

Writing & Reviewing a PBRN Research Paper

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Overview

- 14 tips for medical writing
 - PBRN-specific tips
- Cookbook for a research paper
- The peer review process
- Tips on getting funded
 - PBRN-specific tips

14 Tips for Medical Writing

Tips for Medical Writing

1. Decide what it's about
2. Identify the audience
3. Write the abstract first
4. Make the tables and figures
5. Outline
6. Do a focused literature review

Tips for Medical Writing

7. Involve collaborators
 - PBRN members
 - CTSC Core
 - Content experts
 - Methodologists
 - Writers/readers

8. Nike (just do it!)
 - Deadlines
 - Daily/weekly writing
 - Immersion experience

Tips for Medical Writing

9. Seek critical feedback and draw general concepts from it
10. Iterate between computer and hard copy (in a writing “place”)
11. Revise, revise, revise; stop
(Seek parsimony, logic and clarity)
12. Follow the rules (usually)

Tips for Medical Writing

13. Make writing a regular part of your week

Candib, LM. Making Time to Write? *Ann Fam Med.* 2005; 3: 365 - 366.

14. Build your capacity

Clark, RP. *Writing Tools: 50 Essential Strategies for Every Writer.* New York: Little, Brown and Company, 2006

Prose, F. *Reading Like a Writer: A Guide for People Who Love Books and for Those Who Want to Write Them.* New York: Harper Collins, 2006

PBRN-Specific Tips

- PBRN as a means to an end (or the end)
- Use the PBRN generalizability argument
- Options to acknowledge PBRN members
 - List all participants in acknowledgements
 - Include as co-authors but have a writing committee
- Cite literature from this course

A Research Paper Cookbook

- Title page
- Abstract
- Introduction
- Methods
- Results
- Discussion
- Acknowledgements
- References
- Tables
- Figures
- Appendices

Title Page

- Title
- Authors & affiliations
- Corresponding author
- Other (check the journal's info for authors)
 - Word count
 - Funding
 - Potential conflicts of interest

Abstract

- The only thing that most readers look at
- Must stand alone as a summary of the main points of the study
- Include *Index Medicus* key words

Introduction

- Purpose is to set up **this** study
- **Focused** literature review and rationale
- End with a paragraph that begins:
“Therefore, this study was undertaken to...”

Methods (Qualitative)

- Reflexivity
- Design
- Participant sampling procedure
- Experimental procedures
- Data collection
- Analyses
- Consider organizing as a chronology if highly iterative

Methods (Quantitative)

- Design
- Sites / participants
- Experimental procedures
- Data collection
- Measures
- Analyses

Results

- Refer to and explain main findings from the tables & figures
- Don't repeat in words what can be discerned from the tables/figures
- Include any findings not in the tables or figures
- For qualitative, include quotations as text, tables or appendix

Discussion

- Emphasize / synthesize main findings
- Put findings into context of what is already known
- Draw any new conclusions
- Discuss strengths & weaknesses
- Implications for future studies, clinical application, education or policy

Acknowledgements

- Those who helped but don't meet criteria for authorship
- Funding sources

References

- Usually numbered, in order cited
- Use a bibliographic database

Figures

- Info best presented graphically
- Examples
 - Theoretical model
 - Flow diagram of participant recruitment, exclusion, retention
 - Photos

Tables

- The data!
 - Short, descriptive title and headings
 - Consider putting N in subheading
 - Footnotes for details, defining abbreviations
- For epidemiological studies
 - Table 1 is study participants
 - Table 2 is univariate findings
 - Table 3 is multivariable analysis

Appendix

- Details for a subset of readers
 - Extra tables
 - (Extra) quotations from qualitative data
 - Measurement details (survey, technical procedures...)
- Some journals may publish only online

The Abstract

- Purpose (Background)
 - Methods
 - Results
 - Conclusions
- Background (context)
 - Objective
 - Design
 - Setting
 - Participants
 - Intervention(s)
 - Main outcome measure(s)
 - Results
 - Conclusions

