

## **The impact of open access for the Medical Library Association**

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## Abstract

**Objectives:** To determine the measurable impact, if any, on membership figures and finances of the Medical Library Association, following the move of the *Journal of the Medical Library Association (JMLA)* to an open access format. In addition, to assess the views of the JMLA readership and the MLA Board of Directors regarding certain aspects of that decision.

**Methods:** Analysis of membership and financial figures, online survey of readers and editorial board members, and examination of PubMed Central (PMC) activity reports.

**Results:** Membership figures for MLA have declined over the past decade but the move to open access does not appear to be a significant cause. Advertising revenues are flat and subscription revenues have declined, and these changes are associated in time with the move to an open access journal. JMLA readers, as well as the MLA Board of Directors indicate strong support for the open access journal, and PMC activity reports indicate a substantial increase in readership, particularly from outside the health sciences library community.

**Conclusions:** The move to an open access journal has greatly increased the readership and reach of the *JMLA*. The impact on membership figures and revenues needs to be monitored closely, but there does not appear to be any dramatic negative effect at this point. In general, open access has served to

further the goals of the *JMLA* in promoting access to the literature of health sciences librarianship.

## Introduction

In June of 2001, the *Bulletin of the Medical Library Association* (which became the *Journal of the Medical Library Association (JMLA)* in January of 2002) became publicly available in an electronic version on PubMed Central (PMC). Initially, issues from January 2000 forward were available. In November 2003, the entire backfile, going back to volume 1, 1911, became available. At the present time, each issue goes live on PMC within a week or two of the date that hardcopy issues are mailed to subscribers.

Critics of various open access models have suggested that moving to an open access journal could have a negative impact on an association's membership retention rates and overall financial health. Proponents have argued that open access would vastly increase readership, thereby helping to promote the mission of the association. The Medical Library Association (MLA), in existence since 1898, and having a membership of 3,600 individuals and 1,100 institutions, is representative of many small "niche" scholarly societies. The budget of the *JMLA* is only a modest part of the overall MLA budget, accounting for less than 5% of overall expenses of nearly \$3,000,000 annually. It does, however, operate as a profit center, and revenues in 2004 (all from advertising and non-member subscriptions), were some \$40,000 over expenses. These funds are added to the general revenues. Any significant reduction in that surplus would be a matter of concern for the association.

In the spring of 2005, nearly four years after the move to an open access e-journal, the editor of the *JMLA* undertook an investigation to see what, if any, impacts could be determined as a result of the move to open access.

## Methods

Membership figures and *JMLA* revenue/expense figures for the years 1994 to 2004 were examined, to see if there was any shift in membership or financial trends occurring around 2001/2002. Although such a shift would not determine cause and effect, an association would indicate a possible impact and one that would warrant further study.

In March 2005, subscribers to the MEDLIB-L and AAHSL online discussion lists were invited to participate in a brief online survey. At that time there were approximately 2,000 individuals subscribed to those two lists (that includes some overlap with individuals subscribing to both lists). There were 252 responses. The survey questions are included as Appendix A.

At that same time, the MLA Board of Directors was invited to participate in a separate online survey. Of the twelve individuals eligible to participate in that survey, ten responded. The survey questions are included as Appendix B.

PMC activity reports were examined. Specifically, records on number of unique users per month, total downloads per month, and most downloaded articles were analyzed.

## Results

### *Finances and Membership*

In 1994, total revenue from subscriptions and advertising was \$177,600, with subscriptions accounting for 70%. Revenue peaked in 2002, at \$200,600, and during that time the proportions had undergone a gradual shift – advertising was now the larger portion at 52%. In 2003, the revenue dropped sharply.

Advertising revenue held steady, but subscription revenue dropped by 20%.

Subscriptions had been falling for a decade, but the drop from 2002 to 2003 was far more dramatic than the previous declines. The number of subscriptions declined again in 2004, although not as dramatically, but the revenue went up slightly, thanks to a modest rate increase in subscription rate.

Total membership has declined during the entire period, but the biggest drop occurs in 2000/2001, just *before* the PMC debut. Most of the erosion is accounted for by a steady decline in institutional members, likely caused by the pressures on hospital libraries. The past three years have seen significant *increases* in the number of individual members.

