

## Maintaining Nursing Knowledge Using Bibliographic Management Software

Rutgers University has made this article freely available. Please share how this access benefits you.

Your story matters. [\[https://rucore.libraries.rutgers.edu/rutgers-lib/37513/story/\]](https://rucore.libraries.rutgers.edu/rutgers-lib/37513/story/)

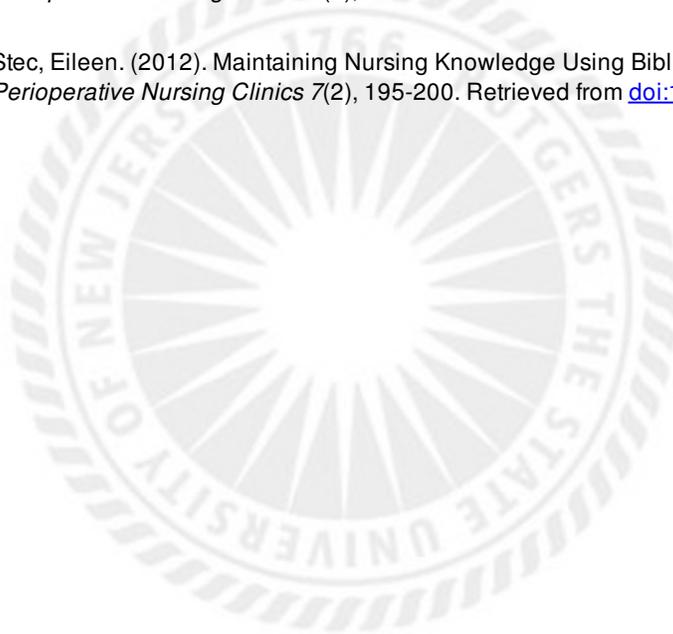
This work is an **ACCEPTED MANUSCRIPT (AM)**

This is the author's manuscript for a work that has been accepted for publication. Changes resulting from the publishing process, such as copyediting, final layout, and pagination, may not be reflected in this document. The publisher takes permanent responsibility for the work. Content and layout follow publisher's submission requirements.

Citation for this version and the definitive version are shown below.

**Citation to Publisher** Stec, Eileen. (2012). Maintaining Nursing Knowledge Using Bibliographic Management Software.  
**Version:** *Perioperative Nursing Clinics* 7(2), 195-200.

**Citation to *this* Version:** Stec, Eileen. (2012). Maintaining Nursing Knowledge Using Bibliographic Management Software.  
*Perioperative Nursing Clinics* 7(2), 195-200. Retrieved from [doi:10.7282/T3MS3R4N](https://doi.org/10.7282/T3MS3R4N).



**Terms of Use:** Copyright for scholarly resources published in RUcore is retained by the copyright holder. By virtue of its appearance in this open access medium, you are free to use this resource, with proper attribution, in educational and other non-commercial settings. Other uses, such as reproduction or republication, may require the permission of the copyright holder.

*Article begins on next page*

# Maintaining Nursing Knowledge Using Bibliographic Management Software

Eileen Stec, MS, MSW

Two bibliographic management products are compared in this article, RefWorks 2.0, produced by ProQuest LLC and EndNote v.X5, produced by Thomson Reuters. For the purposes of the product comparison the EndNote, a stand-alone client was loaded on an individual computer and the RefWorks Web-based, institutional version was used. Both applications were tested on the Microsoft XP Operating System using the Internet Explorer Web browser. The databases used for searching are the free PubMed database and the subscription-based Cumulative Index for Nursing and Allied Health Literature (CINAHL) database.

The features of the two applications selected for comparison were based on an assumption that professional perioperative nurses will be using the software to remain current in their field. Neither features used to generate bibliographies for publication nor inserting footnotes into papers will be assessed. Several other no-cost bibliographic management software applications exist including Zotero, Mendeley, BibTex, and Citulike. These applications will not be reviewed in this article. Ovadia<sup>1</sup> provides information regarding the aforementioned no-cost bibliographic management products and their respective features.

The author has nothing to disclose.

Mabel Smith Douglass Library, Rutgers, The State University of New Jersey, 8 Chapel Drive, New Brunswick, NJ 08901, USA

*E-mail address: [estec@rci.rutgers.edu](mailto:estec@rci.rutgers.edu)*

Perioperative Nursing Clinics 7 (2012)

doi:10.1016/j.cpen.2012.02.004

## KEYWORDS

- Bibliographic management • Citation management • Journal citations
- Evidence-based practice • Continuing nursing education

## KEY POINTS

- To engage in evidence-based practice, perioperative nurses should be regularly accessing literature on pertinent practice subjects.
- Use of bibliographic management software can help nurses sift through databases to find literature content that meets their needs.

## ENDNOTE

EndNote software allows storage of portable document format (.pdf) journal articles. The stored .pdf full-text articles may be highlighted and annotated. The digital tools included serve the same purpose as a highlighting marker to color portions of printed text or a sticky-note allowing the nurse to return quickly to important information and personal comments she or he made concerning portions of the article. All the citation

fields—including but not limited to—keywords, author, and abstracts associated with a citation can be edited and searched after storage.

