

# CORE COMPETENCIES

The ACGME has defined six areas for which programs must ensure that residents become competent at the level expected of a surgical practitioner. The program must define specific knowledge, skills, and attitudes required and provide educational experiences for residents.

## 1. **Patient Care**

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Surgical residents must:

- demonstrate manual dexterity appropriate for training level
- be able to develop and execute patient care plans appropriate for the resident's level

### Specific Knowledge

Residents obtain knowledge through daily patient care and observation of the faculty, who are role models for providing the standard of practice. Didactic conferences provide the knowledge base required to execute patient care plans.

### Skills

Manual dexterity skills are taught through clinical activities in the operating room and with simulators. A skills laboratory using computer-based modules is available to the residents for practice in manual dexterity.

Through supervised, progressive operative experience, the resident performs more complex operative procedures as he/she advances in training. At the senior level, the resident performs complex surgical procedures with faculty supervision.

### Attitudes Required

The qualified surgeon must exhibit compassion, integrity, industry, and interpersonal skills. The resident works with the faculty to admit patients, order diagnostic and therapeutic interventions, perform daily rounds, participate in the operating room, and provide postoperative care. The resident meets with families and interacts with social service, discharge planning, and other care providers. These activities enable the resident to develop the ability to execute patient care plans.

### Educational Experience

Education in manual dexterity and the development of patient care plans occurs through patient care activities on the clinical services. These activities occur in the patient units, operating room, and outpatient offices or clinics.

### Assessment

Progress in obtaining knowledge related to patient care is measured through global ratings at the end of each rotation as well as a summative evaluation by the Surgical Education Committee. The annual resident oral examination provides an assessment of the resident's knowledge related to patient care. The Surgical Education Committee monitors development of manual dexterity through global ratings at the completion of each rotation and the summative evaluation. The resident operative log provides measurable data regarding the resident's progress, along with the portfolio the resident generates throughout the year.

## 2. **Medical Knowledge**

Residents must demonstrate knowledge of established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Surgical residents are expected to critically evaluate and demonstrate knowledge of pertinent scientific information.

### Specific Knowledge

Through the curriculum conferences, the components of basic science related to surgery, as well as the clinical components, are taught. Postoperative care of patients, especially in the critical care units, provides a basis for teaching biomedical science. Surgical Grand Rounds, Matrix and Basic Science Conferences, visiting professor lectures, journal club, and specialty conferences provide additional forums for obtaining medical knowledge.

Clinical research is an integral part of the program. By developing background information and completing a project, the residents develop the ability to critically evaluate scientific information.

### Skills

The curriculum conferences and journal clubs provide a structured environment for developing study skills needed to acquire scientific information. During rotations on clinical services, the residents synthesize the scientific knowledge obtained through the didactic program. Supervised patient care reinforces this knowledge. The scholarly activity program enables residents to critically evaluate the literature and assimilate information related to a specific clinical topic.

### Attitude

The attitude required to develop scientific knowledge is defined by fostering open inquiry in the structured and informal teaching environment. The residents are encouraged to seek and teach information as part of daily patient care.

### Educational Experience

Education occurs through activities on the clinical services along with the curriculum conferences, department conferences, and scholarly activity. The residents also attend regional and national educational conferences.

- a. Biomedical knowledge is provided through the basic science and clinical curricula. In addition to an assigned reading program, the residents review topics selected from missed questions on the prior year's in-training examination. Biomedical science is taught during patient care rounds.
- b. Clinical knowledge is taught during daily patient care activities of the clinical teams. The patient's pathophysiology is discussed, and in-depth clinical knowledge is conveyed on rounds and in the operating room,

#### Assessment

Acquisition and application of medical knowledge is evaluated through the annual in-training and oral examinations, global ratings at the end of each rotation, and a summative evaluation by the Surgical Education Committee. Attendance records are maintained and monitored in the Department of Surgery.

### 3. **Practice-Based Learning and Improvement**

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:

- Identify strengths, deficiencies and limits in one's knowledge and expertise
- Set learning and improvement goals
- Identify and perform appropriate learning activities
- Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement
- Incorporate formative evaluation feedback into daily practice
- Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- Use information technology to optimize learning, and
- Participate in the education of patients, families, students, residents and other health professionals.

