DISEASEDEX General Medicine System. MICROMEDEX Healthcare Series from Thomson MICROMEDEX, 6200 South Syracuse Way, Suite 300, Greenwood Village, CO 80111–4740; 303.486.6400; fax 303.486.6464; mdx.info@thomson.com; http://www.micromedex.com/products/diseasedex/general/; pricing varies, contact MICROMEDEX for quote.

DISEASEDEX General Medicine is the newest addition to the MICRO-MEDEX Healthcare Series suite of products. MICROMEDEX databases include clinical, research, and reference information related to drugs, acute care, toxicology, and patient education. DISEASEDEX bills itself as “evidence-based, current disease information . . . to support disease management and treatment decisions in ambulatory and inpatient care settings.” DISEASEDEX stands as an alternative to other well-known clinical and evidence-based databases such as UpToDate, InfoPOEMS, and FirstConsult (previously PDxMD).

DISEASEDEX content is written and peer reviewed by clinicians. Diseases are presented as monographs, similar to content on electronic information providers such as eMedicine, and each title provides complete author information. Physician editors review monographs for completeness, adherence to a template, and currency. The DISEASEDEX general information states that titles are updated quarterly. Main topic areas include: allergy and immunology, cardiology, dermatology, endocrinology and metabolic disease, gastroenterology, hematology, hepatology, infectious diseases, nephrology, neurology, oncology, psychiatry, pulmonary and critical care medicine, and rheumatology.

There are three ways to search any MICROMEDEX database. The default method is to search the Integrated Index. When this option is selected, the application searches across all databases to which an institution subscribes. This “keyword search” returns a list of topics and databases in which the search word or phrase is found, called “related occurrences” by MICROMEDEX. Each result appears as a hypertext link listing a database name and the number of related occurrences. Clicking on a link expands the search results screen to show the names of the documents in which the search phrase is actually found.

An Integrated Index search automatically combines multiple words with a Boolean “AND.” The online User’s Guide notes that Boolean search operators should not be entered into the search box and then goes on to explain how the automatic Boolean “AND” search works. Unfortunately, searching with a Boolean “OR” is not supported by the application. The User Guide indicates that synonyms must be searched independently; in other words, a user must first search for “skin cancer” and then perform a second search for “melanoma” to find all documents containing one or the other. This is a definite drawback of the search engine. To its credit, the application does truncate as a default and automatically searches for an expanded wildcard match of the keyword containing that string of letters. Users can also mark a check box to “Find exact term only” if they are not interested in wildcard searching.

The second search method allows the user to limit the search to a database or any combination of available databases. The databases to which an institution subscribes appear as active check boxes on the screen, while unavailable databases are grayed out. After selecting the check box for DISEASEDEX General Medicine, search words or phrases are entered and searched in the same manner as in the Integrated Index. The third and final search method allows the user to search by category: drug/alternative therapy, disease/condition, or toxicology.

This reviewer chose the Search by Database option to fully evaluate DISEASEDEX rather than the entire MICROMEDEX suite. Because the Pittsburgh metropolitan area has been suffering the nation’s largest ever hepatitis A outbreak (640 cases confirmed by the CDC as of December 15, 2003), a search for diagnosis and treatment information for this viral infection seemed appropriate. Entering “Hepatitis A’” into the search box found no results in DISEASEDEX. A second search for “acute hepatitis” found three related occurrences in Clinical Reviews and three in News and Alerts, including one complete monograph under Clinical Reviews.

The Acute Viral Hepatitis monograph mirrors the format of other monographs in DISEASEDEX. Each DISEASEDEX General Medicine document contains some or all of the following: Management Highlight, Background/Introduction, Symptoms and Signs, Diagnosis, Unusual Clinical Presentation, Treatment, Controversies, When to Consult or Refer, Prognosis, Advising the Patient, Follow-up, Prevention and Screening, Key References, Literature Cited, and Tables and Images. A particularly useful section is Key References, which are the latest guidelines and reviews as well as papers deemed “noteworthy” by the authors. Some references link to the associated PubMed abstract, although it is not clear why the links are not found with all references. Another very nice feature of each monograph is the list of Evaluated Links of links to guidelines, physician Websites, and patient sites directly related to the monograph topic.

