Thesis Project for graduation with a Doctorate in Physical Therapy: CASE STUDY

The case study allows you to integrate and apply information across courses in your physical therapy professional education. Case studies help you sharpen your analytic skills for patient/client management through the process of gathering and synthesizing information, identifying problems, determining the prognosis, developing interventions, evaluating outcomes, and integrating prevention and wellness strategies to prevent or limit disability.

- Your case study must be turned into your advisor two weeks prior to the completion of the clinical rotation in which it is assigned.
- During the first week of this clinical rotation you will identify a patient for the case study. You will discuss your selection with your clinical instructor to ensure that you will have access to the necessary materials to complete the case study. Choosing a patient for the case study can be a daunting thought but it does not have to be. Advisors would like to be consulted directly, early, and often about the case.
- We are now **REQUIRING** that you make contact with your advisor during the 2nd week of the clinical to tell them what case you have chosen. Your advisor can be a HUGE help in choosing a case. They know what works and what does not work. Your CI is unlikely to know which patients work for this project. The CI is an integral and important person to help you gather the patient information that you need for the case.

Included in this document are:

- 1. Guidelines for writing the case study
- 2. Guidelines for the oral presentation
- 3. Grading rubric
- 4. Sample title page

I have posted to Carmen two sample case study papers. Should be in foundation course.

Guidelines for DPT Case Study:

- 1. Students will purchase the book: "A How to Manual for clinicians Writing Case Study Reports 2nd ed. or 3rd ed." Purchase the book from a peer in the class before yours or from the office. (Make checks out to "OSU Physical Therapy Division")
- 2. Use the book to help format and edit the case study report. You should review Section 1 to assist you in choosing a patient and to understand the overall goal of the process. This section reviews the how and whys of case studies and deciding what to measure.
- 3. The paper should follow the format described under Section 2, chapters 5-9
 - a. Title page
 - b. Abstract (you write this LAST)
 - c. Introduction
 - d. Describing the Patient
 - e. Describing the Intervention
 - f. Describing the Outcomes
 - g. Discussion
 - h. Analysis of Fiscal Impact (this is not in the book but is an OSU requirement) NEXT go to Chapter 10 and work on your figures, tables, title, abstract and references.
 - i. References

See Appendices 4, 5, and 6 for examples.

PLEASE note that case studies do NOT simply relate back the care given in the exact timeline it was given. The purpose of the case is to describe an interesting case and how it impacts some aspect of physical therapy care. You examine the literature to discuss the evidence behind the care you provided. You reflect on the plan of care and discuss changes you would make when treating this type of patient again.

You MUST have **Outcome Measures** – pre and post. No student has been told that they cannot collect outcome measures they wish to collect. Ask. The outcome measures you choose must be supported by the research literature. So, once you choose your patient you had better begin searching the literature immediately. If you discover you need to change something you can do it if you are staying on top of things.

- 4. Peer Review During Autumn Semester and Spring Semester will submit your paper to your peers for peer review (your advisor's other advisees for the DPT). Then make changes based on the peer review. USE CHECKLIST IN APPENDIX #3 as an aide in doing the peer review.
- 5. Faculty are encouraged to meet with their advisees as a group as soon as you all return for Autumn Semester classes which should be facilitated by the peer review process.

- 6. References:
 - AMA format!
 - The references themselves are single spaced; there is a space between references. Example:
 - 1. Mazzeo R, Tanaka H. Exercise prescription for the elderly. Sports Med. 2001;31:809-818.
 - 2. Paterson D, Jones G, Rice C. Ageing and physical activity: evidence to develop exercise recommendations for older adults. *Appl Physiol Nutr Metab.* 2007;32:69-109.
- 7. Tables and Figures: Include these within the text.
- 8. Some good types of patient cases for a case study are:
 - Cases for which new treatment protocols you have learned about or heard about are likely to be more effective than traditional practice, so that you can show an impact of your care
 - Cases for diagnoses not typically seen by PT, but for which you can demonstrate that you treatment has a strong impact, so you might have an influence in expanding our practice
 - Cases involving more than one problem where there might be competing influences, such that creative solutions are required to address both problems without exacerbating either
 - Cases that involve issues such as financial problems, or difficulties with some aspect of care provision (ie: inter-disciplinary issues, facility issues etc..) The kinds of issues from professional issues courses. These have made some of the BEST cases submitted to date
- 9. You are unlikely to find the perfect case in such a short time. You may wish to do a case on CVA but if you don't see a patient with CVA in the first week then you need to change course. Students tend to be too picky and be very limited in how they view possible cases. So, CALL or email your advisor. Run your patient cases by them. We are very good at identifying cases that work well for case studies. You can NOT sit back and wait for the perfect case to fall into your lap. That could take a year. You don't have a year. So, CALL or email your advisor. Talk through the patients you are seeing and choose your case early. Collect outcomes. COLLECT OUTCOMES. (this means we expect to see some standardized outcome measures!)
- 10. You can choose to add an outcome measure at almost any time along the continuum of care. So, if your research makes you realize you should be doing XYZ then add it. Better late than never. CI's may not typically do this many outcome measures but when they have agreed to you doing this patient as your case study they are very likely to agree to you collecting extra data. ASK.
- 11. In general, you should strive to select patients who will be reliable, compliant, and available for follow-up.

