

MEDICAL ONCOLOGY AND HEMATOLOGY (R2, R3)

A. The PURPOSE of this rotation is to afford medical residents a broad clinical and training experience in the clinical diagnosis and management of common adult malignancies and hematologic problems, both malignant and non-malignant. This program will encompass both the in-patient and out-patient setting and reflect consultative, primary care, and educational foci.

Both R2 and R3 residents may be assigned to the rotation. The Department of Medicine does not distinguish R2 and R3 resident assignments on this rotation; both have identical levels of responsibility for patient care, teaching, and medical record documentation. There are no differences in patient assignment. However, R3 residents are expected to display a greater degree of independence in decision-making (under the supervision of the Attending Physician) than R2 residents.

The level of SUPERVISION is, at minimum, Indirect with Direct Available.

B. GOALS AND OBJECTIVES RELATED TO THE COMPETENCIES

<i>1. Patient Care</i>	Goal: 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.	
Objectives	Actions: To achieve these objectives during this rotation, DO these:	Assessment: Achievement of these objectives will be evaluated by:
<ul style="list-style-type: none"> <li>perform a medical history and physical examination focused on findings specific for a patient with various malignancies</li> </ul>	See patients on the inpatient hematology and/or oncology consultation service and in the outpatient clinics for both services under the supervision of fellows and attending physicians. Present cases to attendings on rounds and in clinic to discuss plans for diagnosis and treatment	Competency-Based Subspecialty Medicine Evaluation by attending physician based on patient interactions, professional interactions, review of medical records, and performance on teaching and patient care rounds.
<ul style="list-style-type: none"> <li>plan an approach to risk factors, detection, strategies, risk-reduction approaches, and therapy of the common adult cancers: lung, breast, colon, lymphoma, testicular cancer, prostate, gastric, and ovarian cancer</li> </ul>	Gather a thorough history upon consultation of the patient with suspected malignant disease. Counsel on strategies for risk-reduction, including adjuvant chemotherapy, quitting smoking, and routine surveillance.	Attending physician will observe consultation history and physical, and counseling on risk-reduction at least once during the resident's rotation on this subspecialty service.
<ul style="list-style-type: none"> <li>use accepted tumor clinical staging practices and designations for common adult malignancies</li> </ul>	Upon seeing patients with malignant disease, designate TNM staging clearly on consult, clinic, or progress note.	Attending physician will directly observe the written note that documents resident's appropriate TNM designation for each patient seen.

Curriculum: Goals and Objectives  
 Department of Medicine  
 Harbor-UCLA Medical Center

<ul style="list-style-type: none"> <li>Exposure to some of the broad principles of cancer therapy and be aware of relevant toxic and dose-dependent side effects of such therapy</li> </ul>	Follow patients undergoing chemotherapy on the consult service and in the outpatient setting.	
<ul style="list-style-type: none"> <li>assess and manage pain and reactive depression as these pertain to the patient with cancer</li> </ul>	Use pain scale to rate level of pain. Recommend pain management options and/or appropriate referral to pain service/psychiatry/social work.	
<ul style="list-style-type: none"> <li>Exposure to the psychosocial sequelae of clinical cancer on the patient and the patient's family and is aware of resources and intervention techniques to assist in such problem areas should they arise</li> </ul>	Assess psychosocial effects on patients daily lives during initial consultation and on follow-up of inpatient consults. Be able to recommend social work consult when appropriate.	
<ul style="list-style-type: none"> <li>use clinical and laboratory techniques to assess clinical cancer progression and response to therapy</li> </ul>	Present radiographic and laboratory results in discussion of management of malignant disease as it pertains to specific patients.	
<ul style="list-style-type: none"> <li>Be aware of principles of clinically appropriate cost-benefit analysis to current aspects of diagnosis and treatment of clinical cancer</li> </ul>	Discuss with attending the cost-benefit analysis of diagnosis and treatment of malignant diseases and common hematologic disorders during rounds or while presenting cases in the outpatient clinic.	
<ul style="list-style-type: none"> <li>have an approach to management of common blood disorders</li> </ul>	Be able to describe the initial laboratory workup of common blood disorders.	
<ul style="list-style-type: none"> <li>understand standard hematology tests, including clotting tests and the peripheral blood smear</li> </ul>		

