

Iveta Simerá¹, Douglas G. Altman¹, John Hoey², David Moher³, Kenneth F. Schulz⁴

¹Centre for Statistics in Medicine, University of Oxford, UK; ²Queen's University, Kingston, Canada; ³Chalmers Research Group, University of Ottawa, Canada; ⁴Family Health International, Durham, NC, USA

Abstract

Scientific publications are the primary means of sharing research findings. Clarity and completeness of research description are essential to assess study quality and relevance. Despite its importance, the quality of reporting in journal articles is unsatisfactory.

The EQUATOR Network is a new international initiative that aims to improve the reliability of medical publications by promoting transparent and accurate reporting of health research. The Network will provide resources and training relating to the reporting of health research and assist in the development, dissemination and implementation of reporting guidelines.

The project's current focus is on the development of an internet-based resource centre and a training programme. The EQUATOR website already hosts a collection of reporting guidelines. Those resources will be expanded into a comprehensive digital library for health research reporting.

The training programme will focus on important issues in health research reporting and efficient use of reporting guidelines. Journal editors and peer reviewers will be targeted first. EQUATOR also aims to develop customised training workshops addressing specific needs of interested organizations.

The EQUATOR Network is not an isolated project; it should be seen in the context of other ongoing initiatives that aim to increase transparency and reliability of health research (e.g. trials registration). Securing enough financial resources and support from influential organisations are crucial to sustain the EQUATOR Network and the successful achievement of its goals.



Rationale

Clarity and completeness of health research publications is not satisfactory

Clinical practice and public health policy decisions in the evidence-based era depend on high quality information about research findings. There is, however, a wealth of evidence that much published health research is reported poorly¹⁻⁶. Unclear reporting prevents those studies from contributing to systematic reviews and clinical practice guidelines, with potentially serious consequences for clinical practice and further research.



Reporting guidelines: tools for improvement of health research reports

Reporting guidelines specify a minimum set of items to be reported in an article that are necessary for a clear account of the methodology and findings. Evidence is emerging that their use can improve the accuracy and transparency of publications^{6,7}.

During the past 10 years several internationally respected guidelines for the reporting of health research have been developed. Examples include:

CONSORT (for randomised controlled trials): <http://www.consort-statement.org/>
 STARD (diagnostic accuracy studies): <http://www.stard-statement.org/website%20stard/>
 STROBE (for epidemiological studies): <http://www.strobe-statement.org/>
 QUOROM (for meta-analyses of RCTs): <http://www.consort-statement.org/>
 Good publication practice for pharma companies: <http://www.gpp-guidelines.org/>

The effectiveness of reporting guidelines depends critically on their support from editors of influential medical journals and health research funders. At present, most reporting guidelines are not widely endorsed by a majority of medical journals or adhered to by researchers and thus their potential impact is not being fully realised.

The EQUATOR Network: providing resources and training for good research reporting

The EQUATOR Network is a new international initiative that aims to improve the reliability of medical publications by promoting transparent and accurate reporting of health research. The main aim is to provide resources and training relating to the reporting of health research and assist in the development, dissemination and implementation of reporting guidelines.

The EQUATOR Network website hosts a collection of available reporting guidelines. The EQUATOR team will develop an internet-based resource centre that will provide resources grouped according to relevance for its main users – researchers/authors of research articles; editors and peer reviewers; and developers of reporting guidelines. The website will host a comprehensive digital library for health research reporting, guidance for the development of robust reporting guidelines, tools to facilitate their use, and educational materials.

Training programme development will focus first on journal editors and peer reviewers, who play a key important role in safeguarding the high quality of research publications. This group is also relatively easy to reach with potentially good ratio of costs of developing the training programme to benefits derived from its implementation.

There are several models to consider; they will be developed and run in parallel:
 - direct training - online modules - basic and general content
 - train-the-trainers - face-to-face workshops - advanced and specialised content

Support EQUATOR — link to our website

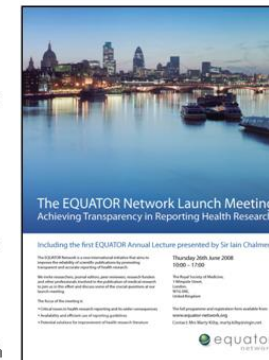
By endorsing the EQUATOR Network's effort and by promoting the use of its resources organizations can contribute significantly to the wider implementation of reporting guidelines. Only support on a wide scale can generate meaningful change in people's behaviour as seen recently with quick adoption of clinical trials registration requirements.

EQUATOR Network funding

At present, EQUATOR is solely funded by the NHS UK. We are negotiating for further support from other major public health research funders in the UK, Canada and US. The EQUATOR Network is seeking funds to support its current activities and also development of new educational and research projects that would complement its core programme.

These issues are global and the initiative needs major international support not only from public funding bodies but also from a private sector – in particular, publishing and the pharmaceutical industry. We are currently working on a funding model for private sector support for EQUATOR.

We welcome any suggestions, contacts and contributions.



We would like to invite you to the EQUATOR Network launch meeting on 26 June 2008 in London, UK.

Visit our website and register now!

The EQUATOR Network Steering Group:

- Prof Douglas G. Altman, Director, Centre for Statistics in Medicine, University of Oxford, UK
- Dr John Hoey, Queen's University, Kingston, Ontario, Canada
- Dr David Moher, Director, Chalmers Research Group, University of Ottawa, Ontario, Canada
- Dr Kenneth F. Schulz, Vice president, Quantitative Sciences, Family Health International, Durham, USA

Project Managers:

- Dr Iveta Simerá, Centre for Statistics in Medicine, University of Oxford, UK
- Contact: iveta.simera@csm.ox.ac.uk

References

1. Chan AW, Altman DG. Epidemiology and reporting of randomised trials. *Published online*. *Lancet* 2005; 365: 1312-12.
2. Pridley S, Doshi J, Johnson S, Frentham S, Daniels V, Altman D. Systematic review of diagnostic trials: in context: review of methods and reporting. *BMJ* 2003; 326: 1112.
3. Moher D, Liberati A, Tetzlaff J, Altman DG, et al. Strengthening of reporting of meta-analyses: the QUOROM statement. *BMJ* 2007; 334: 1876-78.
4. Pridley S, Chan AW, Daniels V, et al. Issues in the reporting of epidemiological studies: a survey of reports in *BMJ*. *BMJ* 2005; 330: 2023.
5. Pridley S, Altman DG, Simeon AJ, et al. Reporting of epidemiology

6. Moher D, Altman DG, Liberati A, et al. Strengthening of reporting of diagnostic accuracy studies. *Lancet* 2007; 370: 581-86.
7. Moher D, Liberati A, Tetzlaff J, Altman DG, et al. The QUOROM statement: reporting and meta-analysis of diagnostic accuracy studies. *BMJ* 2003; 326: 2109-11.
8. Moher D, Liberati A, Tetzlaff J, Altman DG, et al. The QUOROM statement: reporting and meta-analysis of diagnostic accuracy studies. *Lancet* 2007; 370: 581-86.