



# COVID-19 Rapid Review cross-publisher initiative: What we have learned and what we are going to do next

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## Key points

- The global crisis sparked collaboration between publishers and service providers to successfully address an immediate problem and demonstrated the possibility for future partnerships.
- Encouraging experts to join a reviewer pool and quickly review the preprint and journal submissions, we were able to publish COVID-19 research more quickly.
- The initiative confirmed little author uptake of inter-publisher journal transfer option.
- The collaboration showed wide consensus on open science practices which will ensure faster and more reliable research findings.

## INTRODUCTION

It all started with a group of publishers and service providers thinking what can we do to help? We had already started by making all our COVID-19 content open access (if it was not already) (Wellcome Trust, 2020), some of us had waived Article Processing Charges and there were ongoing conversations between some of the publishers in the group and the Copyright Clearance Centre about what more we could be doing—in our own small way—to help.

The research community quickly became flooded with preprints and journal articles submissions of highly variable quality. We needed to work collectively to help ensure research articles were filtered, assessed and published quickly. The open letter helped galvanise the community into reviewing and publishing COVID-19 work more efficiently. Phil Hurst, The Royal Society (Greaves et al., 2020)

In addition, the research community also had a number of issues they were contacting publishers about. An unprecedented number of preprints and journal article submissions on one topic were being submitted with insufficient researchers available to review them and this was overwhelming key academics in the field who were being asked to review nearly every submission (or what felt like every submission). In addition, the media and

governments were quoting unreviewed preprints and journal articles were being retracted. At the same time, the traditional journal peer review system was proving too slow.

So through *ad hoc* conversations, a few publishers and industry service providers agreed to get together to help in the battle against this common enemy. We initially started in a small way between a few of us (Hindawi, PLOS and The Royal Society) to send out of scope submissions to more relevant journals as publishers were being inundated with papers not in scope or format for their titles - and this felt like a good way to speed up the situation for authors. In addition, PeerJ were reaching out to others wondering if there was more they could do to speed up peer review; alongside the desire of Copyright Clearance Centre to help we decided to bring the whole group together - as well as some more publishers, industry players, and OASPA to create a common goal to help the academic community at this time to ensure papers were published quickly, with robust peer review and openly disseminated to the right audiences. We also wanted this to be as open as possible, link up with preprints and data and increase the reviewers available to review. So, there was a lot to put in place quickly.

## OBJECTIVES

In March 2020, in what became the COVID-19 Rapid Review (C19RR) group, we came up with the following measures that we

could all sign up to and implement within a short space of time which felt like it would address the key issues in the community:

- Expand the pool of reviewers
- Encourage transfer of manuscripts between publishers
- Ensure articles submitted to journals have a preprint
- Ensure the manuscripts have data

These eventually evolved into a call for action (OASPA, 2020) which seven publishers, along with the CCC and PRReview signed, and which was endorsed by OASPA. The group has now been joined by more publishers and endorsers and represents over 20 organizations and companies working in academic publishing.

### Objective 1: Expand the pool of reviewers

As researchers directly working in viruses and viral transmission were already inundated with requests to review, we need to expand the pool of researchers to others with suitable expertise relevant to COVID-19 from all career stages and disciplines, including those from industry. We established an online form where these groups could sign up using emails from all the Publishers to their databases and social media to reach as many academics as possible, to Rapid Review, along with an upfront agreement that their reviews and identity could be shared among publishers and journals if submissions get rerouted. Plus, they were committed to delivering a review within five working days.

We also called on reviewers to identify and highlight important and crucial COVID-19 preprints (e.g. by using <https://outbreaksci.prereview.org/>), as early as possible, to optimize the limited time of expert reviewers who are subsequently invited to review the most important and promising research. This was a key part of the initiative in the bid to 'close the loop' between early stage research and published papers.

### Objective 2: Encourage transfer of manuscripts between publishers

As we all know, the process of submitting to a journal, peer review, and rejection, followed by submission to another journal and starting all over again is inefficient use of everyone's time. Therefore, we sought permission in advance from rapid reviewers to share their names and reports with other publishers in the group.

We also asked authors to support reviewers and publishers in this endeavour by ensuring the deposition of their submission as a preprint, and by working with publishers to make the peer-reviewed article and associated dataset, software, and model available for reuse as rapidly as possible.