Surgical residents are expected to:

- critique personal practice outcomes
- demonstrate recognition of the importance of lifelong learning in surgical practice

#### Specific Knowledge

The resident evaluates his/her personal performance and clinical outcomes as part of daily patient care activities. This includes seeking information on patients under their care in appropriate textbooks and journal articles. Discussions of cases presented at Matrix conference and weekly case conference enhance the resident's knowledge of patients under his/her care.

The value of lifelong learning using the practice-based format occurs through the role modeling of surgical faculty, peer instruction, and preparation for board certification. The residents are provided membership in the Resident & Associate Society of the American College of Surgeons. Each senior resident is required to attend a meeting of the American College of Surgeons, whose organizing principle was the establishment of ongoing education for the practicing surgeon.

### Skills

Skills for practice-based learning are taught to the residents through lectures, journal club, teaching on patient care rounds, and by faculty example. The oral examination and required certification in ACLS and ATLS encourage lifelong learning. The in-training examination sets a standard for educational achievement as a resident advances through the program.

### Attitudes

The attitude needed to establish practice-based learning is achieved through the environment created within the department by the faculty and by the residents in the program.

### Educational Experience

Clinical rotations, in conjunction with standard teaching conferences provide the educational milieu in which practice-based learning can be achieved. The residents participate actively in these events.

### Assessment

Evidence of practice-based learning by the residents is documented through their portfolios, in-training and oral examinations, and global ratings based on performance during teaching rounds and weekly conferences.

## 4. **Interpersonal and Communication Skills**

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and other health professionals. Residents are expected to:

- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
- Communicate effectively with physicians, other health professionals, and health related agencies
- Work effectively as a member or leader of a health care team or other professional group
- Act in a consultative role to other physicians and health professionals, and
- Maintain comprehensive, timely, and legible medical records.

Surgical residents are expected to:

- communicate effectively with other health care professionals

- counsel and educate patients and families
- effectively document practice activities

### Specific Knowledge

Effective communication is defined for the residents as the ability to interact verbally and in writing to facilitate the patient's care.

Communication includes personal and telephone conversations, chart documentation, and record keeping.

Teaming with the patient, family, and other health professionals is accomplished in a considerate manner by recognizing the other participants as competent, capable individuals who participate in the process of returning the patient to his/her family in good health.

### Skills

Clarity in written and verbal communication is essential. Communication must be provided in a timely manner with respect and compassion for the patient, his/her family, and members of the health care team. Effective communication requires honesty and regard for the patient's understanding of medical vocabulary.

The development of empathy and consideration for the patient and his/her family are crucial to effective collaboration with the patient, family, and health professionals. Accurate and prompt information must be provided through both written and verbal communication to facilitate the care of the patient.

### Attitudes

Effective communication requires a humanistic attitude using both secular and religious philosophies. Communication must be tailored appropriately for the particular patient and circumstance.

### Educational Experience

The educational experience occurs through the resident's participation with the patient care team. In the daily care of patients, effective verbal communication opportunities arise through interaction with nurses, therapists, and families. Experience in written communication is obtained through daily chart notes, operative note dictation, and discharge summary preparation. The didactic educational experience is provided through the general surgery curriculum (i.e., Matrix conference and case conferences).

### Assessment

Global evaluations at the end of each clinical rotation and evaluations completed by ancillary staff provide an assessment of the resident's development. Resident portfolios also assess the development of interpersonal and communication skills. Maintaining his/her operative log on a timely basis is another measure of effective communication by the resident.

## 5. **Professionalism**

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

- Compassion, integrity, and respect for others
- Responsiveness to patient needs that supersedes self-interest
- Respect for patient privacy and autonomy
- Accountability to patients, society and the profession, and
- Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.

Surgical residents are expected to:

- maintain high standards of ethical behavior
- demonstrate a commitment to continuity of patient care
- demonstrate sensitivity to age, gender, and culture of patients and other health care professionals

### Specific Knowledge

Specific knowledge regarding ethical behavior is gained through formal and informal meetings with the program director and the hospital leadership (i.e., department chairman, Director of Medical Education). The ethical standard of behavior for the surgical resident is to conduct himself with a level of integrity that will earn the respect of peers, the community, and the profession.

Continuity of care is taught to surgical residents through the organization of the resident teams and their daily activities. Continuity of care is defined as the daily attendance to the preoperative and postoperative needs of patients, as well as participation in outpatient evaluation and postoperative follow-up.

