Plan P - Transform to Open Science

Transscript of a presentation on Plan P by Gunther Eysenbach
https://www.youtube.com/watch?v=DRGpRh-_N3Q
(based on a presentation at the Force11 Conference on Dec 9, 2021)

SUMMARY KEYWORDS

journals, preprint, peer review, plan, publish, institutions, publisher, manuscript, services, publications, review, science, author, agreements, peer, open, component, research, JMIR, university, funding agency, offer

SPEAKERS

Dr Gunther Eysenbach, CEO & Founder, JMIR Publications

Hello, my name is Gunther Eysenbach. I am the founder and CEO of JMIR Publications. And today I want to talk to you about Plan P.

Plan P or "Transform to Open Science" is JMIR Publications' offering primarily for institutions, but also for funders and publishers as well, as well as for peer review services.

What we want people to associate with the letter P and Plan P are open science related terms like protocols, preprints, but also portable peer-review, peer review innovations, open access publication, and new research assessment metrics for promotion and tenure.

The overarching goal here is to facilitate a transition to 100% open access, and to encourage open science. And we think that Plan P is an alternative or a complementary plan to other approaches, which are out there (Plan S and Plan U). And we think this is an interesting offering for institutions, as well as for funders.

JMIR Publications and JMIRx

To start, just a couple of words about JMIR Publications.. We are a mission driven publisher founded over 20 years ago in 1999, with academic roots. I myself am a former academic, I used to be a professor in the field of health informatics, and I am actually one of the most cited health informaticians in the world. So health information was and is my passion. And being a publisher is kind of an extension of what I've been doing as an academic.

Our focus is knowledge translation to different audiences, including patients. That has been a hallmark of all JMIR publications - that we also keep in mind that our end users may be patients (and all of us will be patients at one point!) and as such, Open Access (and Open Science) is a natural requirement for patients to be able to access research. So that's why we have been an Open Access publisher, from

the beginning: 100% of our journals are Open Access, we were one of the pioneers in open access. And we are a co-founder of OASPA, the Open Access Scholarly Publishers Association.

A secondary goal JMIR Publications is really to re-engineer scholarly publishing. And that's also where Plan P fits in.

We are now one of the leading open access publishers in Canada, at least by volume - we are publishing over 4200 papers a year. And we see ourselves not just as a publisher, but also as a disruptor, and tech company. So at our 20th anniversary birthday, in 2019, we published a special theme issue, and in this theme issue, we reflected a little bit about the past and the future. We have been disruptive and innovative in terms of pioneering Open Access publishing, but what's the next step? The next step in our mind is open science. And that's what we are going to focus on for the next 20 years: To advance open science. And again, this is where Plan P fits in.

The JMIRx Superjournal Series

So what we [announced in this 20th anniversary theme issue](#) was the creation of a new kind of journal, a journal that is also known as an overlay journal. We call this a superjournal, or more precisely a series of superjournals. JMIRx is the title of this series of journals. We have already created JMIRx Med, which focuses on medicine (other titles, including for example JMIRx Bio with a focus on biology, will be launched in 2022).

What is special about overlay journals is that they sit on top of preprint servers, and they offer a rapid peer review of existing preprints. So this is very much in line with what's also known as a PRC model, first publish as a preprint, then review and then curate in journals. Publication in JMIRx (or other Plan P journals) is one step of the curation process.

JMIRx Med is now one of the first - probably the first - PubMed indexed overlay journal in the world. And we want to promote preprints with this journal and also with Plan P.

Preprints

So why do we want to promote preprints? There is now a lot of evidence out there that immediate Open Access for all research output benefits science, and preprints are a form of green open access.

This has also led to proposals like Plan U, which is a proposal brought forward by Richard Sever and John Inglis and others. These people are managing the MedRxiv and BioRxiv preprint servers and their argument is simply that if everybody would publish their work as a preprint, then we would achieve 100% open access.

Now, the problem with Plan U is that it requires a mandate of preprinting, which we don't think is really feasible - especially for institutions - to mandate that everything is being published as preprint first. But again, as you will hear, this is where Plan P adds value, because we are incentivizing researchers to publish their work as a preprint first, as opposed to mandating.

The other component that's missing in Plan U is obviously the peer-review component. If researchers published something as a preprint then the question remains is this valid research? We have seen in the COVID pandemic that it is very useful to be able to publish something very rapidly as preprint, but the question always remains - is it valid science? And again, this is where Plan P fits in, which has a peer review component.

The other advantages of preprinting include that it facilitates knowledge transfer, increases altmetrics scores and citations, it increases accountability and transparency, leads to quicker publication of research results, and broader peer review may increase quality.

