

Subspecialty Inpatient Rotation: Pediatric Oncology at Memorial Sloan Kettering Cancer Center – Senior Resident

Residents: Pediatric residents at the PL3 level

Prerequisites: Successful completion or waiver of PL2 training

Primary Goals for this Rotation

5.47 GOAL: Undifferentiated Signs and Symptoms (Hematology/Oncology). Supervise management of referred patients with presenting signs and symptoms that may indicate a hematologic or oncologic disease process.

5.47.1 : Supervise junior residents is developing a strategy to determine if the following presenting signs and symptoms are caused by a hematology/oncology disease process and determine if the patient needs treatment or referral:

1. Fatigue/malaise
2. Fever
3. Bruising/bleeding
4. Headache
5. Limb pain/limp
6. Seizure
7. Lymphadenopathy
8. Hepatomegaly and/or splenomegaly
9. Weight loss
10. Abdominal pain
11. Vomiting
12. Dizziness and gait disturbances
13. Nevi

5.48 GOAL: Conditions Generally Referred (Hematology/Oncology). Diagnose and manage patients with hematological or oncological disorders that are referred to a tertiary care center.

5.48.1 : Identify, explain, manage:

1. Major complications of inherited bleeding disorders refractive to standard therapy
2. Hemoglobinopathies (sickle cell and other sickling disorders), including severe pain crisis, fever, stroke, sequestration and aplastic crises refractive to standard therapy
3. Urgent conditions in children under treatment for cancer, including fever and neutropenia, chicken pox exposure or illness, bleeding
4. Neutropenia
5. Thrombocytopenia including ITP
6. Abdominal masses
7. Mediastinal masses
8. Lytic bone lesions
9. Suspected or confirmed CNS tumor
10. Recognize and treat Graft versus host disease
11. Coagulation disorders refractive to standard therapy

**COMPETENCY BASED CURRICULUM FOR PEDIATRIC RESIDENCY EDUCATION
SUBSPECIALTY INPATIENT CARE (ONCOLOGY) AT MSKCC – SENIOR RESIDENT**

12. Recognize and treat Diabetes Mellitus post transplant

5.48.2 : In cases of serious or life-threatening disease, counsel the patient's families with sensitivity to their desire and need to know about:

1. Prognosis and possible impact of the disease
2. Likely steps in immediate and future treatment
3. Decisions about treatment options which they may face
4. Support services that they may seek in the hospital and community

5.48.3 : Identify the role and general scope of practice of hematology/oncology; recognize situations where children benefit from the skills of specialists trained in the care of children; and work effectively with these professionals in the care of children with hematologic or oncologic diseases.

5.49 GOAL: Rare Malignancies. Discuss the presentation, pathophysiology, and prognosis of important malignancies in children and adolescents.

5.49.1 : Summarize the common ages, presenting signs and symptoms, pathologic variants, diagnostic procedures, principles of current therapy, prognosis, and long-term complications (due to disease or treatment) for the following malignancies and conditions:

1. Leukemia (ALL, AML)
2. Brain tumor
3. Hodgkin's and non-Hodgkin's lymphoma
4. Neuroblastoma
5. Wilms' tumor
6. Soft tissue sarcomas (rhabdomyosarcoma)
7. Bone tumors (osteosarcoma and Ewing's sarcoma)
8. Retinoblastoma
9. Langerhans cell histiocytosis
10. Solid organ tumors (hepatocellular carcinoma, renal cell carcinoma, ovarian cancer)

5.49.2 : Compare and contrast the common acute side effects of frequently used chemotherapeutic drugs, including: cyclophosphamide, cytarabine, vincristine, anthracycline compounds, methotrexate and prednisone; radiation therapy.

5.49.3 : Be familiar with adjunctive medications that increase patients' tolerance of chemotherapy, e.g. folate, epogen, GCSF.

5.49.4 : Discuss the common late complications of childhood cancer treatment that may present in childhood, adolescence or adulthood. These include: learning disabilities, endocrine suppression, infertility and second cancers.

5.51 GOAL: Blood Products. Appropriately use blood products in the management of patients.

5.51.1 : Explain the appropriate indications for and potential risks of various blood products (e.g., red blood cell products, platelet concentrates, coagulation factors).

