



JOHNS HOPKINS  
MEDICINE

# Scientific editors: How they can help you



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# Disclosure

I have no relevant financial relationships to disclose.

# Introduction

## About me

- *MS in Biomedical Writing*
- *BA in Journalism*
- *Editor in the Life Sciences*
- *Educator since 2011*
- *Director of Editorial Services since 2014*



Rachel Box, MS, ELS

# Introduction

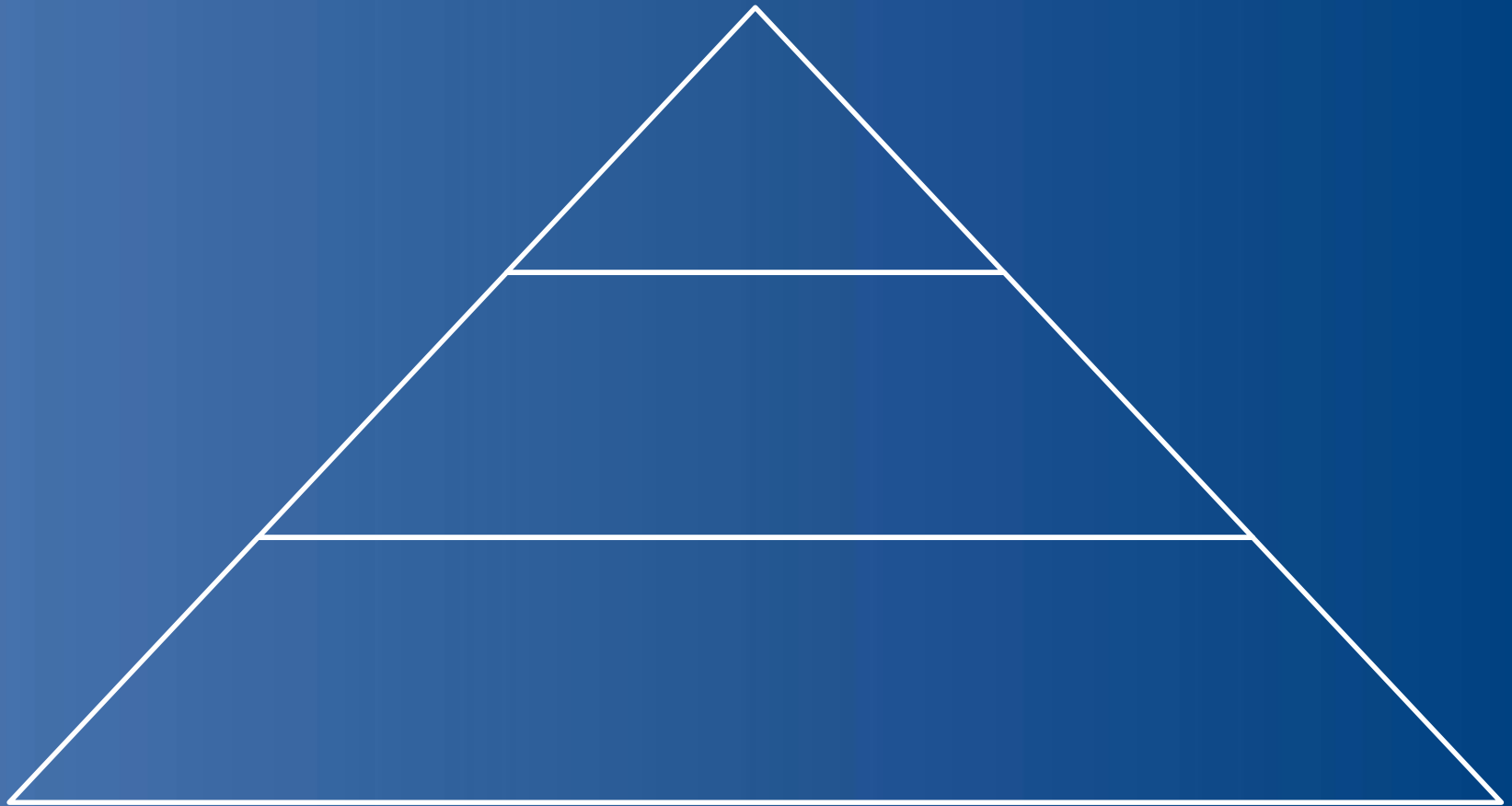
## What I do

- Edit
  - *Help authors communicate their research*
  - *Help authors publish their work*
- Educate
  - *Teach the foundations and skills of scholarly scientific writing*

