## **CLINICAL CASE STUDY GUIDELINES**

#### **PURPOSE**

The purpose of case studies is to expose the ATS to an organized way of developing the student's clinical reasoning skills which are based on the knowledge and skills that the student develops in MAT program lecture and lab classes. The case study follows the "P.I.C.O." model of evidence-based medicine which is comprised of a series of four sets of guided questions to help the student formulate an appropriate question. This exercise will provide documentation of the ATS's thought process when the ATS's preceptor evaluates the student utilizing the Written Clinical Evaluation Form that is completed twice a semester. At the end of each semester the ATS will submit their completed case study to their assigned clinical education course faculty (e.g. clinical coordinator) with the expectation that a minimum of one (1) case study must be submitted for publication or presentation to a professional organization related to athletic training prior to the completion of their MAT degree. Examples of professional organizations include but are not limited to the National Athletic Trainers' Association (NATA), Southwest Athletic Trainers' Association (SWATA), Texas State Athletic Trainer's Association (TSATA), American College of Sports Medicine (ACSM), National Strength and Conditioning Association (NSCA), etc.

### **IDENTIFYING A CASE STUDY**

Each student has very similar experiences in clinical education but a variety of different experiences. Once per semester the ATS will be evaluated on the application of clinical knowledge and skills in the related Clinical Education course (ATP 6191, ATP 6192, ATP 6193, ATP 7194, ATP 7195, ATP 7196). The student will use P.I.C.O. model (shown below) of evidence-based medicine as a guide to identify which learning experiences to choose based on the student's current and previous semester's clinical education and/or experiences and courses. For example, if a student is enrolled in ATP 6191and studying anatomy and emergency management and prevention of injury, that student cannot choose to write about a clinical education and/or experience relevant to ATP 6193 which would include upper-extremity evaluation. Please see the "Outline of course sequence and clinical education" (p11) and related materials.

# **P.I.C.O.** Model for Clinical Questions

<u>P</u>	Patient, Population, or Problem	How would I describe a group of patients similar to mine?
<u>I</u>	Intervention, Prognostic Factor, or Exposure	Which main intervention, prognostic factor, or exposure am I considering?
<u>C</u>	Comparison or Intervention (if appropriate)	What is the main alternative to compare with the intervention?
<u>o</u>	Outcome you would like to measure or achieve	What can I hope to accomplish, measure, improve, or affect?
-	What type of question are you asking?	Diagnosis, Etiology/Harm, Therapy, Prognosis, Prevention
-	Type of study you want to find	What would be the best study design/methodology?

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The following are guidelines for the case study. Please keep in mind that timelines are scheduled to change as deemed necessary by the course instructor:

#### **Choosing a Case Study:**

- 1. The ATS must formally propose a case study to the course instructor and assigned preceptor. The final decision for case study approval must be made by the course instructor and preceptor.
- 2. Once a case study is selected, the ATS must receive permission from the patient/client for the release of medical information for presentation and/or publication of the management of that patient's/client's injury (please see Case Study Patient/Client Release Form). The patient's/client's name and all related personal identifiers will be removed and deleted to protect the patient's/client's privacy. Two (2) permission forms are included in this handbook. Please keep in mind, if the patient/client is a minor, prior permission from the patient's/client's parent and/or legal guardian must be obtained.
- 3. Two students who are under the direct supervision of the same preceptor may choose to present the same case study; however, each student must complete a case study demonstrating his/her independent work. Prior signed approval from the course instructor and preceptor will be required. The final grade will be determined by the course instructor using the grading rubric outlined on the "Criteria and Evaluation of a Case Study" form (listed below).
- 4. Students will <u>NOT</u> be permitted to choose a case study that is not a part of their preceptor's case load.

#### **Instructions for Preparing the Case Study:**

Prepare your case study in accordance with the following instructions.

- 1. The case study must be typed in Microsoft Word.
- 2. Top, bottom, right, and left margins of the body of the case study should be set at 1" using the standard 8.5" x 11" format. Use either Arial or Times New Roman 12pt. font with single spacing.
- 3. Provide a title page formatted only with (in this order): Title of the Case Study (limited to 20 words), your full name and your preceptor'ss full name (use "and" between your respective names), University of Houston, your case study semester (e.g. "Fall 2016"), and date of the case study submission.
- 4. On the next page, format an abstract that includes the following headings and is no more than 450 words. Begin entering the body of the abstract flush left in a single paragraph with no indentions. Use no first-person terminology (e.g. "I', "we", "me"). The text of the abstract body must be structured with headings as follows:

