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### What are funders doing to minimise waste in research?

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## What are research funders doing to minimize waste in research?

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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**

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## **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](#)