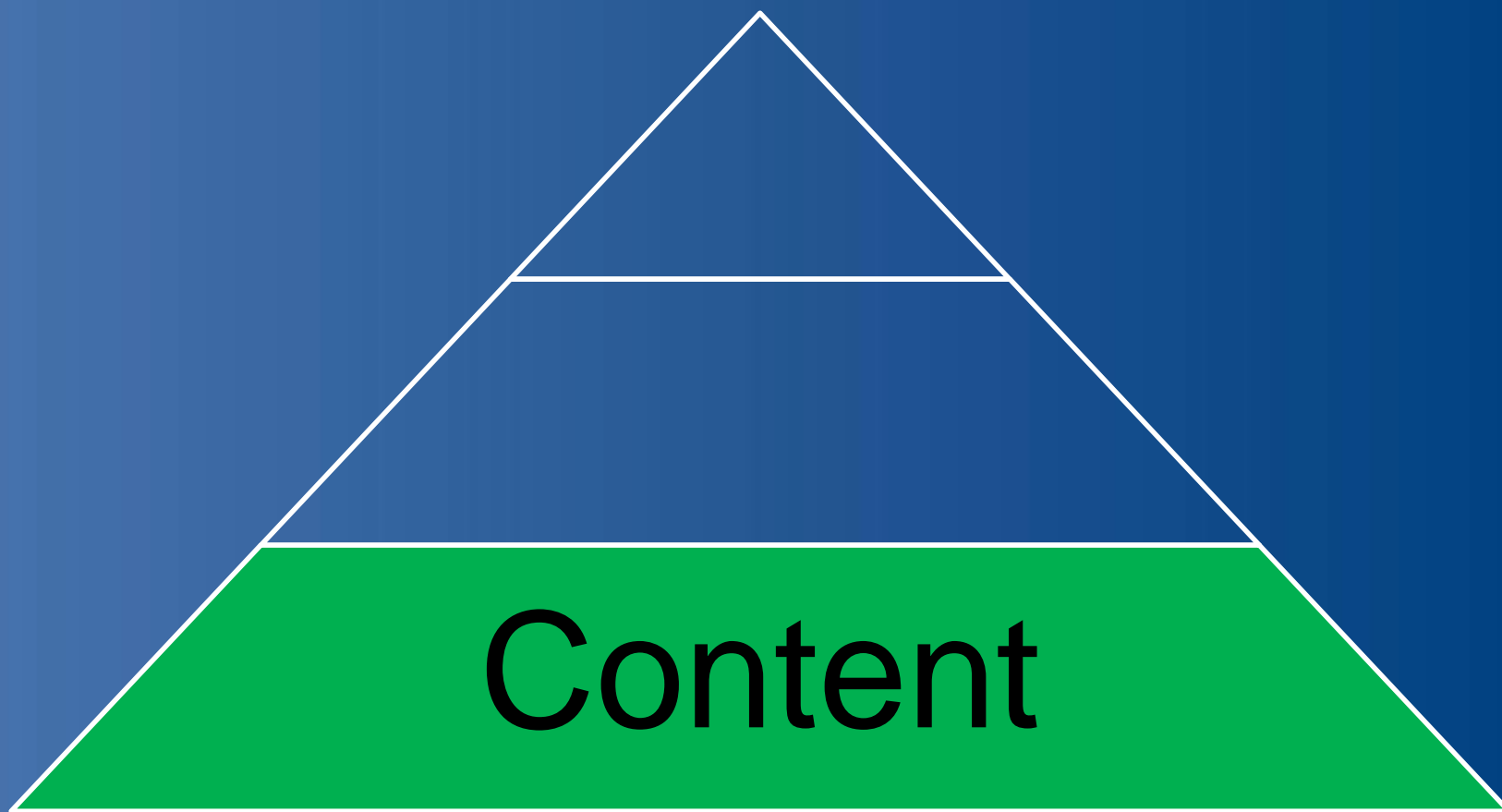


# **WHAT IS SCIENTIFIC EDITING?**

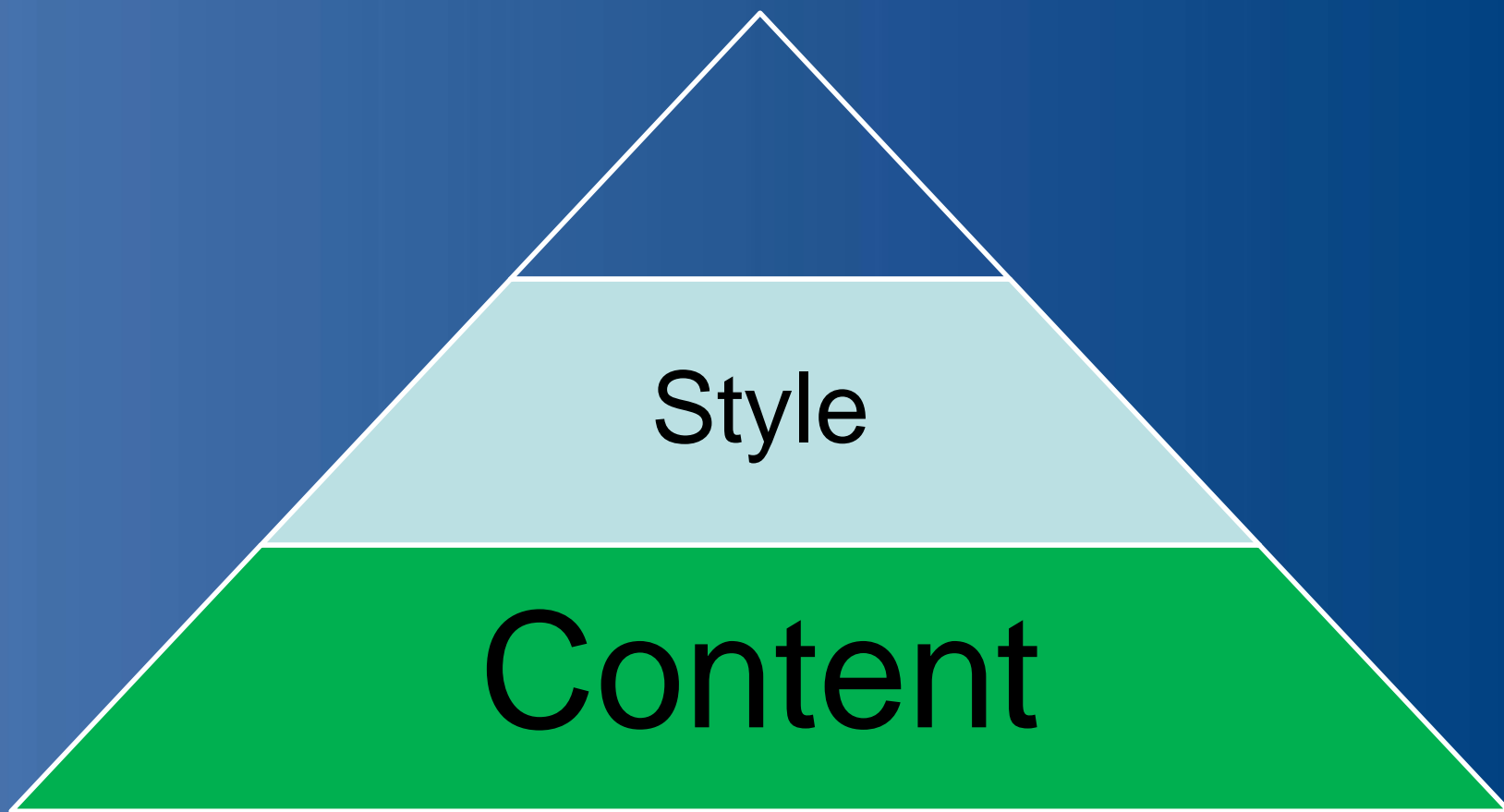
# Components of editing



# Components of editing

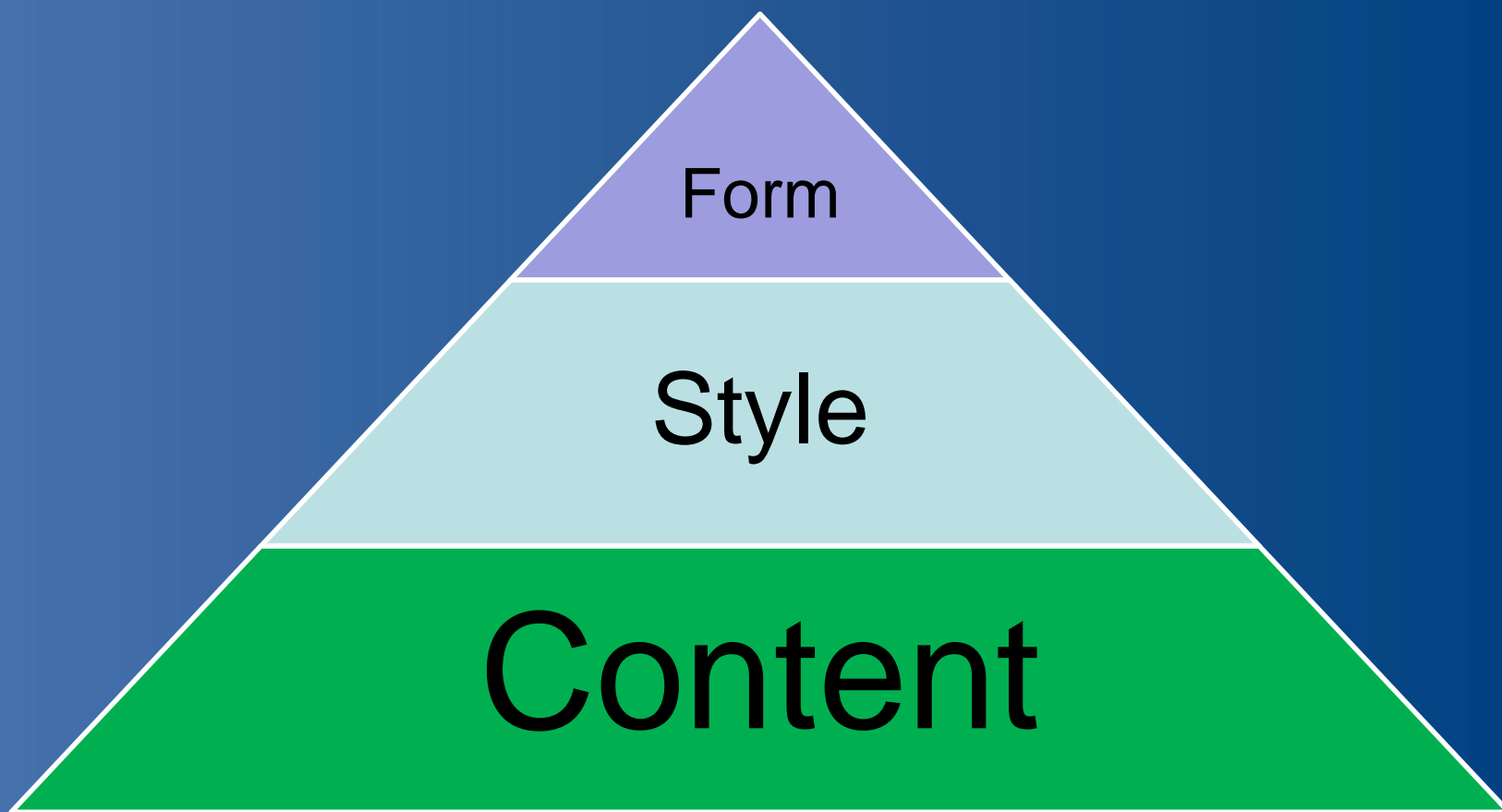


# Components of editing





# Components of editing



# Components of editing

Implications  
Interpretation  
Accurate reporting  
Detailed methods  
Rationale  
Background/context



**Content**

# Components of editing

Organization  
Transitions  
Emphasis  
Flow



**Style**

Attention to the readers' needs  
(both primary and secondary  
audiences)

