

# **Embracing new roles:** **how librarians can encourage and support clinicians and health-related researchers to improve the quality of published research papers**



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# Presentation Outline

- \* What is the EQUATOR Network?
- \* Deficiencies in research reporting and the consequences of poor reporting
- \* What are reporting guidelines?
- \* What is the EQUATOR Network doing to help?
- \* How can librarians help?
- \* What libraries are already doing
- \* The EQUATOR International Librarian Network

The EQUATOR Network is funded by:



# About EQUATOR

## **EQUATOR: Enhancing the QUALITY and Transparency Of health Research**

International initiative to improve the reliability and value of medical research literature by promoting transparent and accurate reporting.

Our main focus:

- \* Highlighting problems resulting from poor reporting
- \* Promoting rigorous research reporting (accurate, complete, transparent, timely)
- \* Provision of online resources
- \* Education and training
- \* Research, evaluation, development
- \* Collaboration

Established due to growing evidence of serious deficiencies in research literature and its effect on the reliability and usability of research results.

# Deficiencies in reporting

## 5 main areas where deficiencies have been identified in the health research literature:

- \* Non-reporting (or delayed reporting) of studies
- \* Incomplete reporting
- \* Selective reporting
- \* Misleading reporting
- \* Unacknowledged discrepancies between sources

Recently there has been an explosion in the publication of studies highlighting such poor reporting practices.

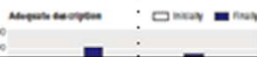


## What is missing from descriptions of treatment in trials and reviews?

Replicating non-pharmacological treatments in practice depends on how well they have been described in research studies, say Paul Glasziou and colleagues

Have you ever read a trial or review and wondered exactly how to carry out treatments such as a "behavioural intervention,"

receiving numerous requests for additional details from doctors and patients, the author of a randomised trial on graded exercise for



## ARTICLE

### Adequacy of Published Oncology Randomized Controlled Trials to Provide Therapeutic Details Needed for Clinical Application

Jennifer M. Duff, Helen Leather, Edmund O. Walden, Kourtney D. LaPlant, Thomas J. George Jr

Manuscript received July 9, 2009; revised March 15, 2010; accepted March 16, 2010.

Correspondence to: Thomas J. George Jr, MD, FACP, Division of Hematology Oncology, Department of Medicine, University of Florida, PO Box 100278, Gainesville, FL 32610-0278 (e-mail: thom.george@medicine.ufl.edu).

**Background** Randomized-controlled trials (RCTs) improve clinical care through evidence-based RCT result reporting, but specific details of therapeutic administration and protocol details of the trial design. We assess the reporting methodology in RCTs published in the medical literature.

**Methods** Ten essential elements of RCT reporting were identified and included a maximum number of cycles, premedication, growth factor support, patient adjustments for hematologic and organ-specific toxicity. All therapy-based RCTs published in the *New England Journal of Medicine (NEJM)*, *Journal of Clinical Oncology (JCO)*, *Journal of*

Clin Chem Lab Med 2012;50(3):411–413 © 2012 by Walter de Gruyter • Berlin • Boston. DOI 10.1515/cclm-2011-0904

### An appeal to medical journal editors: the need for a full description of laboratory methods and specimen handling in clinical study reports

These abbreviations. use of session. burden cardio-2 dia-sis, by physical cha57.

elements.  
27 from Cancer, nts for toxicities of complete data ncer (5/27; 18%), did not substan- ills necessary for

OPEN ACCESS Freely available online

### Publication Bias in Antipsychotic Trials: A Efficacy Comparing the Published Literature and the Food and Drug Administration Database

Lee Shapley<sup>5</sup>

Oregon, United States of America, 2Department of Health Care, Oregon Health & Science University Medical Center, Portland, Oregon, United States

of evidence-based medicine, yet a drug regulatory agencies, e.g., the US which data in journal articles can be ch extent to which it inflates apparent

## RESEARCH ARTICLE

Open Access

### Electronic search strategies to identify reports of cluster randomized trials in MEDLINE: low precision will improve with adherence to reporting standards

