HRB Open Research – offering an alternative to academic publishing

Aileen Sheehy, Data Policy Programme Officer

RCSI Open Science week, 22 Oct 2019

HRB Health Research Board

Research. Evidence. Action.

Overview

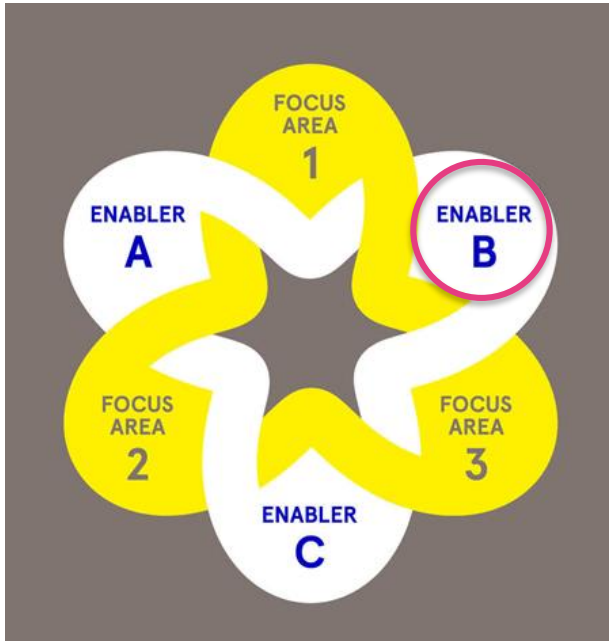
- Brief overview of HRB
- HRB Open Research
- Other initiatives in Open Science

Health Research Board Ireland

- Main funder of health research in Ireland
- Also hosts Evidence Centre and National Health Information System
- Soon to take on National Research Ethics role
- Funds applied biomedical, clinical, health services and population health research
- Award budget of €45m p.a., ~20 people in funding

HRB's role to enable improved open research environment

HRB Strategy – 2016-2020



Enabler B – Build a strong enabling environment

"The HRB is committed to ensuring that its funded research is open, accessible and usable, so it can have the greatest possible impact."

HRB Open Research Pilot

Academic publishers

Elsevier
SpringerLink
SAGE
Taylor & Francis
Wiley

✘

✓

Not open access

Journal subscriptions

Open Access

Green

subs

Gold

APCs

Problems with current model

Lengthy

currently estimated between 150-250 days on average.

