

What do funders do to increase value and reduce waste in research?

Can these policies and practices help to address issues of research integrity?

Mona Nasser Clinical Lecturer in Evidence Based Dentistry

Project Team: Paul Glasziou, Iain Chalmers, Mike Clarke, Hans Lund, Hanna Nykvist, Kjetil Gundro Brurberg



Medical research funders, governments and research waste – are taxpayers getting 'bang for their buck'?

By Mona Nasser - posted Tuesday, 14 March 2017 Sign Up for free e-mail updates!

Files 2 people like this Sign Up to see

Gold 0

It's estimated that 85% of medical research is wasted.

This is not because it was a bad idea to carry it out in the first place, or that scientists and researchers are profligate with their projects. The waste comes from asking the wrong question, bad design or poor reporting – and in a study carried out with colleagues from around the world, and published online in The Lancet, we found that at the root of this issue were funding bodies not taking responsibility for the efficiency of the research they have used public money to fund, and governments not holding those funding bodies to account.



Lancet study puts NIHR top of the intl league table for health research in the public interest inc. public involvement @TheLancet





Ari Friedman @AriBFriedman · 12h Would love to see this including PCORI, AHRQ, as well as how good they are at funding social sciences.

Conference theme

The 5th World Conference on Research Integrity will be organized around the interlinked themes of **transparency** and **accountability**, ..

REWARD statement (www. researchwaste.net)

We recognise that, while we strive for excellence in research, there is much that needs to be done to reduce waste and increase the value of our contributions...

	Country		
National Instit	UK/England		
Medical Resea	rch Council (MRC)	UK	
French Ministr	 Browsing websites 	France	
l'Agence Natio	 Using Manuals and Handbooks 	France	
Deutsche Fors		Germany	
The Netherlan Development	 Make-up of committees Note – the project focuses only on information available or 	Netherlands n	
Danske Region	the website We will later contact funders to assessed	Denmark	
Regional Healt	interpreted it appropriately	Norway	
National Health and Medical Research Council (NHMRC)		Australia	
Canadian Institutes of Health Research (CIHR)		Canada	
National Institutes of Health (NIH)		USA	
Patient-Centered Outcomes Research Institute (PCORI)		USA	

Evaluate

Funding methodological research (research on research)

Transparency

- Research prioritisation with stakeholder engagement
- Systematic reviews ahead of new primary studies;
- Registration of studies and publication of full proposal
- Full publication of the methods and results

EVALUATE



Nicola Low @nicolamlow

@trished @TheLancet

@monalisa1n @iainchalmersTTi

@PaulGlasziou Are funders funding research to see if the practices reduce waste in output?

25/03/2017, 07:08



Sarah Knowles @dr_know · 11h

Very glad "research on research" is being recognised. Gets dismissed (avoided?) as 'naval gazing', I think it's getting our house in order

Mona Nasser @monalisa1n

How do funding agencies compare to each other #researchwaste @iainchalmersTTi @PaulGlasziou @tweethlund @ebrnetwork @CAPSMG #lancet

Does the funder provide targeted funding to undertake "research on research"?

UK	NIHR/MRC
Netherlands	ZonMw
USA	PCORI
France	FMoH
France	ANR
Canada	CIHR
USA	NIH
Germany	DFG
Norway	RHA
Australia	NHMRC
Denmark	DR

Dedicated funding programme for methodological research

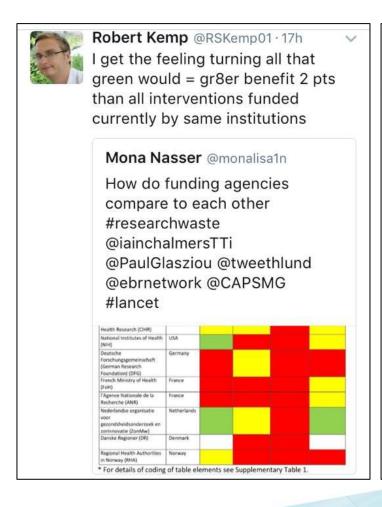
Methodological research can be funded but there is no dedicated programme for it

Only support internal staff working on methodological research.

Not funding methodological research

MRC/NIHR	ZonMW	PCORI
Methodology research programme	Responsible Research Practices (FRRP)	Patient-Centered Outcomes Research and Methodological Research
Study of how best to design, conduct, analyse and evaluate medical and health research	to encourage quality, integrity, efficiency and positive social impact in scientific and academic research	Improving methods for the design and conduct of clinical studies

TRANSPARENCY How we select questions?





Zachary Munn @ZacMunn · 1h Very interesting - @nhmrc time to start requiring systematic reviews prior to funding new research?

Explored in @TheLancet "What are funders doing to minimize waste in research?" Best job by the UK's @OfficialNIHR.

