DEPARTMENT OF SURGERY

THORACIC SURGERY (ALLEGIANCE ROTATION)

Allegiance Hospital (Jackson MI)

House Officer IV

Curriculum/Rotation Goals and Objectives for Surgery Residents
Thoracic Surgery (Allegiance Hospital)
House Officer IV

**Goal:** The goal of the HO IV rotation in thoracic surgery at Allegiance Hospital is to build on previous knowledge, skills, and attitudes provided during the HO III thoracic surgery rotation at the Cardiovascular Center. The Allegiance rotation allows an apprenticeship-type experience with Dr. Mohan Kulkarni (an academically-trained community-practice thoracic surgeon). This allows complementary exposure and experience for multiple conditions and procedures in thoracic surgery different from the typical experience at the University of Michigan. The residents also have the opportunity to increase their experience and proficiency in endoscopic procedures by working with Dr. Vishal Gupta. The rotation at Allegiance Hospital is also meant to increase the residents’ ability to practice and appreciate differences in a different health care setting working with a different socio-economic patient group.

**Learning Objectives:**

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<th><strong>Patient Care:</strong> By the end of the Allegiance Thoracic Surgery rotation, the HO IV resident will be able to:</th>
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<td>1. Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families</td>
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<td>2. Gather essential and accurate information about their patients, especially regarding tumors or functional abnormalities of the lungs and/or esophagus, gastroesophageal reflux, or mediastinal masses</td>
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<td>3. Perform a thorough physical examination relevant to the presenting complaints or diagnosis</td>
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<td>4. Demonstrate accurate and systematic interpretation of chest X-rays, CT scans, and contrast studies used in the evaluation of thoracic diseases</td>
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<td>5. Suggest diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment</td>
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<td>6. Counsel and educate patients and their families</td>
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<td>7. Use information technology (in an unfamiliar system) to effectively support patient care decisions and patient education</td>
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<td>8. Assist and perform portions of operative cases (under supervision) such as laparoscopic and open fundoplication or para-esophageal hernia repair, thoracotomy for pulmonary lobectomy, VATS for pulmonary wedge resection, Ivor-Lewis esophagectomy</td>
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<td>9. Collaborate with health care professionals, including those from other disciplines, to provide patient-focused care, with a particular attention to the multidisciplinary care of the thoracic surgery patient which includes interactions with radiology, oncology, nutrition, physical therapy, and discharge planning</td>
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<td>10. Perform pre-procedure evaluation for endoscopic procedures and safely and effectively perform colonoscopy under supervision from Dr. Vishal Gupta</td>
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<th><strong>Medical Knowledge:</strong> By the end of the Allegiance Thoracic Surgery rotation, the HO IV resident will be able to:</th>
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<td><strong>1. Gastro-esophageal Reflux, Hiatal Hernia, and Para-esophageal Hernia</strong></td>
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<td>a. Construct a treatment plan for patients with GERD based on their knowledge of esophageal and gastric and physiology, including the location and function of the gastro-esophageal junction</td>
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<td>b. Integrate their knowledge of the pathophysiology with the clinical presentation of gastro-</td>
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esophageal reflux disease (GERD)

c. Compare and contrast the classic and atypical symptoms of GERD
d. Integrate their knowledge of the anatomy and pathophysiology to guide evaluation of patients with para-esophageal hernia (including Types I-IV)
e. Compare and contrast the most common urgent and chronic symptoms of para-esophageal hernia
f. Develop a treatment plan for management of acute gastric volvulus in the context of a para-esophageal hernia
g. Compare and contrast the common treatment options for GERD, with particular attention to laparoscopic approaches
h. Compare and contrast complete and partial fundoplication, both in terms of technique and rationale
i. Construct a treatment plan based on their knowledge of the common treatment options for para-esophageal hernia, with particular attention to correct application of laparoscopic approaches
j. Construct an intra-operative strategy to address the intra-operative complications of both open and laparoscopic hiatal hernia repair and/or fundoplication
k. Construct a plan to manage post-operative complications, both short and long term for hiatal hernia repair and fundoplication
l. Identify post-operative complications and demonstrate safe and effective management in conjunction with Dr. Kulkarni, including esophageal perforation, bleeding, dysphagia, recurrence, and “red flags” that may indicate a need for reoperation

2. Lung Cancer

a. Explain typical diagnostic patterns of lung cancer and guidelines for CT imaging and follow up of incidental lung nodules
b. Delineate histologic subtypes of lung cancer and discuss risk factors for each
c. Outline surgical treatment strategies for each subtype of lung cancer
d. Explain lung cancer staging schemes
e. Diagram lymph node stations and nomenclature relevant to lung cancer
f. Discuss prognosis of lung cancer and the factors that affect it

3. Emphysema

a. Explain known risk factors for emphysema and chronic obstructive pulmonary disease
b. Discuss the diagnosis of emphysema and typical imaging and pulmonary function test results
c. Discuss selection of patients with pulmonary blebs and/or emphysema for lung volume reduction surgery
d. Explain the role and performance of lung volume reduction surgery including VATS techniques

4. Esophageal Cancer

a. Explain typical diagnostic patterns of esophageal cancer and discuss risk factors
b. Construct a plan for staging of esophageal cancer and explain the details of the staging system
c. Explain necessary imaging for staging of esophageal cancer and interpret typical images obtained
d. Outline surgical treatment strategies for esophageal cancer and explain the details and differences in trans-hiatal esophagectomy and Ivor-Lewis esophagectomy
e. Demonstrate understanding of the role of neoadjuvant chemotherapy and explain the details and expected outcomes of treatment
f. Explain the influence of nutritional status and smoking on expected outcomes of surgery
g. Discuss prognosis of esophageal cancer and the factors that affect it

Systems-Based Practice:
By the end of the Allegiance Thoracic Surgery rotation, the HO IV resident will be able to:

1. Identify practical system differences between Allegiance Health and University of Michigan and understand influences on patient care
2. Explain the role of systems in delivering optimal health care, including how “system problems” contribute to quality problems
3. Explain how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.

4. Explain how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.

5. Practice cost-effective health care and resource allocation that does not compromise quality of care.

6. Advocate for quality patient care and assist patients in dealing with system complexities.

7. Collaborate with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

**Practice-Based Learning and Improvement:**

By the end of the Allegiance Thoracic Surgery rotation, the HO IV resident will be able to:

1. Analyze patient care experience and perform practice-based improvement activities using a systematic methodology (discussed in QI curriculum).

2. Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.

3. Conduct an effective literature search about a given thoracic surgery topic.

4. Describe/design a systematic approach to evaluate the results of one’s own practice.

5. Use information technology (in a new health care system setting) to manage information, access online medical information; and support their own education.

**Professionalism:**

By the end of the Allegiance Thoracic Surgery rotation, the HO IV resident will be able to:

1. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and ongoing professional development.

2. Demonstrate appropriate sensitivity to the thoracic surgery patient population, and understand how their needs may be different from other patients.

3. Recognize the importance of timely record keeping and its impact on the quality of general surgery care.

4. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.

5. Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

**Interpersonal and Communication Skills:**

By the end of the Allegiance Thoracic Surgery rotation, the HO IV resident will be able to:

1. Create and sustain a therapeutic and ethically sound relationship with patients.

2. Demonstrate and employ effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.

3. Work effectively with others as a member or leader of a health care team or other professional group.

4. Demonstrate the ability to interview and evaluate the patient, especially the newly-diagnosed cancer patient.