Wellcome's Open Access Policy Review

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Group

Stakeholder Q3 - What do you think has been the impact of Wellcome's existing OA policy on realising open access?

Q4 - What are the main reforms or developments needed to ensure 100% of Wellcome-funded research outputs are OA? Please highlight the reform that you believe to be the most important.

Q5 - Wellcome wishes to support a Q6 - Do you transition to a fully OA world, where no research is behind a paywall irrespective of who funded published online it. In your opinion what action is required to enable this transition?

consent to your response being under a creative commons attribution licence?

Funder

Wellcome has led the field in the OA area and has probably had the greatest influence on other funders (predominantly UK but also European) moving to OA and influencing them to provide more money for OA.

For much of Wellcome's portfolio especially for infectious disease rapid, open publication is really important. However, for other areas (such as developmental biology) the argument for why open access is important needs to be reflected on and articulated better.

But ultimately it will come down to Wellcome's funding committee and partner institutions evaluating work in OA journals properly. When early career researchers see others gain tenure, funding etc with an entirely OA portfolio of articles, then you will see the change needed for 100% OA.

You need to explain why fully OA is desirable. Yes I think the next battle in scientific publishing is for credible, replicable believable science that addresses the most important societal issues. The question is how is this best achieved the higher editorial costs of subscription journals might be the best way to do this.

The biggest impact of Wellcome's existing OA I would love to see the policy be no the world - this includes all stakeholders in the research ecosystem. The policy has facilitated the open access publishing of over 3k - articles that now can be read, reused, and shared globally. Without a policy this most likely would not be the case. Behavior change is not easy and bold policy helps make change a reality. I know that the Gates Foundation would not have been as bold in its Open Access publishing becomes more policy if it were not for Wellcome setting the stage and being a global leader. Funders hold advocates feel that the hybrid/APC model is so much power in the research ecosystem, but this often goes unrealized, and such policy and open initiatives can lead to actual change. Having Wellcome Trust be a part of the Open Research Funders Group has been funder platform. impactful and is important in signalling to other funders how to maximize their research outputs to further their mission.

policy is to signal priority of open to the rest of exceptions (meaning no waivers to opt-out of policy). I hope to see Wellcome Trust continue the work of changing the incentive system for publications - great work on changing how publications are viewed in grant applications. I would love to see an APC cap for publications - I know that this will be a big shift, but I think it's the only way to stop the increase in APC's and to ensure that equitable globally. I think most funders & OA not sustainable, but it's going to take a lot of work changing this system. Or if funders want match. to truly upend the system - require all research outputs be published in an open

Changing the perverse incentive system is Yes the main obstacle to an OA world in my opinion. Technology and infrastructure are much easier and certainly evolved enough at this point to solve the current issues. Career advancement, grant seeking, and publication aims are obstacles not only to an OA world, but an obstacle to doing better science. Funders should focus on ensuring the research outputs from their funding are openly available and useable globally. If funders change how applicants are viewed for funding, then universities and institutions will change their career advancement criteria to

Funder

As a major funder of medical research, Wellcome's existing OA policy has placed it in progressive changes from many different a strong position to advocate OA in the research community. In addition, Wellcome in need sufficient awareness of OA, CC-BY partnership with the COAF has provided a compelling platform to enforce transparency and compliance by publishers. The long-term impact being that OA publishing is increasingly chosen by the Research community and facilitated by publishers.

This transition will take time and requires stakeholders. Firstly the research community licences and access to funds for OA. The publishing community need to be more receptive to OA and transparent in terms of costs and services. This may require the publishing community to adopt a different funding model from the subscription model, although it is important to note that this is currently evolving. Funders and/or research institutions will have a responsibility to provide funds for OA, although this will need to be sustainable and cannot be a barrier to smaller funders or research institutions.

Whilst a zero tolerance OA policy may provide the stick to enforce OA in the Research community, this will not assuage Researchers' concerns or help to develop a sustainable OA funding model. Rather than amend policy, the most impactful method of increasing OA could be to bring the main stakeholders together to negotiate a new sustainable funding mechanism across all Publishers. Admittedly may be beyond the reach of a single funder (or even a single country). These efforts will need to be done alongside activities to engage the Research community. Only by advocating OA, easing the currently convoluted process of supporting OA and enabling Researchers to publish where they want; can this second battle be won.

Yes

It has forced people to consider how they can Moving towards a Bill & Melinda Gates make their work more accessible whether via the gold or green route, and the welladvertised COAF block grants held by universities means individuals know they can usually make their work gold open access. This is great for them as researchers but also for the Wellcome Trust to better disseminate the work it funds. This has a knock on effect for improving compliance with REF open access policy.

Foundation-style policy: i.e. CC BY gold only, and no green. Most non-compliance probably comes from publishing green in a journal with normal polemics around open access, there a embargo period longer than 6 months (very few hybrid journals are compliant with that). Also, helping to convince publishers to apply CC BY as standard regardless of APC funder. series of case studies demonstrating how BMJ often puts CC BY NC as default, and Elsevier do CC BY NC ND OR CC BY NC as default - it's difficult to change those after the fact, leading to non-compliance.

Banning hybrid journals would also be a step forward. Some institutions have already limited their open access funding pots to fully open access journals, so this isn't such a radical step for a funder to do also. Many hybrid publishers fail to apply CC BY, and many are TOO expensive. I think a fully OA journal only policy would be great - it would force (some) publishers to convert journals and it would reduce administration in terms of policing the CC BY license. Combating the extortionate fees charged by some fully open access journals (e.g. Lancet sub-journals) might also be an issue here.

I think communications about the (concrete) Yes

benefits of open access beyond just policy/mandates is still important. Beyond the are still not enough case studies around of how open access work benefits authors and more importantly non-academics. I think a various people have used OA work would be invaluable for encouraging further commitment to OA amongst researchers. Wellcome might collaborate with other organisations to create such a resource, to help convince others funded or not to think about OA before they choose a journal. Funders and institutions need to take a stand against hybrid publishers - a fully OA/no hybrid policy might would help, particularly if others like RCUK got on board. Getting senior academics on board is still vital. There are many arguments that getting Early Career Researchers on board with Open Science is the best way forward in the long-term, however I think it is problematic to encourage them to give up the prestige around a closed-access Nature/Science/Lancet article when some senior academics still do not care about open access and will happily publish behind a paywall in a legacy publishers' journal - just for the impact factor. Finding some way of holding senior and mid-career academics to account may be needed, or at least offering better rewards for ECRs who demonstrate a commitment to Open.

Independent

Checking that researchers are complying, and removing funding/not giving any more grants to those who don't.

Independent

I have no data, but based on the fact that it only requires Green OA, I do not expect it has with penalties and requirement to refund induced a major change. As stated below, OA grants, would suffice. is important, but very far from the only issue we need to address.

Presumably enforcing your current policy,

Support (financially if possible) community-Yes controlled journals abiding by the Fair Open Access Principles (fairopenaccess.org). Support the FOAP publicly and loudly. Understand that OA is important but not the only issue - journals controlled by Elsevier et al are unlikely to innovate enough to deal with the changes required to improve research quality. Note that a switch to OA Big Deals may in fact make everything worse: http://bjoern.brembs.net/2018/04/why-openaccess-big-deals-are-worse-thansubscriptions/

The policy has had a tremendous impact, both from the point of view of raising awareness of the importance of OA but most importantly by demonstrating that a funder can take a lead in developing, implementing. and following up on OA policy

Having taken a position that it will support OA What the Wellcome does has profound for Wellcome-funded outputs the key requirements to ensure 100% of Wellcomefunded research outputs are OA will be through monitoring and enforcement of the policy - at the researcher, institution and publisher level.

At the publisher level there is a need for a similar approach as SCOAP3 takes: unless articles are deposited in the SCOAP3 repository within 24 hrs of publication with the correct license and metadata the publishing fee is not paid. This is the most important reform.

For researchers and institutions it could be possible to withhold a proportion of a grant until it has been assured all funded research outputs will be OA. As this might be logistically difficult for all peer-reviewed articles, perhaps an interim measure would be the expectation that research outputs are submitted, for example as preprints, by the time the grant ends.

Yes effects across the publishing landscape more generally. Wellcome should continue to lobby forcefully for OA globally and key to that will be coordinating its work with other funders and other large players who have a commitment to open scholarship. The key issues that need addressing that extend beyond Wellcome are costs, infrastructure, diversity of publishing models

and incentives for research: Support for open infrastructure There is an urgent need for those that support any research to also invest in the open infrastructure that supports open access. This infrastructure extends beyond publishing platforms such as Open Journal Systems into related initiatives such as DOAJ, Sherpa Romeo (as currently being coordinated by SCOSS - http://scoss.org/) open citations etc, and even to OA specific advocacy and policy development all of which need to be supported by long-term secure funding.

Support for emerging and diverse publishing

There is a need for a diverse publishing landscape - not just by speciality but also geographically and by funding model. For example author-funded APCs are simply not a viable option for much of the global south and a model that is entirely free for authors is essential there. Likewise, traditional journal models are not relevant for many fields outside of science and medicine and there is a need to support diverse, community and university supported models, including those

initiatives.

specific geographic regions.

Cost control

There is an urgent need to control costs. Currently, despite work that shows that online, fully OA publishing can operate overall at a substantial reduction compared with subscription publishing, these savings are yet to be realised.

Three changes are needed.

There needs to be full transparency of OA (and subscription) costs.

There needs to be a cap applied for the maximum APC that can be charged. Hybrid publishing, as a major contributor to the high costs, should be phased out. Journals that currently have a hybrid model should be given a specific time frame for them to convert to full OA.

Researcher and institutional transparency of openness and incentives

Researchers should be rewarded for making their research open - including but not limited to publications, data and code. Applications for grants, positions and for promotions should be required to include a statement that indicate if/how previous work has been made open and what will be done to ensure future work will be open. Institutions should make publicly available an indication of how open or perhaps more meaningfully, FAIR - is the work of their researchers (similar to the idea in this tool from ANDS-Nectar-RDS (https://www.ands-nectar-rds.org.au/fair-tool) The openness of institutions' research outputs should be included in assessments of universities and other research organisations.