What is Plan P?

So what is Plan P? Depending on the audience, there are a couple of ways to frame Plan P in an "elevator pitch".

So, we refer to this as a *framework and plan to achieve 100% Open Access for an institution*. And it's fully compatible with Plan S and Plan U.

It can also be seen as an *accelerator for open science implementation*. And when we talk about Open Science we refer to open science components like preprints, but also to Registered Reports, and the idea that researchers first publish protocols to increase accountability and transparency of the work they intend to do. All these are components of Plan P.

Plan P could also be seen as a *collaboration between open science friendly institutions, funders, societies, Peer Review Services and journals*.

And it is also a *business model*. The business model is compatible with the University of California model (UC calls it multi-payer model [https://osc.universityofcalifornia.edu/wp-content/uploads/2019/06/UCNegotiationToolkitforTransformativeAgreements_May2019.pdf]), a shared cost model, where part of the publication costs are carried by the institutions, and another part is supported by funding agencies. In the agreement the University of California signed with us (first with us, but then also with other publishers), the first 1000 US dollars (of an Article Processing Charge) is covered by the institution. And the rest is covered by the grant that the researcher holds.

It's also an *innovation to experiment with new forms of peer reviews*.

And it is also a plan to *reform research assessment* to move away from the Impact Factor centric system. We are also creating new metrics for research assessment metrics that measure for example, adherence to best practices of open science, and also AI supported scoring of the quality of reporting of research.

The Plan P Ecosystem

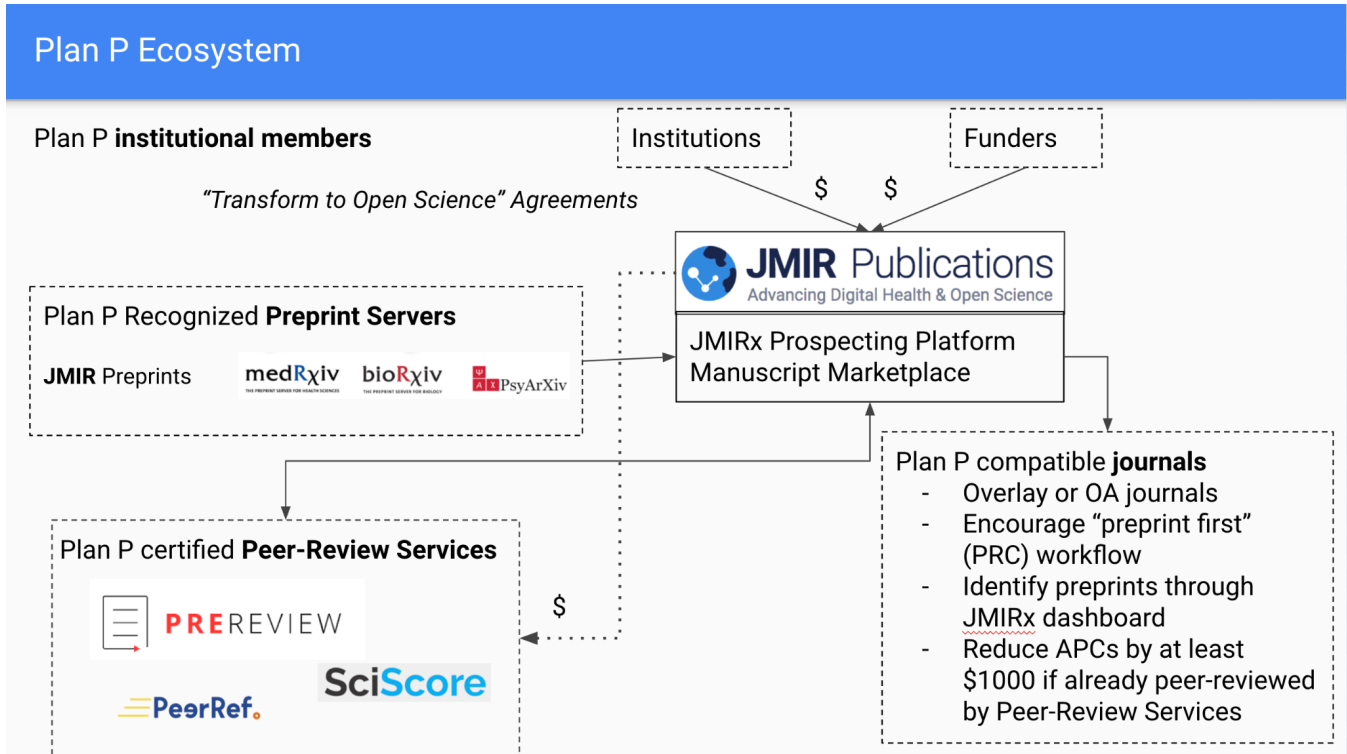In the Plan P ecosystem, we have a variety of players (Figure 1).