- **Background** provide a background of the associated injury or condition
- **Patient** provide demographics, the chief complaint, and mechanism
- **Findings** report on special tests, ROM/MMT findings, and other measures
- **Diagnosis** list the diagnosed injury
- **Treatment** detail the treatment plan and expected or achieved outcomes
- **Uniqueness** explain why the public needs to be aware of this injury, condition, or treatment
- **Conclusion** explain what this case study concludes
- 5. On the next page, begin the body of the case study using the same headings as in the abstract and same formatting guidelines listed above. There is no minimum or maximum length; rather, it is expected that the case study is of adequate length to include all relevant material
- 6. Citations must be included in the body of the case study. On the first new page after the body of the case study, format a bibliography page using AMA or APA style.
- 7. When complete, email the case study to the course instructor prior to the deadline outlined in the syllabus calendar. Attach the case study to an email with a subject line of "(Semester) Case study (Last name)".
- 8. Any case study received in the course instructor's email box after the stated time deadline (e.g. 11:59:59pm) will receive an automatic 50% reduction in points.

Students are recommended to refer to previously published clinical case studies for further assistance in formatting their individual case studies.

# CRITERIA & EVALUATION OF CLINICAL CASE STUDY

Categories	Scales
	3=provides appropriate background and relevant information that is correctly cited.
Introduction and Summary of Existing Research (briefly summarize the current literature on this case)	2= provides appropriate background and relevant information that is incorrectly cited.
	1= provides inappropriate references.
	0= provides no references
atient, Population, and Problem: (age, sex, sport/occupation of individual, primary complaint and pertinent aspects of his/her medical history)	3= patient data and/or population data provided; clearly and concisely identifies and communicates primary complaint and pertinent aspects of medical history.
	2= patient data provided and identifies primary complaint and pertinent medical history.
	1= some patient data missing or unclear; very wordy and does not communicate effectively the exact primary complaint and/or medical history.
	0= no relevant information provided concerning this injury or patient/client was identified.
Intervention, Prognostic Factor, or	3= provides a concise summary with appropriate information given; communicates very clearly and specifically details the criteria.
Exposure: (differential diagnosis and/or diagnosis, severity of disease, a concise	2= a summary of the criteria; needs to be more concise and specific, not comprehensive enough.
summary of the physical findings)	1= very wordy and unclear; does not provide adequate information.
	0=inappropriate criteria, very difficult to read and understand.
	3= provides an accurate and specific list of interventions.
Comparison or intervention (if appropriate): (treatment (e.g. surgical,	2= provides a minimum amount of information specific to interventions.
modalities, physical rehabilitation, etc.)	1= provides at least one absolutely incorrect intervention does not relate.
	0= provides no real list of other possible intervention.
	3= provides adequate and realistic information that outlines the expected result(s) of the intervention.
Outcome you would like to measure or	2= provides unclear information regarding the expected results of the intervention.
achieve (expected results from intervention)	1= provides some inadequate information about the results of the intervention.
	0= does not provide any specific information about results of the intervention.
	3= provides a clear and concise explanation of the uniqueness of this case.
Deviation from Expectations	2= provides a minimum amount information and explanation.
(a brief description of what makes this case unique)	1= provides an adequate explanation but no insight into the uniqueness of this case
umque)	0= provides no realistic explanations or reasoning for the uniqueness of this case.

Students must demonstrate a "2" or above in each category to be considered competent.

## RELEASE OF CLINICAL CASE STUDY MEDICAL INFORMATION

# **PURPOSE**

courses (ATP 6191, ATP 6192, ATP 6193, Athletic Training Program at the University an injury under the direct supervision of an	etic Training Students enrolled in clinical education ATP 7194, ATP 7195, ATP 7196) in the Master of of Houston to specifically study the management of assigned preceptor and then potentially share that arse presentation, presentation at professional tion at a professional organization).
release of information regarding my injury a audio/visual images (e.g. medical imaging f	, freely give my consent for the and all related medical information as well as all films and related materials) for use in a case study Program Student)
education courses (ATP 6191, ATP 6192, Athis information for the following: course proportion of the property	letic Training Program Student enrolled in clinical ATP 6193, ATP 7194, ATP 7195, ATP 7196) to use resentation, presentation at professional conference, fessional organization. I understand that my name nain strictly confidential at all times and will not ly.
Signature:	Date:
(Patient/Client)	
Signature:	Date:
(Parent or Legal Guardian if minor)	
Signature:	Date:
(Master of Athletic Training Program Studen	nt)
Signature:	Date:
(Assigned Preceptor)	
Signature:	Date:
(Course Instructor)	