



## NATA Foundation Free Communications Program Instructions for Peer-Reviewed Abstracts

The mission of the NATA Research and Education Foundation Free Communications Program is to advance the discovery, dissemination, and application of scientific knowledge in athletic training domains through written and oral forums. This mission is realized by sharing peer-reviewed unique and impactful Contributions to the Available Sources of Evidence (i.e. clinical CASE studies), Quality Improvement (QI), and original research during our annual symposium and through publication in the Journal of Athletic Training.

The Free Communications Committee uses a blinded peer-review process and standardized guidelines to ensure the exchange of valuable information. However, it expects abstracts to be submitted at a quality worthy of publication. Each one of the 300 plus abstracts submitted annually is blinded and peer reviewed by at least two committee members. Because of the vast number of submissions and limited time and human resources, authors must follow these instructions precisely and copy-edit their work. There is not time to request edits to abstracts, as you might receive for a manuscript. Abstracts that fail to adhere to the instructions or do not advance the knowledge of athletic trainers will likely not be accepted. Provided below are example abstracts. We have also provided instructions to increase success in the submission process, provided investigators read and follow these directions.

NATA Clinical Symposia & AT Expo  
CALL FOR ABSTRACTS  
June 24 – June 27, 2025, Orlando, FL

**DEADLINE FOR ABSTRACT SUBMISSION IS NOVEMBER 1, 2024 (11:59 PM CT)**

*All abstracts submitted for presentation must be submitted ONLINE at this [link](#).*

### Pilot Policies for 2025

1. All Principal Investigators (i.e. non-students and non-mentees) **can submit two papers as the presenting author**. When submitting two papers as the presenting author, the papers must be essentially different from each other and follow the text recycling policy outlined below. Papers submitted with the same presenting author may be assigned different formats and/or sessions (i.e. you may be asked to present both an oral and poster and do so on different days). Guidelines for what constitutes different papers are listed below:
  - a. Each abstract confirms a hypothesis that is reasonably different from the other hypothesis
  - b. The data and conclusions reflect the results of different experiments.
2. All presenting authors can now select preferred presentation style (i.e. oral, poster, or no preference). Please note the following:
  - a. The selection is a 'preference' and while we cannot guarantee all selections because of time and space constraints, we will work to give all presenting authors their preference.
  - b. All abstracts are reviewed the same, regardless of 'preference'.
  - c. The selected preference cannot be changed after submission.

**Please reach out the Erik Wikstrom, Free Communications Chair, with questions about these policies.**

# Instructions for Abstract Preparation and Submission

Please read all instructions before preparing and submitting the abstract. Individuals may submit only one **Original Research Abstract, Critically Appraised Topic, QI Project, or Clinical CASE Study Abstract** as the primary (presenting) author but may submit unlimited abstracts as a secondary author.

**A \$35 non-refundable abstract submission fee must be paid at the time of submission.**

**All presentations must be of original work and not previously presented or published in any format.**

Exceptions to this restriction are limited to athletic training organizations' state and district meetings and the NATA Athletic Training Educators' Conference as long as the submitted abstract has not been and will not be published in a journal in its submitted form prior to the 2025 NATA Annual Meeting.

**Duplicate abstracts will be rejected.** All submitted abstracts must be original work with original wording.

**Text recycling is discouraged.** The text for each abstract should be unique. Authors should avoid using the same text in more than one abstract (text recycling). Cases of text recycling may lead to each abstract being rejected if the reviewers and Committee Chair find excessive text repeated verbatim. If the abstract is part of a larger project and some text recycling is unavoidable, then the authors should provide language within the text of the abstract indicating that this is a larger project and indicate which abstracts are similar on the submission page. A footnote within the submission page, to explain why there is an overlap between abstracts, should also be provided. This footnote may be published with the abstract(s).

