A conversation with Kevin Dolby on May 24, 2013

Participants:

- Kevin Dolby Evaluation Adviser, Wellcome Trust
- Alexander Berger Senior Research Analyst, GiveWell

Note: This set of notes was compiled by GiveWell and gives an overview of the major points made by Kevin Dolby.

Summary

Kevin Dolby is an Evaluation Adviser at Wellcome Trust, which is the UK's largest private funder of biomedical research. GiveWell spoke with him as part of our investigation of opportunities to improve scientific research. The main topics of discussion were Wellcome Trust's contributions to open access, how Wellcome Trust uses citations and alternative metrics, and ORCID, a group that Wellcome Trust is involved in.

Wellcome Trust's policies on open access

Wellcome Trust is a major advocate of open access when it comes to both publications and data. Any publication that it funds, in part or in full, is expected to be open access, and Wellcome Trust will pay whatever is necessary for it to be open access. Data is a bit more difficult because of different disciplinary approaches and needs, but Wellcome Trust still supports the sharing of data by asking for a data management plan for the research that it funds.

Wellcome Trust's use of citations and non-traditional metrics

Open access is important because it means that there are more metrics available to judge the impacts that research is having. Wellcome Trust still looks at citations, but is increasingly looking at other metrics as well, like those produced by ImpactStory and Altmetric.com. These non-traditional metrics systems are still being developed, so Wellcome Trust has not relied on them in any systematic way thus far. Where it has used alternative metrics is more as an indicator. For example, if a paper has been tweeted a lot by important policy people, that is an indicator that it may be important.

Citations still remain one of the key indicators of impact. There are cases where they are necessary, because non-traditional metrics would not be useful, such as with basic genetic research, which won't impact clinical medicine or policy, but could impact other research. But with public health, you do want a paper to influence policy documents, so social media and alternative metrics may be a way of highlighting impact.

Logistics of citation analysis

Wellcome Trust generates a list of papers that have resulted from research it funded in the previous year using PubMed, which includes funder information where available. Wellcome Trust sends this list of papers to Thompson Reuters on an annual basis, and Thompson Reuters returns it with citation counts for each paper. Thompson Reuters also normalizes the citation counts on a subject basis, so that papers are compared appropriately relative to other papers in their field.

The timing is such that there is a delay from when the paper is published to when it is indexed on PubMed, and also a delay because papers are submitted yearly to Thompson Reuters. This is the amount of time that a paper has for citations to accrue before the count is done. This is one way that altmetrics could be valuable, by providing more immediate feedback metrics such as which papers are getting tweeted and how many journal downloads a paper has.

How Wellcome Trust uses citation analysis

Grants are never given on the basis of citations alone – they are considered as part of a portfolio approach. Applications for funding are subject to external peer review and an internal review.

After grants are awarded, Wellcome Trust collects citation counts for individual papers in order to analyze the impact of research it has funded in various cohorts – for example, to compare citations across fellows groups, subject areas, or institutions. Currently, Wellcome Trust is looking at citations between male and female researchers, as well as following these researchers over time, in order to analyze the career paths of men and women to see if there are barriers to women in science. Wellcome Trust does not use citation counts to make decisions about funding one individual researcher over another.

Wellcome Trust also included citation data in their annual reports. This helps the Board of Governors understand Wellcome Trust's progress based on data about the citation impact of research it has funded. Citation analysis also helps the Trust benchmark its performance against the biological sciences sector in the UK.

Wellcome Trust's relationship with alternative metrics organizations

Wellcome Trust is a consumer of the products that ImpactStory and Altmetric.com provide. ImpactStory is free; Altmetric.com has a subscription fee. Wellcome Trust has also been in touch with Plum Analytics, which it may use in the future.

Generally, Wellcome Trust staff contribute their time and involvement to these kinds of efforts, as opposed to directly funding them. Mr. Dolby is on the working group for CrossRef's FundRef project, which seeks to standardize the way that

funding sources are reported in scholarly research. Most of the funding in this space is publisher driven, not from philanthropic funders. Even CrossRef, which is non-profit, is funded by publishers.

ORCID is a big step forward in citation analysis, because it will enable researchers to disambiguate authors, institutions and grants. Wellcome Trust is a member organisation of ORCID, and Liz Allen, of Wellcome Trust, is on ORCID's board.

About ORCID

ORCID has about 147,000 individual members, as well as some publishers and funders. The real value is going to be for institutions, though few have yet signed up. The business model behind ORCID requires institutions to pay to obtain ORCID identifiers on behalf of all their staff—a service which the individual researchers can access freely for themselves.. Up to now, publishers have been putting in the majority of the money, but as they are not the main beneficiaries of the project, institutions are also expected to start contributing.

ORCID solves a major issue for researchers by streamlining the funding application process into one common platform. At the moment, if a researcher wanted to apply for a grant from four different funders, that researcher would need to fill out four applications with the same information: what they've done, what the outputs have been, and what they are planning to do. With ORCID, researchers can apply for funding using their ORCID IDs instead, which enable funders to view all of a researcher's papers, outputs, plans, etc. This will save researchers an enormous amount of time and make things simpler for everyone involved.

Wellcome Trust's work on open access/open science movement

Wellcome Trust's open access policies are a contribution to the broader movement, though take up has been relatively slow. Robert Kiley leads Wellcome Trust's work on open access.

Mr. Dolby is in the Strategic Planning and Policy department, which has two parts: assessment & evaluation, and policy & advocacy. These two sides work closely together to develop open access policies that Wellcome Trust will be able to measure its progress against. The policy & advocacy side also have discussions with government both in the UK and in Brussels about the best open access policies. For instance, Wellcome Trust signed on to the San Francisco Declaration on Research Assessment (DORA), which criticizes some uses of the journal impact factor in research evaluation.

All GiveWell conversations are available at http://www.givewell.org/conversations