

## Current Research

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Flake D. No password required: a case study of integrating the library's electronic resources into the hospital's electronic medical record. *J Hosp Librarian*. 2010 Oct;10(4):402–9. doi:10.1080/15323269.2010.514670.

This article describes the process of integrating electronic library journals, books, and databases into the hospital's Electronic Medical Record (EMR). It covers the reason the project was undertaken, the process of obtaining administration approval, the technical solution, marketing the new access to library resources, and examples of how significantly this project increased use of the library's electronic resources and the benefits to the library. It also describes how the new OvidSP MEDLINE played a significant role in making the project even more desirable to users.

Puterbaugh MD, Shannon M, Gorton H. A survey of nurses' attitudes toward distance education and the educational use of 3-D virtual environments. *J Electronic Resour Med Lib*. 2010 Oct;7(4):292–307. doi:10.1080/15424065.2010.527243.

Using funds provided through the Medical Library Association's 2008 Donald A. B. Lindberg Research Fellowship, librarians at Eastern University conducted a survey to assess nurses' attitudes and perceptions about (1) the effectiveness of distance education in delivering academic content; (2) whether distance learning promoted socialization and fostered professionalization; and (3) the use of an online immersive environment, such as the virtual world Second Life, as a tool to deliver distance education. Results from the survey indicated a positive attitude from nurses at all academic levels toward distance education and a willingness to explore the academic use of a virtual environment.

Ketterman E, Besaw ME. An Evaluation of Citation Counts, Search Results, and Frequency of Updates in DynaMed® and UpToDate®. *J Electronic Resour Med Lib*. 2010 Oct;7(4):273–80. doi:10.1080/15424065.2010.527238.

This study examines two point-of-care products: DynaMed® and UpToDate®. These resources were evaluated based on four criteria: search result counts, search result answers, reference counts, and currency of updates. The results of the study suggest that of the four areas evaluated, two indicate a statistical advantage of one database over the other. *DynaMed* contained updates that were more current, and *UpToDate* had a more significant total number of references used in a topic. The other two criteria, of

initial search result counts and if there was an exact answer to the clinical question, did not produce a statistically significant difference.

Brettle A, Maden-Jenkins M, Anderson L, McNally R, Pratchett T, Tancock J, Thornton D, Webb A. Evaluating clinical librarian services: a systematic review. *Health Info Libr J*. 2011;28. doi: 10.1111/j.1471-1842.2010.00925.x.

**Background:** Previous systematic reviews have indicated limited evidence and poor quality evaluations of clinical librarian (CL) services. Rigorous evaluations should demonstrate the value of CL services, but guidance is needed before this can be achieved. **Objectives:** To undertake a systematic review which examines models of CL services, quality, methods and perspectives of clinical librarian service evaluations. **Methods:** Systematic review methodology and synthesis of evidence, undertaken collaboratively by a group of 8 librarians to develop research and critical appraisal skills. **Results:** There are four clear models of clinical library service provision. Clinical librarians are effective in saving health professionals time, providing relevant, useful information and high quality services. Clinical librarians have a positive effect on clinical decision making by contributing to better informed decisions, diagnosis and choice of drug or therapy. The quality of CL studies is improving, but more work is needed on reducing bias and providing evidence of specific impacts on patient care. The Critical Incident Technique as part of a mixed method approach appears to offer a useful approach to demonstrating impact. **Conclusions:** This systematic review provides practical guidance regarding the evaluation of CL services. It also provides updated evidence regarding the effectiveness and impact of CL services. The approach used was successful in developing research and critical appraisal skills in a group of librarians.

Olvera-Lobo M, Gutiérrez-Artacho J. Question-answering systems as efficient sources of terminological information: an evaluation. *Health Info Libr J*. 2010 Dec;27(4):268–76. doi: 10.1111/j.1471-1842.2010.00896.x.

**Background:** Question-answering systems (or QA Systems) stand as a new alternative for Information Retrieval Systems. Most users frequently need to retrieve specific information about a factual question to obtain a whole document. **Objectives:** The study evaluates the efficiency of QA systems as terminological sources for physicians, specialised translators and users in general. It assesses the

performance of one open-domain QA system, START, and one restricted-domain QA system, MedQA. **Method:** The study collected two hundred definitional questions (*What is...?*), either general or specialised, from the health website WebMD. Sources used by the open-domain QA system, START, and the restricted-domain QA system, MedQA, were studied to retrieve answers, and later a range of evaluation measures (precision, Mean Reciprocal Rank, Total Reciprocal Rank, First Hit Success) were applied to mark the quality of answers. **Results:** It was established that both systems are useful in the retrieval of valid definitional healthcare information, with an acceptable degree of coherent and precise responses from both. The answers supplied by MedQA were more reliable than those of START in the sense that they came from specialised clinical or academic sources, most of them showing links to further research articles. **Conclusions:** Results obtained show the potential of this type of tool in the more general realm of information access, and the retrieval of health information. They may be considered a good, reliable and reasonably precise alternative in alleviating the information overload. Both QA systems can help professionals and users can obtain healthcare information.

