

## Consultation response about HEFCE's Research Excellence Framework proposals from the Royal Pharmaceutical Society of Great Britain

1. Respondents should complete the form below.
2. Responses should be e-mailed to [refconsultation@hefce.ac.uk](mailto:refconsultation@hefce.ac.uk) by **Thursday 14 February 2008**. HEIs in Northern Ireland should send a copy of their response to [research.branch@delni.gov.uk](mailto:research.branch@delni.gov.uk)
3. Institutions wishing to express an interest in taking part in the pilot of the bibliometrics indicator should e-mail their details to [refconsultation@hefce.ac.uk](mailto:refconsultation@hefce.ac.uk) by Thursday 31 January 2008.
4. We will publish an analysis of responses to the consultation. Additionally, all responses may be disclosed on request, under the terms of the Freedom of Information Act. The Act gives a public right of access to any information held by a public authority, in this case HEFCE. This includes information provided in response to a consultation. We have a responsibility to decide whether any responses, including information about your identity, should be made public or treated as confidential. We can refuse to disclose information only in exceptional circumstances. This means responses to this consultation are unlikely to be treated as confidential except in very particular circumstances. Further information about the Act is available at [www.informationcommissioner.gov.uk](http://www.informationcommissioner.gov.uk).

### Respondent's details

**Are you responding:** On behalf of an organisation  
(Delete one)

**Name of responding organisation/individual** Royal Pharmaceutical Society of Great Britain

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## Consultation questions

(Boxes for responses can be expanded to the desired length.)

**Consultation question 1a:** Do you endorse our proposals for defining the broad group of science-based disciplines, and for dividing this into six main subject groups, in the context of our new approach to assessment and funding?

No. There are major problems with the subject groupings proposed. The six subject groups are too broad to provide a sufficiently flexible, sensitive and robust framework for meaningful assessment of research activities within very disparate disciplines.

Some of the divisions seem arbitrary, debatable or are inexplicable. For example, Why is Psychiatry/Neuroscience placed within Health Sciences when Psychiatry is obviously a clinical discipline like Cardiovascular Medicine? Why is Dentistry (again a predominantly clinical discipline) placed in Subjects Allied to Health rather than Health Sciences or Clinical Medicine?

The Biological Sciences subject group is so broad and all-encompassing that it is likely to be practically useless: forestry and molecular genetics do not seem appropriate bedfellows for the purposes of bibliometric assessment.

A serious concern of the Society is that pharmacy research covers both science and clinical/professional practice, the latter does include social sciences and education. In the current RAE all areas of research have been encompassed in UOA 13 (Pharmacy). Clearly pharmacy must be included in science subject groupings but why has pharmacy not been included in a clinical subject grouping alongside other healthcare disciplines too? Also, if the social science and education areas were to be removed into an arts and humanities scheme, then after 2009 parts of pharmacy may remain un-assessed until 2013/14. The Society cannot see how clinical/professional practice research could be funded in those 4/5 years except through cross subsidy (which would have the effect of depriving science researchers of the income they had earned or force institutions to vire funds from other areas).

Another concern relating to pharmacy is that as a highly multidisciplinary subject, involving science research disciplines of chemistry, biology/pharmacology, clinical science, material science and engineering, it is difficult to see how the bibliographic output might be correctly normalized within one subject group.

It is unclear to the Society whether sub-panels will form part of the REF's review structure.

The RAE2008 UoAs seem to be generally more appropriate, they are familiar and understood, are already accepted by the HEI sector, have better defined boundaries, and have easily identifiable expert advisers.

**The Society does not support this proposal.**

**Consultation question 1b:** Are there issues in relation to specific disciplines within this framework that we should consider?

There are issues relating specifically to pharmacy.

Pharmacy presents obvious issues with regard to its place in Subjects Allied to Health. The discipline straddles Health Sciences, Biological Sciences and Physical Sciences. The social and clinical research dimensions in Pharmacy may fit alongside Nursing. But it would be nonsensical to relate bibliometric data for Nursing which has no/little basic science research to those for Pharmacy where the research is predominantly basic science.

In addition to the bifurcation of pharmacy's scientific research aspects proposed in the current model, it is invisible from the clinical subject group. Clinical/Pharmacy Practice are well established disciplines with significant research footprints so the Society does not understand, and is concerned, why there is no reference to this in the definitions of clinical subject areas.