The information presented in Acute Viral Hepatitis, as in other monographs, is comprehensive but clearly designed for the practicing physician. Each monograph is succinct and focused on clinical presentation, diagnosis, and treatment. This particular monograph was problematic, because a clinician interested only in the hepatitis A strain must sort through diagnosis and treatment information for all acute viral strains. DISEASEDEX does contain summary documents called ClinicalPoints, single-screen overviews giving diagnosis and management highlights. But if using the Search by Database option, a user must remember to check the
Summary Documents box to include ClinicalPoints in the search. They do not appear when searching only DISEASEDEX General Medicine.

DISEASEDEX electronic delivery options include an Internet-based product and a version for upload to a Solaris or NT intranet server. Currently, only the ClinicalPoints subset is available for download to a personal digital assistant. An unlimited number of downloads are available with an institutional subscription to the DISEASEDEX General Medicine module.

Decisions about whether or not to purchase DISEASEDEX General Medicine should be based on your current electronic products. The clinical focus of the content is appealing, as is its brevity. But neither the information nor the format is particularly original, and comparable products have features not found in DISEASEDEX, such as full handheld versions, continuing medical education, embedded practice guidelines, and clinical calculators. If your organization already subscribes to other MICRO-MEDEX databases, DISEASEDEX would be a nice addition to the suite. If you are evaluating DISEASEDEX in comparison to other clinical evidence-based medicine databases, a side-by-side feature comparison will be essential to make an educated decision.

Marcy L. Brown, MLS, AHIP
Librarian
Health Sciences Library
Forbes Regional Hospital
Monroeville, Pennsylvania


Soon after announcement of the human genome map in April 2003, the National Library of Medicine (NLM) launched a new Website called Genetics Home Reference. Its purpose is to make the connection between genetics and disease more understandable for the general public. In a sense, it is a project in genetic literacy. With the mapping of the human genome and the changes this has already brought and will surely bring to medicine, the Website is a timely effort.

Genetics Home Reference provides information in high-school-level language about genetic conditions and the genes related to those conditions. While there are literally hundreds of genetic conditions, at the time of this review, only ninety-one genetic conditions were covered, together with information on eighty-one of the genes related to those conditions. However, NLM adds new information on a regular basis and, in the first five months of its existence, seventeen new genetic conditions and twenty-three genes were added to Genetics Home Reference.

This ambitious project is off to a solid start. Alexa T. McCray, director of the Lister Hill National Center of Biomedical Communications, and Joyce A. Mitchell, professor at the University of Missouri–Columbia, guide the project. Under their leadership, the genetics content is developed by a team of board-certified medical geneticists, biologists, and computer and information scientists and includes an outside review panel composed of medical genetics experts.

The major features of the Genetics Home Reference Website are Genetic Conditions Summaries, Gene Summaries, Help Me Understand Genetics, and a Glossary. The Genetic Conditions Summaries include, in a question-and-answer format, a brief description of each condition, signs and symptoms, genetic causes, prevalence, diagnosis, treatment information, and other names by which conditions are known. Links are provided for more information, and the helpful Glossary is just a click away.

The Gene Summaries, again in a question-and-answer format, include normal gene functions, changes in genes causing certain conditions, locations of the genes on the chromosome, alternative names for genes, links to more information, and links to the Glossary for terms used in the summary.

In the section Help Me Understand Genetics, six chapters provide short explanations of genes and how they work, genetic disorders, gene therapy, genetic consultation, genetic testing, and the Human Genome Project. Each chapter answers typical questions an individual might ask to learn more about genetics. Links to further information are provided for each area.

The Glossary can be searched or browsed and is linked extensively throughout the other sections. Seventeen identified resources are drawn upon for the definitions; therefore, more than one definition may be given for a particular term.

There are two primary ways to navigate Genetics Home Reference: via a search bar or through its browse capabilities. The search bar feature on the home page searches for keywords or terms in Gene Summaries, Genetic Conditions Summaries, and Help Me Understand Genomics. The Search Tips link brings the user to helpful information on constructing a successful search. One annoying aspect of the search feature is that after entering a keyword or phrase, a list of responses is retrieved but the response page itself does not have a search bar. The user must use the back key or click on the Search Link to return to the search bar option. Another popular NLM Website for the public, MEDLINEplus, has the search bar capability on every page; doing so on the Genetics Home Reference Website would be an enhancement, saving users time and another dreaded click.