# Components of editing



Form

Grammar

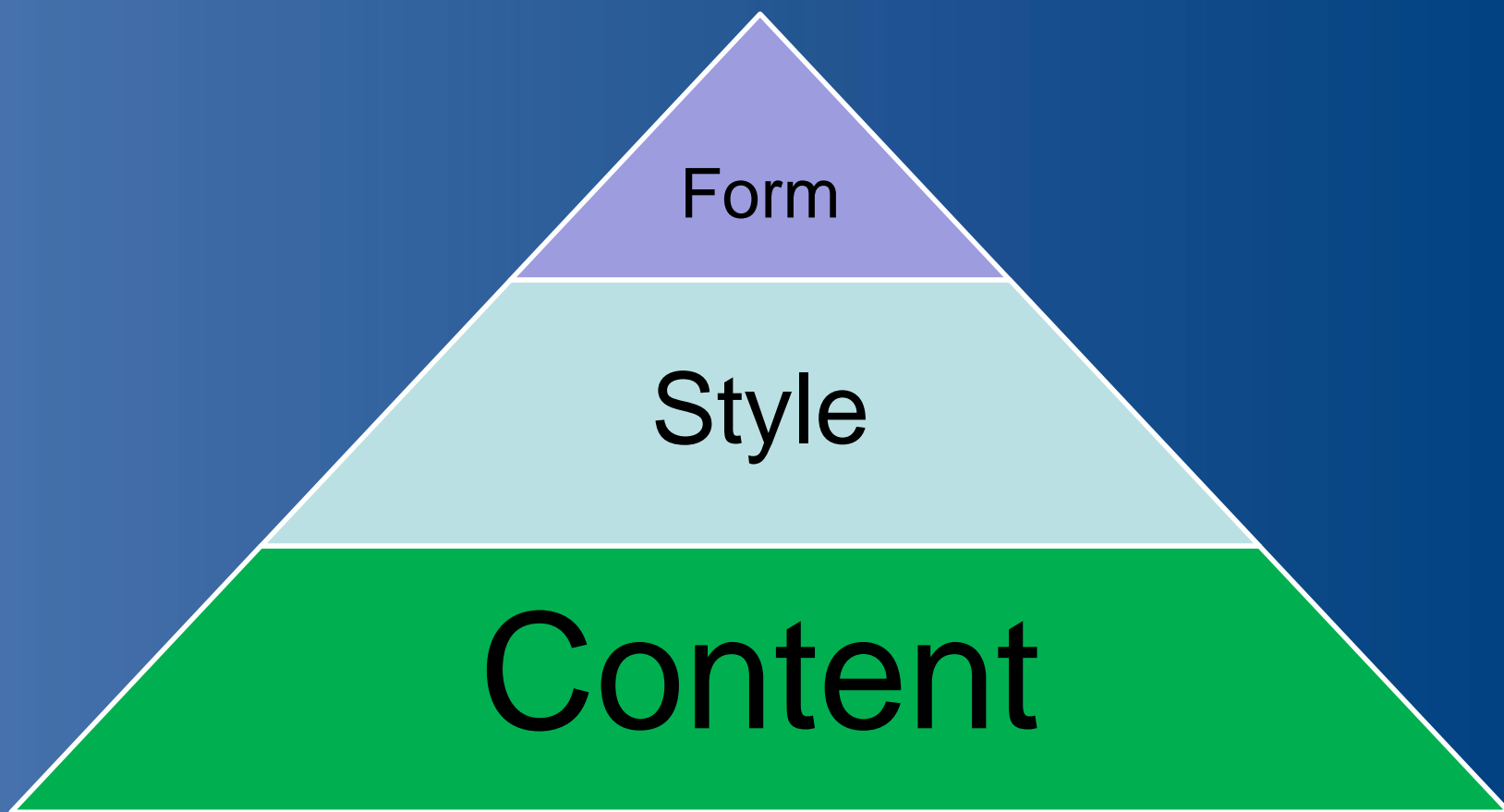
Punctuation

Usage

Typographical errors

Spelling

# Components of editing



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# WHO ARE SCIENTIFIC EDITORS?

# Who are scientific editors?

- All are language experts
  - *E.g., degrees in English, Writing, Communications, Journalism, Language Arts*
- Some are subject matter experts
  - *E.g., degrees in scientific field, clinical credentials*

# Who are scientific editors?

- Knowledge
  - *Conventions of scientific writing*
  - *Best practices in scientific writing*
  - *Research and publishing ethics*
- Skills
  - *Reading critically*
  - *Querying authors*
  - *Suggesting revisions*
  - *Improving tables/figures*



# Who are scientific editors?

- Credentialing
  - *Board of Editors in the Life Sciences*
    - ELS Designation
  - *American Medical Writers Association*
    - Medical Writer Certified

**WHAT DO EDITORS DO?**

# Key functions



Read critically



Ask  
questions



Suggest revisions

# Read critically

- What does your audience know?
- What do they not know?
- Why should they care?
- What value does your study offer?
- How is your study novel/important?



# Ask questions

- Is every sentence **clear**?
- Is the information **complete**?
- Can the text be more **concise**?
- Are data and terms **consistent**?
- Is the story of your study **cohesive**?
- Is your manuscript **compelling**?



## Query example: clarity

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**Text:** “Thoracic outlet syndrome may occur secondary to scalene muscle hypertrophy caused by swim training.”