Expensive

For example, Elsevier had profit of £913m in 2017

Not open

Editor decision, journal scope

Not transparent

Anonymous peer review

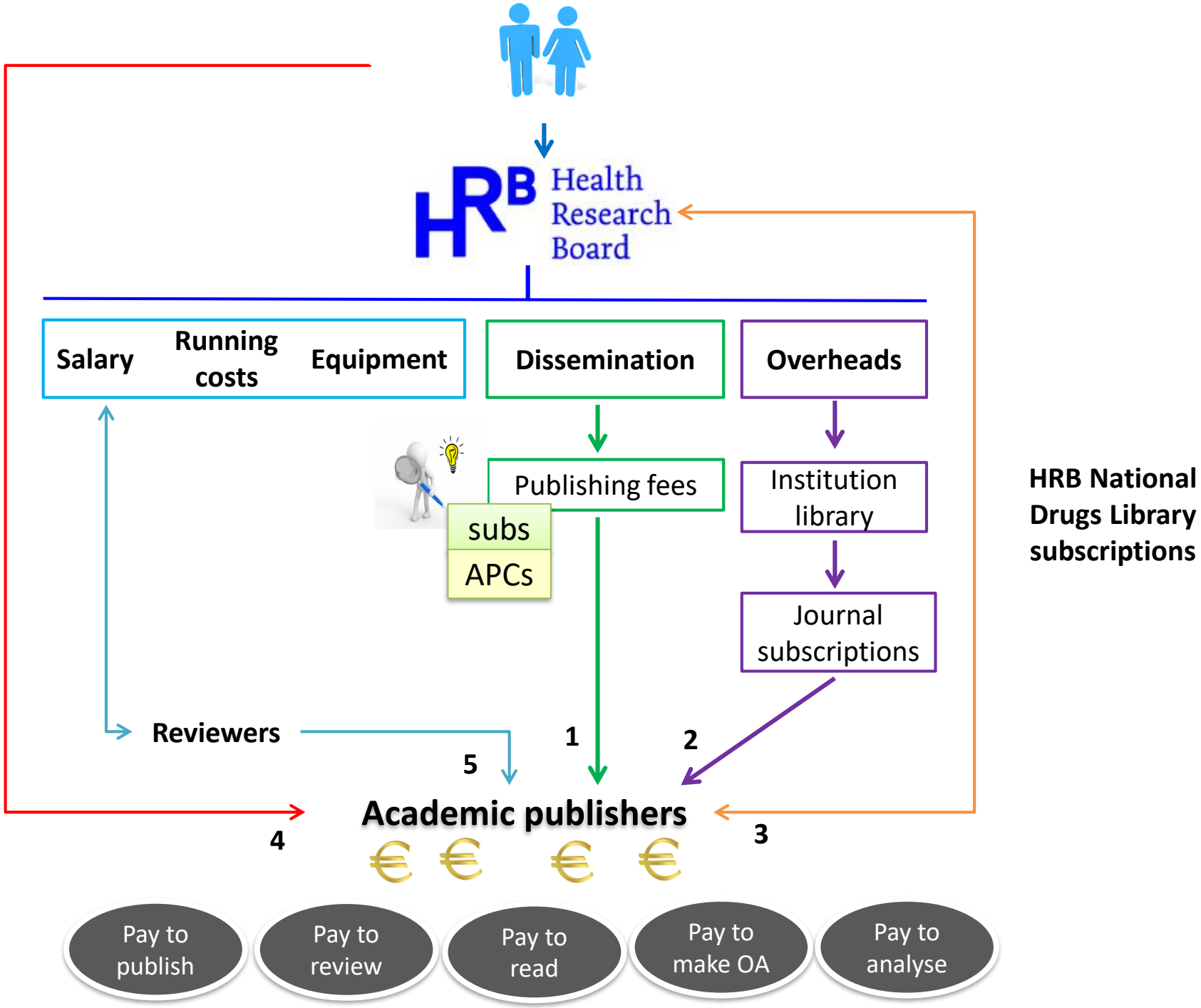
Not inclusive

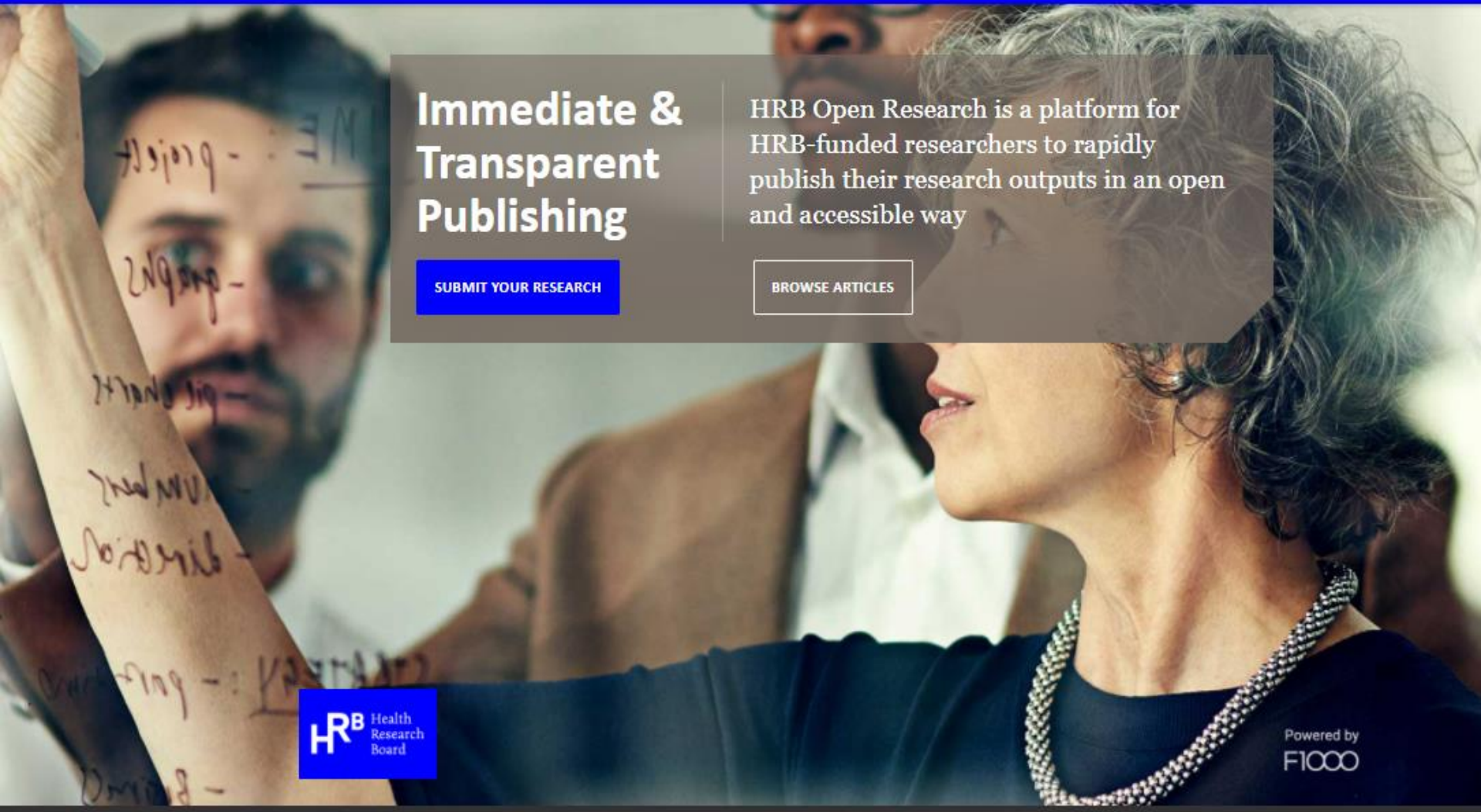
Articles, rarely confirmatory findings or null reports

Nowhere for other outputs

Tied to 'flawed' metrics

Journal impact factor, eigenfactor


HRB Health Research Board
Salary
Running costs
Equipment
Dissemination
Overheads
Publishing fees
subs
APCs
Institution library
Journal subscriptions
Reviewers
1
2
3
4
5
Academic publishers
Pay to publish
Pay to review
Pay to read
Pay to make OA
Pay to analyse
HRB National Drugs Library subscriptions



Recent Articles | Browse all →

12 MARCH 2018

An international, Delphi consensus study to identify priorities for methodological researc...