The Browse feature allows users to leaf through Website content in a number of ways. Genetic conditions can be perused alphabetically by name, such as Apert syndrome, or by category, such as blood/lymphatic system or cancers. Genes may be browsed alphabetically by their symbol, like BRCA1, or by
their full name, like breast cancer 1, early onset. Genes may also be browsed by category. Biological process, cellular component, and molecular function are the three categories designed to allow users to home in on a gene's products or effects. It is questionable how helpful this section is for most members of the general public. Novice users need to use a lot of guesswork, or at best deductive reasoning, to find the gene in question. Except for students who need to research genes by category (for example, genes which affect “cellular processes”), consumers may find this feature intimidating.

On the plus side, many helpful features abound, such as the Glossary links for each genetic condition or gene summary. Links are also provided to relevant clinical trial information, nearby genetics clinics, and genetic counselors as well as to topical search results for both MEDLINEplus and PubMed. The Resources section is rich with links to genetics news, patient support resources, education resources, and the Human Genome Project.

Some links to resources do not make sense on a Website whose primary audience is the general public, such as those to medical genetics professional sites and genetics databases for researchers. Another small drawback is the reading level of the site, which tests at the twelfth grade. NLM is clear in its description of the database being written for high-school reading levels. However, if its intention is to reach the mass public, whose average reading level is sixth grade, more work needs to be done to simplify this most complex area of medicine. This will be no small feat.

As users would expect from a National Library of Medicine product, Genetics Home Reference adheres to Website standards for quality health and medical information and meets criteria for accessibility. While narrower in focus, it joins other sites like the Department of Energy’s Human Genome Project Information (www.ornl.gov/Tech Resources/Human_Genome/) and the National Human Genome Research Institute (www.genome.gov) in the important task of making genetics information both meaningful and accessible to the general public. Genetics Home Reference is a welcome addition to genetics literature.

Michele A. Spatz, MS
michelles@mcmc.net
Director
Planetree Health Resource Center, Mid-Columbia Medical Center
The Dalles, Oregon

Aetna Intelihealth. Aetna, 151 Farmington Avenue, Hartford, CT 06156; comments@intellihealth.com; http://www.intellihealth.com; free Website.

Aetna Intelihealth is published by Aetna, a health, dental, group life, and long-term care insurance provider. Since 1996, Aetna Intelihealth has provided online health information. The site endeavors to educate health care consumers with reliable and valid information, so that, in consultation with their health care providers, consumers can make informed health care decisions. The partnership with the Harvard Medical School and the University of Pennsylvania School of Dental Medicine in August 2000 has lent credibility to the health information available through the Website. A quick perusal of the About Us link offers detailed biographies of the Intelihealth editorial staff, as well as of the contributors from two of their professional affiliations. Other top health care organizations contribute content also, such as the National Institutes of Health.

Aetna InteliHealth’s expert editors work to create consumer-friendly health information that is accessible to as large an audience as possible. In the future, they plan to work toward making more information available on the health issues that concern underserved populations. The expert contributors from the Harvard Medical School review recent news articles and other content frequently, if not daily, and create commentaries on these subjects. From the lefthand sidebar on the main Web page, Health Commentaries takes the user to a page of up-to-date articles with advice on a variety of topics useful to the general public, such as staying fit despite age or condition, medical myths, news about the latest drugs, and improving communication with a physician or other health care provider.

Besides the list of link options on the lefthand sidebar, Intelihealth offers four main categories of health topics to choose from: Diseases and Conditions, Healthy Lifestyle, Your Health, and Look It Up, which will take users to resources such as a medical dictionary and a “tests and procedures” section. If users choose to click into one of the predefined diseases or conditions, “dementia,” for example, they are taken to another page where they can again access a range of subcategories. The medical information presented at this point has been reviewed by the faculty of the Harvard Medical School. Choosing a subtopic such as FAQs reveals useful overview information. It would be better to have the “send this page to a friend” and the “printer friendly format” options provided at the top of the page, either in place of or in addition to, the option at the bottom. This way, users interested in the information understand immediately that a printer-friendly version is available and can get a printout without having the righthand side of the information cut off in the process! Sidebars on the righthand side of the page display access to other formats for receiving information on the subject, such as news briefs and interactive tools and options of submitting a question to an expert, becoming part of an online community of users with similar interests, or choosing to search the medical literature for relevant articles.