<i>2. Medical Knowledge</i>	Goal: Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.	
Objectives	Actions: To achieve these objectives during this rotation, DO these:	Assessment: Achievement of these objectives will be evaluated by:
<ul style="list-style-type: none"> <li>acquire a core understanding of risk factors, detection, strategies, risk reduction approaches, and therapy of the common adult cancers</li> </ul>	Attend and participate on consult rounds, outpatient clinics, and clinical conferences.	Competency-Based Subspecialty Medicine Evaluation by attending physician based on patient interactions, professional interactions, review of medical records, and performance on

Curriculum: Goals and Objectives  
 Department of Medicine  
 Harbor-UCLA Medical Center

<ul style="list-style-type: none"> <li>understand the etiology, detection, strategies, risk-reduction approaches, and therapy for other tumors less commonly seen in oncology practice</li> </ul>		teaching and patient care rounds.
<ul style="list-style-type: none"> <li>appreciate accepted tumor clinical staging practices and designations for the common adult malignancies</li> </ul>		
<ul style="list-style-type: none"> <li>appreciate the multimodal therapeutic approach and integrates such therapeutic decisions with clinical and pathologic staging assessments of these malignancies.</li> </ul>	Attend tumor board.	
<ul style="list-style-type: none"> <li>know the broad principles of cancer therapy and be aware of relevant toxic and dose-dependent side effects of such therapy.</li> </ul>	Follow patients undergoing chemotherapy both in the inpatient and outpatient settings to learn and observe treatment related toxicities.	
<ul style="list-style-type: none"> <li>become familiar with the vocabulary of tumor therapy such as "adjuvant, neoadjuvant, palliative, regional disease, metastatic disease, remission". so that therapeutic decisions can be appropriately structured and evaluated for efficacy.</li> </ul>	Read textbooks, journals, pertinent articles relevant and appropriate to specific diseases encountered on the consult service and in the outpatient setting.	
<ul style="list-style-type: none"> <li>become familiar with the important aspects of clinical carcinogenesis, molecular biology, and inheritance as these apply to the common cancers</li> </ul>	Attend and contribute to sub-specialty core conferences/didactic sessions.	
<ul style="list-style-type: none"> <li>know some of the common para-neoplastic syndromes associated with cancer</li> </ul>		
<ul style="list-style-type: none"> <li>gain appropriate knowledge of pathophysiology, diagnosis, and treatment of blood diseases</li> </ul>		
<ul style="list-style-type: none"> <li>develop an approach to management of common blood disorders</li> </ul>		
<ul style="list-style-type: none"> <li>understand standard hematology tests, including clotting tests</li> </ul>		

Curriculum: Goals and Objectives  
 Department of Medicine  
 Harbor-UCLA Medical Center

<ul style="list-style-type: none"> <li>can explain indications, contraindications, and complications of bone marrow aspiration and biopsy, and fine needle aspiration</li> </ul>	Observe bone marrow biopsy procedure.	
<ul style="list-style-type: none"> <li>demonstrate awareness of areas of needed improvement in knowledge of medical oncology and hematology</li> </ul>	Keep ongoing dialogue with fellows and attendings regarding potential areas for improvement in knowledge base.	
<ul style="list-style-type: none"> <li>demonstrate awareness of clinical guidelines and the role of clinical trials for management of patient with cancer</li> </ul>	Use national guidelines as available online in consultation with patient with malignant disease.	

<i>3. Systems-Based Practice</i>	Goal: 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.	
Objectives	Actions: To achieve these objectives during this rotation, DO these:	Assessment: Achievement of these objectives will be evaluated by:
<ul style="list-style-type: none"> <li>coordinates resources for optimal patient care, including ancillary services, guidelines, patient education, social services, and non-physician care specialists</li> </ul>	Attend various tumor boards to appreciate multi-modality approach to diagnosing and treating patients with cancer.	Competency-Based Subspecialty Medicine Evaluation by attending physician based on patient interactions, professional interactions, review of medical records, and performance on teaching and patient care rounds.

