

LEARNING OBJECTIVES AND EXPECTATIONS

Parkland Inpatient Ward Service

The Parkland Inpatient Ward Service provides opportunities for gaining competence in the evaluation and management of a broad variety of hematologic and neoplastic disorders in the setting of a multicultural county hospital where most of the patients are indigent. Trainees will be given opportunities to assume continuing responsibility to observe the evolution of blood disease and the natural history of cancer and the benefits and adverse effects of therapy.

Competencies:

1. Patient care

A. Procedural skills

- i. Bone marrow aspiration and biopsy, and intrathecal chemotherapy (spinal and via Omay reservoir).
- ii. Serial measurement of palpable tumor masses
- iii. Assessment of tumor imaging by CT, MRI, and nuclear imaging techniques and correlation of clinical information with cytology, histology and immunodiagnostic imaging techniques

In addition, trainees should become familiar with:

- i. Apheresis procedures
- ii. Fine needle aspiration and biopsy

Plan: Certain procedural skills (bone marrow aspiration and biopsy, intrathecal chemotherapy and chemotherapy through Omay reservoir) will be taught by instruction and direct supervision by an attending faculty until both attending and fellow consider the fellow competent to perform the procedure independently. This will require a minimum of five directly supervised procedures for bone marrow biopsy, three for intrathecal chemotherapy and three for Omay chemotherapy. Procedures will be recorded using the resident case log system on MyEvaluations.com. When the minimum number of procedures has been performed under direct supervision and the fellow has been deemed competent by the supervising attending, it is the fellows responsibility to request that the supervising attending send a note via email to the program director to that effect. (Please be aware that such documentation is required by many future employers).

B. Patient care-clinical diagnosis and management

Trainees' clinical experience and outside study will be addressed to the following so that increasing levels of substantial knowledge are gained in these areas:

- 1) Morphology, physiology, and biochemistry of blood, marrow, lymphatic tissue and spleen
- 2) Basic molecular and pathophysiologic mechanisms of anemias, diseases of white cells, and hemostasis and thrombosis
- 3) Etiology, epidemiology, natural history, diagnosis, pathology, staging and management of a wide variety of neoplastic disorders
- 4) Chemotherapeutic drugs, biologic products, growth factors and their mechanisms of action, clinical indication, and limitations, including their effects, toxicity and interactions
- 5) Multiagent chemotherapy protocols and combined modality therapies, including principles of multidisciplinary management of organ-specific cancers, such as leukemias and lymphomas, breast, lung, gastrointestinal and urological malignancies.
- 6) Management and care of indwelling venous catheters
- 7) Management of neutropenia and immunocompromised patients
- 8) Hematologic effects of systemic disorders
- 9) Hematologic and oncologic effects of HIV disease
- 10) Pain management, rehabilitation and psychosocial management of patients with hematologic and neoplastic disorders
- 11) Personal development, attitudes and coping skills of physicians and other health-care professionals in a county hospital setting

Plan for meeting these goals and objectives:

The goals and objectives will be met by assuming and overseeing the care of patients admitted to the Parkland 7E Hematology-Oncology ward. Many of these patients will be derived from the ambulatory hematology-oncology clinics.

- a. The Parkland Inpatient Ward fellow is the identifiable "doctor" with regard to Hematology-Oncology patients admitted specifically for chemotherapy or chemotherapy-related toxicity. All questions regarding patient management will be directed to this fellow first, and responsibility for being sure that treatment plans are carried out falls on this fellow. The attending is present to supervise, advise and answer questions for the fellow, and carries legal responsibility for patient care. Communication with the primary fellow in the disease-specific continuity clinics is crucial, as this fellow will be able to provide clear details about a patient's history, exam, and prior and planned treatment. In most cases the primary fellows in the clinic will write the chemotherapy orders for their patients who are being admitted for scheduled chemotherapy, but it is the responsibility of the Parkland Inpatient Ward fellow to check these very carefully. Chemotherapy should be started as soon as the patient arrives to the floor (this is facilitated when the primary clinic fellow has obtained blood counts for the patient in the week prior to chemotherapy). **23-hour observation** admissions arranged from the clinic, usually for transfusion will also be

on the ward service. There is an on-call intern who is responsible for covering these patients at night. The fellow or resident responsible for the patients must check out these patients with the on-call person prior to leaving and be available by beeper should problems arise.

- b. Make daily rounds (including "pre-rounds" before attending rounds) and writing daily notes on all patients. Notes should include recommendations pertinent to the patient's care, including making specific arrangements for follow-up after discharge with the appropriate disease -specific clinic and case manager. This is best done by email.
- c. Carry the service beeper (214-786-1580) at night and on alternate weekend call. This beeper is to be carried and left on at all times, including night and weekend call. On alternate weekends the Parkland consult fellow will carry this beeper.
- d. Communicate via email with the primary fellow and case manager brief details of the admission such as dates of chemotherapy and any complications that might have arisen. The case manager will then print this note for the clinic shadow file.
- e. Attend the weekly update conference on 7E on Wednesdays at 10:00am. This meeting includes the unit manager, nurses, cases managers, social worker, dietician, etc and is an excellent way to discuss patient care issues and discharge planning.

