PATS CALL FOR ABSTRACTS

PATS Poster Presentations
Pennsylvania Athletic Trainers' Society Annual Meeting and Clinical Symposium
Sheraton Harrisburg/Hershey, PA
June 7th – June 8th, 2024

DEADLINE FOR ABSTRACT SUBMISSION: April 7th, 2024

The Pennsylvania Athletic Trainers' Society Free Communication Committee is accepting abstracts from Athletic Training Students, Certified Athletic Trainers, and other health care professionals for poster presentations on topics which are pertinent to the practice of Athletic Training. If an athletic training student is submitting an abstract, they must have a health care professional listed as a secondary author.

Process for submitting abstracts:

1. All abstracts must be submitted ONLINE. Attach the original abstract and a cover letter that indicates if you are student or professional, the presenter's mailing address, city, state, zip code, phone, and submit ELECTRONICALLY (via email) to Aaron Hand at aaronhand@kings.edu. Please include "poster abstract" in the subject of the email. A confirmation message will be sent once the files have been received. The format for electronic submissions should be in Microsoft Word or PDF files. ***Please include a second abstract with the authors removed for blind reviewing purposes. Also, all abstracts should be submitted with plain background and Not on letterhead.***

2. The abstract should follow the format utilized by the NATAREF and fall into one of the following categories: **Original Research**, **Survey Research, Qualitative Research, Mixed-Methods Research, Critically Appraised Topics**, **Type 1-3 Clinical Case Study, or Type 4 Clinical Case Study.** The author is responsible for determining the most appropriate category for structuring their abstract.

Format for Original Research Abstracts

The Title of your Abstract Bolded and in Title Case

Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

Context: Write a sentence or two summarizing the rationale for the study, providing a reason for the study question and/or uniqueness of the study. State the precise objective(s) of the report, including a priori hypotheses, if applicable. The objective/purpose statement MUST identify the target population, intervention or exposures, and outcomes.

Methods: Describe the overall study design of the project reported (e.g., randomized controlled trial, crossover trial, cohort, or cross-sectional). Describe the environment in which the study was conducted to help readers understand the transferability of the findings (e.g., patient clinic, research laboratory, or field). Describe the underlying target population, selection procedures (e.g., population-based sample, volunteer sample, or convenience sample), and important aspects of the final subject pool (e.g., number, average age, weight, height, and measures of variance, years of experience or gender). An appropriate sample size should be evident. Describe the independent variables (e.g., interventions, exposure) in the study. Describe the essential pieces of the experimental methods, types of materials, measurements and instrumentation utilized, data analysis procedures, and statistical tests employed. Identify primary or critical dependent variables that support the primary objective(s) of the study. Provide validity and reliability information on novel instrumentation. Indicate the statistical analysis employed to answer the primary research objective(s).

Results: The main results of the study should be given. Comparative reports must* include descriptive data (e.g., proportions, means, rates, odds ratios, or correlations), accompanying measures of dispersion (e.g., ranges, standard deviations, or confidence intervals), and inferential statistical data. The exact level of statistical significance should accompany results. The P-value should not exceed 3 digits to the right of a decimal. When the exact significance is below $P < .001$, the exact significance should be reported as $P < .001$. Tables and figures can be used to communicate the results efficiently. If tables or figures are included with the abstract, they need to be referenced in the abstract.

Conclusions: Summarize or emphasize the new and important findings of the study. The conclusion must be consistent with the study objectives and results as reported and should be no more than three to four sentences. Relate implications of the findings for clinical practice – provide a clinical take-home message/bottom line/recommendation that aligns with the objective(s). The clinical take-home message may address one or more of the following aspects of patients care: 1) financial implications, 2) equipment needs, 3) practicality of implementation, or 4) applicability of findings to various patient populations.

Word Count: Limited to 450 words, not including headings.