<i>4. Practice-Based Learning and Improvement</i>	Goal: 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.	
Objectives	Actions: To achieve these objectives during this rotation, DO these:	Assessment: Achievement of these objectives will be evaluated by:
<ul style="list-style-type: none"> <li>use evidence from the medical literature to answer clinical questions</li> </ul>	Identify clinical questions concerning patients that you see in consultation or in the clinic, or other patients seen by the team. Look up relevant literature and present your findings to	Competency-Based Subspecialty Medicine Evaluation by attending physician based on patient interactions, professional interactions, review of medical records, and performance on
<ul style="list-style-type: none"> <li>identify areas for potential improvement in personal delivery of care</li> </ul>		

<ul style="list-style-type: none"> <li>maintain a positive attitude towards learning, including attendance and participation on rounds and conferences, and evidence of reading or other methods of gaining knowledge</li> </ul>	<p>the team during rounds.</p> <p>Participate in teaching others on the rotation.</p>	<p>teaching and patient care rounds.</p>
<ul style="list-style-type: none"> <li>can teach effectively, including to students, residents, and faculty</li> </ul>		
<ul style="list-style-type: none"> <li>is aware of important clinical guidelines for management of patients in this subspecialty.</li> </ul>		

<p>5. <i>Interpersonal and Communications Skills</i></p>	<p>Goal: Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates.</p>	
<p>Objectives</p>	<p>Actions: To achieve these objectives during this rotation, DO these:</p>	<p>Assessment: Achievement of these objectives will be evaluated by:</p>
<ul style="list-style-type: none"> <li>can present a patient effectively and efficiently, avoiding jargon, and concisely summarizing pertinent information and plans</li> </ul>	<p>Present patients on rounds and in the clinic to fellows, attending physicians and the rest of the team. Present new patients with sufficient information to make decisions. Present patients in followup concisely, emphasizing changes, input from other consultants, and results of diagnostic studies.</p>	<p>Competency-Based Subspecialty Medicine Evaluation by attending physician based on patient interactions, professional interactions, review of medical records, and performance on teaching and patient care rounds.</p>
<ul style="list-style-type: none"> <li>can write accurate, complete, and legible entries in the medical record</li> </ul>	<p>Be sure to get feedback on your consultation and followup entries in the medical record.</p>	

<p>6. <i>Professionalism</i></p>	<p>Goal: Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.</p>	
<p>Objectives</p>	<p>Actions: To achieve these objectives during this rotation, DO these:</p>	<p>Assessment: Achievement of these objectives will be evaluated by:</p>
<ul style="list-style-type: none"> <li>focus on issues of appropriate and adequate pain management</li> </ul>	<p>If applicable, identify patients with pain or other discomfort (dyspnea) whom you see in the clinic or on the consultation service. Include these on problem lists and address these with attending physicians.</p>	<p>Competency-Based Subspecialty Medicine Evaluation by attending physician based on patient interactions, professional interactions, review of medical records, and performance on teaching and patient care rounds.</p>

<ul style="list-style-type: none"> <li>recognize the importance of a patient's culture, language, and family background</li> </ul>	Identify particular issues related to delivery of patient care across cultural, language, or family barriers. Address these with attending physicians.	
<ul style="list-style-type: none"> <li>demonstrate respect and compassion for patients, including issues of informed consent</li> </ul>	If relevant, understand issues involved with informed consent. If necessary, review policies for informing patients and documenting consent.	
<ul style="list-style-type: none"> <li>interact consistently with other health care workers in a professional manner</li> </ul>	Participate in patient care on a professional and collegial level. Observe and identify role models for professional behavior.	

<i>7. Entrustable Professional Activity</i>	Goal: Perform a SUBSPECIALTY CONSULTATION with INDIRECT SUPERVISION	
Objectives	Actions: To achieve these objectives during this rotation, DO these:	Assessment: Achievement of these objectives will be evaluated by:
<ul style="list-style-type: none"> <li>provide effective consultation for patients with subspecialty problems, including identification of the problem, determination of findings, and concise effective communication of recommendations</li> </ul>	<p>Identify best practices for consultation. You should 1) restate the reason for consultation; 2) provide new information, if any, in your consultation; 3) answer the question being asked; 4) communicate the recommendations; 5) be sure that the primary team knows and understands the recommendations and their rationale.</p> <p>The resident is not expected to perform subspecialty consultation without at least indirect supervision, but is expected to be able to provide consultation at the level of a general internist (General Medicine Consult Rotation) without supervision at the conclusion of training.</p>	Competency-Based Subspecialty Medicine Evaluation by attending physician based on patient interactions, professional interactions, review of medical records, and performance on teaching and patient care rounds.