Monica Taljaard<sup>1,2\*</sup>, Jessie McGowan<sup>1,3,4,5</sup>, Jeremy M Grimshaw<sup>1,6</sup>, Jamie C Brehaut<sup>1,2</sup>, Andrew McRae<sup>7</sup>, Martin P Eccles<sup>8</sup>, Allan Donner<sup>7,9</sup>

### Reporting of adverse events in randomized controlled trials of highly active antiretroviral therapy: systematic review

Michal Y. Chowers<sup>1,2\*</sup>, Bat Sheva Gottesman<sup>1,2</sup>, Leonard Leibovici<sup>1,3</sup>, Ulrike Pielmeier<sup>4</sup>, Steen Andreassen<sup>5</sup> and Mical Paul<sup>1,3</sup>

<sup>1</sup>Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel; <sup>2</sup>Meir M Rabin Medical Center, Beilinson Campus, Petah-Tiqva, Israel; <sup>3</sup>Center for Support, Aalborg University, Aalborg, Denmark

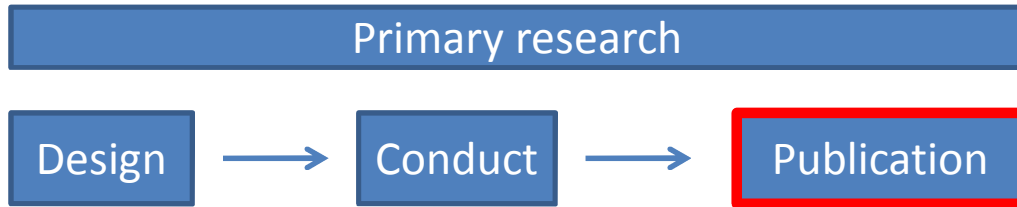
Received 5 February 2009; returned 3 April 2009; revised 20 April 2009; accepted 20 April 2009

**Objectives:** Our objectives were to systematically assess the quality of (AEs) in publications of randomized trials of highly active antiretroviral examine whether reporting quality affects the effect estimates reported for **Methods:** We searched the PubMed, Cochrane library and EMBASE December 2008. We included all published randomized controlled trials ment-naive adult HIV-infected individuals, with 48 weeks' follow-up. The extracted according to CONSORT guidelines. We pooled the relative r results by sponsorship and different reporting methods.

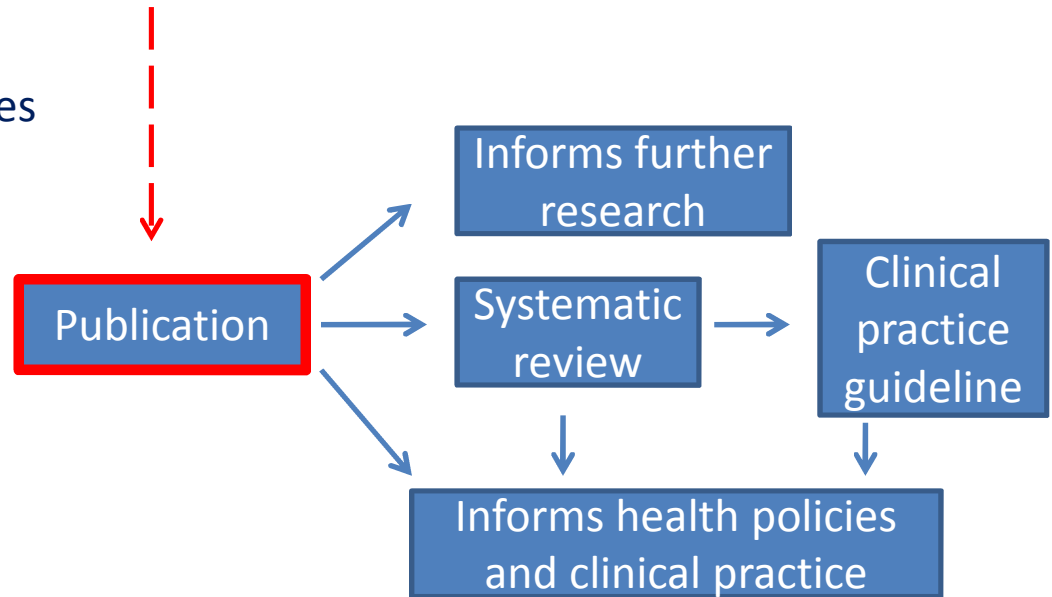
**Results:** Forty-nine trials, including 19882 patients, published between inclusion criteria. Only one of the trials reported on AE collection method only AEs attributed to drugs, 17 of which did not refer to the attribution nearly always selective and selection criteria were highly variable, based rrence threshold. Presentation of AEs above an occurrence threshold w sponsored by industry (30/31) than in studies sponsored by non-profit or

