

**Department of Veterans Affairs Medical Center  
Lebanon, PA 17042**

**Podiatric Medicine and Surgery 24 Curriculum**

**INTRODUCTION:**

The Lebanon VA Medical Center is a JCAHO accredited hospital with 249 operational beds. Acute, intermediate, long-term and psychiatric care facilities are available. The Lebanon VA Medical Center is affiliated with the University Hospital, Penn State Medical Center for the training of medical and surgical residents. The Podiatry Section is part of an active Surgical Service and is located in Building 17 on the second floor in a modern and spacious clinic. Clinic space includes 6 fully equipped treatment rooms, a research laboratory, a conference room and office suites. The clinic operates 5 days a week with an evening and weekend call schedule for emergencies.

There are several affiliate hospitals and surgical centers for added surgical exposure. Each site has an affiliation agreement in place for the training of the resident.

The podiatry residency program at the Lebanon VA Medical Center was initiated in 1982 with one resident. Since that time the program has experienced steady growth in staff and clinical activity. There are three full time podiatric staff as well as two consulting podiatrists at the VA Medical Center and over twenty podiatrists that contribute to the overall surgical experience in outside rotations.

The residency program is structured as a PM&S 24. This program places emphasis on a well-rounded experience in podiatric medicine and surgery, surgical subspecialties, anesthesia, diagnostic modalities and medicine. The resident has the opportunity to provide preoperative and postoperative management of patients in a clinical and hospital environment.

## **INTRODUCTION (continued):**

The aim of this postgraduate educational program is to develop the resident's clinical skills and sound judgment in podiatric medicine and surgery. The curriculum is resourced based, competency driven and assessment validated. The program provides training resources that facilitate the resident's sequential and progressive achievement of specific competencies. A mechanism for continued supervision, feedback and evaluation is built into the curriculum in order to fulfill the competencies.

There are ample clinical, laboratory and instructional resources available to the resident and staff at the Lebanon VA Medical Center. An excellent medical library provides over 290 journals, 3500 book titles, 350 videos and access to DIALOG, BRS, MED LARS, MED LINE (on CD ROM) and the Health Science Network. Interlibrary loans are also available.

The Podiatry Research Laboratory includes an EMED-SF System for dynamic pressure analysis and an 8-mm video camera for gait analysis. Primary research interests have focused on the lower extremity complications of diabetes mellitus. Specific research interests include wound healing, foot ulcers, limb salvage, the Charcot foot and the role of pressure distribution measurement in diabetic foot care.

A fully equipped and staffed operating room is available for inpatient/outpatient podiatric surgery. Professional staff interaction is outstanding and fosters an enlightened educational experience. The resident will complete the course in Basic Life Support (BLS) and offered Advanced Cardiac Life Support (ACLS) at the Lebanon VA Medical Center.

## **OVERVIEW OF EDUCATIONAL EXPERIENCES:**

1. Clinical experience providing an appropriate opportunity to expand the resident's competencies in the care of diseases, disorders and injuries of the foot and ankle by medical, biomechanical and surgical means.
2. Clinical experience providing participation in complete preoperative and postoperative patient care in order to enhance the resident's competencies in the perioperative care of diseases, disorders and injuries of the foot and ankle.
3. Clinical experience providing an opportunity to expand the resident's competencies in the breadth of podiatric and nonpodiatric medical and surgical evaluation and management.
4. Didactic experience providing an opportunity to expand the resident's knowledge in the breadth of podiatric and nonpodiatric medical and surgical evaluation and management.

## **TRAINING RESOURCES:**

### **Diagnostic Modalities: Medical Imaging (CPME 320: 6.5)**

At the completion of this two week experience at the Lebanon VAMC and Hershey Medical Center the resident will be able to achieve the following competencies:

1. Identify normal and common abnormal findings on a chest radiograph.
2. Identify common radiographic findings associated with arthritic conditions.
3. Discuss the indications and contraindications for ordering MRI, CT, ultrasound and nuclear medicine bone scans.
4. Identify common radiographic findings associated with osseous trauma.

Task Activities: The resident will review medical imaging studies (to include plain radiographs, CT, MRI, ultrasound and nuclear medicine) with the radiologist. The radiologist will discuss the principles of each of these studies with specific remarks directed to identifying normal and abnormal findings. The resident will be assessed at the completion of this training experience.

