

OPTIONAL FELLOWSHIP CATEGORIES AND COMPETENCIES

From CPME 820, *Standards and Requirements for Approval of Podiatric Fellowships* – July 2023

6.0 The fellowship program has appropriate competencies that are comprehensive in addressing the body of scientific knowledge underlying the fellowship and from which a curriculum of at least 12 months duration is derived and implemented. Curricular components of the program demonstrate consistency with the stated competencies to impart specific knowledge and values and develop specific skills to produce highly trained professionals to continue the search for innovative and improved methods to prevent disease, promote health, and more effectively manage foot and ankle pathology.

6.5 The program shall have clearly stated competencies that are appropriate for educational experiences provided in the fellowship. Competencies shall be statements that describe the knowledge, skills, and attitudes that the fellow is expected to acquire during training.

Competencies are short-term conditions to be achieved within a given period of time and provide measurable evidence of progress toward the achievement of the goals of the program. Competencies are brief statements of accomplishments expected to be realized and attained by the fellow in the various educational experiences through departments and services of the sponsoring institution and through other affiliated facilities. Competencies reflect resources available for fellowship training at the sponsoring institution and affiliated institutions.

A prescribed set of clinical and/or didactic learning activities or tasks should accompany each objective to facilitate achievement of that objective by the fellow

Five fellowship categories were identified.

1. Lower Extremity Reconstruction & Limb Salvage
2. Foot & Ankle Surgery/Trauma
3. Lower Extremity Wound Care
4. Advanced Foot and Ankle Research
5. Sports Medicine

Optional Competencies: Lower Extremity Reconstruction & Limb Salvage

A. Diagnose and manage non-surgically and surgically limb salvage and reconstructive patients.

1. Manage and diagnose lower extremity complications of Diabetes and Peripheral Arterial Disease
2. Demonstrates knowledge of Charcot pathophysiology, management, and treatment
3. Order and interpret laboratory tests for diabetes, infection, nutrition.
4. Perform and/or order and interpret appropriate diagnostic medical imaging studies, including plain radiography, nuclear medicine, and CT/MRI.
5. Perform (and/or order) and interpret appropriate diagnostic studies, including non-invasive vascular studies (arterial ultrasounds, segmental pressures, LUNA, TcPO2).
6. Interpret lower extremity angiograms
7. Demonstrate appropriate timing and use of multi-disciplinary consultation services.
8. Recognize and differentiate between urgent, emergent, and elective procedures bases on patient's presenting condition.
9. Orders appropriate orthotic, brace, prosthetic, and custom shoe management when indicated.
10. Perform debridement and/or amputation with attention to tissue handling.
11. Perform split thickness skin grafts, full thickness skin grafts and local flap closure
12. Orders and interprets culture and pathology specimens, uses results for surgical and antibiotic treatment
13. Demonstrate knowledge of indications and techniques for internal and external fixation as it applies to lower extremity reconstruction of the foot and ankle.
14. Understand indications for different flaps of the lower extremity including local flaps, free flaps, pedicle flaps, muscle flaps and fascio cutaneous flaps.
15. Understand monitoring perfusion assessment technology available for post operative flap management
16. Recognize flap complications and manage complications.
17. Diagnosis and treats bone/joint infections.
18. Provides perioperative management of the inpatient and outpatient.

Optional Competencies: Foot & Ankle Surgery/Trauma

A. Diagnose and manage both non-surgically and surgically lower extremity foot and ankle trauma.

1. Understand and recognize the indications for initial management of acute lower extremity trauma, including closed reduction and immobilization by splinting, casting, or use of walking boot.
2. Recognize the physical exam findings consistent with compartment syndrome and demonstrate knowledge of both diagnostic modalities and indications for surgical intervention.
3. Demonstrate knowledge of various imaging studies as they relate to foot and ankle trauma diagnoses and guide conservative, pre-operative, and post-operative care.
4. Understand the indications for and peri-operative care of acute emergent versus scheduled surgical intervention of acute lower extremity trauma.
5. Demonstrate knowledge of the indications for prophylactic and acute treatment of trauma-related anticipated or clinically evident soft tissue and osseous infections of the lower extremity.
6. Demonstrate appropriate understanding and use and potential abuse of narcotic and non-narcotic pain medication to effectively manage pain-related and post-surgical trauma.
7. Demonstrate knowledge of indications and techniques for internal and external fixation as it applies to lower extremity trauma of the foot and ankle.
8. Understand the indications for and effectively manage DVT prophylaxis during the non-operative and operative post-trauma course of treatment.
9. Demonstrate knowledge of various off-loading and non-weightbearing prosthetic options as indicated in both the non-operative and operative post-injury course of care.
10. Demonstrate appropriate timing and use of multi-disciplinary consultation/referral services.
11. Demonstrate and effectively manage trauma complications that are encountered as they relate to lower extremity bone and soft tissue healing, hardware, various surgical interventions and long-term outcomes.