# Research Article

A research article is 'end product' of one process ...



...and 'raw material' of other processes



# Consequences of poor reporting

**Poor reporting is a serious problem particularly for systematic reviews and clinical guideline development (and therefore impacts ultimately upon patient care).**

**It prevents the inclusion of all eligible studies and comparison across studies:**

“This review only found one methodologically sound but somewhat under-reported trial”

“In terms of evaluating the quality of studies, the lack of important information in some of the trial reports has resulted in categorisations of ‘unclear”

“The biggest problem was the quality of reporting, which did not allow us to judge the important methodological items ...”

“Data reporting was poor. 15 trials met the inclusion criteria for this review but only 4 could be included as data were impossible to use in the other 11.”



*(Cochrane Library, accessed on 18 September 2010 & 8 June 2011)*

# What are reporting guidelines?

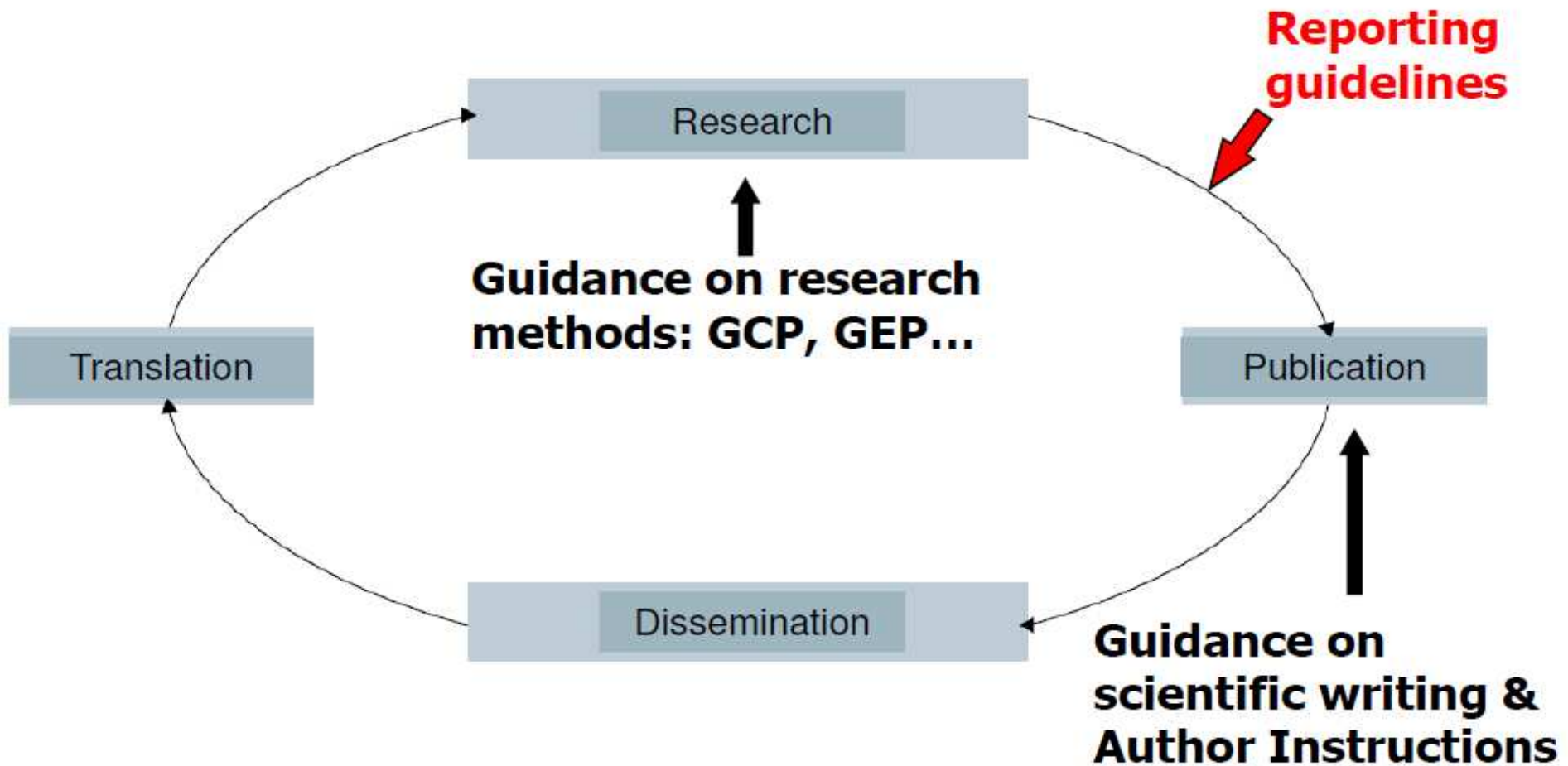
- \* Statements that provide advice on how to report research methods and findings
- \* Specify a minimum set of items required for a clear and transparent account of what was done and what was found in a research study
- \* Typically take the form of a checklist, flow diagram or piece of explicit text
- \* Based on available evidence and reflect the consensus opinion of experts in a particular field
- \* Complement advice on scientific writing and journals' instructions to authors