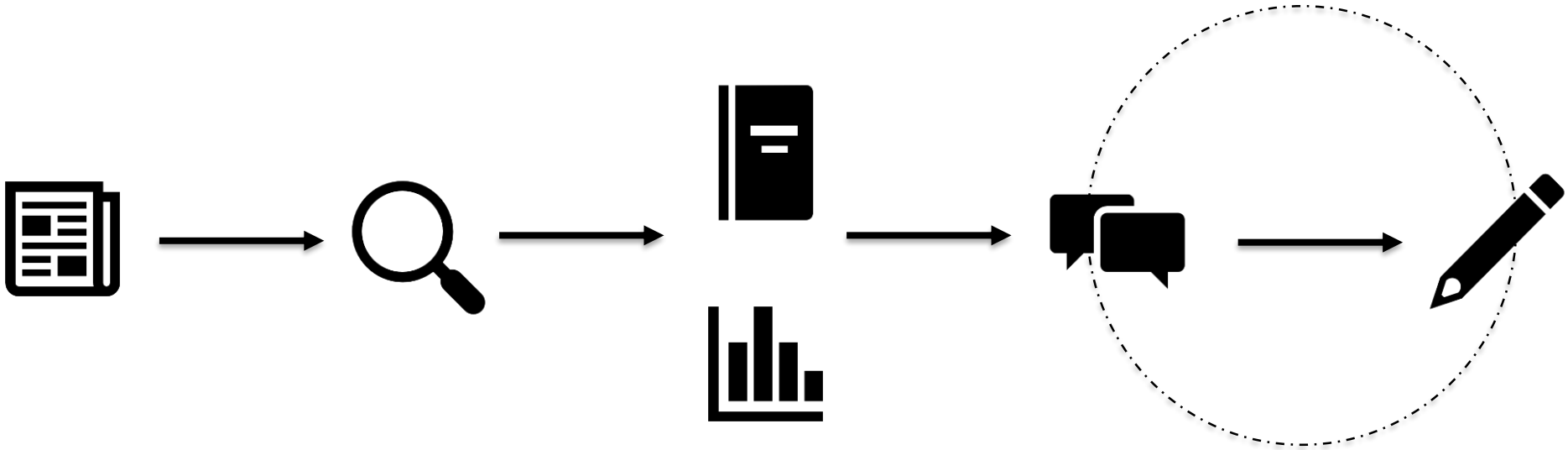
08 MARCH 2018

Sexual transmission of Hepatitis C Virus infection in a heterosexual population: A sys...

05 MARCH 2018

The systematic approach to improving care for Frail Older Patients (SAFE) study: A protocol ...

The publishing process



Article submission

Editorial checks

Publication and data deposition

Included in Google Scholar, visible online

Open peer review and user commenting

Article revision

Open to all HRB grantholders or people working on a HRB funded/co-funded grant, including work not directly funded by the HRB as well as HRB staff

Why publish in HRB Open Research?

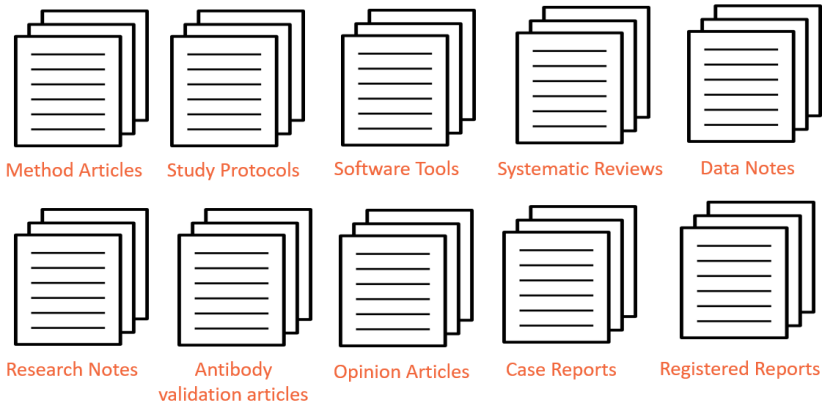
PREPRINTS

- Remove delay, allowing authors to share on their own terms
- Incorporated preprints into our publication process
- Post-publication peer review (speed)

NO EDITORS

- No Editorial Bias, minimising publication bias
- Open to publish negative results and replications
- Authors making the choice of what is valid and useful to publish- handing back control

Why publish in HRB Open Research?



