



TIGMER Institutional Residency Handbook

San Antonio, TX

Laredo, TX

Rotational Curriculum, Goals and Objectives

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Overall Competency Based Goals and Objectives

Patient Care

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.

Residents are expected to:

- 1. Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families**
 - a. Conduct an interview using appropriate verbal and nonverbal skills
 - b. Develop and convey a sense of empathy and concern
 - c. Demonstrate respect for patient privacy and dignity during interview and physical exam
 - d. Adhere to patient confidentiality standards
 - e. Communicate results and return phone calls to patients in a timely manner
- 2. Gather essential and accurate information about our patients**
 - a. Identify purpose of visit and conduct a focused evaluation of the presenting problem, including history, physical exam and studies
 - b. Update the problem list and the medication list at every encounter
 - c. Completely document the patient care encounter in the medical record in a concise and legible manner following a problem oriented format, using the SOAP notation
- 3. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up to date scientific evidence and clinical judgment**
 - a. Perform a history and physical exam with enough sensitivity and specificity to evaluate the patient complaint and physical status, to guide further diagnostic testing, and to develop an assessment and plan
 - b. Find and apply evidenced based recommendations and generally accepted clinical protocols
- 4. Develop and carry out patient management plans**
 - a. Develop a plan of action that attends to the salient medical, psychosocial, family, cultural, and socioeconomic issues

- b. Address current problem in a manner that fits guidelines or current standard of care and/or attends to the special needs of the patient, family or caregiver
 - c. Receptive to changes in available evidence and/or recommendations, patient financial, personal and medical status
- 5. Counsel and educate patients and their families** Keep patient and family informed of diagnostic and therapeutic plans, answer questions in a manner that the patient understands
 - a. Inform patients of lifestyle changes and other information that may help them participate in their own care
- 6. Use Information technology to support patient care decisions and patient education**
 - a. Access medical knowledge, clinical guidelines and patient educational materials from the internet and intranet
 - b. Be aware of web based patient resources in order to guide patients' use of the internet
- 7. Perform competently all medical and invasive procedures considered essential for family practice**
 - a. Obtain informed consent and perform invasive procedures with technical and psychosocial skill
- 8. Provide health services aimed at preventing health problems or maintaining health**
 - a. Review the problem list at each encounter and attend to appropriate continuity care issues
 - b. Apply generally accepted guidelines or protocols. Able to access USPSTF and other authoritative sources for health maintenance and preventative guidelines
- 9. Work with health care professionals, including those from other disciplines to provide patient focused care**
 - a. Assist patient in arranging for appropriate medical and ancillary referrals that seek to resolve specific issues in a diagnostic or management areas

Medical Knowledge

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.

Residents are expected to:

1. **Demonstrate an investigatory and analytic thinking approach to clinical situations**
 - a. Develop appropriate biopsychosocial hypotheses that apply to the presenting problem
 - b. Apply an open minded, analytic approach to acquiring new knowledge
 - c. Access and critically evaluate current medical information and scientific evidence

2. **Know and apply the basic and clinically supportive sciences that underlie the practice of family medicine**
 - a. Appropriately prioritize the probable and potential diagnosis to ensure that attention is given to the most likely, most serious, and most readily treatable options
 - b. Have clinically applicable knowledge of nearly all medical topics and detailed knowledge regarding those areas routinely encountered by a practicing family physician
 - c. Attend didactic conferences and actively participate in rounds and discussions.

Practice-Based Learning and Improvement

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 lifelong learning.

Residents are expected to develop skills and habits to be able to:

1. **Analyze practice experience and perform practice based improvement activities using a systematic methodology**
 - a. Participate in practice reviews, system changes, and clinical improvement activities
 - b. Use information about individual errors to improve practice and change behavior
2. **Locate, appraise and assimilate evidence from scientific studies related to your patient's health problems**
 - a. Access current medical information specific to your patient's health problem and incorporate the knowledge gained to improve care
3. **Obtain and use information about your own population of patients and the larger population from which your patients are drawn**
 - a. Identify the major health issues of the community and of your patient population
4. **Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness**

- a. Critically review a journal article
- 5. **Use information technology to manage information, access online medical information and support your own information**
 - a. Interface with local clinical information systems to obtain patient related data
 - b. Access online medical information and apply it to the management of the patient
- 6. **Facilitate the learning of students and other health care professionals**
 - a. Supervise and teach junior residents, medical students, and allied health students
 - b. Ability to teach in small and large group settings.

Systems Based Practice

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.

Residents are expected to:

1. **Understand how your patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect your own practice**
 - a. Communicate with other physicians giving concise, accurate descriptions of the patient, the clinical question or request and promoting coordination of care
 - b. Provide pertinent information when ordering labs or other studies
 - c. Use formularies and write accurate legible prescriptions
 - d. Access and utilize resources, providers, and systems available to provide optimal care
2. **Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources**
 - a. Be willing to see add on patients to preserve continuity and reduce costly ER visits
 - b. Schedule patients for return visits appropriately
 - c. Understand the limitations and opportunities inherent in various practice types and delivery systems, and develop strategies to optimize care for the patient in context
3. **Practice cost effective health care and resource allocation that does not compromise quality of care**
 - a. Conduct visit in a timely efficient manner
 - b. Complete the tasks associated with the patient visit including phone calls, referrals, charting, communicating with other staff in a timely and organized manner
 - c. Bill patients appropriately, referring those who need financial assistance to the appropriate staff
 - d. Apply evidence based, cost conscious strategies for prevention, diagnosis and disease management

4. **Advocate for quality patient care and assist patients in dealing with system complexities**
 - a. Help patients utilize local community resources
 - b. Collaborate with other team members, such as discharge planners, social workers, financial screeners, therapists, mental health workers, etc, to assist patients and improve the processes of care
5. **Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance**
 - a. Coordinate care at time of hospital discharge with case managers, discharge planners, nursing homes, and other community services
 - b. Make referrals to help provide comprehensive care, such as hospice, home health, nursing homes
 - c. Work together with the healthcare team in a manner that fosters mutual respect and facilitates the effective handling of patient care issues

Professionalism

Goal: Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

Residents are expected to demonstrate:

1. **Demonstrate respect, compassion, and integrity; a responsiveness to the needs of the patients and society; accountability to patients, society and the profession; and a commitment to excellence and on-going professional development**
 - a. Engage in activities that foster personal and professional growth, such as local conferences, discussion groups, and one on one critiques
 - b. Adhere to the ethical principles of the profession and of the hospital system.
 - c. Demonstrate respect for patients, colleagues and support staff at all times, and avoid harassment of any nature
 - d. Avoid concrete or implied conflicts of interest
 - e. Demonstrate willingness to perform responsibilities of the training program
 - f. Identify and report deficiencies in performance of colleagues
 - g. Demonstrate commitment to ethical business practices and scientific and academic integrity
 - h. Do what you say you will do for your patients and colleagues
 - i. Finish necessary tasks each day, transfer patient care activities accurately, efficiently, and completely before leaving the patient care setting
2. **Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information and informed consent**
 - a. At each patient encounter, present yourself and the practice in a manner that will encourage the patient to select you, the practice and family practice in the future
 - b. Discuss diagnostic and therapeutic options with patients and families truthfully and in fair light, allowing them to be partners in decision making

3. **Demonstrate sensitivity and responsiveness to patients' culture, age, gender, beliefs, behaviors, skills and disabilities**
 - a. Define and articulate your own belief system and world view and recognize the impact of it on your provision of health care and on your interaction with other people
 - b. Recognize the human dimensions of health care and adapt care to accommodate the needs and understanding of your patient

Interpersonal and Communication Skills

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.

Residents are expected to:

1. **Create and sustain a therapeutic and ethically sound relationship with patients**
 - a. Demonstrate willingness to value patients' varied background, beliefs and communication styles while adapting to the needs of the patient
2. **Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning and writing skill.**
 - a. Conduct an interview using appropriate verbal and nonverbal skills and active listening techniques
3. **Work effectively with others as a member or leader of a health care team or other professional group**
 - a. Work together with other professionals, including physicians, midlevel providers, nurses, office staff, therapists, and hospital ancillary staff, in a manner that fosters mutual respect and facilitates the effective handling of patient care issues
 - b. Maintain comprehensive, timely and legible medical records
 - c. Communicate all relevant clinical information to all appropriate team members in a timely and consistent manner
 - d. Interact with consultants, faculty, staff, and peers in a respectful, appropriate manner

Assessment of the Resident

1. An evaluation of the resident's performance on the rotation with regard to the competencies will be submitted via the New Innovation's Residency Management Software System by each supervisor that the resident has contact with during the experience. A minimum passing grade of good (3 on a 5-point scale) on all the competencies is required to pass the rotation. Residents with less than a good on all the competencies will be reviewed by the faculty to determine if remediation is necessary.
2. During specific rotations, the resident will have to demonstrate competence in specified procedures. These procedures will be monitored by a faculty member and the faculty member will determine whether the resident is competent to perform the procedure independently.

3. Residents are required to record all procedures done on specific rotations in the New Innovation's Residency Management Software System. These procedures are then confirmed by the supervising physician, and a log is provided to the resident at the end of their residency.

Resident Assessment of the Rotation

The resident will be provided an opportunity to evaluate both the attending faculty and the rotation itself per each rotation via the New Innovations Residency Management Software System. There will two forms: Evaluation of Clinical Rotation and Evaluation of Clinical Faculty. These evaluations will remain anonymous and will be released to the attending faculty at the end of the year.

Overall Teaching Methods

1. The In-Training Exam will also be used to assess the resident's knowledge in this area and an Independent Learning Plan will be implemented should this score be low.
2. Longitudinal experience will be gained in the ER and in the Continuity Clinic with evaluation of patients with acute and chronic disease in the outpatient setting.
3. While on medicine service the resident will care for patients with similar problems, ranging from acute management to chronic disease management in the inpatient setting.
4. Journal Clubs are presented once a month on pertinent topics related to this area of Medicine.
5. Monthly Morbidity and Mortality Rounds are presented on selected patients from the Medicine Inpatient Service.
6. Call will be in the appropriate residency call system.
7. **Level of Supervision** - The resident will be assigned to at least one supervising physician. To improve the rotation sometimes the resident will be assigned to more than one preceptor to optimize the time spent on the rotation.

Allergy and Immunology

Description of Educational Experience

- Acquire the knowledge and skills to recognize, evaluate, and manage the common acute and chronic allergic and immunologic disorders
- Know the current recommendations for prevention, including environmental and occupational adjustments, and implement them in the care of your patients.
- Recognize and stabilize life threatening allergic and immunologic conditions.
- Utilize consultants appropriately.

Rotation Specific Knowledge:

1. Understand the immune response and hypersensitivity reactions.
2. Understand primary and secondary immunodeficiency.

Asthma:

- Understand pathophysiology, triggers, differential diagnosis, evaluation, pharmacological and nonpharmacologic management, and impact on quality of life for the family.
- Identification and stabilization of status asthmaticus.

Rhinitis:

- Understand pathophysiology, triggers, pharmacologic and nonpharmacologic management.
- Adverse Reactions to foods, drugs and biologicals.

Dermatitis:

- Understand etiology, pathophysiology, clinical evaluation, and management

Anaphylaxis:

- Understand precipitating factors, pathophysiology, stabilization, prevention.

Urticaria/Angioedema:

- Understand pathophysiology, evaluation, and management.

Rotation Specific Skills:

1. Perform an appropriate history and physical exam of the patient with an allergic diathesis.
2. Explain a food allergy diet and environmental control methods for amelioration of respiratory and skin allergies.
3. Appropriate use of topical and systemic medications for treatment of allergic conditions.
4. Identify immunosuppression and adjust management of the patient relative to this.
5. Appropriate use of consultants.

6. Appropriate patient and family education regarding allergies, asthma, and immunosuppression.
7. Familiarity with skin testing, allergy shots.
8. Interpret and apply pulmonary function testing, ABGs, and peak flow monitoring.

Cardiology

Description of Educational Experience

- Acquire the knowledge and skills to recognize, evaluate, and manage the common acute and chronic cardiovascular disorders.
- Know the current recommendations for primary, secondary, and tertiary prevention of cardiovascular disease and implement them in the care of your patients.
- Recognize and stabilize life threatening cardiovascular conditions.

Rotation Specific Knowledge:

1. Cardiac anatomy and physiology.
2. Changes in cardiovascular physiology with age.
3. Cardiovascular screening and primary and secondary prevention practices [risk factors for coronary artery disease and the interventions necessary to correct them]
4. Medical, surgical, and psychosocial aspects of caring for patients with cardiovascular disease, including timely use of the consultant.
5. Be familiar with the indications for and mechanics of pertinent noninvasive examinations, such as stress-testing (exercise & pharmacological techniques), echocardiography, radioisotope imaging, ambulatory ECG monitoring, vascular Doppler and ultrasound examinations.
6. Know the indications, contraindications, and complications of pertinent invasive examinations and treatments, such as cardiac catheterization with angiography, angioplasty, intracoronary and peripheral stent placement, pacemaker insertion, internal monitoring devices (central venous and arterial monitors), coronary bypass grafting, diagnostic carotid and peripheral angiography, electrophysiologic studies or ablation, valve replacement or repair.
7. Epidemiology, pathophysiology, & management of the following problems:
 - a) Coronary artery disease (angina, MI, sudden death)
 - b) Dysrhythmias
 - c) Syncope
 - d) Hypertension (essential, secondary, pulmonary)
 - e) Congestive heart failure (systolic, diastolic)
 - f) Thromboembolic disease
 - g) Peripheral vascular disease
 - h) Cardiomyopathy
8. Familiarity with cardiovascular pharmacology including:
 - a) Antiarrhythmics, Digitalis, Nitrates, Calcium channel blockers, ACE inhibitors, diuretics, Thrombolytics, Lipid lowering agents, Beta Blockers, Antibiotic prophylaxis for valvular disease

Rotation Specific Skills:

1. Identify and correctly interpret normal and abnormal heart sounds.
2. Interpret ECG's and chest x-rays.
3. Interpret lipid analysis and cardiac enzyme analysis
4. ACLS
5. Perform preoperative evaluation of cardiac status
6. Utilize other noninvasive examinations when indicated
7. Perform emergent cardioversion.
8. Emergency use of an external pacemaker
9. The resident will demonstrate independent assessment and management of CHF, hypertension, CAD, angina, thromboembolic disease and pre-operative evaluation of cardiac and noncardiac patients.
10. The resident will be able to demonstrate the stabilization of acute MI, and atrial fibrillation.
11. Application of preventive counseling and pharmacological interventions
12. The resident will demonstrate appropriate clinical consultation with cardiovascular specialists.

