

**Medical University of South Carolina**  
**Neurologic Physical Therapy Residency**

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**USING TECHNOLOGY to TEACH EVIDENCE BASED PRACTICE**

**MUSC Neurological Residency Interactive Case Studies**

The purpose the case studies is to have the residents present a case they are working with via written and video, identify an evidence-based intervention that applies to the case, review the evidence with their peers, then apply the evidence on their patient and reflect on the intervention and discuss with their peers. This assignment uses technology for the initial presentation of the case to the group of residents as well as a video of the evidence-based intervention trial. We use Web ex for all of our conversation and discussion.

Instructions for Case Study:

Week 1

1. Residents should pick a patient they are working with that follows the current residency topic (SCI, Stroke, MD, Vestibular or TBI)
2. Prepare your written case study based on the template provided and videotape your patient with some functional mobility to “paint a picture” for the group. -Make sure to get a signed consent from your patient and submit it to the moodle site.
3. Talk with your mentor about the case as well as the intervention you are considering
4. Go to the evidence and identify an appropriate article with an intervention for your patient
5. Show your mentor your article and discuss its appropriateness for your specific case
6. Submit your article so that all residents review the article.
7. Complete your journal review on the template
8. On Web ex call one-present your patient and discuss your journal with the group. Make sure that you can speak to WHY you chose this intervention and what you hope to accomplish. Be prepared to discuss the journal itself

Week 2

1. Apply the evidence that you researched on your patient for at least the entire week. Try to apply the evidence as written but make modifications as needed. Note the modifications and why you needed to modify as part of your reflection
2. Video the intervention with your patient
3. Complete the final reflection
4. Be prepared to show the video of the intervention and articulate your reflection and lead the discussion with your peers on Webex



# Neuro Residency Case Study Template

Each case study will consist of the following:

- Brief Patient History
- Physical Therapy evaluation findings
- Description of PT treatment interventions incorporated to date
- Video of patient **PRIOR** to introducing specific evidence-based intervention
- Journal review and description of evidence-based intervention you want to try and what led you to this intervention
- Video of patient attempting evidence-based intervention
- \*\*\* The patient you chose for this case study **SHOULD** be a patient for which you are receiving mentoring.

# Patient Case History

Name:

Age:

Diagnosis

Sex:

Patient's lifestyle/occupation:

Brief history of problem for which patient is referred to PT:

Abnormal Labs/impact of therapy:

Pertinent medications and what they are for/side effects that may affect therapy:

Past medical history:

# PT examination and Treatment

Abnormal ROM

Abnormal MMT

Abnormal Sensation

Functional Mobility

Gait

OM's Used and scores

Interventions to date:

Effective or not?

Interventions being considered? WHY?

Journal Review:

Describe WHY you chose this article/intervention.

Outline the purpose of the study and relevance to Physical Therapy?

Describe how sampling was done. Was the sample size adequate?

Describe the study design. Was this design appropriate for the study question?

List outcomes areas and Outcome Measures used for each area.

What type(s) of data was collected? Was the statistical test utilized appropriate for the data type being assessed?

What was the clinical significance of the results? And how does this apply to your patient?

What did the study conclude? What are the implications for physical Therapy Practice?

## DISCUSSION

How do you feel implementation of the evidence-based intervention(s) went with your patient?

Were there any barriers to implementing the intervention of the case?

Can the intervention(s) be modified to meet your patient's needs?

What would you do different at the next session?

What feedback did you receive from your mentor that you were able to incorporate into your treatment with this patient?