## **TRAINING RESOURCES (continued):**

### **Diagnostic Modalities: Pathology and Laboratory Medicine (CPME 320: 6.5)**

The podiatry resident assigned to the Philadelphia VA Medical Center (PVAMC) will be scheduled for a two week training experience with the Pathology and Laboratory Medicine Service (P&LMS). During this experience the resident will review with a staff pathologist the gross and microscopic features of soft tissue and bone pathology relevant to the practice of podiatry. In addition the resident will gain exposure to tests in laboratory medicine specifically with regard to their proper clinical utilization and interpretation.

At the conclusion of the training experience, the resident will be expected to be able to:

1. Appropriately collect and preserve tissue for histopathologic evaluation.
2. Understand the informational and tissue identification needs for pathologic evaluation.
3. Understand the role of pathology specific treatment plans in clinical practice.
4. Effectively correlate clinical laboratory testing with clinical need.

Anatomic pathology (relative to the practice of podiatry):

1. Knowledge of the techniques for the preparation and fixation of tissue specimens.
2. Knowledge of the handling of biopsy tissue and gross dissection techniques including autopsy.
3. Interpretation of pathology specimens such as benign or malignant tumors of skin, soft tissue and bone.
4. Evaluation of systemic disease pathology, e.g. diabetes, gangrene, etc.

Laboratory Medicine:

1. Familiarity with relevant tests, their proper utilization and interpretation in hematology, chemistry, urinalysis, blood banking and immunology/serology.
2. Review and understanding of microbiology tests in the diagnosis of infectious diseases. This will include but not be limited to:
  - a. Proper collection of specimens for microbiologic analysis.
  - b. Gram smears and other microscopic procedures for the direct examination of specimens, e.g. KOH technique.
  - c. Microbiologic culturing methods.
  - d. Methods for the identification of microorganisms.
  - e. Methods for antibiotic susceptibility testing.

## **TRAINING RESOURCES (continued):**

### **Diagnostic Modalities: Pathology and Laboratory Medicine (CPME 320: 6.5) continued**

On the first day of his/her assignment, the resident will report to Dr. Donald D. Stieritz (Room 3B119, X-4683) or Dr. Eugene Einhorn (Room 3B,121a, X-6301). A schedule for the two week period will be prepared. The resident will be assigned to a staff pathologist in P&LMS who will oversee the intended objectives in anatomic pathology. Rotations in the various clinical laboratory sections will be coordinated with the respective doctoral staff members. The latter will be scheduled so as to complement and not conflict with the anatomic pathology assignments. During the scheduled training experience the resident will be available in the P&LMS. Scheduling conflicts should be discussed with the respective P&LMS coordinator.

### **Medicine (CPME 320: 6.6)**

The medicine experience is a combination of one month on the inpatient University Service and one month in the medical outpatient clinic. Upon completion of this two month training experience the resident will achieve the following competencies:

1. Perform and interpret the findings from a comprehensive medical history and physical exam.
2. Formulate appropriate differential diagnoses of the patient's general medical problem(s).
3. Recognize the need for and/or order additional diagnostic studies when indicated and interpret diagnostic studies.
4. Develop the ability to utilize information obtained from the history and physical examination and ancillary studies to arrive at an appropriate diagnosis and treatment plan.
5. Formulate and implement appropriate plans of management.
6. Ability to recognize the need for appropriate consultation and/or referrals.
7. Counsel the patient on general medical health promotion and education.
8. Participate directly in the medical evaluation and management of patients from diverse populations.
9. Appropriately document the approach to treatment that will reflect adequate investigation, observation and judgment.
10. Practice with professionalism, compassion and concern in a legal, ethical and moral fashion.
11. Communicate effectively and function in a multidisciplinary setting.

## **TRAINING RESOURCES (continued):**

### **Medicine (CPME 320: 6.6) continued**

Task Activities: During the inpatient section of the medicine experience the resident will be a member of the ward team and participate on daily rounds and will attend morning report, lectures and other didactic sessions held for the benefit of the ward team. The resident will actively participate in rounds by examining patients, reviewing patients' records including laboratory data and special tests such as EKGs and chest x-rays. The resident will use the computer to access patient data and enter progress notes. The resident will be assigned patients to follow and present on rounds and other exercises. In the outpatient primary care clinic the resident will evaluate and manage patients under the supervision of the medical attending. The resident will complete a minimum of 25 comprehensive histories and physicals upon completion of this two month experience. The resident will be assessed at the completion of this training experience.