The specific activities I find the most valuable The Wellcome Open Research platform has a It's a slow transition, this one, and a "no in the way the Wellcome OA policy is being implemented are:

in order to raise any appropriate issues with regard to compliance: it makes them realise that this is important for their research funder. - the thorough work to make sure publishers are aware of and comply with the policy, checking every single publication for its deposit in EuropePMC and chasing any possible non-compliance

The support for APC-based Gold OA is also inspiring of course, and has much increased the research impact of outputs arising from Wellcome- and COAF-funded projects. This said, the associated costs make it hardly sustainable in the mid- and long-term and its support for publications in hybrid journals raises issue in a European landscape where funders are often choosing no-hybrid policies. If we didn't have the RCUK/UKRI policy to support APCs standing alongside the Wellcome's, this would just be a drop in the ocean in terms of awareness-raising.

lot of potential and one wonders if it could be more effectively supported from a policy - the very close direct contact with the authors perspective once it starts to consolidate.

> On top of this, if it were possible for the very valuable work to persist on the two lines I've highlighted in the previous answer while extending its coverage to the Open Research platform, this could become a true gamechanger.

> A switch to a no-hybrid policy would also make total sense given the massive costs, but it might not fit the default publishing patterns for Wellcome-funded authors and projects, so would perhaps not be that useful in achieving immediate OA for all funded outputs.

Yes

research being left behind a paywall irrespective of who funded it" might better be achieved by aiming first to get to a point where "no funded research is left behind a paywall". Given the rather bold steps taken so far in launching the Open Research platform with its associated goals, I have high hopes for the discussions that might be held within the Open Research Funders Group (including hopefully the European Commission) in terms of promoting the use of such platforms first by funded authors and projects, and eventually even beyond that.

As a very longstanding policy, with increasingly strict compliance-checking, Wellcome's policy has informed a wider national direction of travel and raised understanding levels which have embedded an open access culture amongst Wellcomefunded researchers.

The strong approach being taken by Wellcome towards both research institutions and publishers has meant that compliance work has complemented advocacy in an effective way.

The shortcomings of institutional research information systems make it impossible to quantify what intuitively feels successful, but it 2) Increase pressure on publishers to offer is certainly the case that our block grant allocation has been rising year on year.

The policy has been an effective way to achieve compliance. It may have benefitted researchers and collaborators most directly. We are less sure of the direct impact to the wider public.

what 100% compliance represents at [R] so more management information from Wellcome would help us understand this. We believe that we are achieving the most we In our view, a mixed Gold/Green model is the can at present. The two reforms which might most helpfully improve on the status quo would be:

- 1) Increased automation and centralization: if processes enabled automatic OA payment from Wellcome to publishers this would reduce administrative overheads at multiple institutions and remove the need for the researcher to be part of the workflow.
- sustainable and affordable open publishing business models which are genuine in shifting well-established titles offered by commercial the landscape away from hybrid and towards full OA. Direct engagement with publishers as very expensive subscription deals. proposed above should support this.

Join forces with Jisc and other stakeholders to negotiate deals and policy with publisher rather than going in separately. Jisc initiatives already have the weight of UK institutions behind them.

It isn't currently possible to be confident about Collective and consistent action across all UK Yes research funders towards a common goal will be critical: different signals about whether Gold or Green is preferable are unhelpful. most effective way forward, but there are three major obstacles:

- 1) The perpetuation of Hybrid Gold without effective offsetting agreements:
- 2) Lengthy embargo periods which reduce the attractiveness of Green:
- 3) An academic culture and career structure which continues to place the importance of the 'top journal in my field' above the value of sharing research outputs openly. This makes it difficult to introduce new publishing platforms which may require a shift away from publishers, and difficult to change or cancel

Be more flexible with green compliance which Yes will allow the budget to go further and often satisfies the wider openness agenda.

Streamline with other funders and REF to reduce confusion which should result in better engagement.

Library/HEI

Often cited as a leading example of a strong policy taken seriously, and places PMC as a critical aggregated OA discovery layer for all outputs. Strong preference for immediate OA with CC-BY has supported the sharing and reuse aspect of OA.

The focus on Gold OA at essentially any cost may have been a factor in driving APC costs up, rather than insistence that publishers with suitable re-use licensing of author manuscripts.

Most importantly the tendency of publishers to National legislation to determine OA for all see Gold OA as an additional income stream needs to be reversed, as it is clearly not sustainable while subscription costs continue the lobbying power of publishers. to rise. Hybrid should be discouraged, or allowed only where close to 100% offsetting arrangements are in place. In this scenario, licensing arrangements such as UK-SCL should be supported as a mechanism to rebalance the rights in research outputs, allow shorter embargoes for Green OA, along allowing authors' rights for dissemination under permissive reuse licensing to be given parity with publishers' rights in the content.

> Publisher compliance under Gold OA should be enforced from first online publication, rather than from the much later publication in an issue.

publicly funded research, with strong support required by funders to ensure equality with

Join forces with international frameworks to take forward proposals such as those contained in the EU's approach: https://www.openaire.eu/open-science-inpractice-in-fp9

More promotion and evidence of the benefits of OA, with a serious effort to measure views (downloads) and reuse across all versions of a publication

Support technical (repository infrastructure), legal (licensing arrangements such as UK-SCL) and cultural elements (researcher behaviour) in a holistic way.

Yes

Unquestionably influenced government and non-profits in the UK and beyond to take OA forward through funder compliance mechanism and, of course, stimulated the formation of COAF.

At least for beneficiaries, it has teeth and sanctions can be imposed for noncompliance.

The requirement to deposit in Europe PubMed Central emphasises the importance of making research in critical areas like Biomedicine open as soon as possible to drive research and get the best value for the money spent. It links compliance with an obvious need and benefit.

It has been far more ambitious than most funder policies, extending to cover monographs and book chapters. The monograph requirement probably instigated REF2027 signals.

From Wellcome's perspective:

*Remind Wellcome-funded researchers (and perhaps all researchers) to support each other and their postgraduate students with funder compliance.

Publisher requirements introduced April 2017 are welcome; however, it needs to be made clear that the publisher list might not always be reflected in Sherpa FACT for various reasons that aren't made explicit.

From the practitioner perspective: Wellcome to communicate to researchers they may be approached by institutions to help them access funds up to the acceptance stage. The change to practice in institutional reimbursement has introduced a burden of vigilance on practitioners.

Wellcome to continue to build on work with publishers to reduce the scope for complicated workflows and the gap between institutional and publisher workflows.

Key in to Research Excellence Framework Open Access and encourage publishers to share better quality metadata with CrossRef at acceptance.

The UK Scholarly Communications licence is Yes still in a Holding state although it is by far the most achievable option short of legislation to influence publishers

http://ukscl.ac.uk/institutions-adopting-themodel-policy/. Wellcome has done a good job shaping its research funding so it augments rather than replaces publicly funded research. UK-SCL supports Wellcome compliance. Could Wellcome do more publicly to support UK-SCL?

Use influence to support international frameworks that inculcate researcher open practices in science and scholarship, e.g. European Commission Recommendation of 25.4.2018 on access to and preservation of scientific information, which includes measures on Open Access and open data and the move to open science in general: https://scholarlycommunications.jiscinvolve.or g/wp/2018/04/30/the-european-commissionsrevised-recommendations-on-access-andpreservation/.

Support international efforts like IRUS and RAMP that use the recognised COUNTER standard to reliably measure usage from repositories and showcase the benefits of OA.

Support open source repositories and their communities and discourage their takeover by publishers.

- 1. The collective impact on OA policies, approaches and strategies adopted in the UK through institutions has been challenging has been to make the UK one of the countries because publisher processes have not been leading the transition to open access, with 37% of UK outputs made freely available to the world immediately on publication, either through Green or Gold OA. This has taken us and their institutions, despite considerable further towards a fully open access world than investment by institutions in infrastructure to the average globally and must be regarded as inform and support authors and to ensure, a success.
- 2.We recognise the important role that Wellcome has played in bringing this about by requiring publishers to meet certain criteria, particularly on deposit and licence terms. This has been transformative.
- 3. Over the last eight years, Wellcome has consistently taken a leadership position, both in terms of the public debate on open access policy and as an early adopter of open access of its own policy. It would also remove some has therefore been highly influential in the UK climate, disproportionately so compared to its 4. However, while we don't believe that (significant) funding of UK research.
- 4.It would be difficult to isolate fully the impact of Wellcome's OA policy from other factors. Certainly the policy of the funding councils' REF open access policy desirable. (SCONUL member institutions has also been a powerful agent of change. leading to higher levels of awareness among researchers of open access.
- 5.We are still at a relatively early stage in the transition to open access, and there are a

- 1. The management of OA APC funds developed to streamline payment at the article level. The workflows for paying APCs are labour-intensive and messy for authors and report on, compliance.
- 2. One option would be for Wellcome to change the way APC funding was supported (for example, pay APCs directly to publishers). There are potential benefits and challenges to this approach.
- 3. We appreciate that this approach would help Wellcome track APC payments and ensure that all outputs meet the requirements policies. Wellcome's open access policy of the administrative burden from institutions.
 - involvement of the author in the process of paying APCs has delivered the sensitivity to price envisaged in the Finch report, it has undoubtedly raised awareness of open access among researchers. This is highly continue to report a mixed picture on levels of understanding of open access among researchers, including of the overall objective representatives of institutions and Jisc of opening up access the world's knowledge.)

- 1. While we are concerned about the growth Yes of hybrid Gold OA publishing in the UK for the reasons stated above, we do not suggest that Wellcome prevents its funds being used for publication in all such journals. This is because (a) there are hybrid models, such as the Springer Compact deal, which do not hinder the transition to open access and (b) a blanket ban would be contrary to academic freedom in that publishers would struggle to make the transition to fully OA publishing models while other countries have such varied approaches to open access. 2. Therefore, we argue instead that funders,
- including Wellcome, should not cover the cost of APCs in hybrid journals which do not meet certain requirements. Payment should only be allowed if and when:
- •there is an acceptable offsetting scheme in place, and
- •there is also a compliant green OA option with full access after 6 months or APC costs should be less than £2000 per article (all in). decreasing £100 per year for next 5 years. 3. What constitutes an acceptable offsetting deal is likely to incorporate a range of objective and subjective measures, including, but not limited to, a significant discount on subscription plus APC costs of 75% or more and a commitment to making the offsetting arrangement transitory.
- 4.We recommend that funders. Collections work together to agree criteria and approaches to offsetting schemes, and consider whether individual publisher

number of factors which suggest that, should open access policies remain static, progress towards a shared goal of a fully OA world, where nothing is behind a paywall, is likely to slow or stall. Progressive funder policies are absolutely key to maintaining momentum in the transition.