This access to searching the medical literature is an interesting diversion. If users click into this area,
they are informed that they are leaving the Intelihealth site, and they will be taken to TopicDoc. If the choice is made to enter TopicDoc from a disease or condition page, TopicDoc Express will display a group of possible subtopics or synonyms for the condition. Choosing one of these then displays a search results page, which offers links to a “Top 50” selection of articles, practice guidelines, reviews, and outcomes. The abstracts are apparently gleaned from MEDLINE, as Medical Subject Headings are listed as well as the PubMed number. Full-text articles can be ordered for a fee through TopicDoc Express, but users must register first.

Accessing the Website itself posed varying degrees of difficulty. On some days, the site took an unusual length of time to download. On other days, using the same computer, it was faster. A Web page that makes users wait an inordinate amount of time to appear is one that may find users going elsewhere to get information. Concerning the design of the Web page, the choice of colors is eye pleasing and not too busy. The heading at the top left hand corner of the main Web page that announces the Harvard Medical School involvement is in a deep blue, which contrasts nicely with the run of heading tabs next to it that move along the color spectrum from yellow to orange and then red. Font size is adequate for most readers. However, some wording might be too small for a reader with poor eyesight. Quite a few different font types are used on the main homepage. While varying the font types can help to delineate one section from another, too much variation can be distracting. Advertisements are clearly marked as such. The word “advertisement” is shown in a large enough font to be discerned by users right away. On some other consumer health information sites, drkoop.com, for one, users might click into a subject, having had their curiosity piqued, before realizing the information is in fact sponsored by a commercial entity.

When users search for health information on a condition they are personally experiencing, they tend to look for advice instead of general information [1]. The advertising banners designed for this site clearly take advantage of this phenomenon, leading users in with questions such as “Can soy really help me?” Further, the Harvard Medical School’s Health Commentaries section uses this same marketing strategy when presenting “advice” and “insights” to consumers in each of the health topics.

In this last decade, great efforts have been made in the development of standards for health information Websites. Intelihealth.com is a signatory of the Health On the Net Foundation HONCode and is accredited by the Utilization Review Accreditation Commission (URAC) Health Website Accreditation Program. Intelihealth.com is judged by this reviewer as a welcome and useful addition to the arsenal of consumer health librarians seeking to provide their public with reliable and valid health information.

Beth Hill, BSW, MLIS, AHIP bhill@kmc.org
Clinical Reference Specialist
William T. Wood Medical Library
Kootenai Medical Center
Coeur d’Alene, Idaho

Reference

NetLibrary. OCLC: 6565 Frantz Road, Dublin, OH 43017-3395; 800.848.5878; oclc@oclc.org; http://netlibrary.com; pricing varies; contact OCLC for quote.

A product of the nonprofit OCLC Online Computer Learning Center, netLibrary, is a full-text electronic book collection that encompasses a variety of content options designed to help academic, public, school (K–12), and corporate libraries meet the information needs of the populations they serve. Because netLibrary is a Web-based product, a subscribing library’s users have access to the collection twenty-four hours a day, seven days a week, from any computer with an Internet connection.

Basing its collection development policies on the regulations of the Research Libraries Group, netLibrary requires that the bulk of the materials it acquires fall into the upper 50% of the specified date range limit of two to five years. At the research level (level 4 in netLibrary’s Collection Development Conspectus), netLibrary’s focus is expanding its collection in the fields of education, business, library science, medicine, computer science, and engineering. Older works are included as well and are considered for inclusion based on merit. Incorporated in all netLibrary subscriptions, the publicly accessible collection is intended for both the recreational and educational use of library users and includes literary classics and other works in the public domain. Popular titles in consumer health abound, and, in the experience of this reviewer’s place of employment, a mid-size academic medical research library, some of the heaviest users of the collection are faculty, staff, and students in the nursing school using nonmedical support materials.

TitleSelect®, netLibrary’s catalog, features a wide range of titles (more than 62,000 titles at the time of this publication) from more than 325 publishers and allows searching by predefined categories, keyword, or using Boolean operators. Results can be compiled as lists that can be saved and viewed, edited, or deleted later. These lists can then be submitted electronically to netLibrary as purchasing orders, which can be tracked through the TitleSelect feature.

