

Strengthening the methodology of reporting guidelines

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

Michael M. Schlüssel

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The EQUATOR Network - UK Centre
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University of Oxford







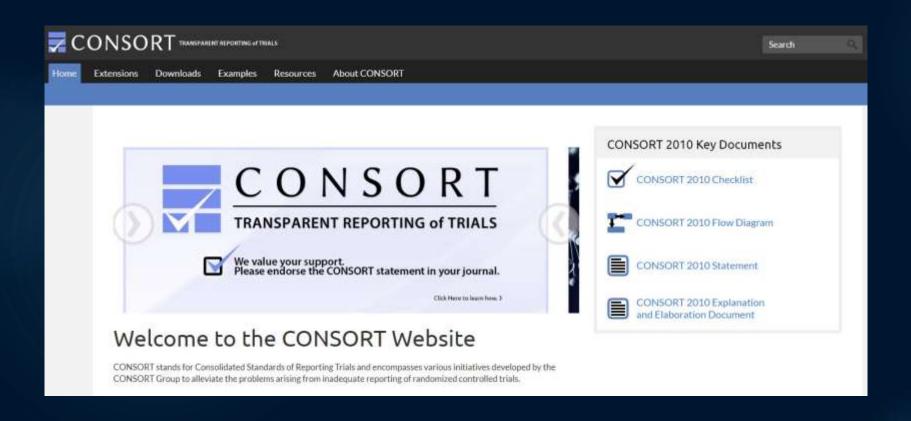
I have a deep interest in people's conflicts.



Reporting Guideline

UNIVERSITY OF OXFORD

- ▶ A checklist, flow diagram, or structured text
- Developed using explicit methods
- Listing the minimum level of detail to include in research papers





Don Blancoux - Michael Drammond - Status Potent - Chris Carenell -Burid Moher - Dan Greenberg - Federico Arganteviki Andrew H. Reters : Exercises Manakouf - Exertesk Lader



SQUIRE 2.0 (Standards for QUality Improvement Reporting Excellence) revised publication guidelines from a detailed consensus process

Greg Ogrins; 1.37 Louise Davies, 1.57 Dainy Goodman, 1.2 Raul Batalden, Frank Davidoff, 1 David Stevens, 1.5

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Improving Bioscience Research Reporting: The ARRIVE Guidelines for Reporting Animal Research

Carol Kilkenny*, William J. Strower*, Innex C. Cuttell*, Michael Emerson*, Douglas G. Altman* Name Street Color Stageton, & Street Colorado Streeton Streeton, of Street, Street, Colorad Stageton, & Streeton Stade and Long Streeton, Color tion (transferration between the function is thinking demands of China States (total Season)

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Standards for Reporting Qualitative Research: A Synthesis of Recommendations

Bridget L. (Pillerin, Phil), Steen B. Flannis, Phil), Stoorus J. Berkmann, Mill Darcy is fleed (4D) ARNA, and David N. Coak, MO: 19599.

Abstract

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BARLICASE REPORTS

The CARE guidelines: consensus-based

Joel J Gagner, 1,2 Gurser Kursic,4 Douglas G Altman, 5 David Moher,9

Annals of Internal Medicine RESEARCH AND REPORTING M.

Transparent Reporting of a multivariable prediction model for

qualitative research (COREQ): a 32-item

checklist for interviews and focus groups

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A Reporting Tool for Practice Guidelines in Health Care:

Consolidated criteria for reporting

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clinical case reporting guideline

Harold Sox, " David Riley," the CARE Group.

