EQUATOR Network:

Reporting guidelines and other resources for editors

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Outline

• EQUATOR online resources and other support
• Where to start – what to choose – and what impact to expect
• Examples
Key points

• Serious reporting **problems** exist in published research literature

• **Reporting guidelines** help to improve completeness and transparency of research articles

• EQUATOR resources support authors, editors and peer reviewers ([www.equator-network.org](http://www.equator-network.org))
EQUATOR core activities support good publication of research

• Raise **awareness**
  – Problems resulting from inadequate reporting
  – Existence of helpful resources / tools

• Provide **resources**
  – Ensure people have an easy access to reliable, up-to-date resources

• Develop an education and **training** programme
Reporting guidelines

• ‘Reminders’ of scientific content

• Definition:
  – Specify a **minimum set** of items required for a clear and transparent account of what was done and what was found in a research study (methodology, clinical focus)
  – Form: structured advice, often as a checklist (perhaps also a flow diagram)

• Most internationally accepted RGs
  – Based on evidence
  – Consensus of relevant stakeholders (multidisciplinary group)
Typical research designs

- Randomised trials  
  CONSORT
- Cohort studies  
  STROBE
- Cross-sectional studies  
  STROBE
- Case-control studies
- Diagnostic, prognostic studies  
  STARD, TRIPOD
- Case reports  
  CARE
- Qualitative research  
  COREQ, SRQR
- Research synthesis  
  (systematic reviews)  
  PRISMA, ENTREQ
Reporting guidelines database

Enhancing the QUAlity and Transparency Of health Research

Home > Library > Reporting guideline

Search for reporting guidelines
Browse for reporting guidelines by selecting one or more of these drop-downs:

- Study type
- Clinical area
- Section of report

Or search with free text

Search Reporting Guidelines

Displaying 282 reporting guidelines found.

Most recently added records are displayed first.

1. Preferred reporting items for studies mapping onto preference-based outcome measures: The MAPS statement

2. A call for transparent reporting to optimize the predictive value of preclinical research

3. Guidelines for uniform reporting of body fluid biomarker studies in neurologic disorders

Reporting guidelines for main study types

- Randomised trials
- Observational studies
- Systematic reviews
- Case reports
- Qualitative research
- Diagnostic / prognostic studies
- Quality improvement studies
- Economic evaluations
- Animal pre-clinical studies
- Study protocols

Translations

Some reporting guidelines are also available in languages other than English. Find out more in our...
Easy access to the right tool
Impact – 2 types

• Impact of EQUATOR activities (core programme)
  – Awareness, resources, training

• Impact of using reporting guidelines
Impact of using RG

• Primary goal for the use of RG is to improve completeness of reporting
  – Ensure that research publications contain all important information allowing study assessment and further use

• Achieving this goal is possible only through combined actions / accumulated impact of:
  – Effectiveness of reporting guidelines
  – Availability / easy access to these guidelines
  – True use of these guidelines
## Impact: Role of EQUATOR and others

<table>
<thead>
<tr>
<th>Role</th>
<th>Role of EQUATOR</th>
<th>Other leading players</th>
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<tbody>
<tr>
<td>Effectiveness of reporting guidelines</td>
<td>*</td>
<td>RG developers *** (robust dev)</td>
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<tr>
<td>Awareness / easy access to these guidelines</td>
<td>***</td>
<td>RG developers * (OA)</td>
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<td></td>
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<td>Editors, educators ** (awareness)</td>
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<tr>
<td>True use of these guidelines</td>
<td>*</td>
<td>Authors *** (know &amp; use RG)</td>
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<td>Editors, Peer reviewers ** (check)</td>
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<td></td>
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<td>Funders ** (require, check, reward or punish?)</td>
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Impact: Use of RG by authors (?)

- Impact of an online writing aid tool for writing a randomized trial report: the COBWEB (Consort-based WEB tool) randomized controlled trial
  

- Reporting diagnostic accuracy studies: some improvements after 10 years of STARD.
  

- Does use of the CONSORT Statement impact the completeness of reporting of randomised controlled trials published in medical journals? A Cochrane review.
  

- Risk of bias of randomized trials over time.
  
  Reveiz et al. *J Clin Epid* 2015 Sep;68(9):1036-45
Impact: Active implementation by journals

- Effect of editors’ implementation of CONSORT guidelines on the reporting of abstracts in high impact medical journals: interrupted time series analysis
  
  Hopewell et al. *BMJ* 2012; 344

- The CONSORT Statement: Application within and adaptations for orthodontic trials.
  
Examples from journals

Implementation of reporting guidelines

Mandatory

Nothing
Editorial

Improving the Quality of Research Reporting:
*Headache* Steps Up to the Plate

Elizabeth W. Loder, MD, MPH; Donald B. Penzien, PhD

Good reporting is not an optional component of good science and evidence is summarized in meta-analyses. All of these activities are dependent upon the quality of information in the original research report.