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to the CV system, especially in the work-up for chest wall syndrome.
2. Understand the application and usefulness of OMT in the presence of cardiovascular pathology.
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. A one-month block rotation is available. Your preceptor will assign activities and duties.

Cardiology Educational Resources

1. Residents are expected to read print and online resources to help supplement their knowledge in this field.
2. Residents are expected to maintain certification in BLS and ACLS. Each summer the course is provided by the residency. In house residents on medicine may respond to cor zeros.

The resident must read independently and understand the following topics;

- a. Management of Arrhythmia's Part 2
- b. Management of Arrhythmia's Part 1
- c. Stroke Part 1: An Update on Prevention
- d. Stroke Part 2: Management of Acute ischemic Stroke
- e. Caring for Infants with Congenital Heart Disease and their Families
- f. Diagnosis of Heart Failure in Adults
- g. New Developments in the Management of Hypertension
- h. Initial Evaluation of Hypertension
- i. Cholesterol Treatment Guidelines Update
- j. Diagnosing Pericarditis
- k. Heart Murmurs in Pediatric Patients: When do you refer?
- l. Cardiovascular Screening in Student Athletes
- m. Management of Peripheral Artery Disease
- n. Valvular Heart Disease: Review and Update
- o. EKG Learning Center

Community Medicine

Description of Educational Experience

Goal: To provide learning opportunities that will enable residents to develop or refine the knowledge, skills, and attitudes necessary to:

1. Apply principles of community-oriented primary care to the care of populations
2. Increase their skill in occupational medicine.
3. Use community health resources in the care of patients
4. Understand the physician's role in:
 - a. School-related health problems.
 - b. Community health education.
 - c. Environmental health.
5. Use public health resources effectively.
6. Provide appropriate interventions and recommendations for disease prevention and health promotion.

Rotation Specific Knowledge:

1. Occupational Medicine:
 - Assess and manage the common job-related illnesses and injuries, including psychosocial issues.
 - Identify and manage job related health risks.
 - Assess disabilities
 - Perform pre-employment physical
2. Community Health Resources Identify the major types of community health resources, including:
 - Governmental
 - Voluntary
 - Private agency
 - Use such resources in the care of patients and their families (including home health agencies, hospice, FQHCs, Community Health Centers, PIPS, and others).
3. School Health
 - Manage school-related health problems, including:
4. Identification of learning disabilities
5. Adaptation to physical disabilities

6. Evaluation for sports and recreational activities
7. Community Health Education
 - Identify methods for information transfer to community populations
 - Use media techniques.
 - Describe the physician's role in community health education
8. Public Health Services
 - Use public health resources at the local, state, national, and international levels to help patients.
 - Describe an overview of public funding and regulation of health care in the US.
9. Environmental Health
 - Assess the impact on patients' health of exposure to:
10. Toxic wastes
11. Air pollution
12. Water pollution
13. Industrial materials
 - Describe the public-health role of the physician in communities where such concerns exist.
 - Recognize and treat illness/injuries from environmental insults (thermal, electrical, chemical exposure)
14. Epidemiology
 - Understand how to conduct surveillance programs in a practice
 - Understand possible pathways of disease propagation and how to identify causal sources
 - Know when and how to share epidemiological information with appropriate health agencies.
 - Be aware of local surveillance activities which establish regional disease patterns.
 - Know how to obtain information on epidemiological patterns in your community.
 - Longitudinal Care
 - Be introduced to the principles of nursing home care.
 - Be exposed to end of life and palliative care through Hospice.
 - Complete at least one home visit per Community Medicine rotation with the behavioral science coordinator.
15. Care of Underserved Populations
 - Be exposed to care of the migrant worker.

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities utilizing effective ‘low-tech, high-touch’ methodologies in the community setting.
2. Understand the application and usefulness of OMT in community health.
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. Two one-month block rotations occur during internship. These rotations are coordinated with the Health Department under the direction of the Medical Director of the Health Department. Site visits are arranged to various agencies and support services that demonstrate the goals and objectives above.
2. The resident is required to complete a Community Medicine research project (see guidelines below) under the supervision of the Medical Director.
3. While on medicine service the resident will care for patients with similar problems, ranging from acute management to chronic disease management in the inpatient setting, with the need to arrange transitions of care to home or other facilities.
4. Case management involving social workers, home health care and senior support services occurs on a longitudinal basis on the inpatient services and in the ambulatory care clinic.
5. Required reading in the community medicine syllabus.
6. Participate in career days, school health education and county health department clinics and migrant health care programs as available.
7. Provide routine care for school age children in the family medicine center.
8. See students at the High School Wellness Center under the supervision of residency faculty.
9. Work with school officials in managing health care needs of students/migrant children
10. Case conferences demonstrating environmental influence on illness.
11. Site visits to industrial areas with attention environmental issues.
12. At least one visit is made to the Migrant Clinic under the supervision of residency faculty.
13. Resident participates in didactics, reading syllabus and direct patient care with the Hospice director.
14. Resident will pick reading material from the geriatrics reading list and discuss with the Faculty advisor for nursing homes. Resident will round with the advisor on nursing homes at least two half-days during each month. Resident will discuss the nursing home

goals and objectives with the advisor to prepare for assuming care of patients in the second year of residency.

15. Resident will rotate with the Occupational Medicine preceptor to be exposed to the principles of OM.

Level of Supervision

The resident will be assigned to at least one supervising physician. To improve the rotation sometimes the resident will be assigned to more than one preceptor to optimize the time spent on the rotation.

Educational Resources

1. The following topics are required reading material for this rotation.
 - a. Recognizing Occupational Disease. Taking an Effective Occupational Medicine [History](#)
 - b. Work Related Asthma
 - c. Travel Medicine: Helping you patients for travel abroad.
 - d. USPSTF Preventative Medicine Guidelines

GUIDELINES FOR COMMUNITY MEDICINE PROJECT

All residents will meet with the rotation director during or before the first week of their Community Medicine Rotation to choose a topic for their project.

The project topic will be of public health or community medicine significance either locally, nationally, or globally.

Once, the topic is chosen, the resident will develop a description of the topic and explanation as to why it is of public health significance, outline, and references, and mechanism for presentation. These will be presented to the rotation director prior to the end of the month.

The resident will spend the rest of the month developing the project in order to present to fellow residents and faculty. There will be two half days allotted to researching and developing the project.

The residency will schedule this presentation during the rotation following Community Medicine at the noon conference at a time convenient for the resident and the rotation director.

The presentation can be any type of visual and oral mechanism, such as PowerPoint, poster, slides, blackboard, or handout.

It is highly recommended that the project be completed before the end of the rotation, as there will not be time to work on it when a new rotation begins.

The rotation director will evaluate the project and include it in the total evaluation for Community Medicine rotation.

Some examples of previous topics include: STD's, Homelessness, Teenage Drinking, A Study of Depression in SCFM Clinic, Syphilis, Botulism Case Study, E Coli Contamination of the Fountain Creek in Pueblo, Childhood Immunizations, and Community Smallpox Preparedness.

Dermatology

Description of Educational Experience

- Acquire the knowledge and skills to recognize, evaluate, and manage the common acute and chronic skin conditions.
- Recognize and stabilize life or limb threatening skin conditions.
- Utilize consultants appropriately

Rotation Specific Knowledge:

1. Normal skin anatomy, development and physiology, including changes with age.
2. Risk factors for skin disorders
3. Preventive measures, both primary and secondary
4. Psychosocial and family implications of chronic skin disorders.
5. Differential and management of the major skin disorders, including papulosquamous disorders, vesicobullous disorders, macular eruptions, nodules, pruritus, urticaria, dermatitis, acne, pigment disorders, burns and lacerations, malignancy, hair and nail abnormalities, cutaneous manifestations of systemic disease.
6. Major therapeutic medications, topical and systemic, and other modalities. This includes steroids, antifungals, antibiotics, psoriasis treatments.

Rotation Specific Skills:

Proficiency:

- Utilize appropriate terminology for the arrangement, distribution, type and patterns of skin lesions.
- Acquire, examine and interpret biopsies, cultures and scrapings.
- Use Wood's lamp when appropriate
- Evaluate for systemic illness based on skin changes where appropriate.
- Patient education and counseling for prevention, self-care of skin conditions.
- Use of chemical and temperature based ablation techniques.
- Excision, I&D, intralesional injections
- Treatment of ingrown toenails

Familiarity:

- UV therapy, chemotherapeutic agents in treatment of skin conditions

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to dermatology
2. Understand the application and usefulness of OMT in the presence of dermatopathology
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. A one-month block rotation is available. Your preceptor will assign activities and duties.

Educational Resources

The following topics are required reading material for this rotation:

- a. Treatment of Seborrheic Dermatitis
- b. Lichen Planus
- c. Common Bacterial Skin Infections
- d. Skin and Wound Infections: An Overview
- e. Dermatophyte Infections
- f. Topical Treatment of Common Superficial Tinea Infections
- g. Autoimmune Bullous Dermatoses: A Review
- h. Evaluating the Febrile Patient with a Rash
- i. Rosacea: A Common, Yet Commonly Overlooked, Condition
- j. Early Detection and Treatment of Skin Cancer
- k. Recognizing Neoplastic Skin Lesions: A Photo Guide
- l. Diagnosis and Management of Malignant Melanoma
- m. Cryosurgery for Common Skin Conditions
- n. Diagnosis and Treatment of Acne
- o. Use of Systemic Agents in the Treatment of Acne Vulgaris

- p. Topical Therapy for Acne
- q. Atopic Dermatitis
- r. Atopic Dermatitis: A Review of Diagnosis and Treatment
- s. Molluscum Contagiosum and Warts
- t. Common Benign Skin Lesions
- u. Nail Abnormalities: Clues to Systemic Disease
- v. Treatment of Psoriasis: An Algorithm-Based Approach for Primary Care Physicians
- w. Pityriasis Rosea
- x. Treating Onychomycosis

Endocrinology

Description of Educational Experience

- Acquire the knowledge and skills to diagnose and manage acute and chronic care of the common endocrine disorders.
- Recognize less common disorders and participate in management.
- Utilize the consultant appropriately.

Rotation Specific Knowledge:

Diabetes:

- Describe normal glucose metabolism.
- Describe the pathophysiology and natural course of diabetes, both non-insulin dependent, and insulin dependent.
- Discuss prevention and treatment of renal, neurologic, vascular, and retinal sequelae of diabetes.
- Discuss the management of diabetic ketoacidosis.
- Discuss treatment of infections in diabetics.
- Discuss care of foot and leg ulcers in diabetics.
- Pharmacologic and nonpharmacologic interventions for the control of diabetes.

Thyroid:

- Describe the pathophysiology, clinical presentation, and evaluation and treatment of hyper- and hypothyroidism, including the crisis states.
- Discuss the workup of a thyroid nodule.
- Explain the thyroid function tests.
- Pharmacology of the common medications and treatment modalities used for hyperthyroidism and hypothyroidism.

Growth and Sexual Maturation:

- Describe endocrine causes of delayed growth or maturation.
- Describe the Tanner stages and define delayed and precocious puberty
- Describe the Denver Developmental Screening Test, indicating its uses and limitations.

Women's Health:

- Endocrinology of the menstrual cycle
- Etiology, evaluation, and management of primary and secondary amenorrhea.
- Evaluation and management of dysfunctional uterine bleeding.
- Clinical presentation, evaluation and management of polycystic ovarian syndrome.
- Infertility – female and male contributions, evaluation, emotional and family impact.

- Hormone replacement therapy.
- Prevention and treatment of osteoporosis.

Other:

- Pathophysiology and clinical presentation of the following disorders: diabetes insipidus, syndrome of inappropriate ADH secretion, pituitary adenoma, pheochromocytoma, Addison's and Cushing's disease.
- Pharmacology of the adrenal steroids and the use of exogenous steroids (clinical indications, effect on adrenals, side effects, and dosage alternatives).

Rotation Specific Skills and Procedures:

Skills:

1. Perform preliminary stages of the work-up of male and female infertility.
2. Perform developmental screening as a part of routine well child care
3. Perform an appropriate history and physical of the endocrine system.
4. Appropriately work up common presenting complaints such as the following: edema, extremes of stature, galactorrhea, hirsutism, obesity, and disorders of electrolytes, polyuria, polydipsia, polyphagia, anorexia, weight change, pigmentation change, tetany and muscle cramps, impotence, fatigue, malaise, tremors.
5. When considering an endocrine etiology for a problem, utilize the various diagnostic studies efficiently and interpret the results accurately (including blood studies, x-rays and scans, and tissue reports). Use prednisone and other steroids appropriately.
6. Manage diabetes with diet, oral agents, and insulin demonstrating thorough knowledge of each.
7. In the chronic management of diabetes, demonstrate attention to early recognition and management of complications, prevention, and patient and family education and support.
8. Manage diabetic ketoacidosis.
9. Manage hyper- and hypothyroidism.
10. Manage hormonal manipulations of the female reproductive tract, both pre- and post-menopausal.

Procedures:

1. Perform endometrial biopsy.
2. Familiarity with Fine Needle Aspiration of a Thyroid Cyst, I131 treatment.

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to the endocrine system
2. Understand the application and usefulness of OMT in the presence of endocrine pathology.
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. A one-month block rotation is available. Your preceptor will assign activities and duties.

Educational Resources

The following topics are required reading for this rotation:

- a. Oral Agents in the Management of Type II Diabetes Mellitus
- b. Treatment of Type II Diabetes Mellitus
- c. Evaluation of Incidental Renal and Adrenal Masses
- d. Pharmacologic Prevention of Osteoporotic Fractures
- e. Obesity
- f. Obesity: Assessment and Management in Primary Care
- g. Hyperparathyroidism
- h. Cushing's Disease: Clinical Manifestations and Diagnostic Evaluation
- i. Amenorrhea: Evaluation and Treatment
- j. Evaluation and Treatment of Galactorrhea
- k. Evaluation and Treatment of Women with Hirsutism
- l. Evaluation of the Subfertile Man
- m. Subclinical Thyroid Disease

ENT – Otolaryngology

Description of Educational Experience

- Recognize and manage the common disorders of the head and neck.
- Know the differential diagnosis and efficient evaluation of common presenting symptoms relative to the ears, nose, sinuses, neck and throat.
- Utilize the ENT specialist appropriately.