Kari Tikkinen @KariTikkinen

thelancet.com/pdfs/journals/...

Research (NIHR)	UK			
Medical Research Council (MRC)	UK			
National Health and Medical Research Council (NHMRC)	Australia			
Canadian Institutes of Health Research (CIHR)	Canada		- 1	
National Institutes of Health (NIH)	USA			
Deutsche Forschungsgemeinschaft (German Research Foundation) (DFG)	Germany			
French Ministry of Health (FoH)	France.	1	- 1	
l'Agence Nationale de la Recherche (ANR)	France			
Nederlandse organisatie voor	Netherlands			

How priorities are set? Are patients and public involved?

UK	NIHR
Netherlands	ZonMw
USA	PCORI
UK	MRC
Norway	RHA
Australia	NHMRC
Canada	CIHR
USA	NIH
France	FMoH
France	ANR
Germany	DFG
Denmark	DR

Prioritisation process is transparently and patients are partners in the decision making

Some information on the <u>plan</u> for a prioritisation process but not on implementation

Patients involvement is very limited

No patient involvement in the priority setting process

No information on how priorities are set

Are applicants who seek support for new research required to refer to systematic reviews of existing evidence?

UK	NIHR
USA	PCORI
UK	MRC
Germany	DFG
Netherlands	ZonMw
Canada	CIHR
France	FMoH
France	ANR
Denmark	DR
Norway	RHA
Australia	NHMRC
USA	NIH

Primary research is not funded without a systematic review

Only Clinical trials are not funded without a systematic review

Systematic reviews are encouraged before new research but are not mandatory

Primary research is funded without a systematic review

Framework for Establishing Research Priorities

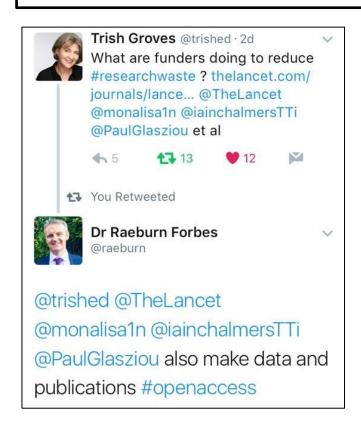


- Topic generation
 - engagement of multiple stakeholders, especially patients, is critical at this stage
- Systematic review and Gap analysis
- Value of information analysis
- Peer and stakeholder review

NIHR definition of a systematic review

- Is completed according to a predetermined methodology
- Methodology is adequately described to allow, in principle, replication by others
- Has well defined and justified inclusion and exclusion criteria
- Minimises bias and random error in a way proportionate to the risk of an inappropriate funding decision
- Maximises completeness in a way proportionate to the risk of an inappropriate funding decision
- References ongoing studies
- Critically appraises for quality and relevance
- Synthesises [in a credible way and without introduce new bias]

TRANSPARENCY How we report the research?





Does the funder require registration of research?

UK	NIHR
Netherlands	ZonMw
USA	PCORI
UK	MRC
France	FMoH
France	ANR
Germany	DFG
Norway	RHA
Australia	NHMRC
Canada	CIHR
USA	NIH
Denmark	DR

All studies have to be registered in an existing registry before they start

Only clinical trials need to be registered in an existing registry before they start

No requirement to register studies before conducting them.



3. Registration of Clinical and Public Health Intervention Studies

Any MRC-funded clinical trials, clinical and public health studies with a study design that is within the scope of this policy must register with the ISRCTN Registry and obtain a unique ISRCTN number. The MRC project reference should be included in the registration. The MRC will cover the cost of ISRCTN registration where this has been included in the application for funding.





- Clinical trial or observational comparative effectiveness study of human participants.
 Clinical trials must be registered prior to enrollment of the first patient.
 ClinicalTrials.gov (https://clinicaltrials.gov/) must be used for registration of such studies.
- Patient registries. Patient registries must be registered in the <u>Registry of Patient</u>
 <u>Registries (RoPR) (https://patientregistry.ahrq.gov)</u>, which is a repository of patient
 registries designed and deployed by the Agency for Healthcare Research and Quality
 (AHRQ) to complement ClinicalTrials.gov. In order for a Patient Registry Profile to exist
- c. Methodological and other projects that are not clinical studies or patient registries. Methodological projects and others that are not appropriate for ClinicalTrials.gov or RoPR must be registered in the <u>Health Services Research Projects in Progress</u> database (HSRProj) (http://wwwcf.nlm.nih.gov/hsr_project/home_proj.cfm). HSRProj, a database

Making the proposal available before starting the study?