Figure 1: Plan P Ecosystem

First of all, we want to sign agreements with *institutions* (Iowa, UC, etc). That includes libraries, universities, other research institutions. We call the "transform to open science agreements". In these agreements, institutions pay either a fixed fee, or a fee that is dependent on their research output, and what they have been publishing with JMIR Publications in the past.

In the future, we will sign more agreements, also with funding agencies (e.g. Infoway, CZI), so that the other component can be billed directly to the funder, possibly. But for the time being, we are focusing on selling this to institutions.

Other players include *preprint servers*. We are collaborating with preprint servers, we have our own preprint server, JMIR Preprints. But we also tapping into third party preprint servers, for example MedRxiv, BioRxiv, PsyRxiv, ArXiv, and others. We call these Plan P recognized preprint servers.

Figure 2: Logos for official Plan P partners, as well as portable Peer-Reviews that are recognized by Plan P compatible journals. The logos are only authentic if the link to a landing page on http://planp.science which confirms the partner is in good standing. (© JMIR Publications, Unauthorized use prohibited)

Another important player are freestanding *Peer Review Services*, which peer review preprints. There are a couple out there. And we are starting to make agreements with them to call them *Plan P Certified Peer Review Services* (these services carry the Plan P logo and the. One of these peer-review services is for example PREreview. And together with PREreview, we are also innovating in terms of the form of peer review. In the case of PREreview, we are organizing preprint journal clubs with webinar-like events where we invite the community to discuss a preprint together with the author. And that webinar is transcribed and it is used in lieu of a traditional peer review report. Other examples for freestanding Peer Review Services are for example PeerRef, and we are also working with very innovative research assessment services, which are perhaps not traditional peer reviewed services, but also provide a

service by rapidly (and automatically) assessing preprints. One of these services for example SciScore, which is an AI supported tool to assess the quality of a manuscript.

And the last player here are the journals for the curation aspect within the PRC model (preprint - review - curate) because at the end of the day, we want to offer the researcher the opportunity to publish their peer reviewed preprint in a journal, we call those journals *Plan P compatible journals*. We are starting with the JMIR journals - all JMIR journals are Plan P compatible journals. In the future, we will invite other journals to participate in this as well. They should be open access (but as preprints are a form of green open access and these journals agree to a prerprint-first intake, also subscription journals would qualify). They can be overlay journals. They encourage a preprint first workflow, and we help them to identify suitable preprints through our JMIRx infrastructure, which is basically a dashboard which allows editors of these journals to search preprints (and to identify associated existing reviews from peer-review services or import preprints into their submission system) and to target preprints which may be potentially in the in the scope of their journal. And they have to reduce the Article Processing Charge by at least $1000 (subscription journals have to offer a honorarium for the author), because what they get is basically an already peer reviewed preprint (the matchmaking between preprints and journals happens in the "manuscript marketplace", see below).

