KEY POINTS

- We are highly supportive of RCUK’s policy on open access and its commitment of providing funding to institutions to meet the associated costs. We remain committed to working in partnership with RCUK to implement our shared objective that our funded research outputs are freely available to access and re-use.

- We believe that funders will need to work together to help ensure that the future open access market delivers high quality services and value for money. In particular, there is an increasingly pressing need to consider how to ensure journals offering hybrid open access models are providing cost-effective services.

- Our experience is that a range of factors act to limit researcher compliance with open access mandates – and while increasing convergence in funder expectations will help, RCUK should consider the introduction of specific sanctions for non-compliance.

INTRODUCTION

1. The Wellcome Trust is pleased to respond to the independent review of the implementation of RCUK policy on open access.

2. The Wellcome Trust has had an open access policy since 2005 which requires that all research papers that have been accepted for publication in a peer-reviewed journal, and are supported in whole or in part by Wellcome Trust funding, to be made freely available through the PubMed Central (PMC) and Europe PubMed Central (Europe PMC) repositories as soon as possible and in any event within six months of the journal publisher's official date of final publication.

3. From the outset, we provided our grant holders with additional funding, through their institutions, to cover open access publication charges. In early September 2014, the Trust and five partner UK medical research charities (Arthritis Research UK, Breast Cancer Campaign, the British Heart Foundation, Cancer Research UK and Leukaemia & Lymphoma Research) announced the establishment of the Charity Open Access Fund (COAF), which will provide combined block grants to 36 UK research institutions for use in meeting open access article processing charges. COAF has been established for an initial two-year pilot phase and will become operational from the 1 October 2014.

4. We have been a strong and vocal supporter of the strengthened RCUK open access policy which came into force in April 2013, and the recommendations of the 2012 Finch Review in setting the Government’s overarching approach to open access. We have a close and productive working relationship with RCUK in progressing our shared commitment to ensure that the published outputs of research supported by public and charitable funds are freely available to access and re-use.
5. We are not in a position to provide primary data on the implementation of RCUK's open access policy. We also believe it is far too early at this stage to attempt to judge its effectiveness and impact. In our response, we highlight some of our experience in implementing our own open access mandate and some of the key emerging issues—which we hope will be helpful to the review team in taking forward its work.

ISSUES FOR CONSIDERATION

Policy compliance and enforcement

6. The Wellcome Trust actively tracks compliance with our open access mandate, by measuring the proportion of papers attributing Trust funding that are available openly through the PMC/Europe PMC repository six months after publication. Compliance has risen steadily over the years since our policy was introduced (graph 1) – from around 15 per cent in 2007 to a current level of between 65 and 70 per cent.

Graph 1 – Percentage of Wellcome Trust funded papers available through the PMC repository six months from publication

7. Increasing researcher compliance to this level has been a resource-intensive exercise: in addition to making funds to support open access article processing charges readily available to researchers and institutions, we have worked actively to communicate our policy and to provide guidance and support to our communities.

8. Based on our experience, and previous surveys and discussions with our communities, a range of factors contribute to non-compliance with the policy, including:

- continuing lack of awareness of, and levels of importance placed upon, funder mandates among researchers;
- challenges faced by researchers in navigating publisher workflows and in identifying compliant publishing options;
• challenges in payment processes at institutional level;
• difficulties associated with a funded researcher not being a lead author on a paper;
• particularly low levels of compliance where researcher self-archiving is the only route to compliance (more than 85 per cent of full text articles in Europe PMC are deposited by the publisher).

9. Another contributing factor in the early years of implementing our policy was there were no clear consequences for non-compliance. In June 2012, we introduced three specific sanctions for our grant holders:

• withholding the final grant payment on a grant pending assurance all papers on final grant reports are compliant,
• not issuing award letters for any new grants or funding renewals until publications arising from previous or current Trust grants have been confirmed as compliant;
• discounting, by removing from grant applications, non-compliant Trust-funded papers as part of a researchers track record.

10. Our experience over the last two years has been that the implementation of these sanctions has had a very positive effect in increasing compliance levels and ensuring our published outputs are available in open access form.

11. We believe compliance levels with funder mandates should continue to increase as a growing number of UK funders develop consistent open access policies, and as the new policy of the Higher Education Funding Councils requiring open access to published outputs in the Research Excellence Framework comes into force. We would suggest however, that specific sanctions could play an important role in helping to accelerate levels of uptake with RCUK’s policy and consequently we would encourage RCUK to consider developing sanctions for non-compliance.

Controlling costs and fostering an effective open access market

12. We believe firmly that the gold route to open access provides the only sustainable model for ensuring that published research findings are made immediately and freely available, while the costs associated with publication are adequately resourced. To achieve the transition, we believe that funders must recognise that publishing has a cost, and make funds available to provision open access article processing charges (APCs).

13. We are conscious, however, that there are legitimate concerns over the extent to which costs to the sector may increase during a transition period in which both article processing charges and subscriptions exist, and in relation to the level of APCs levied – especially for publishers operating hybrid business models.

14. The Wellcome Trust collects data annually on APC expenditure from our funded institutions, and earlier this year we made the data on our 2012/13 return openly available (see Annex A). The dataset was cleaned, supplemented and enhanced considerably through a crowdsourcing effort. It revealed that:

• The mean APC paid was £1,821 and the median £1,837 – our year on year analysis suggest these averages have remained largely unchanged for the last three years;
• Over 80 per cent of the APCs we currently pay are through hybrid journals;
• A small, but significant proportion of articles were not available in open access form
despite an APC having been paid – demonstrating continuing issues with publisher
and payment processes.

