Common Formats in Medical Writing
Most of the information in this handout is taken from Edward J Huth, How To Write and Publish Papers in the Medical Sciences, 2nd edition (Williams & Wilkins 1990)

Formal Studies

Template

**Introduction and Objective (2 paragraphs)**
- Background, scope and importance of problem
- Clearly and directly stated objective or hypothesis

**Methods**
- Study design and protocol
- Setting and participants
- Interventions
- Main outcome measures
- Statistical analysis

**Results**
- New or unique findings first
- Tables, charts, graphs instead of text where appropriate

**Discussion**
- Central conclusion, or answer, to the data presented in the Results (“working conclusion”)
- Main result found
- Literature review
- Assessment and response to counter-evidence
- Identification and response to limitations of study

**Conclusion**
- Answer to the research question (the working conclusion as modified by its place in the literature, assessment of counter-evidence, and acknowledgement of limitations)
Review Articles

Notes
- Are carefully conceived to answer an important question, based on a critical assessment of the literature, written with a logical structure
- Spare clinicians the burden of searching the literature for reliable guidance in practice
- Tell investigators where their field stands on a particular problem and may suggest what direction new research should take

Suggestions
- Define and limit the topic of the article
- Write a tentative outline before searching articles
- Determine a logical structure for the article based on the subject; make the structure clear with the use of sections and sub-sections

Template

Introduction
- State the problem and its importance at this time to justify reading the review
- Clearly identify the main questions to be answered or the focus of the article

Methods
- State how you decided on the relevance of the reviewed papers and the validity of their data and conclusions
- Fully describe the literature search: bibliographic indexes and databases searched, limits on years and languages, search terms used
- For papers reporting quantitative data, how the data from different studies were integrated for generalizable conclusions must be specified

The Body
- Determine the logical structure of the sections based on the topic, eg,
  - a chronological sequence well known in clinical concept and experience
    - from the general to the particular
    - from components of a system to its integrated structure
    - from cellular effects to systemic effects
    - from the most frequent and important problems to the rare

Discussion
- Address unresolved issues or problems that need further study so that the reader can understanding of what is not known about the topic, in addition to what is known.
Book Chapters

Notes
- Are solicited by editors
- Are similar in format but broader in scope and longer than review articles

Case Reports

Template

Introduction (1-2 paragraphs)
- How case came to author’s attention
- Main features worth reporting
- What literature searches or studies were carried out
- A statement of why the case is worth reading about

Case Description
- An account of the case in its chronologic sequence
- All relevant data

Variations in Format (if needed)
- Other sections, such as methods and results, if they were part of your investigation of the case

Discussion and Conclusions
- Discussion of other evidence, beyond that in the case description, that the case is unique or unexpected
- Details about the extent of the search for similar cases
- Evaluation of the credibility of the evidence of the case
- Possible alternative explanations for case features
- Conclusion, with possibilities for future study or implications for clinical practice

Case Series

Notes
- A paper based on retrospective study of multiple case records, usually from the same institution
- Approach can follow
  - the case report model: short case reports that are followed by such generalizations as can be drawn from these cases and, perhaps, from similar cases in the literature.
  - the formal study model: an analysis of a series of cases written only after the authors define questions they hope to be able to answer from their case data and cases in the literature; carried out with intellectual rigor (specific questions or hypotheses, entities defined, control or contrast case-data sought, data tested statistically).
  - the review article model, where the cases reviewed are treated as a unit. Here the cases are not presented in separate reports; rather, the data are combined with that from the literature, usually in tables. Structure is chosen based on criteria for review article and the report should include a Methods section so that it can be read critically.
Letters to the Editor

Notes

• are miniature equivalents of research reports, case reports, reviews, or editorials
• may comment on a report published in that journal

Suggestions

• Follow journal’s guidelines and word and citation limits; model the letter after letters that appear published in that journal
• If the letter is about a published report, cite the paper at the start and comment on why you are writing the letter
• State that you are submitting the letter for possible publication
• Be as clear and brief as possible

Editorials

Notes

• Are usually solicited by editors
• Should be short and have flawless organization
• Length depends on how complex a problem an editorial considers, the amount of evidence it considers, and the number of possible answers

Template

Introduction

• State issue or problem or question

Body

• Pose one or more possible answers
• Weigh the evidence supporting the answers
• Assess counter-evidence

Conclusion

• Conclude with an answer

Personal Essays

Notes

• Use examples, stories, and analogies to illuminate and gain greater insight into an experience, issue, or situation
• Structure is highly variable: “form follows function.”
Patient Education Literature/Writing for the Lay Audience

Formatting to engage lay readers
- Graphics: images, flow charts, cartoons, storyboards
- Legends to graphics that repeat important information from the text
- Color
- Columns

Style conventions to engage lay readers
- Question and Answer format: recreates the way most people get most of their information, via a verbal exchange
- Sidebars: miniature articles on related topics set aside from the main article by a box or shaded area
- Callouts: engaging, direct quotes from the article enlarged and inserted in text in advance of where the quote actually appears in text

Elements to Use to Promote Lay Reader Understanding
- Subheadings
- Short sentences
- Short paragraphs
- Examples
- Stories
- Analogies
- Emphasis on the importance of the topic
- Specific information (telephone numbers, etc.) on whom to contact for additional information

Suggested Reading/Video List


from The Health Care Communication Group, Writing, Speaking and Communications Skills for Health Professionals (Yale University Press 2001; ISBN 0-300-08862-0):
- Chapter 3, “The Creative Process” (pp 62–69)
- Chapter 4, “The Scientific Journal Article: Approaching the First Draft” (pp 70–90)

- Chapter 3, “Preparing to Write” (pp 43–54)
- Chapter 4, “Critical Argument and the Structure of Scientific Papers” (pp 55–58)
- Chapter 5, “The Research Paper”

- “The Goal: Clear Writing” (pp 1–7)