Structured Abstracts

(Modified from the *Journal of the American Medical Association*)

All Clinical Research Articles, Reviews, Reviews with meta-analysis, Case Reports, and Consensus Statements should be submitted with structured abstracts of no more than 250 words, as described below. All information reported in the abstract must appear in the manuscript. The abstract should not include references. Write the abstract with a general medical audience in mind.

NOTE: Abstracts must include all the headings shown for each type of paper. There may be a delay in processing your manuscript if no structured abstract is included.

Clinical Research Articles should include an abstract with the following headings. Parts of the abstract may be written as phrases. Each section should include the following content:

> *Context*. The abstract should begin with one to two sentences explaining the clinical (or other) importance of the study question.
>
> *Objective*. State the precise objective or study question addressed in the report. If more than one objective is addressed, the main objective and only key secondary objectives should be stated. If a hypothesis was tested, it should be stated.
>
> *Design*. Describe the basic design of the study, years of study performance, and duration of follow-up. If applicable, include the study name (e.g., the Framingham Heart Study).
>
> *Setting*. Describe the study setting, for example, general community, a primary care or referral center, private or institutional practice, or ambulatory or hospitalized care.
>
> *Patients or Other Participants*. State the clinical disorders, number, eligibility criteria, key sociodemographic features, and method of selection of patients. If matching is used for comparison groups, characteristics matched should be specified. In follow-up studies, the proportion of participants who completed the study must be indicated. In intervention studies, the number of patients withdrawn because of adverse effects should be given.
>
> *Intervention(s)*. The key features of any interventions should be described, including their method and duration. The intervention should be named by its most common clinical name, and nonproprietary drug names should be used.
>
> *Main Outcome Measure(s)*. Indicate the primary study outcome measurement(s) planned before data collection began. If the manuscript does not report the main planned outcomes of a study, this should be stated and the reason indicated. State clearly if the hypothesis being tested was formulated during or after data collection.
>
> *Results*. The main outcomes of the study should be provided and quantified, including confidence intervals or P values. For comparative studies, confidence intervals should relate to the differences between groups. If relevant, indicate whether observers were blinded to patient groupings, particularly for subjective measurements. If differences for the major study outcome measure(s) are not significant, the clinically important difference sought should be stated and the confidence interval for the difference between the groups should be given. When risk changes or effect sizes are given, absolute values should be indicated. Studies of screening and diagnostic tests should report sensitivity, specificity, and likelihood ratio. If predictive value or accuracy is given, prevalence or pretest likelihood

should be given as well. All randomized controlled trials should include the results of intention-to-treat analysis, and all surveys should include response rates.

Conclusions. Provide only conclusions directly supported by the results, along with implications for clinical practice; avoid speculation and overgeneralization. Indicate whether additional study is required before the information should be used in usual clinical settings. Give equal emphasis to positive and negative findings of equal scientific merit.

Reviews should include an abstract with the following sections:

Context. Include one or two sentences describing the clinical question or issue and its importance in clinical practice or public health.

Evidence Acquisition. Describe the data sources used, including the search strategies, years searched, and other sources of material, such as subsequent reference searches of retrieved articles. Methods used for quality assessment and inclusion of identified articles should be explained.

Evidence Synthesis. The major findings of the review of the clinical issue or topic should be addressed in an evidence-based, objective, and balanced fashion, with the highest quality evidence available receiving the greatest emphasis.

Conclusions. The conclusions should clearly answer the questions posed if applicable, be based on available evidence, and emphasize how clinicians should apply current knowledge. If your paper is accepted for publication, the conclusion segment of your structured abstract will be used in the Table of Contents as a brief text descriptor to enhance the title.

If meta-analysis is to be used in a Review, the following abstract format should be used:

Context. One to two sentences explaining the importance of the review question.

Objective. State the precise primary objective of the review. Indicate whether the review emphasizes factors such as cause, diagnosis, prognosis, therapy, or prevention and include information about the specific population, intervention, exposure, and tests or outcomes that are being reviewed.

Data Sources. Summarize data sources and years searched. Potential sources include computerized databases and published indexes, registries, abstract booklets, conference proceedings, references identified from bibliographies of pertinent articles and books, experts or research institutions active in the field, and companies or manufacturers of tests or agents being reviewed. Additional information about data sources can be described in the Methods section, e.g., exact indexing terms and constraints (for example, English language or human subjects) used.

Study Selection. Describe inclusion and exclusion criteria used to select studies for detailed review (e.g., particular populations, interventions, outcomes, or methodological designs). The method used to apply these criteria should be specified (for example, blinded review, consensus, multiple reviewers). State the proportion of initially identified studies that met selection criteria.

Data Extraction. Describe guidelines used for abstracting data and assessing data quality and validity (such as criteria for causal inference). The method by which the guidelines were applied should be stated (for example, independent extraction by multiple observers).

Data Synthesis. State the main results of the review, whether qualitative or quantitative, and outline the methods used to obtain these results. Meta-analyses should state the major outcomes that were

pooled and include odds ratios or effect sizes and, if possible, sensitivity analyses. Numerical results should be accompanied by confidence intervals, if applicable, and exact levels of statistical significance. Evaluations of screening and diagnostic tests should include sensitivity, specificity, likelihood ratios, receiver operating characteristic curves, and predictive values. Assessments of prognosis should summarize survival characteristics and related variables. Major identified sources of variation between studies should be stated, including differences in treatment protocols, co-interventions, confounders, outcome measures, length of follow-up, and dropout rates.

Conclusions. The conclusions and their applications should be clearly stated, limiting interpretation to the domain of the review. If your paper is accepted for publication, the conclusion segment of your structured abstract will be used in the Table of Contents as a brief text descriptor to enhance the title.

Case Reports should include an abstract with the following sections:

Context. Include one or two sentences describing the relevant condition and its importance in clinical practice or public health.

Case Description. Briefly describe the examplary case employed to focus the discussion.

Conclusions. Provide conclusions supported by the clinical experience and review, along with implications for clinical practice. If your paper is accepted for publication, the conclusion segment of your structured abstract will be used in the Table of Contents as a brief text descriptor to enhance the title.

Consensus Statements should include an abstract with the following sections:

Objective. Describe the issue and purpose of the statement. For example, the issue may be a health problem or practice options. The purpose may be to guide clinical practice or to set policy standards.

Participants. Explain how people became participants, the number of participants, whether meetings were open or closed. Disclose the funding source.

Evidence. Describe how data sources were obtained, selected, and synthesized. Explain the use of unpublished data and the influence of expert opinion.

Consensus Process. Described the process by which consensus was achieved such as voting, the Delphi process, or group meetings. Explain who wrote the statement (an individual or a committee). Explain who reviewed the statement and how suggestions for revision were incorporated.

Conclusions. Summarize the statement. Include important minority views if they exist. If your paper is accepted for publication, the conclusion segment of your structured abstract will be used in the Table of Contents as a brief text descriptor to enhance the title.