15. We believe these findings further illustrate the need for funders to actively consider now
how they can work to ensure that the rapidly growing open access APC-market delivers
high quality services and value-for-money for the research community. As a first step
towards this, the Trust together with a consortium of partner funders (including RCUK,
JISC, Research Libraries UK and the Austrian Science Foundation) commissioned a
major study to analyse this market and develop scenarios for how funders could help
ensure it develops in manner which is functional, transparent and fair.

16. The report of this study, which was conducted by Bo-Christer Bjork and David Solomon,
was published in March 20141. The key finding was that, while the full OA market was
functioning relatively2 competitively, the hybrid OA market was highly dysfunctional –
with much higher prices and low levels of uptake. Indeed the average APC charge for
publishing in a hybrid journal is more than double the average charged by borne-digital
full open access journals ($2,727 compared to $1,418).

17. The report sets out three scenarios for how funders could act to make the hybrid market
more effective, namely:

a. funding APCs for full OA journals, and only funding APCs for hybrids that offset APC
revenues by reducing subscription charges at a local (institutional) level;

b. setting multi-tier price caps for the maximum they will contribute towards an APC for
particular journals, based on the quality of services they provide;

c. covering only a fixed percentage of the APC once the APC exceeds a threshold –
with authors (or institutions) covering the shortfall.

18. We would like to continue to take forward discussions of these models with RCUK and
other funders, and hope that the Review Group will consider them as part of their
discussions.

Licencing issues

19. Since April 2013, the Wellcome Trust – like RCUK – has required that, where our funds
are used to meet an APC, the article must be licenced using the Creative Commons,
Attribution licence (CC-BY), to allow full re-use (subject only to proper attribution). We
worked in partnership with RCUK to implement this requirement. The vast majority of
publishers offering gold open access routes will now allow a CC-BY licence, all but a few
at no extra cost.

20. We have noticed however, that a number of publishers have experienced difficulties in
including the CC-BY licence at the article level. As a consequence there is an on-going

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1 The report “Developing an effective market for open access article processing charges” is available
at: http://www.wellcome.ac.uk/About-us/Policy/Spotlight-issues/Open-access/Guides/WTP054773.htm
2 The data we released (and summarised in Annex A) shows that “subscription” publishers who
develop a fully OA journal, on average charge higher APCs than “born digital” OA publishers.
risk that researchers will not make full use of this content (because it is not clear that full re-use, subject to attribution is allowed), or worse still will be charged for re-use (as was the case with around 50 Elsevier published articles)\(^3\). As such, we encourage RCUK to undertake a full audit of its APC spend to check that when an APC has been paid, the articles have been published under a CC-BY licence.

21. We also note that a number of publishers continue to offer Wellcome and RCUK-funded authors a choice of licences when publishing under an OA model. Though on the face of it this sounds benign, it should be remembered that for authors who are funded by these organisations, there is no choice; if an APC is paid, the work has to be made available under a CC-BY licence.

22. We recognise that there have been particular concerns over the use of the CC-BY licence in some research disciplines, particularly in the humanities and social sciences. These have focused on the potential for authors to lose control over how their articles are re-used, and the possible difficulties associated with securing permission for the use of third-party content. While we believe these issues are manageable and that workable solutions exist (including the use of different licences for third-party content), we recognise the need for further discussion and debate of these matters.

**Wider impact of RCUK policy**

23. Although it is too soon to assess the full impact of the RCUK policy, we believe there are early indications that it has had an extremely positive effect in accelerating the uptake of open access and in contributing to some of the enormous positive developments that have happened since. For example, RCUK’s commitment to support open access was a key factor in the decision of the partner charities to establish COAF. It has enabled the UK to adopt a recognised international leadership role in the open access arena, as demonstrated by the G8 Science Ministers’ discussions.

\(^3\) See: [http://www.elsevier.com/connect/open-access-the-systems-journey](http://www.elsevier.com/connect/open-access-the-systems-journey)
Annex A – Summary of Wellcome Trust APC spend 2012-13

This Annex provides a short summary of the Wellcome Trust APC spend for 2012-13. The full dataset can be accessed at: https://docs.google.com/spreadsheets/d/1RXMhqzOZDqygWzyE4Hx9DnJnxjdp0NOhiHcB5SrSZoe/edit#gid=0

Figure 1: Wellcome APC spend: hybrid v full OA

- 2012-13 Wellcome spent £3.88m on OA
- £3.17m on hybrid; £0.71m on full OA

Table 1: Top 5 publishers, by spend

<table>
<thead>
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<th>Publisher</th>
<th>No. of articles</th>
<th>Average cost</th>
<th>Total cost (rounded)</th>
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<td>PLOS</td>
<td>307</td>
<td>£1,139</td>
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<tr>
<td>OUP</td>
<td>167</td>
<td>£1,850</td>
<td>£310,000</td>
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<tr>
<td>NPG</td>
<td>80</td>
<td>£2,696</td>
<td>£216,000</td>
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Table 2: Top 5 publishers, by spend, split between hybrid and full OA

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<th>Average cost</th>
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