## Query example: clarity

**Text:** “Thoracic outlet syndrome may occur secondary to scalene muscle hypertrophy caused by **swim training.**”

**Query:** What do you mean by “swim training”? Simply frequent swimming? A rigorous program (e.g., for a competitive swimmer)? Something else?

# Query example: **completeness**

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**Text:** “In one study,  
20% of swimmers met  
the criteria for  
generalized  
ligamentous laxity.”



## Query example: **completeness**

**Text:** “In one study, **20% of swimmers** met the criteria for generalized ligamentous laxity.”

**Query:** Please provide the n values (numerator/denominator) and indicate what kind of swimmers they were (recreational? collegiate? elite? Olympic?).

## Query example: **conciseness**

**Text:** “While rare, there are reported cases of thoracic outlet syndrome in swimmers. This may occur secondary to scalene muscle hypertrophy caused by swim training.

(24 words)

**Revision:** Rarely, thoracic outlet syndrome occurs in swimmers, possibly caused by training-induced scalene muscle hypertrophy.  
(14 words)

# Query example: consistency

**Text:** “Freestyle has been associated with lower risk of knee pain compared with other strokes (OR, 0.5).”

## Query example: consistency

**Text:** “Freestyle has been associated with lower **risk** of knee pain compared with other strokes (**OR, 0.5**).”

**Query:** You say “risk” but report odds. Please confirm you are reporting an odds ratio, and we will change term. Please also provide a 95% CI.

## Query example: cohesion

**Text:** “Most swimming deaths occur in nonswimmers. In the U.S., 10 drowning deaths are reported each day, 20% of which are in children younger than 15 years.”

## Query example: cohesion

**Text:** “Most swimming deaths occur in nonswimmers. In the U.S., 10 drowning deaths are reported each day, 20% of which are in children younger than 15 years.”

**Query:** In a review of current treatments for swimming injuries, the incidence of drowning deaths in the US is not relevant. Recommend deleting.

# Query example: conviction

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**Text:** “Our goal was to provide the sports medicine physician with a comprehensive review of evidence-based literature on swimming injuries.”

## Query example: conviction

**Text:** “Our goal was to provide the sports medicine physician with a comprehensive review of evidence-based literature on swimming injuries.”

**Query:** Can you help reviewers understand the importance of your study? No recent reviews on the topic? Inconsistencies in treatment? Major advances since the last review was published?



# Query example: conviction

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**Text:** “Postoperative return-to-swimming protocols should be tailored to the surgery performed.”

## Query example: conviction

**Text:** “Postoperative return-to-swimming protocols **should be tailored** to the surgery performed.”

**Query:** How can a reader *use* this information? Can you provide more specific advice here? Perhaps a table or figure showing protocol options by procedure?

# Suggest revisions

- Asking, “Do you mean A or B?” can help authors recognize ambiguity in their writing





# Beyond the basics

Identifying  
target  
audiences



Choosing  
a journal



Avoiding plagiarism

CONSORT PRISMA  
STARD STROBE

Adhering to guidelines

# What editors DON'T do

- Editors do NOT
  - *write your paper for you*
  - *qualify for authorship on your paper*
  - *take responsibility for the scientific integrity of your work*

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**HOW CAN EDITORS HELP  
YOU?**

# How editors can help

- Improve your “hit rate”
  - *Avoid rejections! This saves time*
  - *Example*
    - Mean acceptance rate of top 10 orthopaedic journals is 28%
    - Our authors’ annual hit rate is consistently >50%

# How editors can help

- Help you write more efficiently
  - *Clinical article template*
  - *Chronology of writing*
  - *Early-stage feedback*
  - *Journal requirements*



# How editors can help

- Guide you in journal choice
  - *Who is your target?*
  - *Look beyond impact factor*
  - *Consider journal scope and requirements*

# How editors can help

- Help you avoid common pitfalls
  - *Misleading/uninteresting title*
  - *Incomplete abstract*
  - *Data discrepancies*
  - *Inappropriate target journal*
  - *Incomplete response to feedback*
  - *Reviewer “pet peeves”*
    - Eg, “trend toward significance”
    - “our study is the first to...”

# How editors can help

- Organize your references
  - *Reference management*
  - *Welch Library resources (EndNote Basic and RefWorks)*
  - *Journal style adherence*

# How editors can help

- Improve your writing skills
  - *Teach through querying*
  - *Point out recurring deficiencies*
  - *Explain rationale for revisions*
  - *Direct you to further resources*

# Thank you

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