- 6. These factors are as follows:
- 6.1. The progress which has been made to date has come at a high financial and administrative cost to funders and institutions. It is not clear that funders and institutions can payments would be to require publishers to afford to continue to meet those costs. whether or not UKRI follows RCUK in supporting institutions through an OA block grant. (Expenditure on APCs has at least quadrupled between 2013 and 2016, and the reason stated above, we would prefer this average cost of an APC has increased by 16% over the same period). Potential impacts from the process. include (a) funding being directed toward the large publishers at the expense of smaller publishers, Pure Gold OA journals, OA consortia and new entrants and (b) some institutions withdrawing from deals with the larger publishers, restricting their
- 6.2. Jisc Collections has led the way internationally in the establishment of offsetting deals as the main tool for controlling costs of the transition to OA. However, certain of the largest publishers have remained wholly opposed to such an approach and continue to

- 5. Such an approach would also have drawbacks around (a) ensuring compliance where joint funders are involved (b) making negotiation of offsetting deals more challenging by removing the link between institution and article and (c) removing the institution as the primary point of information and advice for authors.
- 6. An alternative approach to smoothing the process of paying APCs and tracking improve their workflows and automate processes. It is highly surprising that a full eight years on from the development of OA funder policies this has yet to occur. For the approach as it does not remove the author
- 7. We believe that it should be a requirement for all publishers of Wellcome-funded research outputs to have signed up to an enhanced service level agreement. An SLA should cover automation; standards adoption, researchers' access to the latest findings. automated repository deposit, metadata, as well as licensing, deposit and reporting and should include a commitment to participate in the developing OA support infrastructure for example Jisc Publications Router.

- proposals meet those criteria. 5. It is our view that the successful development of off-setting agreements in the UK and elsewhere shows that this is an approach open to all subscription-based publishers. Therefore the introduction of such a funder criteria could not reasonably be held to be a curb on academic freedom but is a matter of publisher choice.
- 6. A significant minority of SCONUL members have a "green first―policy for open access publishing, particularly among teaching focused institutions. Many have not been in receipt of RCUK block grant funding for OA. Outside of STEM research, Green OA is seen as the primary approach to making outputs open access.
- 7. Given these factors, we are suggesting that all funder OA policies, including Wellcome's, align around a set of common conditions for publishing in hybrid journals, including reference to Green OA.
- 8. On balance, we believe harmonisation of policies particularly on embargoes and processing approaches is necessary whilst still incorporating an element of progression in policy. The current arrangements causes considerable confusion for researchers and increases the likelihood of non-compliance with funder policies. Harmonisation would also allow institutions to reduce associated administration costs.

- benefit from "double dipping―in terms of high subscription charges for "big deals― and high cost APCs. While this option remains open to publishers, there is a clear financial disincentive in place for them to adopt off-setting arrangements or to transition to read and publish approaches, despite strong moral pressure to do so.
- 6.3. Offsetting deals have had a positive effect on controlling costs and appear to underpin the slower rise of hybrid journal prices. This approach is being picked up internationally and is a powerful driver of change. However, a negative side effect has been to cement in the power of the larger publishers at the cost of smaller publishers and new entrants, including Pure Gold OA publishers, as library budgets are stretched to meet the cost of these deals. In addition, as these deals have negotiated on the basis of subscription and APC costs, they can be seen as reinforcing the subscription model.
- 6.4. While publisher early adopters of offsetting arrangements may have benefited from first mover advantage, the impact of this is likely to lessen over time and we may see some attempt to move back to more traditional approaches if these are allowed to continue alongside offsetting models. Libraries, HE leaders and funders will need to collaborate to a greater degree in future to ensure that we are being as effective as we can in resisting such pressures.

- 9. We strongly support initiatives such as the Wellcome Open Research platform. Wellcome's strong reputation among academics suggests that it will continue to gain significant support among academics and it provides a powerful alternative to traditional publisher models.
- 10. SCONUL believes that funders should not pay the cost of APCs over a certain level irrespective of whether they are published through hybrid journals. There is no evidence that authors are "shopping on price― when considering where to publish, and there are very few other mechanisms for control of APC costs. (Some institutions will cap the amount they will provide to an author for gold OA publishing, but this is not a widespread approach and negotiators are doing their best to control costs of APCs within the current policy framework but this is challenging.)
- 11. Hence, despite their name, the cost of APCs does not appear to relate to the cost of producing an article but instead acts as an unreliable proxy for quality as discussed above. Publishers' costs are not at all transparent, but the profit levels enjoyed by the largest publishers are widely known.
- 12. Placing a cap on the cost of APCs is a necessary step in the transition to open access because no other effective mechanism exists for controlling costs.

- 6.5. We are at the very early stages of read and publish deals which arguably bring us closer to our shared ideal of "nothing behind a paywallâ€. We need to create an environment in the UK and beyond in which these approaches can be fostered if we want these publishers to maintain an engagement with this approach. This includes funders working with colleagues internationally to coordinate, and where possible align, objectives, strategies and requirements.
- 6.6. The Finch report envisaged an open access future in which giving authors greater control over the publication costs of their research would result in an effective "market―in APCs. There is no clear evidence that such a market exists. Instead, because of entrenched behaviours around appointment and preferment, Journal Impact Factor (JIF) appears to remain the overwhelming driver behind decisions about where to publish. It appears there is a correlation between JIF and the cost of APCs, suggesting instead that the cost of an APC may be being used by publishers as a proxy for the prestige of a journal and that publishers may be using JIF as a mechanism to drive up APC prices. Hence, the key driver for price control of APCs envisaged in the Finch report is missing. While negotiators do their best to control costs, their scope for doing so is necessarily limited, even with effective collective engagement with negotiations with libraries, HE leaders and

- In addition, it ensures that APC costs have some relation to the cost of publication and disassociates APC costs levels from the JIF.
- 13. We note that, given APC costs are not related in any meaningful way to journal production costs or controlled by market forces, setting a cap is very likely have the effect of publisher APC prices clustering near or at the maximum level. This should be expected and planned for. We propose that this suggests the cap should therefore be set at £2500 and should automatically ratchet down over time, as suggested above for APCs in hybrid journals.
- 14. We have two further observations on the development of OA policy. First, both academic research and academic publishing are global enterprises, and the policy approaches and strategies adopted by funders and institutions in individual countries impact internationally. Funder engagement across boundaries of country and region seems to us to be a necessary precondition of effecting global change.
- 15. Second, in general, authors do not yet understand sufficiently the question of rights to their own work and many sign over those rights to publishers without understanding fully the implications of doing so. The UK-SCL is an open access policy mechanism which ensures researchers can retain re-use rights in their own work, they retain copyright and

7. For these reasons, we argue that, while Wellcome and other funder open access policies have been instrumental in bringing about change, without further development of those progressive policies, we are in danger of being locked in to a high-cost state of permanent and increasingly expensive "transition―where funding for APCs is normalised as an additional income stream and not as a mechanism to support transition. they retain the freedom to publish in the journal of their choice (assigning copyright to the publisher if necessary). We urge all funders to engage with this initiative and to ensure that their policies foster engagement with it.

Library/HEI

The policy is less restrictive than others and therefore enables institututions to realise OA for funded authors. The CC BY licence criteria Greater funded author awareness of OA should help to encourage publishers who still mandate requirements - ways to highlight to do not offer this uption to update their policies PIs the importance of all funded project staff in line with funder requirements.

The insitutional requirement for EPMC compliance checking is time consuming. Is there a better way to do this?

All publishers offering the CC BY licence.

being made aware of the above. We promote OA and train all new research staff. We contact known grant holders (PIs), however some authors still slip through the net.

Publishers policies to change to either drop embargo periods for self-archiving or allow embargo periods compliant with all funders internationally.

Better utulistaiton of funding via offsetting deals with publishers Library consortia funding of OA platforms Increase in fully Gold journals Innovative publication platforms such as Wellcome Open Research Univeristies to move away from using impact factor as a key measure **UK-SCL** licence

Wellcome's OA policy alongside the RCUK's Hybrid journals and offsetting deals should has undoubtedly led to more UK research outputs being freely available to the world. A positive consequence of this has been that academics have really started to see the benefits of making their outputs open access. (self-archiving).

Wellcome's existing OA policy however, does not help us make the transition from traditional publishing to fully open access publishing. The ultimate goal of OA is to remove the paywalls and barriers to research and to encourage re-use. This has not happened and will not happen until Wellcome and the UKRI agree to stop supporting/funding APCs to hybrid journals.

not be supported/funded. Wellcome must align its OA policy with UKRI. the barriers to research. During the transition period academics should During the transition period academics should have the choice of Pure Gold OA or Green

We believe that a Pure Gold OA world is what Yes is needed in order to remove paywalls and

have the choice of Pure Gold OA or Green OA (self-archiving).

Green OA is not the ultimate goal but essential in the transition to a Pure Gold OA world.

Hybrid journals and offsetting deals should not be supported/funded.

Paying APCs to hybrid journals and engaging in offsetting deals delays the transition to a fully OA world and makes publishers even more money.

We believe Wellcome must align its OA policy with UKRI.

I imagine there have been instances of lifechanging impact, directly resulting from access to Wellcome-funded research. I don't work directly in the medical field, though, so from my personal perspective the impact has been to influence significantly the scholarly communications ecosystem toward open models.

rigorous reporting and auditing are essential, and that Wellcome use its influence, if necessary, to blacklist publishers who are 'part of the problem' rather than 'part of the solution'. Is it feasible for Wellcome actually to provide the platform for publication, independent of the commercial publishers?

At this transitional stage, I can only think that Say it, brother!. The attempt to transform the Yes current environment and maintain the primacy of commercial publishers is misguided. Priming a broken system with more public funds for the benefit of shareholders is misguided.

> (This might be an inept analogy, but it strikes me as similar to the attempt by President Obama's universal health coverage to involve the existing commercial health insurance and for-profit health provision entities: what is needed in the States (as with the NHS!) is an adequately funded, free-at-point-of-service health service, where the profit motive has been stripped away).

Large commercial publishers have abandoned any moral grounds to justify their continued existence by acting immorally -showing no interest in the public good and openly bleeding the public of funds -- over recent decades. (I remain sympathetic to small and specialist publishers who have not behaved in this way).