Abstract

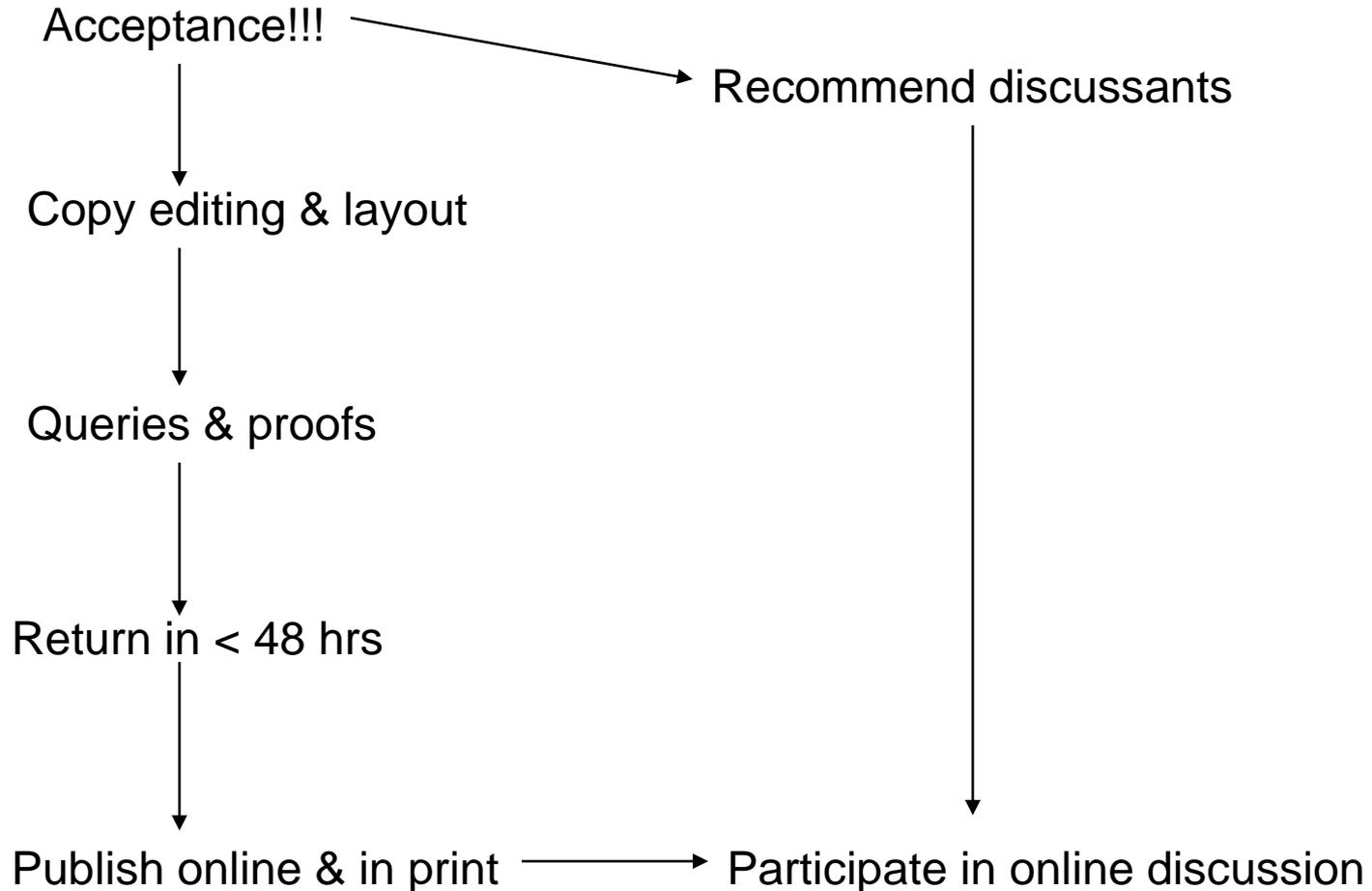
- Purpose
 - 1 sentence on the general problem
 - 1 sentence on the research question or purpose
- Methods
 - Design
 - Sites/participants
 - (Experimental procedure)
 - Main outcome measure(s)
 - Analysis
- Results
 - Main findings - about 1/2 of the 250 word allotment
- Conclusion
 - 1 sentence summary of the main take-home lesson
 - 1 sentence on the implications (So what? Who cares?)

