The New England Journal of Medicine

(reviewed January–June 2003)

The New England Journal of Medicine (NEJM)1 has seemingly become "Everyman's Medical Journal." On each Wednesday one can almost depend on another breaking NEJM article being quoted in the newspaper or highlighted on the evening news. Given the journal's public reputation for providing what is being passed to us as consumer-oriented news, one would expect that it would be fairly simple to get the substance behind the headlines by going online. Quite the contrary. In fact, an informal survey of several medical librarians and library patrons suggests that NEJM may have the most draconian restrictions of any widely circulated medical journal.

The web site looks strikingly familiar to readers of the print version. "Registered visitors" can quickly sign up for a free account that provides access to the current table of contents, abstracts, and original articles older than 6 months. Unfortunately, review articles, "Images in Clinical Medicine," "Case Records," and correspondence to *NEJM*, which are all very useful for teaching² or thought-provoking,³ are not provided with the free service, even after 6 months. Other journals provide full free access after a specific period. Full-text articles are provided in PDF (portable display format) for easy document portability.

NEJM is nothing if not traditional. They present the electronic articles in the same difficult-to-read font used in the paper version, and reading an article on anything less than a high-resolution monitor is difficult. Fortunately, the journal updated its look in January 2003 and adopted a much cleaner format and font,⁴ so presbyopic readers may celebrate

Users can choose to receive the table of contents every Wednesday via e-mail. Be aware though, that e-mail filtering programs, such as SpamGuard on Yahoo, may have to be trained to allow these messages to pass, since they contain advertisements at the beginning of the message. Hypertext links in the e-mail table of contents connect directly to abstracts. For subscribers, the article itself is only one more click away.

An additional free service, CiteTrack, can retain search information and run key word and author queries against a selection of approximately 300 other journals, though RESPIRATORY CARE is not among them. Email is sent when a match is found. Access to articles in other journals is not provided through NEJM. As with all search engines, the CiteTrack search engine requires quotation marks around multiple-word search phrases such as "primary pulmonary hypertension"; without the quotation marks the search engine retrieves all articles that contain any of the 3 words in the phrase; with the quotation marks it will retrieve only the articles that contain the exact phrase. A major drawback to this service is that your e-mail address may be used "for marketing purposes" by the journals you search. In my case it took only 2 days to get the first unsolicited e-mail. NEJM.org does not provide an option to opt out of external mailing lists.

NEJM.org supports full-text searching. The search engine, though, is inflexible. For instance, a search for "permissive hypercapnea" found 1 result, whereas the search engine produced 21 matches for "permissive hypercapnia." Other search engines, such as Google, include variant spellings or suggest alternative spellings. Another example is "anti-inflammatory" versus "antiinflammatory." The former term found 28 items, all in article titles, whereas the latter returned 60 articles with the term in the article body. NEJM uses the Stanford Highwire Press⁵ for its electronic version and, consequently, its unusual search engine. Searches at that site produce similar results.

An additional search function allows looking for key words and phrases in captions. This can be useful for building up a reference or teaching file of images. Images could be easily magnified to 300–400% of their print size to provide a closer look at the condition being described. This is a distinct advantage over print version images. Magnification above 400% usually creates an unacceptable amount of digital distortion.

Subscribers have access to a number of convenient features. "Collections" contains a number of important articles (of all types, including reviews, case reports, research articles, and editorials), dating back to 1996,

in 53 subjects, including aging, asthma, health policy, and pulmonary disease. This provides a simple method for getting a quick, coherent overview. Many articles in *NEJM* are linked directly to relevant chapters in the on-line version of *Harrison's Principles of Internal Medicine*. A "personal digital assistant" (PDA) service allows downloading the full text of an issue or individual articles in DOC format for viewing on Palm OS and Windows CE devices.

On-line continuing medical education is abundantly available through the *NEJM*. There are 3 new examinations with each issue. Regular subscribers receive up to 20 examinations with the subscription. Additional examinations in the weekly program are available for \$10 each, or 10 for \$45. Nonsubscribers are allowed to purchase individual examinations for \$15 each, or 10 for \$100. The fee provides access to the article as well as the examination.