Optional Competencies: Lower Extremity Wound Care

A. Prevent, diagnose, and medically and surgically manage diseases, disorders, and wounds of the lower extremity.

1. Identify various wound types and develop skills to correctly diagnose
 - a. Identify and effectively manage patients at risk for limb loss.
 - b. Identify, understand, manage, and treatment various wound types.
 - i. Neuropathic (diabetic) wounds
 - ii. Venous wounds
 - iii. Ischemic wounds
 - iv. Lower extremity infections
 - v. Mixed etiologic wounds
 - vi. Surgical wounds
2. Understand the indication(s) for and interpret appropriate diagnostic studies, including:
 - a. Medical imaging, laboratory tests, vascular studies, and biopsy techniques
3. Participate directly in the evaluation and management of patients in both inpatient and outpatient settings and become proficient in wound care protocols and medical management of the wound patient with respect to the following:
 - a. Dermatologic, neurologic, orthopedic, arterial, and venous conditions
 - b. Pharmacologic management including Infectious disease collaboration.
 - c. Patient health promotion and education including recognition and communication of the following:
 - i. Appropriate patient nutritional concerns to optimize healing.
 - ii. Understand comorbid conditions of patient and effects on wound healing.
4. Participate directly in the management of the wound patient including the following:
 - a. Evaluating, diagnosing, selecting appropriate treatment.
 - b. Recognizing and managing complications.
 - c. Demonstrating appropriate abilities in wound care management by the following:
 - i. Able to discern between viable and non-viable tissue.
 - ii. Proper debridement techniques.
 - iii. Proficiently utilize wound care modalities such as: wound VAC, grafts (allografts and autografts), other wound care products and techniques.
 - iv. Understand wound care product categories and identify optimal product for treatment of each wound.
 - v. Able to offload wounds appropriately in the lower extremities utilizing a variety of modalities.
 - vi. Able to apply and remove total contact casts appropriately.
 - d. Surgically manage wounds as appropriate.
5. Assess the treatment plan and revise it as necessary.
6. Appropriate post operative wound care to minimize risks of reoccurrence
 - a. Appropriate evaluation and treatment of limb deformities and off-loading modalities.
 - i. Referral to orthotist and prosthetist as needed.
 - b. Appropriate evaluation and treatment (including referrals when necessary) for medical comorbidities to decrease risk of reoccurrence of wound(s)

Optional Competencies: Advanced Foot and Ankle Research

A. Develop research protocol, conduct, and publish on bench or clinical lower extremity foot and ankle studies.

1. Demonstrates wide-ranging knowledge within their discipline and comprehensive knowledge of their specific research interest.
2. Understands the parameters, gaps, and challenges within their research field such that they can develop feasible hypotheses.
3. Understands the importance of being proactive in identifying research opportunities.
4. Participates and leads project initiatives to address research questions.
5. Develops the ability to articulate a clear research vision and strategically plan to achieve research goals.
6. Understands the financial aspect of research including grant management and budget planning.
7. Performs administrative tasks such as ethics approval, institutional review board submission, and research compliance.
8. Identifies importance of collaboration with interdisciplinary team on projects including subjects with complex comorbidities.
9. Explains interpretation and analysis of statistical data.
10. Develops ability to effectively communicate research findings to a broad audience including presentations at local and national conferences.
11. Understands the steps and communications involved within the peer review publication process.
12. Practices delineation of specific skills
 - a. Writing
 - i. Scientific publications
 - ii. Grants/applications
 - b. Speaking
 - i. Presenting research
 - ii. Poster sessions
 - iii. Conferences/seminars PowerPoint presentations
 - c. Teaching
 - i. Teaching methods
 - ii. Learning styles

Optional Competencies: Sports Medicine

A. Prevent, diagnose, and medically and surgically manage diseases, disorders, and injuries of the lower extremity as they relate to sports medicine.

