



UNIVERSITY OF
PLYMOUTH



More Faculty of Health Research
Faculty of Health

2017-03-01

What are funders doing to minimise waste in research?

Mona Nasser *Faculty of Health*

Mike Clarke

Iain Chalmers

Kjetil Gundro Brurberg

Hanna Nykvist

et al. *See next page for additional authors*

Let us know how access to this document benefits you

General rights

All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.

Take down policy

If you believe that this document breaches copyright please [contact the library](#) providing details, and we will remove access to the work immediately and investigate your claim.

Follow this and additional works at: <https://pearl.plymouth.ac.uk/more-foh-research>

Recommended Citation

Nasser, M., Clarke, M., Chalmers, I., Brurberg, K., Nykvist, H., Lund, H., & Glasziou, P. (2017) 'What are funders doing to minimise waste in research?', *The Lancet*, 389(10073), pp. 1006-1007. Available at: [https://doi.org/10.1016/S0140-6736\(17\)30657-8](https://doi.org/10.1016/S0140-6736(17)30657-8)

This Article is brought to you for free and open access by the Faculty of Health at PEARL. It has been accepted for inclusion in More Faculty of Health Research by an authorized administrator of PEARL. For more information, please contact openresearch@plymouth.ac.uk.

Authors

Mona Nasser, Mike Clarke, Iain Chalmers, Kjetil Gundro Brurberg, Hanna Nykvist, Hans Lund, and Paul Glasziou

Elsevier Editorial System(tm) for The Lancet
Manuscript Draft

Manuscript Number:

Title: What are research funders doing to minimize waste in research?

Article Type: Correspondence

Keywords: Research Funders, REWARD initiative, Research waste, Research Quality, Systematic Review, Reporting Guideline

Corresponding Author: Dr. Mona Nasser, DDS

Corresponding Author's Institution: Plymouth University

First Author: Mona Nasser, DDS

Order of Authors: Mona Nasser, DDS; Mike Clarke, DPhil; Iain Chalmers, DSc; Kjetil Gundro Brurberg, PhD; Hanna Nykvist, MSc; Hans Lund, PhD; Paul Glasziou, PhD

Manuscript Region of Origin: UNITED KINGDOM

What are research funders doing to minimize waste in research?

Mona Nasser¹ DDS, Mike Clarke² DPhil, Iain Chalmers³ DSc, Kjetil Gundro Brurberg^{4,5} PhD,
Hanna Nykvist⁵ MSc, Hans Lund⁶, Paul Glasziou⁷ FRACGP

1 Peninsula Dental School, Plymouth University, Plymouth, Devon, England;

2 Centre for Public Health, Queen's University Belfast, Belfast, UK;

3 James Lind Initiative, Oxford, UK;

4 Norwegian Institute of Public Health, Oslo, Norway;

5 Bergen University College, Bergen, Norway;

6 Department of Sports Sciences and Clinical Biomechanics, University of Southern Denmark,
Odense, Denmark

7 Centre for Research in Evidence Based Practice, Bond University, Robina, QLD, Australia;

Address for correspondence:

Mona Nasser, Peninsula Dental School, Plymouth University, The John Bull Building,

Research Way, Plymouth, Devon, PL6 8BU, Telephone: 0044(0)1752-437384, Email:

mona.nasser@plymouth.ac.uk

Twitter @monalisa1n

The Lancet's series of articles on reducing waste and increasing value in medical research were published in 2014(1-7). Subsequently, developments consistent with the recommendations made in the series were documented in an article based on informal enquiries made of research funders and regulators, researchers and research institutions, and journal editors (Moher et al 2016). We have explored in greater detail how the most influential of these 'actors' in the research community, the research funders, monitor and take steps to reduce waste in the research they support; and how they support methodology research ('research on research') and research infrastructure needed to show how waste can be reduced. We summarise our findings in this letter.

We searched the websites of 11 research funding organisations ([Table 1](#), [S Table 2](#), [S Table 3](#)); extracted relevant information to indicate the extent to which each of them has adopted waste-reducing policies and processes; and asked staff at each organisation to check the accuracy of our summaries. A detailed presentation of our findings is available here ([link to web extras](#)). For example, [S Table 4](#) provides an overview of how research funders develop their research agendas and; [S Table 5](#) shows the criteria used for priority setting and their relevance to the "Reduce research waste" framework.

Table 1 – Funding agencies used in the survey and samples of data from the project (further details available in S5 and S6)					
Funding agency	Country	Are patients and the public involved?	New research requires systematic reviews of existing evidence?	Public access to full protocols for completed or ongoing research?	Funding to undertake “research on research”?
National Institute for Health Research (NIHR)	UK				
Medical Research Council (MRC)	UK				
National Health and Medical Research Council (NHMRC)	Australia				
Canadian Institutes of Health Research (CIHR)	Canada				
National Institutes of Health (NIH)	USA				
Deutsche Forschungsgemeinschaft (German Research Foundation) (DFG)	Germany				
French Ministry of Health (FoH)	France				
l’Agence Nationale de la Recherche (ANR)	France				
Nederlandse organisatie voor gezondheidsonderzoek en zorinnovatie (ZonMw)	Netherlands				
Danske Regioner (DR)	Denmark				
Regional Health Authorities in Norway (RHA)	Norway				

* For details of coding of table elements see Supplementary Table 1.