UK	NIHR
UK	MRC
France	FMoH
France	ANR
Germany	DFG
Netherlands	ZonMw
Denmark	DR
Norway	RHA
Australia	NHMRC
Canada	CIHR
USA	NIH
USA	PCORI

The full proposal are available online for all studies

The full proposal for some studies are available

Part of the proposal for each study is available

No requirement to make the proposal (in whole or in part) available

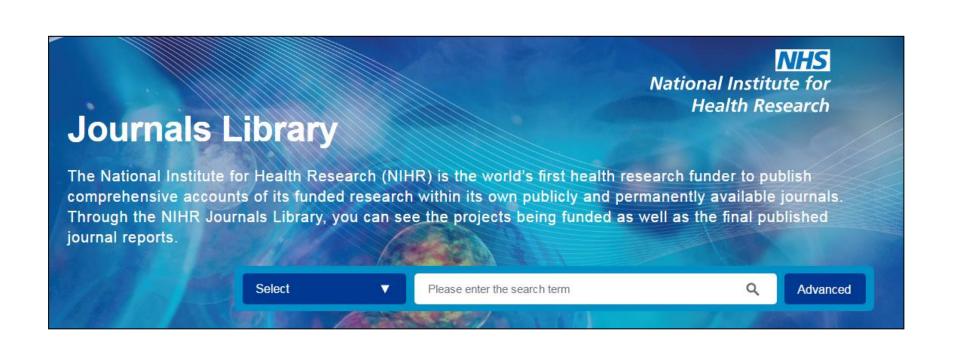
What is the funder's policy on public access to <u>data</u> from <u>completed research</u>?

NIHR
MRC
RHA
NHMRC
CIHR
NIH
PCORI
FMoH
ANR
DFG
ZonMw
DR

All raw data from the study be made publicly available

Publish the final report with summary results in a specific timeframe

No requirement to publish the findings of the study



Major research funders and international NGOs to implement WHO standards on reporting clinical trial results

News release

18 MAY 2017 | GENEVA - Some of the world's largest funders of medical research and international non-governmental organizations today agreed on new standards that will require all clinical trials they fund or support to be registered and the results disclosed publicly.

In a joint statement, the Indian Council of Medical Research, the Norwegian Research Council, the UK Medical Research Council, Médecins Sans Frontières and Epicentre (its research arm), PATH, the Coalition for Epidemic Preparedness Innovations (CEPI), Institut Pasteur, the Bill & Melinda Gates Foundation, and the Wellcome Trust agreed to develop and implement policies within the next 12 months that require all trials they fund, co-fund, sponsor or support to be registered in a publicly-available registry. They also agreed that all results would be disclosed within specified timeframes on the registry and/or by publication in a scientific journal.

The Milbank Quarterly

Explore this journal >

View issue TOC Volume 94, Issue 3 September 2016 Pages 485–514

Original Investigation

The Mass Production of Redundant, Misleading, and Conflicted Systematic Reviews and Meta-analyses

JOHN P.A. IOANNIDIS 🗹

First published: 13 September 2016 Full publication history

DOI: 10.1111/1468-0009.12210 View/save citation

Cited by (CrossRef): 11 articles ♦ Check for updates ♦ Citation tools ▼

with for comparison. Most investigators in most fields loathe performing a replica of a previous study. This is probably a consequence of the requirement to promise novelty and innovation imposed on researchers by funding agencies and promotion committees. Only a tiny fraction of biomedical articles are truly disruptively innovative.

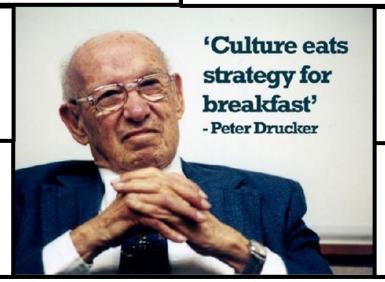
[15] The vast majority of articles are neither innovative nor identical to previous work. Studies may be similar, but they are made deliberately different in one or more aspects. For example, in an empirical evaluation of 60 published studies on risk factors for pterygium (a very common eye condition), no pair of studies considered the exact same factors or used identical adjustments for "known" risk factors.[16]

Research leaders

Universities, academic & research Institutes

Scientific societies

Funders



Industry and private sector

Policy making organisations

End-stakeholders: Members of Public, Clinician, etc.



Magne Nylenna @magnenyle... · 10h
Is this really the situation in
Norway? @jarottingen
@gunnarbovim @helsemidtnorge



Rajna Ogrin @Rajna_O · 16h

Sobering to see all the red in
Australia's funding agency NHMRC
initiative, and no green - we need to
do better





Dr. Giordano @giordanopg · 9h

I'd love to see how the Mexican one,
Conacyt, compares



Let's add @snsf_ch to this list and get to green swiftly!



What are funders doing to minimise waste in research? Check the appendix @TheLancet! DFG mostly 'red': bit.ly/2IQFh5A

12/03/2017, 16:00



Teemu Murtola @Tmurtola

I would like to see comparisons like these done also on the Finnish funding agencies