Specific knowledge regarding sensitivity to age, gender, and culture is a standard that all residents are expected to maintain. Residents must be cognizant of the special needs of others with attention to individual sensitivities.

### Skills

The following skills are taught to the surgical resident regarding professionalism.

- a. The resident is instructed to interact with his/her patients and fellow health care workers in an honest, considerate manner appropriate for his/her position as a physician.
- b. Making daily rounds and evaluating patients with the team is an essential part of the educational program. The resident learns documentation through chart notes and personal communication with the attending surgeon. Residents are instructed in outpatient surgical management through participation in outpatient surgical clinics and private offices.

- c. Respect for patient and peer sensitivities is taught through interaction and active use of the literature to assure consideration of specific patients' needs and concerns.

#### Attitudes

The residents are expected to develop an attitude that brings to their patients a caring, honest countenance at all times, regardless of the patients' varying personal characteristics.

#### Educational Experience

The development of professionalism occurs through the resident's participation with a clinical team caring for patients. The resident applies the skills that he/she has developed during inpatient and outpatient interactions. Mentoring and role modeling by attending faculty is critical in this educational process. As a member of the team, the resident can observe the faculty in a close one-on-one relationship. The institutional curriculum includes relevant sessions for the development of professionalism as a key component of a caring physician.

The general surgery residency curriculum addresses the issues of ethics, care of the elderly patient, and care of the pediatric age group through journal club, curriculum topics, and Grand Rounds.

Consideration for the culture of patients is expected on all surgical services in which the resident participates. In addition, the residents see underprivileged members of our community in the clinic setting. This population includes individuals of varying ethnic and cultural backgrounds. The residents develop the skills to interact with these individuals and respond to their specific need.

#### Assessment

The development of professionalism is monitored through several evaluation tools, including the global rating at the end of each clinical rotation and the summative rating by the Surgical Education Committee. Nursing and peer evaluations are also useful in assessing professionalism. Resident portfolios will be used to evaluate development of professionalism. Participation in office hours and the surgical clinic, as a demonstration of professionalism, is monitored.

### 6. **Systems-Based Practice**

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:

- Work effectively in various health care delivery settings and systems relevant to their clinical specialty
- Coordinate patient care within the health care system relevant to their clinical specialty

- Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate
- Advocate for quality patient care and optimal patient care systems
- Work in interprofessional teams to enhance patient safety and improve patient care quality, and
- Participate in identifying system errors and implementing potential systems solutions.

Surgical residents are expected to:

- practice high quality, cost effective patient care
- demonstrate knowledge of risk-benefit analysis
- demonstrate an understanding of the role of different specialists and other health care professionals in overall patient management

### Specific Knowledge

The cost of various therapies is discussed with residents in the clinical and conference settings, providing specific knowledge in delivering high quality, cost-effective care. Risk-benefit analysis occurs daily on the clinical services as decisions are made regarding diagnostic tests or treatment for a patient. This same process occurs in the operating room as decisions are made during the surgical procedure.

Patient management is conducted as a team effort on all clinical services with appropriate use of specialists and other health professionals to optimize patient care (i.e., physical therapy, social service, discharge planning, and home care).

### Skills

The efficacy as well as cost of alternatives to care for patients on the residents' clinical services is part of the daily discussion on rounds. This data is assimilated by the residents throughout their training. The development of decision-making skills is a major goal of the program. The residents are expected to develop these skills through active role modeling of the attending faculty as well as integrating the knowledge they have gained in the formal program curriculum. The surgical resident must learn the skills that can be brought to patient care by various appropriate specialists and recognize the benefit to their patients through the appropriate use of other members of the health care team.

### Attitude

The resident is expected to develop a team approach to patient care, recognizing the value of a group effort to obtain the optimum outcome for the patients. The residents are instructed in the integration of their personal role into this team, recognizing that they must assume the leadership role as a responsible physician while respecting the skills of other members of the patient care group.

### Educational Experience

Education occurs through the clinical rotations to which the residents are assigned. On a daily basis, the residents participate in a systems-based practice. Through consultation with specialists and conferences with health care providers involved in a patient's care, the residents learn the skills necessary to focus on the individual's needs.

#### Assessment

Evaluation of the learning of systems-based practice is conducted by the 360° evaluation, the annual oral examination, the global evaluation, the resident's portfolio and the in-training examination.