



Division of Hematology and Hematologic Malignancies

Adult Hematology Residency Training Program

Goals & Objectives
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Longitudinal Hematology Resident Clinic

Program Director:

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Longitudinal Hematology Resident Clinic

The longitudinal resident clinic is a weekly half day clinic for ambulatory hematology patients.

In the first year of training the adult hematology clinics are held Wednesday afternoons at the Peter Lougheed Centre Specialty Ambulatory Clinic Area and provide opportunity for longitudinal ambulatory assessment, care planning and therapy for patients referred to a general hematology clinic. .

In the second year of residency the focus of the longitudinal resident clinic is malignant hematology at the Tom Baker Cancer Centre. The clinic allows for graduated clinical and managerial responsibility in the ambulatory care of hematology patients. Residents will spend 2-3 months in a leukemia clinic, 2-3 months in a myeloma clinic, and 4-6 months in a lymphoma clinic to ensure exposure to the broad spectrum of hematological malignancies.

Preceptors Responsibilities:

1. R4 Clinic at PLC

- a. Clinic Director – Dr. J. Lategan
- b. Preceptors – Drs. J. Lategan, M. Wong, J. Slaby, L. Street

2. R5 Clinic at TBCC

- a. Clinic Director – Dr. M. Shafey
- b. Leukemia – Dr. M. Geddes & Dr. L. Savoie; Myeloma – Dr. P. Duggan & Dr. V. Zepeda; Lymphoma – Dr. M. Shafey & Dr. C. Owen.

3. Preceptors responsibilities include:

- Supervision of patient case load selection to ensure resident exposure to a broad range of clinical hematologic disease presentations within the mandate of each clinic.
- Direct supervision of resident based ambulatory patient care. The preceptor should gauge the level of competence of the resident and allow graduated responsibility for care and graduated degree of direct supervision of clinical decision making.

- Ongoing follow up of consult cases according to standards of professional practice.
 - a. The preceptor is responsible for ensuring that appropriate patient follow up is arranged after the resident leaves the clinic, provided by themselves or ongoing in the longitudinal resident ambulatory clinics.
- Resident teaching and direct observation of resident performance in the form of observation of clinical skills (history, physical exam, procedure performance, communication of information) and consultation review.
 - a. Mini-CEX should be performed several times per year to assess CanMEDS competencies, particularly in communicator, collaborator, and health advocate roles
- Direct patient care coverage to allow the resident to attend to mandatory educational responsibilities.
- Verbal and written feedback on resident performance.

Resident Responsibilities

- Patient assessment, planning, explaining and performing diagnostic and therapeutic procedures, developing and providing a care plan.
- Coordination of follow-up scheduling and clinic discharge where appropriate.
- Chemotherapy, transfusion, phlebotomy, infusional therapy supervision, as required
- Attendance at all mandatory educational sessions
- Appropriate and timely notification of clinic preceptors and administrative staff of vacation and other absences from clinic

Longitudinal Hematology Resident Clinic – Specific Goals and Objectives

MEDICAL EXPERT

The R4 clinic will focus on general hematology disorders, including:

- Cytopenias (anemia, thrombocytopenia, neutropenia, pancytopenia, bone marrow failure)
- Myeloproliferative disorders and secondary causes of erythrocytosis, thrombocytosis, and leukocytosis
- Congenital and acquired disorders of hemostasis, excessive bleeding and bruising
- Congenital and acquired disorders of thrombosis
- Splenomegaly, lymphadenopathy, lymphocytosis, hyposplenism
- Hemoglobinopathies, red cell membrane disorders and thalassemias
- Immune deficiencies and other rare blood cell disorders
- Disorders of iron, heme, B12, and folate metabolism
- Monoclonal gammopathies
- Demonstrate an understanding of genetics and cytogenetics pertaining to benign hematological diseases

The R5 clinic will focus on malignant disease:

- Lymphoproliferative disorders, plasma cell dyscrasias, leukemias, myelodysplastic syndromes, myeloproliferative disorders, other rare hematological malignancies
- Demonstrate an understanding of genetics and cytogenetics pertaining to malignant hematological diseases

By the end of the Longitudinal Hematology Resident Clinic the resident will:

- Function effectively as a consultant, with well-documented assessments and clearly outlined recommendations to the consulting physician and/or other health care professional.
- Demonstrate competence in the clinical skills of history taking, physical exam and diagnosis, and synthesis of accurate problem based management plans for adult patients. This will include assessment of both common and uncommon hematologic problems and disease.
- Describe normal and disordered hematopoiesis, including changes related to age from the fetus to the elderly, and recognize when hematopoiesis is disordered.
- Demonstrate recognition of hematologic urgencies and emergencies in ambulatory care clinics and formulation of care strategies including admission to hospital, or urgent outpatient investigation and treatment.