User accounts must initiate from an Internet protocol (IP)—authen-
The unstable fiscal history of netLibrary arguably offers further indication that this will not be the case. Founded in 1998, the Boulder, Colorado—based netLibrary filed for Chapter 11 bankruptcy in the fall of 2001 and was subsequently purchased by OCLC in January 2002 [1]. Offices and operations were permitted to remain in Colorado, but, by April 2002, netLibrary had a new vice president, new stipulations limiting its initial policy of permanent access for its customers, and a revised pricing structure.

In an effort to reinvent netLibrary and revive the electronic book market, OCLC and netLibrary have sought to create alliances with some of publishing’s major players. In the fall of 2002, Gale announced it would partner with the electronic book provider to make its collection of standard reference books available online for netLibrary users [2]. In the spring of 2003, netLibrary and EBSCO unveiled eBooks on Demand, a pilot project to grant netLibrary users short-term access to more than 1,200 Taylor & Francis titles [3], and, in April, the OCLC subsidiary teamed with Elsevier to provide electronic viewing of more than 300 science and technology titles to netLibrary subscribers [4].

The site currently offers two payment options: prepaid ongoing access, a one-time cost comprising 55% of the retail cost of each title selected, and the annual service fee model, which is 15% of the retail cost and is payable on a yearly basis. For additional information, contact your library’s OCLC regional service provider (http://www.oclc.org/contacts/regional/), or fill out a product inquiry form online (http://www.oclc.org/ocl/c/ forms/inquiry.htm).

While consortial purchases are possible, a number of netLibrary’s publishing partners will not allow some of their titles to be included in library consortia subscriptions. Conversely, the solo hospital librarian who may not have affiliation with a regional OCLC provider may find it difficult to quickly and easily obtain adequate purchasing information. For hospital and medical libraries contemplating the decision to add netLibrary to their electronic resources catalog, much may be gained, especially in the way of consumer health titles. But because netLibrary’s content is solely dependent on titles publishers are willing to supply, a mixed bag of the valuable, the obscure, and the downright mediocre is, quite frankly, all one can expect when purchasing a netLibrary subscription.

Lesley W. Jackson
ldwolf0@email.uky.edu
Interlibrary Loan/Document Delivery Services Librarian
Medical Center Library
University of Kentucky Medical Center
Lexington, Kentucky

References


FIRSTConsult. Elsevier, 11830 Westline Industrial Drive, St. Louis, MO 63146; 800.401.9962; mdc.customerservice@elsevier.com; http://firstconsult.com; individual subscriptions $89–$149, free thirty-day trial available, contact Kelly Carter, Elsevier 314.453.7002 for institutional quotes.

FIRSTConsult (formerly PDxMD) is part of the MD Consult Clinical Knowledge System. This evidence-based, electronic primary care clinical information system is designed to enhance the decision making of health care professionals by providing specialized diagnostic tools and continuously updated thinking on the latest in evaluation and diagnosis, management options, and patient outcomes. It is specifically...
designed for use at the point and time of care. According to the product information, it “fosters efficient decision making by combining a ‘best practice’ approach with the flexibility necessary to account for individual patient differences and physician preferences; expedites work-ups and optimizes outcomes by offering evidence-based treatment planning and improving time and resource utilization; and reduces risk of errors and improves clinical documentation by providing comprehensive and continuously updated information.”

FIRSTConsult is available in three formats: online, handheld, and print. FIRSTConsult Online is updated weekly and is composed of an Interactive Differential Diagnosis tool, evidence-based Medical Condition Files, Patient Information Files, Reference Centers, and Procedure Files. FIRSTConsult Handheld includes the Interactive Differential Diagnosis tool and the Medical Condition Files updated quarterly. FIRSTConsult Books is a series of fifteen books including Differential Diagnosis with Clinical Benchmarks and the FIRSTConsult Medical Condition Series published by specialty. Physician writers guided by the editorial advisory board (national figures in their specialties and in primary care) and clinical reviewers (practicing clinicians and experts in their fields) synthesize materials from respected journals, evidence databases, and position papers and guidelines from professional organizations.