### Objective 3: Ensure all articles submitted to journals have a preprint

We called on all publishers to actively facilitate posting of COVID-19 preprints to a relevant preprint server (after

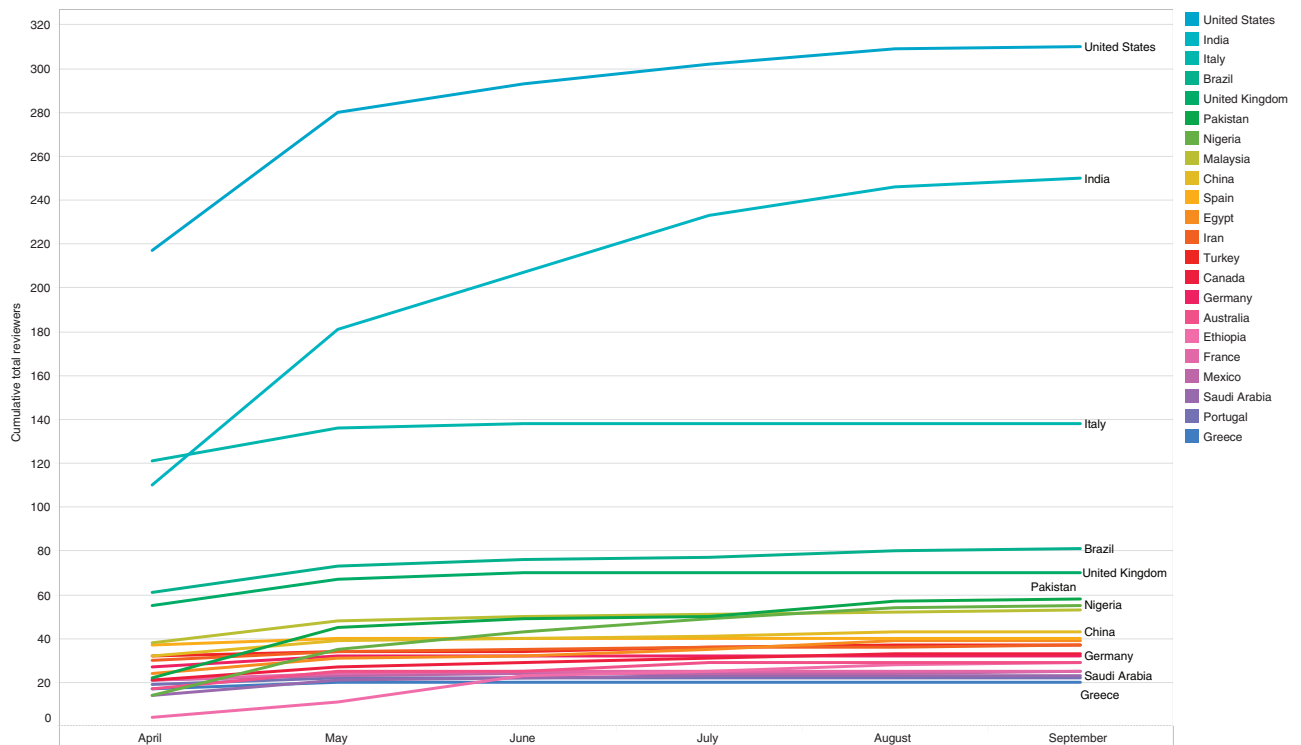


FIGURE 1 C19 Rapid Reviewer Sign up Rates. based on country of origin, from April until September 2020.

confirming the submission warrants further review), if authors have not already posted a preprint. We also asked publishers and editors to consider comments on preprints during the journal peer-review process.

#### Objective 4: Ensure the manuscripts have data

We asked publishers to ensure all COVID-19 submissions include a mandatory data availability statement (DAS), if they do not already do this for all submissions. Publishers should aim to facilitate the stewardship of FAIR data and software code sharing underlying prioritized COVID-19 papers (and associated preprints) during the pandemic.

