Becoming a Better Reviewer

And Researcher and Writer Too
The Life Cycle of a Paper

1. Submission
2. Quality Check
3. Associate editor assigned
4. Reviewers assigned
5. Reject / Accept / Revise
6. Revise, if needed
7. Decision
Manuscript Flowchart
Role of Reviewer

**Help Reader** – helps improve reader experience

**Help Author** – provides honest, courteous, constructive advice

**Help Editor** – provides prompt expertise that helps decision to accept or reject
Help us assign relevant papers to you

The process works only if we know what your expertise or interest is

- Go to afm.msubmit.net
- Sign up as reviewer, or update your profile
- Indicate your specialization
  - Unhelpful to “select all”
- Indicate your competencies
  - Not what you’re trained in per se, but current on
- Note familiarity with datasets
- Methods
  - Qualitative
  - Quantitative
  - Mixed

For example, you might choose:
- Education/curriculum: community health education
- Education/curriculum: patient education
- Family/life issues: family planning/contraception
- Health care delivery/HSR: health care disparities
- Health promotion/prevention: behavior change
- Health promotion/prevention: immunization
- Health promotion/prevention: screening
- Mental health: depression
- Mental health: mental health services delivery
- Practice-based research networks
- Pregnancy/chilbirth: breastfeeding
- Pregnancy/chilbirth: preconception care
- Pregnancy/chilbirth: preterm care
- Primary care: access to care/barriers to access
- Primary care: patient-centered care
- Discipline: Family Medicine/General Practice

How often are you willing to review? 6 times per year
AnnFamMed Reviewer Signup page
What to tell Authors

GOAL: Help the authors make the paper better

Things that can be improved
- Need clarification
- How it fits into FM or current knowledge
- Ways to strengthen methods
- Result needed and not needed
- Presentation of data (make tables, figures more clear, complete)
- Where references are missing

Clear feedback is best
- Organize comments by ms section
- Note location: section, paragraph, sentence
- No copy editing - this is someone else’s job

Be collegial, encouraging and professional
Do NOT recommend accept or reject here
Methods:
1) Low response rate (14%)
2) Didn’t control for rural vs. urban in main analysis
3) Positive - objective measure of outcomes

Results:
1) Explain why these findings go in opposite direction of what you might have hypothesized.
2) How did findings differ between rural and urban populations?

Discussion:
1) No mention of two major papers in this field which contradict these findings (references, John Doe, Annals of Family Medicine 18.9, 2018, Jill Smith, JAMA, 12.4, 2016)
What to tell Authors

Example 2

Tables

Results:
1) Don’t repeat your results in the text and in table 2
2) Need p value and statistical significance testing for results related to emergency department use
3) Move tables 6-17 to online appendix
4) (More) clearly label x, y axes in Fig. 3
5) Consider adding multivariable regression to adjust for insurance type
What to tell Authors

Example 3 - Bias in Methods

“The major risk of bias in this study is the possibility of observing statistically significant differences by chance. The way this study was conducted makes these risks rather high. Specifically, the study analyzes associations between 15 independent variables (11 social complexities plus any set of 2, 3, 4, or 5+ social complexities) and 26 dependent variables (quality indicators) across a sample of more than 600,000 observations. Although the authors have taken some steps to mitigate and address this concern, there are several additional steps that could be taken.” [Reviewer then offers three suggestions.]
HANDOUT - AFM 10-19

- To read online go to: https://docdro.id/QydkBYj
- Take 10 minutes to read
- Take another 10 minutes to write comments for author (in groups)
DISCUSSION
Comments to the Author:
This is another important study about the ecology of medical care. It is a hard read with lots of information in text and table/figures that most readers will not readily grasp, and thus, to be what it aims to be, it needs to communicate its methods and findings more clearly.

1. It is more than its name: It is an update on what is knowable about the ecology of medical care based on MEPS surveys from 2002-2016 AND a subanalysis positioned to provide a before and after look focused on the implementation of insurance expansion in 2014 by the ACA-- placed into the context of established trends!. Title should inform readers what it is more accurately.