** The purpose of having both descriptive and inferential data is to provide the reader with the ability to judge the concluding statements. Descriptive data provide confidence that the data are 'reliable' and provides a gauge to determine whether the inferential statistics and conclusions are meaningful. Studies reporting analysis of larger databases with multiple variables do not need to report all descriptive data. However, they should provide descriptive data for those variables that the author(s) believe to be the primary outcome(s) and support the overall conclusions of the study.*

Format for Survey Research Abstracts

Please review the Survey Abstracts Tips & Tricks Video

The Title of your Abstract Bolded and in Title Case

Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

Context: Write a sentence or two summarizing the rationale for the study, providing a reason for the study question. State the precise objective(s), purpose, or question(s) addressed in the report.

Methods: Describe the overall study design of the project reported (e.g., cross-sectional, case-control, longitudinal, or controlled intervention trial). Describe the environment in which the study was conducted to help readers understand the transferability of the findings (e.g., population-based, patient clinic, classroom, or athletic event). Describe the underlying target population, sample selection procedures (e.g., population based, volunteer or convenience sample, random or systematic sample, or stratified or cluster sampling), and important aspects of the final subject pool (e.g., number, average age, years of experience or gender). Provide the final response rate as a percentage. Interventions are the independent variables in the study. Describe the essential pieces of the experimental methods, the mode of survey administration (e.g., in-person interview, telephone, self- administered, online, or computer-assisted), details of the survey development (formative research,pre-testing for new instruments, number of items, response options), execution and data collection process, and instruments used. Provide validity and reliability information for all instruments and relevant pilot testing. Clearly identify primary or critical dependent variables that support the primary objective(s) of the study. Describe how any data were manipulated (e.g., scoring process for scaled instruments or categorization of variables). Indicate the data and statistical analysis employed to answer the primary research objective(s).

Results: The main results (quantitative or qualitative) of the study should be given. Reports must include descriptive data (e.g., proportions, means, rates, odds ratios, or correlations), accompanying measures of dispersion (e.g., ranges, standard deviations, or confidence intervals), and inferential statistical data. Results should be accompanied by the exact level of statistical significance. The *P* value should not exceed 3 digits to the right of decimal. When the exact significance is below $P < .001$, the exact significance should be reported as $P < .001$. Themes and observations for open-ended questions should be described. This should include identification and brief explanation of the emergent themes.

Conclusions: Summarize or emphasize the new and important findings of the study and relate implications of the findings for clinical practice. The statement of your findings must be consistent with the results as reported and should be no more than three to four sentences. Relate implications of the findings for clinical practice – provide a clinical take-home message/bottom line/recommendation that aligns with the objective(s). The clinical take-home message may address one or more of the following aspects of patients care: 1) financial implications, 2) equipment needs, 3) practicality of implementation, or 4) applicability of findings to various patient populations.

Word Count: Limited to 450 words, not including headings.

Format for Qualitative Research Abstracts

Please review the Qualitative Abstracts Tips & Tricks Video

The Title of your Abstract Bolded and in Title Case

Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

Context: Briefly explain the rationale for the study – provide a background for the study question. State the precise objective(s) or question(s) addressed in the report.

Methods: Describe the overall study design of the project reported (e.g., critical theory or grounded theory). Describe the environment in which the study was conducted to help readers understand the transferability of the findings, (e.g., clinical setting or educational institution). Describe the underlying target population, selection procedures, and important aspects of the final subject pool (e.g., number, average age, and measures of variance, years of experience, or gender). Describe the essential pieces of the sampling methods (e.g., theoretical sampling and criterion sampling). Comment on why this number of participants was used (e.g., data saturation guided the total number of participants selected for the study). Describe data collection tool (e.g., interview guide, survey development and type) and validation. Describe how the data were collected (e.g., interviews, observations, or document analysis), managed (e.g., interviews were recorded and transcribed verbatim, identify if software was used), and analyzed (e.g., the interviews were analyzed using an inductive content analysis or consensual qualitative). Include intercoder agreement information if relevant to the study. Identify any verification strategies used to ensure trustworthiness (e.g., indicate the form of triangulation or debriefing).

Results: A short description of findings, the interpretation of the data, and theme consensus should be included. This should include identification and brief explanation of the emergent themes.