- \* Some examples include:





# How to improve reporting



# What is EQUATOR doing to help?

## \* **Library for health research reporting**

- \* Information for authors of research reports
- \* Resources for journal editors and peer reviewers
- \* Resources for developers of reporting guidelines
- \* Information about reporting guidelines currently under development
- \* Wide range of other relevant resources

## \* **Database of reporting guidelines**

- \* Up-to-date and comprehensive collection of reporting guidelines
- \* Searchable by browse menu or using free-text

## \* **Education and awareness raising**

- \* Workshops
- \* Attendance at meetings and conferences

## \* **Collaboration**

- \* PAHO
- \* Other collaborative activities



# Website homepage



Enhancing the **QUALITY** and  
**Transparency Of** health Research



Visit the **EQUATOR**  
Spanish Website

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The resource centre for good reporting of health research studies



## Library for health research reporting

The Library contains a comprehensive searchable database of reporting guidelines and also links to other resources relevant to research reporting.



Search for reporting guidelines



Visit the library for more resources



## Key reporting guidelines

<a href="#">CONSORT</a>	<a href="#">Full Record</a>   <a href="#">Checklist</a>   <a href="#">Flow Diagram</a>
<a href="#">STROBE</a>	<a href="#">Full Record</a>   <a href="#">Checklist</a>
<a href="#">PRISMA</a>	<a href="#">Full Record</a>   <a href="#">Checklist</a>   <a href="#">Flow Diagram</a>
<a href="#">STARD</a>	<a href="#">Full Record</a>   <a href="#">Checklist</a>   <a href="#">Flow Diagram</a>
<a href="#">COREQ</a>	<a href="#">Full Record</a>
<a href="#">ENTREQ</a>	<a href="#">Full Record</a>
<a href="#">SQUIRE</a>	<a href="#">Full Record</a>   <a href="#">Checklist</a>
<a href="#">CHEERS</a>	<a href="#">Full Record</a>   <a href="#">Checklist</a>
<a href="#">CARE</a>	<a href="#">Full Record</a>   <a href="#">Checklist</a>
<a href="#">SAMPL</a>	<a href="#">Full Record</a>



## Toolkits

The EQUATOR Network works to improve the reliability and value of medical research literature by promoting transparent and accurate reporting of research studies.