**Using generative AI for abstract creation is highly discouraged.**

Abstracts can be sponsored by having an NATA Fellow (FNATA) endorse the scientific, medical, or educational merit of the work. **A Fellow may sponsor up to 5 abstracts that they are an author on.** The person submitting the abstract will be required to provide the Fellow's name and e-mail address when submitting. Sponsored abstracts undergo a formal blinded peer-review. Fellow sponsorship does not automatically imply acceptance. **The final acceptance decision is the exclusive right of the Free Communications Committee.**

The **Original Research Abstract** (including survey, qualitative, or mixed-methods research abstracts) must be written to the accepted scientific standards of a research area. These abstracts should present findings about healthcare issues related to the athletic training profession. The Original Research Abstracts may include systematic reviews and meta-analyses but not critically appraised topics (CATs). The **Clinical CASE Study or Series Abstract** should present CASE(s) of general interest to the NATA membership. The **Critically Appraised Topic Abstract** should present the best available evidence to answer a focused clinical question using publications from the prior 10 years (preferably 5 years) summarizing at least 3 published manuscripts. The **Quality Improvement (QI) Abstract** is a pilot for the 2025 cycle. QI Abstracts should present the goals to resolve an internal or external athletic training problem and how implemented changes addressed the problem. New to QI, find out more via the [JATCast](#) and this [sketch Animation Video](#)

## Formatting Instructions

Prepare your abstract following the instructions below. You will later be directed to upload your abstract to the Abstract Manager system.

1. Abstracts fall into one of the following 7 categories: 1) Quantitative Research, 2) Survey Research, 3) Qualitative Research, 4) Mixed-Methods Research, 5) Critically Appraised Topic, 6) Type 1-3 Clinical CASE Study, 7) Type 4 Clinical CASE Study and 8) Quality Improvement. The author is responsible for determining the most appropriate category for structuring their abstract. Each is provided with examples where applicable, but the examples are not all encompassing, and some may overlap. Authors should choose the format that seems to best fit and present their data or CASE study.
2. **Abbreviations:** See the [list of acceptable abbreviations](#) at the end of this document that does not need to be spelled out. All other abbreviations should be introduced in parentheses after the first time the full word(s) appears.
3. **Numbers:** Use numerals to indicate numbers, except when beginning sentences.
4. **Title:** Enter the title in the title field only. Titles should be brief, clearly describing the content of the abstract. The title should be entered in title case. For example, “This is a Properly Formatted Abstract Title”. Do not include a trial or registry/cohort group name or acronym in the abstract title.
5. **Authors and Affiliations:**
  - Provide the names of all authors, with the author who will make the presentation listed first. Enter the last name, then initials (without periods), followed by a comma, and continue the same format for all secondary authors (if any), ending with a colon. On the same line following the colon, indicate the name of the institution (including the city and state) where the research was conducted. If the primary author is not at the institution where the work was completed, place an \* after their name, and following the institution where the research was conducted, the primary author can indicate their present institution (including the city and state). For collaborative projects where portions of the project were conducted at different institutions, list all authors as described above, then list institutional affiliations using the following consecutive symbols (\*, †, ‡, §, ¶, #, \*\*, etc.).
  - Provide the names, affiliation (including city and state), and email address for each author (additional fields will be available to enter email addresses).
  - The form will also ask for the credentials of the presenting author. Students should enter “ATS”. The “ATS” indicator is for internal purposes and will be removed before publication.
  - The form will also ask for an ‘X’ handle/username for the presenting author or the presenting author’s lab group (optional).
  - To qualify for authorship, individuals must have made substantial contributions to the conception and design, or acquisition of data, or analysis and interpretation of data; drafting the abstract or revising it critically for important intellectual content; and final approval of the version to be published.
6. **The text of the body must be structured** to enable the copying of the text into the appropriate fields. Headers should not be copied into the fields and do not count towards the word count.
  - The body of the abstract for Quantitative Research, including Survey Research, Critically Appraised Topic, and Quality Improvement is limited to 450 words.
  - The body of the abstract for Qualitative and Mixed-Methods Research is limited to 600 words.
  - The body of the abstract for a Clinical CASE Study is limited to 600 words.
7. **Tables and Figures (Optional):**
  - A half-page for a table or figure may accompany the submission.
  - Only 1 figure or table may be uploaded per abstract. The presence of multiple independent tables and/or figures within the uploaded document will result in a rejection.
  - Tables and figures should have a title. Tables and figures should have a legend, caption, or footnote (if appropriate) of no more than 50 words. These titles and legends/captions do not count toward the word limit of the abstract.

