



Review article

Leadership in preparations for the Research Excellence Framework

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A B S T R A C T

The Research Excellence Framework (REF) 2021 will inform the allocation of public funds for research to UK dental schools until at least 2027. Although the outcome has the potential to provide a national picture of research activity and strengths in dentistry, this opportunity may be lost given changes in the criteria for REF submission. Preparations for a successful REF are high on the agenda of all schools. This article presents some of the leadership challenges posed by REF2021.

1. Witching hour

Midnight... on a late December night in 2021. Across all the higher education institutions in the land there is only silence and darkness. The great halls, the lecture theatres, the laboratories and the seminar rooms of all the major universities in the UK lie empty, while the deserted phantom heads in the clinical skills rooms stare, open mouthed into the night. But, in the midst of this nocturnal calm, this deathly hush on a cold mid-winter night, some lights glow from a few small windows within the central administration buildings of the nations' centres of learning. The communications teams are hard at work! And they are hard at work on a very important task. A task which will shape the identity and reputation for the next five years of their entire institution and its individual scholarly disciplines including, for those lucky enough to have one-their dental school. The outcome of the Research Excellence Framework 2021 will be un-embargoed at one minute past the witching hour. At that moment, the universities of the UK can publicly proclaim and extol, via the world wide web and a multiplicity of social media channels, their interpretation of their performance and national rankings in this quinquennial assessment of research quality in the UK. This is a moment of huge significance and will reflect the outcome of a significant amount of preparatory work leading up to the university's submission in 2020.

2. Mechanism

The REF is the mechanism used for assessing research in UK Higher Education Institutions. First conducted in 2014, when it replaced the previous Research Assessment Exercise, it is conducted jointly by Research England, the Scottish Funding Council, the Higher Education Funding Council for Wales and the Department for the Economy, Northern Ireland (DfE). REF 2021 outcomes will be used to inform the allocation of around £2 billion per year of public funding for research to

UK universities from 2022 to 2027. What is more, the assessment will provide accountability for public investment in research and produce evidence of the benefits of this investment. Equally importantly, the outcomes will provide benchmarking information and establish reputational yardsticks, for use within the Higher Education sector and for public information. So, for each university and for each dental school within those universities, significant income streams, reputational standing and league table position are riding on the outcome of this exercise. Hence, the preparations for REF are high on the agenda of the leadership of all schools between now and the submission deadline of in Nov 2020.

3. Issues

This paper explores some of the leadership issues in preparing a dental school for the next REF. For most schools this involves a huge amount of work and considerable academic and support staff time which reaches a crescendo in the run up to the final submission date. As a starting point one could ask why is such a volume and intensity of preparation required? As described below, the information required for a REF submission is largely a description of the research focus, volume and quality of the research performed within a dental school over a defined assessment period, supported by examples of research publications and evidence of the impact of that research beyond the confines of academia. Shouldn't all that information be routinely collected and continuously analysed by the institution to help monitor its overall academic performance and guide resource investment as part of good business management? Shouldn't submission simply involve reformatting one or two institutional databases and then flicking a switch? The answer to these questions is yes – in an ideal world. The reality is quite different. For example, it's true that most institutions now hold central repositories for all publication outputs by their academic staff and many of these have the capacity to continuously upgrade and report the

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impact factor of the relevant journals and the citation indices of individual papers. However, whilst these metrics are useful, one of the central tenets of the REF is that expert review should be the primary means of assessing outputs, to reach rounded judgements about the full range of assessment criteria. Hence, if an institution aims to assess how individual research outputs, or indeed examples of impact, may be viewed in the REF, to inform which outputs to include in the submission, there is little option but to use the same assessment criteria and therefore a process of expert review. Very few schools, if any, perform this process as a matter of routine business. Instead, it tends to be concertained into the preparatory period leading up to the REF submission. A second issue which entails significant diversion of management time and resource are changes to the formal guidelines of submission which inevitably appear to accompany every new REF exercise. Seemingly minor adjustments to the requirements, for example the percentage return of eligible staff, can have major ramifications in terms of resource management and recording within the Institution in the lead up to submission. Some of these changes relevant to REF2021 are described below.

