

GOALS & OBJECTIVES

Surgery Clerkship Goals

The aim of the third-year Surgery clerkship is to prepare students to identify disease processes and clinical situations in which surgical intervention is appropriate; to understand what is needed to prepare a patient for surgical intervention; and to care for the patient after surgical intervention. The clerkship is designed as a survey course of “*surgery in general*” rather than a course in “general surgery”. We strive to deliver an educational experience that fosters self-directed learning in a setting where students feel empowered to explore the discipline of surgery and develop an understanding of how surgery interacts with other disciplines in medicine.

Students will have the opportunity to evaluate patients and formulate care plans in the inpatient and outpatient settings with graduated independence. The clerkship is structured so that the majority of time is spent in the clinical setting. Additional learning activities include hands-on simulation based learning activities, didactic lectures and small group, problem-based learning seminars.

Students will be assessed at the completion of the clerkship through a composite evaluation comprised of clinical performance feedback from faculty and residents, small group participation, professionalism assessment, an end-of rotation OSCE exam and the Surgery NBME exam.

Students are expected to actively maintain their online clerkship log which includes assessment and evaluation of patients with a variety of common surgical diagnoses and specific clinical/procedural skills. Students will achieve the majority of these objectives through actual patient encounters and will have access to alternate learning experiences if needed.

Goals

- **Excite** - Under the guidance of a surgeon-preceptor, we provide exposure to the breadth and depth of the surgical sciences by enabling students to function as a contributing member of the surgical team in ambulatory and inpatient settings.
- **Explain** - We introduce the principles of surgery and the rationale behind surgical intervention through self-directed learning activities.
- **Expand** - We provide students with the opportunity to expand their clinical knowledge and develop skills necessary to provide patient care. Particular emphasis is placed on teaching skills needed to diagnose surgical diseases and to determine criteria for surgical referral while fostering the development of lifelong learning skills.
- **Interact** - We foster student growth in the areas of communication skills, practice-based learning, medical ethics and moral reasoning, professionalism and social and community context of health care.

Phase 2 (All Clerkships) Common Objectives

Objective 1: Perform a directed history and physical exam and document findings clearly and timely in the medical record. (EPA 1, EPA 5) (PCMC-1; PCMC-2; PCMC-3; PCMC-5; ECIS-1; ECIS-2)

Expectations

Students will obtain a history and perform components of a physical exam in one or more of the outpatient, emergency room and inpatient settings.

Assessment

Faculty and residents will directly observe or review with the student a patient's history and observe the students performing a physical exam. Faculty and residents will read and review student notes on an ongoing basis during the clerkship. History and physical exam skills will be assessed by observation, discussion, documentation, and in the end- of-rotation OSCE.

Objective 2: Acquire and apply evidence-based knowledge to clinical care. (EPA 2, EPA 3, EPA 7) (MKS-1b,1c,1d,1e,1f; MKS-3a,3b; CLQI-3; PBMR-1; PBMR-1,2; PCMC-3)

Expectations

Several knowledge topics are covered in didactic lectures and in small group seminars. Students are expected to independently study each of the knowledge objectives. This list of required objectives is on EMERG. Students are expected to independently review topics related to patients they encounter in the clinical setting.

1. Students will actively participate in the evaluation and care of patients presenting with surgical diseases.
2. Students will participate in scheduled conferences, including problem-based small group seminars, didactic sessions, and other interactive formats.
3. Students will participate in surgical procedures.

Assessment

Students will demonstrate their acquisition of knowledge by successful completion and passage of the NBME Subject Examination in Surgery (minimum score in the 10th percentile nationally).

Students will review the literature and address clinical questions in preparation for the small group seminars. Faculty and residents will assess each student's ability to search and analyze the literature on an ongoing basis during the clerkship.

Objective 3: Demonstrate effective interpersonal communications skills with patients and as a member of the healthcare team (EPA 6, EPA 9) (ECIS-1; ECIS-3; ECIS-4; PCMC-6; SATBC-2a-2b)

Expectations

Students will:

- Establish rapport with patients.
- Communicate in a way patients understand by avoiding medical jargon and checking back for understanding.
- Work collaboratively with nursing staff, residents and attendings.
- Contribute information effectively to the team in a clear and timely manner.
- Ask for guidance from other team members when appropriate

Assessment

Students will be assessed specifically on these interpersonal skills through the use of the CPA forms (communication domains and EPA 9). Feedback will be reflected in the Final Grade Narrative.

