

ELECTRONIC RESOURCES REVIEWS

Mosby's Nursing Index. Elsevier, 11830 Westline Industrial Drive, St. Louis, MO 63146; 877.857.1047; MNI.groupinfo@elsevier.com; www.mosbysnursingindex.com; annual subscription or available with Mosby's Nursing Consult; contact for pricing.

Mosby's Nursing Index is a new database from Elsevier that indexes nursing and allied health literature from 1995 to present. It is international in scope and includes evidence-based practice, peer-reviewed journals, trade publications, and electronic-only titles. More than 2,500 titles are indexed, including many unique titles and some 200 titles not currently indexed by other nursing databases.

Mosby's Nursing Index is a sister to Elsevier's EMCare database. The new index, equal to EMCare in content, is offered on the Health Science platform, while EMCare is available on Dialog/Datastar. Both databases index the same journals, but the search interfaces are different. The Mosby database is primarily marketed to nurses and allied health professionals but also indexes literature from related disciplines such as physical therapy, chiropractic, and complementary medicine. Updated daily, it aims to assist clinicians in accessing the most current available literature that they can use to enhance the quality of patient care they provide.

A simple literature search can be performed from the database home page using the Quick search tab. However, to use the power of the database, the Advanced mode must be used. In the Advanced mode, searchers type their search terms in quotes, which enables the database to map common words to the EM-Tree list of topic headings. This advice and other helpful search tips are printed on a green-capped side bar on each screen for quick access. These tips impart how to refine or narrow searches, save searches, or work with session results.

The database's advertising claims that Mosby's Nursing Index is a database of abstracts and indexing. This could be why one of the search default settings is "with ab-

stracts." While nurses might prefer retrieving abstracts, they may not realize that their search results may be incomplete when using the "with abstracts" default. Experienced searchers will know to bypass this default setting to ensure that pertinent citations will not be missed. Other search default settings like human, English language, and dates 2003–2007 are common limits and save time for the searcher.

Available drop-down limit menus are complete and include age groups, types of evidence, publication types, gender, language, area of focus, animal study types, and molecular sequence numbers. Help screens, identified by an icon box with a question mark inside, offer brief but useful information. A main help button is also located at the top of each page and provides a full index to access search tips.

After the searcher enters a search term and clicks the search button, the search statement is numbered and the retrieved citations can be viewed without a second "click." The search may then be edited or modified in a couple ways. A search box, similar to the details box in PubMed, appears, and the searcher may add or delete terms here. An edit link is also located at the right edge of the search statement and opens to the limit options. Search statements may be combined using the Combine tab or by simply typing the set numbers and the Boolean operator (e.g., #3 and #4). It is not necessary to capitalize these operators as the database is not case-sensitive.

As previously mentioned, results in the citation format are shown below the search statement. If a searcher, however, selects a record to view in full by clicking on the article title, the Back to Results tab returns to the first citation on the results page and not to the selected citation, as might be expected.

Tabs to view, print, export, email, order, and add to clipboard are available and familiar to most experienced database searchers. The View tab reveals the full record, and only the full record can be printed from this tab. From the

Print tab, options to print the citation, citation plus abstract, or full record are available. It would be beneficial if selected citations could be sorted by journal title as well as by relevance and publication year. One might think the Order tab would "sort" items, but it refers only to article purchase.

The Mosby database has many search features that are also available on other platforms. Searches can be saved, email alerts can be created for given searches, and session results remain for eight hours. Users can export search results into a plain-text document, End Note, ProCite, or Reference Manager. A View Related Articles tab is also provided. When the tab is selected, a new search strategy is automatically entered in the search box and is ready to be run or edited. This differs from databases in which the "related articles" link retrieves citations of topically similar articles. A "loading" message appears in red to apprise the searcher when the database is working and to alert the searcher to avoid entering additional commands.

While the Advanced search tab provides the most productive use of the database, other options include searching by field, drug, disease, article, topic, and author. Searchers may also browse the topic tree to locate articles. For searchers who are familiar with Medical Subject Headings (MeSH), the terms used in Emtree, Elsevier's life science thesaurus, may not be intuitive. Truncation is available but disables the capability of mapping to the preferred vocabulary.

