

Rehabilitation Curricular Thread Report
Prepared by James W Denham, MD, MBA, FCAP
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The term “Rehabilitation” is a broad term describing a variety of services and scientific disciplines available to patients for aiding in recovery from any sort of physical or mental disability, injury or habit. These disciplines all involve the chronic care model and involve services and treatments to patients over varying lengths of time in regards to recovery of, at least, maximal improvement and maintenance of function.

LCME 7.2 addresses “rehabilitative care” as a broad area of focus. Physical therapy, occupational health/medicine, end of life care, pain management and palliative care, are encompassed in Rehabilitation. Please see end of report for a more complete list categorizing rehabilitation medicine.

The Rehabilitation Curricular Thread relates to the following Entrustable Professional Activities:

- EPA1: History of and physicals related to defining limitations and functionality associated with disabilities.
- EPA4: Order evaluations for disabilities and ordering appropriate rehabilitative consultations/services.
- EPA5: Documentation of functional progress and need for rehabilitation.
- EPA9: Working interprofessionally with providers of rehabilitative services.

BACKGROUND

The Association of Academic Physiatrists Undergraduate Education Committee Workgroup has developed goals, objectives, and defined a minimal level of content and exposure that they feel is appropriate for undergraduate medical education. The following Goals and Objectives are adapted in part from this work:

GOALS

- Provide a comfort level in the medical practitioner to the assessment and care of individuals with disabilities that present for evaluation, and a framework in which to look to obtain further information.
- Provide an awareness of the psychosocial issues faced by the individual with disability or chronic illness.
- Provide an appreciation of the need for a functional, or outcomes-based, approach to the continuum of medical care.

OBJECTIVES

KNOWLEDGE

The graduate should be able to:

- Define and distinguish among the terms “impairment,” “disability,” and “handicap.”
- Describe the different components of the rehabilitation team and special abilities of each. (QCOM objectives 2.8 and 6.7)
- Discuss the functional implications of illnesses and injuries within the routine practice of medicine.
- Discuss the impact of chronic illnesses, pain and disability on an individual, the family and community. (QCOM objective 6.2)
- Describe the concepts of continuum of care, including appropriate locations and facilities for different stages in the course of recovery and rehabilitation, and the strengths and weaknesses of each. (QCOM objectives 2.8 and 6.7)
- Discuss the cost-benefit relationship in the provision of psychiatric/rehabilitative care.

SKILLS

The graduate should be able to:

- Obtain a history from patients with a particular emphasis on functional limitations, residual abilities, and psychosocial status.
- Perform a physical examination designed to assess functional problems. (QCOM objective 2.2)
- Determine whether disability is present and make an appropriate referral for continued care and/or evaluation.
- Demonstrate communication techniques with patients, family members, other health care professionals, and/or representatives of third-party payers and managed care.
- Keep medical records with sufficient information to monitor a patient’s functional progress and document need for care.

ATTITUDES

The graduate should exhibit behaviors consistent with:

- A patient-centered, rather than disease-oriented medical ethic.
- Concern for the social, cultural and economic implications of a patient’s disorder.
- The willingness to seek long-term solutions for chronic problems.
- Empathy and compassion for patients with chronic illnesses and disabilities. (QCOM objective 5.1)
- Respect for and willingness to work in harmony with other members of the rehabilitation team. (QCOM objective 4.4)

CURRICULUM REVIEW

YEAR 1

Doctoring I/Case-Based Learning

- Case involving Stickler Syndrome emphasizing activity prescriptions to minimize progression of arthritis and rehabilitative means methods to maximize quality of life has been removed from Case Based Learning.
- Introduction to Chronic Disease and Introduction to Rehabilitation lectures (previously part of Profession of medicine) are now part of Cased Based learning in Doctoring I. This includes lecture and small group facilitated discussion of rehabilitation in the context of care for chronic diseases emphasizing rehabilitation as a component of care for many chronic diseases covering:
 - Physical rehabilitation
 - Cardiac rehabilitation
 - Pulmonary rehabilitation
 - Neurological rehabilitation post CVA

Medical Human Gross Anatomy and Embryology

- For each anatomical region (for example, head, neck, shoulder, elbow, etc.), students learn about common injuries or clinical disorders that require physical therapy for proper recovery.
- Through interactive hands-on sessions students
 - Learn how to recognize the injury/disorder
 - Assess the extent of the injury or disorder
 - Stabilize the injury
 - When necessary, refer the patient to the most appropriate therapist for further action
 - Manage or treat the injury or disorder using various modalities
 - Prevent further injury by increasing strength and flexibility of the affected area, or provide other protective measures
 - Assess the ability of the patient to return to their normal routine.
- A lecture and module on pelvic floor physical therapy with a Pelvic Floor Physical Therapist.

Lifespan Development

- Presentation by director of a rehabilitation facility specializing in patients with traumatic brain injury emphasizing psychosocial aspects of rehabilitation.
- Required reading covering psychosocial aspects of rehabilitation is covered.

YEAR 2

Practice of Medicine

- Cardiac rehabilitation is introduced as a didactic presentation
- Cardiac rehabilitation is a component of two cases as part of the treatment plan in cases of Peripheral Arterial Disease and ST Elevated Myocardial Infarction

Integrated Grand Rounds

- Includes elements of rehabilitation in at least two cases per year.