2. The news is mostly lost and too hard to find. That news about the ACA shows up mostly on page 10 (if page 1=the title page, page 2=abstract, etc). In my view the news is headlined with three findings: rates of individuals engaged in primary care visits did not increase after the ACA implementation; there were groups with decreased engagement with primary care and they were individuals reporting fair/poor health and individuals >64 y/o; racial/ethnic disparities in the engagement with medical system were minimally altered if at all in the 2 year post ACA window assessed. There is other "news" about trends in the ecology during 2002-2016, e.g.: the general decline in seeing PC physicians with little change in seeing other specialties with the decrease occurring for whites and blacks but not Hispanics, declines in hospitalization for >64 y/o, declines in pc for people with poor/fair health, and some trends in dental, ED, and home care participation. (it may be news that the ACA drop in uninsurance occurred in all health status categories reported by MEPS)
3. There is in this paper history repeating itself: the basic pattern in the ecology of medical care based on data from 1959 and 1996, largely persists, rather resistant to our machinations and manipulations of the organization and payment of healthcare--suggesting it is grounded in some underlying propensities/experiences of humans. This is relatively amazing in its stubborn persistence.

4. Aiming to enable revisions to make this news much more accessible:
   a. Think about pulling the material in second paragraph of discussion starting with "Our goal was . . ." into the introduction and maybe end the introduction with what you predicted you'd find --that a drop in uninsurance would alter the ecology/engagement. And in introduction call out the two studies you have combined, announce how the paper is organized to present both 2002-2016 and pre-post 2014 findings. Also in introduction explain your unit of analysis throughout is a person/month --expressed as a number per 1000. (and check bottom of page 8 for the +5 visits per 1000 per month statement --really?)
   b. Reconsider your decision to report categories for the 14 year analysis and the ACA analysis back and forth, rather than organized by what is actually 2 studies. Whatever you prefer, think about using some convention to label what you are reporting in the results--I and I think other readers will struggle to keep track of what you are reporting--a 14 year trend or a change from before ACA to after ACA.
Helpful Review

c. The tables and figures are completely inadequately labeled and explained. Name them to indicate what they are. If you keep the table combining the before and after findings and the changes from 2002-2016--format them with a dramatic separation. Add footnotes to tables to clarify what the numbers are, and what they mean. As presented now, there is no hope of understanding them without reading the entire paper.

5. Strengthen the methods. Explain the 2 sets of analyses for the reader. Define explicitly and explain what "change over the course of the study" is, how it was calculated, how tests for difference were done, what was included as participation (e.g. email, phone call), and exactly what the numbers in the tables mean--e.g. is a 2=2 persons/month/thousand. What is actually being compared by a p value in the rate of change column? Explain in the different sets of patients, e.g. race/ethnicity--what variables were controlled for in the regressions.

6. A few details:
   a. Can't you avoid repeatedly using "in the course of the study"? I think this phrase means "between 2002 and 2016.
   b. Check in overall population part of the big first table the line for Emergency dept--are the numbers in that row correct--15 is outside what I assume are confidence intervals).
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The figures would be clearer if the confidence intervals didn't touch and disguise the data point—and they will probably be in black and white when published.

Help the editors deal with all these tables and figures even more by carefully reconsidering what can go into an online appendix and be replaced with 1-2 sentences.

Have a bit more fun in the discussion and offer your own thinking/conjecture about what might explain your findings, esp the unexpected findings. And perhaps editorialize about your thinking concerning the glide path to less primary care physician engagement with persistent or more engagement with other specialties in the context of needing to contain costs.

Consider revising the paragraph about sensitivity analyses on page 9. It seems to raise more questions than provide further answers/information.
What to tell Editors

GOAL: Help with decision to accept or reject

What editors need to know:

- Is it “true”
- Is it “new”
- Is it “useful”

- What you know
- What you think is so
- What you don’t know

- Any fatal flaws?
- Honest appraisal, no kid gloves
- Any conflicts of interest?
- Reasons to accept or reject
What to tell Editors

Example 1

Case study vs. Implementation research (qualitative)

“The manuscript is missing detail and rigor to be a credible evaluation.”

“My main concern is the lack of details about methodology of the qualitative evaluation. Several times in the manuscript, it is noted that “this evaluation is based on a case study” or “draws on case study data.” I find that insufficient to assess the quality of the evaluation. The following are missing in the methodology:”
“How can this information enhance delivery of primary care beyond what is currently available? I appreciate the authors' comments on the practical use of their results, and further elaboration would be helpful in regards to exploring other motivating reasons participants did not want to know prognosis of life expectancy, particularly when this study had different outcomes than previous studies.