Objective 4: Demonstrate professional characteristics as a student doctor and a member of the healthcare team

(EPA 9) (PBMR-3; PBMR-5; PBMR-6; PBMR-7; SATBC-2a-2b; CLQI-1a-1b; CLQI-2)

Expectations

Students will:

- Demonstrate dependability, truthfulness and integrity.
- Participate actively in learning opportunities and work assignments.
- Acknowledge and demonstrate awareness of own limitations.
- Take initiative for their own learning and patient care.
- Remain open to feedback and implement it.
- Treat all patients with respect and compassion
- Protect patient confidentiality.
- Students participating in patient care activities are expected to present a professional image in both conduct and attire, including the following:
 - Personal cleanliness
 - Attire appropriate to professional environment
 - Clean white coat
 - Jade green scrubs only in the proper locations, covered when appropriate and never worn outside the hospital
- Professional conduct also includes the following:
 - Charting is to be completed in a timely manner
 - Adhere to all principles of patient privacy, particularly regarding hard copies of medical records and discussion of patients in public places. Maintain a collaborative tone when communicating in front of patients or in the medical record. Arrive for clinics on time and well-prepared

Assessment

Students will be assessed specifically on these professionalism skills on the Clinical Performance Assessment (EPA 9 and Professionalism Domains). Feedback will be incorporated into the Final Grade Narrative where appropriate.

Objective 5: Advocate on behalf of patients. (CES-1, CES-2, SATBC-1)

Expectations

Students will:

- Identify social barriers to care and link patients to resources to address them.
- Effectively call on system resources to provide care that is of optimal value.

Assessment

Students will be assessed specifically on these skills through the use of the CPA forms . This will be reflected in the Final Grade Narrative.

PATIENT-CENTERED MEDICAL CARE

1. Obtain a patient history (PCMC-1) (CPA, DO, OSCE)

- Students will perform a total of 10 oral presentations and document in the clerk log.

2. Perform a targeted physical exam (PCMC-2) (CPA, DO, OSCE)

Perform a targeted physical exam including exams targeting specific systems:

Abdominal exam - Students will complete a total of five abdominal exams and document in the clerk log. Students must obtain a minimum of **four** EPA assessments from faculty or residents over eight weeks. Two of these assessments must include either a history or physical exam.

- Demonstrate complete abdominal exam including inspection, auscultation, percussion and palpation
- Detect abnormal findings of abdominal exam including abnormal bowel sounds, masses, hernia, tenderness and guarding and describe their significance.

Orthopedic exam – Student will be able to do basic assessment focused on:

- Shoulder and Neck exam
- Knee exam
- Back and Hip exam
- Foot and ankle exam

Urologic Exam – Student will be able to:

- Detect hernia on physical exam
- Demonstrate patient education for self-testicular exam

Vascular exam – Student will be able to:

- Demonstrate proper location and technique for listening for carotid bruit
- Demonstrate proper location and technique for palpating carotid, brachial, radial, femoral, popliteal, dorsalis pedis and posterior tibial pulses
- Demonstrate proper technique for palpating an abdominal aortic aneurysm
- Perform and calculate an ankle brachial index
- Evaluate perfusion of extremity after trauma
- Evaluate extremity for consideration of compartment
- Evaluate extremity for DVT

3. Efficiently report findings of history, physical exam, diagnostic studies and prior records. ECIS-3, PCMC-3 (CPA, OSCE)

4. Formulate a patient care plan based on the most likely differential diagnoses, including necessary diagnostic tests, therapeutic treatment, and family education. PCMC-3, PCMC-6 (CPA, OSCE, NBME)

5. Demonstrate competency level performance in these basic technical skills listed: PCMC-4 (CPA, EPA, OSCE,

CL)

Expectations

The following skills will be covered in hands-on mentored skills sessions: Basic suturing, **suture and staple removal**, Foley catheter insertion, ~~Nasogastric intubation~~, Removal of closed suction drains and NG tube, Intravenous catheter insertion, Ankle-brachial index calculation, Arterial puncture, Aseptic dressing change,

Assessment

Students are required to perform and document required skills in the clerkship log. Students must pass a verification of proficiency for urinary catheter insertion.