Clinical Neurosciences

- Rehabilitation in chronic neurologic illnesses introduced in setting of clinical cases.
- Patients with neurological disabilities are discussed in class by
 - o Faculty in Biomedical Sciences
 - o Faculty in Physiotherapy
 - o Clinical Neurologists.
- Medical students work side-by-side with physical therapy students discussing options for rehabilitation for several neurological diseases presented during the course (i.e. Multiple Sclerosis, Strokes, Trauma, Infections, congenital malformation, etc).

Career Exploration II

- Physiatry presented as a career option in lunch and learn session.

Medical Pharmacology

- Lectures discussing use of methadone, buprenorphine, and disulfiram in treatment of opioid addiction and alcohol addiction.

Introduction to Psychiatry

- Didactic session regarding addiction and introduction to drug rehabilitation.

- Additional session involving patients who had experienced rehabilitation as part of this topic.

YEAR 3

Community Medicine Clerkship

- 1-2 day clinical experience at LeConte Medical Center for all students with exposures to:
 - o Physical therapy
 - o Speech pathology
 - o Occupational therapy
 - o Half day shadowing a Physical Therapist in a PT Clinic.
- Assigned modules and assigned readings covering Occupational Therapy.

Family Medicine Clerkship

- Didactic presentation “Introduction to Rehabilitation Medicine: An Overview for Students and Residents” to all students with an emphasis on
 - o Physical disabilities
 - o Assistive devices
 - o Occupational therapy
 - o Speech therapy
 - o Physical therapy
- One half-day rehab experience in Skilled Nursing Facility.
- Home visits include requirement of history and physical exam and needs assessment of the home to determine needs for resources including rehabilitative services or assistive devices.
- Palliative care and the impact of chronic disease on the family and community is addressed in didactic and rounds.
- One of the structured cases (fmCASES #22) that addressed stroke rehabilitation has been removed as fmCases no longer utilized.

Internal Medicine Clerkship

- Cardiac rehabilitation didactic presentation.

Rural Primary Track Clerkship

- Students have options of working with Physical Therapy and in the local nursing home or SNF settings where general rehab is highlighted.

Surgery Clerkship

- Role of various rehabilitative professionals in trauma recovery is emphasized.
- Surgical consultation is regularly encountered among drug and alcohol rehabilitation patients, specifically at the VA Medical Center.
 - o Drug and alcohol rehabilitation related issues are addressed in this context.

Pediatrics Clerkship

- Clinical exposure to developmental pediatrics, evaluation and treatment of children with developmental delays.
- Students are exposed to a variety of inpatient therapies including to speech, occupational and physical therapy and learn when appropriate referral is needed in the management of a variety of inpatient and outpatient pediatric problems.

OB/GYN

- Introduction to Pelvic Floor Physical Therapy is made on the Urogynecology subrotation and during Urogynecology didactics.
- Student rotation through a Subutex Clinic addressing drug addiction and pregnancy has been added

Psychiatry

- Students have broad exposure to patients in detox and rehabilitation related to substance abuse disorder at both the VA and Woodridge Hospital.

Specialties

- Elective opportunities if a student chooses in Sports Medicine or Physical Medicine and Rehabilitation which addresses various rehabilitation issues.
- Elective opportunities in Addiction Medicine at High Point Clinic.

Year 4

Keystone Course

- Presentation on physicians and addiction
- Presentation by Psychiatrist covering:
 - o Introduction to the field of Physical Medicine and Rehabilitation (PM&R)

- Definition of rehabilitation and the basics of rehabilitation care
- Description of common PM&R problems, including acute and chronic pain, stroke, spinal cord injury, joint replacement, traumatic brain injury, amputations, burns, chronic neuromuscular diseases, sports-related and industrial injuries, and arthritis sequelae
- Economic consequences of chronic illnesses (TBI as example)
- Patient consequences of chronic conditions (including bed rest, decubitus ulcers, and cognitive decline) and importance of prevention of a secondary insult (hypotension, hypoxemia, etc.)
- Discussion of patients who may benefit from inpatient rehabilitation
- When to consult the services of PM&R & the role of the PM&R physician and the PM&R Interdisciplinary Team
- Services involved with PM&R (PT, OT, Respiratory Therapy, Speech Therapy, etc.) and descriptions of each
- Types of post-acute care: Inpatient rehabilitation Facilities, Skilled Nursing Facilities, Cancer Rehabilitation Centers
- Ways PM&R patients recover from their illnesses
- PM&R Clinical Cases
- Discussion of trauma outcomes (in %-ages – those who can return to work, those with major sequelae, etc.)
- Sample consults for early post trauma and for later post complications
- Criteria for inpatient rehabilitation
- The 1987 OBRA “The Federal Nursing Home Reform Act of the Omnibus Budget Reconciliation Act”
- Rehabilitation reimbursement criteria

PREVIOUS RECOMMENDATIONS ACCOMPLISHED SINCE LAST REPORT

1. Clarify Goals and Objectives of the curricular thread to those delivering rehabilitation content.
2. Create introductory session in a current course that provides an overview of the content of the curricular thread to better leverage existing content throughout the curriculum and clarify goals and objectives to students as well as provide an overview of the content.

- Accomplished with CBL module

CURRENT RECOMMENDATIONS

1. Continue to pursue and develop inter-professional opportunities in the pre-clerkship and clerkship years with ETSU College of Clinical & Rehabilitative Health Sciences and other schools and professionals in the community.
2. Continue to expand opportunities for student exposure to rehabilitative clinics/programs for students.