

Better Reporting, Better Research: Guidelines and Guidance in *PLoS Medicine*

The *PLoS Medicine* Editors

PLoS Medicine aims to publish important studies from all medical disciplines that provide a substantial advance either in clinical practice, public health policy, or basic pathophysiology. Though this is a lofty aim it is possible to see the journal's role as primarily a passive one; presubmission inquiries and research articles arrive unsolicited, by which time evaluation by editors and reviewers for rigor, originality, and importance can do little to improve deficiencies in study methodology (largely a fait accompli by that point). However, we would argue that medical journals such as *PLoS Medicine* should seek to go beyond merely reflecting current trends in medical practice and research, by actively working to establish and promote standards that aim to improve the quality of research that is done.

We have already published articles that address common problems or recommend best practices in conducting research. These articles include a Policy Forum that outlines guidance on gaining true informed consent for genetic studies in developing countries [1]; a proposal for how best to enroll adolescents in sensitive health research studies [2]; and an article discussing the issues involved in data cleaning [3]. To date we have also published three papers establishing reporting standards for medical research: two detailing the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) guidelines for reporting epidemiological studies [4,5], and one describing the CONSORT (Consolidated Standards of Reporting Trials) guidelines for reporting results of a randomized trial in abstract form [6].

Is there any evidence that such guidance does any good? It's probably too early to tell whether the STROBE or CONSORT for abstracts guidelines have had an impact, but a before-and-after assessment of journals that

signed on to the original CONSORT guidelines suggested that adoption of this guideline was associated with improvements in the quality of trial reports [7]. Clearly, it is difficult to distinguish between improvements that are due to uptake of the guideline from other forces that might have sensitized researchers to the need for improvements in reporting. We do however know that papers related to research methodology are widely read and popular with *PLoS Medicine* readers across multiple specialties.

With the goal of encouraging the highest possible standards in medical research and reporting, *PLoS Medicine* is now launching a new section within our Magazine to pull these types of articles together under one heading. This section, entitled "Guidelines and Guidance," will include articles that raise awareness of emerging and novel methodological approaches; provide a place for the publication of community consensus standards for reporting or carrying out particular types of research (or proposals for such standards); and offer easily digestible "how-to" guides to commonly encountered statistical or methodological issues.

PLoS has its roots in the scientific and medical research communities, and collaboration between professional and academic editors forms an important component of decision making on all of our journals. The new Guidelines and Guidance section in *PLoS Medicine* will have, as section advisors, two members of our editorial board: Aziz Sheikh, Professor of Primary Care Research and Development at the University of Edinburgh, and John Ioannidis of the University of Ioannina School of Medicine. Together with the in-house editors they will evaluate submissions to this new section. All published articles will have been peer-reviewed. As with all content considered for publication in the Magazine section of *PLoS Medicine*, we are looking for articles that attract interest beyond their immediate

field and will stimulate widespread debate and discussion. Although many of these articles will be commissioned, we invite authors—both individuals and groups—to submit presubmission inquiries on possible topics. We are particularly interested in papers that go beyond existing users' guides or research resources.

The idea for this new section comes at a time when other initiatives aiming to improve the quality of health research and reporting are also coming to fruition. One such initiative is EQUATOR (Enhancing the Quality and Transparency of Health Research; <http://www.equator-network.org/>). This recently established network, which will hold its first conference, "Achieving Transparency in Reporting Health Research," in June 2008 in London, aims to provide resources and training relating to good research reporting, and to help in the development and implementation of reporting guidelines such as STROBE [4].

As an open-access journal, *PLoS Medicine* is an appropriate venue for publication of guidelines and guidance, which are of benefit only when they can reach the broad, multidisciplinary research communities that they are intended to support. Open access means that readers are not only able to freely access this content, but are licensed to distribute, translate, and reuse the material provided that the original source is cited. We are pleased to be able to make

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available, under open-access licensing, recommendations for best practices in conducting and reporting research, and hope that researchers preparing future guidelines and guidance will adopt a similar approach so that their efforts can have the widest possible impact. ■

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