4. Process

Essentially the REF is a process of expert review, with discipline-based expert panels assessing submissions made by HEIs in 34 different Units of Assessment (UoA) under five Main Panels (A–E). The submissions comprise five basic elements:

- REF1- information on eligible current and former staff
- REF2 - details of outputs (normally peer reviewed journal publications) produced over the period January 2014 to December 2020). In REF2021, the total number of outputs must equal 2.5 times the sum of the unit's submitted staff
- REF3 - case studies describing impacts achieved during the assessment period (August 2013 to July 2020), underpinned by excellent research in the period January 2000 to December 2020
- REF4: data on research doctoral degrees awarded, research income and income-in-kind over the assessment period;
- REF5 - an institutional-level environment statement, and a completed template describing the submitted unit's research and impact environment.

The expert panels, composed of rigorously recruited UK research active academics, industry representatives and international experts, review each submission throughout 2021 and produce an assessment of the overall quality profile in which outputs, impact and environment are weighted 60:25:15. These are the data that university research leaders and their communications teams will eagerly anticipate, scrutinise and pore over in the dark days of December of that year to make the best possible outward facing impression of their rank performance. This will be the research benchmark of their organisation for the following 5–7 years.

5. Panel A

Main Panel A comprises UoA1-5 and covers all the research conducted in medicine, health and life sciences. Dentistry is grouped together with Allied Health Professions, Nursing and Pharmacy in UoA3. In previous iterations, HEIs were permitted to submit separate submissions for each individual discipline in UoA3 to identify the number of staff they had included in, for example, nursing and/or dentistry, and to obtain a quality assessment for each area. Although not all universities chose to make this more granular level of submission to UoA3 in REF2014, it did enable a comparison of the relative strengths of dental research across dental schools in the UK. At the time of writing, the final submission guidelines for REF2021 have not yet been finalised following consultation on the draft guidelines in 2018. However, it

appears possible, that separate submissions in the different disciplines in UoA3 may not be required in REF2021. Hence, regrettably, it may not be possible to obtain an accurate view of the national picture of dental research through the REF2021 process – a missed opportunity in the view of this author.

6. Compliance

How each dental school conducts its preparations for REF2021 must be via a transparent and open process. Universities are required to develop, document and apply a code of practice on the fair and transparent identification of staff with significant responsibility for research, on determining who is an independent researcher and on the selection of outputs. All institutional codes of practice require approval by the Equality and Diversity Approval Panel advising on the REF2021 process. The guidelines are explicit that all decision-making processes in relation to REF 2021 need to be demonstrably compliant in the context of the principles of equality and diversity and all relevant legislation. Hence, HEIs need to ensure that their REF procedures do not discriminate unlawfully against, or otherwise have the effect of harassing or victimising individuals because of age, disability, gender identity, marriage and civil partnership, race, religion or belief, sex or sexual orientation or because they are pregnant or have recently given birth.

7. Eligibility

A number of other alterations to the submission guidelines have been made which will influence the way in which the leadership of research in dental schools will prepare for REF2021 compared to previous exercises. The first is the difficult issue of who should be returned. Similar to previous exercises, Category A staff eligible to be included in the submission are defined as academic staff with a contract of employment of 0.2 FTE or greater, on the payroll of the submitting institution on the census date, whose primary employment function is to undertake either 'research only' or 'teaching and research'. Staff on 'research only' contracts (effectively research fellows) should meet a prescribed definition of an independent researcher. In REF2014 and earlier RAEs, the key decision of who to include from the eligible staff was left to the submitting university. Under these rules, it was entirely legitimate for a university to only return those members of eligible staff it considered to meet a certain quality threshold. In so doing, the university could boost the quality measure of its return (the Grade Point Average or GPA) at the expense of the volume of staff returned. Whilst this could have a negative impact on the funding allocation for that return (as this is governed by not only by GPA but also the number of staff returned) the university would gain in reputational terms – and in some league tables - for an enhanced GPA. Consequently, it was quite common for submissions to REF2014 and previous RAEs to only include 75% and sometimes even lower percentages of eligible staff. That latitude in deciding who from the eligible staff pool should be returned has now gone. The guidelines for REF2021 are quite clear that ALL eligible staff must be included. In consequence, this change may lead some institutions to re-evaluate the exact job titles and/or job descriptions of their academic staff. For example, in many dental schools there are academic staff whose primary role is education at either undergraduate and/or postgraduate level and whilst their job description nominally includes research, in practice their time available to pursue independent research is limited. Rather than including this group of staff in REF2021 and, thereby potentially lessening the quality profile of the return, some institutions may decide that it is more appropriate to ensure that all job descriptions more accurately reflect the nature and purpose of the roles.

