Preparing a Manuscript for the JACMP (or any other journal, for that matter)

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Learning Objectives

After attending this presentation, the participant will:
• Be able to prepare a well-written manuscript suitable for publication in the JACMP or any other peer-reviewed journal.

Target audience

• All medical physicists who have done work worth sharing
  – Which is really most of you
• You have done the work, now how do you communicate it to others?
Before you begin to write

- Your role is to communicate knowledge and experience
- Know your audience
  - For JACMP, it is the clinical medical physicist
  - Do not pitch manuscript over your readers' heads
  - Do not talk (write) down to your reader

While you write

- Write in clear English
  - S Pinker, *The Sense of Style*
  - Strunk & White is outdated!
- Define all acronyms the first time they are being used
- Be specific with your verbiage
- Get your words right!

Get your words right!
Where to submit

- Clinical – audience is physicists
  - JACMP
- Clinical – audience is physicists and physicians
  - Red Journal
  - Radiology
- Scientific
  - Medical Physics
  - PMB

Format of manuscript

- Abstract
- Introduction
- Methods and Materials
- Results
- Discussion
- Conclusions
- Acknowledgments
- Appendices/Supplementary Files

Order of writing manuscript

- Introduction
- Methods and Materials
- Results
- Discussion
- Conclusions
- Acknowledgments
- Appendices/Supplementary Files
- Abstract
Introduction

- What gaps in knowledge does this work fill?
  - Provide sufficient background so reader can appreciate the work
  - Clearly state the problem you propose to solve
  - Why is this a problem worth solving?
- Keep Introduction focused
  - Save discussion for Discussion section

Methods and Materials

- Describe methodology in sufficient detail so interested reader can repeat your work or do similar work
- Identify equipment with generic description (with brand name in parentheses)
- Be sure to indicate compliance with patient issues (HIPPA, IRB, etc)
- Use active voice
  - “We” is ok

Results

- Display figures, tables, graphs
  - Make sure everything is readable
  - Include uncertainties
- Use text to interpret
  - Do not rehash data
  - Point out significant findings
  - Identity trends
Discussion

- Why is this work significant?
- How has our understanding of the field been enhanced by this work?
- What issues related to this work should the reader be aware of?
- How could this work be refined?
- Where do we go from here?

Conclusions

- Base conclusions on work done
- Do not speculate – that belongs in the Discussion
- Do not suggest further work – that belongs in the Discussion

Acknowledgments

- Identify courtesy authors in Acknowledgments
- Identify funding sources
Appendices

- Information relevant to work that would distract from flow of body of manuscript
  - Derivations
  - Extensive background information

Supplementary Files

- Additional data
- Downloadable worksheets
- Video clips
- Possible with online journal

Abstract

- Write Abstract after manuscript has been completed
- Abstract allows casual reader to obtain sense of the work without going into details
What not to do in Abstract

• Too much information: Do not rehash the manuscript
  – Abstract, not Summary
• Too little information: Do not write “We will show results.”
  – Instead, show results

What to do: “8-sentence rule”

• 2 sentences for Purpose
  – “The purpose of this work is to …”
• 2 sentences for Methods and Materials
• 2 sentences for Results
• 2 sentences for Conclusions

Review and Rewrite

• Enlist colleague to read your manuscript
• Sit on manuscript for 1-2 weeks, then re-read
• If possible, have copy editor review manuscript
  – Do not rely on journal reviewer
• Be sure you have followed journal’s formatting rules
Response to Reviewers

• Explicitly address each point made by reviewers
• If you disagree with reviewer, explain why you disagree
• Respond promptly to review

Final Tasks

• Respond promptly to proofreader
  – Manuscript is on schedule for publication
  – Delayed response affects production schedule
• Add manuscript reference to your CV

Take-away Message

• Preparing a manuscript for publication is a relatively straightforward procedure
• If you have done work worth sharing, consider publishing it
Thank you