### *Reader Survey*

Respondents were asked to identify themselves as current or former members. Former members (n=17), were asked what degree of impact the free availability of the *JMLA* had on their decision not to renew. Fourteen indicated little to no impact, two were neutral, and one indicated that it had a major impact.

Current members were asked if the free availability of the *JMLA* would make them more or less likely to renew their membership. Sixty-one percent indicated that it would have no bearing; but for 30% it would make them somewhat to much *more* likely to renew. Five percent felt that it would make them much *less* likely to renew. The survey did not distinguish between institutional and individual members.

Other questions in the survey indicated that the free availability would make people much more likely to read articles from older issues, and would also make potential authors more likely to submit manuscripts.

### *Board of Directors Survey*

Appendix B lists the questions that members of the MLA Board of Directors were invited to answer, along a scale that listed 1 as “very likely” and 7 as “not at all likely”. Several options were presented for continuing the *JMLA* if publication could no longer be funded in the current manner. To the option “suspend

publication altogether” there were nine sevens and one six – a resounding vote in favor of finding a way to continue publishing. There was likewise little support for imposing an embargo, or tacking on an additional members’ fee. There was some support for ceasing the print publication, as well as for shifting resources among other association programs.

### *PMC Activity Reports*

Between June of 2004 and May of 2005, the number of unique users accessing the JMLA averaged just over 20,000 per month. According to Ed Sequeira, the project coordinator at PMC, NLM surveys indicate that there are likely half again as many actual readers per IP address.[1]

The most requested article over the four years that the journal has been available on PMC is an article on impact factors from the January 2003 issue.[2] As of June 2005, that article, which came online in February of 2003, had been downloaded 12,409 times. According to ISI’s Web of Science, it has been cited 14 times, in such journals as *Human Factors and Ergonomics in Manufacturing*, *Journal of Science and Medicine in Sports*, *Neuroepidemiology*, and *Medicina Clinica*, among others. (Huth’s letter and Frank’s editorial on impact factors are also in the top ten.) [3,4] The number three article, an investigation of the impact of online journals on print journal usage (13,513 downloads),[5] while more library-related, has implications far beyond the health sciences.



The core readership is well represented in the top ten articles. The number two article is one of the Brandon-Hill lists [6] and the number four is the 2002 edition of the standards for hospital libraries.[7] Some of the other topics covered in the top twenty-five include evidence-based practice (including evidence-based librarianship), website design, consumer health, and medical education.

### Conclusions & Discussion

Whether the decrease in subscription revenue indicates a trend or not it is still too early to say, but certainly it seems logical that those who have made up the subscriber base (interested *enough* in health sciences librarianship to want easy access to the journal, but not so interested that they become members of the association) would be likely to drop those subscriptions in favor of the free online version. It is encouraging that advertising revenue has remained steady; the challenge will be to increase it if the slide in subscription revenue continues.

One of the most encouraging things about the online survey was that many members clearly feel that the free availability of the journal makes association membership more attractive. Whether their enthusiasm will compensate for those members who see it as a reason to cease their membership remains to be seen.

The responses from the MLA Board of Directors were also encouraging. Clearly, the Board feels strongly that the journal should be continued, even if only in an online format. However, it should be noted that all of the current revenue is tied to the print version, so we cannot very well get rid of it without identifying a different funding stream altogether

The readership numbers were, perhaps, the most surprising thing about the investigation. Obviously, the journal is being read by many people beyond the core of health sciences librarians. No doubt, many of those readers stumble across an article accidentally via Google or some other search engine. It is not surprising, given those numbers, that the number one requested article is one whose subject is not exclusive to health sciences libraries, but is of considerable importance to the larger scientific community.

The jury is still out. The revenue figures are a concern. The association will need to keep a very close eye on the membership numbers and make sure that it continues to provide a broad range of programs and services that meet the many needs of its members. It is still too early to label the experiment an unqualified success. But given the readership numbers, and the positive responses to the online survey, it is an experiment well worth continuing.

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