Conclusions: Summarize or emphasize the new and important findings of the study and relate implications of the findings for future research aor for clinical practice. The statement of your findings must be consistent with the results as reported and should be no more than five sentences. Relate implications of the findings for clinical practice – provide a clinical take-home message/bottom line/recommendation that aligns with the objective(s). The clinical take-home message may address one or more of the following aspects of patients care: 1) financial implications, 2) equipment needs, 3) practicality of implementation, or 4) applicability of findings to various patient populations.

Word Count: Limited to 600 words, not including headings.

Format for Critically Appraised Topic Abstracts

The Title of your Abstract Bolded and in Title Case: A Critically Appraised Topic
Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

Context: Write a sentence or two summarizing the clinical scenario leading to the clinical question. The clinical question should clearly identify the patient or population of interest (P), intervention or exposure (I/E), comparison or control group (C, when warranted), the outcome of interest (O), and time (T, when warranted). For more information on the PICO format and its variations, see the guide from the Center of Evidence-Based Medicine (https://www.cebm.ox.ac.uk/).

Methods: Identify how relevant research papers were identified – search strategy (e.g., electronic databases, hand search), databases, timeframe of search, keywords, and search limits. Describe the criteria for selection - the processes through which studies were selected for inclusion for further analysis. **Only abstracts reporting on literature from the past 10 years, but preferably 5 years (minimum of 3 papers), will be accepted. If more than 8 studies are identified, then the search/question may be too broad, or the question may be better answered with a systematic review or meta-analysis**. Describe the specific outcomes that were gathered from the included studies. Describe how the extracted data were organized and summarized (e.g., calculation of effect sizes, odds ratios, mean differences). If appropriate, include statistical procedures applied to assess the studies. Describe the method used to appraise the quality of the evidence (see below), addressing issues related to the internal (the ability to determine cause and effect) and external (the ability to generalize).

EXAMPLES of commonly used critical appraisal tools:

- Interventions: The Physiotherapy Evidence Database (PEDro) scale
- Appraisal of Diagnostic Accuracy: The Quality Assessment of Diagnostic Accuracy Studies (QUADAS) scale
- Observational study: The STrengthening the Reporting of OBservational studies in Epidemiology (STROBE).

Results: Present the overall results of the screening process (number of studies identified, studies screened vs. those included). Present a concise summary for each outcome included which may include data on group differences, intervention, etc. For these results, point estimates and measures of variability should be presented if available (e.g. effect sizes). Present the overall results of the Evidence Appraisal.

Conclusions: Summarize the main findings of the study by highlighting the clinical take-home message related to the research question. Emphasize the "answer" to the clinical question. Interpret these findings within the context of the strengths/weaknesses/biases based on the evidence appraisal. The clinical take-home message may address one or more of the following aspects of patients care: 1) financial implications, 2) equipment needs, 3) practicality of implementation, or 4) applicability of findings to various patient populations.

Word Count: Limited to 450 words, not including headings.

Common Reasons Leading to Rejection of Critically Appraised Topic (CAT) Abstracts

- The clinical question was too broad, with outcomes not clearly or operationally defined.
- Search strategy and the articles reviewed were not aligned with components in the clinical question.
- The included literature was published outside of the required timeframe of "the past 10 years, but preferably 5 years" or the timeframe was not described at all.
- The abstract did not include an adequate summary of data, nor, if possible, an analysis of the extracted data (e.g., calculation of effect sizes, odds ratios, mean differences, confidence intervals).
- Authors extracted and analyzed outcome variables that were not identified in the clinical question.
- Conclusion was not aligned with outcomes and/or within the context of evidence appraisal.

Format for Mixed-Methods Research Abstracts

Please review the Mixed Methods Abstracts Tips & Tricks Video

The Title of your Abstract Bolded and in Title Case

Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

Context: Write one or two sentences that summarize the rationale for the study, providing a reason for the study question. State the precise objective(s), purpose, or question(s) addressed in the report.