- The table/figure MUST be referenced within the text of the abstract. For example, “Results indicated the treatment group increased ROM compared to the control group (Figure 1).”
  - The figure or table must contain original material that is directly relevant to the abstract.
  - The figure or table must be original. That is, it may not contain any protected or copyright material or any material that was previously published in (or is currently being considered for) any publication or free communications program. A figure or table that does not adhere to these guidelines will not be reviewed and will subject the abstract to rejection without review. Exceptions to the restriction are limited to athletic training organizations’ state and district meetings and the NATA Athletic Training Educators’ Conference as long as the submitted abstract has not been and will not be published in a journal in its submitted form prior to the 2025 NATA Annual Meeting.
  - Figures showing participants or patients in any image (photograph, radiograph, etc.) must conceal each person’s identity.
  - The figure or table should be saved as a pdf in a file separate from the abstract.
  - The figure or table will not be edited. Therefore, it must be clear and easy to read or understand at the specified size. Questions about figure or table preparation should be directed to the Journal of Athletic Training editorial staff, you may email [jat@slu.edu](mailto:jat@slu.edu)
  - For further clarification about formatting a table or figure, authors should also consult the AMA Manual of Style 9th edition and the instructions for authors in the Journal of Athletic Training.
8. The required formats for the structured abstracts are listed below. For further clarification, authors should consult the AMA Manual of Style 9th edition and the instructions for authors in the Journal of Athletic Training.
9. **Additional information required for submission:**
- **Presentation Style Preference:** Select the format that the presenting author prefers (Oral, Poster, No Preference).
  - **Domain/Task:** Identify the domain and the task tied to that domain. Reference the [Practice Analysis, Eighth Edition Content Outline](#).
  - **Learning Objectives:** The objectives should follow best practices for learning objective construction and use [Bloom’s Taxonomy Action Verbs](#); Avoid “understand” and “appreciate”. Refer to the link above for more information. **DO NOT** begin the learning objective with “Following this session, participants will be able to...” Please start the learning objective with a verb that is NOT ‘understands’. Example: “1) Describe the results of a research study about changes in balance between patients with chronic ankle instability and healthy controls. 2) Review the literature in the area of chronic ankle instability as it pertains to the presented research findings.”
  - **Key Take Home Message for Possible Use on Social Media** (120 characters or less): Provide a concise take-home message that could be used to promote the abstract on social media.
  - **References:** Provide 2 to 5 key references or sources supporting the submission’s content. Format according to the Journal of Athletic Training author guide.
  - **CV, Resume, or bio for presenting author** must be uploaded.
  - **Disclosures:** Indicate if any author has a relevant financial relationship with commercial interests that have the potential to affect the content of the abstract. If the authors have no disclosures enter “The authors report no relevant financial disclosures.” This section does not count towards the word count.
  - **Funding Sources:** Indicate the funding source (and grant number if appropriate), if applicable. Please review the [Policy for the Submission of the Disclosure Form and Presenter Commitment](#). This section does not count towards the word count.

## **Review Criteria for All Original (including Quantitative, Survey, Qualitative, and Mixed-Methods) Research, Critically Appraised Topic, and QI Abstracts:**

- Completeness of requested information in each structured heading
- Overall clarity of writing
- Originality of research or contribution to the literature or knowledge base
- Methods and results address the primary objective
- Consistency between data and conclusions
- Adequacy of sample size to support conclusions

## **Specific Review Criteria for All Clinical CASE Study or Series Abstracts:**

- **MUST PROVIDE:** [Patient Release of Information Form](#) (retain in your files until requested)
- Completeness of requested information in each structured heading.
- Aligns with the specific [Type of CASE Study](#) selected.
- Overall clarity of writing
- CASE managed within the standard of care

## **Specific Review Criteria for Quality Improvement Abstracts:**

- Completeness of requested information in each structured heading
- Overall clarity of writing
- Model for improvement identified and appropriate
- Consistency between improvement results and conclusion

The linked instructions highlight the requested information in each structured heading for the following formats:

- [Quantitative Research Abstracts](#)
- [Survey Research Abstracts](#)
- [Qualitative Research Abstracts](#)
- [Mixed-Methods Research Abstracts](#)
- [Critically Appraised Topic Abstracts](#)
- [CASE Study / Series Abstracts](#)
- [Quality Improvement](#)

A high-level [submission checklist](#), below, is also available to help authors ensure that their submission is formatted appropriately and contains all of the information requested in this call. The checklist is not to be submitted.