An entirely new system is needed. Assistance to support the development of alternative models (hire expertise away from the corrupt commercial publishers!) I imagine that disciplinary repositories show a way forward. Incentives to lure learned society publications onto not-for-profit platforms. Public funds should not be used to fund APCs but rather publication in not-for-profit platforms. Efforts to persuade researchers that open access is

in their interest (involving broader reward structures). Rewarding editors, boards and peer reviewers to work for not-for-profit platforms. These are all pretty obvious ideas that float around blogs... I very much wish I were clever enough to have steps toward a solution.

The policy requirements are clearly articulated and well-communicated by Wellcome to authors, institutions and publishers. Together with the potential sanctions for non-compliance, this means that We do not necessarily know about all papers authors are motivated to make their papers open access and reap the benefits of doing so beyond just compliance with a policy.

There are issues with the cost, value and sustainability of favouring the Gold route to open access. With a few exceptions however, it is relatively difficult for papers to comply with Wellcome Trust policy via the Green route and so this is perhaps not seen as a legitimate route to open access.

We would need to know about 100% of Wellcome-funded research outputs. We currently only monitor and report on papers where we have paid the APC for Gold OA. that are made Gold OA via other means, comply via the green route or are not made open access at all.

Compliant publishers be required to agree to payment of the APC on proof they have made a complaint deposit of the paper in E/PMC.

Liaise with publishers to ensure papers that acknowledge Wellcome Trust funding are flagged for OA publication.

WT endorsed lists of non-compliant journals/publishers and therefore where author shouldn't publish. Sherpa/fact does not always present information that is sufficiently granular for a specific journal or type of publication.

Encourage Green OA by allowing for longer embargo periods (12 months in accordance with requirements for REF) and allowing for deposit in institutional repositories (not just EPMC). Encourage automated cross-deposit of Wellcome Trust funded papers between institutional repositories and EPMC (and vice versa.)

Yes

Alignment of funder policies.

of open access journals.

access as a legitimate approach.

hybrid OA journals with commercial

Recognition and support for green open

Funders to support or become publishers of

open access journals, rather than supporting

publishers. Universities to become publishers

Library/HEI

I just read about Wellcome Trust's open access policy and so glad I came across this webpage and read about it. What is interesting is the accessibility of researchers' work immediately.

Research that generates significant datasets, software or materials that could be used to address research questions other than those it was created for.

Yes

Being outside the U.K., I may have a limited perspective on this question. My thoughts from afar:

-Wellcome has been an international leader in supporting open access and a model for other funding agencies - so tremendous impact there

-l'm quessing your compliance rates are quite -no incentive for publishers to change their high given the significant sanctions imposed on non-compliance (which I applaud) So again, tremendous impact in driving open access

-on the negative side, Wellcome's support for hybrid OA in particular and the APC OA model more generally is problematic and completely fails the opportunity to incentivize any meaningful change in a dysfunctional scholarly publishing system. Your current policy does nothing to curb mendacious publisher business practices.

Wellcome wields huge power - why not use that power to to drive positive changes in open scholarship by refusing to pay hybrid APCs (for a start)

1a. Stop paying hybrid APCs! Hybrid OA is problematic on so many fronts:

-costs are higher for authors and institutions -hybrid OA articles don't enjoy same OA citation effect as articles in fully OA journals -managing hybrid OA fees, offsetting etc is a waste of staff resources

practices or for researchers to change their problematic publishing behaviours

1b. Require researchers to publish their work *only* on Wellcome Open Research -- this solves the problem of APCs, makes all Wellcome-funded research open access simply and easily and has the potential to drive transformational change in scholarly publishing.

You have the power - use it!

As stated above, Wellcome is an international Yes leader among research funding agencies, so just about anything you do to support open access will have an impact on other research funders (obviously especially in the UK) and thus encourage support for open access. But it's impossible to answer the broad question of "what action is required" to enable a transition to a fully OA world. There are far too many factors to consider, including: -reward structures in academia: the reliance on publishing in "high-impact" paywalled journals is a huge impediment to progress, but change on that front can only be driven by scholars themselves

-the corporate might of profit-driven academic publishing corporations, particularly the Big 5 -misconceptions and negative cultural perceptions of open access -the small but significant pool of predatory publishers

As stated above, I really think researchers themselves must play a major role in supporting open access if any meaningful change is to occur. But Wellcome has the opportunity to help shape researchers' behaviour by making its open access requirements as strong - and free of APCs as possible.

Very positive •Require CC-BY (only) licence •Extended the requirement to include deposit of monographs and book chapters •Encouraging authors to deposit in PubMedCentral (PMC) •Requiring authors/publishers to deposit in 2. Publisher reforms to ensure that they offer PMC when an Article Processing Charge (APC) has been paid •Clear communication to authors •Tools to assess compliance •Clarity that compliance is mandatory and provision of additional funding if/when required to meet demand

Less positive •Open Access is still largely APC dependent: •Most APC payments support hybrid iournals •APC spend continues to increase

- 1. Reduce complexity and streamline publisher online submission and APC payment processes for authors and institutions along the lines of Springer and Wiley online dashboards and notifications [most important reform]
- Open Access (OA) compliance. Wellcome could work with smaller publishers to ensure that they too offer viable OA alternatives

•A UKRI approach to open access policy, Yes delivering consistency across research councils and Research England, and where possible alignment with other research funders.

•Simplified and standardised open access requirements

•Encouragement, support and promotion of Open Research Publishing platforms such as Wellcome Publishing platform. •Expansion of current joint publishing platforms such as the Association of Medical Research Charities (AMRC) •Adoption of FAIR principles

I think there has been a positive impact on raising authors' awareness of open access and increasing the number of publications available as open access. There has also been a positive impact in an increase in publishers publishing gold open access under Creative Commons Attribution licences and having clear green open access policies.

However there has been a less positive impact in the increased administrative burden on institutions, both in management of the COAF block grant and providing guidance on the complex workflows around publisher policies and green open access compliance, and in reporting data back to Wellcome.

There needs to be some progress made in the shift from the standard hybrid Gold OA/ Subscription model still prevalent in the sector, although this is obviously a hugely complex landscape.

Also, a focus away from Gold OA being the †gold standard†of open access publishing would be encouraged, and the support and introduction of a UK-SCL could be the way forward to provide a simpler workflow for Green open access. Ultimately for long-term sustainability a progressive move to supporting Green OA would be the most important to ensure 100% OA.

A dual approach whereby Gold OA funding (from all funders) is restricted to fully OA titles only; with funders supporting the adoption of a UK-SCL type licence to facilitate a robust and viable Green alternative.

A ban on hybrids for COAF funding would reduce any risk of publisher double dipping and separate the issues existing between negotiating cost effectiveness of both subs and OA hybrid for institutions. It would also align funder policies with the REF through increased support for Green and simplifying administrative workflows and communications to our researchers. In combination with the UK-SCL this would allow institutions in receipt of block grant funding to make the simple choice â€" Fully OA â€" pay for Gold; Not fully OA â€" deposit as Green.

The removal of hybrid would have a negative impact in reducing the opportunity for institutions to engage in effective transitional schemes around hybrid, such as the Springer Compact, or place the cost of involvement in such schemes solely on institutions (even when funded papers would benefit). One solution if we believe hybrid still has a part to play in the transition, would be for funders to stop funding hybrid payments from institutions but themselves negotiate national Compact style schemes with publishers â€" it may also be more effective as the negotiation would be directly between funder and publisher, rather than the institutional consortiums currently involved.

es/

Clearly the policy has significantly increased the proportion of Wellcome funded research that is now openly accessible. Strong monitoring with clear criteria for publishers on innovative business models and reader appropriate conditions has attempted to influence publishers' behaviours and workflows. There has been some success in vigilance over CC-BY licences, but the policy has not encouraged or leveraged sufficient change in some desirable areas e.g. broader interoperability, restraint of APC prices, encouraging offset of APCs against subscription costs so the APC payment structure is not an entirely additional sector cost. Despite good intent more progress is also needed with the eradication of page and colour charges in the digital environment.

There is currently a requirement to make monographs open access but there is still much to do, with huge potential to provide innovative business models and reader engagement with digital outputs that do not seek to just replicate the print but maximises media. From data visualisations, to sematic navigation and streamed content, monographs can be so much more than just a digital surrogate of the text. Wellcome could fund a series of pilots to explore both the potential of the monograph form and the business models for sustainability. Without this 100% open access coverage, including monographs, will be hard to achieve.

There is perhaps a supplementary quencher is still here. What developments are needed ensure that no research is behind a para sustainable fully OA world. The most important facilitator is policy harmonis Currently the fragmentation of the poli landscape, some of it conflicting, make environment complex for researchers workflows less efficient and costly for institutions. It hinders the development are needed ensure that no research is behind a para sustainable fully OA world. The most important facilitator is policy harmonis Currently the fragmentation of the poli landscape, some of it conflicting, make environment complex for researchers workflows less efficient and costly for institutions. It hinders the development as sustainable fully OA world. The most important facilitator is policy harmonis Currently the fragmentation of the poli landscape, some of it conflicting, make environment complex for researchers workflows less efficient and costly for institutions. It hinders the development as sustainable fully OA world. The most important facilitator is policy harmonis Currently the fragmentation of the poli landscape, some of it conflicting, make environment complex for researchers workflows less efficient and costly for institutions. It hinders the development as a sustainable fully OA world. The most important facilitator is policy harmonis currently the fragmentation of the policy harmoni

There is perhaps a supplementary question here. What developments are needed to ensure that no research is behind a paywall in a sustainable fully OA world. The most important facilitator is policy harmonisation. Currently the fragmentation of the policy landscape, some of it conflicting, makes the environment complex for researchers and institutions. It hinders the development of enabling interoperable infrastructure and supportive governance. The emphasis should also be on discoverability, reuse and visualisation and we currently have too many institutional, discipline, funder and publisher systems that cannot exchange metadata and outputs appropriately. Working with other funders, sector organisations and institutions in pursuit of greater harmonisation will help engage researchers and enable innovation. It will also provide a more unified platform for discussions with publishers about sustainable business models, including incentivising use of initiatives such as Open Welcome Research, open access University Presses, open monograph platforms and data repositories.

Publisher

It has given support to the Gold OA model. What impact it has had on the number of people accessing research funded by Wellcome. I have no idea.