### **Medicine Subspecialty: Physical and Rehabilitation Medicine (CPME 320: 6.6)**

Upon completion of this one week experience at the Lebanon VA Medical Center the resident will achieve the following competencies:

1. Prescribe appropriate physical therapy modalities.
2. Perform muscle testing and grading.
3. Know the indications and contraindications for use of the following modalities: ultrasound, hydrotherapy, diathermy, low voltage stimulation, TENS, moist heat and radiant light.
4. Demonstrate crutch/cane training: partial/non-weight bearing, three point gait.
5. Describe methods used for reducing contractures and strengthening muscles.
6. Know the indications and contraindications for nerve conduction studies and EMG.

Task Activities: This ongoing experience will be directly supervised by the physiatrist and Chief, Physical Therapy. The resident will receive hands-on experience in the Physical Therapy Department and Electrodiagnostics Lab. Under supervision the resident will evaluate and manage patients referred to this department for lower extremity problems. Electrodiagnostic studies will be observed by the resident under supervision of the physiatrist. The resident will be assessed at the completion of this training experience.

## **TRAINING RESOURCES (continued):**

### **Behavioral Sciences (CPME 320: 6.6)**

Upon completion of this two week experience at the Lebanon VA Medical Center the resident will achieve the following competencies:

1. Have an understanding of the psychological barriers to compliance with treatment plan and strategies to overcome these barriers.
2. Have an understanding of the psychological issues of aging.
3. Have an understanding of the issues surrounding advance directives and competency.
4. Have an understanding of the psychological issues of patients undergoing major surgical procedures and/or rehabilitation.
5. Have an understanding of the psychological issues of patients with ongoing chronic diseases.
6. Have an understanding of the end of life issues that encompass the patient and family.

Task Activities: The resident will participate in the activities of the clinical psychologist. The resident will be assessed at the completion of this training experience.

### **Neurology (CPME 320:6.6)**

At the completion of this two week experience at the Lebanon VA Medical Center the resident will have achieved the following competencies:

1. Perform a complete neurological examination of the lower extremities including a sensory and motor examination.
2. Understand the basic concepts and findings of a neurological examination of the lower extremity.
3. Will be able to identify common neurological conditions that manifest themselves in the lower extremities.
4. Will know the indications and contraindications for nerve conduction velocity and EMG studies of the lower extremities.

Task Activities: The resident will participate in the evaluation of outpatients seen in the neurology clinic in the outpatient medicine clinics. The staff neurologist will discuss with the podiatry resident subjects pertinent to the resident's understanding of lower extremity neurological conditions. The resident will be assessed at the completion of this training experience.

## **TRAINING RESOURCES (continued):**

### **General Surgery (CPME 320: 6.7)**

Upon completion of this four week experience at the Lebanon VA Medical Center Surgical Service the resident will have achieved the following competencies:

1. Understand the principles of preoperative evaluation including pathophysiological changes and their impact on the risk of anesthesia and surgery.
2. Understand common postanesthesia/surgical complications, their clinical presentation and the principles of management.
3. Understand the principles of tissue handling and wound healing.
4. Understanding surgical procedures and principles applicable to nonpodiatric surgical procedures.
5. Evaluate peripheral vascular disease via noninvasive vascular testing and correlate it with the patient's clinical diagnosis.

Task Activities: The attending surgeon will lecture the resident on general surgical principles and the assessment of the surgical patient. Under the supervision of the attending surgical staff and the third year surgical resident the podiatry resident will completely work up a patient for general surgery. In the operating room under supervision the resident will assist with skin incisions, retraction, ligation of vessels and wound closure. Ward rounds, surgical clinic, surgical conferences, mortality and morbidity conferences and formal lectures will supplement this rotation. The resident will be assessed at the completion of this training experience.

