www.goodreports.org: a new online tool from EQUATOR to help find and use reporting guidelines
Presented by Caroline Struthers, UK EQUATOR Centre, Oxford
Reducing waste in research: REWARD session, 10 June 2018
14th EASE Conference, Bucharest

Reporting guidelines such as CONSORT, STARD, PRISMA, and ARRIVE aim to improve the quality of research reports, but all are much less adopted and adhered to than they should be
Professor Paul Glasziou, The Lancet 2014

Reporting guidelines are acknowledged to be a great tool for authors and editors to help reduce research waste by making sure study reports are complete and transparent, so:-

- Knowledge can be used by doctors to improve patient care
- Patients and the public get reliable evidence to make decisions
- Researchers can appraise or replicate methods

The EQUATOR Network  www.equator-network.org

EQUATOR is an international collaboration dedicated to improving the quality and transparency of health research literature, primarily through promoting the use of reporting checklists such as CONSORT, STROBE, and PRISMA

The EQUATOR Network was established in 2006 by Doug Altman and colleagues to help coordinate the efforts to improve the quality and reporting of health research. EQUATOR bring together tools and resources to facilitate good reporting in one place, including a comprehensive database of reporting guidelines for all types of health research.
There have been numerous articles and commentaries over the years in appreciation of EQUATOR and what we’re trying to do to improve the conduct and reporting of research. But tangible improvements have been modest and slow.

The GoodReports project www.GoodReports.org

In January 2018 the UK EQUATOR Centre launched a website called www.GoodReports.org to make it easier for authors to find and complete key reporting checklists. We put sixteen of the most commonly used reporting checklists in one place and secured copyright licenses when necessary for free online access

The GoodReports tool includes:
- A reporting guideline finder “wizard” leading to a recommendation of an appropriate reporting guideline
- A link to an online (and downloadable) version of the reporting checklist
- A validation tool and clear instructions to encourage completion, referencing and submission of a reporting checklist with a manuscript
- Links from checklist items to explanations and examples of good reporting

The BMJ Open pilot study

In February 2018 we began a pilot of the GoodReports tool with BMJ Open in collaboration with James Harwood developer of Penelope.ai. Penelope is an automatic manuscript checker which can be customised for any journal’s
formatting, content and publication policy requirements and can be integrated into the a journal submission system. James has been piloting Penelope with *BMJ Open* and several other journals.

For the extended pilot with *BMJ Open*, James integrated the EQUATOR GoodReports tool into Penelope.

**The Penelope automatic manuscript checker**

All BMJ authors are prompted to check their work using Penelope.ai’s automated software when submitting a manuscript. If they choose to use Penelope they upload their manuscript for checking, and they are also taken through the GoodReports “wizard” questions to identify the appropriate reporting guideline.

In a matter of seconds, Penelope performs over 40 automatic checks. The output is a detailed online feedback report including the advice to complete a checklist if one is identified by the GoodReports tool. They can expand the section of the report saying they need to upload a reporting checklist, and then click on the link to open and complete it on the GoodReports website.

**GoodReports usage data**

Data on usage of [www.GoodReports.org](http://www.GoodReports.org) since January 2018

- 2000 author visits
- 788 downloaded a checklist to complete offline
- 257 completed a checklist online

**Usefulness feedback**

75% rated it between 8-10/10
We also asked users who rated the usefulness of GoodReports at 7 or less why they gave it a lower rating.

A selection of suggestions on how we could improve the tool were:

- every item should be assessed by scores, telling the users which is very important.
- Give a example for each "subheading".
- To make it more understood by non-native English speakers

These are changes we could deliver fairly easily in future versions of GoodReports

**Accuracy of the “wizard”**

We assessed a sample of manuscripts submitted to Penelope in April and we agreed with the checklist recommendation made by the “wizard” in 81% of papers (n=58). We agreed with the conclusion that there was not suitable checklist in 79% of cases (n=19)

**BMJ Open data**

On 31 May, we received data about manuscripts submitted to from BMJ Open over a six day period in May and found that authors that had used Penelope were more likely to include a checklist with their submission to the journal.

We will measure improvement in reporting by comparing the manuscripts submitted to Penelope with the version subsequently submitted to the journal.
The Future for www.GoodReports.org

It is easy for a journal to say we want you to adhere to CONSORT or STROBE etc., but it is a lot of work to ensure that authors actually do that, even those publishing in the top medical journals.

Interview with Doug Altman, March 2018

We are hopeful that scaling up and developing GoodReports to include more reporting guidelines, and more sophisticated software to enable user feedback and the facility to combine more than one reporting guideline and create article templates will show that integrating reporting guidelines into journal publishing policy and submission systems is effective in saving journal editors the considerable time and effort required to ensure authors find and adhere to reporting guidelines.

Where next for GoodReports.org?
- More guidelines
- More examples
- User feedback on items
- Simplify
- Plain language
- Translations
- Hybrids
- Article templates