The database's claim that source titles are indexed "cover-to-cover" is misleading. A quick journal search found this claim to be only partially true. Individual issues may be indexed cover-to-cover, but some issues of allegedly indexed titles are not covered. For example, when searching *American Journal of Nursing*, volume 105, 2005, issues 9–12, are not indexed. Most searchers will not realize the omissions and become frustrated when looking for an article they know to have been published.

When a mediated search is

done and emailed to a customer, the return address is no_reply@Mosbynursingindex.com. Because some servers may mistake this as junk mail, it would be beneficial if the librarian's or library's email address could be inserted to avoid confusion.

All things considered, this is a useful, competitive product entering the health database arena. Mosby's Nursing Index is available with a subscription to Mosby's Nursing Consult or as an annual stand-alone product. As seen with most new products, this database may need a few tweaks. Nurses, however, with a little training and practice searching the database, will be able to access the information they need to enhance their clinical practice.

Nancy O'Brien, AHIP, Obrienna@ihs.org, and Paula Whannell, BSN, MA, Whannep2@ihs.org, Health Sciences Library, Iowa Health-Des Moines, Des Moines, IA

DOI: 10.3163/1536-5050.95.4.469

VisualDX. Logical Images, 3445 Winton Place, Suite 240, Rochester, NY 14623; 800.357.7611; <http://www.logicalimages.com/prodVDx.htm>; institutional and individual subscriptions; contact for pricing and technical requirements.

Introduction

Typical clinical decision support software requires a user to use text-words to describe symptoms and patient findings. This can create problems if users are unfamiliar with or use variations of the software's "correct" terminology. VisualDX solves this problem by creating a graphically based interface for inputting visual symptoms, thus helping users quickly answer the question, "What is this?"

VisualDX was first developed by Logical Images for pediatric, adult, and geriatric dermatologic conditions, which can be notoriously difficult for non-dermatologists to di-

agnose. A 1999 article found a significant difference in the diagnostic skills of dermatologists (93% correct), compared to primary care physicians (52% correct), when viewing images of the most common skin diseases ($P < 0.001$) [1]. VisualDX was designed to meet the needs of users who may not see dermatological manifestations everyday: primary care physicians, emergency room physicians, dentists, infectious disease specialists, and public health workers.

Since then, the product has expanded to include modules on oral lesions, pulmonary infections, and terrorism recognition, among others. In total, the knowledgebase has 21 modules containing more than 14,000 images that span over 800 diseases. That includes more than 1,700 dark skin images, a group often underrepresented in dermatology resources. The images come from a variety of sources, including university and individual archives. In addition, each condition has an associated handbook-length monograph including testing and management pearls. This unreferenced text comes from textbooks, journal articles, and medical experts.

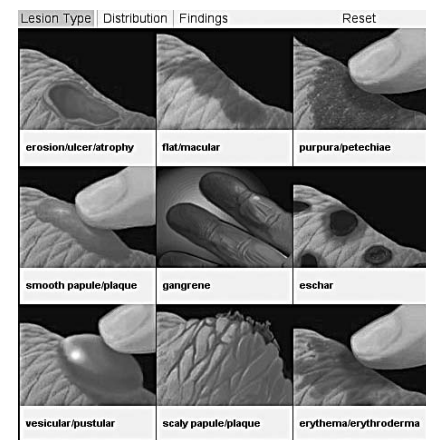
Access

VisualDX is Java-based and can be accessed through a stand-alone application or online through the application hosted either on the Logical Images' Web server or an institution's Web server. The choice of access will depend on the institution's needs and resources. This reviewer used only the Logical Images-hosted Web version, which loaded quickly and ran well with only a minimal lag. For institutions with high-speed Internet access, this version should work well.

Searching

When users first connect to VisualDX, the introductory screen they see lists the various content modules. These modules simplify the process of navigating the database and offer search options customized for the content. The graphical search interface can be bypassed if the diagnosis is known by

Figure 1 VisualDx grid with illustrations of different lesion types



entering it directly into the top right search box. Otherwise, the appropriate module can be chosen based on patient demographics and clinical findings. For situations where the module choice may be unclear, there is a Help Me Select a Module utility, but, as the modules overlap significantly, module choice is unlikely to exclude potential matches or diagnoses.