The Medical Condition Files cover more than 450 medical conditions that are most commonly seen by primary care physicians. Each condition includes a summary of the most pertinent information from the other sections; background information including ICD 9 codes and epidemiology; diagnosis including differential diagnosis, signs and symptoms, clinical pearls, suggested questions for the patient history, links to references to guide the provider’s decision making, and tests that may be performed; therapy with a summary of therapeutic options, full drug details, and patient and caregiver issues; outcomes including efficacy of therapy, prognosis, and complications; prevention indicating risk factors, lifestyle and wellness suggestions, and screening; resources including key references and a link to information for the patient; and evidence linking to the bibliographic references and clinical guidelines. Contributors are listed at the end of the information provided.

The Differential Diagnosis Files allow users to see a diagnostic pathway table listing potential diagnoses sorted by age and prevalence for more than 330 signs and symptoms. Potential emergencies are shown in red. Clicking on a diagnosis brings up a brief summary including onset, male-to-female ratio, ethnicity, character, location, clinical course, and co-morbidities along with a link to the Medical Condition Files.

The Patient Information Files provide patient handouts written in a question-and-answer format. The handouts, many of which are written at the fifth-to-sixth-grade reading level, are linked to the Medical Condition file and can be customized for a specific patient. Handouts are available in a choice of Spanish or English and in a choice of format, for the patient who has been diagnosed with the condition or for general information only.

The Reference Centers and Procedure Files are relatively new additions to the database. Reference Centers discuss topics that are not disease specific. At the time of review, only bioterrorism, pregnancy, and contraception were available, though several others were in production. The Procedure Files section describes, in detail, twenty-five procedures commonly performed in the office setting. Most of the descriptions include video clips that demonstrate the procedure. At the time of review, nine other procedures were in production.

Because the product is designed for quick lookup at the point of care, the primary audience for FIRSTConsult would appear to be primary health care providers; physician extenders, such as physician assistants and nurse practitioners; and house staff. It lends itself to use in primary care offices, clinics, or emergent and urgent care settings. Special pricing is available for residents and students, as well as individual subscribers to MD Consult.

The interface for FIRSTConsult is easy to use. Users can access information in each section by choosing a subject from the alphabetical list or entering a term in the search box. In the Medical Conditions section, a structured template provides concise information and recommendations that allow the clinician to make decisions based on accurate and clinically relevant information from respected sources such as the Cochrane database and the National Guidelines Clearinghouse, as well as peer-reviewed articles. A new feature for users who have a subscription to MD Consult is the capability to link directly to that service. This enhancement gives users the ability to access the reference and current awareness resources available in MDConsult.

In a comparison with another popular evidence-based medicine resource, UpToDate, the following observations were made:
- FIRSTConsult focuses on the most common medical conditions and diseases. UpToDate covers a greater number of diseases and conditions.
- FIRSTConsult is targeted to primary care providers. UpToDate is targeted to practitioners in internal medicine and subspecialties.
- FIRSTConsult is designed for quick lookup at the point of care. UpToDate has more in-depth coverage of the topics covered.
- The material in FIRSTConsult is divided into separate sections (differential diagnosis, medical conditions, etc.). Topic reviews in UpToDate are presented in a narrative format that is linked to supplementary material via a table of contents sidebar for quick access to specific aspects of the disease or condition.
- The patient information in FIRSTConsult is written at a lower grade level and in a style that is
easier to read than that of UpToDate. This makes the information much more accessible to the average patient.

- Primary care providers, house staff, less experienced clinicians, and other care providers—such as physician assistants, nurse practitioners, or clinical nurse specialists—may prefer the scope of topics and presentation style of FIRSTConsult with its “cut-to-the-chase” synthesis of topics. More experienced clinicians and specialists may find the information provided in FIRSTConsult too basic for their needs.

Mary Virginia Taylor, MLS
MaryVirginia.Taylor@med.va.gov
Chief Librarian
Veterans Affairs Medical Center
Memphis, Tennessee

Patsy S. Ellis, MLn
patsy.ellis@med.va.gov
Medical Librarian
James H. Quillen Veterans Affairs Medical Center
Mountain Home, Tennessee

Deborah Kessler, MLn
deborah.kessler@med.va.gov
Manager, Library & Medical Media Section
Veterans Affairs Medical Center
Lexington, Kentucky