

The EQUATOR Network

Core programme (2007 – 2012)

The EQUATOR Network is an emerging global initiative with the goal of improving the quality and reliability of medical literature by promoting the transparent and accurate reporting of health research. That goal will be achieved through:

- raising awareness of the crucial importance of good reporting of research
- becoming the recognised global centre providing resources relating to the reporting of health research and organising activities aimed at the improvement of reporting quality
- assisting the efficient development, dissemination and implementation of reporting guidelines
- monitoring the status of the quality of reporting across health research literature
- conducting research relating to the quality of reporting

The EQUATOR Network aims to develop into a global 'umbrella' organisation covering all areas of health research and all nations, and actively involving all key stakeholders. It will bring together developers of reporting guidelines, medical journal editors and peer reviewers, research funding bodies and other key collaborators with mutual interest in improving the quality of research publications and of research itself.

Over the next five years, the core programme of the EQUATOR Network will provide a key set of deliverables enabling effective improvement of the quality of reporting of health research studies. The objectives of the core programme are outlined below, followed by details of each of the planned activities.

Objectives and key activities

1: Provide resources enabling the improvement of health research reporting

Over the next five years, we plan to:

- 1.1 Develop a comprehensive web-based 'Resource Centre' providing up-to-date information, tools and other materials relating to reporting of health research
- 1.2 Set up a network of reporting guideline developers, initiate and maintain mutual collaboration, and provide support in the development and maintenance of existing and new reporting guidelines
- 1.3 Actively promote reporting guidelines and their use by developing and running training courses for editors, peer reviewers and authors, and other activities to help raise the awareness and importance of reporting guidelines

2: Monitor progress in the improvement of health research reporting

Over the next five years, we plan to:

- 2.1 Conduct an annual assessment of how journals implement reporting guidelines
- 2.2 Conduct an annual audit of reporting quality across the health research literature

The core programme will also provide a foundation for other educational and research activities, achieved through separately funded projects, to enable us to realise the overall aims of the EQUATOR Network.

1. Provide resources enabling the improvement of health research reporting

1.1 *Develop a comprehensive web-based 'Resource Centre' providing up-to-date information, tools and other materials relating to reporting health research*

Creating and maintaining the website will be the one of the most crucial activities of the EQUATOR Network.

The website will provide the following information and resources:

(a) Information

Evidence-based reporting guidelines, such as CONSORT, cannot remain evidence-based without continued efforts. To remain up-to-date reporting guideline development groups need to search the literature regularly and thoroughly for relevant methodological and empirical research, and then appraise it. The CONSORT Group has recently received funding that explicitly includes such literature searching for evidence relating to the reporting of randomised trials, and aims also assist some other guideline groups.

The same considerations apply to resources relating to reporting guideline development in general. We will conduct regular searches for material relevant to the objectives of the EQUATOR Network. All material identified will be available on the EQUATOR website in a structured and annotated database, covering:

- reporting guidelines
- methodology literature relating to the development of reporting guidelines
- literature relating to the reporting of research (including evaluations of the quality of reporting; empirical evidence supporting or refuting reporting of particular items; editorials, comments & discussion papers, etc.)

(b) Tools

The EQUATOR Network aims to develop tools for editors, peer reviewers, and authors, for which we will seek specific funding. We will, however, make available on the EQUATOR website any relevant information that is identified, in particular tools aimed at researchers involved in reporting guideline development, and editors and peer reviewers.

(c) Educational materials

Our priority will be the development of online educational materials for editors and peer reviewers. Development of other educational activities and materials by the EQUATOR Network will require specific funding.

We will, however, make available in the EQUATOR website any relevant information that is identified, including

- literature resources related to teaching research ethics, scientific writing and reporting
- presentations related to reporting research (e.g. for specific study designs) that can be used for teaching (lecture notes and slides)
- links to relevant courses

We will share practical examples of good and bad reporting with explanations, which will also have an educational value.

Resources relevant to reporting will be collected and classified to enable efficient use by different stakeholder groups, including researchers, clinicians participating in research, other professionals involved in health research (e.g. information specialists), lecturers, journal editors and peer reviewers, research funders, and representatives of ethics committees.

We will identify and monitor activities and products from other organisations with similar scope (e.g. Guidelines International Network).

We will collect and make available relevant material from other research fields (e.g. biology, engineering) and from related activities (e.g. scientific writing, research conduct and ethics).

We will update the website regularly.

1.2 Set up a network of reporting guideline developers, initiate and maintain mutual collaboration, and provide support in the development and maintenance of existing and new reporting guidelines

We have identified many reporting guidelines and surveyed those who developed them. We classified these as generic or specialised in relation to the breadth of their relevance. We have identified and made contact with 36 groups who have produced generic reporting guidelines, several of whom attended the first EQUATOR meeting in 2006. We have thus effectively initiated a **network**. It is important to try to include all of the identified groups in the EQUATOR Network and initiate mutual collaboration. We will maintain contact with these groups (e.g. by regular newsletters) and try to assist them in any future development of their guidelines. We will continue to run regular searches of published literature and the internet so that we can identify new or updated reporting guidelines.

The network will facilitate information sharing, education and knowledge transfer, and collaborative working between guidelines groups to promote best practice and avoid duplication of effort. We will work to improve and harmonise methodologies for developing, publishing and updating reporting guidelines.