2. Medical Knowledge

During this rotation, medical knowledge in the above areas will be gained through the collection and interpretation of patient-related data, the integration of data into a diagnosis or differential diagnosis, including alternative interpretations of the data, development of a treatment plan (or independent evaluation of an existing treatment plan), daily review of cases with the attending on attending rounds, background reading on the pathophysiology of each disorder and presentation and discussion at conferences. A multiple choice in-service exam is given in May of each year to help gauge trainee's progress in medical knowledge. Questions are similar to those posed on hematology-oncology board exams.

Reading list:

Greer: *Wintrobe's Clinical Hematology*, 11th ed. 2004

DeVita: *Cancer, Principle and Practice of Oncology*, 6th ed. 2001

WHO: *Classification of Tumours, Pathology & Genetics of Tumours of Haematopoietic and Lymphoid Tissues*, 2001

Henderson: *Leukemia*, 7th ed. 2002

Canellos: *The Lymphomas*, 1998

NIH: *The Management of Sickle Cell Disease*, 4th ed. 2002

ASH-SAP (American Society of Hematology Self-Assessment Program)-complimentary copies available)

ASCO-SAP (American Society of Clinical Oncology Self-Assessment Program)-complimentary copies available

Journals

The New England Journal of Medicine www.nejm.org

Journal of Clinical Oncology www.jco.org

Blood www.bloodjournal.org

Websites

National Comprehensive Cancer Network www.nccn.org (guidelines for work-up and treatment of many tumor types)

American Cancer Society www.cancer.org

National Cancer Institute www.cancer.gov

American Society of Clinical Oncology www.asco.org

American Society of Hematology www.hematology.org

Harvard Sickle Cell Program http://sickle.bwh.harvard.edu/menu_sickle.html

World Federation of Hemophilia www.wfh.org

Required conferences:

Hematology/Hematopathology Rounds, Hematology/Oncology Teaching Lunch, Combined Modality Conference

Suggested conferences:

Multidisciplinary Breast Conference, GI Malignancy Conference, Head and Neck Tumor Board, Gynecologic Tumor Board, Thoracic Malignancy Conference, Internal Medicine Grand Rounds

3. Practice-based learning and improvement

Fellows will have the opportunity to apply medical literature, research and statistical methods, and data management technology for self-evaluation and improvement on this rotation. Clinical questions will be formulated and researched through clinical databases pertinent to patient care as they arise and will be discussed daily during attending rounds. One case will be selected each week for in depth research and discussion and presentation at either the Hematopathology or Combined Modality conferences as appropriate. Feedback concerning selection of cases and areas for discussion will be sought from the attending and in some cases, additional faculty with particular expertise. A hard copy containing a record of presentations (Powerpoint or similar) made and clinical problems researched (“a portfolio”) will be maintained by the fellow and reviewed at each six month evaluation.

4. Interpersonal and communication skills

The fellow will develop and demonstrate competence in effective and efficient communication with patients, physicians colleagues and physicians from other services, nursing and support staff, and patients from a wide diversity of racial, ethnic, and socioeconomic backgrounds. On this rotation, sensitivity to cultural differences will be learned and developed.

This will be achieved through demonstration by attending physicians of culturally appropriate and sensitive behavior, interaction with faculty and staff including feedback as appropriate.

5. Professionalism

Fellows will have the opportunity to develop and demonstrates an increasing commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Examples include establishing highly effective therapeutic relationship with patients and families; demonstrates excellent relationship building through listening, narrative and nonverbal skills; excellent education and counseling of patients, families, and colleagues, and being always "interpersonally" engaged.

6. Systems-based practice

Fellows will develop an understanding of how the Parkland ward operates within the larger context of a county hospital and propose ways to effectively accesses/utilizes outside resources. Fellows will demonstrate approaches to reduce errors and improve patient care and enthusiastically and graciously assist in developing systems' improvement. This will largely be accomplished during weekly conferences in the 7E conference room with members of the ward team that includes nursing, case managers, and pharmacy.

Evaluation: Trainees will be evaluated on the six general competencies through interactions during attending rounds and during the course of patient diagnosis and management. Competencies in procedures will be evaluated through direct supervision by an attending or other qualified physician and must be recorded through the case-log system (www.myevaluations.com) so that they are available for review by outside accrediting agencies (i.e. future employers). A multiple choice in-service exam is given in May of each year to help gauge trainee's progress in medical knowledge. Fellows will each be responsible for one case presentation per week in the Combined Modality Conference while on this service. This will provide an opportunity for the fellow to demonstrate competency in practice-based learning and evidence-based medicine.