One of my concerns about APC-funded publishing is that providers (publishers) will 'follow the money' and compete for a larger share of this 'business' by boosting their services to authors. No bad thing, one might think, but what about readers? Who will invest http://blogs.lse.ac.uk/impactofsocialsciences/ in reader-facing services? Discovery remains a major issue in scholarly publishing and new platforms and repositories don't make it any easier. Access and accessibility is less than ideal (especially on mobile devices. Finally, what about making content understandable to a broader public? Once Wellcome has got itself into a position where all 'your' research is available for free, I think you need to start looking at improving the experience on the reader side - after all, there's no point in making content free if no-one uses it!

As I wrote last year, I don't believe the Gold and Green routes to open access are working and I think new thinking is needed (https://goo.gl/RAKhK2). I published some thoughts to this end here: 2017/10/24/its-time-for-pushmi-pullyu-openaccess-servicing-the-distinct-needs-ofreaders-and-authors/.

In theory, it's easy to be rid of paywalls (for example, why doesn't each research institution oblige their staff to post their findings/articles/books on their institution's website as a condition of employment?). The challenge of OA is therefore as much cultural (researchers wanting the kudos of publishing in branded channels - aka academic freedom) as it is financial (who will meet the cost of publishing?). I believe not nearly enough attention is being paid to the needs of readers and not nearly enough pressure is being put on authors to ensure that their content is actually being read (and I mean read, not cited - another thing entirely). The latter could be addressed by funders requiring postpublication reports from authors on the readership their articles generated and on any impact accrued.

Publisher

The Wellcome policy has been the single most effective policy in driving OA since its clear from the start and have been made even more clear over the years. The commitment to fund OA has ensured that every stakeholder has been clear on their responsibility. The flexibility and enforcement has been really strong which has led to a good uptake in the policy by researchers and publishers alike. It's policy in paying for OA publication in all journal models means authors continue to have the same choice to publish where their communities see the most Better infrastructure and automation and value. It has also meant that researchers have the same academic freedom that they have always enjoyed.

Use of permanent identifiers throughout the process from grant application through to inception in 2013. It's requirements were formal publication. Funder IDs are not always resources. Wellcome could share, in case used in article submission to journals and it is studies, their experience more widely for therefore difficult for publishers to ensure Wellcome Trust outputs are published OA immediately under a CCBY license.

> Central payment of Wellcome Trust OA funds to publishers to ensure that lack of OA payment is not a reason for noncompliance.

therefore investment for article deposition from publisher to PubMed Central.

All governments and funders operating with the same OA policy and OA funding example % or funding for OA etc â€" sharing the positive outcome of their policy on the world to create change.

Development and enforcement of a global award and assessment exercise that recognizes open research.

In 2013 we were proud to publish Wellcome's first OA book, under our Palgrave Macmillan imprint. We are strongly supportive of the Wellcome Trust's approach to OA books and chapters: you have provided a policy â€" and a strong voice particularly in humanities and social science â€" in support of gold OA and the funding and funding mechanisms to enable and simplify gold OA publication, and have advocated for expansion of OA publishing options for books. These measures have been critical in helping to enable OA publication of books, and to start to effect the cultural change we need in this area, while also retaining diversity in the publishing landscape and supporting author choice.

Books

Looking specifically at Wellcome Trust authors, who do not face the same funding challenges as other monograph authors, cultural change is the main challenge we see. including work to convince scholars, disciplines, of the value of open access for monographs. Springer Nature has contributed to this debate via its recent white paper, which found significant download and citation developed in collaboration with all advantages for OA books (https://www.springernature.com/gp/openresearch/journals-books/books/the-oa-effect); more work of this kind is needed.

Research data

While Wellcome addresses issues of sharing research data, software and materials in another of its policies (https://wellcome.ac.uk/funding/managinggrant/policy-data-software-materialsmanagement-and-sharing), there are areas of mutual concern and potential for reinforcement in open access policy. To support transparency on the availability of research data, researchers in receipt of Wellcome funding could be compelled to provide information in publications on the availability of underlying research data and materials, in an open access format, such as with â€~data availability/accessibility' statements in publications. Such a policy can Books be supported by publishers and journals which are, increasingly, standardising and harmonising their policies on research data

If we are to see further transition to open access in the UK, a long-term commitment from government and from funders is vital. For institutions and publishers to commit to transitional models, there needs to be confidence that the funding infrastructure to support these will remain in place.

The current UK policy frameworks were stakeholders in scholarly communications. This resulted in a bold yet sustainable policy which, in Springer Nature's case, has led to a significant transition to open access in the UK over the last five years â€" in the five years since Finch we've published 28,000 articles with a UK corresponding author via gold open access. We welcome the opportunity to contribute to the Wellcome Trust's policy review and encourage ongoing collaborative dialogue in this area to support further transition to open access.

While countries like the UK and others in northern Europe are leading the way in transitioning to OA, globally the picture is mixed, and this means that significant policy and cultural change, as well as new funding mechanisms, will be required around the world to enable further transition.

This continues to be a challenging area for open access and we do not see the same growth and changes we did in journals.

Yes

(https://www.rd-alliance.org/groups/data-policy-standardisation-and-implementation). Greater use of such statements - which are mandatory when publishing in BMC and Nature research journals - in publications will also help enable compliance monitoring.

Funding of course is a significant challenge for many monograph authors: scholarly monographs are most valued by disciplines in the humanities and social sciences, areas which are typically less well-funded than STM subjects and so less able to support gold open access fees. Meanwhile, green open access delivers poor utility for long-form content.

We have seen commitments to and pilots for gold open access for books in the Netherlands, Austria, and Switzerland, where both policy and funding commitments together have made an impact on the growth of OA books; further approaches of this kind will be necessary to support further take-up of OA book publication globally. A mandate purely for green OA, without gold funding, could be limiting.

It is also important to remember that the publishing landscape for scholarly monographs is richly diverse, reflecting the needs of individual disciplines, and is not the same as journals; a range of publishing models and solutions may well be required.

Research data

In March 2018 Springer Nature published a white paper summarising the practical challenges to research data sharing, derived from a survey of researchers with nearly 8000 responses

(https://doi.org/https://doi.org/10.6084/m9.figs hare.5975011.v1).

The main barrier to data sharing was identified by respondents as â€~Organising data in a presentable and useful way' (46%). Other common challenges were â€~Unsure about copyright and licensing' (37%); â€~Not knowing which repository to use' (33%); â€~Lack of time to deposit data' (26%) and â€~Costs of sharing data' (19%). Funder policy can potentially help overcome these barriers. For example, by including costs relating to research data management and data sharing in grants, supporting researchers to follow best practice in data curation, and considering researchers' data management plans when assessing grant applications.

The Wellcome OA policy was truly groundbreaking and has led the way for other funded researchers know of the requirement funders to follow. Wellcome's enforcement program has also been crucial mandating OA is not enough to see it fully implemented. The open and regular reporting to help tie together activities in areas from on Wellcome's OA program has helped all parties to see both the progress made and and research assessment. the obstacles to be overcome. It may seem an obvious point, but the Wellcome policy has Any new policy directives should be simple also itself made a significant amount of important content available via OA.

The OA policy of Wellcome and others have driven the creation of a plethora of OA journals in what is essentially a new branch of the scholarly communications industry. It has pushed publishers and technology providers to create processes for how to deal with article processing charges (APCs) and to think more widely about this as business model. And both by Wellcome-sponsored research and analysis, and in practice, it has helped to normalise the payment of APCs as a route to OA.

A key area is to ensure that all Wellcomeand how to fulfil it. Wellcome should continue to work with publishers and with researchers, and also communicating with their institutions billing and grant management to OA policy

and implementable, and Wellcome should ensure outcomes continue to be reported on. and that the policy is enforced.

We would suggest the following areas of

activity where input from Wellcome could make a significant difference to the progress of global OA:

- 1. Work with other funders and ask them to commit to paying APCs, and to include funding for OA as a line item in grants.
- 2. Ensure funded institutions offer practical support for paying APCs from grants. Work with institutions and other stakeholders to reduce the administrative burden for managing APC payment, encouraging the development and adoption of standards for workflows and metadata (to facilitate reporting and ensuring OA is implemented)
- 3. Work with Societies to help them understand how they can replace the income from subscription publishing
- 4. Work with publishers on a roadmap to â€~flipping' journals from hybrid to OA. Encourage all funders to negotiate with publishers in this direction.
- 5. If high-profile journals are seen as adding value, devise mechanisms to support them in an OA world. This might mean embracing submission charges, higher APCs for more selective journals, a membership model similar to Open Library of Humanities, or some other approach.

Yes

Publishers believe that Wellcome's open The publishing industry fully supports access policy has had a significant impact on Wellcome's aim to ensure 100% of the amongst publishers as being one of the most However, for this aim to be achieved, successful funder policies in the world and has one of the highest track records for compliance. We believe that one of the primary reasons for this success has been the policy's flexibility, which focuses on than prescribing how this objective should be met. This has accommodated a diversity of publishing models, including hybrid journals, and has enabled authors to choose to publish green and the ongoing availability of hybrid in the journals which best suit their research. The importance of enabling this choice was highlighted in a recent report by the Publishing Research Consortium, Research Consulting and Pleide Management & Consultancy, which showed that the quality and scope of a journal was the most important factor for authors when deciding where to publish. In addition, figures from the UUK's Monitoring the transition to open access: December 2017 report demonstrate the importance of allowing for a range of models in order to increase the take up of open access, with the latest figures showing that there is almost a 50:50 split between green and gold OA, and with hybrid journals making up 28% of the proportion of immediate Gold OA articles in 2016. Additionally, the report highlights how the existence of a hybrid option is a significant reason why the UK is ahead of the global average in the publication of immediate OA

realising open access. It is generally regarded research it funds are published open access. publishers believe that the breadth of the subject areas and formats covered by your OA Policy must be matched by the breadth and flexibility of the OA models available. With that in mind, we believe that there are ensuring that outputs are available OA rather many aspects of the current policy that should be maintained and developed further. These include enhanced funding for gold OA, support for appropriate embargo periods for models.

> However, one reform that could be made from time, the UK publishing community has a publishing perspective is to consider further reached a place where despite just having the way your policy takes account of the different needs and issues at play in book publishing.

As your current policy acknowledges, the book has a key role to play in the dissemination of research outputs. However, they differ greatly from journal articles in many ways including the way they are conceived, produced, read and sold. Unlike most journal articles, books can take decades to write and be read centuries later. They and their authors have a different relationship with time, their publisher, their subject matter, the printing press and their reader.

