Department for Business, Innovation and Skills: Research Excellence Framework Review

Response by the Wellcome Trust

24 March 2016

Summary

- REF is an effective way of assessing the quality of research in universities. However, the process of submitting information could be made less onerous by making better use of existing systems for data collection.

- Institutions rely too heavily on publications to demonstrate excellence through REF. This reinforces the academic pressure to publish and ignores the range of activities that contribute to a flourishing research environment. HEFCE should make it clearer that it expects to see a variety of outputs in institutional submissions.

- There should be more REF assessment at an institutional level to reward important behaviours such as collaboration between universities, cross-disciplinary and cross-sector partnerships, public engagement, diversity, and technology transfer.

- Metrics should support, not replace, peer review. Individual metrics are not yet sophisticated enough to replicate the current REF process.

Consultation Questions

Q1.1: What changes to existing processes could more efficiently or more accurately assess the outputs, impacts and contexts of research?

The overall Research Excellence Framework (REF) process

1. Last year, Wellcome invested almost £500 million in UK universities and funded the salaries of around 9,000 academics. We felt able to make this investment because of the quality of the research base and the Government’s commitment to science through the dual support system. Quality-related (QR) block funding is a critical pillar of dual support, enabling universities to invest strategically and flexibly as they see fit. The allocation of QR relies on an independent process to assess excellence in research. Broadly speaking, REF is an effective way of delivering this.

2. As well as allocating funding, REF provides accountability and benchmarking, and can be an important driver of positive behaviours — public engagement is a good exemplar of this. We were particularly pleased to see efforts to better reward diversity in REF 2014, with highly-rated outputs from early career researchers, part-time staff and those who’d taken time out for maternity leave. This should continue in future exercises. We also welcome the Higher Education Funding Council for England’s (HEFCE) policy to require open access to journal articles and conference proceeding submitted to the next REF. However, there is no denying that the process is onerous, particularly as the intensity of activity is focused over two years.

3. Future exercises must harmonise data gathering so that existing information can be captured as part of the submission process, for example grant reports and Researchfish data. In the future, adopting standards such as ORCID (Open Researchers and Contributor ID) could also ensure that information is shared across systems more effectively, reducing the need for researchers to duplicate effort.

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Outs

4. We would like to see better communication and reframing of this section, so it is clear that it is designed to assess the very wide range of outputs (and impacts) that advance understanding. HEFCE’s principles of conduct say that all types of research and all forms of research outputs should be assessed on a fair and equal basis. However, it is clear that institutions rely heavily on publications to demonstrate success — 82% of outputs across all panels in the 2014 exercise were categorised as 'journal articles'. In Panel A, this increased to 99% of documented outputs.

5. We understand that publications are a failsafe demonstrator of excellence, and institutions play it safe when submitting to REF. However, an overreliance on this indicator drives the wrong behaviours. It reinforces the pressure for researchers to publish and be listed as a prominent author on papers. It promotes the hiring of 'REF-able' star academics, can undermine the importance of teaching, and reduces the time spent on other important activities that contribute to a thriving research environment.

6. Instead, we would like submissions to reflect the variety of outputs that enable research to flourish. This includes collaborations within an institution, creation of intellectual property, and development of the next cadre of research leaders through teaching, mentoring, talent development and training. There are currently few incentives to encourage data sharing among researchers, and a recent report concluded that the sharing of high quality data sets should be explicitly recognised and assessed as valued research outputs in REF. Similarly, review panels should consider the development and sharing of research tools, methods, and enabling technologies such as the CRISPR gene-editing technique, the establishment of clinical trials, and the reporting of null or negative findings (which unhelpfully are often not published).

7. HEFCE (or its successor) has a critical role to play in ensuring that institutions understand that the range of research outputs are expected, and will be valued, in REF submissions, and must encourage varied demonstrators of excellence. HEFCE also needs to give clearer guidance on how different outputs will be evaluated so that panels know how to assess value and institutions understand the process.

Impact

8. The new emphasis on impact in the 2014 REF was a helpful development and we welcome the broad definition. This should be reflected in the title of the section, for example 'Impact Beyond Academia' or 'Societal Impact'. This would help to ensure that a broad range of impacts are captured in submissions, rather than an overreliance on economic indicators.

9. The guidelines that HEFCE provides to institutions should also describe how the varied activities linked to impact will be considered and measured through REF.

10. Impact case studies have been particularly useful to Wellcome, and have enabled us to gain valuable insights into the research we fund in universities. Our preliminary evaluation shows that Wellcome-funded projects fell into 31 out of the 36 units of assessment, and 669 Wellcome Trust grants were identified in connection with 270 case studies, meaning multiple awards were interacting to create impact. However, the data gathered lacks consistency in collection and is not easy to use when exported. The next REF should introduce clearer and more consistent formats, standards, templates and guidance for reporting. This needs to make the process less onerous and will underpin a richer dataset.

Expert Advisory Group on Data Access (2014) Establishing incentives and changing cultures to support data access
Q1.3: Is there scope for more or different use of metrics in any areas?

11. The recent report *The Metric Tide*, recommended that metrics should support, not supplant, peer review, and we agree with this conclusion. Individual metrics are not yet sophisticated enough to replicate the current REF process. This is particularly true for the impact case study component. Any large shift towards the increased use of metrics will likely lead to a reliance on one or two commercial providers, which presents its own risks to the research system's information infrastructure.

Q2.2: Would there be advantages in reporting on some dimensions of the REF at a more aggregate or institutional level?

12. We understand that linking outputs to particular investigators can help to ensure that academics and departments are recognised for their valuable contributions. However, we would also like to see more assessment at an institutional level.

13. This should include recognition of wide-ranging collaboration between universities, cross-disciplinary partnerships, cross-sector working, overarching good research practice and reproducibility, strategic public engagement activities, and cross-departmental practices to stimulate diversity. Assessment should be data-driven wherever possible to ensure meaningful review. Standardised metrics would allow institutions to benchmark and compare performance, and encourage progress across REF exercises. It would also reduce duplication between different disciplinary panels.

14. We would also like to see more assessment of Technology Transfer Offices (TTOs) at an institutional level — they are key to realising the health and societal benefits of research. In our view, TTOs should be measured on how effective they are at sharing university IP and brokering partnerships between academia, industry and investors, rather than their ability to generate revenue. Wellcome is also working to establish some principles for good translation and we would be keen to develop these in partnership with the Government, universities, TTOs and other funders.

15. The organisers of REF could lead by example on diversity in terms of advisory group composition and peer review, particularly by ensuring that REF panels are diverse.

Q9: Are there additional issues you would like to bring to the attention of the Review?

16. The Government’s Higher Education Green Paper outlined plans to introduce a Teaching Excellence Framework (TEF). High-quality and inspiring teaching is essential, and we support the intention of this proposal. However, it should be carefully implemented, and it is important to consider the potential impact on research activities. It would be damaging to force teaching and research into competition with each other as institutions chase different pots of money through TEF and REF.

17. Teaching and research in universities are intrinsically linked. Quality and inspiration will be lost from higher education if the bond between them is broken. Research-informed teaching and teaching-led research must be promoted. A Higher Education Academy-funded study demonstrated that teaching-focused work is an intrinsic part of academic practice, and should be recognised and rewarded as such.

18. Any restructuring should not inadvertently destabilise this. As a minimum, TEF metrics should recognise research-rich teaching, and REF should consider the impact of research on education.