The Peer Review Process

- Thinking like a reviewer (and editor) makes you a better writer
- Being a reviewer helps you to think like a reviewer

Review Process

Annals of Family Medicine



Reviewer Role

- Service to the field
 - Help authors to improve the quality of their work
 - Help the editors make a decision
 - Advance the quality of scholarship in the field
- Benefits to the reviewer
 - Understanding of the process
 - Learning to think like a reviewer
 - (Both these help your own writing)

Why me?

- Content expertise (usually specified by you)
- Methodological expertise
- Represent the voice of readers
- [To be who you are]

Process

- Email query
 - Read abstract
 - Look at your schedule
 - Respond online yes or no
- Doing the review
 - Read article with a red pen
 - Note general questions, concerns, positives
 - Write review
- Submit and do rating & recommendation

Writing the Review

- Comments to the author
 - General
 - Positives
 - Concerns
 - Questions (what wasn't clear)
 - Suggestions for improvement
 - Specific
 - By page, line and paragraph
- Comments to the editor
 - Judgment re acceptance
 - Place in the literature
 - Additional concerns (e.g. duplicate publication)

Rating the Manuscript

(1 = not at all, 5 = very much)

- Does this paper present new information?
- How useful is the information in this paper?
- How valid are the conclusions presented in this paper?
- How important is this manuscript?
- In your opinion, will the authors be able to revise this work into a high quality paper?
- Are you interested in participating in the online discussion of the article?

Recommendation

- Consider
 - Manuscript
 - Place in the field
 - Place in the journal
- Options
 - Accept
 - Accept with minor revisions
 - Reconsider after major revisions
 - Reject

Critiquing Your Critique

- Compare your recommendation to the editors' decision
- Compare your reviews to others
 - Tone
 - Specific points you caught or missed
 - Potential usefulness to authors
- Everything doesn't have to match
 - Your unique voice is important
- Use feedback to improve your reviewing and writing

Interpreting Reviews

- Revision is required for almost all accepted
 - Editors' letter
 - Degree of interest
 - Guide to reviews
 - Specific instructions
 - Are requested revisions possible?
- Rejection may reflect
 - Quality of the study being described
 - Quality of the writing
 - Fit with the journal
 - More good manuscripts than space

Resubmitting

- Don't be discouraged
- Do it soon
- Use editors' letter as a guide
- Cover (rebuttal) letter is important
 - Enumerate and address each concern
 - Justify disagreements
 - Work to improve the manuscript
 - Work to meet the journal's needs (e.g. shorten)
- Have someone else read manuscript before resubmitting

Rejected Manuscripts

- Submitting to another journal
 - Use critique to improve the paper
 - Consider any suggestions regarding target
- Challenging the decision
 - Reversal unusual
 - Provide argument if paper misunderstood
 - Recognize the decision may reflect considerations of space, fit, variety, etc, in addition to the specifics of your paper

Accepted Manuscripts

- Respond to editors' request for discussant names and email addresses
- Respond to managing editor's queries
- Return proofs on time
- Consider doing a press release

How to Get Funded

14 Tips

Getting Funded

1. Zig when everyone else zags
2. Adapt your idea to funding priorities
3. Follow their rules
4. Think like a reviewer
5. Sell the sizzle
6. Sell the steak
7. Write for the next level

Getting Funded

8. Know the literature, then go beyond
9. Gather pilot data
10. Collaborate and build a team
11. Create early internal deadlines
12. Seek critical feedback
13. Be true to yourself
14. Be persistent!

PBRN-Specific Tips

- PBRN as a means to an end (or the end)
- Use the PBRN generalizability argument
- Options to acknowledge PBRN members
 - List all participants in acknowledgements
 - Include as co-authors but have a writing committee
- Cite literature from this course
- Include PBRN members as participants
- Use card study method for pilot data
- Use mixed methods
- Consider multi-level stats

PBRN Funding Sources

- Infrastructure – requires creativity
 - Local sources
 - Atypical sources: e.g. health depts, prof. orgs
 - Foundations, AHRQ
 - CTSA, Cancer Center Shared Resource, NIH
 - PBRN Resource Center

<http://pbrn.ahrq.gov/portal/server.pt?open=512&objID=969&mode=2>
- Specific projects – PBRNs as the “lab”
 - NIH, foundations, AHRQ, etc
 - RFAs
 - Contracts (e.g. AHRQ PBRN Master Contracts)
 - SBIR/STTRs

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