We would like to start by reiterating our support for Wellcome's mission to improve health and supporting bright minds in science, the humanities and social sciences as well as public engagement. Many of our Members have similar mission statements and we also fully agree with the fact that the availability of research outputs can play a key role in achieving such a mission.

Like Wellcome, UK publishers are deeply committed to the dissemination of knowledge, learning and research. Through the act of publication, publishers connect authors to readers and aim to serve both communities as best they can. We are very proud that over 1% of the world's population and 4% of the world's researchers, the UK publishing industry produces 16% of the world's most cited journal articles.

In a research world where truth, integrity and quality are key, the UK publishing industry's brands and people stand for excellence and quality. Publishers also play a vital role in the help they provide to academics to progress their careers. We believe that the UK publishing community is well placed to continue to help Wellcome and the UK research community to lead the world in open access policies specifically and scientific research and innovation more generally.

articles.

UK government's current open access objectives, which aims to increase access to scientific research outputs in ways that are compatible with sustainability and research excellence. As already highlighted, allowing for a range of options for researchers to comply with the current OA policy helps to increase the proportion of articles which are published open access. Meanwhile the current policy supports excellence, by ensuring that researchers can continue to publish in the journals with the highest impact factors and with well-established reputations, and ensures sustainability by enabling publishers to offer the OA model which best suits their overall business strategy and particular journal.

In short, we believe that for your OA policy to The current Wellcome policy also fits with the be fully effective with respect to books, more work can be done with publishers to understand the dynamics of the book publishing process and when and how the transition to OA can take place.

The UK publishing industry fully supports open access and the key principles that underpin it, specifically to make content free at the point of readership and to maximise the distribution of research publications in an effective way.

However, if the purpose of open access is to achieve a better and more positive environment for research and innovation, it is important that policies are crafted in a way that in addition to widening access to published research outputs, also ensures that those outputs remain of the highest quality. Publishers therefore welcome the commitment and acknowledgement in your policy that you expect your research outputs to be published in high-quality, peer-reviewed research articles, monographs and book chapters.

Academic publishers are committed to maintaining a high-quality publishing ecosystem that is capable of sustaining outputs of this nature in these formats. However, doing this in a way that whilst securing the transition to an OA world also simultaneously ensures that there is no reduction in the quality, breadth or integrity of what is published nor any impact on author freedom or choice and whilst continuing to invest in the publishing skills and technologies of tomorrow is a complex challenge. Although good progress has been made in recent times, we would suggest that

thetransition to a fully OA to continue the following actions should be taken:

1. Flexible options

One of the key reasons for the success of the Wellcome policy has been flexibility around the different models. A combination of gold, green and hybrid have been essential to your OA success to date and should be maintained. This is the case because the way in which authors and publishers interact with Wellcome and researchers to produce an digital, data driven, time sensitive STM journal output is completely different from how we would collaborate with you on a print, literary, ephemeral HSS monograph or book chapter.

Over many years, publishers, authors, funders and institutions have worked together to build a range of different and bespoke publishing models based on a mixture of copyright and licensing to support every conceivable combination of the above. It is therefore extremely important that if the research community wishes to benefit from, and indeed enhance, all of the many aspects of this world-leading publishing ecosystem whilst simultaneously widening access, it will need to develop a suite of different OA models that cater for each variation and type of publishing. This means that "one size fits all―open access policy is unlikely to provide the outcomes you would like to achieve. And we believe that much further consideration needs to be given about whether, when and how OA models can work 4------

2. Time needed for a Global Approach We believe that we have made good progress along the transition to OA already. However, in order to realise the vision of a 100% OA world that is capable of sustainably supporting research and innovation for the long term, we would urge patience and to allow enough time for this highly complex, international and long-standing publishing ecosystem to evolve and adapt.

One of the key factors for UK publishers is that we are hugely global in outlook and operation. The development of OA policy in the UK is just one approach amongst many around the world and as organisations sitting at the hub of a global academic community, adapting models in a way and at a pace that creates the right outcome for all actors in every country we serve is complex. Making that change can be time consuming and requires a degree of patience for interests, laws, political and funder priorities and policies across continents and cultures to align.

3. Publishers as partners
Both the PA itself and many of our members have good and close relationships with the Wellcome Trust. We are committed to helping you make your open access Policy as successful as possible and are keen to continue to be close partners and advisors in how to transition from one model to another and the best way of doing so. Indeed, we

believe that one of the key reasons both Wellcome and the UK in general has been able to lead the way in open access policy has been the presence of many of the world's leading publishers in this country and their willingness to work with funders and researchers on making more research outputs accessible. We look forward to continuing to continuing this collaboration in future.

4. Focus on outputs, not format or medium We believe the best way to achieve OA policy is to focus on the outputs and not prescribing the process. We also agree with your statement that it is the quality of each and every piece of research and its publishing output that is important. With that in mind, we believe that OA policies should remain practical and be focused on the OA status and accessibility of each article / individual piece of research.

5. Adequate Funding

Publishers play a vital role in the research ecosystem through maintaining the quality, integrity, discoverability and breadth of the research outputs available to the community. We would not want the transition to open access to risk diminishing this work in any way and do not think it ought to. But doing this requires publishing organisations to continually invest in the publishing models, technologies and skills of the future as well as retain, train and incentivise thousands of skilled staff and external suppliers. For this reason, we are keen to ensure that any shift

funding models only takes place when adequate long-term funding is available to enable us to continue to perform our role in this process without any risk to our ability to maintain quality or the full breadth of publishing outputs across all subjects, genres and formats.

Publisher

Wellcome has shown significant and appropriate leadership in Open Access, and has been a key driver for a great deal of positive change in the Open Access landscape.

- (1) Wellcome made an early and strong commitment to Open Access, and adopted the approach of PubMed Central to increase the distribution of content.
- (2) Wellcome has promoted compliance by giving clear guidance to authors and financing stakeholders: authors, funders, publishers, as mentioned in our answer to the previous their APCs.

 well as third-party systems such as Crossref. guestion, we suggest that the Trust can see the compliance by policies, practices and services of all open future. As well as the specific action open future action open future. As well as the specific action open future action open future. As well as the specific action open future action open future. As well as the specific action open future action open future. As well as the specific action open future action open future. As well as the specific action open future action open future action open future. As well as the specific action open future action open future action open future action open future. As well as t
- (3) Wellcome has produced sensible requirements for publishers in order to improve the service publishers provide to authors and their funders.
- (4) the Trust has undertaken useful analyses of the Open Access landscape and the takeup of OA by researchers.
- And (5) Wellcome has engaged in proactive dialogue and discussions across various aspects of the scholarly communication ecosystem. Overall, through its policy, Wellcome has facilitated the greater adoption of OA while acknowledging the complex global environment in which journals and publishers operate.

At present, monitoring OA compliance is hampered by incomplete metadata. All research outputs should be associated with clear and readily accessible public information about the authors' identities. affiliations, and funding, along with clear information about the end-user license terms of the published works themselves. This requires continued improvements in the policies, practices and services of all well as third-party systems such as Crossref. Wellcome has a role in fostering better metadata policies and practices. Wellcome should continue to appreciate that it will take some time for all stakeholders to be providing, collecting and distributing a full set Specifically: of metadata, but that is the goal we should be working towards.

We applaud this transition and support Wellcome in the pursuit of it. Cambridge University Press is actively working towards a more diverse Open Access future with greater openness across all areas of the research lifecycle. We believe that both publishers and funders can engage in a dialogue about the ways in which institutions incentivize and reward researchers that can lead to a more open future. As well as the specific actions mentioned in our answer to the previous question, we suggest that the Trust can show continued leadership in promoting Open Access in a manner that acknowledges that there isn't a one size fits all solution and helps carve out space for differences.

- (1) A global transition to OA will be more likely to occur if all stakeholders around the world work together on the common goal. Wellcome is well positioned to facilitate global discussion and collaboration. Cambridge University Press would be very willing to contribute to any discussions and to join partnerships or other forms of collaboration that move us towards the global transition.
- (2) As a publisher, we serve many communities with different views and capabilities about Open Access. We do not believe it benefits research and researchers to see the academic publishing landscape fragment along geographical or other boundaries. For the foreseeable future, some funders and countries will continue to favour

- Green OA, others will favour Gold, and each journal should be able to serve its global community. While we appreciate that there are some issues with the hybrid model for journals and invite Wellcome to help the hybrid model evolve, we hope that funders will see that it serves a useful role in a period of transition with geographical differences in policy and approach.
- (3) All organizations need to adapt, improve, and invest in the future. If we operated journals on a purely at-cost basis supported, for example, by at-cost APCs, we would have no scope for investment. The investment in innovation is essential to being able to meet the evolving needs of research and researchers and we believe this has an important role in ensuring that communities are better served in the future. We appreciate that our customers (authors and libraries, for example), have their own financial pressures and that this leads them to press for greater value-for-money from publishers. However, we urge that as Wellcome works towards greater adoption of OA around the world, the cost of OA cannot be considered in isolation from the cost of other aspects of the services publishers such as Cambridge University Press provide, or are working to provide, to the community.
- (4) Wellcome could play a role in promoting more diversity in the OA space by working towards sustainable alternatives to the APC model that help ensure that no research is behind a paywall, regardless of the funder (or even in lieu of having funding in the first place).

It has led to a significant culture change towards open access, preregistration, preprinted and OA publications

It is is force for good!

in this more recently.

Making it mandatory and financially supporting institutions to pay OA charges A different model of publication where OA publication journals are the norm and articles rejected by one can be efficiently transferred to another

Yes

Researcher

Having such a large funding agency demanding the OA of the science generated using its funding has had a big impact. Many more organisations now push for OA when research is produced using its funding. Having large funding agencies come out in support of OA has clearly helps change opinion regading this matter, which I think is the most important outcome. But having access to the highest quality research performed by Wellcome-funded researchers can also clearly had considerable OA of a manuscript for several months (this benefits in terms of improving and accelerating the world of science. That said, the advent of Sci-Hub has also played a part

I can think of a few ideas, though some of these may already be implemented today: - help promote the use of preprint archives. This could happen via specific campaigns to generate debate and awareness surrounding preprints, but also by refusing to accept 'manuscript in submission/under review' listed coordinated push for universal OA policies in grant applications, but accepting listed preprints instead.