- Apply appropriate, ethical and cost-effective diagnostic testing in the investigation of hematologic disorders.
- Demonstrate expertise in procedural skills necessary to the investigation and management of hematologic disorders in the ambulatory setting (bone marrow biopsy and aspiration, lumbar puncture)
- Critically interpret the results of diagnostic investigations.
- Access and apply current basic science, diagnostic and treatment information to the care of patients with common and uncommon hematologic disease
- Demonstrate the appropriate use and supervision of therapeutic procedures including indications, complications and pharmacology of
 - Chemotherapy
 - Phlebotomy
 - Transfusion of blood products
 - Iron infusion and chelation therapy

COMMUNICATOR

By the end of the longitudinal ambulatory clinic rotation the resident will:

- Elicit relevant information with respect to the patient's medical history, hematologic problems, indications for treatment.
- Gather relevant information about the patient's beliefs, concerns and expectations about their hematologic problem and consider the impact of factors such as the patient's age, gender, ethnic, cultural and socioeconomic background and spiritual values on their approach to health care.
- Recognize and demonstrate relevant, clear and complete and effective verbal and written communications with both families and other health care professionals involved in patient care. This includes open discussion of diagnoses, prenatal and family counselling, investigations, and treatment options with patients and their families; promote patient participation in decision-making.
- Develop strategies for dealing with difficult patient communication situations (e.g. delivery of bad news, anger, frustration, confusion or differences in ethno-cultural background)

COLLABORATOR

By the end of the Longitudinal Fellows' clinic rotation the resident will:

- Identify and describe their roles and the roles of others in the health care team, including expertise and limitations of all members of the patient care team; specialist physicians, primary care physicians, nursing staff, social work, geneticists etc as appropriate to the particular patient problem.
- Describe how regional, provincial and national health care governance influences patient care e.g. number of health care providers, waiting list times, accessibility to outpatient diagnostic modalities and specialized outpatient management facilities.
- Participate in the weekly tumour board rounds and understand the importance of cooperation and communication among the varied and numerous health care professionals involved in the care of patients with hematological malignancies
- Function effectively as a consultant, and coordinate specialist consultation referrals where appropriate.
- Effectively communicate with the members of the interdisciplinary team in the resolution of conflicts, provision of feedback and where appropriate be able to assume a leadership role.
- Participate in the coordination of transitional care from inpatient to outpatient facilities and between care centres/cities, including notification of the appropriate physicians and interdisciplinary team members, appointment planning and home care support.

MANAGER

By the end of the Longitudinal Fellows' clinic rotation the resident will:

- Understand how to function effectively in an ambulatory clinic setting including the following
 - Case triage
 - Clinic Scheduling
 - Billing
- Oversee patient care in the ambulatory setting and manage transitions to acute care settings as well as delegation to other health care providers where appropriate.

- Effectively utilize the information technology available to optimize patient care (e.g. electronic patient records, patient data bases for tumour groups or bleeding disorders, accessing learning materials and patient support programs)
- Be aware of and utilize appropriately the Quality Improvement and Patient Safety reporting systems of the Calgary Health Region and Tom Baker Cancer Centre
- The resident will be able to manage outpatient problems according to the level of acuity and triage investigation and delegate responsibility where appropriate.
- The resident will demonstrate effective time management skills in order to balance the responsibilities of patient care, consultation requests, attendance at regular outpatient clinics and educational responsibilities.

HEALTH ADVOCATE

By the end of the Longitudinal Fellows' clinic rotation the resident will:

- The resident will demonstrate an understanding of how the basic determinants of health will affect outcome of patients with hematologic disease e.g. employment status, social support systems, educational level, community health support systems, nutrition, carcinogen / toxic agent exposure, genetic disease
- Advocate preventative strategies in the long-term care of adult patients with chronic hematologic disorders and the transition from pediatric to adult based care. For example:
 - prophylactic treatment of hemoglobinopathies and hemostatic defects,
 - prevention and support of disease/treatment mediated complications
 - safe-sex principles
 - smoking cessation, diet and exercise
 - prevention of transmissible disease including immunization programs,
 - screening for transmissible disease (e.g. Hepatitis B, C, HIV)
 - importance of regular follow-up and compliance with care program
 - prenatal counselling
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- Recognize patient groups at risk for the development of hematologic disease or at risk for adverse outcomes of hematologic disease:
 - e.g. occupational exposures to lead or carcinogens, transmissible diseases in patients requiring chronic transfusion of blood products,

discriminatory policies with respect to insurance coverage for patients with hereditary disorders, issues of population screening

- Advocate preventive strategies to patients at risk of hematologic illness (e.g. prenatal diagnosis, family counselling, appropriate prophylactic treatment and follow-up, appropriate supportive care in the treatment of malignancy, long term complications of therapy),
- Advocate preventive strategies to patients at risk of repeat hospital admissions (e.g., community health support, prophylactic treatment, appropriate follow-up, supportive care).

SCHOLAR

By the end of the Longitudinal Fellows' clinic rotation the resident will:

- Identify , retrieve and critically appraise the medical literature pertinent to the basic science, diagnosis and treatment of adult and pediatric patients with hematologic disease
- Provide education to health care professionals, students, junior residents, patients and families regarding hematologic disease
- Will be able to participate in and critically apply results of basic science research or clinical trials where appropriate, including obtaining proper informed consent, grading adverse events, and following clinical trial protocols.

PROFESSIONAL

By the end of the Longitudinal Fellows' clinic rotation the resident will:

- Demonstrate behaviours and attitudes essential for the provision of the highest quality of professional care with respect to adult patients with hematologic disease.
- Demonstrate an appreciation of their own limitations in expertise in the care of patients with uncommon/rare hematologic disorders, and be able to access appropriate expert support to develop a continuing medical education plan
- The resident will use ethical and legal codes of practice when dealing with ethical issues related to hematologic disease e.g. end of life care, consent, conflict of interest, research ethics, and resource allocation.

- The resident will recognize, analyze and develop strategies for dealing with unprofessional behaviors in clinical practice
- The resident will develop and implement a personal continuing education strategy with respect to the changing indications, modalities, improvements in care and treatment of complications of hematologic disease.