## Checklist for Free Communication Submission

### All Abstracts

*You must be able to answer Yes to all questions.*

- | Yes                      | No                       |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | The abstract is original work and not previously presented in any format   |
| <input type="checkbox"/> | <input type="checkbox"/> | The text for this abstract is unique from other abstracts you have submitted (no text recycling)   |
| <input type="checkbox"/> | <input type="checkbox"/> | Abbreviations not on the 'list of acceptable abbreviations' are spelled out and introduced in parentheses the first time they appear   |
| <input type="checkbox"/> | <input type="checkbox"/> | Numbers at the beginning of sentences are spelled out, all others are numerals   |
| <input type="checkbox"/> | <input type="checkbox"/> | The Abstract Title is Formatted in Title Case Like This and does not include trial, registry or cohort group names or acronyms   |
| <input type="checkbox"/> | <input type="checkbox"/> | Author who will make the presentation is listed first  |
| <input type="checkbox"/> | <input type="checkbox"/> | If included, a figure or table is called out in the text and has been uploaded.  |
| <input type="checkbox"/> | <input type="checkbox"/> | If included, the figure or table must be original (not protected by copyright)   |
| <input type="checkbox"/> | <input type="checkbox"/> | If included, the figure or table must contain material relevant to the abstract, contain a title, legend, caption or footnote, and be the appropriate size.  |
| <input type="checkbox"/> | <input type="checkbox"/> | If a participant or patient is pictured, the person's identity is concealed  |
| <input type="checkbox"/> | <input type="checkbox"/> | If included, the figure or table is saved as a separate pdf file   |
| <input type="checkbox"/> | <input type="checkbox"/> | If included, the figure or table is no larger than 1/2 a page  |
| <input type="checkbox"/> | <input type="checkbox"/> | Meet the word count for the type of submission   |
| <input type="checkbox"/> | <input type="checkbox"/> | Requested information for each section has been provided.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Novel instrumentation includes validity and reliability information  |
| <input type="checkbox"/> | <input type="checkbox"/> | Results include descriptive data, inferential findings, and / or emergent themes as appropriate.   |
| <input type="checkbox"/> | <input type="checkbox"/> | Survey results include final response rate, mode of survey administration, details of survey, including validity and reliability information for all survey instruments and relevant pilot testing, and how data were manipulated. |

# Format for Quantitative 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 or 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 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 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 Clinical CASE Study / Series Abstracts