DIFFERENT ARTICLE TYPES

- Over-emphasis on traditional research articles
- Crediting all different research outputs
- Reducing research waste

OPEN DATA

- 'Replication crisis'
- Ensure data is FAIR
- Ensuring what is published is reproducible

Why publish in HRB Open Research?

NO IMPACT FACTOR

- Flawed metric for evaluating individual researchers
- DORA, intrinsic value
- Encourage metrics at the level of the article

NO EVAULTATION FOR NOVELTY

- Subjective
- No ‘sell’
- Reviewers judge the scientific soundness
- Literature represents what is happening in the lab

RESEARCH ARTICLE metrics AWAITING PEER REVIEW

Capturing data for emergency department performance monitoring purposes [version 1; peer review: awaiting peer review]

Aileen McCabe, Maria Brenner, Philip Larkin, Sinéad Nic An Fhailí, Brenda Gannon, Ronan O'Sullivan, Abel Wakai

PEER REVIEWERS Invited

FUNDER Health Research Board

PUBLISHED 13 Aug 2019

SYSTEMATIC REVIEW metrics ✓ ? ✓

REVISED Improving palliative care with machine learning and routine data: a rapid review [version 2; peer review: 2 approved, 1 approved with reservations]

Virginia Storick, Aoife O'Herlihy, Sarah Abdelhafeez, Rakesh Ahmed, Peter May

PEER REVIEWERS Tim Luckett; Wei Gao; Amara Callistus Nwosu

FUNDER Health Research Board

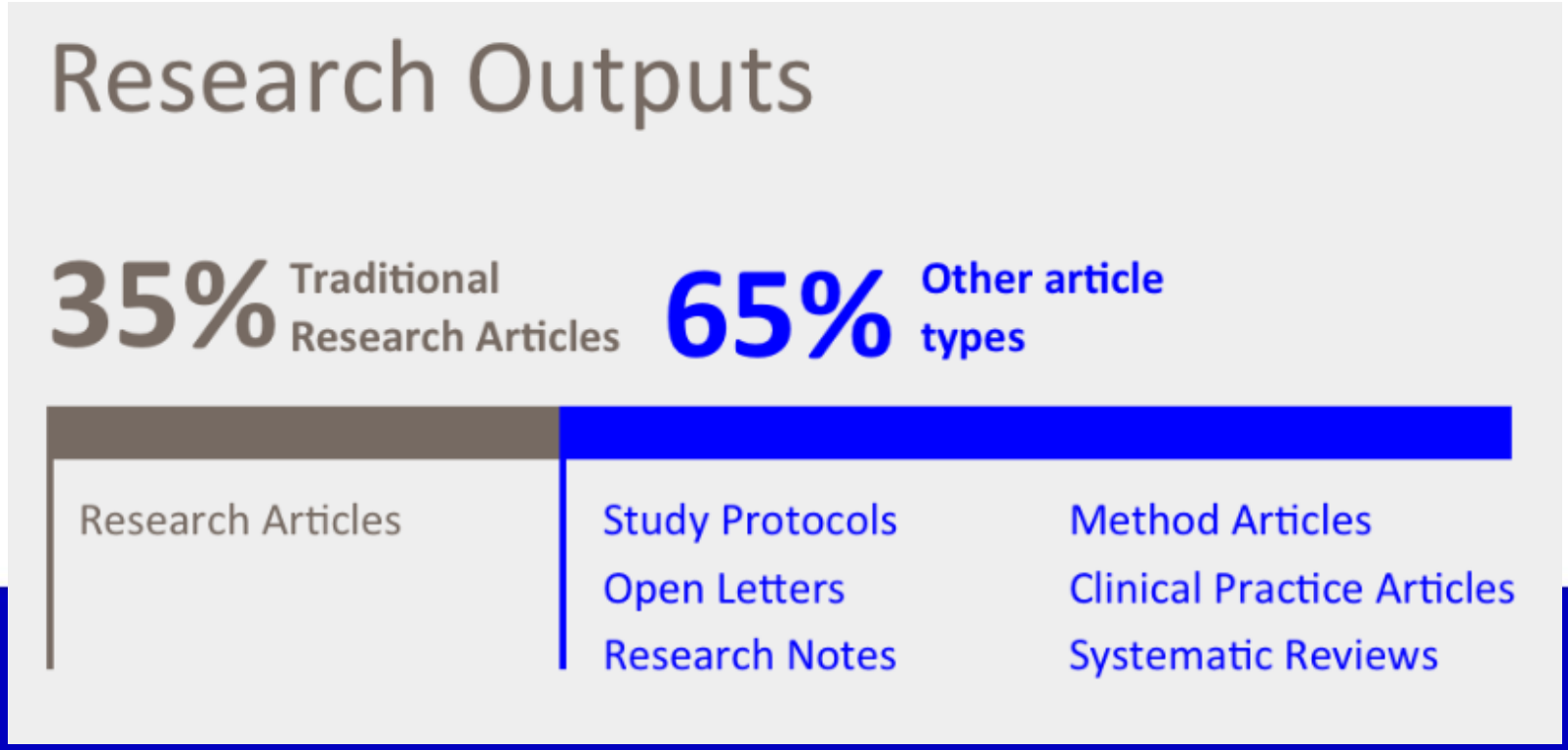
PUBLISHED 12 Aug 2019

18 months in…

Most used publication venue for HRB-funded researchers

52 articles submitted by 11/10/2019

- 44 papers approved or approved with reservation, 6 awaiting peer review
- Have exceeded 25 papers required for inclusion in Pub Med – process started



Registered reports now available

Review of
- Intro
- Method
- Proposed analyses

Review of
- Intro
- Methods
- Results
- Discussion

Two bespoke collections so far

- **Aging populations** *(*related articles on ageing covering a broad scope of outputs*)*
- **HRB Trials Methodology Research Network** (strengthening the methodology and reporting of trials in health and social care in Ireland)

Acknowledging reviewer contribution