It is not clear why Pharmacy and Pharmacology has been split in the way it has. The Society would welcome clarity on this issue.

**Consultation question 2a:** Do you agree that bibliometric indicators produced on the basis that we propose can provide a robust quality indicator in the context of our framework?

The Society has serious reservations about the use of bibliometric indicators and is of the strong opinion that they cannot be used uncritically

In principle, bibliometric assessment of research quality based on independent citation rate is fine. This provides a reasonably robust indication of the standing of individual researchers. As indicated in the consultation document, citation indices correlate reasonably well with peer-review assessment *for individuals*. The Society is not convinced that the pooling of individual researchers within an HEI into broad subject groupings or disciplines will provide a robust quality rating of research across the board at the broad subject level. As far as the Society can see, no evidence or research is presented to justify this pooling approach.

A remedy would be a peer-review filter of the data. Without the filter, bibliometric data will be distorted due to the niche nature of some research. Just because a large percentage of the research community are not engaged (and therefore citing) work in an area does not indicate that it is of less value than mainstream research. If there is insufficient care taken here the result will be a reduction in innovation and risk-taking. It is well known that science progresses at two distinct paces: 1) leaps in knowledge and understanding that open up entirely new areas of research 2) the slow methodical advancement of

knowledge that then characterises and exploits these new areas. Without the scientific leaps of knowledge/understanding, which would be impaired by inappropriate judgement of worth, we will be left with slow incremental attainment of knowledge.

If a published article states a point which is subsequently retracted, this will require discussion alongside citation. Contentious (although not necessarily excellent) papers may result in letters/editorials in journals, producing citation. A useful modification to a standard experimental method can create many citations. All may skew citation results, or may affect publication behaviour.

**Consultation question 2b:** Are there particular issues of significance needing to be resolved that we have not highlighted?

There are questions of emphasis that need to be addressed.

All of the major issues are covered in the consultation document but it is worth emphasising some of these are somewhat down-played. There are a number of potential practical problems with WoS which are not insurmountable but may entail considerable work for HEIs.

- a) A major issue will be the accurate and reliable collection of bibliometric data. At present, the entire proposal is based on the use of a single commercial database (Thompson ISI Web of Science). The accurate identification of individuals and their work in this database can be difficult and may require very careful sifting/manipulation of the database by a trained operator.
- b) The range of serial publications covered by the database does not cover the full range of outputs in Pharmacy. For example, the *International Journal of Pharmacy Practice* is not covered.
- c) An institution/school will need to invest considerable time in preparing and validating data for submission. It is not clear whether advance tools will be made available to institutions for dry runs prior to submission. For example, the access to data on global citation rates within disciplines may not be readily available to HEIs.
- d) Disciplines like chemistry are subdivided by WoS but pharmacy and pharmacology are not even though they are separate disciplines.

The timescale for implementation is too short; there are many unresolved questions that have to be sorted out before the exercise can be robust.

Recent articles, which might include the output of early career researchers, are likely to have only a few citations. There will therefore be a whole tranche of recent work and new staff appointments which cannot be assessed by bibliographic means, putting at risk the overall analysis of quality for the subject under assessment.

Research is a dynamic activity, with researchers moving into new fields and disciplines taking on a new relevance. There will need to be a mechanism for reselection and de-selection of staff submitted for assessment.

Multi-authorship may also mean substantial sharing of papers within a unit of assessment. This may have an influence on the average citation rate.

If the REF is intended to assess the research quality of a subject area in an HEI, then the published work under assessment should be associated with the employees at the census date. This may influence recruitment behaviour.

Normalisation will be critical and will require widespread sector agreement in order for the REF to be credible.

There is a strong likelihood that citation strategies will evolve. It will be important to identify these and differentiate them from standard practices within discipline areas (which might not, of course, be consistent with the consolidated behaviour of a subject group).

A review of WoS classification of journals is proposed in paragraph 41. The panel of UK-based experts will need to be drawn widely from across the RAE 2008 units of assessment in order to ensure credibility for this review at discipline level.

The pilot exercise must cover complex subjects such as pharmacy in order to be credible.

A decision will need to be made as to whether all published papers by a researcher or selected papers are subject to bibliographic review. If all papers are selected then this may affect publishing patterns, perhaps to the detriment of dissemination to the user (as against fellow scientist).