“For example, in a systematic review of self-estimated life expectancy in chronic disease, researchers concluded that patients with non-cancer chronic disease may have survival expectations that markedly exceed outcomes. Therefore, these expectations might lead some patients to make health decisions and life choices that they would not if their predictions were more realistic (Hole B, Salem J. How long do patients with chronic disease expect to live? A systematic review of the literature. BMJ Open 2016;6:e012248. doi:10.1136/bmjopen-2016-012248). Perceived life expectancy may affect a variety of outcomes, including healthcare choices. Furthermore, having previous long-term conditions also means that patients’ life circumstances have already changed because of them. Also, previous experience facing the challenges of chronic illness and disability means that patients may have already made adaptations. For such patients, the previous impacts of illness became influences on subsequent healthcare decisions.”
What NOT to tell Editors

“Author misuses a semicolon in Introduction, P2, line 3. Consistently incorrect capitalization throughout Methods....”
AFM 10-19

- Write Comments for the Editor
DISCUSSION
Resources for Reviewers

- AAFP’s Reviewers Resources (aafp.org)
- Scholarly Kitchen, “How To Be a Good Peer Reviewer” (scholarlykitchen.sspnet.org)
- Equator Network - Peer review training and resources (equator-network.org)
- Trisha Greenhalgh - “How to read a paper” (bmj.com)
THANKS FOR ATTENDING

Please fill our our survey for a chance to win a handmade Annals Leaf Lapel pin!
What to tell Authors

Example 4

Data problems

[for a retrospective cohort study using a very large administrative health database]

“The most disadvantaged people are often those who are excluded from dominant data source.”
“I found some of the results tables difficult to interpret. In Table 1, I suggest that the authors merge rows in the last column when they are attempting to display a p value for an analysis with multiple categories (i.e., race/ethnicity). In Table 2, I was very confused on why there was an FM/other residency column crossed with an FM(%) row. The percentages in Table 2 would be more useful and understandable if they indicated the percentage of graduates in each row category entering family medicine. Then readers would be able to more clearly see that overall, students choose family medicine at 8.7%, but those in the different pathways choose FM at different rates.”
What to tell Authors

Example 6

Conclusion needs rewriting

“The study is based on patients visiting/contacting primary care, while the authors drew conclusions on population needs - for example, they conclude when comparing their findings with other studies that (discussion, second paragraph): In other words, we do not see evidence that lonely individuals isolate themselves from primary care. However, to draw such conclusion it would be essential to understand the population prevalence, in particular in those not contacting (primary) health care: the overall population prevalence and its relation to contacting primary care or not.”
“This was a terrific paper. I don't have any comments or suggestions to make. Well done!”
What to tell Editors

Example 1

Missing Information

“The paper currently lacks connection to the literature on the primary care reforms in XXX to which this study is related. This is important for two reasons. First, the context of other studies of the medical homes in XXX being ineffective for other outcomes of interest would bolster the case that the contractual obligation of the medical homes to provide after hours care is predictably ineffective. It is not just with respect to impacts on use of emergency departments that XXX’s bold experiment has been underwhelming in its impacts. See Jinhua Li & Jeremiah Hurley & Philip DeCicca & Gioia Buckley, 2014. "Physician Response To Pay-For-Performance: Evidence From A Natural Experiment," Health Economics, John Wiley & Sons, Ltd., vol. 23(8), pages 962-978.”
What to tell Editors

Example 2

Lack of Expertise

“I did not feel that I could evaluate their statistical methods sufficiently with my knowledge base.”
What to tell Editors

Example 4

Potential conflict of interest

“I have participated in research by the XXX consortium and know several of the authors. I did not participate in this specific trial.”
What to tell Editors

Example 5

Useful Confidential Comments to the Editors

“This is a well-written paper that addresses the important question regarding quality of care (based on ASAM guidelines) provided by physicians who prescribe buprenorphine by urban/rural location. As I indicate to the authors, my primary concern is the low response rate and difficulty in assessing response bias, I also pondered the “so what?” question in terms of implications.

“The authors are correct that it is getting more difficult to survey people including physicians. Even with best survey practices, only one in three responded creating a threat to generalizability.

“In terms of significance, I can see two reasons for publishing it. First, publication could encourage more rural family physicians to prescribe. Sixty percent of rural prescribers are primary care physicians, presumably mostly family physicians. Those practicing or preparing to practice might be re-assured that rural prescribers can provide comparable quality of care and that it is doable.

“Second, family medicine needs to make up for lost time in addressing the opioid epidemic. A national survey even with its acknowledged flaws helps remind family medicine that management of opioid use disorder should be a core skill. The authors data on age and date of waivers suggest there is lots of room for improvement.

“For these reasons, I think this paper warrants a “revise and resubmit.” Let’s see what the authors come back with…”