Our Toolkits support different user groups, including:



### Authors

Information and resources for authors

## EQUATOR highlights

### 3/10/2013 - OPEN: To overcome failure to publish negative findings

The EU-funded OPEN project (Overcome failure to Publish nEgative fiNdings) brought together key opinion leaders from across Europe to address the issue of publications bias. [Read More](#)

### 17/09/2013 - EQUATOR Network at the Peer Review Congress 2013 in Chicago

EQUATOR actively participated at the Seventh International Congress on Peer Review and Biomedical Publication, 8-10 September 2013, Chicago, USA. We organised the EQUATOR workshop for editors on reporting of research studies (Saturday 7 September am) and the EQUATOR 5th Annual ... [Read More](#)

## News

### The Checklist Manifesto Meets Clinical Trials 9/10/2013

Publicly available sources provide insufficient information on patient-relevant outcomes of clinical trials  
9/10/2013

New EASE Science Editors' Handbook published  
1/10/2013

Clinical Trials 2013 – 2014  
20/09/2013

The New ICMJE Recommendations  
29/08/2013

# Database of reporting guidelines



Enhancing the QUALity and  
Transparency Of health Research



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[Home](#) > [Library](#) > Reporting guideline

## Search for reporting guidelines



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

Study type  and Clinical area  and Section of report

Or search with free text

[Start again](#) | [Help](#)

Displaying 218 reporting guidelines found.

Most recently added records are displayed first.



1 [Launch of a checklist for reporting longitudinal observational drug studies in rheumatology: a EULAR extension of STROBE guidelines based on experience from biologics registries](#)



2 [The Strengthening the Reporting of Observational Studies in Epidemiology \(STROBE\) Statement: guidelines for reporting observational studies](#)



3 [CONSORT 2010 Statement: updated guidelines for reporting parallel group randomised trials](#)



4 [Better reporting of harms in randomized trials: an extension of the CONSORT Statement](#)



5 [The CARE Guidelines: Consensus-based Clinical Case Reporting Guideline Development](#)



## Key reporting guidelines

<a href="#">CONSORT</a>	<a href="#">Full Record</a>   <a href="#">Checklist</a>   <a href="#">Flow Diagram</a>
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<a href="#">CARE</a>	<a href="#">Full Record</a>   <a href="#">Checklist</a>
<a href="#">SAMPL</a>	<a href="#">Full Record</a>

## Translations

Some reporting guidelines are also available in languages other than English. Find out more in our [Translations section](#).