- push for immediate OA on Wellcome-funded other largest funding bodies. manuscripts. I believe it is possible to delay happened with a paper I published in Journal of Cell Science, which only became OA after 6 months). These early months of publication are when the science is most cutting-edge, and would therefore benefit greatly from OA.

Pressure on Lancet and similar journals where OA is not the usual course of action. Nature Genetics too needs further encouragement

This is a tricky question. Publishing giants such as Elsevier are unlikely to (fully) embrace OA.

A few ideas:

- join forces with other funding agencies (including smaller ones) to push for OA. A from other funding bodies would have greater impact that Wellcome alone, or only with the
- promote preprints. Many researchers I know are still unaware of what preprint repositories are, and are suspicious of them (in the sense that they would not submit they own data there). One way to do this may be to help generate a PubMed + preprints search system. Currently PubMed does not search preprint depositories, but it would be very useful if it did. It would also spread the idea of preprints being a 'normal' publication method.
- help university libraries to negociate better access/prices for access to journals. Though this has far more implications than I can think of, I am sure that Wellcome can use its influence to help this happen.

Enormous. I feel like Wellcome took a strong leadership role, and demonstrated that it is possible to be progressive without disrupting the present system too greatly. Among 'open science advocates'. WT is generally regarded publishers that make things difficult. as one of the top research funders for pushing OA forward. This is due to a combination of high compliance, an effective OA mandate, monitoring, and evidenceinformed policy.

Researcher

More journals provide open access but publishing a paper comes with significant costs to the researchers.

Some charities help to mitigate publication cost by covering the OA fee separately from the grant. But most charities do not and it becomes and onerous burdan to try to find the money to pay the OA fee. Some charities prohibit the use of funding to pay for publishing costs. Most universities won't cover the cost. So it is the individual researcher that bears the brunt at a time when their is little money to go round.

I would say enforcing the policy in a stricter way, for example by withholding funding from parties that do not comply with the policy (for researchers). I would also be stricter with complicated, or unreasonably expensive. There is little reason why the WT should cave Implementation of lengthy embargo periods to the demands of commercial entities, to the expense of their own finances, and that of the wider public. I would also demand more transparency from these publishers in terms of exactly what is being paid for. No transparency, no APCs. This could put topdown pressure on the industry, and actually create a functional scholarly publishing market. This would be an extremely powerful method of reform, and one which I believe the system to make the transition fully WT is excellently placed to address.

Oh, also removing journal rank/brand and the impact factor from any sort of evaluation process, and taking a hard stance against researchers who continue to use these as proxies for, well, anything.

N/A

An understanding of where the tensions lie, Yes and in whose interests should the WT be acting in with respect to this. So the best example of this is virtually every other stakeholder engaged in scholarly communication versus legacy publishers. and high APCs that reflect absolutely nothing about the publishing process are two examples of this, where private interests of one stakeholder group run directly opposed to

The transition is eminently possible using existing Web technologies, there is clearly more than enough funding in the present sustainable (for researchers and research funders), and the only parties who don't want this are the legacy publishers. Therefore action is required to dissolve this power imbalance, which research funders are again in a strong position to do.

all others.

The abolishing of scientific journals as a for profit enterprise. As this will not happen, the alternative is Universities and major charities setup their own publications and manage peer review.

Most journals don't rely on print anymore, there are many on line only journals. So the barriers to charities and universities publishing their own work on dedicated servers is entirely feasible. Indeed this is already done to a certain extent in some institutions through preprint servers.

This will require effectively marketing of the new portals for accessing work and weaning the community off of its metric obsession for impact factors and prestige journals.

Main barrier for early/mid level researchers such as me is the need to demonstrate publication in "prestige journals―for the REF, and for career progression.

Much greater pressure on publishers to Yes reform their publishing and profit models, and on universities to change the ways they assess academic progression.

I am grateful for Wellcome funding my publication in OA journals and paying fees to ensure open access, but I struggle to see how the current model can can be sustained unless the career progression targets for academics are revised substantially to reflect modern publishing OA publishing approaches.

Some pressure on universities to rethink these "journal impact factor targets― from Wellcome would I think be beneficial to more junrior and emerging researchers.

Researcher

Not sure what your current policy is

How much would Wellcome and similar bodies save by publishing themselves?

Yes

It strikes me that publishers such as Elsevier and Springer add little value to the process of knowledge generation, but enjoy the majority of financial reward from scientific writing.

At this stage, primarily setting an example. Which is very important - to have societies and organisations of the stature of WT supporting OA lends OA credibility and helps convince many who would otherwise doubt that OA is, or will become, mainstream.

Mandatory OA publishing of outputs, and mandatory sharing of data on open data repositories within a set time period.

The main barrier to OA publications/outputs is Yes the paywall - and the publishing companies that maintain it. But as the paywall is dismantled. exorbitant article processing charges are creating an uneven playing field, with researchers from wealthy institutions and those funded by wealthy funders able to pay to publish in the "most prestigious" journals.

So making *publishing* of OA outputs in high prestige outlets accessible and affordable to all researchers needs to be a priority. Paying the publishers large fees redirects precious funding away from research, and is not the answer.

So, either pressure needs to be brought to bear on publishers to lower APCs (I don't know how), or alternative "high prestige" outlets need to be created. eLife is such an example. Also, support of *meaningful* measures of outlet quality (i.e. not JIF) should be given - measures that take into account aspects of research quality (e.g. statistical power, complete and open research methods including code and data), as well as measures of reproducibility (e.g. including preregistration).

Researcher	It's good. There is no longer any excuse for hiding research from those who paid for it.	Everything should be posted on a preprint server. In the longer run, I suspect that all reviewing will be post-publication, so the cost of putting a paper on the web will be very small.	Mandate publication on preprint servers. In the longer run, switch to post-publication peer review, so it costs no more (to the authors) than £100 or so to publish a paper.	Yes r.	
		It's said that this would result in a deluge of rubbish, but that deluge already exists. for example, Pubmed indexes more than 30 journals that are devoted to promoting quackery. This system has worked for many years in Physics. It should be adopted by biology.			
		Traditional publishers charge far too much for OA (up to \$5000) and that money should be spent on research.			
Researcher	Welcome has clearly been supportive. I applaud that.	Require it of grantees. Support APCs for grantees outside of their operating budgets. Recognize OA publications as highest impact in reviewing your grantees and applications for funding.	lower cost barriers, to encourage authors regardless of funder.	Yes	
Researcher	It's an interesting start but you need to think carefully about unintended consequences	Two key points 1. Make sure any mandates come with funding for all research groups they affect-true publication costs are likely \$5-10K 2. Make sure they don't disadvantage journals run by scientific societies and other scientist-driven non-profits for which subscription fees still support the business model! The big three (CNS) can survive in a subscription free world but I do not want to do scienc eina world where only they survive.	See above!!!!!!!	Yes	

I have seen more open access journal articles I believe that a requirement for preprint or from researchers in my field last few years. the impact i see is that the journals that are subscription based (mostly non-profit scientist-further and dissuade researchers from run society journals) are in trouble. I think that the open access movement is turning from a high minded initiative to a money making scheme for big publishers, which are sprouting open access journals to grab cash from scientists and their funders. Basically taking advantage of how we conduct science (reviewing work for free and paying to publish). Given the preprints taking off at BioRxiv, and the unintended consequences of OA policies, I am happy to hear that Welcome Trust is thinking about this . I think any future policy should protect non-profit publishing particularly from societies. Use the money to fund more science!

preprints postprint (or simultaneous print) at BioRxiv or alike will be perfect. I would one one step printing at "cash-grab" journals like Nat Comm, Cell Reports, etc.

Good step in the right direction.

We need to completely dismantle the whole see above prestigious journal culture. There needs to be a mechanism whereby all research can be published and accessed completely freely, whilst ensuring a robust review process focussed on scientific rigour not the sexiness of the story. This requires funders such as Wellcome (who have lead the way in this area) to continue to push for fully independent publishing platforms that are properly funded to facilitate the system. This will also require a step change in the way that academic outputs are judged in terms of grant applications, REF panels, promotion committees etc. Wellcome has already lead in this area, but could go further, and will need to if the other organisations are to be dragged out of entrenched positions, with no doubt a huge backlash for the for profit publishers who have been creaming off research and teaching funds for years for a system wholly dependent on tax payer and charity support

Researcher

There have been unintended consequences.

For example, science publishers obtained a boost in profits, as they could charge twice, the author and the reader/library. This meant that University libraries suffered increased subscription costs.

Allowing authors to retain copyright would enable all work to be freely available on their institution's (or Wellcome's, or individuals') websites

A revolution in scientific publishing

Yes

Good. It's been influential (and helped to stir the UK research councils to more purposeful action - e.g.

http://occamstypewriter.org/scurry/2012/02/21 Enforce that rule. /an-open-letter-on-open-access-to-ukresearch-councils/) â€" at least in the biomedical sphere.

A significant flaw, however, is Wellcome's commitment to pay APCs on behalf of its funded researchers, whatever the cost. I think require authors to submit preprints and then this has sent the wrong signal to publishers and researchers and is not a sustainable position. The value offered by a journal should be evaluated by researchers on a costbenefit basis. At present (and despite DORA, Metric Tide etc) publishers of prestige titles still have too much clout in the market. As Springer-Nature's IPO prospectus revealed recently, they are not shy about exploiting that power.

Warn funded researchers that unless they make their research OA immediately, they will be blocked from making future applications.

Encourage researchers to seek out costeffective venues for publication â€" by facilitating assessment of publications by panels and reviewers in a journalindependent fashion. One way could be to only cite their preprints in applications (along with a 200 word summary of how the work was improved by peer review).

Stop funding hybrid OA. Yes Adopt a similar OA policy to the Gates Foundation (immediate OA required on publication). Encourage/require preprinting. Encourage open peer review (a process that I think could help to refocus quality assessment on the paper, not the journal).

Researcher

It has made research more accessible.

There is need to support LMIC authors (other than PI) in writing manuscripts.

The current open access regime has meant Yes that only those researchers who have access to funds (through Wellcome or other funded money) are only able to publish . This perpetuates a vicious cycle wherein those who are not funded cannot get published and consequently not get funded. If the Wellcome indeed wants a "fully OA world" it should set up platinum open access journals where research is judged on methodological parameters and not on ability to pay Article Publication Charges.