### **Surgical Subspecialty: Orthopedic Surgery (CPME 320: 6.7)**

Upon completion of this four week experience at the Lebanon VA Medical Center the resident will have achieved the following competencies:

1. Demonstrate proper operating room protocol, draping and prepping of the operative field and aseptic technique.
2. Demonstrate proficiency in proper instrumentation used in common orthopedic procedures.
3. Demonstrate proficiency in incision and soft tissue dissection techniques.
4. Demonstrate a working understanding of the principles of open and closed reduction of fractures, immobilization and fracture healing.
5. Demonstrate the ability to function adequately during orthopedic surgical procedures.
6. Demonstrate proficiency in the proper application of casts and splints.

## **TRAINING RESOURCES (continued):**

### **Surgical Subspecialty: Orthopedic Surgery (CPME 320: 6.7) continued**

Task Activities: The podiatry resident will participate in orthopedic surgical procedures under the direct supervision of the attending. The resident will participate in patient care at the orthopedic surgeon's office and assist him in the operating room. The resident's level of participation is up to the discretion of the attending and the resident's level of training in the program up to that point in time. Emphasis will be placed on attention to detail, meticulous technique and "infection control". The resident will be assessed at the completion of this training experience.

### **Surgical Subspecialty: Plastic Surgery (CPME 320: 6.7)**

Upon completion of this one month experience at the Lebanon VA Medical Center the resident will have achieved the following competencies:

1. Utilize various suture techniques.
2. Demonstrate a basic understanding with skin grafting principles/techniques.
3. Demonstrate a basic understanding with skin flap and tension reduction surgical techniques.
4. Demonstrate a basic understanding with excision techniques for common skin tumors.

Task Activities: The podiatry resident will participate in plastic surgery procedures under the direct supervision of the attending. The resident will participate in patient care in the plastic surgery clinic and assist in the operating room. The resident's level of participation is up to the discretion of the attending and the resident's level of training in the program up to that point in time. Emphasis will be placed on attention to detail, meticulous technique and "infection control". The resident will be assessed upon completion of the training experience.

## **TRAINING RESOURCES (continued):**

### **Anesthesia (CPME 320:6.8)**

Upon completion of this one month rotation at Lebanon VA Medical Center the resident will achieve the following competencies:

1. Demonstrate an understanding of the preoperative assessment and ASA status of the patient.
2. Recognize different levels of anesthesia.
3. Understand the function and effects of commonly used inhalation and intravenous anesthetic agents.
4. Understand the principles of airway management including intubation and extubation techniques and common anesthetic emergencies.
5. Understand recovery room care and postoperative management of the anesthesia patient.
6. Understand the techniques and ramifications of spinal, regional and local anesthesia.

**Task Activities:** The anesthesiology team will lecture the resident on principles of anesthesia and discuss the management of the anesthesia patient. The resident will observe the intubation and extubation of general anesthesia patients and the administration of spinal anesthesia. The resident will participate in the administration of local anesthesia during podiatric surgical cases. The resident will attend surgical service morbidity and mortality conferences at the Lebanon VA Medical Center at which anesthesia complications are discussed. The resident will be evaluated at the completion of this training experience.

### **Emergency Medicine (CPME 320:6.9)**

At the completion of this two week experience in the Urgent Care Department at the Lebanon VA Medical Center the resident will achieve the following competencies:

1. Perform problem focused history and physicals.
2. Order and interpret appropriate diagnostic studies.
3. Formulate an appropriate diagnosis and/or appropriate differential diagnosis.
4. Formulate and implement appropriate plans for management.
5. Evaluate and manage common musculoskeletal injuries.
6. Recognize the acutely ill patient who requires immediate and aggressive intervention.

## **TRAINING RESOURCES (continued):**

### **Emergency Medicine (CPME 320:6.9) continued**

Task Activities: The resident is under the supervision of the urgent care physician during the normal daily tour of duty. The resident will actively participate by examining and treating patients, reviewing patients' records including laboratory data and special tests such as EKGs and imaging studies. The resident will be assessed at the completion of this training experience.