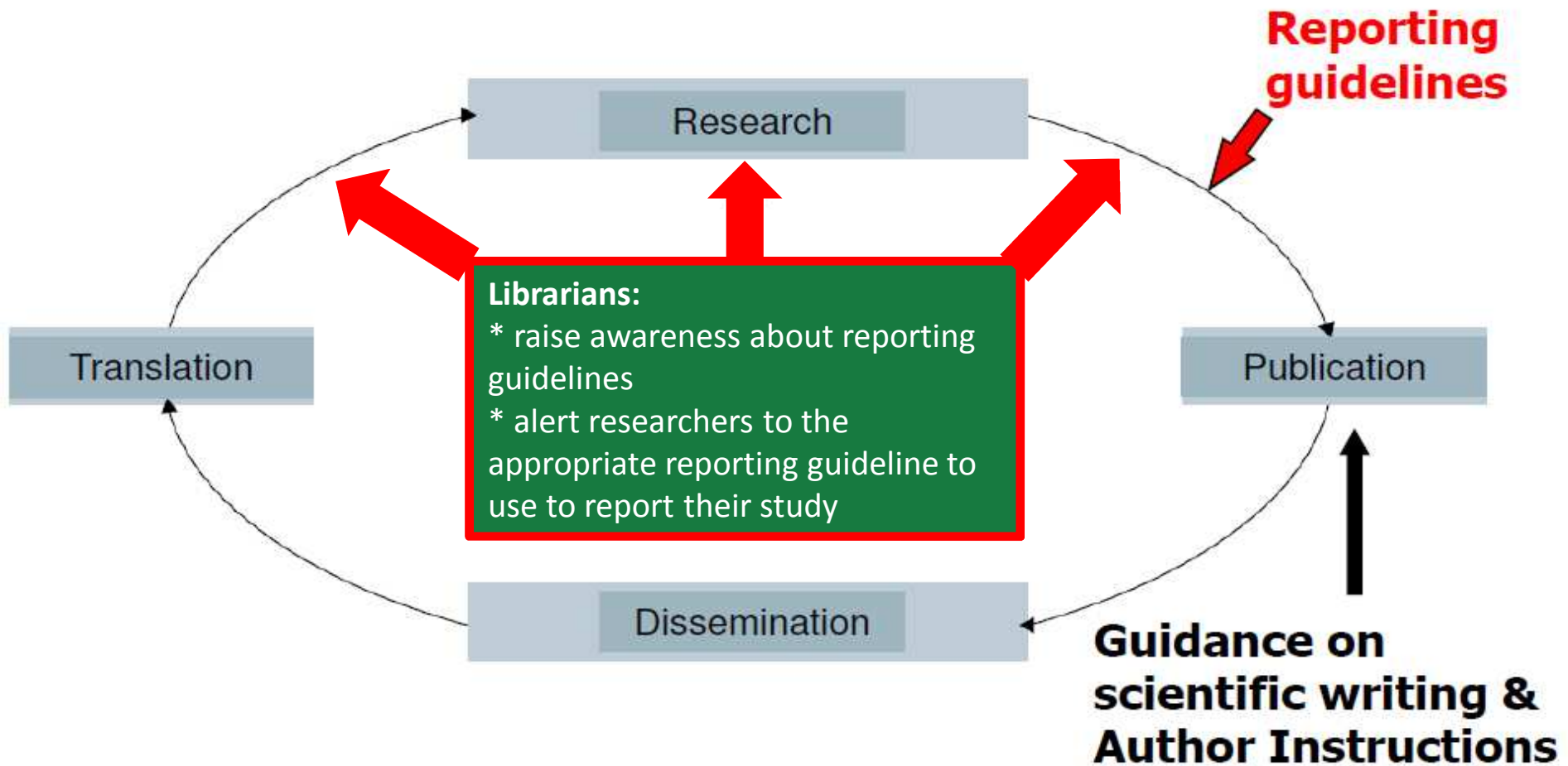
## About the Library

For information about Library scope and content, identification of reporting guidelines and inclusion/exclusion criteria please visit [About the Library](#).

Visit our [Help page](#) for information about searching for reporting guidelines and for general information about using our website.

Our full catalogue of reporting guidelines is available to download as a PDF. Reporting

# A new role for Librarians?



# How can librarians help?

**Librarians are excellently positioned to raise awareness about reporting guidelines and encourage their use**



## \* **Promotion**

- \* Display EQUATOR Network leaflets/posters
- \* Include details about reporting guidelines in library bulletins
- \* Link to the EQUATOR Network website from library website pages

## \* **Education**

- \* Include information about reporting guidelines in library induction sessions
- \* Hold research reporting workshops

## \* **Researcher support**

- \* When supporting the work of clinicians and researchers mention relevant reporting guidelines and how to locate them
- \* When presenting the results of literature searches to researchers alert them to the appropriate reporting guideline for reporting their study

# What are librarians currently doing?

## Evidence Portal

Search:

Networks: Cochrane, Brazilian Cochrane Centre, Ibero-American Cochrane Centre, EVIDET

Health Care

Systematic Reviews: Cochrane Reviews (CDSR), Quality-assessed Reviews (DARE), Protocols of Cochrane Reviews, LILACS

Clinical Trials: CENTRAL, LILACS, Trials on spinal pathologies

Evidence Summaries: Actualización en la práctica ambulatorial, Bandolier, Gestión clínica y sanitaria

Health Economic Evaluations: NHS-EED, LILACS

Health Technology Assessments: HTA-INAHTA, Iberoamerican Agencies

Clinical Practice Guidelines: National Guideline Clearinghouse (US)

Evidence-Based Medicine: methodology and application

Relevant sites: Clinical Trials, Systematic Reviews and Meta Analysis, Reporting health research, Terminology, Glossary

TOPICS

- Woman Health + Trauma + Nervous System Disease + Neoplasms + Disorders + Diseases + Sexually Transmitted Diseases + Health Care + Mental Health + Oral Health

## NEW YORK UNIVERSITY LIBRARIES

### Health (Nursing, Medicine, Allied Health)

Guide to locating health evidence. View the EBP "pyramid" and link to tools for locating relevant research.