For the purposes of this review, the patient is a light-skinned female adult patient who has smooth papules and erythema on her face and hands and has been losing weight. After selecting a module (in this case Adult Rash), the first step is to indicate the type of lesion. Rather than just using descriptive text, VisualDX brings up a grid with illustrations of different lesion types (Figure 1). In this case, smooth papule and erythema were chosen.

The next step is to select the distribution of the rash. Just as with the type of lesion, VisualDX shows images of different distribution patterns and allows users to select between extensive and limited patterns. Unfortunately, the color scheme chosen for this display can make the pattern difficult to distinguish on some monitors. In this case, photo-distributed was selected.

The final step is to enter any other findings or symptoms. These can either be selected from a hierarchi-

cal list in the Findings drop-down menu or typed into the field labeled Enter Findings. The options here are extensive and include medical, medication, and social history as well as physical, laboratory, and imaging findings. An auto-complete feature suggests potential matches as they are entered in the Enter Findings box and only allows users to enter findings that exist in the list. In this case, weight loss was entered.

As lesion type, distribution, and findings are entered into the system, VisualDx displays images of potential diagnoses ranked by the number of criteria matched. For instance, at the end of the above example, systemic lupus erythematosus is listed first with four matches followed by several other diagnoses with three or fewer matches. Because isolated findings could be unrelated to the condition being diagnosed, it is valuable that VisualDx lists all the potential diagnoses, rather than just those that match all criteria. Results can be sorted to show emergency status (life-threatening conditions) first, rather than number of criteria met. Users can also choose to view only selected diagnoses from the full list.

The images and monograph for a given diagnosis can be accessed from the results screen. Where traditional textbooks or atlases describe symptoms and offer "classic" or "severe" images, VisualDx provides many versions of typical and atypical presentations. This allows users to see the true range of variation of disease due to age, severity, time, or skin tone. Offering this breadth of manifestations allows a clinician to more comfortably match a diagnosis to a particular patient. Images can be viewed one at a time, simultaneously, or enlarged when double-clicked. The pictures and their associated monographs can be easily and clearly printed.

For users wanting more assistance with using VisualDx, a help system is provided. While basic and slightly awkward, it covers the essentials of using the interface.

Future directions

VisualDx has continually expanded their product since its inception, and a new cellulitis module should be online soon. Long-term plans include modules on ophthalmology, emergency plain film radiography, emergency ultrasound, and bites, stings, and envenomations. The possibilities for the interface seem endless; with expansion into otoscopic, endoscopic, and CT or MRI images, this tool could only become more powerful.

Conclusion

Overall, VisualDx works very well. The interface is easy to use and walks the user through the search process; the image collection is excellent; and the availability of multiple access routes would appeal to a variety of users. Lack of references, both in provenance on the images and citations on the monographs, is VisualDx's biggest flaw. External links to resources like PubMed or an attempt to integrate evidence-based medicine would also increase the overall value of the product.

A straightforward and intuitive tool, VisualDx provides a unique graphical interface to support diagnostic clinical decision making. With a wide selection of high-quality images, it would be a useful addition to the toolbox of primary care and emergency physicians, dentists, and public health workers.

Note: VisualDx's Terrorism Recognition module meets the preparedness requirements of the Centers for Disease Control and Prevention and Health Resources and Services Administration for public health departments and emergency rooms. As such, the product can be purchased using the preparedness funds made available to these institutions.

*Kathryn J. Skhal, MS,
kathryn-skhal@uiowa.edu, and
Jonathan Koffel, MSI,
jonathan-koffel@uiowa.edu,
Hardin Library for the Health
Sciences, University of Iowa, Iowa
City, Iowa*

Reference

1. Federman DG, Concato J, Kirsner RS. Comparison of dermatologic diagnoses by primary care practitioners and dermatologists: a review of the literature. *Arch Fam Med* 1999 Mar/Apr;8:170-2.