Methods: Describe the overall study design of the reported project (e.g., sequential explanatory/exploratory mixed methods, embedded design, concurrent parallel design). Describe the environment in which the study was conducted to help readers understand the transferability of the findings (e.g., population-based, patient clinic, classroom, or athletic event). Describe the underlying target population, sample selection, **and** procedures (e.g., population based, volunteer or convenience sample, or stratified, cluster, snowball sampling) for each phase of research as well as the important demographics of each subject pool (e.g., number, average age, years of experience, or gender). Interventions are the independent variables in the study. Describe the essential pieces of the experimental methods, including timing of intervention, the mode of qualitative and quantitative administration (e.g., in-person interview, face-to-face data collection, online survey, or computer-assisted), details of the instrument development for new tools (e.g., interview guide, survey), and execution and data collection process. Provide validity and reliability information for all instruments. Provide the point of integration of mixed data. Clearly identify primary or critical dependent variables that support the primary objective(s) of the study. Describe how any data were manipulated (e.g., scoring process for scaled instruments or categorization of variables). Indicate the data and statistical analysis employed to answer the primary research objective(s) and how qualitative data were checked for trustworthiness and credibility, and how quantitative inferential statistical analysis was calculated. Theme analysis should be provided.

Results: The main results of the study should be given for both qualitative (e.g., themes and observations) and quantitative (e.g., descriptive statistics, odds ratios, correlations) and how both aspects of the mixed-methods were incorporated to inform the conclusions. Results should be accompanied by the exact level of statistical significance. The *P* value should not exceed 3 digits to the right of decimal. When the exact significance is below $P < .001$, the exact significance should be reported as $P < .001$.

Conclusions: Summarize or emphasize the new and important findings of the study and relate implications of the findings for clinical practice. The statement of your findings must be consistent with the results as reported and should be no more than three to four sentences. Relate implications of the findings for clinical practice – provide a clinical take-home message/bottom line/recommendation that aligns with the objective(s). The clinical take-home message may address one or more of the following aspects of patients care: 1) financial implications, 2) equipment needs, 3) practicality of implementation, or 4) applicability of findings to various patient populations.

Word Count: Limited to 600 words, not including headings.

Format For Clinical CASE Study / Series Abstracts

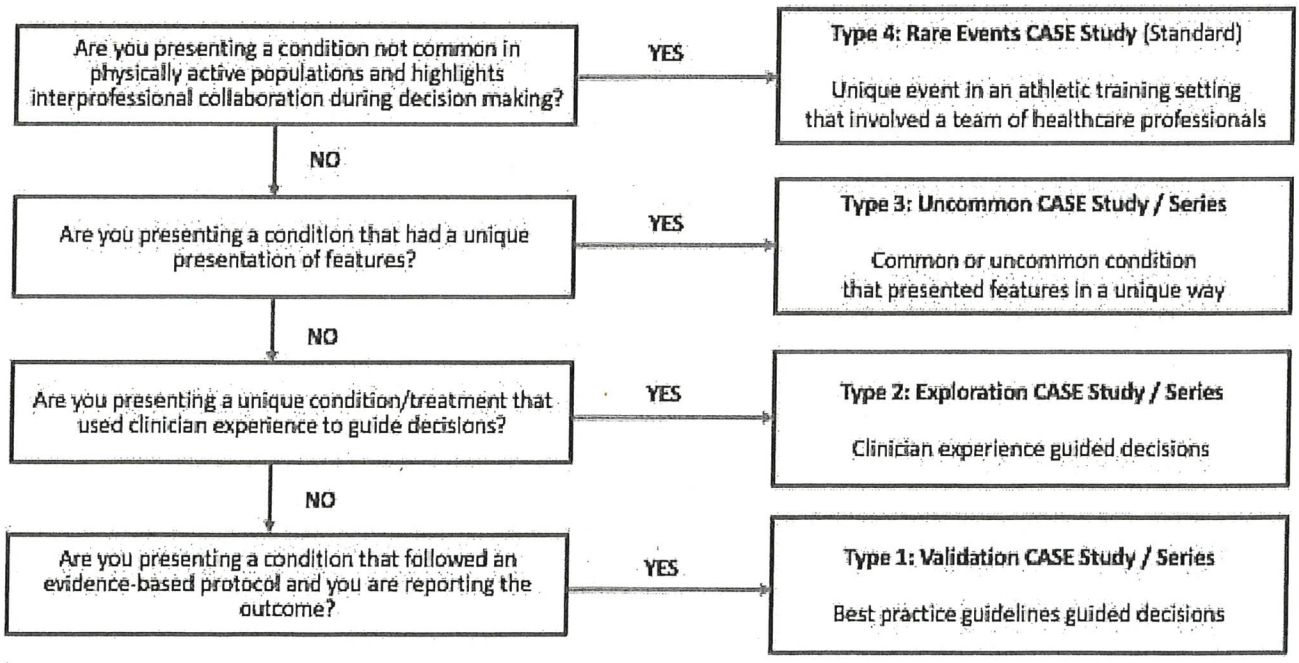
NOTE: All clinical CASE report abstracts submitted to Free Communications must have permission of the patient before submission. Click here for a sample Consent Release Form.