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The RIGHT Statement

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Preferred Reporting Items for Systematic Review Meta-Analyses: The PRISMA Statement

David Mohar^{1,3}, Alessandro Uberati^{3,4}, Janualler Teteleff¹, Douglas G. Alexan², The f Security of Vision States, Colors, Science (Security) of Malaina - Degree State, Section, State, Wisson States of Security States of Security States (Security Security Security States) (Security Security Securi

Annais of Internal Medicine

The Strengthening the Reporting of Observational Studies Epidemiology (STROBE) Statement: Guidelines for Reporting Observational Studies

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Special Communication

Improving the Quality of Reporting of Randomized Controlled Trials

The CONSORT Statement

Colo Begg, PhD; Miland Chi, PhD; Sasan Eastwood, ELS(D); Richard Honori, MB. David Mohar, MSc. Ingrary Olice, PHD, Ray Prins, MD, Drummond Ranne, MD. Karrett F. Schulz, PhD: David Simel, MD: Donna F. Stroup, PhD.

BLTT), recent their any other methodisiare, was have a new orbit and immediate impact on patient care. Disally, the re-port of such an evaluation mede to retsay to the reader relevant information rey to the reader reterrant information consurring the denge, corebest, analysis, and generalisationly of the trial. This information should provide the reader with the shiftly to reader televised judg-ments requesting the internal and exornal validity of the trial. Accurate and complete reporting also benefits editors and seviewers in their delitorations

THE RANDOMIZED contribut trial

regarding submitted manuscripts. For ECTs to ultimately benefit patients, the published report should be of the high-For editorial comment see p 646.

est possible standard.

Eristone probabl repeatedly over the last. 20 years indicator a wide chases ween what a trial should report and what is actually published in the litera-ture. In a review of 21 BCTs with nego-tive results published between 1990 and 1975, the authors reported that the voot majority of them had too few patients to discrete moderate or importificements.' Twenty years later, Trix Joseph st. re-

ported research indicating few improveexects in this ultration and expressed a research about the reporting of BCTs in

journal.*
In an effort to correct these and other problems, the Standards of Superstag Trials (SOSET) group each on October 1 and 8, 1995. At the conclusion of the Edgy workshop, the SORT group put forth a new proposed for the reporting of BCTs: summared reporting." The preposal set out 58 exceptial income that eeded to be included in the report of a why the news should be included, and provided a formal showing how they could be instalted.

Independently, approximately 3 runtin later (March 16 to 16, 1964), oz-ether group, the Asilomar Working Green on Recommendations for Report ing of Clinical Trials in the Hismedical Literature, met to discuss similar chaltengre fining the reporting of clinical trials. Their proposal causisted of a checklist of items that should be inchalled when reporting a clinical trial, along with a neggration that economials is to the Sortractions for Authors.

A subsequent Editorial urged both groups to meet and decide which rec-sommediations from each group's prowast abuild be retained. Resided being pragmatic, this nuggestion bull the po-terrial for increasing consumus, which is time south, affind a preater chance of improving the quality of reporting of citema totals to a wider audience.

On September 26, 1996, a total of 9 mendem including editors, dinical op-levelologists, and statisticians of the SGRT group and the Asternar Working Group met in Chicago, 31. Two other people participated in the meeting: a ingregate bad select R. H. H. Start bad expressed interest to helping to improve the re-porting of NCTs and one of the authors (D.S.) of a trial report that used the

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RESEARCH METHODS & RE

STARD 2015: an updated list of essential reporting diagnostic accuracy studies

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RESEARCH AND REPORTING METHODS Annals

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Strengthening the Reportin Studies in Epidemiology-I Epidemiology (STROBE-nut the STROBE Statement

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Abstract

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Methods and Findings

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Conclusion

When used appropriately, reporting guidelines for in improve experting of observational studies with a focus

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RESEARCH METHODS AND REPORTING

CONSORT-Equity 2017 extension and elaboration for better reporting of health equity in randomised trials

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Pliot and Feasibility Studies

CONSORT 2010 statement: extension to randomised pilot and feasibility trials

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Adaptation of the CARE Guidelines for Therapeutic Massage and Bodywork Publications:

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Efforts To Improve the Impact of Case Reports Niti Monk, PhD, LMT," and Kazon Strainger, PhD, CMT Department of Health Extract Solven Construct ACTS, Subsequents, IV. Department of Solvents S

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SPECIAL COMMENSATION

Reporting of Patient-Reported Outcomes in Randomized Trials

The CONSORT PRO Extension

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Extension Focused on Patient-Reported Outcomes

mended for RCTs in which PROs are primary or important secondary and points. These recommendations urge that the PRGs be identified as a pri-mary or secondary estimate in the abeliant, that a description of the hypothyou of the PRDs and relevant distrains be promited (in; if a multiplimen sized PSO tool but have upoil. But evidence of the PSO metrosper's validity and reliability be provided or cited, that the statistical approaches for dealing with missing date Se explicitly stated, and that PSO-specific limits tions of study Androgs and general/subdity of results to other populations and clinical practice be-discussed. Examples and an opdated COMSONT Nov Seatons with PSO items are provided. It is recommended that the COMICE PRO guidance suggistment the standard CONSONT guidelines for reporting ACTs with PROs as primary in secondary outcomes, Improved reporting in PRO data should facilitate exhaul interpretation of the results from RCTs are teleper patient care. consent PRO size. After Millione, from the for four factor

The CORDORY (Consultated Standards of Reporting Trials) Statement aims

to improve the reporting of randomized controlled trials (#Cf st: however, it

lasks guidance on the reporting of patient reported nationary (PROs), which

is this article, we decotte the development of the COMORT FRO value

stor based on the mothestategical framework for guideline development pro

good by the Enhancing the Quality and Transparency of Health Research (EQUATOR) Network. Five CONDORT PRD checkful fairs are recom-

are offers inadequately exported in trials. Thus limiting the value of these data.

Some RC For an increasemply aread to be a made to be a made of made of trade of trad tion/melting, and health policy or reindustrial distance

The applications of PROs requires as a second Person reported Outcomes young, valid and according report in Facure 2000, 800 ing. This life is accordingly of the file of th beliefs beginning grafter of the certain for a service of 750 MCTs and pages from the common of 750 MCTs and pages from the certain for the certain of 750 MCTs and pages from the certain for property that are pointed reported a policies. 20th provided believanture and

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2006





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!



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Bibliometric data

Background

Scope

Development methods

Presentation

Dissemination

Implementation

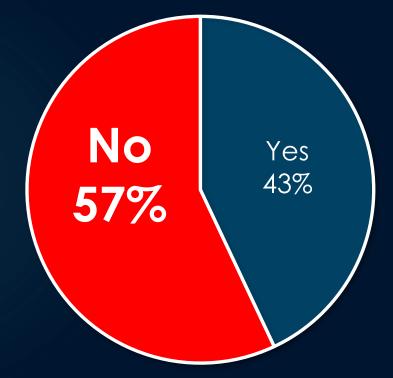
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Does the title clearly state that the paper describes a Reporting Guideline?







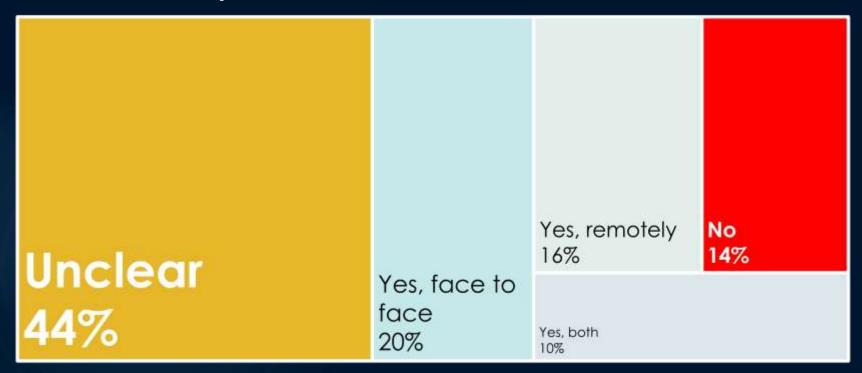
Did the development methods include a literature review?







