

The Virgen Macarena Hospital's research output in the Andalusia Health Institutional Repository

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Abstract

Introduction: The Health Institutional Repository is intended to gather the open access research output from the Andalusia Public Health System. Even though a national law requires the deposit of published research outcomes funded with public money, there is no institutional policy for other published documents. Knowing exactly how many articles can be submitted to the Repository in any of their authorized version is a key point in determining how to encourage our authors to publish their work according to the principles of the open access paradigm. The Virgen Macarena Hospital is one of Andalusia's district hospitals and has been chosen as a sample for the present study.

Objective: To analyse what the proportion of the Virgen Macarena Hospital's research results published from 2011 to 2015 is open access and what is not. To know how many articles are already archived in the Repository using the publisher's version or PDF and how many could be submitted using one of the author's versions.

Methods: Firstly, we searched the Hospital's research output on Impactia, the application developed by the Andalusia eHealth Library to quantify the Andalusia Public Health System scientific output, the Web of Science and other databases. Secondly, we checked the publisher's self-archiving policy of each one of the journals chosen for the Hospital's authors on specialized databases and the publishers' web sites. According to the obtained data, we compared the number of publisher's versions with the author's ones allowed to be submitted to the Repository. In addition, we consulted how many of the subscription-journals are considered to be hybrid journals.

Results: More than 70% of the journals chosen by the researchers are subscription-based. None of these journals allows the publisher's version to be archived. Over 73% of them offer an open access option to make articles free for everyone to read immediately after publication if the authors agree to pay a fee. However, fewer than 20% of the journals are open-access. Around 15% of these allow the re-use of publisher's PDF, whereas 3% are only gratis open access and they do not permit self-archiving.

In terms of articles, fewer than 15% of them can be submitted to the Repository as publisher's version. All of these authorized PDF are already archived. However, 75% of the articles could be archived using one of the author's versions. Not one of those articles is in the Repository.

Conclusions:

Only a small proportion of the articles published by the Virgen Macarena Hospital's researchers is archived in the Repository. It seems highly recommended to take active measures to increase the number of deposited articles. These measures should be directed at promoting open access among authors and, especially, at encouraging self-archiving.

Key words: Open Access; Health Repository; Self-archiving; Author Rights; Publisher Policies.

Introduction

The Health Institutional Repository is intended to gather the open access research output from the Andalusia Public Health System. In order to do it more effectively, the strategy followed by the Andalusian eHealth Library in the development of the Repository was to start by making a batch ingest of scientific articles published in academic journals from 2006 to 2011. The selected articles had been written by professionals of our Health System, with the criterion that they had permission to be self-archived using the published version. The librarians at hospitals and institutions of the Health System were the people in charge of the review and submission of these articles.

The aim was to achieve two twin objectives: to gain experience in the development of the process and criteria of submission acceptance; and to give a perspective to authors about the benefits of self-archiving their articles in the Repository.

It has been three years since the Repository was made publicly available. This allows sufficient time to quantify how many articles are archived from 2011 to 2015 using the publisher's version and how many could be submitted if we used one of the author's versions.

Objective

Knowing exactly how many articles can be submitted to the Repository in any of their authorized versions is a key point in determining how to encourage our authors to publish their work according to the principles of the open access paradigm. As the Virgen Macarena Hospital is one of Andalusia's district hospitals and one of the most productive in terms of scholarly publishing, it has been chosen as a sample for the present study.

The purpose of this poster is, firstly, to analyse the proportion of the Virgen Macarena Hospital's research results published from 2011 to 2015 that is open access, and assess whether this figure has risen in the period studied; and, secondly, to establish how many more articles could be submitted using one of the author's versions.

Methods

To achieve these objectives, we searched the Hospital's research output on Impactia, the application developed by the Andalusian eHealth Library to quantify the Andalusia Public Health System scientific output, as well as the Web of Science and other databases. Once we had collected the data, we checked the publisher's self-archiving policy with reference to Institutional Repository for each one of the journals chosen for the Hospital's authors on specialized databases (mainly, [Sherpa/Romeo](#), [Dulcinea](#), [DOAJ](#) or [SciELO](#)) and the journal homepage. According to the obtained data, we compared the number of articles held in our repository, with those that could be submitted, and with those ones which cannot be self-archived in any of their versions. The last group includes those where the publisher's self-archiving policy is unknown. In addition, we consulted how many of the subscription journals offer authors an open access option by paying a fee and for this reason are considered to be hybrid journals.