Drawing from recent publications,[1-4] there are now four types of CASE study abstracts. Types 1-3 are submitted in one format, and Type 4 is submitted in a different format.

Authors are encouraged to review the following references, the below decision making tree, and Table to determine the type of CASE study they are submitting.

1. McKeon JMM, King MA, McKeon PO. Clinical Contributions to the Available Sources of Evidence (CASE) Reports: Executive Summary. *J Athl Train*. 2016;51(7):581.
2. McKeon JMM, McKeon PO. Evidence-based practice or practice-based evidence: what's in a name? *Int J Athl Ther Train*. 2016;21(1):1-3.
3. McKeon JMM, McKeon PO. New year, a new set of guidelines for making clinical contributions to the available sources of evidence. *Int J Athl Ther Train*. 2016;21(1):1-3.
4. McKeon JMM, McKeon PO. Building a case for CASE studies. *Int J Athl Ther Train*. 2015;20(5):1-5.

Clinical CASE Study/Series Level Decision Tree



Type	Purpose*	Example(s)*
Type 4: Rare Events CASE Study (Standard Case Study)	Present a condition relevant to athletic trainers which has been documented in other medical literature, but is a condition not common in physically active populations. Provide evidence for athletic trainers interacting with other health care professionals for making decisions associated with the condition.	A collegiate female athlete without any traumatic injury, who was taking oral contraceptives and traveled by airplane to a competition, developed a deep vein thrombosis 1 week after the trip. The report described the AT's role in caring for this athlete and the management of this CASE beyond the AT's scope of practice.
Type 3: Uncommon CASE Study / Series	Present CASE(s) that have atypical presentation of features. Present CASEs that have a novel treatment applied to either common (highly prevalent) or uncommon conditions. Educate clinicians on alternate or irregular presentations of either common or uncommon conditions.	A patient developed acute compartment syndrome after an ACL reconstruction with an allograft. A clinician applied a new taping technique to stabilize subluxation peroneal tendons after an inversion ankle sprain.
Type 2: Exploration CASE Study / Series	Present CASE study / series that highlight clinical decisions made that were based on the clinician's experience (internal evidence).	A clinician developed a novel taping technique that improved the clinical outcomes of 3 collegiate track athletes with subluxing peroneal tendons.
Type 1: Validation CASE Study / Series	Present a CASE study / series that applies an evidence-based protocol and compares outcomes to previously published results.	A clinician applied an effective rehabilitation protocol from a previously published randomized clinical trial for patellofemoral pain among recreational runners. The report compares and contrasts the AT's findings from their clinical environment to the previously published results.

* Adapted from McKeon JM, King MA, McKeon PO. Clinical Contributions to the Available Sources of Evidence (CASE) Reports: Executive Summary. J Athl Train. 2016;51(7):581-585. doi:10.4085/1062-6050-51.9.07

Type 1-3 Clinical CASE Study Abstract Guidelines

The Title of your Abstract Bolded and in Title Case: Indicate the Type of CASE Study

Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

Background: Provide an overview of the condition of interest using available evidence, where appropriate. Indicate the type of the clinical CASE Study. For a Type 1 validation CASE study, the authors should provide a clear description of the previously reported comparison study and highlight the most important findings. For Type 3 exploration CASE studies/series, introduce the alternate, unique, or irregular presentation of the CASE examined compared to the available evidence.