On the whole, I've been delighted to see Wellcome take the lead on OA -- I think it has and other research outputs. Currently OA set a high standard. The recent experiments F1000Research) are interesting. However. my main concern with the existing policy (as I ensuring that scientists are aware of the understand it) relates to three points: (1) if there is a gold OA route, it should be taken, even if there is a green OA route that also meets the OA policy. (2) With no cap on APCs (or total cost of publication - once APCs and "colour figures―/ page charges are considered), publishers have been left free to charge whatever they like for APCs. There are no market forces driving APCs down. Points 1 and 2 may not matter for Wellcome-funded researchers, but it does affect those without access to funds to cover APCs. (3) By paying for APCs in hybrid journals, there has been little pressure for publishers to convert their journals from closed to open. In general, whilst the gold OA model has helped push things along, it has also caused problems. I think the diamond OA model may now be worth evaluating.

Scientists need to be credited for sharing data I think there are technical and social issues relates primarily to the underlying paper. in alternative publishing models (via eLife and However, this is often just an "advert for the scholarship" (Donoho). Part of this may be selfish reasons to encourage that they share their materials (Markowetz). Grant application forms could evaluate (and credit) the OA resources previously generated does not provide sufficient compute by a PI as part of the evaluation process (just as papers are). Training for PIs is probably also required.

In some fields (e.g. genomics) there are wellestablished repositories for scientific data to be shared. However, in many others, like neuroscience, there are few established very long. I currently recommend scientists use Zenodo (supported by CERN) for such data, as this is not tied to any commercial entity. However, I think research funders (including Wellcome) need to examine seriously the long-term sustainability of repositories. As difficult as it is to get a grant to create a resource (I was part of the CARMEN e-Science initiative funded by EPSRC), funding for long-term support and maintenance is much more difficult.

be managed and developed as a valuable long-term resource. Markowetz F (2015)

that need to be solved. The social issues. e.g. relating to moving away from prestige journals, are hard and not addressed below. On the technical side, we need freely available infrastructure similar to Arxiv/Zenodo for the life sciences for longterm storage of large data sets, code and papers. (Zenodo itself might not suffice: it resources to allow for recomputation of research artifacts, and has limited facilities for activities such as post-publication peer review PPPR.) With a fully-open repository, this will allow other services, e.g. PPPR, overlay journals, text and data-mining, and reproducible research, to operate. Scientists repositories, leading to confusion as to where would then want to deposit their data there to to share, or whether the data will be visible for allow these services to operate on their work, and to integrate with other researcher's work. [Incidentally, sharing PDFs, is far from optimal in terms of reuse -- author's raw manuscripts (in whatever word-processing format) are preferable for reuse. New online journals, such as http://distill.pub, are promising in this regard.] Cost is currently a major factor inhibiting OA. For those researchers who are well-funded, APCs might not be a problem, but for those on limited budgets, a typical APC (2-3000 Software/data infrastructure like this needs to USD in PLOS for example) is too high. Publishers need to be more transparent about the costs to explain why for example some publishers (e.g Ubiquity Press, PeerJ) manage to charge just a few hundred

dollars.

Five selfish reasons to work reproducibly. https://doi.org/10.1186/s13059-015-0850-7 Buckheit JB, Donoho DL (1995) WaveLab and Reproducible Research. In: Wavelets and Statistics, pp 55–81 Lecture Notes in Statistics. Springer New York.

Another approach to overcoming the high cost of APCs is for "diamond OA journals" where no fee is paid by reader or author. Overlay journals have a lot of potential in this field. One recent success story from Mathematics is Discrete Analysis http://discreteanalysisjournal.com/. Papers live on ArXiv but the journal website provides an editorial introduction to each paper before linking to the paper. The direct running costs are very low (typically under \$50 / accepted paper). Funding to establish and maintain diamond OA journals, with strong editorial boards, is required.

Sydney Brenner noted in 1995 that "what matters absolutely is the scientific content of a paper and that nothing will substitute for either knowing it or reading it". Currently, quality of a paper is often inferred by checking the journal where it is published. By moving more to a system where all papers live on a central repository, similar to Arxiv or PubMedCentral, and referred to simply by a DOI, we should be able to focus on the paper's contents, not the envelope in which it was delivered.

Brenner S (1995) Loose end. http://dx.doi.org/10.1016/S0960-9822(95)00109-X

Acknowledgments: thanks to Bjorn Brembs and Laurent Gatto for comments.

As a major funding body, I think your OA policy has had a largely positive effect. It has clearly demonstrated the effectiveness of funding bodies policies to modify the behaviour of major publishers, in this case by causing journals to relax their general access policies to accommodate submissions from Wellcome-funded authors.

Currently, your OA policy on data sharing is not fully open, e.g. "… we expect all the researchers we support to maximise access to research data with as few restrictions as possible―(Q3 in https://wellcome.ac.uk/sites/default/files/wtp0 53977.pdf). Moreover, journal data sharing statements are often conditional, e.g. "The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.― (https://www.springernature.com/gp/authors/r esearch-data-policy/data-availabilitystatements/12330880), which leaves it to authors not only to decide whether a request is "reasonable―but also when data will

esearch-data-policy/data-availability-statements/12330880), which leaves it to authors not only to decide whether a request is "reasonable―but also when data will be disclosed and in what form. A delayed response to a request or data supplied in a proprietary format can be effectively the same as a refusal (closed data). For the sake of reproducibility, data and its analysis from funded research should be disclosed at time of publication and in an open file format.

Wellcome should consider making it a requirement that all data generated or analysed during a project are made publicly available in this way. This policy might be implemented quickly and at little cost to Wellcome by using a reliable free-hosting platform such as zenodo (https://zenodo.org/) which provides DOI and versioning. This would also enhance data security for scientifically valuable information obtained at the cost of many thousands of pounds.

To realize a fully OA world would require that Yes researchers bear no cost for the dissemination and storage of their articles and data yet these are easily accessible to anyone else without charge. A problem for publishing papers under â€~Gold OA' is that while those with sufficient funding can pay article processing charge fees (APC), those without funding frequently cannot. Fee waivers do exist for some journals (not hybrids) but these are generally discretionary not automatic. Unfunded authors may decide not even submit to an OA journal in case they might not receive a fee waiver. â€~Diamond OA' would eliminate this problem at least but there is a unavoidable cost to publishing that needs to be borne by somebody.

Current publishing costs for many full OA or OA-accepting (hybrid) journals could be reduced but not eliminated. APCs are typically several thousands USD and rising, yet the basic cost of article processing is roughly an order of magnitude less (e.g. https://www.nature.com/news/open-accessthe-true-cost-of-science-publishing-1.12676). For example, e-life, an already respected OA biomedical journal which receives Wellcome funding, spends more per article on features and marketing combined than on article processing (https://elifesciences.org/insideelife/b6365b76/setting-a-fee-for-publication). Peer review is or should be free: I have never received or wanted payment for what is a reciprocal benefit. Article formatting can be automated with templates, which have been

To increase public engagement in science and raise awareness of the Trust's own mission, the Trust could dedicate a page on its website to summarise the outcome of each manuscript handling, and perpetual hosting of funded project and provide a link to the data repository.

used successfully for many decades in Computer Science/AI and Physics. But proofreading and editing (if provided), an article's html/pdf/xml and any supplementary data are unavoidable costs.

Suggestions

1. A major obstacle to full OA is the weight given to high impact factor journals. Hiring and promotion committees prefer candidates who are most likely to secure funding. Funding bodies are perceived to prefer applicants who publish in high impact journals. Consequently these committees prefer candidates publishing in high impact journals. High impact journals in turn receive a high volume of submissions and the laws of supply and demand mean they can charge high APCs. If funding bodies did not use journal impact factor as a measure of applicant quality then neither would selection committees. The volume of submissions to high impact journal would fall and so, according to same market forces, should the cost of APCs. Your OA policy has already affected the publishing market in a small but significant way, but making your grant evaluation policy "journal-neutral―could have an even greater effect for OA and the health of Science in general.

2. To help reshape the OA terrain, Wellcome could seed the development of low-cost OA journals for applications supported by field leaders. The e-life model, for instance, provides only lower-cost not a low-cost solution for OA publication. Low cost APCs would have a dual benefit in reducing both the budgets of grant allocation and fee waivers. The alternative would be to reach agreements with major publishers to mitigate costs such as negotiating a lower price directly with major publishers for an APC voucher system to expand support for fee waivers. But why should publishers continue to make a profit out of charitably-funded scientific research?

Wellcome's existing policy has undoubtedly increased the volume and proportion of the UK's research output that is available as gold open access. However, since Wellcome-funded research is very aware of the problems, but when a a very small proportion of global research output, its policy cannot make a significant global impact on realising open access except as an example to others. Unfortunately, it may well have had a negative impact in this regard, by contributing action against the publishers. I realise that to ongoing price inflation of APCs (see https://www.jisc.ac.uk/reports/apcs-andsubscriptions). The fact that no cap has been put on the amount paid for an APC has contributed to price inflation, and the continued support for hybrid APCs (which on average are more expensive), means that costs are not being sufficiently constrained.

If a policy of supporting gold open access is to continue, publishers must not be allowed to provide the poor level of service that is sometimes seen. I know that Wellcome is publisher fails to make a work open access despite an APC being paid, immediate sanctions should be enacted, e.g. demanding Wellcome Open Research may well play an a full refund, refusing to continue supporting doing so would be contentious, but publishers funder platforms because diversity of will not change their behaviour unless they are forced to. The main reform that is needed is to support gold open access without APCs (see next answer for details).

It is essential to support gold open access without APCs. The APC funding model is impossible to scale up to encompass the whole world's research output, because the funds to support this model are unequally distributed and thus it excludes researchers from the global South. Platforms such as your important role in a non-APC future, though it publication at that venue, or even taking legal concerns me that one company is responsible for building and hosting so many of the new publishing venues is important.

> I cannot emphasise enough that the market will not, by itself, lower the price of APCs unless research funders take action on this issue (I recommend looking at the policy of Austria's FWF). Both the RCUK/UKRI open access policy and Wellcome's policy have encouraged market concentration with â€~prestigious' legacy publishers who are able to set their own price. This has deleterious knock-on effects for researchers from less wealthy nations who cannot afford to pay such high APCs.

If Wellcome continues to support the APC funding model and hybrid journals above all else, it will not be acting in a way that is likely to lead to a fully open access world.



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Version 1

Wellcome exists to improve health for everyone by helping great ideas to thrive. We're a global charitable foundation, both politically and financially independent. We support scientists and researchers, take on big problems, fuel imaginations and spark debate.

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