Rotation Specific Knowledge:

- Know the common sites and presentations of ENT cancers
- Describe the normal anatomy and physiology of the ear including pertinent micro- and neuro-anatomy that contribute to hearing and proprioception.
- Discuss the etiology and characteristics of hearing loss of aging.
- List causes of ear pain, including local and referred pain, and discuss how to approach differentiating the cause of ear pain.
- Differentiate dizziness and vertigo and describe the mechanism of vertigo.
- Discuss the etiology and natural history of middle ear infections and describe methods of assessment and treatment.
- Describe the clinical picture of otosclerosis, cholesteatoma, and mastoiditis.
- List the major classes of drugs that affect hearing.
- Describe the normal anatomy and function of the nose, sinuses, and oropharynx.
- Discuss causes, evaluation, and therapy of rhinitis and nasal congestion or obstruction.
- Discuss the common location and causes of epistaxis and several approaches to management.
- Discuss the causes, evaluation, and therapy of sinusitis and pharyngitis.
- Discuss the etiology, evaluation, and management of hoarseness.
- Describe the location and function of the salivary glands and discuss the diagnosis and treatment of sialitis and sialolithiasis.
- Discuss causes of lymphadenopathy and lymphadenitis in the head and neck.
- Discuss indications for tonsillectomy, adenoidectomy, ventilation tubes, and sinus irrigation. Discuss the pharmacology of the drugs commonly used in the treatment of ENT problems, including ototopicals, antibiotics, antihistamines, and decongestants.

Rotation Specific Skills:

Diagnostic:

1. Perform a thorough history and physical of the head and neck, including a skillful exam of the temporomandibular joint, the nasal passages, the nasopharynx, the oropharynx, EACs, tympanic membranes, and the neck.
2. Diagnose and manage acute otitis media, chronic otitis media, and their complications.

Management/Therapeutic:

Recognize, evaluate and manage appropriately:

- a) Disorders of the Ear: dizziness and vertigo, otitis media and externa, hearing loss, tinnitus, pain, perforation, and trauma. Recognize and refer otosclerosis, cholesteatoma, and mastoiditis.
- b) Disorders of the Nose and Sinuses: Rhinitis, obstruction, epistaxis, sinusitis, foreign body, maxillofacial and TMJ pain, trauma
- c) Disorders of the Neck and Throat: epiglottitis, laryngeal edema, pain, hoarseness, lymphadenopathy, pharyngitis, peritonsillar abscess, sialitis and sialolithiasis, head and neck masses, foreign body.

Procedures:

1. Intubation and emergency tracheotomy
2. Perform and interpret tympanogram, pneumatoscopy, tuning fork tests, and audiogram.
3. Removal of impacted cerumen or foreign body from ear or nose.
4. Be familiar with direct and indirect laryngoscopy, and fiber optic nasopharyngoscopy.
5. Management of undisplaced nasal fracture
6. I&D of peritonsillar abscess
7. Anterior nasal pack and nasal cautery.

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to otolaryngology
2. Understand the application and usefulness of OMT in the presence of ear, nose, and throat pathology.
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. A two-week block rotation in ENT is required during the second or third year of training. Activities and duties will be assigned and supervised by the otolaryngology preceptor. Time will be spent in the Ambulatory Continuity Clinic.
2. A large portion of your outpatient pediatrics training will involve dealing with pediatric ENT problems

Educational Resources

1. The following topics are required reading for this rotation.
 - a. Acute Otitis Media: Part I. Improving Diagnostic Accuracy
 - b. Acute Otitis Media: Part II. Treatment in an Era of Increasing Antibiotic Resistance
 - c. Differential Diagnosis and treatment of Hearing Loss
 - d. Diagnostic Approaches to Tinnitus
 - e. Viral Croup
 - f. Pharyngitis
 - g. Management of Group A Beta-Hemolytic Streptococcal Pharyngitis
 - h. Acute Bacterial Rhinosinusitis in Adults: Part I. Evaluation
 - i. Acute Bacterial Rhino sinusitis in Adults: Part 2 Treatment
 - j. Tympanometry
 - k. Management of Epistaxis
 - l. Vasomotor Rhinitis
 - m. The Initial Evaluation of Vertigo
 - n. Treatment of Vertigo
 - o. Otitis Externa: A Practical Guide to Treatment and Prevention

Emergency Medicine

Description of Rotational Experience

- Acquire the knowledge and skills to recognize, triage, and provide initial management of the common urgent and emergent conditions in any age group that present to a community based Emergency Department.
- Assess patients quickly and efficiently, according to the urgency of the patient's problem.
- Work as a member of the emergency department team.
- Understand the role of consultants in the Emergency Department

Rotation Specific Knowledge:

- Principles of early intervention including pre-hospital care.
- Principles of prioritization and triage, stabilization for transport, efficient resource utilization, simultaneous triage of multiple patients with trauma or serious medical illness
- Assessment and management of common emergency situations:
 1. Trauma: primary and secondary assessment
 2. Neurologic: coma, status epilepticus, stroke, spinal cord compression, syncope
 3. Cardiac: arrest, arrhythmia, failure, shock, angina, MI
 4. Psychiatric: suicide, psychosis, violence and abuse, situational crisis
 5. Pediatric: acute abdomen, sepsis, abuse, injury
 6. Gynecologic: ectopic pregnancy, sexual assault, hemorrhage
- Management of critical care situations such as airway maintenance, respiratory failure, arrhythmias, cardiac arrest, shock, anaphylaxis, infection.
- Identification and management of environmental exposures: temperature extremes, bites, stings, poison ingestions, including appropriate use of the poison control databases and basic decontamination procedures.
- Basic fracture/dislocation management

Rotation Specific Skills:

Proficient:

1. The resident will be able to correctly interpret and respond to ECG's, x-rays, and monitor readings.
2. Competent acid/base interpretation and response
3. Airway management
4. Laceration repair including local blocks
5. Follow heart attack and Brain Attack protocols and other established emergency protocols
6. Splinting techniques
7. Be an effective team member
8. ACLS

Familiar:

1. Intubation and initial vent management
2. Complex laceration repair
3. Central lines and venous cut downs
4. Conscious sedation
5. Regional blocks
6. Thoracentesis, paracentesis, LP
7. External cardiac pacing

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Utilize osteopathic principles and practices in their approach to each patient, recognizing the inherent interconnectivity of systems in relation to form and function.
2. Utilize osteopathic manipulative medicine when appropriate in the treatment of patients in the emergency department.
3. Recognize the mind-body connection in the treatment of patients and will evaluate the patient as a person, rather than as a disease process.

Teaching Methods

1. PGY-1 Rotation: A 4-week rotation is required in the first year.
2. Elective Emergency Department rotation can be arranged as needed for the residents as needed

Educational Resources

1. The following topics are required reading for this rotation.
 - Emergency Department Evaluation And Management Of Patients With Upper Gastrointestinal Bleeding
 - Hepatic Failure: An Evidence- Based Approach In The Emergency Department
 - Evidence-Based Management Of Suspected Appendicitis In The Emergency Department
 - Current Guidelines For Evaluating And Managing Symptomatic Early Pregnancy In The Emergency Department
 - Emergency Department Management Of Vaginal Bleeding In The Nonpregnant Patient

- Renal Calculi: Emergency Department Diagnosis And Treatment
- Diagnosis And Management Of Urinary Tract Infections In The Emergency Department
- Pelvic Inflammatory Disease: Diagnosis And Treatment In The Emergency Department
- Complications In Pregnancy Part I: Early Pregnancy
- Identifying Emergency Department Patients With Chest Pain who are at Low Risk for Acute Coronary Syndromes
- Atrial Fibrillation: Management Strategies In The Emergency Department
- Evaluation And Management Of Bradycardias In The Emergency Department
- Syncope: Risk Stratification And Clinical Decision Making
- An Evidence-Based Approach To Managing Asymptomatic Elevated Blood Pressure In The Emergency Department
- Differentiating Types Of Wide-Complex Tachycardia To Determine Appropriate Treatment In The Emergency Department
- An Evidence-Based Approach To Acute Aortic Syndromes
- Supraventricular Tachycardias: An Evidenced Based Approach
- Acute Decompensated Heart Failure: New Strategies for Improving Outcomes
- The Use Of Vasoactive Agents In The Management Of Circulatory Shock
- Diagnosis And Management Of Shock In The Emergency Department
- Allergy And Anaphylaxis: Principles Of Acute Emergency Management
- Current Guidelines For Procedural Sedation In The Emergency Department
- Sepsis, Severe Sepsis, And Septic Shock: Current Evidence For Emergency Department Management
- Postarrest Cardiocerebral Resuscitation: An Evidence- Based Review
- The Use Of Blood Products In The Critically Ill Patient: Indications And Risks
- Evidence-Based Guidelines For Evaluation And Antimicrobial Therapy For Common Emergency Department Infections
- Sodium Disorders In The Emergency Department: A Review Of Hyponatremia And Hypernatremia
- Antidotes For Overdose: Timely And Effective Counteraction
- Evidence-Based Evaluation And Management Of Patients With Pharyngitis In The Emergency Department
- Diabetic Emergencies: New Strategies For An Old Disease
- Evidence-Based Management Of Potassium Disorders In The Emergency Department

- Mammalian Bites In The Emergency Department: Recommendations For Wound Closure, Antibiotics, And Postexposure Prophylaxis
- The Depressed Patient And Suicidal Patient In The Emergency Department: Evidence-Based Management And Treatment Strategies
- Identifying And Treating Thyroid Storm And Myxedema Coma
- Oncologic Emergencies, Part II: Neutropenic Fever, Tumor Lysis Syndrome, And Hypercalcemia Of Malignancy

Gynecology and Obstetrics

Description of Educational Experience

- Manage a normal pregnancy and delivery
- Recognize and provide initial management of a high-risk pregnancy and delivery.
- Recognize and manage complications and emergencies that arise during labor and delivery.

Rotation Specific Knowledge:

- Describe normal growth and development of the female reproductive system and common variants.
- Describe pre-pregnancy counseling and planning.
- List and discuss the methods of establishing the presence of pregnancy and their limitations, and the methods of dating a pregnancy and their limitations.
- Describe standard low risk prenatal care, including laboratory and physical exam surveillance.
- Discuss the psychosocial impact of pregnancy on the woman and her family, including changes in self-image, lifestyle, relationships, and common emotional tasks of pregnancy.
- Describe maternal physiologic changes associated with pregnancy, including changes in endocrine, hematological, cardiovascular, renal, reproductive tract and GU tract.
- Describe prenatal risk assessment, and the potential harm to the fetus of alcohol, tobacco, and illicit drug use, extremes of age, poor nutrition, underlying medical conditions, and medications.
- Discuss methods to determine fetal well-being both antepartum and intrapartum, including Non-Stress Test, Oxytocin Challenge Test, Biophysical Profile, indirect and direct fetal heart monitoring, and scalp pH.
- Discuss obstetrical analgesia and anesthesia.
- Discuss the management of preterm labor, bleeding during pregnancy, elevated BP during pregnancy, and infections during pregnancy.
- List the indications for induction of labor, and describe cervical assessment for inducing.
- Describe the normal stages of labor and delivery, including familiarity with the Friedman Curve and uses of oxytocin.
- Describe immediate intervention techniques for maternal exhaustion, shoulder dystocia, fetal distress, retained placenta, and postpartum hemorrhage.
- Discuss indications for C-section.
- List indications for maternal transport.
- Describe management of the postpartum period addressing both physiologic and psychological issues.

Rotation Specific Skills:

Evaluation Skills:

1. Demonstrate a technically and psychosocially skillful examination of the pregnant patient.
2. Evaluate all pregnant patients for pelvic adequacy and cervical dilatation and effacement, position and station of the presenting part.
3. Perform accurate gestational dating using all appropriate modalities in all patients.

Management Skills:

1. Manage all infectious diseases associated with pregnancy.
2. Correctly identify and manage premature rupture of membranes and preterm labor based on gestational age, including timely maternal transport when indicated. Manage labor including but not limited to use of the Friedman curve, analgesics, IV fluids, oxytocin augmentation and induction, prostaglandins, magnesium sulfate, and anti-hypertensive. When using medications, the resident must be knowledgeable about indications and possible side effects.
3. Manage postpartum complications, including hemorrhage, uterine atony, constipation, fever, urinary retention, mastitis, phlebitis, anemia, and depression, hemorrhoids, and lactation issues.

Procedural Skills:

1. Normal Spontaneous Vaginal Delivery
2. Vacuum Assisted Deliveries
3. Familiarity with outlet forceps delivery
4. Episiotomy and repair
5. Pudendal and local anesthesia
6. Manual extraction of the placenta
7. Manual exploration of the uterus.
8. Accurate interpretation of fetal heart tone tracing.
9. Accurate use of ultrasound for position and biophysical profile
10. Repair of third and fourth degree lacerations
11. Repair of cervical and vaginal lacerations.
12. Artificial rupture of membranes
13. Placement of fetal scalp electrode
14. Placement of intrauterine pressure catheter.
15. First assist at C-Sections.

A graduating resident is expected to be competent in the area of obstetrics by demonstrating the following:

1. Independent management of low risk pregnancy and delivery, with repair of first and second-degree episiotomy.

2. Recognition and management or stabilization of intrapartum complications and emergencies.
3. Competent neonatal resuscitation
4. Appropriate clinical consultation with obstetrical specialists

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to obstetrics and gynecology
2. Understand the application and usefulness of OMT in pregnancy and women's health.
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. Be available to the community physicians when possible.
2. Didactic conferences occur throughout the year on pertinent topics related to this area
3. PGY1's duties include the following:
 - a) Admit all obstetric, gynecologic, and pediatric patients.
 - b) Make daily rounds in conjunction with the both the SCFM and PCHC faculty on call.
 - c) Perform necessary procedures on L&D and pediatrics.
 - d) Maintain adequate charting, documenting all procedure and patient contact.
 - e) Evaluate patients presenting to L&D for any reason.
 - f) Manage labor.
 - g) Perform deliveries.
 - h) Evaluate all obstetric, gynecologic, and pediatric patients presenting to the ER.
 - i) Attend High Risk OB clinic.
4. PGY2 and PGY 3 responsibilities.
 - a) Write upper levels admit notes on all admissions to these services.
 - b) Supervise the PGY-1 in the management of all women in labor and delivery; attend all deliveries and resuscitations.
 - c) Supervise the PGY-1 in the management of complicated newborns
 - d) Cover L&D while the PGY-1 is unavailable.
 - e) Oversee OB and Pediatrics ER activities
5. Longitudinal experience will be gained in the ER and in the Continuity Clinic with evaluation of patients with acute and chronic disease in the outpatient setting in addition to routine Prenatal Care.