Critical Appraisal Resources

- AGREE II Assessment of practice guidelines.
- AGREE II tutorial
- Appendix 1: Checklists for finding, appraising, and implementing evidence (Greenhalgh, Trisha, 2001). How to Read a Paper: The Basics of Evidence Based Medicine. [nyu.edu only]
- Can I Use This Evidence in my Program Decision? Tool for Assessing Applicability and Transferability of Evidence (National Collaborating Centre for Methods and Tools) (Tool for Assessing Applicability and Transferability of Evidence for Public Health Managers and Planners)
- CASP International Network (CASPin) The CASP International Network (CASPin) is an international collaboration which supports the teaching and learning of critical appraisal skills, and in particular helps other people set up sustainable training programmes. Appraisal tools are available for:
  - Systematic reviews
  - Randomised controlled trials
  - Qualitative research studies
  - Economic evaluation studies
  - Cohort studies
  - Case control studies
  - Diagnostic test studies
- Critical Appraisal worksheets from the Centre for Evidence Based Medicine (Oxford)
  - Systematic Review Critical Appraisal Sheet
  - Diagnostic Critical Appraisal Sheet
  - RCT Critical Appraisal Sheet
  - Prognosis Critical Appraisal Sheet
  - PCO Critical Appraisal Sheet (PDF)
  - PCO Critical Appraisal Sheet (MS-Word)
  - Educational Prescription Critical Appraisal Sheet (PDF)
- Equator Network: Enhancing the QUALITY and Transparency Of health Research
- How to Use an Article About Quality Improvement (JAMA Users' Guides) Assessing the effectiveness of QI interventions.

## U.S. National Library of Medicine

National Institutes of Health

Databases Find, Read, Learn Explore NLM Research at NLM NLM for You

Home > Bibliographic Services Division > MEDLINE®/PubMed® Resources Guide

## THE UNIVERSITY OF TOLEDO

Mulford Health Science Library  
Instructions to Authors in the Health Sciences  
3000 Arlington Avenue, Toledo, OH 43614 419-383-4225

### Instructions to Authors in the Health Sciences

These pages provide links to Web sites which provide instructions to authors for over 6,000 journals in the health and life sciences. All links are to "primary sources" - that is, to publishers and organizations with editorial responsibilities for the titles.

Alphabetical Listings of Journal Titles

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Search

Journal title begins with:

Journal title contains:

Add special character:

Search

### Research Reporting Guidelines and Initiatives: By Organization

This chart lists the major biomedical research reporting guidelines that provide advice for reporting research methods and findings. They us set of items required for a clear and transparent account of what was done and what was found in a research study, reflecting, in particular introduce bias into the research" (Adapted from the EQUATOR Network Resource Centre). The chart also includes editorial style guides for other publications.

Additional information about these guidelines and/or initiatives can be found using the Research Guidelines Search.

ORGANIZATION/GUIDELINE	DESCRIPTION
AMA Manual of Style Online Edition AMA Manual of Style (10th ed.) (Print Version)	A manuscript style guide for authors and editors.
ASSERT: A Standard for the Scientific and Ethical Review of Trials	Proposed standard for the review and monitoring of randomized clinical trials by committees. Checklist incorporates certain elements of CONSORT, to ensure full requirements for scientific validity in the ethical conduct of clinical research.