C. CLINICAL EXPERIENCE

- Residents will consult and participate in the care of patients with a variety of common cancers and hematologic problems.
- Residents will interact with peers, faculty, and other specialty trainees in the interactive management of common clinical problems in cancer diagnosis and management and non-malignant and malignant hematologic problems.
- Residents will be exposed to, and assist in the management of the common oncologic critical clinical problem areas such as spinal cord compression, superior vena caval syndrome, hypercalcemia, cerebral edema secondary to brain metastases, cardiac tamponade, and pleural effusion due to cancer.

Curriculum: Goals and Objectives  
Department of Medicine  
Harbor-UCLA Medical Center

4. Residents will exercise primary cancer care management in the outpatient setting under direct supervision by Divisional Faculty.
5. Become familiar with diagnostic techniques for the assessment of tumor recurrence and progression.
6. Gain an appreciation for the use of tumor markers (i.e., CEA, AFP, CA-125) in the management of clinical cancer.
7. Recognize and manage the common toxic side effects of cancer chemotherapy such as myelosuppression, nausea, vomiting and neurologic toxicity.
8. Become familiar with the ordering of cancer chemotherapeutic agents (dose, toxicity amelioration) and the use of observed side effects in dose scheduling and dose intensity.
9. Manage cancer pain with appropriate narcotics and these antagonists to unwarranted narcotic side effects.
10. Learn the approach to anemia, including iron deficiency, megaloblastic anemia, anemia of chronic diseases, hemoglobinopathies and thalassemia syndrome, hereditary and acquired hemolytic anemia, and anemias due to failure of erythropoiesis.
11. Recognize and characterize myeloproliferative disorders, including polycythemia rubra vera.
12. Learn the approach to Hodgkin's and non-Hodgkin's lymphomas and lymphocytic leukemias.
13. Understand the manifestations and management of multiple myeloma.
14. Know the approach to thrombocytopenia, and hereditary and acquired coagulation disorders.
15. Understand the basics of transfusion therapy and adverse reactions.
16. Become familiar with the role of evidence-based medicine in oncology decision-making, including the process and general content of evidence-based guidelines.

Reading, discussion and other educational activities should be directed at understanding the pathophysiology, clinical course, and management of the disorders listed under B.

D. CLINICAL SKILLS to be developed on this rotation include:

1. Focused history and physical examination directed at malignancies and blood diseases.
2. Management of various anemias and common cancers.
3. Evaluation of the peripheral blood smear.
4. Use of CT scans and other special imaging studies in blood diseases and cancers.
5. Diagnosis of hematologic and non-hematologic malignancies and general principles of management.

E. Exposure to these PROCEDURES, including indications, contraindications, and complications, is likely on this rotation (although they may not be performed):

1. Bone marrow aspiration and biopsy
2. Fine needle aspiration
3. Phlebotomy

E. EDUCATIONAL RESOURCES available during this rotation include:

1. Attending Physicians

Curriculum: Goals and Objectives  
Department of Medicine  
Harbor-UCLA Medical Center

2. Medical Oncology and Hematology Fellows
3. Chief's Rounds (weekly case discussion of past week's malignant disorders)
4. Medical Oncology and Hematology Teaching Rounds
5. Conferences
  - a. Combined Medicine-Pediatrics Hematology Grand Rounds (weekly)
  - b. Hematology Clinic (weekly)
  - c. Oncology Clinic (twice weekly)
  - d. Oncology Work Rounds
  - e. Hematology Seminar (weekly)
  - f. Oncology Lecture Series (weekly)
  - g. Bone Marrow Clinic (weekly)
  - h. Hematology Slide Review (weekly)
  - i. Discussion of Major Topics in Hematology
  - j. Seminars and Rounds within the Division of Medical Oncology Faculty
  - k. Multidisciplinary general and breast tumor board conferences, with participation of surgeons, radiotherapists and medical oncologists (weekly)
  - l. Lectures and clinical teaching by full-time faculty and, on occasion, Clinical Faculty.
  - m. Pathology conferences and slide review for familiarity with the common histologic types of adult solid malignancies.

F. During this rotation, SUPERVISION will be provided by:

1. Hematology and Medical Oncology Fellow(s)
2. Faculty Attending Physicians
3. Hematology and Medical Oncology Clinic Attending Physicians

G. EVALUATION of performance will be by Attending Physicians in the Division of Medical Oncology and Hematology using the Department of Medicine Subspecialty Rotation form (through Verinform).