6. While on the Obstetrics service the resident will care for patients with similar problems, ranging from acute management to chronic disease management in the inpatient setting.

Level of Supervision

The attending is the residency faculty on call and the faculty on the service.

Educational Resources

1. The following topics are required reading for this rotation:
 - a. Evidence Based Prenatal Care Part 1 General Prenatal Care and Counseling Issues
 - b. Evidence Based Prenatal Care Part 2 Third Trimester Care and Prevention of Infectious Disease
 - c. Uterine Rupture: What Family Physicians Need to Know
 - d. The Nature and Management of Labor Pain: Part 1. Non-Pharmacologic Pain Relief
 - e. The Nature and Management of Labor Pain: Part 2. Pharmacologic Pain Relief
 - f. Preventing Post-Partum Hemorrhage: Managing the Third Stage of Labor
 - g. Current Trends in Cervical Ripening and labor Induction
 - h. An Approach to the Postpartum Office Visit
 - i. Diagnosis and management of Preeclampsia
 - j. Preterm Labor

Gastroenterology

Description of Educational Experience

- Understand basic anatomy and pathophysiology of the gastrointestinal tract.
- Recognize life threatening disorders of the GI tract and respond appropriately
- Diagnose and manage common GI disorders.
- Utilize the gastroenterology consultant appropriately.

Rotation Specific Knowledge:

1. Describe the normal anatomy and physiology of the alimentary tract, including mouth, esophagus, stomach, intestinal tract, liver, pancreas, and biliary tract.
2. Discuss common disease states of the GI tract including: disorders of the esophagus (erosion, trauma, bleeding, reflux, stricture, and motility), stomach (ulcer, bleeding, and pain), intestinal tract (bleeding, obstruction, diarrhea, inflammation, and infection), liver, pancreas, gall bladder, cancers, trauma, and psychosomatic disorders.
3. Discuss the advantages and disadvantages of the following GI tract tests: x-rays, sonography, CT scan, MRI, gastric and stool analysis, liver function tests and enzyme assays, endoscopy, biopsy, invasive radiography.
4. Discuss GI pharmacology including antidiarrheal, antiemetic's, antibiotics, anthelmintic, H2 antagonists, proton pump inhibitors, promotility agents, antacids, anorexics, emetics, dietary supplements, laxatives. Know the indications, actions, side effects, toxicity and interactions of these drugs.
5. Describe adjuncts to pharmacological therapy of GI disease such as dietary adjustments, psychosocial support and surgery.
6. List health maintenance recommendations relative to GI cancer.
7. Discuss indications for and use of enteric hyperalimentation, peripheral parenteral nutrition, and total parenteral nutrition.
8. Know how to determine ideal body weight and calculate appropriate caloric intake

Rotation Specific Skills:

1. Perform a thorough and efficient GI history and physical exam. Ask questions that probe the differentiation between functional and pathologic abdominal pain.
2. Perform a focused history, physical exam and work up of abdominal pain, appropriate to the nature of the presenting complaint.
3. Obtain a diet history and evaluate it for adequacy of caloric intake and protein, carbohydrate and fat content.
4. Recognize and manage (with consultation if necessary) the following GI disorders:
 - a) Esophageal varices, reflux, stricture, foreign body, tumor, inflammation, motility disorders, hiatal hernia.

- b) Peptic ulcer disease, gastric outlet obstruction, perforation.
 - c) Ileus, inflammatory bowel disease, diverticulosis, diverticulitis, irritable bowel syndrome, bowel obstruction, peritonitis, appendicitis, ischemic colitis, upper and lower GI bleed, hemorrhoids, perirectal abscess, colon cancer, hernias, malformations.
 - d) Cirrhosis, hepatitis, pancreatitis, pancreatic pseudo cyst and cancer,
 - e) cholelithiasis and cholecystitis.
 - f) Infections including giardia, viral and bacterial gastroenteritis.
 - g) Lactose intolerance, malabsorption syndromes, pernicious anemia.
5. Order and interpret labs and diagnostic studies efficiently, indicating an understanding of the information gained from each test and avoiding unnecessary testing.
 6. Be able to evaluate the following sign/symptoms: anorexia, dysphagia, dyspepsia, nausea, vomiting, heartburn, early satiety, bleeding, abdominal pain and cramping, organomegaly, ascites, diarrhea, constipation, jaundice, rectal pain.
 7. Utilize the GI medications appropriately.
 8. Refer appropriately for surgical evaluation and management.

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to the GI system
2. Understand the application and usefulness of OMT in the presence of GI pathology.
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. A one-month block rotation is available. Your preceptor will assign activities and duties.

Educational Resources

1. The following topics are required reading for this rotation.
 - a. Evaluation and Management of Non-ulcer Dyspepsia
 - b. Management of *Helicobacter pylori* Infection
 - c. Gastroesophageal Reflux Disease: Diagnosis and Management
 - d. Barrett's Esophagus
 - e. Gastric Cancer: Diagnosis and Treatment Options
 - f. Update on Colorectal Cancer
 - g. Diverticular Disease: Diagnosis and Treatment

- h. Preventive Strategies in Chronic Liver Disease: Part I. Alcohol, Vaccines, Toxic Medications and Supplements, Diet and Exercise
- i. Preventive Strategies in Chronic Liver Disease: Part II. Cirrhosis
- j. Hepatitis C: Part I. Routine Serologic Testing and Diagnosis
- k. Hepatitis C: Part II. Prevention Counseling and Medical Evaluation
- l. Hepatitis B
- m. Management of Inflammatory Bowel Disease
- n. Management of Crohn's Disease—A Practical Approach
- o. Gluten-Sensitive Enteropathy (Celiac Disease): More Common Than You Think
- p. Pancreatic Cancer: Diagnosis and Management
- q. Diagnosis and Management of Acute Pancreatitis
- r. Acute Abdominal Pain in Children
- s. Evaluation and Treatment of Constipation in Infants and Children

Hematology/Oncology

Description of Educational Experience

- Acquire the knowledge and skills to diagnose and manage common hematologic disorders.
- Efficiently work with a consultant in the management of more complex hematologic disease.
- Acquire the knowledge and skills to diagnose cancer, refer appropriately, and lend support and guidance to the patient and family during the course of the illness.
- Facilitate coordinated health care for patients with cancer by acting as the intermediary among the specialists

Rotation Specific Knowledge:

Hematology:

- Describe the normal physiology of the RBC, including development, release, function, and senescence.
- Describe the various factors which influence the oxygen dissociation curve.
- Describe the different types of white blood cells including their morphology and function and normal numbers.
- Describe the clotting process. Describe the etiologies for: Normocytic anemia, Microcytic anemia, Macrocytic anemia, Thrombocytopenia, Leukopenia, Leukocytosis, Red cell variant forms (spherocytes, targets, helmets, etc.) Describe the pathophysiology of the following: anemias, thrombocytopenia, purpuras, hemoglobinopathies, bleeding disorders, DIC, polycythemia Vera, transfusion reaction, leukemia's, lymphomas, multiple myeloma.
- Discuss the principles of anticoagulation.
- Discuss the risks and benefits of transfusions and blood components.

Oncology:

- Be able to describe cancer both in scientific and lay terms.
- For the most common malignancies (lung, breast, colon, prostate, cervix, uterus), describe the common presenting problems, route of spread, complications, therapies, and current prognosis.
- Discuss the management of nutrition and pain in the cancer patient.
- Discuss the predictable psychosocial adjustments for a patient and family when diagnosed with cancer (denial, anger, acceptance, loss of status in community and in family, change in family roles, etc.).
- Discuss current screening recommendations for cancer.
- Discuss the paraneoplastic syndromes.
- Discuss in general the rationale, methods and effects of radiation therapy.

- a) Discuss the care for the cancer survivor

Rotation Specific Skills:

Hematology:

1. Perform a thorough history and physical exam pertinent to hematologic problems
2. Interpret all the components of a CBC correctly.
3. Identify the normal cell types in a peripheral blood smear and recognize abnormal cells.
4. Utilize the various coagulation studies appropriately and interpret the results accurately.
5. Utilize blood components in appropriate circumstances, using good judgment in weighing the risks and benefits.
6. Recognize more complex hematologic disorders, stabilize and refer or consult appropriately.
7. Manage ABO and Rh incompatibility in the newborn.
8. Institute and monitor/manage short and long-term anticoagulation in a patient
9. Identify and manage the common types of anemia.
10. Support the patient with a hematologic malignancy and participate in therapy

Oncology:

1. Recognize presenting complaints and utilize the various diagnostic procedures efficiently to make the diagnosis of cancer as early as possible.
2. Carry out accepted screening procedures in your ambulatory population.
3. Discuss the diagnosis of cancer with a patient and family, indicating an ability to point out the implications of the diagnosis in terms of medical treatment, complications, and life expectancy.
4. Coordinate the medical, surgical, and psychosocial care of a cancer patient to minimize confusion and discomfort.

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to benign and malignant cancers
2. Understand the application and usefulness of OMT in the presence of cancer and hematologic pathology.

3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. A one-month block rotation is available. Your preceptor will assign activities and duties.

Educational Resources

1. The following topics are required reading for this rotation.
 - a. Leukocytosis: The Basics of Clinical Assessment
 - b. Lymphadenopathy and Malignancy
 - c. Recognition of Common Childhood Malignancies
 - d. Multiple Myeloma: Recognition and Management
 - e. Evaluating the Child with Purpura
 - f. Anemia in the Elderly
 - g. Normocytic Anemia
 - h. Hemolytic Anemia
 - i. Polycythemia Vera

Hospitalist Service – Internal Medicine

Description of Educational Experience

- Develop and refine the knowledge, skills and attitudes necessary to care for efficiently and effectively patients requiring inpatient management.
- Develop and refine the knowledge, skills, and attitudes necessary to care for patients longitudinally that have chronic general medical conditions.
- Recognize, stabilize, and Co-Manage with appropriate consultation life threatening general medical conditions.
- Know and apply the current health maintenance recommendations in adult medicine.

Rotation Specific Knowledge:

- The resident will be acquiring the knowledge to diagnose, treat and manage the non-surgical diseases of adults.
- The resident will understand the pathophysiology of non-surgical diseases of adults.
- The resident will develop a disciplined approach to the practice of adult medicine.
- Appropriately diagnose and treat acute illness, while acknowledging the changes in lifestyle required of the patient and his/her family when illness occurs.
- Manage the chronically ill patient and his/her family, understanding their needs and coping strategies with specific appreciation of shock, denial, bargaining, depression, and acceptance.
- Appropriately hospitalize those patients that cannot be properly managed on an outpatient basis.
- Assume the family physician's role of health advocate through patient education, preventive measures, and screening for early disease and risk factors.
- Assume the family physician's role of health care coordinator through proper use of consultants and integration of community and private services available to the patient.
- Assume the family physician's role of patient educator through routine health education practices, use of varied resources for patient information, and careful and sensitive fielding of patient and family questions.
- Maintain and continuously refine your knowledge and clinical skills in order to provide optimal care for patients, exercising good judgment in timely consultation or referral.
- Coordinate and institute reasonable discharge planning beginning early in the hospital stay with appropriate utilization of hospital and community resources.
- The resident will understand the evaluation of:
 - a. Cardiovascular disorders
 - b. Hematological disorders
 - c. Gastrointestinal disorders
 - d. Endocrine disorders
 - e. Renal disorders

- f. Infectious diseases
- g. Rheumatologic disorders Pulmonary disorder
- h. Medical complications of alcoholism
- i. HIV infected patient

Rotation Specific Skills:

Diagnostic:

1. Perform a comprehensive history and physical examination and develop a reasonable, prioritized differential diagnosis.
2. Obtain appropriate laboratory and imaging studies to address the differential efficiently, and interpret results correctly.
3. Develop a problem list, revising and refining it as more data becomes available.

Management/Therapeutic:

1. Develop a reasonable treatment plan for each problem including further diagnostic studies if necessary, multifaceted therapeutic plans and educational and environmental adjustment plans as necessary.
2. Develop specific plans for ongoing care of chronic problems and rehabilitation from acute problems, again utilizing hospital and community resources as well as patient and family participation.
3. The resident will be able to interpret these tests accurately:
 - a. EKG & echocardiogram
 - b. Blood chemistry and serology
 - c. Basic hematology testing
 - d. Abdominal x-rays
 - e. Chest x-ray
 - f. Microbiology tests
 - g. Blood gas/acid base data
 - h. Fluid and electrolyte data

Procedures:

1. The resident will be able to perform the following procedures:
 - a. Lumbar puncture
 - b. Thoracentesis
 - c. Paracentesis
 - d. Arterial & central venous line placement

Teaching Methods

1. The medicine teaching service is the backbone of in-hospital medicine training in this program. The resident will spend at least two months in all three years participating in this service. The service will be staffed by an internist from the community. Descriptions of the function and duties of each team member can be found in the Residency Policy and Procedure manual.
2. Training in critical care medicine occurs longitudinally since the teaching service manages patients in the ICU routinely.

Educational Resources

1. The following topics are required reading for this rotation:
 - a. Diagnosis and Treatment of Community Acquired Pneumonia
 - b. Hyperkalemia
 - c. Transient Ischemic Attacks: Part 1 Diagnosis and Evaluation
 - d. Acute Respiratory Distress Syndrome
 - e. Pneumonia in Older Residents of Long-Term Care Facilities
 - f. Delirium
 - g. Diagnosis of Heart Failure in Adults
 - h. An Approach to Drug Abuse, intoxication and Withdrawal

Nephrology

Description of Educational Experience

- Acquire the knowledge and skills to recognize, evaluate, and manage the common acute and chronic renal disorders.
- Be competent at assessing and managing fluids and electrolytes.
- Utilize the nephrology consultant appropriately.