Results

Scholarly publishing business model and journals' self-archiving policy

Authors from the Virgen Macarena Hospital published 1313 articles in 396 academic journals from 114 different publishers during the studied years.

The largest group of journals chosen by the Hospital's researchers is by far **subscription-based model**. This business model represents an average of 75% of total of journals chosen per year. 80% of the articles are published in this journals.

| | | OA Free OA – <i>Gratis</i> <i>OA</i> | | Subscription / Hybrid | Not self- archiving* |
|------|----------|--|----|--------------------------|-------------------------|
| 2011 | Journals | 14 | 4 | 88 | 10 |
| | Articles | 20 | 9 | 159 | 20 |
| 2012 | Journals | 14 | 5 | 112 | 7 |
| | Articles | 25 | 10 | 188 | 16 |
| 2013 | Journals | 18 | 6 | 92 | 11 |
| | Articles | 28 | 10 | 181 | 26 |
| 2014 | Journals | 19 | 6 | 114 | 10 |
| | Articles | 34 | 14 | 221 | 13 |
| 2015 | Journals | 31 | 3 | 110 | 9 |
| | Articles | 66 | 7 | 234 | 24 |

*(subscription/unknown policy)

Table 1. Distribution of published articles among journals depending on business model and self-archiving policy

At least initially, none of these journals allows the publisher’s version/PDF to be archived in the Repository. Only less than 1% of this group of journals authorizes to submit the aforementioned version after 12 months embargo.

Over 73% of the subscription-journals offer an open access option to make articles free for everyone to read upon publication if author agrees to pay a fee. Therefore they are considered to be **hybrid open access journals**. However, it does not always mean that author has permission to self-archive the publisher’s version in an institutional repository. In the period studied, it does not seem an option to have been considered by the Hospital’s researchers.

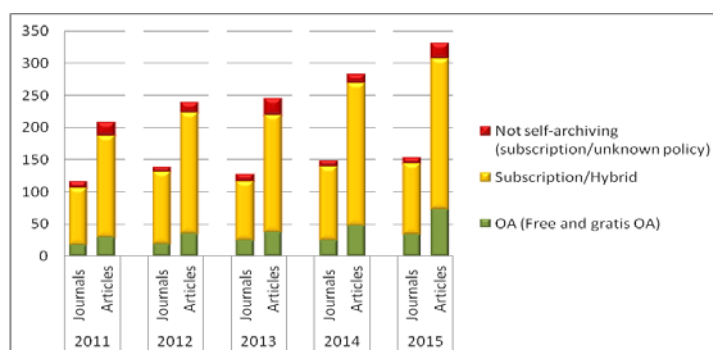


Figure 1. Bar chart showing the distribution of published articles among journals depending on business model and self-archiving policy

Interestingly, although **open access journals** represent an average of over 17% of the total of journals from 2011 to 2014, this proportion has risen to 22% the last year. However, a quarter of the open access journals from 2011 to 2014, and 10% in 2015, is only gratis open access. This means that articles are freely available to be read upon publication, re-use and self-archiving is not permitted. In consequence, from the 220 articles published in open access journals, more than 20% of them (50) cannot be self-archived in the Repository in any of their versions.

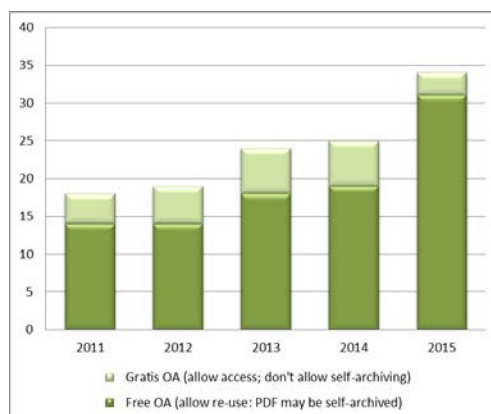


Figure 2. Open Access Journals

Finally, there is a small group of journals (both subscription-based and open access) whose their self-archiving policy is unknown because it is not publicly stated. In the same way as gratis open access journals, 99 articles published in this group cannot be archived in the Repository.