### OUTCOMES

We had a strong response, with some 1,500 researchers from around the world signing up for Rapid Review within a few days and the list now totals nearly 2,000 researchers. The response from the countries underrepresented in peer reviewer pools (Greaves & Treadway, 2020a) was most encouraging with strong sign ups from China and the Global South (see Figure 1). It was also interesting that the number of reviewers who signed up correlated with the volume of COVID-19 cases seen in those countries with high sign ups from Italy, Brazil, and USA. Perhaps an increased rate of infection encouraged more academics to sign up and assist?

Using their own reviewers alongside this pool, all publishers in the group have been able to fast-track COVID-19 papers for peer review and publication more rapidly than non-COVID-19 papers. All publishers in this collaboration have seen a rapid increase in COVID-19 submissions (and beyond that field), and it is clear there is more desk rejection happening by editorial teams to not only allow authors to submit elsewhere more quickly but to prevent overburdening already stretched peer reviewers who already could not cope with the volume of papers to peer review.

So far only 10% of Rapid Reviewers have been invited to review. There could be numerous reasons for this including Editor engagement, insufficient information of subject area expertise or simply reticence to use volunteers. The recent survey (Greaves & Treadway, 2020b) we ran with the group however indicated many have been used (just not directly from the Rapid Reviewer pool) and many have engaged with reviewing preprints on sites such as PREReview. Due to this they are all now encouraged to review preprints on PREreview so we can aim to showcase the papers ready for more formal review at a journal.

We were surprised, however, that there has been little or no uptake up of the transfer option by authors. We therefore followed up with a small survey of authors - and it seemed a good number opted to resubmit to another journal rather than request transfer. We concluded that we need to do more to communicate about transferring and the benefits; and to encourage authors that sharing sometimes negative reviewer reports is not a bad thing and could ultimately speed up publication of their manuscript.

We have also been delighted to see more of our industry colleagues join the group and for our initiative to number over 20 publishers, preprint sites, and industry experts. The group continues to work together to maximize collaboration around COVID-19 research.

### CONCLUSIONS AND FUTURE PLANS

The COVID-19 pandemic has highlighted the need, like never before, for open science and open research; and the benefits this can bring to science overall, publishing and the advancement of scientific knowledge.

The pandemic has helped confirm (Flanagin et al., 2020) that preprints are an important element in the scholarly communication of the life sciences. They must not be seen as rival system to journals - they are complementary to one another. Together they allow researchers to communicate their ideas, establish priority and, most importantly, expose their work to their peers for assessment.

A challenge for the future is to better connect the two to make the publication process more efficient. We have started developing an Editors' Portal on PREreview so journal editors can see directly which papers their peers believe are ready for more formal peer review - allowing us to truly 'close the loop' and embed preprints into the research workflow. We are aiming to launch this initiative in Q1 2021 and will work with our journal editors to monitor the impact alongside our RR pool who will be reviewing C19 preprints using standardized criteria.

A report on research data (Royal Society, 2012) highlighted the need to ensure research findings must be backed by data. Some pioneers such as PLoS (Silva, 2014) have met this challenge by mandating the inclusion of data accessibility statements (DAS) within the journal linking with open datasets with journal articles. This initiative tries to make this practice more widespread. As part of this, we have recently mandated, as a group, that all COVID-19 papers published as part of the group must have a DAS and link to the data - this is imperative if we are to truly embrace open research and ensure all parts of the research are available to readers of the journal article.

However, the group is not stopping there - we are regularly reporting on our data and aim to release a report about 1 year after our launch to update the industry on our findings. We are also now working closely with Research on Research Institute (RoRI, <http://researchonresearch.org/>) to answer some key research questions they have around peer review - and how the C19RR initiative might have impacted the speed of peer review and whether peer review changes the version submitted to a preprint site and that published (and if so by how much). That group is also aiming to report on their findings in 2021 and are keen to involve other publishers in that research whether or not they have been involved in the wider initiative.

Overall, we view this as a successful first step in publishers working collaboratively together to solve some of the industry's biggest challenges - we are all ultimately aiming to serve the

research community and drive forward the advancement of open science. The group came together due to a global pandemic and put in place cross publisher agreements on key issues that some of us have tried to implement for years. This shows us that we can work together as an industry, rapidly, to solve key problems for our audience when we are motivated to do so. We, as a group, aim to stay working together even when the spotlight is no longer on COVID-19 as the research community will expect a more collaborative, open publishing industry in 2021 and beyond.

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