Rotation Specific Knowledge:

- Normal anatomy and physiology of the kidneys, including renal responses to volume, acid/base, and electrolyte imbalances, and to hormonal mediators.
- Differential diagnosis, evaluation, and management of acute and chronic renal insufficiency and failure.
- Evaluation and management of proteinuria, hematuria, and pyuria.
- Differential diagnosis, evaluation, and management of acidosis and alkalosis, electrolyte and volume imbalances.
- Effect of hypertension on the kidneys and the kidneys on hypertension
- Effect of diabetes on the kidneys.
- Pathophysiology of the nephritides and RTAs
- Indications for dialysis

Rotation Specific Skills:

Diagnostic:

1. Perform an appropriate history and physical exam on a patient with a renal problem or complaint.
2. Perform a complete urinalysis, including accurate microscopic analysis of the urinary sediment.
3. Interpret electrolyte and acid/base data correctly.
4. Evaluate renal function using blood and urine testing and interpret results accurately.

Management/Therapeutic:

1. Manage acid/base and electrolyte imbalances
2. Manage acute and chronic renal failure with appropriate consultation.
3. Diagnose and manage pyelonephritis in children, adults, and pregnant women.
4. Manage hypertensive crisis and hypotension in acute settings.
5. Evaluation and management of hypertension in all settings.

6. Recognize and manage with appropriate consultation hydronephrosis, the nephritides, nephritic syndrome, renal tubular acidosis, cysts, abscesses, tumors, and other rarer renal disorders.
7. Use appropriate drugs and appropriately modify drug dosages in the face of renal insufficiency

Osteopathic Principles and Practice

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to the kidneys.
2. Understand the application and usefulness of OMT in the presence of renal pathology.
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. A one-month block rotation is available. Your preceptor will assign activities and duties.

Educational Resources

1. The following topics are required reading for this rotation:
 1. Diagnosis and Management of Acute Interstitial Nephritis
 2. Proteinuria in Adults: A Diagnostic Approach
 3. Pediatric Urinary Tract Infection and Reflux
 4. Chronic kidney Disease: Prevention and Treatment of Common Complications
 5. Management of Acute Renal Failure
 6. Evaluation of Dysuria in Adults

Nursing Home Goals and Objectives

Description of Educational Experience

- Acquire the knowledge and skills to recognize, evaluate, and manage the common acute and chronic conditions commonly encountered in the nursing home environment.
- To become competent in management of elderly patients who require nursing home care.
- Understand the unique aspects of the delivery of care for the elderly.

Rotation Specific Patient Care:

1. Patients are seen in a timely fashion and all tasks related to care of the patient are accomplished in a timely fashion. This includes sub specialist referral, lab follow up, orders, H and P's, and medication preauthorization's. Residents are responsible for doing an annual history and physical on all their nursing home patients. It is their responsibility to check the nursing home chart and find out when the last history and physical was done.
2. Resident arranges coverage of nursing home patient when resident is away or on vacation.
3. Resident demonstrates knowledge of patient problems and care by writing a comprehensive SOAP note in the patient's chart. In addition, the note will include:
 - a) List of medications the patient is currently taking
 - b) Weight taken the month of the visit.
 - c) Vitals taken the month of the visit.
4. Alternatively, the resident may use the Nursing Home Progress note template which prompts a comprehensive exam of the nursing home patient. This template is available from the residency coordinator.

Rotation Specific Knowledge:

Patient's medical problems are managed comprehensively and according to current evidence based guidelines for geriatric care. Specifically, resident demonstrates knowledge and management of:

- Dementia and dementia related behaviors
- Indications for swallowing studies and gastrostomy tubes.
- Urinary incontinence
- Medication issues specific to the geriatric population such as dosage adjustment for renal function, polypharmacy issues, and medications to avoid in the elderly.
- Falls
- Advance directives and appropriate use of hospice care
- Maintenance of function
- Rights of the patient in the nursing home.

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities in nursing home patients
2. Understand the application and usefulness of OMT in the nursing home population
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. A one-month block rotation is available. Your preceptor will assign activities and duties.

Neurology

Description of Educational Experience

The goal of the Neurology Rotation is to familiarize residents with Neurology's particular place in the overall practice of family medicine. History taking in neurology and performance of the neurologic examination are essential skills. There must be emphasis on good diagnostic and therapeutic skills, with appropriate consideration of biosocial factors.

Rotation Specific Knowledge:

- Normal anatomy, physiology and anatomic principles that allow localization of neurologic disease.
- Normal growth, development and senescence of the nervous system.
- The psychological and rehabilitation aspects of patient management, especially for chronic or long term neurologic disorders. The temporal sequence of common neurologic disorders.
- The inherited basis of certain neurologic disorders as they affect the patient and family regarding the benefits of genetic counseling.
- The pathophysiology, differential diagnosis and treatment of prevalent neurologic conditions and emergency situations the physician may encounter.
- A special understanding of the neurologic disabilities of elderly patients, and the importance of assessing, restoring and maintaining their functional capacity.
- Neurologic complications of systemic illness.
- Prevention of neurologic disease.

Rotation Specific Skills:

Evaluation Skills:

1. The resident will be able to recognize and define the neurologic problem.
2. The resident will be able to perform a complete adult and pediatric neurologic exam
3. The resident will be able to localize the neurologic lesion and develop a differential diagnosis.
4. The resident will be able to assess the need for consultation. The resident will be able to formulate a treatment plan.
5. The resident will be able to know the indications, contraindications and significance of the tests listed in the Core Educational Guidelines.

Management Skills:

1. The resident will be able to implement a treatment plan.
2. The resident will understand the role of the neurologic specialist.

3. The resident will manage the emergent neurologic problems listed in the Core Educational Guidelines with consultation when appropriate.
4. The resident will manage the family and psychosocial issues that accompany the long term care of patients with debilitating neurologic conditions.
5. The resident will be able to recognize and treat the prevalent conditions listed in the core Educational Guidelines.

Procedural Skills:

1. Lumbar Puncture
2. Evaluate a C-spine film

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to the neuromuscular system.
2. Understand the application and usefulness of OMT in the presence of neurological pathology.
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. A one-month block rotation is available. Your preceptor will assign activities and duties.

Educational Resources

1. The following topics are required reading for this rotation.
 - a. Transient Ischemic Attacks Part 1 Diagnosis, Evaluation, treatment
 - b. Stroke: A Clinical Update on Prevention and management
 - c. Practice Guidelines: Management of Bacterial Meningitis
 - d. Diagnosis and Management of Multiple Sclerosis
 - e. Guillain-Barré Syndrome
 - f. Evaluation and Treatment of the Child with a Febrile Child
 - g. Management of Seizures and Epilepsy
 - h. Evaluation of Acute Headaches in Adults
 - i. Headaches in Children and Adolescents
 - j. Update on Parkinsonism
 - k. Retinoblastoma
 - l. An algorithm for the Evaluation of Peripheral Neuropathy
 - m. Evaluation and prevention of Diabetic Neuropathy
 - n. A Practical Approach to Uncomplicated Seizures in Children
 - o. Diagnosis and Management of Acute Low Back Pain

Osteopathic Medicine

GOALS

- To apply Osteopathic principles to the evaluation and management musculoskeletal problems in clinic patients
- To provide Osteopathic manipulative treatment in a safe and ethical manner

OBJECTIVES

Knowledge

1. To become familiar with the complex nature of musculoskeletal disorders including the interaction of systems that may contribute to these disorders (nervous, muscular, skeletal, vascular, psychosocial)
2. To understand the indications and contraindications of various Osteopathic manipulative methods
3. To understand the components of the Osteopathic examination (TART - Tissue texture change, Asymmetry, Restriction, and Tenderness)
4. To understand how to assess response to Osteopathic manipulative treatment
5. To understand how to prescribe an appropriate Osteopathic treatment program for a patient
6. To understand appropriate coding and billing techniques for Osteopathic manipulative treatment

Skills:

Evaluation:

1. Perform an Osteopathic structural examination
2. Perform a comprehensive neuromuscular examination for low back pain.
3. Perform an Osteopathic referral consultation
4. Perform Muscle energy technique to the lumbar spine
5. Perform an indirect technique to the back/or extremity
6. Perform high velocity/low amplitude therapy to the low back under direct

Management:

1. A plan of management for common musculoskeletal problems
2. An understanding of the roles of Osteopathic manipulation in patient management.
3. An ability to recognize and treat the complex issues/body systems involved in chronic pain.
4. Complete appropriate documentation of an Osteopathic examination and manipulative treatment
5. Complete appropriate coding and billing forms for Osteopathic manipulation

TEACHING STRATEGIES

1. A longitudinal experience in the OMT clinic
2. Activities and duties are assigned by the preceptor. No vacation is allowed.
3. Didactic conferences occur throughout the academic year on pertinent musculoskeletal topics.
4. Longitudinal experience is gained in the Ambulatory Continuity Clinic with common musculoskeletal problems. This experience is supervised by family medicine faculty.

Osteopathic Principles in Medical Practice

Osteopathic principles include Osteopathic philosophy and Osteopathic techniques in healthcare delivery. Osteopathic principles are based on the following observations established by AT Still:

1. THE BODY IS A UNIT
2. THE BODY IS CAPABLE OF SELF-REGULATION, SELF-HEALING, AND HEALTH MAINTENANCE
3. STRUCTURE AND FUNCTION ARE RECIPROCALLY INTER-RELATED
4. RATIONAL TREATMENT IS BASED UPON AN UNDERSTANDING OF THE BASIC PRINCIPLES OF BODY UNITY, SELF-REGULATION, AND THE INTER-RELATIONSHIP OF STRUCTURE AND FUNCTION.

These principles have often been summarized as meaning Osteopathic physicians have a “holistic” approach to medicine. In many ways this is true, but this holistic approach has also been adopted by non-Osteopathic physicians as well. As a result, it has been argued that Osteopathic and Allopathic training and philosophy do not differ greatly. This is evidenced by the fact that many Osteopathic students and physicians train in Allopathic institutions while Allopathic students and physicians sometimes train in Osteopathic institutions. This “loss of a unique Osteopathic identity,” however does not mean Osteopathic principles have been abandoned. It represents more of a “merging” of principles, with Osteopathic physicians recognizing Allopathic principles and Allopathic physicians recognizing Osteopathic principles.

Osteopathic techniques refer to manipulative therapy. The term “techniques” has gained increasing usage, to reflect the fact the Osteopathic manipulative therapy encompasses more than high velocity-low amplitude techniques (HVLA, or the so-called “crunch techniques”). It is not uncommon for Osteopathic physicians to perform only muscle energy or cranial techniques, and no longer use HVLA. This phenomenon has developed as a result of the potential nerve or blood vessel injury associated with HVLA (particularly cervical spine HVLA), and the fact that muscle energy techniques and cranial techniques may have indications beyond musculoskeletal disorders.

Osteopathic techniques should be considered one of many therapeutic interventions making up the “therapeutic armamentarium.” Like any other treatment (i.e. medications, surgery, and lifestyle modification) Osteopathic techniques have specific indications, contraindications, advantages, and disadvantages. Table 1 lists common Osteopathic techniques and their properties.

Table 1: Common Osteopathic techniques

Techniq	Indications	Contraindications	Advantages	Disadvantages
HVLA	Musculoskeletal disorders of the back and extremities	Vascular disease (Vertebral artery disease); malignant or infectious bony invasion, acute herniated disc;	May be able to provide immediate relief; may be more acceptable to patients not	Requires trained provider and office visit; may not be tolerated in acute painful syndromes;
		patient fear over technique	wanting medications, may be used when medications limited (i.e., pregnancy, patients on multiple medications)	requires specialized treatment tables
Muscle energy	Musculoskeletal disorders, post-operative pain, respiratory disorders (may be used to improve respiratory effort)	Poor patient compliance with technique, active skin/muscle infection	Maybe used in acutely painful syndromes, may help improve respiratory effort and/or lymphatic drainage, maybe used at bedside	Requires trained provider and office visit; requires patient participation
Cranial	Musculoskeletal disorders, post-operative pain, respiratory disorders (may be used to improve respiratory effort), depression, anxiety	Poor patient compliance	Maybe used in acutely painful syndromes, may help improve respiratory effort, lymphatic drainage, maybe used at bedside, maybe used in depression and anxiety	Requires trained provider and office visit

When selecting any therapeutic intervention (Osteopathic techniques, medications, surgical intervention, etc.) three guiding principles should be followed:

- 1) Select the intervention(s) that are most effective
- 2) Select the intervention(s) that are the safest
- 3) Select the intervention(s) that are most acceptable to the patient

These principles should help direct the physician to identify ALL therapeutic interventions that would provide the best response. Too, often physicians become fixated on one particular treatment method (i.e., pills, HVLA, surgery) and do not look at how one or more interventions used together may provide the best response.

Osteopathic techniques should not be considered a “cure all.” Osteopathic techniques may not be indicated, may be indicated as stand-alone therapy, or may be part of a treatment plan. Like any therapeutic intervention, Osteopathic techniques should be monitored regarding clinical response. Table 2 list common means of monitoring response to Osteopathic techniques.

Table2: Measuring response to osteopathic treatment

Condition	Measuring Response
Acute musculoskeletal problems	Acute change in pain scale (both before and after treatment and at follow-up visits) Change in ROM of affected areas
Chronic musculoskeletal problems	Reduction in overall pain Improvement in ROM Improvement in functional status (ability to work, sleep, recreate) Reduction in medications
Respiratory status	Improvement in incentive spirometry Improvement in auscultatory findings Improvement in oxygenation
Depression, anxiety	Depression scale changes Anxiety scale changes

Duration of Osteopathic treatments is based on clinical response. Although patients may require more frequent treatments initially, daily or every other day treatments should only be used over a one or two-week time period as long as significant improvement is seen. Lack of response to Osteopathic treatment should indicate a need for treatment change, or reassessment of the patient’s diagnosis. The goal of Osteopathic treatment is to illicit a clinical response that has progressively longer duration. Failure to demonstrate a long-lasting response should prompt reassessment. In addition, patients who request frequent Osteopathic treatment may be experiencing a “good feeling” effect or maybe responding to secondary gain (i.e., prolonged time off from work, litigation, etc.).

Application of Osteopathic principles involves the application of Osteopathic philosophy and techniques to everyday care.

