Fostering the Discipline to Disseminate:

A Workshop on Writing Productively for Publication

Anne Marie Weber-Main, PhD
Associate Professor of Medicine
Director of Faculty Mentoring
University of Minnesota Medical School

UNIVERSITY OF MINNESOTA
Driven to Discover℠

Today's Agenda

Time	Topic
8:15 - 9:15	I can publish that? Scope of scholarship in academic medicine.
9:15 - 9:25	Break
9:25 - 10:15	Essential tools: Searching the literature and using citation software
10:15 - 11:15	Meeting readers' expectations for IMRAD article format
11:15 - noon	Navigating the path to publication, from journal selection to responding to reviewers
noon - 12:15	Break, gather lunch
12:15 - 1:00 (over lunch)	Maximizing your writing productivity

UNIVERSITY OF MINNESOTA
Driven to Discover℠

Part 1:

I Can Publish That?

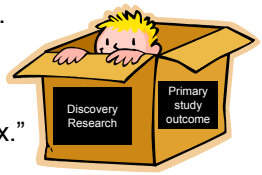
Scope of Scholarship in Academic Medicine

UNIVERSITY OF MINNESOTA
Driven to Discover℠

Objective

Stimulate participants to identify a broad range of ideas worth disseminating to a wider scholarly audience.

In other words, think outside the traditional "publishing box."



UNIVERSITY OF MINNESOTA
Driven to Discover℠

What is Scholarship?

- **Process**
  - Recognizing/developing your expertise
  - Looking critically at things you do that are new or building on others' ideas
- **Product**
  - Reviewed by experts & judged "worthy"
  - Public, ideally available long term
  - Once public, others incorporate these ideas into their practice or thinking

Simpson, D., Fincher, R.-M. E., Hafler, J. P., Irby, D. M., Richards, B. F., Rosenfeld, G. and Viggiano, T. R. (2007), Advancing educators and education by defining the components and evidence associated with educational scholarship. Medical Education, 41: 1002–1009.

UNIVERSITY OF MINNESOTA
Driven to Discover℠

Step 1: Identify Ideas, Opportunities

- What projects or innovation are you engaged in?
- What is your role?
- How interested are you in this topic/area?

Infectious disease control
- Case reports
- Case-control study of risk factors for HAI
- Pilot test of outpatient protocol for preventing SSI

Sports medicine, Physical activity, Pediatric obesity
- Brief reports, mini-reviews in sports medicine journals
- "Middle author" as physician on PA trials
- 2ndary data analyses
- Clinical guidelines
- Pilot feasibility RCT of pediatric obesity intervention

Other sources of ideas

- Professional meetings


- Conversations with colleagues, listserves
- Journal tables of contents – topics, article types

Annals of Internal Medicine

Article Type (length)	Description
Original Research (1500 to 3200 words)	Reports of original research on prevalence, causes, mechanisms, diagnosis, course, treatment, and prevention of disease.
Research and Reporting Methods (2500 to 4000)	Papers about research methods or reporting standards.
Reviews: Narrative (3500 to 4000)	Descriptions of cutting-edge and evolving developments, and underlying theory.
Reviews: Systematic & Meta-Analyses (3500 to 4000)	Reviews that systematically find, select, critique, and synthesize evidence relevant to well-defined questions about diagnosis, prognosis, or therapy.
Letters: Clinical Observations (600)	Short research or case reports.
Clinical Guidelines including Synopses (4000)	Summaries of official or consensus positions on issues related to clinical practice, health care delivery, or public policy.

Journal of Graduate Medical Education

Article Category	Description	Words
Original Research (Quantitative, Qualitative)	Studies of graduate medical education curricula, evaluation, teaching methods, or settings	≤ 2,000, ≤ 3,000
Educational Innovation	A description of a new approach or strategy in medical education	≤ 2,000
Review	Systematic, Narrative, or Meta-Analyses of existing literature on a topic in GME	≤ 3,000
Brief Report	May have a more limited focus: a single setting, smaller number of trainees, a single discipline, preliminary or self-reported outcome measures	≤ 1,200
Perspective	On issues of broad interest to program directors, educators, researchers, and deans for GME. Evidence-based but also reflect authors' expert opinion.	≤ 1,200
On Teaching	Personal essays or reflections that speak to the experience of teaching, learning, or other aspects of the physician experience.	≤ 1,200
To the Editor (Comment or Observation)	Comments on articles published in *JGME* or brief observations on topics relevant to GME	≤ 500

Pediatrics

Ethics Rounds

- Discussions of cases that illustrate ethical dilemmas in patient care, research, or administration.
- Must contact assistant editor before submission.

Quality reports (3,000 words)

- *Purpose:* add to understanding of how to improve quality in clinical settings.
- *Content:* describe the change process, whether successful or unsuccessful, and insights regarding why planned interventions did or did not lead to improvement.

Have YOU written (or contributed to) an article that reported on something other than "original research"?