Patient: Present the clinical CASE(s), including primary patient characteristics (age, sex, sport if appropriate, setting, and years of experience) and diagnosis. For a CASE series, describe the underlying target population with measures of means and variance and important aspects of the subject pool. Pertinent aspects of the medical history should be included. Describe their complaints, MOI, initial clinical examination, diagnostic imaging, lab tests, and their commonality (examples: characteristic, injury, postural/gait abnormality, pathology, MOI). Describe the process that led to the diagnosis of the condition.

Intervention or Treatment: Describe the management of the CASE, interventions used, the timeline for progression to final resolution in the CASE, and the specific time points when treatment was provided. Relevant and unique details should be included. For type 2 CASE study / series, compare and contrast the interventions used with the typical interventions. For Type 3 CASE study / series, compare and contrast the presentation of the condition as described in the literature.

Outcomes or other Comparisons: Describe the primary outcomes or results of the CASE. For type 1 CASE studies, compare and contrast the outcome from the current CASE to the outcome of the previously reported comparison study. Compare/contrast the outcomes used in the Type 3 Exploration CASE Studies / CASE Series with the typical presentation of the condition as previously described. For Case Series, report whether all patients responded similarly to each other. For this, it is important to ensure that similar outcome measures were used.

Conclusions: Interpret the findings of the study. For type 1 CASE studies, discuss the current case in the context with the previously reported comparison study, including the similarities and differences in the patient and outcomes. Discuss challenges associated with implementing the intervention from the comparison study "in real life" and provide recommendations for continued use of the assessment or intervention. For type 3 CASE studies/series, discuss the challenges associated with the CASE due to the atypical presentation, and provide recommendations for clinical practice.

Clinical Bottom Line: Provide an overall statement of the most important clinical points that can be gleaned from the current CASE study. Relate implications of the CASE for clinical practice – provide a clinical take-home message/bottom line/recommendation that aligns with the objective(s). The clinical take-home message may address one or more of the following aspects of patients care: 1) financial implications, 2) equipment needs, 3) practicality of implementation, or 4) applicability of findings to various patient populations.

Word count: Limited to 600 words, not including headings.

Type 4 Clinical CASE Study Abstract Guidelines

The Title of your Abstract Bolded and in Title Case: Indicate the Type of CASE Study
Doe JT*, Public JQ†: *First Author's Institution Name, †Second Author's Institution.

Background: Include the individual's age, sex, sport or activity, pertinent aspects of their medical history, a brief history of their complaint, and physical findings from the athletic trainer's examination.

Differential Diagnosis: Include all possible diagnoses suspected based on the history, mechanism of injury, and the initial clinical examination prior to physician evaluation and subsequent diagnostic imaging and laboratory tests.

Treatment: Include the physician's evaluation and state the results of diagnostic imaging and laboratory results if performed. The final diagnosis of the injury or condition and subsequent treatment and clinical course followed should be detailed. Relevant and unique details should be included, as well as the final outcome of the CASE.

Uniqueness: Briefly describe the uniqueness of this CASE, such as its mechanism, incidence rate, evaluate findings, rehabilitation, or predisposing factors.

Conclusions: Include a concise summary of the CASE as reported and highlight the CASE's importance to the athletic training profession and provide the reader with a clinical learning opportunity. Relate implications of the CASE for clinical practice – provide a clinical take-home message/bottom line/recommendation that aligns with the objective(s). The clinical take-home message may address one or more of the following aspects of patients care: 1) financial implications, 2) equipment needs, 3) practicality of implementation, or 4) applicability of findings to various patient populations.

Word Count: Limited to 600 words, not including headings.

Common Reasons Leading to Rejection of Clinical CASE Study Abstracts

- Missing requested information
    - Examples: No final outcome, incomplete differential diagnosis
- Poor overall clarity of writing or presentation of CASE
- CASE report mismanaged within accepted standard of care
- Role of ATC not clearly identified in the CASE report