PGY-2 ONCOLOGY RESIDENCY ROTATION DESCRIPTION

ROTATION TITLE
Outpatient Adult Oncology

PURPOSE
The outpatient oncology service will provide the PGY-2 resident with the opportunity to further develop and refine advanced pharmacotherapeutic management skills required for provision of care of this specialized patient population in an ambulatory setting. The resident will be familiar with the role of the pharmacy specialist in the clinic setting as well as in the infusion center. Upon completion of the rotation the resident should be competent in performing these functions independently.

LEARNING EXPERIENCE DESCRIPTION
Patients are seen in the Hollings Cancer Center (HCC) clinics for new diagnosis, referral from other centers, disease progression, complications from anti-cancer treatment, to receive chemotherapy, and for end of life care/transition to hospice. The outpatient oncology clinics serve patients with hematologic malignancies, blood and marrow transplant needs, and solid tumors. The focus of this rotation will be the treatment of patients with solid tumors including; lung, breast, esophageal, head & neck, bladder, pancreatic, gynecologic, colorectal malignancies, among others. The radiation oncology clinic is located in HCC and serves the cancer patients with their radiation oncology needs. Clinical pharmacy services are comprehensive with a focus on chemotherapy counseling, side effect management, assistance with chemotherapy orders, and providing drug information and education to staff.

The resident will be scheduled in various oncology clinics and the HCC infusion center during the month. Clinics typically run from 8:00 am until 5:00 pm, but these times may change based on the needs of the clinics. Working in several different clinics will afford the resident the opportunity to see how different oncologists discuss with patients and their families the key issues of prognosis, adjuvant therapy, therapy for metastatic disease and to observe their approaches to comfort care and end-of-life decisions. Residents will also improve their knowledge of chemotherapy and other systemic therapies used to treat cancer and the treatment of side effects from those agents as well as complications from cancer. By listening to and counseling patients, residents will become familiar with the complexities and variations in how patients and family react to the diagnosis and treatment of cancer and how physicians interact with patients and their families in this challenging but very rewarding specialty.

During the time prior to clinic the resident should work-up all new patients, develop a problem list for the patients they will be seeing, review past medical histories, labs, supportive care needs, chemotherapy administrations, and any other pertinent history to the clinic visit. The resident should be in frequent contact with their preceptor(s) to discuss patients they are seeing in clinic and/or infusion. There will also be various topic discussions determined by the preceptor and resident. The resident will be expected to lead at least two topic discussions per week. The resident should provide prompt feedback to the preceptor of topics not being properly explained to them, and areas of improvement for the preceptor/team.

The resident is responsible for counseling patients, documenting their interventions in the appropriate pharmacy systems, and providing drug information and consult services.
LEARNING EXPERIENCE ACTIVITIES

- The pharmacy resident will serve as an authoritative resource on the optimal use of medications used to treat individuals with cancer.
  (ONC: R1.1.1, R1.1.2, R1.1.3, R1.1.4, R1.1.5, R1.5.1)

- Provide concise, applicable, comprehensive, and timely responses to requests for drug information pertaining to the care of individuals with cancer. Requests may be from physicians, mid-level practitioners, nurses, pharmacists, students, patients and their caregivers, etc. The response provided should be a thorough and thoughtful evaluation of the literature. Assess the effectiveness of your recommendation and ensure understanding.
  (ONC: R1.2.1, R1.2.2, R1.2.3, R1.2.4, R1.2.5, R1.2.6, R1.2.7, R1.2.8, R1.5.1)

- Be an active participant in topic discussions. Lead topic discussions at the request of your preceptors. Locate the appropriate resources for oncology practice; ie. guidelines, primary literature, etc.
  (ONC: R1.3.1, R4.1.1, R4.1.2, R4.1.3, R4.1.4, R4.1.5, E3.2)

- Be familiar with and understand the contributions of oncology specialists to the organization’s technology and automation decisions. For example, order sets, computerized physician order entry (CPOE), compounding automation, etc.
  (ONC: R1.4.1)

- Participate in clinical and economic outcomes analysis. Explain the purpose of a prospective and retrospective analysis, the type of study design, data that must be collected, sources of data, methods of analysis, and how to apply results to clinical practice.
  (ONC: R1.6.1, R1.6.2)

- Identify the need for a medication-related guideline/protocol for the care of individuals with cancer, review existing literature, then develop and implement the new guideline/protocol. Assess the results/impact of the new guideline/protocol.
  (ONC: R1.7.1, R1.7.2, R1.7.3, R1.7.4)

- Integrate yourself into the clinic environment and provide optimal care for patients by collecting data, identifying interventions, reviewing evidence based literature, making recommendations, adjusting care plans, and establishing relationships with patients and providers. Communicate ongoing patient information to those who need it. Document all activities according to hospital policy (interventions, consult notes, etc.)
  (ONC: R2.1.1, R2.2.1, R2.2.2, R2.3.1, R2.4.1, R2.4.2, R2.4.3, R2.6.1, R2.6.2, R2.7.1, R2.8.1, R2.9.1, R2.9.2, R2.9.2, R2.10.1, R2.10.2, R2.11.1, R2.11.2, R2.12.1, R2.12.2)

