Researchfish

Working with national bibliographic databases for research output

University of Antwerp

Centre for R&D Monitoring (ECOOM)

Gavin Reddick

September 10-11, 2018

Abstract

Researchfish is used to collect and help analyse the outputs, outcomes and impacts of funded research in the UK and beyond. Researchfish began ten years ago with the Medical Research Council and is currently used by over 100 funding organisations in 9 countries to track 125,000 grants with a combined value of over €50 Bn.

Researchfish enables researchers to report their outcomes directly and so focusses on making the process as easy as possible by integrating with a wide range of sources, directly harvesting publications, enabling upload from institutional repositories, and adding/updating metadata through backend processes. This approach has led to over 2.5 million outputs being reported and linked to particular grants in Researchfish.

This presentation will explain how Researchfish was created and how it expanded from a system used by the Medical Research Council, first to other UK based medical charities, and then to other disciplines including all of the other UK Research Councils, as well as public and charitable funders in North America, Europe and Australasia. It will discuss the challenges and opportunities created by having a single system for over 100 funding organisations, hundreds of research organisations, and around 90,000 users, including how data and metadata from so many sources is combined and harmonised.

History

2009 - Initially developed by Medical Research Council

- to replace and improve existing final reporting process
- move to a more systematic and structured approach

2011 - ‘Federated’ platform developed

- for use across multiple organisations (initially 11 biomedical organisations)

2013 - Adopted by all of the UK Research Councils

- question set expanded to cover all disciplines

Today - Researchfish is used by over 130 organisations

- Across UK, Europe, US, Canada & Australia
- Equivalent of €50bn+ tracked in the platform
- Around 140k+ awards
- Around 2.7 million outputs

2008: The Challenge

International climate increased the importance of being able to have an evidence base to support assessment of the impact of funded research. Important to have evidence linking outputs to specific funding rather than general activity.

Traditional final reports could not provide this

- Completed immediately after funding ends, missing longer term impacts
- Open text format meant that information non-standardised and incomplete
- Project focus made aggregation or broader analysis difficult

2008: The Challenge

The UK Medical Research Council wanted to be able to collect information that could be flexibly reused to serve multiple purposes:

Advocacy for research funding
Accountability to the funders of research
Analysis to understand what works in research and leads to impact
Allocation of future research funding

'If I was a philanthropist giving millions of pounds, I would want to see what is happening with it – and even I get frustrated [about reporting], as a researcher, when you see millions of pounds going to researchers and you wonder what is coming out of it, and you see nothing coming out of it ... And this is always the case. In a lot of things money is given, and no one follows up … Gone are the days when you can do what you like. Now you are publicly funded … we want to account for what you are doing ... is it leading to some benefit to the public?...' *PI Quote - Researchfish: A Forward Look, p 20*

2008: The Solution

The Medical Research Council created e-Val, an online mandatory census based approach to replace final reports for the gathering of information on the outputs, outcomes and impacts of funded research.

Researchers authenticated and reported information across a wide range of output types.

Once information reported it could be attributed to multiple awards or updated over multiple years.

Evidence gathered very helpful in supporting evaluation of impact.

2011: Federation

MRC e-Val seen as a success by a number of biomedical funders who wanted their own systems.

Researchfish created as a federated system that many different funders could use.

- Researchers report using common framework
- Researchers can report once and reuse if relevant to multiple funders
- Support for “team science” across many agencies and countries
- Efficient use of administrative funds – all benefit from constant improvement
- Focus on unique identifiers and integration with many sources
- Funders retain ability to add funder specific questions

2013: Disciplinary Expansion

After assessment of competing systems and approaches Researchfish adopted by remaining UK Research Councils – requiring the system to broaden to cover full range of academic disciplines.

Common Outcomes expanded

Common Outcomes	
Publications	Intellectual Property & Licensing
Collaborations & Partnerships	Medical Products, Interventions & Clinical Trials
Further Funding	Artistic & Creative Products
Next Destination & Skills	Software & Technical Products
Engagement Activities	Spin Outs
Influence on Policy, Practice, Patients & the Public	Awards & Recognition
Research Tools & Methods	Other Outputs
Research Databases & Models	Use of Facilities & Resources

researchfish

Today

Researchfish used by around 130 funders across 9 countries.

Roughly 2.7 million outputs linked to 140,000 funding awards (Sept 2018).

Publications account for less than 50% of reported outputs.

Average (mean) time spent reporting roughly 45 minutes/award/year

Interoperability

Imperative that Researchfish make best use of available data – integrates with over 1,500 sources.

Individual Accounts: e.g. ORCID

Direct Harvest: Automatically add acknowledged publications, data sets, etc.

CRIS Upload: Research organisations can add outputs with unique IDs

Augment: Links to sources to enable researchers to search for and add as outcome linked to funding

Metadata Augment: Add additional information e.g. Open Access status after output identified

Community

Using Researchfish as a common platform not only means that even the smallest funders gain access to the same technology but also different communities of best practice (conferences, working groups, etc.)

Questions?

Thank You

Further Information on how funders use Researchfish data:
https://www.researchfish.net/why-report

Contact:

Gavin.Reddick@Researchfish.com