### **Podiatric Surgery: Affiliate Sites PGY II (CPME 320: 6.10)**

Upon completion of this ongoing rotation at the multiple affiliate hospitals and surgical centers the resident will achieve the following competencies:

Appropriate surgical management when indicated, including:

1. Digital surgery.
2. First ray surgery.
3. Other soft tissue foot surgery.
4. Other osseous foot surgery.

Specific skills/attitude competencies to be achieved:

1. Demonstrate proficiency in incisions and soft tissue dissection techniques.
2. Demonstrate proficiency in performing digital surgery including tenotomies and capsulotomies, interphalangeal arthroplasties and/or fusions.
3. Demonstrate proficiency in performing soft tissue procedures including excision of common soft tissue tumors.
4. Demonstrate proficiency in performing bunionectomies including osteotomies of the first metatarsal.
5. Demonstrate proficiency in performing arthroplastic procedures of the first metatarsal phalangeal joint.
6. Demonstrate proficiency in lesser metatarsal procedures such as osteotomies and arthroplasties.
7. Demonstrate proficiency in common rearfoot procedures such as heel spur resection, plantar fascial release and exostectomies.
8. Demonstrate proficiency in the use of internal fixation such as absorbable pins, K-wire and screws.

## **TRAINING RESOURCES (continued):**

### **Podiatric Surgery: Affiliate Sites PGY II (CPME 320: 6.10) continued**

Task Activities: The podiatry resident will participate in podiatric surgical procedures under the direct supervision of the attending. The resident's level of participation is up to the discretion of the attending and the resident's level of training in the program to that point in time. Emphasis will be placed on attention to detail, meticulous technique and "infection control". Didactic and clinical training will be supplemented by films, a formal lecture series and surgical workshops. Assessment will be done on a quarterly basis.

### **Podiatric Surgery: VA Medical Center PGY II (CPME 320: 6.10)**

At the completion of this ongoing experience during the second year of training at the Lebanon VA Medical Center the resident will be able to:

#### Clinical Activities:

1. Appropriate surgical preoperative, intraoperative and postoperative assessment and management in surgical areas including:
  - a. Digital surgery.
  - b. First ray surgery.
  - c. Other soft tissue foot surgery.
  - d. Other osseous foot surgery.
2. Demonstrate a working knowledge for the management of foot infections and other complications.

#### Teaching Responsibilities:

1. The resident instructs the junior house staff on hospital protocol.
2. The resident acts as a role model for the junior house staff.
3. The resident demonstrates effective clinical teaching skills when interacting with the junior house staff.
4. The resident lectures the junior house staff on podiatry topics in the didactic lecture series.

## **TRAINING RESOURCES (continued):**

### **Podiatric Surgery: VA Medical Center PGY II (CPME 320: 6.10) continued**

Task Activities: The podiatry resident will directly participate in the perioperative management of the podiatric patient under the direct supervision of the attending podiatrist in a clinical setting. The attending podiatrist will lecture the resident on the preoperative evaluation and postoperative management of the podiatric surgical patient. Didactic and clinical training will be supplemented by films and formal lecture series. Also the podiatry resident will participate under the guidance of the podiatry staff in the didactic lecture series with chapter reviews and discussions to PGY I residents and externs during the academic year. The podiatry resident will also assist the attendings with clinical teaching responsibilities by helping to supervise the first year residents in the clinic and also in minor procedures in the clinic. For surgical procedures in the OR, the resident will be supervised by an attending. The resident will be assessed on a quarterly basis.

### **Podiatric Medicine PGY I (CPME 320:6:11)**

Upon completion of this ongoing training experience at Lebanon VA Medical Center during the first year of training the resident will achieve the following competencies:

1. Perform and interpret the findings of a thorough problem-focused history and physical examination of the LE to include:
  - a. Neurologic examination.
  - b. Vascular examination (to include performing ankle brachial index -ABI as indicated).
  - c. Dermatologic examination.
  - d. Musculoskeletal (biomechanical examination).
2. Order appropriate laboratory studies and correctly interpret the results in the process of working up a diagnosis.
3. Order and interpret foot and ankle radiographs for common osseous conditions of the foot.
4. Formulate an appropriate diagnosis and/or differential diagnosis.
5. Formulate and implement an appropriate plan of management when indicated including:
  - a. Palliation of keratotic lesions and toenails.
  - b. Manipulation/mobilization of the foot/ankle joint to increase range of motion/reduce associated pain and congenital foot deformity.
  - c. Management of closed fractures and dislocations including pedal fractures and dislocations and ankle fractures/dislocations.
  - d. Cast immobilization.
  - e. Tape immobilization.
  - f. Orthotic, brace, prosthetic and custom shoe management.