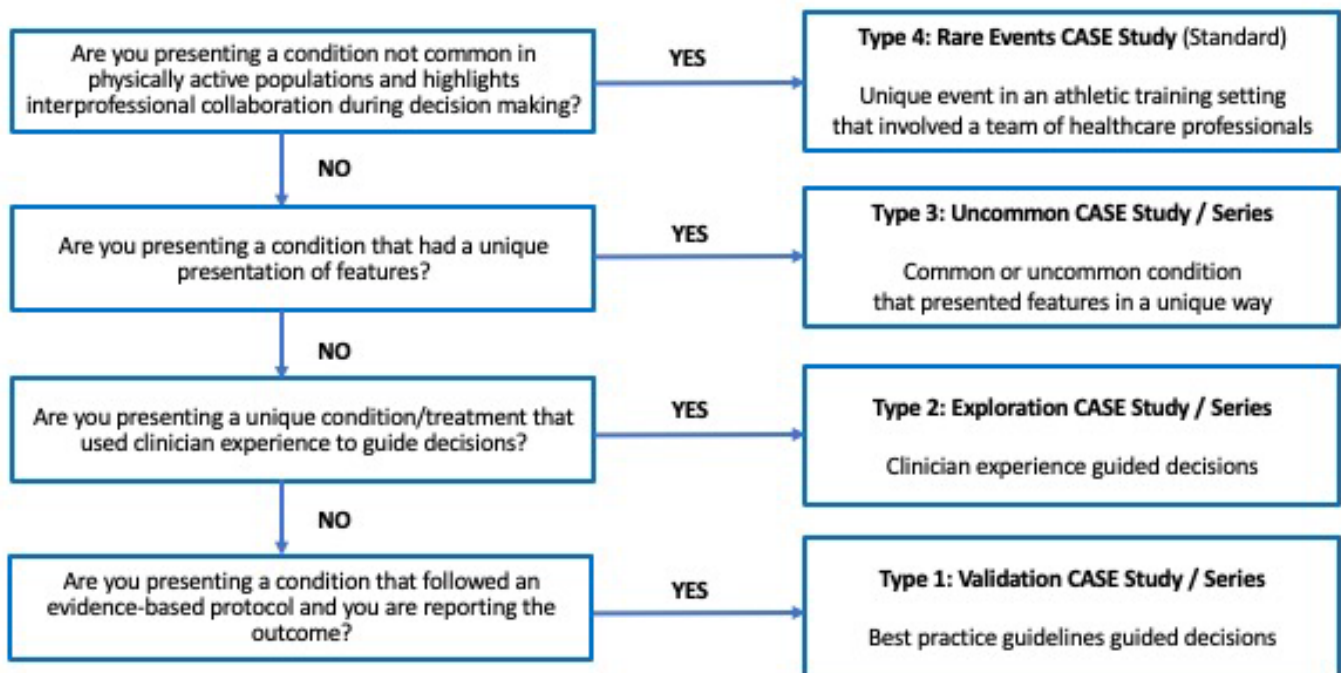
**NOTE: All clinical CASE report abstracts submitted to Free Communications must have permission of the patient before submission. Click [here](#) for a sample Consent Release Form.**

There are now four types of CASE study abstracts.<sup>1-4</sup> 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)	<p>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.</p> <p>Provide evidence for athletic trainers interacting with other health care professionals for making decisions associated with the condition.</p>	<p>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.</p>
Type 3: Uncommon CASE Study / Series	<p>Present CASE(s) that have atypical presentation of features.</p> <p>Present CASEs that have a novel treatment applied to either common (highly prevalent) or uncommon conditions.</p> <p>Educate clinicians on alternate or irregular presentations of either common or uncommon conditions.</p>	<p>A patient developed acute compartment syndrome after an ACL reconstruction with an allograft.</p> <p>A clinician applied a new taping technique to stabilize subluxation peroneal tendons after an inversion ankle sprain.</p>
Type 2: Exploration CASE Study / Series	<p>Present CASE study / series that highlight clinical decisions made that were based on the clinician's experience (internal evidence).</p>	<p>A clinician developed a novel taping technique that improved the clinical outcomes of 3 collegiate track athletes with subluxing peroneal tendons.</p>
Type 1: Validation CASE Study / Series	<p>Present a CASE study / series that applies an evidence-based protocol and compares outcomes to previously published results.</p>	<p>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.</p>

\* 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

# Format for Type 1-3 Clinical CASE Study Abstract

**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.

# Format for Type 4 Clinical CASE Study Abstract

**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
- Submitting a clinical case in the wrong category.

# Format For Quality Improvement Format

## 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 practice problem. Describe if the problem internal or external. Provide a concise review of what is known about the problem and how it relates to available knowledge in the literature. The objective/purpose statement MUST identify the desired goal(s) for improvement.

**Methods:** Describe the process used for implementing the change (i.e., What model was used? Model for Improvement, Lean Six Sigma, etc.). Describe the change that was implemented. Discuss your approach to measuring the effect of the change, specifically what measures were used (e.g., structure, outcome, process, and/or balancing). Detail how the data was collected, analyzed, and interpreted.