If you have submitted an article to *Headache* since the beginning of this year, you probably noticed that you were asked to upload a reporting checklist along with your work. In an attempt to improve the quality of research reports in the journal, *Headache* now requires a completed reporting checklist as a condition of article submission. The electronic manu...
Elevating the Quality of Disability and Rehabilitation Research: Mandatory Use of the Reporting Guidelines

With the remarkable growth of disability- and rehabilitation-related research in the last decade, it is imperative that we support the highest quality research possible. With cuts in research funding, rehabilitation research is now under a microscope like never before, and it is critical that we put our best foot forward.

To ensure the quality of the disability and rehabilitation research that is published, the 28 rehabilitation journals simultaneously publishing this editorial (see acknowledgments) have agreed to take a more aggressive stance on the use of reporting guidelines.* Research reports must contain sufficient information to allow readers to understand how a study was designed and conducted, including variable definitions, instruments and other measures, and analytical techniques.¹ For review articles, systematic or narrative, readers should be informed of the rationale and details behind the literature search strategy. Too often authors in reporting research methods and findings. They are typically presented as checklists or flow diagrams that lay out the core reporting criteria required to give a clear account of a study’s methods and results. The intent is not just that authors complete a specific reporting checklist but that they ensure that their articles contain key elements. Reporting guidelines should not be seen as an administrative burden; rather, they are a template by which an author can construct their articles more completely.

Reporting guidelines have been developed for almost every study design. More information on the design, use, and array of reporting guidelines can be found on the website for the Enhancing the Quality and Transparency of Health Research (EQUATOR) network, an important organization that promotes improvements in the reporting

Collaboration of key journals within medical specialty
The Clinical Neuropsychologist

Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/ntcn20

Introduction to the Special Issue on Improving Neuropsychological Research Through Use of Reporting Guidelines

Mike R. Schoenborn\textsuperscript{a, b}
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Published online: 07 Jul 2014.

Practical introduction of reporting guidelines – examples relevant to a specific medical field

This 2014 special issue of The Clinical Neuropsychologist includes papers describing the application of reporting guidelines to neuropsychology, along with several papers highlighting the use of reporting guidelines followed by how reporting guidelines support evidence-based neuropsychology practice. Loring and Bowden research consumers. We trust that the consumers of research published in The Clinical Neuropsychologist will appreciate this evolutionary process and the fact that TCN intends to join the ranks of peer-review academic journals in using publication guidelines.
Reporting Guidelines and Quality Research

No one likes more work. Writing a scientific paper is hard enough. However, one of the problems with manuscript preparation is the omission of key data that results in either rejection of the manuscript or excessive post-submission work to correct these deficiencies. As a result, over the years, an international initiative known as the EQUATOR Network (http://www.equator-network.org/), has, since 2006, developed guidelines that many journals have adopted, including the Journal of Orthopaedic Trauma has recently adopted them as well.

Accurate reporting of data is critical to publication. Transparency, clarity, and quality are the watchwords when reporting research data. Accurate reporting is not only important for the credibility of research but also critical for the reproducibility of research. The EQUATOR network has developed a series of guidelines for reporting research data, including the CONSORT statement for randomized controlled trials, the Preferred Reporting Items for Systematic reviews and Meta-Analysis (PRISMA) statement for systematic reviews, the STROBE statement for observational studies, and the STARD statement for reporting of diagnostic accuracy studies. Recently, the EQUATOR network has developed an ARRIVE Statement for in vivo animal experiments.

There is an author toolkit, and checklists are available and confirm that you have met the criteria for each study. Readers may be more likely to accept the results of the study if they know that the researchers followed these guidelines. The journal editorial office will work to assist authors in manuscript review using these criteria will be July 1, 2015.

Our goal is to reduce waste in research in the field of orthopaedic trauma and quality, and readers will rely on the accuracy and validity of the data presented. Our goal is to reduce waste in research in the field of orthopaedic trauma and quality, and readers will rely on the accuracy and validity of the data presented.
Frequent problems

• Difficulties matching a specific study with a relevant reporting guideline

• Instructions to authors
  – Authors don’t read them
  – Often ambiguous in what they are asking for

Dear Madam,
we want to publish an original article on the DMCN journal. They require that we have a document in accordance with EQUATOR guidelines, however, it’s not clear for us which guidelines to use for an original article. Could you please advise?

Thank you.
Juan
Frequent problems

• Difficulties in using reporting guidelines
  – Authors
    • Often should use more than 1 (difficult)
    • Checklists often not easy to use
    • Lack of good examples implementing RG in a specific areas
    • Lack of tools (e.g. tool to help create a flowchart)
    • ‘Misusing’ RG – they are guiding reporting not conduct
    • Lack of knowledge of RG (too late when submitting a manuscript)
  – Editors
    • At what stage of editorial and peer review process this might be most efficient?
    • Lack of standardised templates (standard letters to authors)
    • Lack of knowledge of RG
    • Time issues
How can EQUATOR help (now and in the future)

• EQUATOR online resources

• Toolkits for editors
  – GoodReports 2016

• Software development
  – CONSORT – Koneka checking tool
  – Writing tool – Paris
  – StatsReviewer
  – Penelope – James Harwood, Help to select RG

• Resources and training for researchers / authors