## **TRAINING RESOURCES (continued):**

### **Podiatric Medicine PGY I (CPME 320:6:11) continued**

5. Formulate and implement an appropriate plan of management when indicated including: (continued)
  - g. Footwear and padding.
  - h. Injections and aspirations.
  - i. Physical therapy.
  - j. Pharmacologic management including the use of NSAID's, antibiotics, antifungals, narcotic analgesics, muscle relaxants, medications for neuropathy, sedatives/hypnotics, peripheral vascular agents, anticoagulants, antihyperuricemic/uricosuric agents, tetanus toxoid/immune globulins, laxatives/cathartics, fluid and electrolyte management, corticosteroids, anti-rheumatic medications.
6. Order appropriate consultations and/or referrals.
7. Provide appropriate lower extremity health promotion and education.
8. Assess the treatment plan and revise it as necessary.
9. Abide by state and federal laws including the Health Insurance Portability and Accountability Act (HIPAA) governing the practice of podiatric medicine and surgery.
10. Practice and abide by the principles of informed consent.
11. Understand and respect ethical boundaries of interaction with patients, colleagues and employees.
12. Demonstrate professional humanistic qualities.
13. Demonstrate ability to formulate a methodical and comprehensive treatment plan with appreciation to health care costs.
14. Communicate in oral and written form with patients, colleagues, payors and the public.
15. Maintain appropriate medical records.
16. Demonstrate an understanding of the psychosocial and health care needs for patients in all life stages.
17. Demonstrate sensitivity and responsiveness to cultural values, behaviors and preferences of one's patients when providing care to persons whose race, ethnicity, nation of origin, religion, gender and/or sexual orientation is/are different from one's own.
18. Demonstrate an understanding of public health concepts, health promotion and disease prevention.
19. Demonstrate a familiarity with utilization management and quality improvement.
20. Understand health care reimbursement.
21. Understand insurance issues including professional and general liability, disability and Worker's Compensation.
22. Understand the medical-legal considerations involving health care delivery.
23. Demonstrate an understanding of common business practices.
24. Read, interpret and critically examine and present medical and scientific literature.

**TRAINING RESOURCES (continued):**

**Podiatric Medicine PGY I (CPME 320:6:11) continued**

- 25. Collect and interpret data and present the findings in a formal study related to podiatric medicine and surgery.
- 26. Demonstrate information technology skills in learning, teaching and clinical practice.
- 27. Participate in continuing education activities.

Task Activities: The resident will participate in all aspects of the management of the podiatry patient under the direct supervision of the attending podiatrist. The resident will participate in both the inpatient and outpatient management of the diabetic foot. Formal lectures, workshops and films will be presented to augment the training. The resident's clinical logs will be reviewed quarterly. Each resident must complete at least 150 biomechanical examinations that can include the "Podiatric Orthopedic Screening Examination", "Diabetic Screening Examination" and "Compensation and Pension Examinations" that relate to orthopedic conditions. The resident will be assessed on a quarterly basis.

**PATIENT CARE ACTIVITY REQUIREMENTS:**

CASE ACTIVITY:	MINIMAL ACTIVITY VOLUME (MAV):
Inpatient cases (Podiatric or nonpodiatric)	50 (Document all podiatric admissions, surgical admissions which include General Surgery, Plastic and Orthopedic inpatients and all Medicine Service inpatients in which the resident can demonstrate an active role in the management of the patient's care.)
Podiatric clinic/office encounters	750
Podiatric surgical cases	150
Trauma cases	25 (Podiatric and nonpodiatric patients)
Podopediatrics	25
Biomechanical cases	150
H&P (Comprehensive)	25 (Admission podiatry patients, preoperative general surgery and inpatient and outpatient medical H&P may be used as acceptable forms of a comprehensive H&P.)

**PATIENT CARE ACTIVITY REQUIREMENTS (continued):**

PROCEDURE ACTIVITY:	MINIMAL ACTIVITY VOLUME (MAV):
B-and C-level procedures (Total)	350
C-level procedures	
Digital procedures	80
First ray procedures	60
Other soft tissue foot sx procedures	45
Other osseous foot sx procedures	40

There are no numerical requirements for reconstructive rearfoot and ankle procedures. However they should be recorded in the clinical log. Other nonpodiatric procedures from General Surgery, Orthopedic and Plastic Surgery should be documented in "other procedures" in the clinical log.