**Results:** Provide a summary of what you found, including changes in your measures of interest.

**Conclusions:** Summarize or emphasize the significance of your findings and the impact your change will have on your unit or the health care system. Outline the problems encountered during the process of change. Describe what you would do differently if you were to start the process again.

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

**QI projects may or may not be considered research by your institution. Please use your institution's rules and guidelines regarding the presentation of QI projects before submitting your abstract.**



# Acceptable Abbreviations

These abbreviations do not need to be spelled out in an abstract:

AAROM	Active Assistive Range of Motion
ACL	Anterior Cruciate Ligament
ADL	Activities of Daily Living
AED	Automated External Defibrillator
AIDS	Acquired Immune Deficiency Syndrome
AMA	American Medical Association
AROM	Active Range of Motion
ATF	Athletic Training Facility
ATP	Athletic Training Program
BESS	Balance Error Scoring System
BMI	Body Mass Index
BOC	Board of Certification
BP	Blood Pressure
bpm	Beats per Minute
CAATE	Commission on Accreditation of Athletic Training Education
CAI	Chronic Ankle Instability
CDC	Centers for Disease Control and Prevention
CE	Continuing Education
CNS	Central Nervous System
COPD	Chronic Obstructive Pulmonary Disease
CPM	Continuous Passive Motion
CPR	Cardiopulmonary Resuscitation
CT	Computed Tomography
DIP	Distal Interphalangeal
DSM IV	Diagnostic and Statistical Manual of Mental Disorders - 4th Ed.
DVT	Deep Vein Thrombosis
EAP	Emergency Action Plan
EBP	Evidence-Based Practice
ECC	Emergency Cardiac Care
ECG/EKG	Electrocardiogram
EHI	Exertional Heat Illness
EHS	Exertional Heat Stroke
EMG	Electromyography
EMS	Emergency Medical Services
EPA	United States Environmental Protection Agency
FERPA	Family Educational Rights and Privacy Act
FDA	US Federal Drug Administration
FMS	Functional Movement Screen
HIPAA	Health Insurance Portability and Accountability Act
HIV	Human Immunodeficiency Virus
HMO	Health Maintenance Organization
HOPS	History, Observation, Palpation, Special Tests
HR	Heart Rate

HRQL	Health Related Quality of Life
LCL	Lateral Collateral Ligament
LESS	Landing Error Scoring System
MCL	Medial Collateral Ligament
MCP	Metacarpophalangeal
MMT	Manual Muscle Test
MRI	Magnetic Resonance Imaging
MRSA	Methicillin Resistant Staph Aureus
MTP	Metatarsophalangeal
NATA	National Athletic Trainers' Association (should the districts be included too?)
NIH	National Institutes of Health
NCAA	National Collegiate Athletic Association
NOCSAE	National Operating Committee on Standards for Athletic Equipment
NSAID	Non-Steroidal Anti-Inflammatory Drugs
NWB	Non-Weight Bearing
OSHA	Occupational Safety and Health Administration
OTC	Over-The Counter
PCL	Posterior Cruciate Ligament
PFP	Patellofemoral Pain
PIP	Proximal Interphalangeal
PNF	Proprioceptive Neuromuscular Facilitation
PPE	Personal Protective Equipment
PPE	Pre Participation Examination
PPO	Preferred Provider Organization
pps	Pulse Per Second
PRN	As Needed
PROM	Passive Range of Motion
QD	Per Day
QID	Four Times a Day
ROM	Range of Motion
RROM	Resistive Range of Motion
RTP	Return-to-Play
SEBT	Star Excursion Balance Test
SLAP	Superior Labral Tear from Anterior to Posterior
SOAP	Subjective, Objective, Assessment, Plan
SRC	Sport Related Concussion
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TBI	Traumatic Brain Injury
TENS	Transcutaneous Electrical Nerve Stimulation
TID	Three Times a Day
VOMS	Vestibular Ocular Motor Screening
WBGT	Wet-Bulb Globe Temperature
WNL	Within Normal Limits
X-ray	Radiographs

**ABSTRACTS WILL NOT BE ACCEPTED AFTER NOVEMBER 1**