### ***Searching PubMed from Within the EndNote Product***

Some users prefer the ease of searching the PubMed database from within the bibliographic program. Searching from within bibliographic management software can severely limit the citation results a nurse retrieves. Patient care can be compromised

when poor search technique results in omission of important journal articles.

Some search options and hints can be seen and utilized only when searching the native PubMed index. For example, when keying in a search term or phrase in PubMed a drop-down box opens offering suggested vocabulary for the search. Using the search query *pain management AND best practice AND perioperative* in PubMed as text terms yielded the highest, most relevant results. Searching the same phrases as Medical Subject Headings (MeSH) yielded no results. Unless the perioperative

nurse knows MeSH vocabulary, this search approach should be avoided because it may otherwise yield no results.

### ***Searching PubMed Without Using EndNote Software and Importing the Results***

While searching PubMed directly from the PubMed Web site, suggested phrases could be seen when a term is keyed in and a suggested term or phrase can be selected from a drop-down menu beneath the search box (Fig. 1). For example, *pain management nursing* was a suggestion offered when *pain management* was keyed into the search box. Also, *best practices* was additionally offered rather than just the singular form *best practice*. The suggested search phrases were only offered when one search phrase was keyed into the search box at a time. Combining search terms or phrases with AND, OR, or NOT within the same search line disables the suggestion search terms. Consequently, each phrase was searched separately for this article. By using the advanced search feature, individual searches saved in the history box allow the searcher to combine the result sets in the history. PubMed tutorials may be accessed on the Internet.<sup>2</sup>



Fig. 1. PubMed *pain management* search.

### ***Searching CINAHL***

Connecting directly from an institutional subscription of the CINAHL index to the computer where EndNote was loaded could not be accomplished. Therefore, searching CINAHL within EndNote was not tested. Email from EndNote tech support indicated that if a nurse has an individual subscription, export directly into EndNote from CINAHL could be possible. Exporting citations from within CINAHL to a

stand-alone version of EndNote was accomplished quickly.

### ***Attaching or Accessing Full Text of an Article***

The Ebscohost version of CINAHL offers a feature to export to EndNote Web allowing uploading citations to a personal account (free for the first 2 years) along with the full text of any article citations available in the .pdf file format. The .pdf files may also be attached manually in EndNote stand-alone version to a citation after first downloading an individual journal article to the computer. Attaching the article to the citation helps avoid the clutter and potential loss of printed journal articles.

### ***Help/Tutorials***

Getting started training tutorials provided for EndNote are informative and broken into modules. The learning curve is moderately steep for a novice, as it would be for any powerful application. The tutorials may be freely accessed online.<sup>3</sup> Individual assistance requested via email from EndNote did not prove adequate to connect to an institutional CINAHL subscription.

### ***Cost***

The EndNote cost is moderate, particularly if purchased with an academic discount. Information regarding academic discount pricing is available only through your educational institution or visiting the Thomson Reuters purchase page for information regarding “academic solutions.” Expect to spend \$200 to \$300; you then own the software permanently. The purchase price includes a free 2-year Web account allowing collections to be saved for access via the Internet. A perioperative nurse would need more than a single copy of EndNote to access the personal Web collections from different computers.

This begs the question, “Why make a Web accessible collection at all?” Perhaps the best and only reason to create a Web collection in EndNote would be to safeguard citations in the event of a catastrophic computer event, such as a failure of a hard drive (**Table 1**).

## **REFWORKS**

A notable feature and requirement when using Refworks is that it is accessible from any Internet accessible computer via a Web browser. After creating a search in PubMed a perioperative nurse can save the search as a Really Simple Syndication (RSS) feed. The RSS feature as described in the RefWorks help files<sup>4</sup> allows the nurse to run the same search on a regular basis retrieving any new literature fitting the criteria of the saved search. The National Library of Medicine (NLM)<sup>5</sup> loads new citations into PubMed Tuesday through Friday, allowing the nursing professional to check for the most recent articles by running the RSS feed feature on a regular basis. Weekly or monthly updates should be sufficient for most needs; daily uploads by the NLM does not automatically yield new article citations. The updates occur as publishers release citation files to the NLM. NLM uploads any citations supplied by a publisher. If journal articles relating to your specific topic are not being published, no new articles will be available.

	<b>EndNote</b>	<b>RefWorks</b>
Searching PubMed	Both products successfully searched PubMed from within the product itself. Neither product provided the richness of search assistance the PubMed site provided for itself.	
Searching CINAHL	Neither product could access CINAHL through the product itself.	
Cost	One-time product cost between \$200 and \$300 to the nurse, depending on availability of academic discount.	Institutional subscription free to nurses of the institution. Individual subscriptions available for \$100 per year.
Tutorials and Help features	Internet tutorials available for free. Email support was quick but not useful.	Internet tutorials available for free. Information to import PubMed results files is incorrect.
Other features	Can attach journal article files to citations, highlight, and include personal comments on articles.	Institutional subscriptions allow attachment of journal article files.
Issues	Search results can be stored on either the nurse's computer or on the Internet (free for first 2 years).	Search results must be stored on the Internet.

