

Specialized Curriculum for Musculoskeletal in Physical Medicine and Rehabilitation Residency Training and Beyond

Andrea L. Aagesen, DO, Department of Physical Medicine and Rehabilitation, University of Michigan, Ann Arbor, MI

[aquandt@med.umich.edu](mailto:aquandt@med.umich.edu)

Deborah A. Bergfeld, MD, Department of Physical Medicine and Rehabilitation, University of Texas at Austin Dell Medical School, Austin, TX

[d\\_bergfeld@hotmail.com](mailto:d_bergfeld@hotmail.com)

Mark I. Ellen, MD, Anthem Healthcare, Ocala, FL (**Corresponding author**)

[miemd@mac.com](mailto:miemd@mac.com)

McCasey R. Smith, MD, Department of Rehabilitation, University of Kansas Medical Center, Kansas City, KS

[msmith48@kumc.edu](mailto:msmith48@kumc.edu)

Disclosures: none

### **Introduction**

This curriculum was prepared by the American Academy for Physical Medicine and Rehabilitation (AAPM&R) to provide general guidelines for training and written primarily for individuals involved in teaching residents and those in fellowship. The secondary audience for this curriculum is for those that are out in practice and would like to benchmark their current knowledge, skills, and attitudes in specific

**This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1002/pmrj.12893**

This article is protected by copyright. All rights reserved.

content domain. This curriculum was developed as an overview of competencies currently favored for the performance and training of PM&R and to serve as a guide to published references and educational resources available to the psychiatrists. This curriculum is meant to augment rather than supplants the role program and fellowship directors and faculty play in the training of psychiatrists. By providing information about training benchmarks, AAPM&R hopes to improve the teaching and performance of psychiatrists.

## **Background**

Through the BOLD Visioning process, several critical graduate medical education (GME) issues have been identified that must be addressed to move this specialty forward. One of the main priorities for the Academy is to develop a process to re-align the content of GME training by setting standards for training that will advance the knowledge and skills of psychiatrists to meet the needs of new the practice models coming out of BOLD and the future of psychiatry in general. The goal of this curriculum is to outline the specific knowledge, skills, and attitude that are needed to help psychiatrists prepare to embrace, lead, and practice in the future practice environment of PM&R.

## **Definition of terms**

The Academy is defining specialized curriculum and training guidelines as outlined below:

- **Specialized Curriculum:** A document that outlines what one should be able to do, which includes:
  - Competencies
  - KSAs (Knowledge, Skills, Attitudes)
    - Knowledge: Condition of being aware of something
    - Skills: Ability to perform a task or activity
    - Attitudes: Feelings, emotions, beliefs, or value about something (influence people's choice of actions)

- Identified whether each KSA is core or specialized. Since each competency can have varying levels of difficulty, they are rated as Basic, Intermediate, and Advanced within Core and Specialized.
  - Core: Every psychiatrist should know it at the completion of residency training.
  - Specialized: Only those that specialize in this area would be expected to know it.

### **Objectives**

Upon completion of training in PM&R, trainees should be prepared to appropriately recommend procedures as indicated by the findings of consultative evaluation, with explicit understanding of accepted specific indications, contraindications, and diagnostic/therapeutic alternatives; perform procedures and examinations safely, completely, and expeditiously, and clinical assessment and patient monitoring; identify risk factors for each procedure, understand how to minimize each, and recognize and appropriately manage complications when they occur; acknowledge the limitations of PM&R procedures and personal skills and know when to request help; and understand the principles of quality measurement and improvement.

### **Supporting a Specialized Curriculum**

Competence in knowledge, skills, and attitudes requires the foundation of didactic and hands-on learning that occurs within the comprehensive training of a PM&R specialist.

While the specialized curriculum may inform recommendations to the ACGME regarding program requirements, it should not be limited by this consideration; rather, it should focus on “what should be” in order to achieve the goals of psychiatrists and the specialty. The Academy’s goal is to approach the development of specialized curricula from an aspirational and educational perspective – not regulation.

While there is core knowledge that all physiatrists need to have in order to be a general physiatrist, many physiatrists go on to become specialists in a specific content domain, i.e., musculoskeletal (MSK), brain injury, cancer rehabilitation, etc. For this reason, specialized curricula are needed to outline what specialized physiatrists need to know in each domain.

### **Structure**

The following Specialized Curriculum for Musculoskeletal in Physical Medicine and Rehabilitation Residency Training and Beyond was written by the American Academy for Physical Medicine and Rehabilitation's MSK Curriculum Workgroup.

The curriculum is broken down into ten content areas:

- Basic Science
- Medication
- Regions
- Exams
- General
- Ultrasound
- Imaging
- Sports
- Multidisciplinary
- Other Areas

Within these content domains, there are a series of competencies that the workgroup feels everyone who considers themselves an MSK specialist should know. Each competency is broken out to show whether it is a Knowledge, Skill and/or Attitude, and if it is Core or Specialized.

This specialized curriculum outlines the longitudinal expectation of what PM&R residents and those in fellowship training should know upon graduating, to what someone that has been practicing MSK Medicine for many years should be proficient in to be considered an MSK Specialist. Program Directors should use this curriculum as a tool to help augment their current training program and to identify any gaps they may currently have in their program. If any gaps are identified, the program director should implement lectures, conferences, journal clubs, and workshops to fill these gaps. Educational resources for MSK training will vary amongst residency programs, which is why it's important for programs to use these curricula as a tool, to help elevate the level of training amongst all programs and to help reduce that variability of training.

After completing residency and fellowship training, physiatrists must continue their professional development over the course of their careers. They do this by learning from their practice and by participating in educational activities, which includes completing formal continuing medical education. It is essential for physiatrists to remain competent in their area of practice in order to provide the best quality of health care to their patients and communities. Someone that has been practicing for a while can use this specialized curriculum to benchmark their current knowledge, skills and attitudes, with the goal to self-identify any gaps they may need to close.

As the field of MSK medicine continues to grow, it is important to ensure that physiatrists are provided with the tools needed to be successful. This specialized curriculum outlines the current competencies that are essential to ensure residents, those in fellowship training, and practicing physiatrists have the foundation required to be successful. Since the field continues to evolve, this curriculum is meant to be a living document and will be updated accordingly. The goal is to provide a framework for the field of PM&R to ensure physiatrists receive the training necessary to provide the best patient care.

Author Manuscript