- What or who first inspired (nudged, coerced) you to write the article?
- Was the article hard to write? To get accepted? Why or why not? How did you identify a journal?
- What was different about writing this type of article compared to a research report?

Step 2: Write Purpose Statement/Question

- What is your innovation?
- What specific problem are you solving?
- What specific questions do you want to answer?

Step 3: Review the literature

- What is already known?
- What are others doing?
- What have others reported?
- How will your project contribute to what is already known/reported?
- What is your angle?
  - piece of the puzzle

But before you get too far in deciding your approach to answering your questions or testing your innovation…

Give your idea "the sniff test"

1. ***So what?*** Will it make a real contribution to the literature (vs "*litter*-ature")

2. ***Who cares?*** (stakeholders, applicability)

3. ***What venue?*** (journals, other peer-reviewed repositories)

The successful publication will:

(1) Have a clear, focused main message

(2) Reach an audience that needs or wants to hear that message.

UNIVERSITY OF MINNESOTA Driven to Discover℠

Example: Educational Scholarship

Purpose: To determine which resources IM residents use at the point-of-care (POC) for clinical decision making, and the drivers for selection of these resources.

1. So what?
2. Who cares?
3. Where could we publish?

UNIVERSITY OF MINNESOTA Driven to Discover℠

So what?

Why pay attention to the information resources used by learners at the POC?

In general:

- Information resources can affect clinical decisions; must be of high quality and accuracy.
- Most resident learning is directed by patient encounters.

More specifically (and timely):

- Enormous volume of info available to learners
- Documented shift from journals to other online resources (UpToDate, Epocrates, MD Consult)
- Different literature search engines (PubMed, OvidMEDLINE vs. Google Scholar) – ease, speed, accessibility, thoroughness, etc.

UNIVERSITY OF MINNESOTA Driven to Discover℠

Who Cares?

Who, specifically, would be interested in these findings (audience, stakeholders)?

How might the information be used by others?

Your thoughts?

UNIVERSITY OF MINNESOTA Driven to Discover℠

These authors concluded:

We must (re)consider the nuances of how we teach our learners to practice evidence-based medicine:

Bonus question!
How do you think the authors collected their data?

"We should be training our resident physicians not only about ***what*** **quality information is available** (the resources themselves) but also about ***when*** **to delve deeper** into the information pyramid and go directly to the studies themselves, as well as ***how*** **to navigate to resources, manage, and be good stewards** all of the information that is available."

Research Report

Should We Google It? Resource Use by Internal Medicine Residents for Point-of-Care Clinical Decision Making

Alisa Duran-Nelson, MD, Sophia Gladding, PhD, Jim Beattie, MLIS, and L. James Nixon, MD

Duran-Nelson A, Gladding S, Beattie J, Nixon LJ. Should we Google it? Resource use by internal medicine residents for point-of-care decision making. *Academic Medicine*. 2013;88(6):788-794.

UNIVERSITY OF MINNESOTA Driven to Discover℠

QI – Why not published more often?

- Done by busy "front line" professionals, more concerned with local change than generalizable truths
  - Lack of training and experience in research, publishing
  - Lack of academic incentives
- Editors, peer-reviewers are unfamiliar and skeptical
- Writing about QI is hard!

From presentation by Greg Ornic, MD, MS (Geisel School of Medicine at Dartmouth), "Preparing Quality Improvement Work for Publication," May 9, 2014, at the University of Minnesota Medical School

Why is writing about QI so hard?

- QI is performance change, driven by experiential learning
- QI is context-dependent
- QI interventions are often complex, multi-component
- QI interventions are adapted, evolve in response to feedback (reflexive)
- Change they induce may be fragile, results unstable

Consequently: Uncertainty about what evidence is needed when reporting on QI work.

From presentation by Greg Ornic, MD, MS (Geisel School of Medicine at Dartmouth), "Preparing Quality Improvement Work for Publication," May 9, 2014, at the University of Minnesota Medical School

There is some good news

- SQUIRE guidelines: http://www.equator-network.org/
  - Immediate goal: Increase completeness, precision, transparency of published QI reports
  - Ultimate goal: Encourage publication of more and better QI reports
- Institutions and journals are starting to recognize QI as important scholarship. (see handout and http://medicine.ucsf.edu/safety/resources/journals.html for some journals)

From presentation by Greg Ornic, MD, MS (Geisel School of Medicine at Dartmouth), "Preparing Quality Improvement Work for Publication," May 9, 2014, at the University of Minnesota Medical School

Other Scholarly Works

- Education or practice innovation
  - ✓Service learning
- Position papers
- Institutional initiatives
  - ✓ Leadership models
  - ✓ Organizational change
  - ✓ Faculty development
- Community partnerships

Other "Research Related" Scholarship

- Literature reviews (*de novo*, modified from thesis or grant proposal)
- Conceptual models undergirding the research
- Methods development
- Process of research
- New applications or adaptations of previously tested interventions

Take-home message:

Publishable ideas can come from many areas of faculty and student work, besides pure discovery research.

UNIVERSITY OF MINNESOTA
Driven to Discover℠