### AUTHOR GUIDELINES

- COPE Guidelines
- EASE Guidelines
- Uniform Requirements for Manuscripts Submitted to Biomedical Publication (Vancouver Style)

### CONFLICT OF INTEREST

- ICMJE Conflict of Interest Form

### COPYRIGHT

- SHERPA Publisher Copyright Policies and Self-Archiving
- SPARC Author's Addendum

### OPEN ACCESS

- NIH Public Access Plan

### REPORTING STANDARDS

- NLM Research Reporting Guidelines and Initiatives
- CONSORT Statement
- Equator Network - (Health Sciences Research Reporting Guidelines)
- MOOSE Consensus



# Potential impact

## As a result of adopting some simple awareness raising practices librarians can:

- \* Indirectly improve the reliability of literature searching and indexing
- \* Help improve the quality of the research papers written by staff within their organisation
- \* Help ensure that research studies provide a more reliable basis for making clinical decisions or for inclusion in further research
- \* Help the results of research be transferred into practice
- \* Demonstrate to the head of their organisation that the library is playing a fundamental role in improving the quality of the research output of the organisation

***Most importantly...librarians will be playing a central role in improving not only the quality and subsequent usability of published health research but also advancing the global body of health knowledge and ultimately improving patient care!***



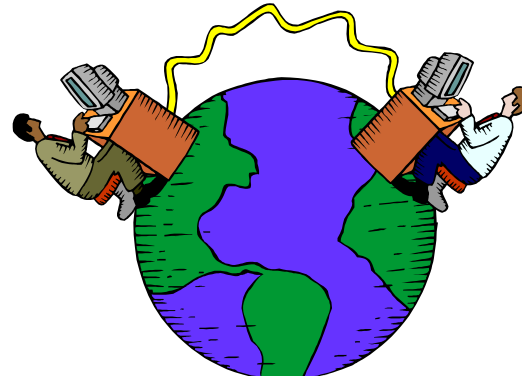
# EQUATOR International Librarian Network (1)

## Exciting new role for librarians!

- \* **Establish an EQUATOR International Librarian Network**
  - \* Free-to-join virtual network organised by the EQUATOR Network
  - \* Through the help of librarians who join the network we will work together to raise awareness about and encourage the use of reporting guidelines by researchers around the world

- \* **The network will provide:**

- \* Help & advice
- \* Training
- \* Resources
- \* Regular updates
- \* Email discussion list
- \* Country directory



...to enable librarians to confidently discuss available reporting guidelines with the clinicians and researchers with whom they work.

# EQUATOR International Librarian Network (2)

## Early stage of development

- \* Set-up an advisory group to help develop the network and advise on key issues
- \* Identify country representative librarians who can act as focal points in their own country
- \* Develop a number of practical and topic specific librarian toolkits
- \* Hold regular webinars offering training for librarians, providing help and support and Q&A sessions
- \* Translate all our materials into other languages to enable librarians to raise awareness more easily
- \* Develop a country directory allowing librarians to identify possible collaborators within their own country
- \* Raise funding for network activities



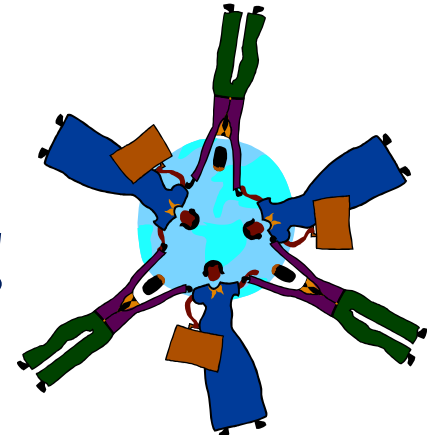
# Embracing new roles

## Opportunities

**We are very keen for librarians to get involved...please do consider:**

- \* Volunteering to join our advisory group or become a country representative
- \* Contributing your ideas and experiences to our toolkit development and resources
- \* Suggesting ideas for other relevant activities that the network could support
- \* Simply join the network and start raising awareness about reporting guidelines

**Are you ready and willing to embrace a new role and make a real difference?!**



# Acknowledgements



## \* EQUATOR Steering Group

- \* **Doug Altman**, Centre for Statistics in Medicine, UK
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- \* **Ana Marusic**, University of Split, Croatia
- \* **David Moher**, Ottawa Health Research Institute, Canada
- \* **Kenneth F. Schulz**, Family Health International, Chapel Hill, USA

\* Many thanks to both Professor Doug Altman and Dr Iveta Simera for permission to reproduce a couple of their slides and for helpful comments on this presentation.

# EQUATOR Network:

[www.equator-network.org](http://www.equator-network.org)



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