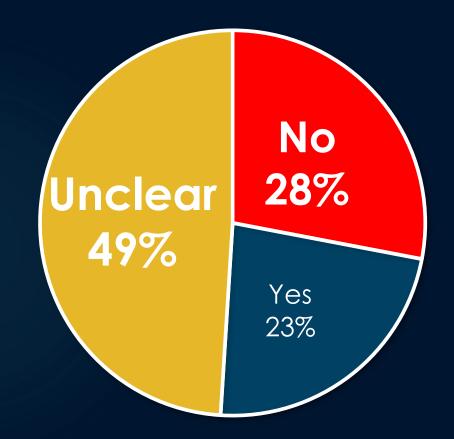
Did the development methods include a Consensus Process?







Did the development methods include a Delphi survey?







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

Unclear
54%

Yes, external feedback 12%

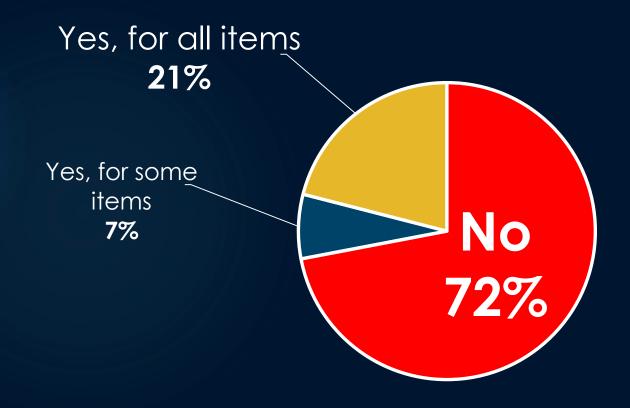
Yes, external feedback 12%

Yes, piloted both, 4%





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









▶ 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."

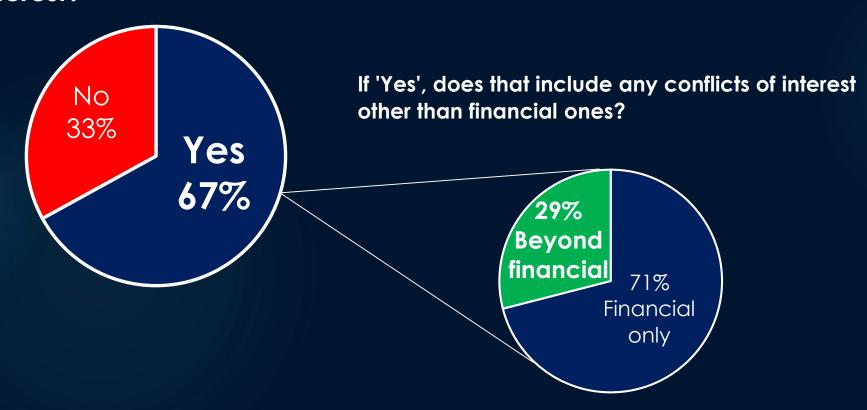
"(...) will enhance the quality of research designs (...)"

"(...) lead to improved conduct, and greater recognition (...)"





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





Next steps

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PLOS MEDICINE

Guidelines and Guidance

Guidance for Developers of Health Research Reporting Guidelines

David Moher^{1,2*}, Kenneth F. Schulz³, Iveta Simera⁴, Douglas G. Altman⁴

1 Ottawa Methods Centre, Clinical Epidemiology Program, Ottawa Hospital Research Institute, Ottawa, Ontario, Canada, 2 Department of Epidemiology and Community Medicine, Faculty of Medicine, University of Ottawa, Ottawa, Ontario, Canada, 3 Family Health International, Research Triangle Park, North Carolina, United States of America, 4 Centre for Statistics in 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 80 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 16 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!





National Institute for Health Research