- Make and follow up on referrals to appropriate health care providers for individuals with cancer.
  (ONC: R2.5.1, R2.5.2)

- Identify opportunities for improvement of aspects of the organization’s medication use system affecting individuals with cancer. Explain vulnerabilities to adverse drug events, analyze processes, identify opportunities for improvement, compare the current practice to best practices, and implement change.
  (ONC: R3.3.1, R3.3.2, R3.3.3, R3.4.1)
• Participate in the development and delivery of programs to the public that center on health improvement, wellness, and screening for and preventing cancer. Participate in the design or redesign of a program, and educate the public.
  (ONC: R4.1.1, R4.1.5, R5.1, E1.1.1, E1.1.2, E1.1.3, E1.1.4)

• Exhibit the essential skills of an oncology pharmacy practice leader. Continue to self assess with the goal of self improvement, participate in professional organizations, demonstrate a commitment to advocacy for optimal pharmaceutical care, explain the importance of contributing to oncology literature an the processes involved in establishing and maintaining oncology pharmacy practice residency.

REQUIRED HOURS
The resident will be expected to be present from approximately 7am to 6pm Monday through Friday. As patient care requires, the above times may vary. The resident shall alert the preceptor if they anticipate they will exceed the resident work hours set forth in the ACGME policy on resident work hours.

REQUIRED MEETINGS
• Pharmacy Resident Seminar- Mondays 1-2pm
• Pharmacy Resident Interactive Teaching Experience (RITE)- Fridays 12-1pm
• Tumor Boards for various specialties
• Oncology Journal Club
• Any other learning opportunity designated by the RPD or preceptor

REQUIRED PRESENTATIONS
• At least two inservices to a clinic, nursing staff, pharmacists and/or pharmacy students
• Additional presentations as assigned by the preceptor
• Participation at topic discussions and journal club

REQUIRED READINGS
• As assigned by the preceptor

OPTIONAL ACTIVITES
The resident may also be asked to complete formal drug information literature searches, additional inservices, and assist with the development of chemotherapy order template or guidelines. The preceptor may request the resident to present at journal club and teaching sessions. If a student is on rotation the resident may precept the student as part of the Academician Preparation Program (APP) at the discretion of the rotation preceptor. The resident may also be asked to assist with precepting student presentations and discussions.

ROTATION PRECEPTORS
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METHOD OF EVALUATION
After discussing the resident’s clinical experiences and interests, the preceptor and the resident will develop an individualized plan. Evaluation of the resident will be based on the learning experience objectives outlined by the Residency Program Director (RPD). A mid-point discussion and evaluation will occur. At the completion of the rotation, the resident will also have a final evaluation utilizing the ResiTrak program.

APPENDIX
The following topics/procedures may or may not be covered on this rotation. The resident is to document which topics/procedures have been addressed and notify the RPD at each quarterly evaluation to insure completion of all required core experiences.

Content for Required Educational Objectives:

Direct patient care experience required:
Neoplasm:
- Breast cancer
- Colorectal cancer
- Leukemias, acute and chronic
- Lung cancer
- Lymphomas
- Ovarian cancer
- Prostate cancer

Cancer-related disorders and cancer treatment disorders:
- Constipation and diarrhea
- Fatigue
- Hypercalcemia
- Infections in immunocompromised patients
- Mucositis
- Myelosuppression
- Nausea and vomiting
- Nutritional deficiencies
- Pain
- Skeletal-related events
- Spinal cord compression
- Thrombosis
- Tumor lysis syndrome

Acquire sufficient knowledge by didactic discussions, reading assignments, case presentations, written assignments, and/or direct patient care experiences:
- Alopecia
- Anaphylaxis
• Anorexia
• Disseminated intravascular coagulation
• Drug extravasation
• Graft-versus-host disease
• Infertility
• Malignant effusions
• Medical emergencies
• Organ-specific toxicities (e.g., cardiotoxicity, dermatologic, hepatotoxicity, nephrotoxicity, neurotoxicity)
• Radiation therapy complications
• Secondary malignancies
• Superior Vena Cava Syndrome
• Surgical complications
• Syndrome of inappropriate antidiuretic hormone secretion

Treatment Procedures:

Patient Experience:
• Autologous hematopoietic stem cell therapy
• Intrathecal/intraventricular therapy

Acquire sufficient knowledge by didactic discussion, reading assignments, case presentations, written assignments, and/or direct patient care experiences.
• Allogeneic hematopoietic stem cell therapy
• Radiation therapy
• Surgery

Elective Educational Outcomes:
• Aplastic anemia
• Hemophilia A
• Hemophilia B
• Immune thrombocytopenic purpura
• Iron deficiency anemia
• Myeloproliferative disorders
• Sickle cell anemia
• Thrombotic thrombocytopenic purpura
• Von Willebrand’s Disease