Reason for Medical Visit	Goal of Medical Provider	Application Osteopathic Technique/Principle
New medical problem	Evaluation of medical problem	Osteopathic examination
	Acute medical management	Manipulative therapy

Ophthalmology

Description of Educational Experience

- Understand the components of vision and the impact of illness and medication on it.
- Utilize the ophthalmology consultant appropriately

Rotation Specific Knowledge:

- Normal development, anatomy, physiology of vision and changes with aging.
- Psychological and adaptive needs of patients with vision deterioration
- Effects of drugs and toxins on vision.
- Systemic effects of ocular drugs
- Understand the visual complications of systemic illness
- Initial diagnosis and management of inflammatory and infectious conditions, movement disorders, the red eye, cataracts, sudden change in vision, trauma.
- Indications for special procedures
- Prevention of eye injury and vision loss
- Indication for eye surgery

Rotation Specific Skills:

Evaluation Skills:

1. Perform and interpret a Snellen chart test and bedside tests of visual acuity and fields.
2. Perform and interpret direct ophthalmoscopy.
3. Perform and interpret fluorescein staining of the cornea.
4. Perform a physical exam on patients from newborn to adult with emphasis on understanding normal ophthalmic neurologic and motor responses
5. Localize the problem as intraocular or extraocular and generate a differential diagnosis and management plan.
6. Develop assessment skills that will allow for treatment of all eye disorders.

Management:

1. A plan of management, investigation and need for expert advice with an awareness of the risks and costs.
2. An understanding of the roles of the ophthalmologist and optometrist.
3. An ability to manage and recognize treatable diseases listed in the Recommended Core Educational Guidelines for Family Practice Residents.
4. An ability to manage and coordinate psychosocial and family issues relating to debilitating ocular conditions.
5. Use of Mydriatics

6. Use of topical anesthetics and corticosteroids
7. Direct ophthalmoscopy
8. Flashlight examination

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to the eye
2. Understand the application and usefulness of OMT in the presence of ophthalmologic pathology.
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. A two-week block rotation is available. Your preceptor will assign activities and duties.

Educational Resources

1. The following topics are required reading for this rotation:
 - a. Overview of Refractive Surgery
 - b. Common causes of Vision Loss in Elderly Patients
 - c. Conjunctivitis
 - d. Eyelid disorders: Diagnosis and Management
 - e. Age related macular degeneration: Update for Primary Care
 - f. Commonly Missed Diagnosis in the Childhood Eye Examination
 - g. The Eye in Childhood
 - h. Evaluation and Management of Herpes Zoster Ophthalmicus
 - i. Open Angle Glaucoma
 - j. Topical Therapies for Glaucoma: What PCPs Need to Know
 - k. Evaluation and Management of Suspected Detached Retina

Orthopedics

Description of Educational Experience

- Familiarize the resident with the most common fractures and dislocations seen by the family physician and to provide framework for treatment, consultation, and referral.
- Competently assess and manage musculoskeletal pain, sprain, and strain.
- Utilize the orthopedic consultant appropriately.

Rotation Specific Knowledge:

- Know the normal anatomy and physiology of bone, muscle, tendons and joints in all ages.
- Recognize common musculoskeletal injuries (fractures, dislocations, sprains, strains, contusions, overuse syndromes).
- Recognize common degenerative and inflammatory conditions of the musculoskeletal system (arthritis, bursitis, myositis, tendonitis, costochondritis, epicondylitis, fasciitis, infections, cysts, bunions, contractures, osteoporosis, rheumatologic disorders, etc.).
- Understand the etiology of myofascial pain syndromes.
- Be familiar with common musculoskeletal problems of childhood (congenital dislocation of hip, osteochondroses, tibial torsion, femoral anteversion, in toeing, out toeing, bowed legs, nursemaids elbow, fractured clavicle, flat feet, scoliosis, epiphyseal injuries, muscular dystrophies, spina bifida, etc.).
- Know the anatomy of the shoulder, elbow, wrist, finger, hip, knee, ankle, and a vertebral joint, indicating an understanding of the shape of the joint, the location of bursae, nerves, vessels, tendons, ligaments and muscle groups.
- Know the basic physiology of the healing process in bone, muscle, and tendon.
- Know the common fractures of the hand, wrist, forearm, and ankle, indicating an understanding of how to describe fractures and assess displacement and angulation.
- Know the grading system for ankle sprains and acromio-clavicular separations.
- Know the factors used in differentiating the various inflammatory and degenerative arthritides, demonstrating familiarity with the clinical course and prognosis of each type.
- Be familiar with common myofascial pain distributions and with trigger point identification and therapy.
- Know the pharmacology of the non-steroidal anti-inflammatory agents, steroids, muscle relaxants, and analgesics

Rotation Specific Skills:

Evaluation Skills:

1. Evaluate children for abnormalities of their lower extremities as they grow and be able to differentiate the causes of bowed legs or in or out toeing.

2. Evaluate the musculoskeletal system for range of motion, strength, and coordination to assess total ability to function.
3. Be able to evaluate patients for metastatic bone disease and deal skillfully with the patient in the work up and management of it.

Management:

1. Manage contusions, sprains, strains, and overuse syndromes appropriately using pharmacologic and physical therapy modalities.
2. Manage fractures appropriately, demonstrating good judgment in referral.
3. Rehabilitate to maximum function after orthopedic injury.
4. Manage acute and chronic low back pain appropriately.
5. Manage the common inflammatory conditions appropriately.
6. Manage scoliosis and the osteochondroses appropriately

Procedural:

1. Perform a thorough history relative to the musculoskeletal system and a competent physical exam of each joint and neurovascular and muscular integrity.
2. Trigger point injection
3. Joint and bursa aspiration and injection
4. Splinting and casting Interpretation of skeletal x-rays
5. Appropriate use and interpretation of bone scan and CT scan.
6. Reduction of dislocation (e.g. shoulder, finger, toe, patella) with consultation
7. Communicate clearly and precisely with the orthopedic consultant and utilize his services appropriately

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities as they relate to orthopedic surgery
2. Understand the application and usefulness of OMT in the presence of bone and joint disease.
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. One or Two month-long block rotations with an orthopedic surgeon are available. The majority of your time will be spent in the outpatient setting and the sports medicine clinic.
2. The above requirements constitute the entire experience in orthopedics and account for 140 hours of training in orthopedics excluding Sports Medicine.

Educational Resources

1. The following topics are required reading for this rotation:
 - a. Diagnosis and Management of Scaphoid Fractures
 - b. Evaluation and Management of Toe Fractures
 - c. Evaluation of Patients Presenting with Knee Pain: Part 1 History, Physical Examination, radiographs and laboratory Tests
 - d. Evaluation of Patients Presenting with Knee Pain: Part 2 Differential Diagnosis
 - e. Acute Knee Effusions: A Systematic Approach to Diagnosis
 - f. Patellofemoral Pain Syndrome: A Review and Guideline for Treatment
 - g. Hip Pain in Athletes
 - h. Anterior Hip Pain
 - i. Slipped capital femoral Epiphysis
 - j. Diagnostic and Therapeutic Injection of the Hip and Knee
 - k. Knee Joint Aspiration and Injection
 - l. Intra-articular Hyaluronic Acid Injections for Knee Osteoarthritis
 - m. Diagnostic and Therapeutic Injection of the Wrist and Hand Region
 - n. Tarsal Navicular Stress Fractures
 - o. Foot Fractures Commonly Misdiagnosed as Ankle Sprains
 - p. Fractures of the proximal Fifth Metatarsal
 - q. Common Conditions of the Achilles Tendon
 - r. Trigger points: Diagnosis and Management
 - s. Groin Injuries in Athletes
 - t. Cervical Spine Radiographs in the Trauma Patient
 - u. Cervical Spondylitic Myelopathy: A Common cause of Spinal Cord Dysfunction in the Elderly
 - v. Clinical Evaluation and Treatment Options in Herniated Lumbar Disc
 - w. Lumbar Spine Stenosis: A Common Cause of Back and leg Pain
 - x. Treatment of Degenerative Lumbar Spinal Stenosis
 - y. Spondyloarthropathies
 - aa. The Painful Shoulder: Part 2 Acute and Chronic Disorders
 - bb. Shoulder Instability in Young Athletes
 - cc. Adhesive Capsulitis: A Sticky Issue
 - dd. Management of Shoulder Impingement Syndrome and Rotator Cuff Tears
 - ee. The Painful Shoulder: Part 1 Clinical Evaluation
 - ff. Commonly Missed Orthopedic Problems

- gg. Evaluation of Overuse Elbow Injuries
- hh. The Newborn Foot
- jj. Adolescent idiopathic Scoliosis: Radiologic Decision Making
- kk. Evaluation of the Acutely Limping Child
- ll. Screening for Developmental Dysplasia of the Hip
- mm. Lower Extremity Abnormalities in Children
- nn. Diagnostic and Therapeutic Injection of the Ankle and Foot
- oo. Plantar Fasciitis: Evidence Based review of Diagnosis and Therapy
- pp. Treatment of Plantar Fasciitis
- qq. Plantar Fasciitis And other Causes of Heel Pain
- rr. Diagnostic and Therapeutic Injection of the Shoulder Region
- ss. Diagnostic and Therapeutic Injection of the Elbow Region
- tt. Joint and Soft Tissue injections

Pain Management

Description of Educational Experience

- Recognize and evaluate patients that require prescription medication for long term pain control.
- Competently manage the patient's treatment needs longitudinally.
- Provide advice, counseling and support to the patient concerning appropriate medication usage, and recognize when the usage is not appropriate.
- Adhere to clinic policies designed to ensure proper care of long term patients with pain, and decrease the exposure and risk to the physician from patients who do not use prescription medications in a recognized, appropriate fashion.

Rotation Specific Knowledge:

1. Through didactic training, develop a knowledge base including but not limited to pain treatment options including medication therapeutic equivalents.
2. Through didactic training, develop a knowledge base including but not limited to adjuvant therapies.
3. Through didactic training, develop a knowledge base including but not limited to patient risk assessment and long-term monitoring strategies.

Rotation Specific Skills:

1. Proficiency in evaluation of a new patient with a long-term pain complaint.
2. Proficiency in risk stratification for medication misuse, and associated monitoring strategies.
3. Proficiency at longitudinal care of patients with long term pain, including medication management, behavior/risk identification and modification.
4. Psychosocial proficiency in advising and counseling patients with long term pain, and appropriate boundary setting.

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities in acute and chronic pain syndromes
2. Understand the application and usefulness of OMT in diagnosing and treating acute and chronic pain syndromes.

3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. Didactic lecture during the R1 year during orientation concerning the practice policy and procedure with respect to chronic pain management.
2. A 4-week rotation is available with a pain specialist.

Educational Resources

The following will be required reading for the residents during their first year, available in the curriculum file on New Innovations Residency Management Suite. Developed for educational purposes by the AMA CME department. <https://cme.ama-assn.org/Activity/4764584/Detail.aspx>

Module 1 – Pathophysiology of Pain and Pain Assessment – due end of orientation

Module 2 – Overview of Management Options – due end of first IM rotation

Module 3 – Barriers to Pain Management & Pain in Special Populations – due end of first IM rotation

Module 4 – Assessing & Treating Pain in Patients with Substance Abuse Concerns – due end of first IM rotation

Module 5 – Assessing and Treating Pain in Older Adults – due end of Geriatrics rotation

Module 6 – Pediatric Pain Management – due end of first Pediatrics rotation

Module 7 – Assessing and Treating Persistent Nonmalignant Pain – and Overview
– due end of first IM rotation

Module 8 – Common Persistent Pain Conditions – due end of second IM rotation

Module 9 – Assessing and Treating Neuropathic Pain – due end of second IM rotation

Module 10 – Overview and Assessment of Cancer Pain – due end of second IM rotation

Module 11 – Pharmacotherapy – due end of second IM rotation

Module 12 – Other Analgesic Approaches and End of Life Care – due end of Geriatrics rotation

Practice Management

Description of Educational Experience

- Familiarity with resources for finding information about managing the business aspects of life.
- Introduction to concepts of personal and business finance, career and business planning, contracts, personnel management, professional liability, risk management.

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Recognize how to bill appropriately for osteopathic manipulation
2. Understand the application and usefulness of OMT in a successful medical practice
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Training Methods

1. A four-week block rotation is required. Time is spent in the faculty practice in the business office and with the business manager. Time is also spent in the reception area of a practice. One on one conference will occur with seasoned physicians in practice, and with other experts, such as bankers and accountants.
2. The resident will be introduced to hospital risk management.

Educational Resources

1. The following topics are required reading for this rotation.
 - a. How to Find the Job That's Right for You
 - b. Salaried FP
 - c. Interviewing 101

Pediatrics

Description of Educational Experience

- NOTE: This is a required rotation for family medicine residents but may be taken as an elective for internal medicine residents.
- Acquire the knowledge and skills to recognize, evaluate, and treat the common medical, surgical, and psychosocial issues from newborn to adolescent years.
- Acquire the knowledge and skills to monitor the development of the child, to help realize the full potential of the child, and to improve the health of children and families in the community.
- Know current recommendations for preventive from newborn to adolescent years.
- Recognize and stabilize life threatening pediatric conditions

Rotation Specific Knowledge:

Newborn:

- Understand the breadth of newborn transitional physiology and adaptation to extra-uterine life.
- Recognize, evaluate and manage the following problems:
 - Anemia
 - Breast and formula nutrition
 - Cyanosis/apnea
 - Bradycardia
 - Glucose homeostasis
 - Hyperbilirubinemia
 - Sepsis
 - Tachypnea
 - Temperature control
 - Anatomical abnormalities
 - Perinatal asphyxia/acidosis

Infants and Children:

- Normal growth and development and variants
- Abnormal growth and development, including recognition of learning and behavior disorders
- Prevention in childhood, including current immunization and screening recommendations
- Anticipatory guidance appropriate to age and developmental stage, including nutrition
- Psychological disorders, including recognizing families at high risk for parent-child interaction or psychiatric problems.

