**Title and Focus of Activity:** Home Exercise Program

*Plan of Care*

**Contributor(s):** Beth Crowner PT, DPT, NCS, MPPA, [crownerb@wustl.edu](mailto:crownerb@wustl.edu); Marghuretta Bland PT, DPT, NCS, MSCI [blandm@wustl.edu](mailto:blandm@wustl.edu)

Washington University Program in Physical Therapy-St. Louis, MO

**Course Information:**

Diagnosis and Management of Neuromuscular Conditions II**;** 4 credit hours**;** Year 2 in the Spring; It occurs after Neuroscience (neuroanatomy), Neurology Medicine (medical management of neuromuscular conditions) and Diagnosis and Management of Neuromuscular Conditions I (neurologic examination) courses.

**Learning Activity Description**: Context/Purpose: Physical therapists must often select and prioritize home exercises for patients with complex neuromuscular diagnoses who are also predisposed to developing musculoskeletal pain conditions. Additionally, if patients live far away from the evaluating therapists, the provider may only see the patient for 1-2 visits, necessitating instructions for exercises progression and mechanisms to monitor adherence. Exercises should be directly related to activity limitations or body/structure/function variables that are limiting to the patient. This assignment helps students to develop skills in selection and prioritization of home exercises that are related to activity limitations or participation restrictions and related to a long term goal for the patient and/or caregiver. In the context of the assignment the student/therapists is a consultant establishing a plan of care (exercises) that the patient/family will continue to do after a single visit.

**Complex Cases: Development of a Home Exercise Program for an Adult or Pediatric Case**

Description:

During this session, students will view a videotaped examination of either an adult or a pediatric patient with a neurologic condition. Half of the class will view and discuss the pediatric case and the other half will discuss the adult case, each with the guidance of a faculty member.

After viewing the video of the patient case, the following will be discussed as a group:

* most likely movement system diagnosis for PT, based on observations and brief descriptions
* activity limitations and priorities for treatment
* short and long term goals
* implications of age and family on treatment selection
* treatment ideas and rationale
* how you would incorporate principles of motor learning into your HEP (indications for practice and feedback to improve performance and/or learning)
* potential effects of neurological deficits on the development of orthopedic deformities

Assignment

You will assume you have seen this patient for evaluation only and no further ongoing therapy is planned. As a consultant it is up to you to recommend activities or exercises that address the major problems of the patient. You will have to devise a method of follow-up that does not include you seeing the patient for treatment.

Working independently, each student shall develop a home program that consists of four exercises for the patient he/she discussed in class. Assume in the pediatric case that the parents will be assisting the patient. Assume in the adult case that the patient needs to do the exercises alone. Submit the home program to the instructor in the same form you would truly provide to the parent or patient (with clear appropriate instructions and any needed drawings etc.) If you choose to use Physiotools, be sure the instructions and pictures are appropriate and customized as necessary.

For each exercise, you need to list:

1. the activity limitation the exercise addresses
2. the specific body/structure/function (impairments) that contribute to the activity limitation (e.g. if weakness is an issue, identify the muscles that are weak that limit the task; don’t just say “weakness”)
3. one long-term goal (LTG) which the exercise addresses. Be sure the exercise addresses the problems that are of priority, as discussed in class. (The time frame of your LTG is up to you and can be between 1-12 months.) The LTG should be functional, achievable, specific, and measurable.

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| --- | --- | --- | --- |
| Name of Exercise | Activity Limitation Addressed by the Exercise | Specific Body/Structure/Function (Impairments) that Cause Activity Limitation | LTG |
|  |  |  |  |

Design and present the method(s) that indicate adherence of the patient or parents with the exercises and which will at some point provide you with (1) an accurate and honest indication of how often and how completely the home program was done and (2) some idea about whether or not the program needs modification. Be sure to provide instructions that you would give to a patient/family! When should the patient contact you? How will the patient contact you? Remember, you are only seeing them on time, with no planned follow-up visit.

Time for student to complete the activity: Preparation for activity outside of/before class: Approximately 1-2 hours ; Class time completion of the activity: 1 hour

Readings/other preparatory materials: There are no assigned readings.

Learning Objectives:

After viewing a video based case and discussing findings with the faculty facilitator, students will:

1. Identify four exercises that are priorities for the given patient case.
2. Describe the specific body/structure/function variables and/or activity limitation addressed by each exercise.
3. Write an appropriate functional long-term goal that the exercise addresses.
4. Create a home exercise program that is patient centered, in lay language, includes a mechanism to promote adherence, and incorporates exercise progression over time.

Methods of evaluation of student learning:

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Check one:** Adult case \_\_\_\_ Pediatric Case \_\_\_\_

For each exercise #1 #2 #3 #4

* identifies the activity limitation addressed by the ex. 1 1 1 1
* identifies body/structure/function ( impairments) 2 2 2 2

related to activity limitation identified

* exercise is appropriate for patient 2 2 2 2
* instruction format is detailed and appropriate 2 2 2 2
* addresses stated activity/impairments 2 2 2 2
* exercise is related to the goal stated 2 2 2 2
* LTG’s are functional/specific/measurable 2 2 2 2

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/52

Method to assure an accurate indication of the frequency with /5

which the program is performed (age appropriate, instructions clear,

method clear, appears to enhance compliance yet promote honest records)

Overall professional appearance of the HEP /3

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/60