8. Outputs

The second major alteration concerns the numbers of outputs

required to be submitted by each individual. In earlier REF and RAE processes, a full-time academic member of staff was required to submit a total of four outputs from their publications published over the assessment period. This number could be reduced if a case was made for extenuating circumstances, for example for periods of maternity/paternity leave and for early career researchers. Under the new guidelines, an individual may return between one and five publications provided that the overall number of outputs returned in a given submission is equal to 2.5 times the number of staff returned. Hence, a fundamentally important part of the preparations for the REF2021 submission is a critical assessment of the eligibility and quality of outputs of all eligible staff and the use of those quality judgements to inform selection. As described above, this assessment needs to be conducted through a fair and transparent process to promote equality and compliance with legislation and avoiding discrimination. The precise method of assessment will vary by institution but will frequently involve review of each publication by at least two independent academics. Determination of the eligibility of outputs for the REF not only requires consideration of whether the work does represent a product of research (which is briefly defined as a process of investigation leading to new insights, effectively shared) but also whether the output meets the definition of open access (i.e. public availability). Those outputs deemed eligible are then given an agreed overall quality score using the well described REF criteria of originality, significance and rigour: 4* = world leading; 3* = internationally excellent; 2* = internationally recognised; 1* = recognised nationally; unclassified = below the standard recognised nationally. A case can also be made that the output is of sufficient scale and scope to be double-weighted (counted as two outputs) in the submission. The overall intention of this internal assessment of outputs is to build an accurate picture of the quality of outputs available to the dental school for submission to the REF. Based on this information, which might also be subjected to validation by external assessors, the school is in a position to make informed decisions on where to focus its efforts prior to the submission deadline in terms of, for example, which staff require additional support to enhance either the quality or number of outputs. Taken together, the various considerations and deliberations on outputs pose many, different questions to be addressed by those in leadership roles.

9. Impact

REF 2014 was the first to introduce assessment on research impact via narrative case studies, detailing how research had led to non-academic outcomes. For the purposes of the REF, impact is defined as an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia. These could include, for example, research which led to the

development of new clinical guidelines or a commercial development of a new material for restorative dentistry. For REF 2021, impact has been maintained, however, some aspects of the assessment of research impact are changing. Perhaps most importantly, impact will now account for 25% of a unit's overall quality profile, up from 20% in the last exercise. The method for calculating the number of impact case studies required for each submission has also changed. In REF2014, one impact case study was required for every 10FTE returned in each UoA. Following feedback from the sector, the initial threshold for impact case studies is increased to 20 FTE (from 15 FTE). Submissions will therefore include a total of one case study, plus one further case study for the first 20 FTE, after which one further case study will be required per < 15 FTE. The requirement decreases after 110 FTE, to one further case study per < 50 FTE returned. Therefore, the larger the return, proportionately the fewer impact case studies are required. In practice, if universities make an identifiable dentistry submission within a larger UoA3 return in REF2021, most dental schools will be required to submit three or four impact case studies. Conversely, if disciplines are combined in UoA3, there may be no requirement to include any impact case studies pertaining to dental research: the entire portfolio of impact case studies of a UoA3 submission could be drawn, for example, from either nursing or pharmacy. The latter outcome again shows how a combined discipline UoA3 submission works against the opportunity to gain an accurate view of dental research across the UK.

10. Conclusion

Despite the drawbacks and limitations, REF2021 and its predecessor exercises provide an agreed and acceptable way to assess and financially reward dental research quality and volume in the UK. It is time consuming, complicated, resource-intensive and requires careful, considered leadership. While it could be improved, it is the best system we've got.

Sources

REF2021 website: <https://www.ref.ac.uk/>

Research Excellence Frame: REF2018/01 Draft Guidance on Submissions https://www.ref.ac.uk/media/1092/ref_guidance_on_submissions.pdf

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