- Familiarity with feeding, eating, and elimination problems, somatic and sleep disorders, obsessive-compulsive disorder, mood disorders, and hyperactive/impulsive and attention disorders.
- Injury prevention, including car, bicycle, gun, and burn safety, aspiration, ingestion, falls, child abuse, and environmental hazards
- Sudden infant death syndrome
- Management of asthma, otitis media, and diarrhea
- Impact of social issues on the child, such as adoption, death, divorce, family violence.
- Recognize, evaluate and manage the following medical issues:
 - Sepsis/meningitis/bacteremia/osteomyelitis
 - Allergic and inflammatory disorders
 - Renal and urologic disorders
 - Endocrine/metabolic and nutritional disorders
 - Neurologic disorders
 - Common skin problems
 - Common orthopedic disorders\
 - Gastrointestinal infections, surgical problems, and pain syndromes
 - Cardiovascular disorders
 - Respiratory disorders, including asthma
 - Common eye, ear, nose, and throat disorders

Rotation Specific Skills:

Newborn:

1. Circumcision
2. Fluid/electrolyte and nutrition management
3. APGAR scoring
4. Assessment of gestational age
5. Newborn resuscitation (NALS)
6. Lumbar puncture
7. Parent/family communication
8. Risk identification

Infants and Children:

1. Perform an age appropriate, psychosocially sensitive history and physical exam from newborn to adolescent stage.
2. Offer age and developmental stage appropriate anticipatory guidance and counseling
3. Assess parent-child interaction and family functioning
4. Follow current recommendations for immunizations
5. Plot height, weight and head circumference on a graph
6. Perform a brief age appropriate developmental assessment
7. Perform age appropriate screening exams, such as lead levels, scoliosis and vision screen

8. Manage fluids and electrolytes in hospitalized children
9. Coordinate care with other community resources, schools, and medical sub specialists when needed
10. Lumbar puncture
11. Intravenous access
12. Tympanograms
13. Peak flows
14. PFT's
15. Hearing and vision screening

Osteopathic Principles and Practices

Goal: Residents must demonstrate an understanding of the interconnectedness of body systems in diagnosis and treatments and demonstrate manual manipulation skills that improve patient health and restore symmetry of structure and function for patients.

Residents are expected to:

1. Assess for musculoskeletal abnormalities in adolescent and pediatric patients
2. Understand the application and usefulness of OMT in children and adolescents
3. Develop an appreciation for the interconnectedness of body systems and utilize this knowledge in their approach to the patient.

Teaching Methods

1. Four months of pediatrics in block rotations are available. These will take place with a variety of preceptors.
2. The resident will care for children in their Ambulatory Continuity Experience throughout their residency and will gain knowledge and insight into the care of children through these encounters. In addition, each pediatric admission will afford experience in managing hospitalized children, including experience in when to consult the pediatric specialist. The intern on OB/PEDS at the hospital will be responsible for all pediatric and newborn admissions at the hospital while on the Ob rotation.
3. The resident will also be able to refer complicated pediatrics patients to the pediatrics clinic run by pediatricians at the Continuity clinic. The will be able to work with a pediatrician on their own complicated pediatric patients.

Educational Resources

1. The following topics are reading on the Pediatrics rotation:
 1. Implementing the Guidelines for Adolescent Preventative Services Klinefelter's Syndrome
 2. The Newborn Examination Part 1: Emergencies and Common Abnormalities

- Involving the Skin, Head, neck, Chest and Respiratory and Cardiovascular Systems
3. Care of the Premature Infant: Monitoring Growth and Development
 4. Prevention and Treatment of Overweight in Children and Adolescents
 5. Failure to Thrive
 6. Management of Asthma in Children
 7. Caring for Infants with Congenital Heart Disease and Their Families
 8. Heart Murmurs in Pediatric patients: When Do You Refer
 9. Evaluation and Treatment of Constipation in Infants and Children
 10. Evaluating the Child with Purpura
 11. Aseptic Meningitis in the Newborn and young Children
 12. Acute Otitis Media: Part 1 Improving Diagnostic Accuracy
 13. Acute Otitis Media: Part 2 Treatment in an Era of Increasing Antibiotic Resistance
 14. Nocturnal EnuresisThe Undescended Testicle: Diagnosis and Management
 15. Evaluating Proteinuria in Children
 16. A Practical Approach to Uncomplicated Seizures in Children
 17. Headaches in Children and Adolescents
 18. Craniosynostosis
 19. Recognition of Common Childhood Malignancies
 20. Commonly Missed Diagnoses in the Childhood eye Exam
 21. Prevention and Treatment of Common Eye Injuries in Sports
 22. Anticipatory Guidance in Infant oral Health: rationale and Recommendations
 23. The Newborn Foot
 24. Adolescent Idiopathic Scoliosis: Radiologic Decision Making
 25. Evaluation of the Acutely Limping Child
 26. Screening for Developmental Dysplasia of the Hip
 27. Lower Extremity Abnormalities in Children
 28. Obstructive Sleep Apnea in Children
 29. Pediatric Advanced Life Support: A Review of the AHA Recommendations
 30. Pediatric Emergency Preparedness in the Office
 31. Club Drugs: MDMA, Gamma-Hydroxybutyrate, Rohypnol and Ketamine
 32. Esophageal Atresia and Tracheoesophageal Fistula
 33. The Undescended Testicle: Diagnosis and Management
 34. Evaluating Proteinuria in Children
 35. A Practical Approach to Uncomplicated Seizures in Children
 36. Headaches in Children and Adolescents
 37. Craniosynostosis
 38. Recognition of Common Childhood Malignancies
 39. Commonly Missed Diagnoses in the Childhood eye Exam
 40. Prevention and Treatment of Common Eye Injuries in Sports
 41. Anticipatory Guidance in Infant oral Health: rationale and Recommendations
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 45. Screening for Developmental Dysplasia of the Hip
 46. Lower Extremity Abnormalities in Children
 47. Obstructive Sleep Apnea in Children

48. Pediatric Advanced Life Support: A Review of the AHA Recommendations
49. Pediatric Emergency Preparedness in the Office
50. Club Drugs: MDMA, Gamma-Hydroxybutyrate, Rohypnol and Ketamine
51. Esophageal Atresia and Tracheoesophageal Fist

Psychiatry and Behavioral Science

Description of Educational Experience

- Acquire the knowledge, skills, and attitudes necessary to understand the patient's view of health, wellness, illness, disease, and medical care, with the ability to consider and incorporate the patient's family structure, support systems, culture, stage of life or development, social situation, community.
- Competently interview individuals and families, facilitate health behavior change, and assess and manage mental health and related issues.
- Recognize severe mental health issues and utilize mental health resources appropriately.

Rotation Specific Knowledge:

Please note: For Community Family Medicine Residents in San Antonio, a site-specific curriculum and readings with CHCS will be adhered to in addition to the TIGMER Curriculum for the BEH MED rotation. For further information, please consult your specific FM Program Handbook.

- Knowledge of biopsychosocial and patient-centered perspective of health and illness
- Normal and abnormal psychological growth and development
- Common family configurations and stages of development
- Common constructs of the psychological life cycle
- The impact of acute and chronic illness and other stressors on patients and their families.
- Common constructs of the stages of grief.
- Signals of alcoholism, substance abuse, domestic violence and child and elder abuse.
- Describe psychosis and discuss etiology and acute management.
- Be familiar with the antipsychotics, MAOIs, and nonpharmacologic treatments such as ECT.
- Basic medical ethics, including patient autonomy, confidentiality, truth-telling, and quality of life issues

Rotation Specific Skills:

1. Conduct a psychosocially appropriate interview, responsive to the patient's concerns and worldview.
2. Recognize and address abuse, neglect, and violence.
3. Recognize and address alcoholism and substance abuse.
4. Recognize, evaluate and manage depression, anxiety, grief reaction, adjustment reactions, and obsessive-compulsive behaviors.
5. Recognize and know resources for evaluating and addressing learning disorders, attention deficit disorder, mental retardation, eating disorders, gender identity disorders, personality disorders

6. Evaluate and treat enuresis and encopresis, night terrors, breath holding and other common childhood behaviors.
7. Recognize and manage somatoform disorders, medical illness disguised as psychological distress, and psychological distress disguised as medical illness.
8. Evaluate and manage chronic pain.
9. Evaluate and differentiate delirium and dementia.
10. Use the antidepressants, pain relievers, Antabuse, and anxiolytics with skill and finesse.
11. Use the physician-patient relationship as a therapeutic tool.

Teaching Methods

1. A block rotation is available with practicing psychiatrists as preceptors.
2. Each month the second and third years also have a didactic session devoted to behavioral issues.
3. Acute and chronic psychological issues will be addressed on the inpatient units, in nursing homes, and on home visits.

Educational Resources

1. The reading material for this rotation is provided by the psychiatrists that the resident is working with. For more information, please consult your program specific handbook.

Pulmonary Medicine

Description of Educational Experience

The goal of the elective pulmonary rotation is to expose the physician-in-training to patients with pulmonary disease that are encountered in the primary care setting as well as in the sub-specialist's realm.

Specific learning objectives include:

1. Identify key principles in evaluating pulmonary complaints and patients
2. Enhance physical examination skills in the pulmonary patient
3. Expand differential diagnosis skills in the pulmonary patient
4. Learn and practice common bedside procedures necessary in pulmonary patients
5. Improve interpretation skills in common laboratory and radiographic procedures as they apply to the pulmonary patient
6. Participate in the educational curriculum of the team by providing relevant literature and preparing a short lecture

Rotation Specific Knowledge:

- Normal growth, development, and anatomy of the respiratory system, and normal lung physiology.
- Causes and consequences of respiratory acidosis and alkalosis.
- Clinical presentation and course of pulmonary infections such as bronchiolitis, bronchitis, and viral, bacterial, atypical, and aspiration pneumonia.
- Clinical presentation and course of opportunistic infections, tuberculosis, the pneumoconioses, and occupational lung diseases
- Clinical presentation and course of tumors of the lung, mediastinum, and pleura.
- Pathophysiology of asthma and chronic obstructive pulmonary disease.
- Discuss the clinical presentation and management of pulmonary embolism.
- Discuss the etiology and management of pulmonary edema.
- Discuss the management of near drowning, flail chest, and smoke inhalation.
- Discuss the indications for bronchoscopy, biopsy, mediastinoscopy, and CT and MRI.
- Discuss smoking cessation techniques and resources.
- Describe the current recommendations for screening for tuberculosis, and for management of a positive PPD.
- Describe the EKG and cardiac manifestations of pulmonary disease.

Rotation Specific Skills:

Diagnostic:

1. Perform an adequate history and physical exam of the respiratory system in a patient with a respiratory problem or complaint.

2. Perform an appropriate work up of the patient with hemoptysis, dyspnea, cough, or wheezing.
3. Interpret arterial blood gases accurately.
4. Interpret chest X-rays accurately.

Therapeutic:

1. Perform CPR, intubation, placement and interpretation of a PPD, sputum quality and gram stain interpretation, and interpretation of pleural fluid analyses.
2. Be familiar with transtracheal aspiration, thoracentesis, and chest tube insertion.

Management:

1. Manage acute infectious processes both inpatient and outpatient.
2. Manage status asthmaticus efficiently.
3. Manage outpatient asthma using medications, environmental controls, and other modalities.
4. Monitor therapy appropriately using blood levels and office spirometry when indicated.
5. Manage oxygen therapy, ranging from respirator support to home oxygen therapy

Teaching Methods

1. A one-month block rotation is available in the second or third year of training. Activities and duties will be determined by the pulmonologist who is your preceptor. Call will be with the pulmonologist. Time will be spent in the Ambulatory Continuity Clinic.
2. Experience with acute pulmonary problems is gained longitudinally while on other hospital services in dealing with patients in the intensive care units and on the floors.
3. The resident will maintain certification in ACLS

Educational Resources

1. The following topics are required reading for this rotation:
 1. Asthma Update: Part 1. Diagnosis, Monitoring and Prevention of Disease Progression
 2. Asthma Update: Part 2 Medical Management
 3. Hemoptysis: Diagnosis and Management
 4. An Approach to Interpreting Spirometry
 5. Evaluation of the Patient with Chronic Cough
 6. Point of Care Guidelines: Outpatient vs. Inpatient Treatment of Community Acquired Pneumonia
 7. Diagnosis and treatment of Community Acquired Pneumonia
 8. Treatment of Obstructive Sleep Apnea in Primary Care
 9. Identification and management of Tuberculosis

Radiology

Description of Educational Experience

- Understand the information gained and the limitations of the various diagnostic imaging and nuclear medicine techniques such as x-ray, ultrasound, mammography, tomography, contrast media studies, computed tomography, magnetic resonance imaging, PET scans and nuclear medicine imaging.
- Interpret standard chest and bone radiographs competently.
- Understand the issues involved in managing an x-ray facility in a private primary care practice (cost, safety standards, and technical issues).

Rotation Specific Knowledge:

1. Describe the characteristics of a good chest x-ray and a method for systematic interpretation of a chest x-ray
2. Discuss indications and limitations for each of the following:
 - i. CT vs. MRI of the head
 - ii. CT vs. MRI of the spine
 - iii. MRI vs. MRA
 - iv. Nuclear imaging (e.g. bone scan)
 - v. IVP vs. Renal US HIDA scan vs. ultrasound of gall bladder
 - vi. KUB vs. acute abdomen series vs. CT scan of the abdomen or pelvis
 - vii. Upper GI series, barium swallow and barium enema
 - viii. Mammogram
 - ix. VQ scan Spiral CT Venogram vs. venous Doppler's
 - x. Obstetrical Ultrasound
3. Know current costs and reimbursement issues related to obtaining diagnostic imaging studies
4. Interpret adult and pediatric chest x-rays with 95% confidence (5% discordance with the radiologist).
5. Obtain appropriate diagnostic imaging studies indicating understanding of the information gained, the limitations, and the risks of each study
6. Identify abnormalities of the long bones, spine, ribs, and joints on radiograph with 95% confidence.
7. Perform obstetrical ultrasounds with accuracy in interpreting fetal position, biophysical profile, fluid adequacy, and placental location.

Teaching Methods

1. Each resident is expected to review personally every x-ray he or she orders in the course of patient care. In cases where the resident does not understand the radiologist's reading he or she should review the film with a radiologist.
2. A two-week rotation in radiology will provide an intensive exposure to the objectives above and allow the resident to practice plain film reading.