1. Demonstrate knowledge of the basics of various aspects of sports medicine and how they relate to the lower extremity.
2. Demonstrate knowledge of the current concepts of conditioning training and competition and its effects on the lower extremity.
3. Understand the dietary and medication regimen precautions as they relate to training demands in the diabetic athlete.
4. Demonstrate knowledge of the running and walking gait cycle differences for various sports.
5. Demonstrate knowledge of anatomy, materials and construction properties and be able to recommend athletic foot gear for various sports.
6. Understand the co-managing roles of the physical therapist, athletic trainer and sports medicine provider while participating in all aspects of preventative medicine and treatment of the lower extremities such as padding, strapping and orthotic manufacture.
7. Demonstrate knowledge of various athletic training curricula and physical therapy indications in sports medicine.
8. Understand the overuse nature of most sports injuries including recognition and diagnosis of an overuse in history and provide effective treatment.
9. Demonstrate the ability to accurately diagnose, treat and rehabilitate foot/ankle pathology by conservative and surgical (if indicated) means not limited to tendonitis, periostitis, compartment syndromes, ligament injuries (sprains), stress fractures, acute fractures, dislocations, sesamoiditis, turf toe, digital/nail injuries, plantar fasciitis/heel spurs syndrome, dermatologic issues, and turf toe. Attention will be focused on prevention.
10. Demonstrate knowledge and treatment, when indicated, of associated knee and hip injuries including ligamentous rupture, patellofemoral dysfunction, and bursitis with focus on diagnosis and awareness of referred pain.
11. Demonstrate competency in the physical diagnosis, appropriate testing and management of vascular abnormalities including venous stasis, deep venous thrombosis, arterial spasm, and arterial insufficiency in athletes within the chronic, acute, and post-operative phases of care.
12. Gain hands on exposure to various stages of athleticism, when the opportunity presents, from the professional and elite international/Olympic athlete to intramural adult/teen/child in basketball, track and field, football, soccer, karate, gymnastics, swimming, tennis, volleyball, and etcetera understanding that each fellowship will have its own unique exposure.

All types of clinical fellowship competencies could also include the following:

B. Assess and manage the patient's general medical and surgical status.

1. Perform and interpret the findings of comprehensive medical history and physical examinations through podiatric and non-podiatric experiences that relate to lower extremity reconstruction and salvage care.
2. Understand how patient's general medical problem(s) can affect lower extremity care and healing potential.
3. Formulate and implement an appropriate surgical and non-surgical care plan including appropriate therapeutic intervention, appropriate consultations and/or referrals, and appropriate general medical health promotion and education.

C. Practice with professionalism, compassion, and concern in a legal, ethical, and moral fashion.

1. Abide by state and federal laws, including the Health Insurance Portability and Accountability Act (HIPAA), governing the practice of podiatric medicine and surgery
2. Practice and abide by the principles of informed consent.
3. Understand and respect the ethical boundaries of interactions with patients, colleagues, and employees.
4. Demonstrate professional humanistic qualities.
5. Demonstrate ability to formulate a methodical and comprehensive treatment plan with appreciation of health-care costs.

D. Communicate effectively and function in a multi-disciplinary setting.

1. Demonstrate effective physician-patient communication skills.
2. Demonstrate effective physician-provider communication skills.
3. Demonstrate appropriate medical record documentation.
4. Demonstrate appropriate consultation and/or referrals.

E. Manage individuals and populations in a variety of socioeconomic and health-care settings.

1. Demonstrate an understanding of the psychosocial and health care needs for patients in all life stages: pediatric through geriatric.
2. Demonstrate cultural humility and responsiveness to values, behaviors, and preferences of one's patients when providing care to persons whose race, ethnicity, nation of origin, religion, gender identity, and/or sexual orientation is/are different from one's own.
3. Demonstrate an understanding of public health concepts, health promotion, and disease prevention.

F. Understand podiatric practice management in a multitude of health-care delivery settings.

1. Demonstrate familiarity with utilization management and quality improvement.
2. Understand health-care coding and reimbursement.
3. Explain contemporary health-care delivery systems.
4. Understand insurance issues including professional and general liability, disability, and Workers' Compensation.
5. Understand medical-legal considerations involving health-care delivery.
6. Demonstrate understanding of common business practices.

G. Be professionally inquisitive, life-long learners and teachers utilizing research, scholarly activity, and information technologies to enhance professional knowledge and evidence-based practice.

1. Read, interpret, and critically analyze and present medical and scientific literature.
2. Demonstrate information technology skills in learning, teaching, and clinical practice.
3. Participate in educational activities.

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