### ***Searching via RefWorks Versus a Search from the Database and Ingesting Citations into RefWorks***

Creating a personal account and login is the first step. In the case of an institutional subscription, there is no individual cost to the nurse. RefWorks also automatically creates storage for search results on the Web with the creation of a personal account. Personal subscriptions are paid for annually by the subscriber and may be renewed without loss of stored citations.

Searching PubMed from within RefWorks provides quick search or advanced search options, allowing either individual or all fields search. As with the PubMed search discussed earlier for EndNote, practitioners are advised to try a search concept directly within PubMed first to ascertain the most appropriate search terms or concepts available.

Importing references from PubMed is multi-stepped and should be approached with caution. Be certain when working in PubMed all the search results you wish to import are displayed on one browser page. If you decide to display only 20 results per page but would like to import all 28 results, the last 8 citations will be lost. The Help feature of RefWorks provides steps for import, including using the Web browser's "save as" function. These directions did not work as described in the RefWorks help materials. It was necessary to follow the import directions to display the search results, ignoring the "save as" steps. Copying the properly formatted display from the Web browser, then using the "import from text" option, THEN copying and pasting the results directly into the area provided was the only successful method to export citations from PubMed and import into RefWorks. If an institutional subscription to Medline is available, it is preferable to search within Medline for export of citations rather than using PubMed.

### ***Other Features***

Attachment of a full text article to a citation is possible when a citation is being edited or added manually under only one circumstance. The attachment feature is available for organization-wide subscriptions only. Individual subscribers cannot attach a full-text article to a citation.

Perioperative nurses with access to RefWorks via the same institutional subscription may share citations. Shared access allows one storage point for joint projects or journal discussion groups. Unfortunately, nurses with RefWorks access from different institutions may not share a central storage space.

### ***Tutorials and Cost***

RefWorks tutorials are available online.<sup>6</sup> Tutorials are broken into short—2- to 4-minute—segments. The size of the RefWorks tutorials is preferable to EndNote's longer tutorials for return users; a casual user may return to relearn only the features she needs versus repeating EndNotes' multi-feature tutorials. Conversely, EndNote tutorials may describe several tools or features in a tutorial providing an overview of the process as well as instruction. The cost for an institutional subscription is borne by the institution, not the individual. As with any institutional subscription, cost is negotiated and varies. Individuals may subscribe for \$100 annually. Software is accessed only online and updated versions of RefWorks are available immediately and automatically. This can be disconcerting to the unsuspecting—suddenly viewing new features or interface changes. However, there is no additional fee for new versions. Individual subscriptions must be renewed annually for continued access to the software citations saved at RefWorks' online site.

### **SUMMARY**

Both EndNote and RefWorks are produced by reputable companies that have been in existence for some time, ProQuest and Thomson Reuters, respectively. This is a good thing to know if one is spending money for software—the company can be expected to continue to provide customer support and upgrades. Both EndNote and RefWorks are good products albeit not perfect. The deciding factor for the perioperative nurse may very well come down to availability and cost. If the nurse's institution has subscribed to RefWorks, the software is available to him or her at no cost. If an institutional subscription to RefWorks is not available, the next feature for consideration after cost should be the appropriateness of the product and the intended use. EndNote is fine for one nurse who always uses the same computer for his or her scholarly journal research. Used for several years, EndNote will be less expensive than RefWorks, but results may be kept on an individual computer without cost only after the initial 2 years of free Internet storage. RefWorks, on the other hand is most useful to the nurse who needs access from more than one Internet-connected computer. The other features and limitations between the two products come down to the value the individual perioperative nurse places on tutorials and help-desk service, storing full-text documents with citations, and the ability to share the citations with other nurses. The last feature will not be available to independent practitioners regardless of the product.

## REFERENCES

1. Ovadia S. Managing citations with cost-free tools. Behav Soc Sci Librarian 2011;30: 107-11.

Bibliographic Management Software **199**

### Author's personal copy

2. PubMed. PubMed tutorials. Available at: <http://www.nlm.nih.gov/bsd/disted/pubmedtutorial/index.html>. Accessed January 13, 2012.

3. Endnote. Endnote tutorials. Available at: <http://endnote.com/training/>. Accessed January 13, 2012.

4. Refworks. RefWorks help file. Available at: <http://www.refworks.com.proxy.libraries.rutgers.edu/refworks2/help/RefWorks2.htm>. Accessed January 13, 2012.

5. U.S. National Library of Medicine: National Institutes of Health. Available at: <http://www.nlm.nih.gov/>. Accessed January 13, 2012.

6. RefWorks 2.0 Fundamentals tutorial. Available at: <http://www.refworks-cos.com/refworks/tutorials/basic.html>. Accessed January 13, 2012.

**200** Stec