There is a real risk that early career researchers will not be able to demonstrate their potential in the bibliographic approach proposed for the REF. This could well be to the detriment of both individual and unit of assessment.

From a purely logical viewpoint, it is not clear why self-citations are to be excluded from the analysis. Self-citation is a normal, necessary, often unavoidable and accepted aspect of scientific writing. The available research suggests that self-citation and reciprocal-citation practices would have to be on an enormous scale to substantially influence any major bibliometric index.

**Consultation question 3a:** What are the key issues that we should consider in developing light touch peer review for the non science-based disciplines?

The Society has no comment.

**Consultation question 3b:** What are the main options for the form and conduct of this review?

The Society has no comment.

**Consultation question 4:** Is there additional quantitative information that we should use in the assessment and funding framework to capture user value or the quality of applied research, or other key aspects of research excellence? Please be specific in terms of what the information is, what essential element of research it casts light on, how it may be found or collected, and where and how it might be used within the framework.

Any readily-available indices could be used alongside bibliometric data, including research income/spend, research student completion rates etc. The compilation of national statistics on these measures may provide useful additional information for judging research within individual institutions. The caveat that research income/spend does not directly correlate with research quality needs to be emphasised: £/citation or £/paper might make an interesting metric.

Would engagement with users of research, such as pharmaceutical companies in the case of pharmacy, not be powerful indicators of research worth? Could income generated in this way, that would inherently have restrictions on publication, be judged separately and valued appropriately?

Quantitative measures of user value could include: patent numbers and details; product output from research and impact on users and society; licensing arrangements with research users.

There is a real risk that the emphasis on quantitative measures will lead to a loss of esteem measures of research quality. If this were to be the case, then engagement of staff in advisory committees, research panels and similar activities might be curtailed. John Denham, in a keynote speech in January at the RSA, expressed concern that there 'may be disincentives in the system that emphasize published and peer-reviewed work over public policy advice'. He went on to say 'to my mind, a scientist who produces fewer papers but produces excellent evidence and advice in the national interest on behalf of the Government should not feel that they disadvantage themselves, their research colleagues or their institution when research funds are distributed'.

**Consultation question 5:** Are our proposals for the role of expert panels workable within the framework? Are there other key issues on which we might take their advice?

It is difficult to tell because not enough detail of the proposed roles of the expert panels is provided. Some expert oversight of an arithmetical approach will be essential to prevent the reduction of UK science into an activity dominated by numerical targets.

The members of the expert panels must adequately cover the subset of disciplines (some of which will have unique features). It is likely that the membership would be large for each panel. The views of minority disciplines must not be overshadowed by larger discipline areas.

**Consultation question 6:** Are there significant implications for the burden on the sector of implementing our new framework that we have not identified? What more can we do to minimise the burden as we introduce the new arrangements?

Yes. The bibliographic checking, and rechecking, process is likely to be a burden on HEIs, especially if the cycle is repeated with greater frequency than the current RAE.

**Consultation question 7:** Do you consider that the proposals in this document are likely to have any negative impact on equal opportunities? What issues will we need to pay particular attention to?

It is unclear how REF will address the objective of "promoting equality and diversity"

What account will be taken of aspects like maternity leave and career breaks for individuals? RAE took account of these but there appears to be no provision in the current proposals.

In order for the REF to promote "excellence and dynamism and encourage research that benefits the economy and society" (paragraph 14d), indicators for these characteristics will need to be established for use in the assessment process.

The needs of early career researchers do not appear to be met by the proposed assessment process.

**Consultation question 8:** Do you have any other comments about our proposals, which are not covered by the above questions?

Yes. There should be some form of self-evaluation from units of assessment (as in RAE 2008), otherwise there will be no evidence of strategic potential.

A too-frequent review might mitigate against changing research strategies if there were a risk of a fallow/developmental period.

Without any assessment of development in research environment and research strategy (as in RAE 2008), there will be a substantial lag before there is any manifestation of the effect of these improvements on citation indices (by virtue of the intrinsic delay in citation). This will have a tendency to negate, or at best delay the impact of internal investments on the funding allocation.

The proposed timescale of 2009 is too close to RAE 2008. It will mitigate against any meaningful development of research potentials which might arise following the outcome of RAE 2008. Particularly since the bibliographic analysis will be looking back over a period which was embraced by RAE 2008.

12 February, 2008