Developing the functionality: send reviews to Publons - a free service for academics to track, verify, and showcase their peer review and editorial contributions for academic journals.

Transparency audit of F1000 research policies and best practices

- Against the Transparency and Openness Promotion (TOP) guidelines provided by the Center for Open Science (COS).
- F1000 Research scored levels 2 or 3 out of 3 for data, materials, analytical code, reporting guidelines and replication, and level 1 for preregistration.

Future of the pilot

- Currently preparing business case about renewing the contract from Feb 2020 for a further 2 years.
- Looking to expand to include some other Irish funders

Other projects and initiatives in Open Science

DORA Declaration

- San Francisco Declaration on Research Assessment first launch in 2013
- HRB signed up to the declaration in 2018
- Not using impact factors in our assessment of research proposals
- Now request list research outputs such as peer-reviewed publications, research data and databases, research material, audio/video products, national and/or international reports or briefs, models and protocols, software, evidence of influencing policy and/or practice, outreach and/or knowledge exchange activities

New data sharing policy

- Mandated from January 2020
- Unless justification is provided, all underlying data must be made openly available – at a minimum, data that underlies all publications
- All meta-data must be made openly available
- The completion of Data Management Plans is mandated
- Alignment with FAIR principles is encouraged
- Working closely with other Irish funders to ensure requirements are aligned

Data Management Plan

- A data management plan or DMP is a formal document that outlines how data are to be handled both during a research project, and after the project is completed.
- HRB developed on template on DMP online:
  - Based on the Science Europe's ***Practical Guide to the International Alignment of Research Data Management***
  - ***https://www.scienceeurope.org/our-resources/practical-guide-to-the-international-alignment-of-research-data-management/***

SCIENCE EUROPE
Shaping the future of research

What's included in the DMP?