For reporting guidelines to become a recognised and accepted 'standard', endorsed by medical journals and professional organisations, it is important that guideline developers use robust and appropriate methodology and, where possible, standardise their methods. We will study and learn from the approaches used in the clinical practice guideline field. Developers of clinical practice guidelines are ahead of reporting guideline developers in their effort to collaborate and harmonise their efforts, notably by creating the Guidelines International Network (G-I-N). The aims of EQUATOR are comparable to those of G-I-N.

We aim to provide **support** for groups developing new reporting guidelines or updating existing ones. Besides providing up-to-date resources on our website and issuing a regular newsletter we will produce a guide on how to develop reporting guidelines. That guidance will take account of experiences of groups already within the network, and as far as possible will be based on robust methodology and wide consensus.

We will identify priorities for and support research relating to guideline development, and the dissemination, implementation, and evaluation of impact of guidelines. Such research will require separate project funding.

1.3 Actively promote reporting guidelines and their use by developing and running training courses for editors, peer reviewers and authors, and other activities to help raise the awareness and importance of reporting guidelines

A general aim of EQUATOR activities is to raise awareness of the existence and importance of reporting guidelines and encourage their use.

We will prioritise the development of training courses for editors, peer reviewers and authors / researchers.

Some other possible activities to target this goal are

- Initiate a series of invited (possibly sponsored) annual EQUATOR lectures. This series would move around the world (appropriately!) to help to disseminate the important messages relating to reporting of research;
- Provide expertise to organisations (e.g. advice in developing courses relating to reporting for postgraduate medical students);
- Develop newsletters and specific initiatives directed at specific groups/stakeholders;
- Promote reporting guidelines at conferences (talks, stands, posters, etc.);
- Engage with non-specialist public through media to generate public awareness of importance of good reporting of research by researchers (cf The Royal Society report on Science Communication, 2006).

2. Monitor progress in the improvement of health research reporting

2.1 Conduct an annual assessment of how journals implement reporting guidelines

We will monitor the policies and practices of a sample of health journals in applying reporting guidelines as a requirement for publications and as a tool used in the editorial process:

- We will conduct regular surveys of journals' instructions to authors in order to examine if the journals are requesting authors to comply with available reporting guidelines and to what extent;
- We will examine if and how are reporting guidelines used by editors and peer reviewers in the editorial process through surveys and personal contact;
- We will systematically monitor the literature for published studies investigating these issues.

2.2 Conduct of annual audit of reporting quality across the health research literature

We plan to conduct annual audits of the quality of reporting of health research. Reviews of cross-section samples of published randomised trials and systematic reviews have yielded valuable information but there is a dearth of longitudinal studies examining the same aspects of the medical literature over time. We propose to conduct annual reviews of this nature, not restricted to particular designs but possibly stratified to ensure adequate numbers of studies of different study designs. By taking annual samples we will be able to monitor trends over time

and identify improvements. Information on areas where weaknesses remain common will provide a target for educational initiatives and feed into the research agenda.

Collaboration with main stakeholders

One of the key principles of the EQUATOR Network will be to ensure the active involvement of stakeholders (see Appendix 1: 'Key stakeholder groups') . All our activities should reflect our stakeholders' needs. Some examples of collaboration are outlined below; however, the extent of collaboration will be dependant on the funding obtained.

(a) Collaboration with reporting guidelines developers is outlined in section 1.2 above.

(b) Collaboration with journals could include:

- Active promotion of reporting guidelines
- Provision of guidance, advice and training for editors and peer reviewers
- Help with implementation of reporting guidelines
- Help to audit and monitor the quality of published articles in their journals
- Development of web tools

(c) We would also like to involve other organisations like editorial organisations, universities and research institutions, professional organisations and societies, software developers, and other relevant organisations and bodies.

We will ensure that we include initiatives that can directly benefit those in countries with limited resources.

In addition we will seek separate funding for projects related to developing an educational programme.

EQUATOR research programme

The core programme will also provide a foundation for other educational and research activities, achieved through **separately funded projects**, that will enable us to realise the overall aims of the EQUATOR Network.

The longer term: where the EQUATOR Network could go in the future

Participants at the 1st EQUATOR meeting highlighted the impossibility of fully separating good reporting from good conduct of research. It was agreed that EQUATOR should concentrate in the first instance on its primary focus of reporting, which is also the area where we have particular expertise and experience. However, there was considerable support for the idea of broadening the scope gradually to incorporate issues relating to research conduct as well as reporting.

In time, with suitable resources these activities might be recognised formally as forming an “Institute” or “Centre” for Research Methodology and Reporting, or some such name. Linked to that we might envisage the creation of a National Electronic Library for Research Methodology and Reporting.

People

Steering Group:

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Appendix 1: Key stakeholder groups

Reporting guideline development groups

Healthcare research professionals
Clinicians participating in research

Editors and peer reviewers of healthcare journals
International editorial organisations (including ICMJE, COPE, WAME, FAME, etc)
Companies engaged in publication of scientific literature
Professional associations of companies engaged in publication of scientific literature
Companies developing software and tools relating to publishing scientific literature

Research funding organisations (including public organisations, foundations, private companies, etc)

Universities (departments engaged in education related to science conduct, writing and reporting)
Professional organisations, societies and bodies (including Joint Committee for Higher Medical Education, Royal Colleges, Royal Societies, etc)

NHS (including R&D departments; National Knowledge Service)
Other international organisations (including WHO, NIH, Cochrane Collaboration, etc)
Groups and organisations involved in improving research conduct and ethics (including Research Ethics Committees, Research Integrity offices and organisations)