Version of articles to be submitted to the Institutional Repository

As has been said previously, 1313 scientific articles, written at least by one professional from the Virgen Macarena Hospital, were published from 2011 to 2015.

According to publisher's self-archiving policy, 184 of them (14%) can be submitted to the Repository as published version. It includes free open access journals and some subscription-based ones, which give permission to archive this version after 12 months embargo. Most of these authorized PDFs are already archived.

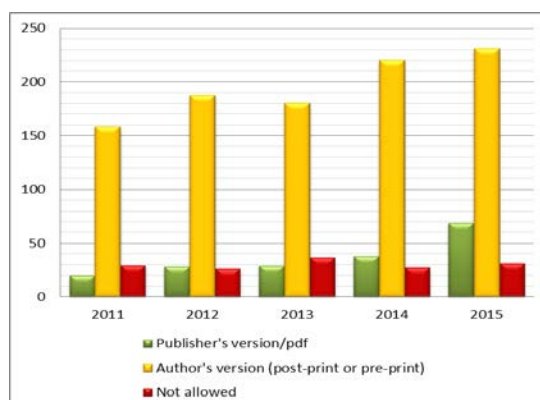


Figure 3. Articles that can be self-archived in the Health Institutional Repository

In contrast, 980 articles (75%), most of them published in subscription-based journals, could be archived using one of the author's versions. However, not one of those articles is in the Repository. The remaining 149 articles (11%) cannot be self-archived in any version. These articles are from gratis Open Access journals, some subscription-based ones and other ones which self-archiving policy is unknown.

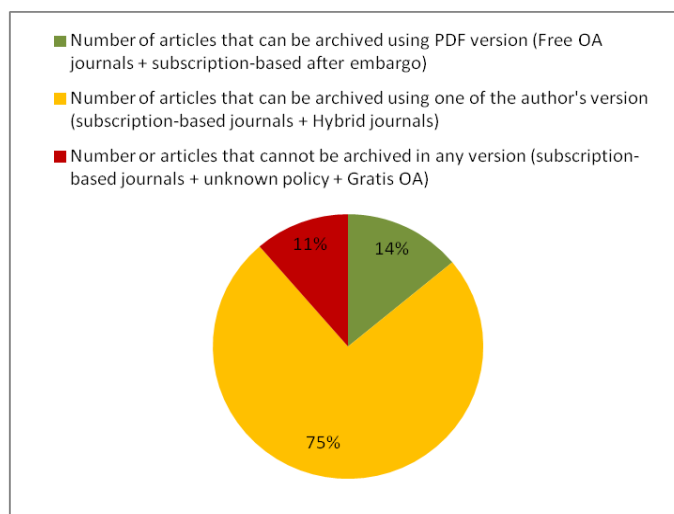


Figure 4. Percentage of articles that could be in the Repository

Conclusions

Only a small proportion of the articles published by the Virgen Macarena Hospital's researchers is archived in the Health Institutional Repository, even though a much higher proportion could be submitted by authors using their post-print or pre-print version. However, a significant group of articles cannot be self-archive in any version for the reasons said previously.

Since authors are not only those who provide their article's version, but also who decide where to publish their research, counting on their participation becomes the crux of the matter to ensure open access to research outcomes.

Therefore, according to analysed data, it seems highly recommended to take active measures directed at promoting open access among authors and, especially, at encouraging self-archiving. Making them aware of their options and their responsibility in this regard must increase the number of deposited articles in the Health Institutional Repository.

Tables and figures

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Figure 2. Open Access Journals

Figure 3. Articles that can be self-archived in the Health Institutional Repository

Figure 4. Percentage of articles that could be in the Repository depending on the authorized version