**COMPETENCY BASED CURRICULUM FOR PEDIATRIC RESIDENCY EDUCATION
SUBSPECIALTY INPATIENT CARE (ONCOLOGY) AT MSKCC – SENIOR RESIDENT**

5.51.2 : Describe alternatives to blood transfusions. These should include: erythropoietin, GCSF, and other cytokines.
5.51.3 : Describe the indications for leukofiltration, irradiation of blood products, and use of CMV negative blood products.
5.51.4 : Summarize the signs and symptoms of a transfusion reaction. Develop an effective treatment plan to manage a transfusion reaction.
6.95 GOAL: Pediatric Competencies in Brief (Subspecialty Rotation). Demonstrate high standards of professional competence while managing patients with oncologic disorders under the care of a subspecialist.
6.95.1 : Competency 1: Patient Care. Assure provision of family-centered patient care that is development- and age-appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.
6.95.1.1 :Use a logical and appropriate clinical approach to the care of patients presenting for specialty care, applying principles of evidence-based decision-making and problem-solving.
6.95.1.2 :Describe general indications for subspecialty procedures and interpret results for families.
<ol style="list-style-type: none"> 1. Reasons well in ambiguous situations 2. Spends time appropriate to the complexity of the problem
6.95.2 : Competency 2: Medical Knowledge. Understand the scope of established and evolving biomedical, clinical, epidemiological and social-behavioral knowledge needed by a pediatrician; demonstrate the ability to acquire, critically interpret and apply this knowledge in patient care.
6.95.2.1 :Acquire, interpret and apply the knowledge appropriate for the generalist regarding the core content of this subspecialty area.
6.95.2.2 :Critically evaluate current medical information and scientific evidence related to this subspecialty area and modify your knowledge base accordingly.
<ol style="list-style-type: none"> 1. Demonstrates an investigatory and analytic approach to clinical situations
6.95.3 : Competency 3: Interpersonal Skills and Communication. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.
6.95.3.1 :Provide effective patient education, including reassurance, for a condition(s) common to this subspecialty area.
6.95.3.2 :Communicate effectively with primary care and other physicians, other health professionals, and health-related agencies to create and sustain information exchange and teamwork for patient care.
6.95.3.3 :Demonstate effective leadership of a health care team in a tertiary care subspecialty center and coordinate patient care among multiple participants.

**COMPETENCY BASED CURRICULUM FOR PEDIATRIC RESIDENCY EDUCATION
SUBSPECIALTY INPATIENT CARE (ONCOLOGY) AT MSKCC – SENIOR RESIDENT**

6.95.4 : Competency 4: Practice-based Learning and Improvement. Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one's patient care practice.
6.95.4.1 :Identify standardized guidelines for diagnosis and treatment of conditions common to this subspecialty area and adapt them to the individual needs of specific patients.
6.95.4.2 :Identify personal learning needs related to this subspecialty; systematically organize relevant information resources for future reference; and plan for continuing acquisition of knowledge and skills.
<ol style="list-style-type: none"> 1. Analyzes personal practice patterns systematically, and looks to improve 2. Compares personal practice patterns to larger populations. 3. Locates, appraises and assimilates scientific literature appropriate to pediatrics 4. Applies knowledge of study design and statistics
6.95.5 : Competency 5: Professionalism. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.
6.95.5.1 :Demonstrate personal accountability to the well-being of patients (e.g., following up on lab results, writing comprehensive notes, and seeking answers to patient care questions).
6.95.5.2 :Demonstrate a commitment to carrying out professional responsibilities.
6.95.5.3 :Adhere to ethical and legal principles, and be sensitive to diversity.
<ol style="list-style-type: none"> 1. Is effective as a consultant
6.95.6 : Competency 6: Systems-based Practice. Understand how to practice high-quality health care and advocate for patients within the health care system.
6.95.6.1 :Identify key aspects of health care systems as they apply to specialty care, including the referral process, and differentiate between consultation and referral.
6.95.6.2 :Demonstrate sensitivity to the costs of clinical care in this subspecialty setting, and take steps to minimize costs without compromising quality
6.95.6.3 :Recognize and advocate for families who need assistance to deal with systems complexities, such as the referral process, lack of insurance, multiple medication refills, multiple appointments with long transport times, or inconvenient hours of service.
6.95.6.4 :Recognize one's limits and those of the system; take steps to avoid medical errors.

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1. Demonstrates ability to adapt to change
2. Provides cost effective care
3. Understands how individual practices affect other health care professionals, organizations and society
4. Demonstrates knowledge of types of medical practice and delivery systems
5. Practices effective allocation of resources that does not compromise the quality of care

Procedures

7.1.GOAL: Technical and therapeutic procedures. Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.

Central line: use/care

Lumbar puncture

Medication delivery: IV chemotherapy, and other meds

7.2. GOAL: Diagnostic and screening procedures. Describe the following tests or procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.

Radiologic interpretation: abdominal ultrasound

Radiologic interpretation: abdominal X-ray

Radiologic interpretation: chest X-ray

Radiologic interpretation: CT of head, spine, chest, abdomen, pelvis

Radiologic interpretation: extremity X-ray

Radiologic interpretation: MRI of head, spine, chest, abdomen, pelvis

Radiologic interpretation: renal ultrasound

Radiologic interpretation: renogram

Source

Kittredge, D., Baldwin, C. D., Bar-on, M. E., Beach, P. S., Trimm, R. F. (Eds.). (2004). APA Educational Guidelines for Pediatric Residency. Ambulatory Pediatric Association Website.