DOI: 10.3163/1536-5050.95.4.470

SUMSearch. Department of Medicine, The University of Texas Health Science Center at San Antonio; badgett@uthscsa.edu; <http://sumsearch.uthscsa.edu>, free Website.

SUMSearch is a free medical, meta-search engine sponsored by University of Texas Health Science Center at San Antonio. It has an easy-to-use interface and is currently available in English, Spanish, and Italian, with a French module coming soon. SUMSearch was created by Robert Badgett, an internal medicine doctor and professor at the University of Texas Health Science Center at San Antonio. His instruction includes classes teaching medical students how to perform effective research in medical sources. His background and knowledge of the problems faced while looking for quality medical evidence led to this user-friendly meta-search engine.

The main SUMSearch search screen is simple and clean. It has been designed for medical students to perform evidence-based research [1], so it can easily be used by a beginning searcher. SUMSearch performs a meta-search and adds contingency searching to help narrow down results when too many are found or can expand results when too few are found. The results can be further researched, making this a good tool for the expert searcher as well.

When a search is run, SUMSearch performs a meta-search. It only searches databases with recognized qualified medical information, such as textbooks and medical journals. By default, search terms are applied to Wikipedia, PubMed, the National Guidelines Clearinghouse, and the Cochrane Library's Database of Abstracts of Reviews of Effectiveness (DARE).

Figure 1 SUMSearch search results

■ DARE (includes [Cochrane abstracts](#)) 12 documents.
Scroll down or [Click here to view](#)

■ PubMed (possible systematic reviews) 91 documents.
Scroll down or [Click here to view first 20](#)

Original research

■ PubMed (5 searches) 504 documents.
Error may have occurred at this Internet server(PubMed-Research). [Click here](#) to search this server again.
Scroll down or [Click here to view first 20](#)

Warning: Your search retrieved too many original studies

Your topic appears well studied. (504 possible original studies after 5 searches).

- ◆ [Hints for choosing which documents to review in this search](#)
- ◆ [Hints for constructing a new search](#)
 - ◇ You did not 'focus' your search (this mainly affects the original research section of your search results)
 - [Click here to repeat your search focusing on controlled trials](#) (Same as 'treatment' focus button)
 - [Click here to repeat your search focusing on diagnostic studies](#) (Same as 'diagnosis' focus button)
 - [Click here](#) to return to the search screen to select other focus.
 - ◇ You only entered 1 search term(s). For searching, a [well-built question](#) may include the following search terms:
 - Patients or disease
 - Treatment, test, or etiologic/prognostic factor
 - Outcome of interest (eg mortality, or a specific morbidity)
 Consider adding another search term:
 - [Click here](#) to return to the search screen to *add* another term.
 - ◇ Make your question more specific.

Consider repeating your search because of possible error at remote server

[Click here to return to search form. -](#)
[EBM 'toolbox' from CEBM -](#)
[Click here for details of your strategy. -](#)
[Click here for details about SUMSearch](#)

Selected journals at PubMed - 9 document(s)

1. [Clinical trials are mandatory for improving surgical cancer care.](#) [Related Articles](#)
 Petrelli NJ.
 JAMA. 2003; 289(16):2077-8. doi:10.1001/jama.289.16.2077

While the search terms are added in the search field on the left, the right-hand top panel changes to offer a link to check Medical Subject Headings (MeSH). When the link is clicked, a new window opens displaying potential terms from the MeSH database. Warnings can also appear for suggestions on how to reword or change the search. The Check My Strategy button also opens that portion of the screen. It is a good tool for novice searchers to be able to check their terminology and make changes.

The results come back divided into sections. The top section (salmon colored on the screen) gives a summary of the searches performed. The bottom section (the blue background color of the screen) gives specific sources found. There is a link from the

summary section to the detail section.

The first portion of the summary has header text stating the results are easy to read but may not be the most up-to-date information. This portion of the summary screen focuses on textbooks, reviews, general articles, and guidelines. Links from the summary section jump to the matching portion of the detail section below.

The second portion of the summary has header text stating that the information is more up to date but not as easy reading as the first group. This portion covers systematic reviews and original research in DARE and PubMed. Other systematic review sources can also be examined, such as the national association's site that applies to the search.