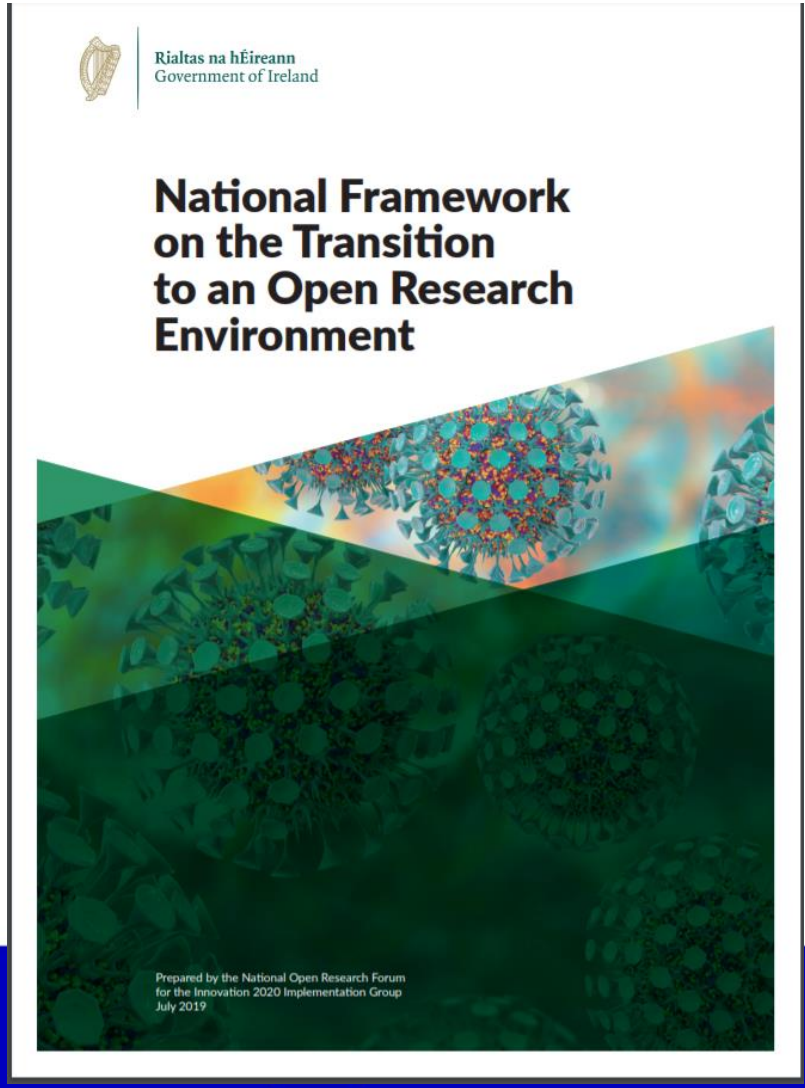
- Data description and collection or reuse of existing data
- Documentation and data quality
- Storage and backup
- Ethical and legal compliance, codes of conduct
- Data sharing and long-term preservation
- Data management responsibilities and resources

Collaboration with Digital Curation Centre on DMPs

- HRB currently using DMP online to host DMP template for researchers
- In 2020 – potentially launch pilot platform for researchers and institutions funded by the HRB
- In discussion with other Irish research funders about creating a national platform for DMP

National Open Research Framework

- Includes representatives from policy, research funding, research performing, library sector and other key stakeholders in the research system across Ireland
- Established to deliver an Irish agenda for open research
- Chaired by the HRB and the Higher Education Authority
- New National Framework first step in a process to create a National Action Plan for the transition to an open research environment in Ireland



In conclusion…

Why does the HRB promote Open Science?

- As a public funder of health research, the benefits of open science include:
  - Value for money in the fact that research we fund are accessible and reusable by others
  - Those who pay for research (the public through taxes) can access findings and information
  - Increased transparency in the research system
  - Increased quality in the research that's produced

Thank you for listening

asheehy@hrb.ie