Workflow for the author perspective

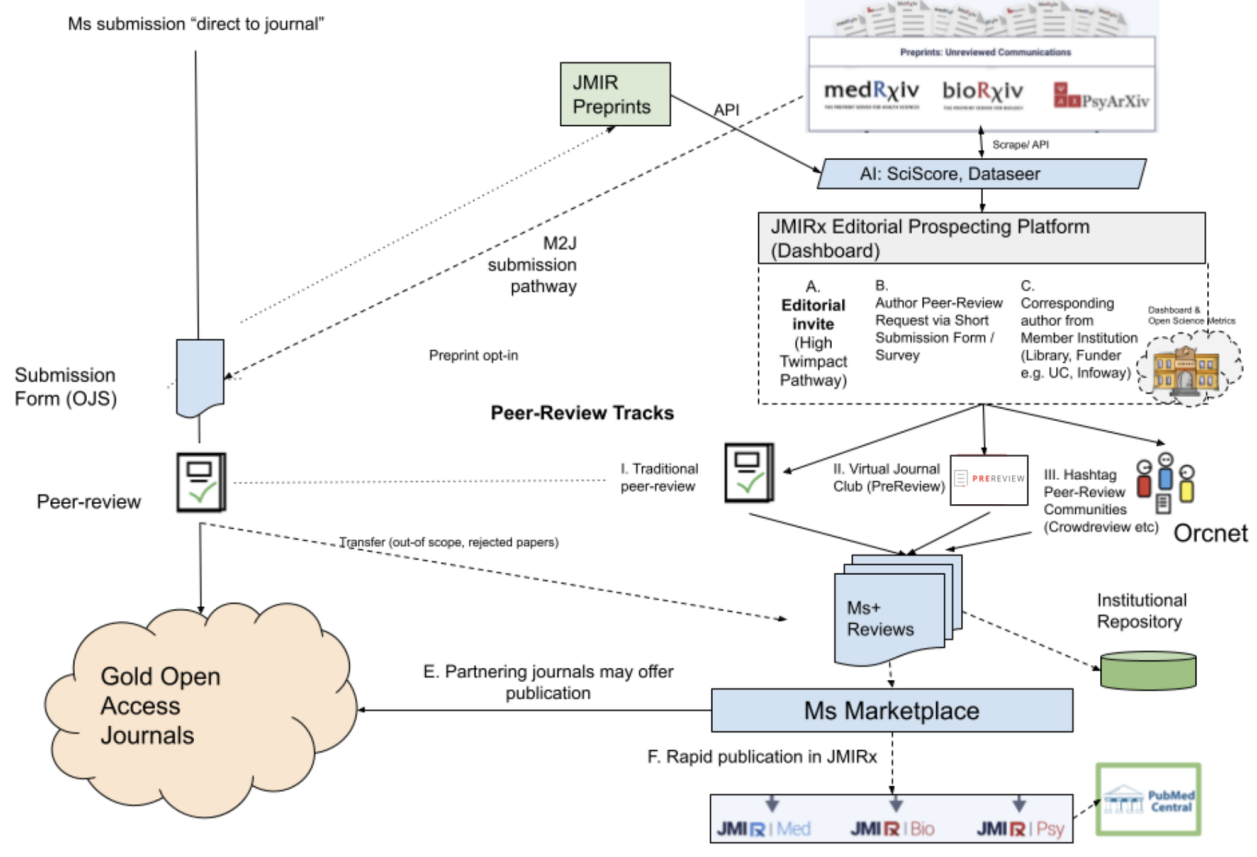From the author perspective, the workflow is shown here in this slide on the right side in Figure 3.

Figure 3: Workflow from the author perspective

The left side shows the classic submission pathway - how authors typically submit a manuscript to a journal. And that is also how today most authors submit their work to JMIR journals.

On the right side is the "preprint first" submission pathway. So in that pathway, authors first publish a preprint, for example, in MedRxiv or JMIR Preprints. And our JMIRx dashboard (which we also call editorial prospecting platform) taps into these preprint servers and identifies potentially suitable manuscripts. And we also send a survey to authors asking them if their preprint was already submitted to a journal, in which case the preprint is not eligible to be peer-reviewed, because we do not want to create redundancies in terms of peer review.

But if the author is from a Plan P member institution, and the preprint is not submitted to a journal yet, the author can opt in to have their preprint peer-reviewed.

There are different peer review pathways. One (I) is a traditional peer review. And then there are some innovative forms to peer reviews - as I alluded to earlier, (II) is the PREreview peer review pathway with preprint journal clubs (and other external peer-review services like PeerRef will be added as other options). And then (III) there is also a pathway where we will experiment with what's known as a crowd

review approach. And where we target specific communities, which we call hashtag communities. They are called hashtag communities because we encourage preprint authors to target those communities with hashtags in their preprint. So this preprint then goes through that peer review process if the author opts-in (e.g. through the JMIRx submission form). And the peer review process may lead to several revisions of the manuscript.

At the end of the day, there will be a final manuscript with a peer review history. And then the author gets the choice to put the manuscript and the peer review reports on what we call a manuscript marketplace. This is a platform, which basically matches manuscripts (peer reviewed preprints) with journals who might be interested in publishing the peer reviewed manuscript. So these are the Plan P compatible journals. Editors tap into that marketplace and make publication offers. As I have previously indicated, a requirement is that the APC is reduced by at least $1,000. And the author can decide which journal he wants to publish the paper in. The other option (the default option) is that we publish the peer reviewed manuscript in a JMIRx journal.

So that - in a nutshell -, is what Plan P has to offer. If you want to learn more about this, please go to http://planP.science. And there's also a contact form there. We want to hear from you if you are an institution that is potentially interested in becoming a Plan P member, if you are a peer review service, who wants to get reimbursed for peer reviews (because we are obviously passing on the revenue we are getting from institutions). We are passing that on partially to the Peer Review Services. And we also want to hear from you if you are a publisher. If you are a publisher, we may add your journal to the list of Plan P compatible journals and we can give you access to our prospecting platform and to the manuscript marketplace. Thank you very much.