Strengthening the methodology of reporting guidelines

Mapping the landscape, updating development guidance and creating a methodological quality badging system

Michael M. Schlüssel
Senior Medical Statistician
The EQUATOR Network - UK Centre
Centre for Statistics in Medicine
University of Oxford

✉ michael.schlussel@cs.m.ox.ac.uk
@m_schlussel

Friday, 21st February 2020
I have a deep interest in people’s conflicts.
Reporting Guideline

- A checklist, flow diagram, or structured text
- Developed using explicit methods
- Listing the minimum level of detail to include in research papers
A checklist, flow diagram, or structured text developed using explicit methods. Listing the minimum level of detail to include in research papers.
The EQUATOR Network was conceived to map and promote activities aimed at preparing and disseminating guidelines for reporting health research.
>400 reporting guidelines in our database!
Bibliometric data

Background

Scope

Development methods

Presentation

Dissemination

Implementation

Impact evaluation
Preliminary results

- Data extracted from 317 out of 396 records

Does the title clearly state that the paper describes a Reporting Guideline?

- No 57%
- Yes 43%
Preliminary results

Did the development methods include a literature review?

- Yes 44%
- Unclear 36%
- No 20%

If yes, was the search described?

- Yes 70%
- No 30%
Preliminary results

Did the development methods include a Consensus Process?

- Unclear: 44%
- Yes, face to face: 20%
- Yes, remotely: 16%
- No: 14%
Preliminary results

Did the development methods include a Delphi survey?

- Unclear: 49%
- No: 28%
- Yes: 23%
Preliminary results

Did the development methods include piloting the guideline or seeking external feedback on at least one version?

- Unclear: 54%
- No: 24%
- Yes, external feedback: 12%
- Yes, piloted: 6%
- Yes, both: 4%
Preliminary results

For each item included in the guideline, do(es) the author(s) provide examples of good reporting?

- No: 72%
- Yes, for all items: 21%
- Yes, for some items: 7%
Preliminary results

- Potential **spin** was found in the description of methods (3%), effect (13%) or utility (7%) of some RGs.

“(…) encourage researchers to execute more thorough searches, leading to more trustworthy results.”

“(…) will enhance the quality of research designs (…)”

“(…) lead to improved conduct, and greater recognition (…)”
Preliminary results

Is there, anywhere in the publication, a statement about conflicts of interest?

- Yes: 67%
- No: 33%

If 'Yes', does that include any conflicts of interest other than financial ones?

- 71% Financial only
- 29% Beyond financial
Guidance for Developers of Health Research Reporting Guidelines

David Moher1,2*, Kenneth F. Schulz3, Iveta Simera4, Douglas G. Altman4

1Ottawa Methods Centre, Clinical Epidemiology Program, Ottawa Hospital Research Institute, Ottawa, Ontario, Canada, 2Department of Epidemiology and Community Medicine, Faculty of Medicine, University of Ottawa, Ottawa, Ontario, Canada, 3Family Health International, Research Triangle Park, North Carolina, United States of America, 4Centre for Evidence-Based Medicine, University of Oxford, Oxford, United Kingdom

Introduction

Publishing health research is a thriving, and increasing, enterprise. On any given month about 63,000 new articles are indexed in PubMed, the United States National Library of Medicine’s public access portal for health-related publications. However, the quality of reporting in most health care journals remains inadequate. Glasziou and colleagues [1] assessed descriptions of given treatments in 89 trials and systematic reviews for which summaries were published during one year (October 2005 to October 2006) in Evidence-Based Medicine, a journal that is aimed at physicians working in primary care and general medicine. Treatment descriptions were inadequate in 41 of the original published articles, which made their use in clinical practice difficult if not impossible to replicate. This is just one of numerous examples of a large and disturbing literature indicating the general failure in the quality of reporting health research [2-6]. Many publications lack clarity, transparency, and completeness in how the authors actually carried out their research. Review. And research funders can benefit from introducing reporting guidelines into the research application system [11]. Ensuring clear and complete reporting of funded research through the use of reporting guidelines should facilitate more efficient use of the new findings and bring better returns on research investments. There are enormous potential benefits of good reporting. However, despite the impressive recent upsurge in the number and range of reporting guidelines, the literature on how individual guidelines were developed remains sparse [12,13] and there is no generic guidance on how to develop one.

In this paper we update and expand upon an earlier effort to outline a strategy for developing reporting guidelines that was published only in Spanish [14]. We recognize that there is no single best or correct approach. However, this paper benefits from our collective experiences of helping to develop more than ten reporting guidelines over the last 15 years, over which period these ideas have evolved considerably. If reporting guidelines are to be useful and more widely disseminated, they need to be developed using robust and widely accepted methodologies.
Many thanks!

@m_schlussel
@EQUATORNetwork