Educational Resources

1. The following topics are required reading for this rotation:
 1. Imaging for Suspected Appendicitis
 2. Radiologic Imaging in the Management of Sinusitis
 3. Imaging of Abdominal Aortic Aneurysms
 4. Safety of Radiographic Imaging During Pregnancy
 5. Radiologic Bone Assessment in the Evaluation of Osteoporosis
 6. Diagnosis and Management of Scaphoid Fractures
 7. Hip Fractures in Adults
 8. Thyroid Nodules
 9. Common Stress Fractures
 10. Interventional Radiology in Cancer Patients
 11. Diagnosis and Management of Kidney Stones
 12. Radiographic Assessment of Osteoarthritis
 13. Neuroimaging in Low Back Pain
 14. Cervical Spine Radiographs in the Trauma Patient

Rheumatology

Description of Educational Experience

- Be aware of the impact of rheumatologic disorders on the patient and family, and their community
- Appropriately evaluate and manage the common rheumatologic disorders.
- Utilize the rheumatologic consultant appropriately

Rotation Specific Knowledge:

- Anatomy and pathophysiology of the musculoskeletal system and the immune system.
- Discuss the impact of aging on the musculoskeletal system.
- Discuss the etiology, pathophysiology, epidemiology, clinical presentation and criteria for diagnosis of the following conditions:
- Discuss the pharmacology of the following medications:
 - i. Nonsteroidal anti-inflammatory agents
 - ii. Steroids
 - iii. DMAARDs
 - iv. Agents used for gout
 - v. Antibiotics
 - vi. Biologics

Rotation Specific Skills:

Diagnostic:

1. Perform a complete musculoskeletal exam, including functional assessment.
2. Aspirate and analyze joint and bursa fluid correctly.
3. Correctly interpret radiographs.
4. Perform a skillful psychosocial evaluation.
5. Perform a skillful disability assessment exam.

Management/Therapeutic:

1. Correctly prescribe and monitor common drugs.
2. Properly perform intra-articular and soft tissue injections.
3. Demonstrate appropriate muscle strengthening and range of motion exercises and splinting.
4. Consult rheumatologists, orthopedists, podiatrists, and rehabilitation specialists appropriately.
5. Utilize physical therapy and occupational therapy appropriately.
6. Educate patients and family about their disease, community resources, and durable medical accommodations and home modifications that may improve the patient's quality of life.

7. Provide psychosocial support for patients with chronic debilitating conditions.

Teaching Methods

1. A one-month block rotation in rheumatology is available as follows: Emphasis will be on understanding the relevance of the patient history, the physical exam, laboratory, radiological studies, and other data relevant to decision making in patient care.
2. Longitudinal experience will be gained in the ER and in the Continuity Clinic with evaluation of patients with acute and chronic disease in the outpatient setting. During the course of the three years of training the resident will have the opportunity to follow multiple patients with arthritis and other chronic rheumatologic conditions both in the inpatient and outpatient settings. This will provide experience with long term care of chronic musculoskeletal conditions. The resident will become familiar with all the therapeutic modalities mentioned in the objectives by giving comprehensive care to his own patients while on medicine service the resident will care for patients with similar problems, ranging from acute management to chronic disease management in the inpatient setting.

Educational Resources

1. The following topics are required reading for this rotation:
 - a. Diagnosis and management of Gout
 - b. Gout and Hyperuricemia
 - c. Clinical utility of Common Serum Rheumatological Tests
 - d. Diagnosis of Systemic Lupus Erythematosus
 - e. Osteoarthritis: Diagnostic and Therapeutic Considerations
 - f. Diagnosis and Management of Rheumatoid Arthritis
 - g. Reactive Arthritis (Reiter's Syndrome)
 - h. Spondyloarthropathies
 - i. An Approach to Diagnosis and Initial Management of Systemic Vasculitis

Rural Primary Care Medicine Rotation

Description of Educational Experience

This one-month Rural/Underserved rotation experience is a very important component of a Family Physicians training. The purpose of this rotation is to allow the resident to experience first-hand the challenges and rewards of being a competent primary care physician in a rural or underserved setting with limited medical resources. Additionally, the Rural/Underserved rotation exposes the resident to the qualities of community life such as local pride in and support of its hospital, the schools, churches, and community activities. The excellent educational experience preceptors provide is one we simply cannot duplicate within the walls of the training program sites. Finally, this rotation offers a resident the opportunity to draw upon his/her accumulated pool of knowledge in real life setting some distance from the training program

Goals:

1. To learn how quality medicine is practiced in rural or medically underserved communities.
2. To learn how primary care physicians compensate for the relative lack of support services through the extension of skills and by wise decisions about referral.
3. To provide the resident a setting for understanding his/her strengths and deficits while there is opportunity to further address particular educational needs upon returning to the training program.
4. To experience the unique lifestyle presented in a rural or medically underserved setting.
5. To be exposed to different styles of practice management.

Teaching Methods

1. A one-month block rotation is available
2. The resident should have a conversation with the preceptor at the beginning of the rotation regarding the resident's educational needs and interests during the rotation; and the preceptor's expectations.
3. The resident should access educational material at the rotation's site with guidance from the preceptor, whether that is the local hospital library, the practice site's library or web-based materials. The resident is strongly encouraged to read about the patients seen at the site to enhance their knowledge base regarding family medicine.

Level of Supervision

The resident will be assigned to at least one supervising physician. In order to improve the rotation sometimes the resident will be assigned to more than one preceptor to optimize the time spent on the rotation.

1. Responsibilities of the Preceptor:
 - a) Provide the resident suitable housing for the rotations period. Examples of living arrangements are:

1. a bedroom in the preceptor's home
 2. rental home or apartment with telephone and utilities in operation
 3. Hospital owned living quarters with telephone and utilities in operation
 4. in-clinic living quarters
 5. hotel accommodations
2. Provide a realistic experience of the full range of rural/underserved practice; Hospital, nursing home, office, and patient's home
 3. Provide adequate office space to temporarily accommodate the resident as an additional doctor
 4. Allow the resident direct patient care responsibilities, monitored and supervised by the preceptor
 5. Discuss the economics and management of the practice
 6. Include the resident in functions of the hospital staff and of the local medical society
 7. Expose resident to the broader role of the preceptor in the community, such as civic, political and educational activities
 8. Emphasize the qualities of small town life by introducing the resident and spouse to the recreational and social activities of the community
 9. Supervise all professional activities personally or through a qualified delegate

Sports Medicine

Description of Educational Experience

- Understand the role of exercise in health promotion and illness prevention.
- Acquire the knowledge and skills necessary to prevent, acutely treat, and rehabilitate sports related injuries.

Rotation Specific Knowledge and Skills:

- Discuss exercise physiology, including acute and long-term adjustments to exercise, conditioning, and the training effect.
- Describe conditioning and training techniques.
- Describe the epidemiology of sports injuries.
- Describe methods of injury prevention including equipment, coaching techniques, taping, adjustments to environmental conditions, and return to participation testing.
- Describe special considerations for the prepubescent, pregnant, and elderly athlete.
- Be familiar with the psychological effects of sports participation.
- Understand exercise related pathologies, including sudden death, bronchospasm, amenorrhea, concussion, performance enhancing drugs, and management of on filed injuries.
- Describe the necessary accommodations for diabetes, pregnancy, single organ status.
- Discuss nutrition and exercise.

Diagnostic Skills:

1. Perform an appropriate pre-participation evaluation for high school level sports.
2. Develop an individualized exercise prescription which is related to age and disease/disability for your patients.
3. Assess orthopedic status with reference to the patients preferred sports.

Management/Therapeutic Skills:

1. Assess and manage acute sports related injuries.
2. Instruct an injured athlete on an appropriate rehabilitative program.
3. Attend and develop an adequate comfort level in supervising sporting events to include on the field team physician experience as well as other sporting events.
4. Instruct your patients in preventive techniques appropriate to the level of sports involvement.

Procedures:

1. Perform a cardiac stress test with an attending.
2. Perform a functional test to determine the patient's readiness to return to competition with regard to balance and proprioception and related to the sport involved.
3. Acquire skills in taping, strapping, and casting.

Surgery

Description of Educational Experience

- Recognize and evaluate patients who may require major surgery and refer appropriately.
- Stabilize a patient with a surgical emergency until transport or consultation available.
- Competently evaluate and manage patients in the pre-op and post-op phases of care.
- Have appropriate minor surgical skills.
- Provide advice, counseling, and support to the patient facing therapeutic options that include surgery, and to the family of a surgical patient.
- Be a technically skillful first assistant in the operating room

Rotation Specific Knowledge:

- Know the indications for the major common surgical procedures, including but not limited to the following (gynecologic procedures included in gynecology):
 - i. Appendectomy
 - ii. Cholecystectomy
 - iii. Herniorrhaphy
 - iv. Bowel resection and bypass
 - v. Exploratory laparotomy
 - vi. Coronary artery bypass
 - vii. Valve replacement
 - viii. Thoracoscopy
 - ix. Pulmonary lobectomy
 - x. Thyroidectomy
 - xi. Amputations
 - xii. Arterial grafts
- Explain common surgical procedures to a lay person discussing the procedure itself, the risks, benefits, and therapeutic alternatives.
- Know the legal obligations to informed consent and manage informed consent conferences skillfully.
- Discuss pre-op assessment, demonstrating familiarity with assessment of cardiac, pulmonary, and renal function.
- Discuss metabolic and hormonal responses to surgery.
- Discuss the role of nutrition in surgical recovery, demonstrating expertise in evaluating nutritional status and tailoring nutritional therapy accordingly.
- Discuss principles of wound healing.
- Discuss post-op pain management.
- Discuss signs and symptoms and the work-up of the acute abdomen.
- Discuss the management of burns.

Rotation Specific Skills:

1. Preoperatively assess the patient's pulmonary, cardiac, renal, and fluid and nutrition status and make appropriate plans to minimize complications.
2. Proficiently manage post-op fluid and electrolyte balance, nutrition, pain, respiratory status and wound care.
3. Identify and manage wound infections appropriately.
4. Maintain ACLS certification.
5. Proficiency in sterile technique and basic tissue handling principles.
6. Proficiency in handling surgical instruments, tying surgical knots, and providing exposure of the operating site for the primary surgeon.
7. Perform office surgery in a technically and psychosocially proficient manner.
8. Perform the following minor surgical procedures as are required in the course of patient care in the Ambulatory Continuity Clinic, emergency department and hospital.

Required Proficiency:

- Incision and drainage
- Simple laceration repair
- Debridement, biopsy and excision of skin lesions
- CPR
- Hemostasis
- Wart removal
- Joint aspiration

Optional:

- Vasectomy
- Arterial line placement
- Paracentesis
- Thoracentesis
- Venous cut down
- Chest tube insertion
- Treatment of thrombosed hemorrhoids
- Swan-Ganz placement
- Bladder aspiration
- Gastric lavage
- Laryngoscopy
- Regional blocks
- Cyst aspiration.
- Central venous access
- Intubation
- Toenail removal
- Digital blocks

- Removal of simple foreign body eye, ear, nose.

Teaching Methods

1. A one-month block rotation is available. Your preceptor will assign activities and duties.
2. Experience with stabilization of major trauma or major surgical emergencies will be obtained longitudinally in the Emergency Room. In addition, there is opportunity to perform varied minor procedures in the ER under the supervision of the upper level resident, the emergency physician, or the faculty. Please refer to the Emergency Medicine curriculum for further details.
3. Opportunities to perform elective and emergent office procedures occur throughout the resident's Ambulatory Continuity Clinic. These procedures will be supervised by family medicine preceptors.
4. The ACLS course is provided each summer in order for the resident to maintain certification.
5. Although not mandatory, Advanced Trauma Life Support (ATLS) is recommended for those residents interested in staffing major emergency rooms in the future.
6. The Surgical score on the In-Training Exam will be used to monitor the resident's knowledge in the general surgery field and an Independent learning plan will be implemented should this score be low.

Educational Resources

1. The following topics are required reading for this rotation:
 - a. Preoperative cardiac Risk Assessment
 - b. Preoperative Evaluation
 - c. Perioperative Management of Diabetes
 - d. Preparation of the Cardiac Patient for Non Cardiac Surgery
 - e. Vascular Surgery: An Update
 - f. Imaging for Selected Appendicitis

Urology

Description of Educational Experience

- Understand normal growth and development of the genitourinary tract and normal function and physiology.
- Acquire the knowledge and skills necessary to assess and manage common GU problems in both adult and pediatric populations.
- Utilize the Urologic consultant appropriately

Teaching Methods

1. A two or four week rotation with a urologist is available in the second or third year of training, which will serve as a broad introduction to the clinical practice of urology. Activities and duties will be assigned by the preceptor.
2. The resident will have contact with urologic problems in their Ambulatory Continuity Clinic longitudinally, on the inpatient services, and in the ER setting during call coverage. Work up and management of these patients will be under the supervision of faculty or the ER physician when appropriate. The opportunity to do vasectomies is available

Educational Experience

1. The following topics are required reading for this rotation:
 - a. Diagnosis and Initial Management of Kidney Stones
 - b. Nocturnal Enuresis
 - c. The Undescended Testicle: Diagnosis and Management
 - d. Managing Benign Prostatic Hyperplasia
 - e. Treatment of Prostatitis
 - f. Evaluation of Dysuria in Adults
 - g. Evaluation of the Sub fertile Man
 - h. Interstitial Cystitis: Urgency and Frequency Syndrome
 - i. Asymptomatic Microscopic Hematuria in Adults: Summary of the AUA best Practice Policy Recommendations
 - j. Evaluation of Incidental Renal and Adrenal Masses
 - k. Diagnostic Evaluation of Erectile Dysfunction
 - l. Testicular Masses

Wound Care Goals and Objectives

Goals:

- Recognize and institute appropriate management of chronic wounds
- Understand the role of nutrition in wound healing
- Understand preventive measures to avoid development of chronic wounds

Objectives:

Knowledge:

1. Discuss the pathophysiology of wounds caused by pressure, neuropathy, ischemia, and venous insufficiency
2. Discuss the role of physical barriers, dressings, positioning, weight bearing, and shear forces on the generation and amelioration of chronic wounds.
3. Discuss the evaluation of nutrition status and the role of nutrition in wound healing.
4. Discuss the aspects of diabetes that predispose to development of wounds and difficulty in healing wounds.
5. Discuss the prevention of pressure wounds.

Skills:

1. Appropriately debride a chronic wound.
2. Apply the principles of prevention of wounds to your diabetic population.
3. Appropriately manage infections in the non-healing wound.
4. Manage venous insufficiency and ulceration efficiently.

Teaching Modalities:

1. Longitudinal experience will be gained with chronic wounds while on the inpatient services and while working with both surgical and medical preceptors.
2. Additionally, the resident will care for his/her own outpatients and nursing home patients with chronic wounds.
3. An elective in the wound care clinic is available, supervised by a general surgeon.
4. Lectures will occur throughout the training cycle.