Membership of the grant committees in the organisations we investigated was dominated by academics and clinicians, which may be problematic given the evidence that the priorities of patients and clinicians can differ from those of researchers [3]. NIHR and ZonMW had the most extensive involvement of members of the public (Table 1, S Table 6).

Practice and policy decisions, in both health care and health research, are often made without any reference to systematic assessment of existing research evidence (8). Of the 11 funders, only NIHR requires reference to relevant systematic reviews in all funding applications for new research. Four funders require systematic reviews to show that new clinical trials are needed (Table 1, S Table 7).

All funding agencies require registration of clinical trials before recruitment of patients. NIHR also requires registration of other study types, for example, registration of systematic reviews in the PROSPERO database. NIHR is the only funder that emphasises the importance of publishing protocols.

Only six of the 11 funding agencies are explicit that they require publication of full reports of the research they have funded. No funder has a comprehensive strategy to make available full datasets of all research projects.

MRC and NIHR have a joint funding scheme for methodology research. The French Ministry of Health funds methodological research at the Centre Cochrane Français (Table 1, S Table 7). NIH and ZonMw have also funded methodology research, and NIH and NIHR have internal staff and departments responsible for such research to inform decisions in different sections of their respective agencies.

Our survey has shown that information on the policies and processes used by research funding agencies to reduce waste and support methodological research and research infrastructure is generally not transparent or readily available. It appears that the processes of governance do not, in general, hold accountable the funding agencies we have surveyed for assessing whether and how they address the questions raised by the “Reduce research waste” framework.

534 words

Acknowledgements

We are grateful to Barbara van der Linden, Wendy Reijmerink, Cule Cucic, Stijn Tersmette, Matthew Westmore, Fabia Le Moignan, Phil Taverner, Louisa Stuwe, Cedric Carbonneil, Hilda Bastian, Megan Columbus, Phillippe Ravaud, Isabelle Boutron, Bertrand Schwartz, Danika Goosney, Frank Wissing, Frances Rawle, Davina Gherzi, Thomas Mindos, Ingrid Kalsnes and Daniel Fox for their help in collecting data or commenting on earlier drafts of this report and the accompanying Tables.

References

1. Al-Shahi Salman R, Beller E, Kagan J, Hemminki E, Phillips RS, Savulescu J, et al. Increasing value and reducing waste in biomedical research regulation and management. *Lancet*. 2014;383(9912):176-85.
2. Chalmers I, Bracken MB, Djulbegovic B, Garattini S, Grant J, Gulmezoglu AM, et al. How to increase value and reduce waste when research priorities are set. *Lancet*. 2014;383(9912):156-65.
3. Chan AW, Song F, Vickers A, Jefferson T, Dickersin K, Gotzsche PC, et al. Increasing value and reducing waste: addressing inaccessible research. *Lancet*. 2014;383(9913):257-66.
4. Glasziou P, Altman DG, Bossuyt P, Boutron I, Clarke M, Julious S, et al. Reducing waste from incomplete or unusable reports of biomedical research. *Lancet*. 2014;383(9913):267-76.
5. Ioannidis JP, Greenland S, Hlatky MA, Khoury MJ, Macleod MR, Moher D, et al. Increasing value and reducing waste in research design, conduct, and analysis. *Lancet*. 2014;383(9912):166-75.
6. Macleod MR, Michie S, Roberts I, Dirnagl U, Chalmers I, Ioannidis JP, et al. Biomedical research: increasing value, reducing waste. *Lancet*. 2014;383(9912):101-4.
7. Chalmers I, Glasziou P. Avoidable waste in the production and reporting of research evidence. *Lancet*. 2009;374(9683):86-9.
8. Chalmers I, Fox DM. Increasing the Incidence and Influence of Systematic Reviews on Health Policy and Practice. *American journal of public health*. 2016;106(1):11-3.

Funding Statement

No funding was received to conduct this work.

Competing interests

The authors have declared that no competing interests exist. None of the authors has received any direct funding to conduct this project. The authors are involved in the REWARD (REduce research WAste and Reward Diligence) initiative, Evidence based Research Network, and the Cochrane Collaboration.

Supplementary Tables

S 1 - Data extraction form to extraction information from the website of the selected funding agencies

S2– Methods to obtain publicly available information from agency websites

S3 - Process to set the research agenda for the funding agency (high level decisions rather than for individual grant submissions)

S4 - What criteria and scoring structure were used to set priorities between different individual research projects?

S 5 - Who is involved in decisions about setting priorities, and how? Are patients and the public involved?

S 6- Overview on research funder's performance against criteria of reduce research waste framework

Supplementary Material

[Click here to download Supplementary Material: Supplementary Material \(funders project\).docx](#)