Ganshorn H. Free access does not necessarily encourage practitioners to use online evidence based information tools. *Evid Based Libr Inf Pract.* 2010; 5(4). Available from: <http://ejournals.library.ualberta.ca/index.php/EBLIP/article/view/9079> [accessed 5 January 2011].

**Objectives:** To determine which strategies were most effective for encouraging general practitioners (GPs) to sign up for free access to an online evidence based information resource; and to determine whether those who accepted the offer differed in their sociodemographic characteristics from those who did not. **Design:** Descriptive marketing research study. **Setting:** Australia's public healthcare system. **Subjects:** 14,000 general practitioners (GPs) from all regions of Australia. **Methods:** Subjects were randomly selected by Medicare Australia from its list of GPs that bill it for services. Medicare Australia had 18,262 doctors it deemed eligible; 14,000 of these were selected for a stratified random sample. Subjects were randomized to one of 7 groups of 2,000 each. Each group received a different letter offering two years of free access to BMJ Clinical Evidence, an evidence based online information tool. Randomization was done electronically, and the seven groups were stratified by age group, gender, and location. The interventions given to each group differed as follows: Group 1: Received a letter offering 2 years of free access, with no further demands on the recipient. Group 2: Received a letter offering 2 years of free access, but on the condition that they complete an initial questionnaire and another one at 12 months, as well as allowing the publisher to provide de-personalized usage data to the researchers. Group 3: Same as Group 2, but with the additional offer of an online tutorial to assist them with using the resource. Group 4: Same as Group 2, but

with an additional pamphlet with positive testimonials about the resource from Australian medical opinion leaders. Group 5: Same as Group 2, but with an additional offer of professional development credits towards their required annual totals. Group 6: Same as Group 2, but with an additional offer to be entered to win a prize of \$500 towards registration at a conference of the winner's choice. Group 7: A combination of the above interventions. The group received the opinion leaders' pamphlet, the online tutorial, and eligibility for professional development points. The online survey and usage data from Groups 2 through 7 was to be analyzed as part of a companion study, and is not reported in this article. To protect the privacy of individual subjects, Medicare Australia mailed out the offers and provided the authors with anonymized data, in table format, on response status by intervention group and by the following sociodemographic variables: age, gender, geographic remoteness as determined by the Accessibility/Remoteness Index of Australia (ARIA), country of graduation, and years since graduation. Baseline characteristics were compared between the intervention groups, and then response rates were also compared between intervention groups and between the above-mentioned variables to see whether any of these variables affected the likelihood of practitioners being interested in an online evidence based tool. All comparisons were done using a chi-square test. **Main Results:** Overall, 2,105 subjects returned their acceptance forms, out of the total sample of 14,000 (15%). The true acceptance rate was 12.5%, however, when adjusted for the number of subjects in Groups 2 through 7 who went on to complete the online questionnaire. There was a statistically significant difference in response rates between the seven groups, with the greatest acceptance rate (27%) coming from Group 1 (who received only the letter of offer, with no experimental demands). The other groups averaged a response rate of 10% collectively, with the lowest rates (8.0% and 8.5% respectively) from Group 5 (offer of professional development points) and Group 7 (combination of interventions). The large sample size offered adequate power to detect differences in characteristics between responders and non-responders. The study found that responders were more likely to be younger, male, recent graduates, and practising in less remote locations. Among responders, there were no statistically significant differences in most of these characteristics among the seven groups, with the exception of time since graduation, which varied somewhat. **Conclusion:** The authors conclude that funding of access to free online resources for large groups of practitioners may not be cost-effective if calculations of cost are based on total eligible populations rather than on the number of practitioners who may be interested. They also conclude that the low response rates generated by their offer indicate a need to find ways to increase GPs' interest in using online evidence based tools and in accessing best practice evidence. Further research into how to achieve behaviour change among practitioners may be needed.