patient safety, modeling preventive health care skills, maintaining stewardship of resources, and access to and effectiveness of treatment for both single patients and populations.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   Programs that give residents information on the cost of labs, pharmaceuticals, and imaging, as well as model preventive health care skills through ongoing community involvement, will provide them the foundation to learn to balance clinical benefits with cost and harm. Involving residents in quality improvement initiatives in the hospital and outpatient clinicals that directly relate to their clinical practice will improve the quality of patient care while also potentially increasing patient safety.

3. How will the proposed requirement or revision impact continuity of patient care?
   There should be no impact.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?

The proposed requirements may necessitate resources related to access to clinical practice information and quality improvement data, as well as resources dedicated to clinical education of faculty members, residents, and staff members.

5. How will the proposed revision impact other accredited programs?
   There should be no impact.

Requirement #: **IV.B.1.e.(1).(g)–(i) and IV.B.1.e.(2).(a)-(b)**

Requirement Revision (significant change only):

IV.B.1.e.(1).(g) [Residents must demonstrate competence in:] counseling patients so that they are able to engage in shared decision making related to proposed procedures (risks/benefits/alternatives of procedures); (Outcome)

IV.B.1.e.(1).(h) [Residents must demonstrate competence in:] communicating unexpected outcomes, including life-limiting diagnoses and medical errors; (Outcome)

IV.B.1.e.(1).(i) [Residents must demonstrate competence in:] transferring and conveying all important medical information and procedural details, including complications, in a concise and understandable manner to other members of the health care team who are involved in the patient's care, when indicated (e.g., hand-offs and transitions of care); and, (Outcome)

IV.B.1.e.(2).(a) Residents must demonstrate the ability to recognize the patient's autonomy to choose the person or people who are the patient's support system with whom they wish the health care team to communicate. (Outcome)

IV.B.1.e.(2).(b) Residents must demonstrate the ability to recognize the legally designated or authorized representative with whom communication must occur when the patient does not have capacity. (Outcome)

1. Describe the Review Committee's rationale for this revision:
   General surgeons should have exceptional communication skills to better serve the needs of their patients. Surgeons are required to interact and build relationships with patients, patients' families, care teams, etc., and must develop the requisite skills to perform these tasks. Communication needs to be culturally sensitive, individualized, and conducted through a variety of modalities. It is essential that programs emphasize ethics, professionalism, and cultural sensitivity in all interactions.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   Developing better relationships with patients and patients' families, while emphasizing ethics, professionalism, and culturally sensitive care in all interactions, will not only strengthen relationships, but contribute positively to patient care and safety.

3. How will the proposed requirement or revision impact continuity of patient care?
   There should be no negative impact on continuity of care.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   Programs may need to invest in educational resources and curricula around difficult conversations, advocacy, and cultural sensitivity while ensuring that faculty members are provided adequate resources to role model these for residents.

5. How will the proposed revision impact other accredited programs?
   There should be no impact on other accredited programs.

Requirement #: **IV.C.3., IV.C.3.a)-a).(1), IV.C.3.d), IV.C.3.d).(2)-(3)**Click or tap here to enter text.

Requirement Revision (significant change only):

IV.C.3. Simulation, Didactics, and Conferences

IV.C.3.a) Residents must participate in a structured, comprehensive curriculum which includes a combination of simulation, didactic, and other educational modalities. (Core)

IV.C.3.a).(1) The didactic curriculum must include instruction in applied scientific and clinical principles fundamental to surgery, including wound healing, shock and circulatory physiology, surgical infection, hematologic disorders, immunology and immunosuppression, transplantation, oncology, surgical endocrinology, surgical nutrition, fluid and electrolyte balance, metabolism, and physiologic response to injury, including burn physiology. (Core)

IV.C.3.d) The educational program must ~~implement a level-specific,~~ include simulation-based curriculum that:

IV.C.3.d).(2) has the ability to incorporate new and evolving technologies and treatments into the simulation curriculum; and, (Detail)

IV.C.3.d).(3) complements clinical experience and is tailored to each resident's level of skill. (Detail)

Specialty-Specific Background and Intent: Programs are not required to use high-fidelity simulators to meet the requirements above.

1. Describe the Review Committee's rationale for this revision:
   The Review Committee is expanding the requirements for simulation and the didactic curriculum. The revisions emphasize both the scope and breadth of topics that must be covered while continuing to emphasize that the simulation curriculum should be tailored to the individual resident and that resident's level of education.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   The proposed requirements ensure that all learners are exposed to a didactic curriculum that sufficiently addresses all components essential for surgical care. In

combination with a tailored simulation curriculum, these activities should increase residents' overall medical knowledge and clinical skills, ultimately improving patient care.

3. How will the proposed requirement or revision impact continuity of patient care?
   There should be no impact.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   There should not be additional resources needed.

5. How will the proposed revision impact other accredited programs?
   There should be no impact.

Requirement #: **IV.C.10.e)**

Requirement Revision (significant change only):

IV.C.10.e) Residents must learn to recognize and identify patients that would benefit from solid organ transplantation, manage general surgical conditions in transplant patients, and understand immunosuppressive medications and their complications. (Core)

1. Describe the Review Committee's rationale for this revision:
   The Review Committee has eliminated the requirement for a formal transplant rotation and instead requires that residents be able to identify patients who would benefit from organ transplantation, have experience in the management of surgical conditions in transplant patients, and understand medications and their complications related to transplant patients.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   By not requiring a formal rotation, but still requiring experience in transplant, programs will have more flexibility to address how residents meet the requirement.

3. How will the proposed requirement or revision impact continuity of patient care?
   Allowing the transplant experience to be integrated into other rotations may improve continuity of care.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   No additional resources should be required.

5. How will the proposed revision impact other accredited programs?
   There should be no impact.