- 12. You should make an outline of your case report early in the process and use this to be sure you are collecting all of the outcomes that you will need in order to write a good case study.
- 13. Review the grading sheet and the examples of case studies written by previous students BEFORE you leave for your clinical. One note, you MUST NOT INCLUDE PERSONALLY IDENTIFIABLE INFORMATION IN YOUR CASE. The means you cannot identify the patient by his or her initials. You must refer to the patient as "him," "her," or "the patient." Likewise, you should not include the precise dates. State all time frame relative to each other. For example, The pt. is 63 years old. When he was 53, he broke his ankle. During the first week of treatment he was non-weight bearing, but for weeks 2-5, he was weight bearing as tolerated." It should not be possible from what is written in the case for me to go into the medical records department and deduce who your patient actually was. Past cases may not be perfect examples on this point.
- 14. Students are encouraged to submit their case study to the PT journal for publication along with their faculty advisor. Faculty advisors will encourage publication of appropriate case studies. Authorship will include the student and the faculty advisor. Other persons may be included when appropriate (*e.g.*, the CI).

15. Suggested Due Dates:

- 1. Final case study due by 8th or 9th week of the clinical
- 2. Faculty edits back to student within 2 weeks
- 3. Student edits to be done:
 - a. if first clinical by the first day of Autumn semester courses
 - b. if second clinical by the end of week 2 of autumn semester

4. Faculty meet with students 2nd week of Autumn and discuss and come up with a system for peer exchange.

5. peer edits due by end of week 5 of autumn and revisions of those done by end of week 7 of Autumn

6. week 5 faculty and students meet and arrange for 2nd peer edits

7. 2nd peer edits due by end of week 2 of spring semester and student edits are due 1-2 weeks later.

8. Faculty work on edits have to students by 5th week of spring semester

9. Week 1 of spring semester groups meet.

10. spend Spring semester working on final edits and the presentations. Most papers should be complete with only very minor edits by the 5^{th} week of Spring semester.

11. Goal is that presentations are ready for a first rough draft practice round 1.5 to 2 weeks prior to the date of the defenses (~ week 8 in spring semester is when defenses occur)

12. Schedule a practice time for all presentations one week before the DPT defenses which is timed.

13. DPT defense is the week prior to the initiation of practicums.

Guidelines for Oral Presentation

Students will present their case study to a group of faculty and peers. This presentation will be oral.

Oral Defense of Case Study:

- 1. Each student will be allotted 15 minutes for their presentation 10 for the presentation and 5 for questions.
- 2. Student will prepare a 10 minute PowerPoint presentation on their case study
- 3. This presentation will be made to a minimum of 3 defense members and a group of the students' peers.
- 4. Students must pass the oral defense to receive their DPT. Failure of the defense results in remediation during summer, must register for additional credit hours under PT 8999.

Oral Defense is your Doctoral Dissertation. This is a very important event for doctoral students. The dissertations are scheduled during finals week of spring quarter. Do NOT schedule anything this week until you know the day and time of the oral defenses. These are done in groups and require three graduate level faculty so they can NOT be re-scheduled for one person.

Passing = 16 of the scores are at meets or exceeds expectations * = Must be included and graded at meets expectation or exceeds for a	Inadequate	Meets Expectations	Exceeds Expectations
passing grade on the paper. *			
Title page			
Introduction – (Why is this case interesting? What clinical			
question do you need to answer?)			
background and purpose			
*a review of literature investigating the problem, evaluation,			
treatment etc*			
importance of the problem			
Case Description			
Patient Classification:			
Practice Pattern			
ICD-9-CM codes			
Other classification systems if relevant (e.g. McKenzie, SCI, etc)			
Examination (clinical presentation of the patient. You can put actual data			
from the PT exam in table(s). Tables may be in the body of the paper or in an			
appendix. Summarize key points of the PT Exam in narrative form.)			
History			
Systems Review * Must include, make appropriate to your patient's diagnosis/co-morbidities. Always screen cardiac. Do a narrative – interpret your			
findings. Do not just fill out the form from the Guide but do use it as a template			
to help you. Blood Pressure and Pulse rate* readings taken and reported			
when appropriate throughout episode of care – or fail paper.			
Blood Pressure and Pulse rate*			
Tests and Measures			
Evaluation, PT Diagnosis, and Prognosis (supported by evidence			
from the literature and clinical reasoning grounded in science and theory)			
Intervention (supported by evidence from the literature, where			
possible, or clinical reasoning grounded in science and theory)			
Outcomes including Goals			
Reexamination			
Criteria for Termination of Physical Therapy Services			
Discussion (draw conclusions, discuss implications and make			
recommendations)			
Reflecting on this patient: If presented again with a similar patient or			
problem what would you do? Was there access to services that was			
particularly helpful or that was lacking and could have improved care? Was there adequate research/literature to guide your care of this patient?			
Analysis of the fiscal impact (Summary of the fiscal impact of the			
physical therapy intervention on the patient based on estimates of charges			
and the patient's insurance coverage)			
References:			
AMA formatted bibliography (>60% of references are research			
articles or systematic review)			
referenced within the paper appropriately			
General overall grading items:			
terminology consistent with that of <i>The Guide to Physical</i>			
Therapist Practice			
typed, double-spaced, 12 point font			

TITLE OF YOUR CASE STUDY HERE, CENTERED AND IN ALL CAPS

Presented in Partial Fulfillment of the Requirements for the Degree of Doctor of Physical

Therapy in the

Graduate School of The Ohio State University

By

Your Name

The Ohio State University 20XX

Doctoral Examination Committee:

Dr. xxxxx, PT, PhD

xxxxxxx, MS, PT

Dr. xxxxxx, DPT, MS, GCS

Advisor School of Health and Rehabilitation Sciences

Approved by