The PubMed search results include a link showing the number of searches run. That link will bring up the different wording and conditions of the searches run in PubMed. The expert searcher can work with those conditions in PubMed to narrow down the results even more.

After the results are listed, SUMSearch adds extra information that is helpful for the novice searcher. There is assistance for narrowing down a search, such as pictured in Figure 1. Notice the warning for too many original studies found in the initial search. SUMSearch offers links to automatically refocus the search to a subsection of the first result. The researcher also can return to the original screen and use the focus portion of the screen to narrow the search.

The bottom part of the screen in the blue area lists part of the results from the search. They can be reached through the links in the top salmon-colored section or the user can scroll down to see a portion of the results. There sections are color coded by a vertical bar to the left of the results. For example, the systematic reviews searched in DARE and the Cochrane abstracts have a red box where the summary shows and a red line down the left side of the results from that search. A color code key appears to the left of the list of results in the blue area. The key floats down the screen, so it is always visible to the user even if the header of the list is off the top of the screen.

If there are more citations available than are listed on the result screen, a link to the list can be found in each search. Each of the citations that are shown links to the online source. Many of the sources are full text. Others, especially the ones found in the PubMed searches, lead to the citation and then may require a subscription to obtain the article or source.

The home search screen in SUMSearch has a Focus section. A request can be immediately restricted to different predetermined filters: adverse treatment affects, diagnosis, etiology/causation, intervention, physical findings, prognosis, and screening/prevention. A few automatic limits can be set: age, human or all, and language. Unfortunately, SUMSearch does not have any limits by date. A close examination of some of the PubMed search strategies shows that they

were limited to the past ten years. If someone only wants to examine the newest findings within the past three years or so, the list has to be visually checked.

Firefox and Internet Explorer 7 plug-ins are available to add SUMSearch to the search bar.

I ran a search in PubMed and SUMSearch that included the term "evidence-based." In SUMSearch, the search only found results in PubMed, the same ones I found in my PubMed search. Knowing that the search engine is programmed to search only quality sites, I removed the descriptor "evidence-based" from my search. Then I got numerous recommended resources. Choosing the different filters in the original search positively impacted my results for the different focuses.

Different word spellings will change the SUMSearch results. I ran a search that included the word "pediatric." After checking the results, I ran the search again using "pediatrics," the proper MeSH term. My results were fewer than without the "s." A researcher may want to run searches using different spellings or terms for greater results.

As a bonus, the searcher can choose to have a separate window open showing current medical news while waiting for the search to run. The main screen warns that a search can take up to forty-five seconds. I found that by the time I had opened the extra window and started glancing at the first headline, the original search was usually completed. The news feature is not one I would use. I found a promi-

nently featured link to another site that was broken. I reported it through the contact information. I received a response within a couple days thanking me for the notice and informing me that the link was fixed.

I found SUMSearch an easy-to-use helpful meta-search engine. The screen is plain and not cluttered. As I stated before, a new searcher can get good results from it. Educational links throughout the site help the new searcher understand the results being obtained. An expert searcher can run an initial search, then dig deeper by refining strategies already created by the SUMSearch programming. The biggest drawback I found was the inability to limit by date, but I can work with that. SUMSearch appears to list its found sources in reverse chronological order, so I can stop reading a list once I have reached my target year in the citation. I like the ease of SUMSearch and the assistance available on the screens. I now recommend SUMSearch to my research clients as part of their writing tools.

*Vicki Crom, MLIS, AHIP,
Vicki.crom@milliman.com, Milliman
Care Guidelines, San Diego, CA*

Reference

1. Badgett RG, Paukert JL, Levy LS. Teaching clinical informatics to third-year medical students: negative results from two controlled trials. *BMC Med Educ* 2001 Aug 7;1:3.

DOI: 10.3163/1536-5050.95.4.469

VOLUME 95 ERRATUM

95(3) July, page 256

Fenton SH, Badgett RG. A comparison of primary care information content in UpToDate and the National Guideline Clearinghouse. *J Med Libr Assoc.* 2007 Jul;95(3):255-9.

The initialism "NCG" should be "NGC" two times in the "Information Resources" section.