- a. Demonstrate appropriate technique for removal of drain or chest tube
 - b. Demonstrate appropriate technique for aseptic dressing change
 - c. Demonstrate appropriate technique for hand scrub and sterile self-gown and glove
 - d. Demonstrate sterile placement of urethral catheter in male or female
 - e. Demonstrate appropriate technique for placing NG tube
 - f. Demonstrate simple closure of skin including suture selection and knot tying
 - g. Place or remove skin staples
 - h. Demonstrate appropriate technique for placing iv or venipuncture
6. Recognize normal and identify the following abnormal findings on imaging studies. MKS-1d, 3a
- Chest x-ray: pneumothorax, hemothorax/effusion, rib fracture, widened mediastinum
 - Abdominal films: normal gas pattern, ileus, small bowel obstruction, free air
 - Spine: normal c-spine, fracture, arthritis
 - Fractures of long bones
 - CT abdomen: normal aorta, liver, bowel, appendix, free air, aneurysm, ruptured aneurysm, small or large bowel obstruction, appendicitis, pancreatic mass, liver metastases, urolithiasis, hydronephrosis
 - Non-contrast CT head: normal, sub-dural hematoma, epidural hematoma, midline shift, fracture
 - Ultrasound of gall bladder – stones, findings of cholecystitis
 - HIDA scan: interpretation for cholecystitis, choledocholithiasis, bile leak
 - Mammogram: normal, speculated mass, microcalcifications

MEDICAL KNOWLEDGE AND SCHOLARSHIP, CONTINUOUS LEARNING AND QUALITY IMPROVEMENT

7. Demonstrate the ability to acquire and apply scientific knowledge to a clinical problem in the small group setting (seminar groups) MKS-3a, 3b; CLQI-3 (SG)
8. Attend required conferences and complete the electronic clerk log. PBMR-5 (Attendance, CL)
9. Practice appropriate infection control measures while caring for patients. CLQI-5 (DO)

COMMUNICATION AND INTERPERSONAL SKILLS

10. Communicate patient information accurately and efficiently to all health care team members in a timely manner. ECIS-3 (CPA, DO)
11. Deliver clear, properly-timed, and well-formatted oral presentations. ECIS-3 (CPA, DO)
12. Write concise, accurate notes in the EHR with up-to-date information including current patient assessments, appropriate physical exams, and problem-based plans. ECIS-2, PCMC-3, PCMC-5 (CPA)
13. List the components of informed consent. ECIS-4 (NBME)

PROFESSIONAL BEHAVIOR AND MORAL REASONING, PERSONAL AWARENESS & SELF-CARE

14. Consistently take initiative for own learning and patient care. PBMR-5,7 (CPA, SG)
15. Demonstrate accountability, dependability, and integrity when interacting with patients, families, and members of the health care team. PBMR-3, PBMR-5, SATBC-2a (CPA, CL, SG)
16. Demonstrate respect, compassion, accountability, dependability, and integrity. PBMR-3 (CPA, DO, OSCE)
17. Observe all patient privacy guidelines. PBMR-6 (CPA)
18. Adhere to standards regarding punctuality, dress, and professional boundaries. PBMR-3,5 (CPA, DO, OSCE)
19. Maintain professional dress and demeanor and develop professional relationships with peers, faculty and staff. PBMR-3(CPA, DO, OSCE)

20. Participate in one ethics conference and be able to participate in a discussion of ethical principles as they apply to surgery: (attend one conference, complete one write-up) PBMR-1 (ES)

SYSTEM AWARENESS AND TEAM-BASED CARE

- 21. Work as an effective member of the healthcare team in an outpatient clinic, inpatient teaching team, or urgent care setting. SATBC-2a, 2b (CPA, DO)
- 22. Interact effectively with clerical staff, nurses, physician assistants, nurse practitioners, and physicians in a cooperative manner to effectively and efficiently provide patient care. SATBC-2a, 2b (CPA, DO)
- 23. Collaborate effectively to help the healthcare team achieve its goals. SATBC-2a, 2b (CPA, DO)
- 24. Implement provided feedback. CLQI-1a (CPA)

COMMUNITY ENGAGEMENT AND SERVICE

- 25. Identify a patient's medical needs and assess barriers in accessing care. CES-1, SATBC-1 (CPA)
- 26. Appropriately utilize community resources and multidisciplinary consultants including social work, nutrition, and physical therapy, for patients in both inpatient and outpatient settings. CES-2, SATBC-1 (CPA, OSCE)
- 27. Assess and reflect on ethical challenges when caring for surgical patients. PBMR-1,2 (ES)
- 28. Demonstrate awareness of community/social factors that influence medical decision-making. CES-1, PBMR-2 (CPA, ES)

Assessment Type

CPA	Clinical Performance Assessment
NBME	Shelf Exam
OSCE	Observed Simulated Clinical Encounter
ES	Ethics Session
CL	Clerklog
SIM	Simulation
MC	Mid-Clerkship Feedback Form
SG	Seminar Group
DO	Direct Observation