Most medical libraries have access to the on-line version of *NEJM*. Smaller libraries may have a limited number of Internet protocol addresses that are allowed to connect, limiting the number of computers that can be used to only a handful. Larger libraries face similar restrictions and in most cases cannot allow access from off campus, even to authorized users. Though the intent may be protection of intellectual property, the effect is onerous to users.

NEJM is a broad-based teaching resource. The on-line version adds more value with special features. Guest access to the archived articles and all abstracts is convenient. Anyone interested in specific topics will appreciate the CiteTrack notification service. The cost of a personal on-line subscription is \$99/year. The reader will have to assess the value of the additional services, including continuing education credits, case reports, and review articles. Using these resources through a medical library would probably be practical for most; the major exception would be access to continuing medical education at reasonable rates for practitioners in remote locations.

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RESPIRATORY CARE WEB SITES

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THE OATH OF HIPPOCRATES

ISWEAR BY APOLLO THE PHYSICIAN. AND ASSCULAPILIS AND HEALTH AND ALL HEAL AND ALL THE GODS AND CODDESSES . THAT . ACCORDING TO MY ABILITY AND RIDGMENT - I WILL KEEPTHIS OATH AND THIS STIPULATION TO RECKON HIM WHO TAUGHT ME THIS ART EQUALLY DEAR TO ME AS MY PARENTS TO SHARE MY SUBSTANCE WITH HIM & RELIEVE HIS NECESSITIES IF RECEIVED . TO LOOK UPON HIS OFFSPRING IN THE SAME POOTING AS MYOWN BROTHERS-AND TO TRACH THEM THIS ART - IF THEY SHALL WISH TO LEARN IT - WITHOUT FEE OR STIPULATION AND THAT BY PRECEPT LECTURE & EVERY OTHER MODE OF INSTRUCTION I WILL IMPART A KNOWLEDGE OF THE ART TO MY OWN SONS AND THOSE OF MY TEACHERS AND TO DISCIPLES BOUNDBY A STIPLICATION AND OATH ACCORDING TO THE LAW OF MEDICINE - BUTTO NONF OTHERS + I WILL FOLLOW THAT SYSTEM OF REGIMEN WHICH - ACCORDING TO MY ABILITY AND JUDGMENT - 1 CONSIDER FOR THE PENEFIT OF MY PATIENTS - AND ABSTAIN FROM WHATEVER IS DELETERIOUS AND MISCHIEVOUS +1 WILL GIVE NO DEADLY MEDICINE TO ANYONE IF ASKED NOR SUGGEST ANY SUCH COUNSEL- AND IN LIKE MANNER I WILL NOT GIVE TO A WOMAN A SARY TO PRODUCE ABORTION - WITH PURITY & WITH HOLINESS I WILL PASS MY LIFE & PRACTICE MY ART+I WILL NOT CUT PERSON LABORING UNDER THE STONE - BUT WILL LEAVE THIS TO BE DONE BY MEN WHO ARE PRACTITIONERS OF THIS WORK - INTO WHAT: EVER HOUSES I ENTER - I WILL GO INTO THEM FOR THE BENEFIT O THE SICK - AND WILL ABSTAIN FROM EVERY VOLUNTARY ACT OF MISCHIEF & CORRUPTION AND FURTHER FROM THE SEDUCTION OF FEMALIS OR MALES-OF FREEMEN AND SLAVES+WHATEVER-IN CONNECTION WITH MY PROPESSIONAL PRACTICE OR NOT IN CON NECTION WITH IT - I SEE OR HEAR IN THE LIFE OF MEN - WHICH OUGHT NOT TO BE SPOKEN OF ABROAD-I WILL NOT DIVULGE-AS RECKONING THAT ALL SUCH SHOULD SE KEPT SECRET . WHILE I CONTINUE TO KEEPTHIS OATH UNVIOLATED - MAY IT BE GRANTED TO ME TO ENIOY LIFE AND THE PRACTICE OF THE ART-RESPECTED BY ALL MEN -IN ALL TIMES - BUT SHOULD I TRESPASS AND VIOLATE THIS OATH - MAY THE REVERSE BE MY LOT

The Oath of Hippocrates. Old negative, Roman lettering. Courtesy of the National Library of Medicine