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NLM Online Users' Meeting - MLA 1995: NLM Remarks

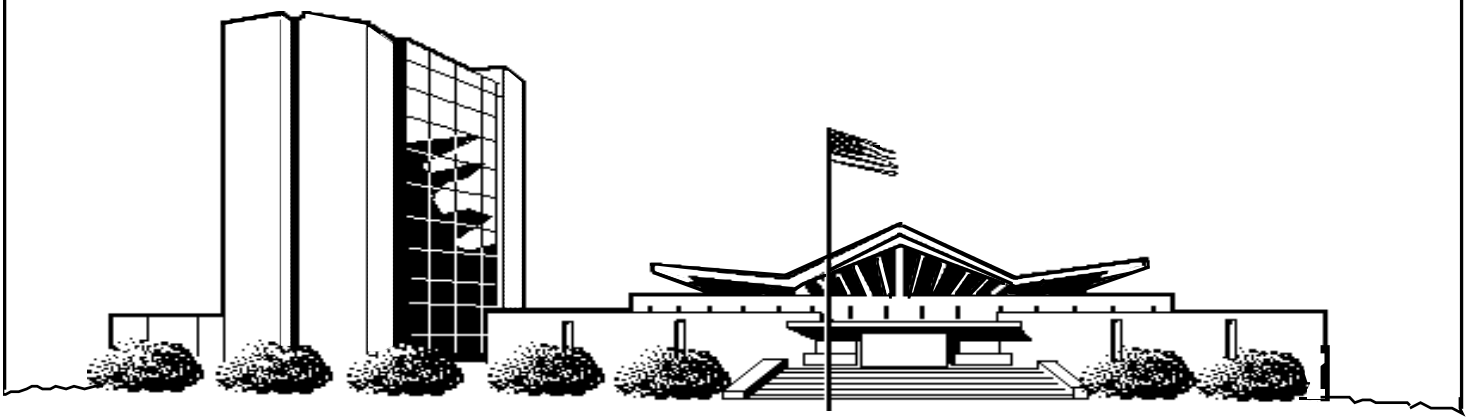
[Editor's Note: This article contains the edited text of a presentation given by Sheldon Kotzin, Chief of the Bibliographic Services Division, at the NLM Online Users' Meeting, May 7, 1995 held at the annual meeting of the Medical Library Association (MLA) in Washington, D.C. It is followed by questions and answers from that same meeting.]

System Usage

Users of the NLM Online Network conducted nearly 7 million searches in 1994. In doing so, they retrieved 134 million citations and 83 billion characters of data. NLM's databases now contain nearly 20 million records that reference useful information from the earliest historical material to the latest scientific findings.

We now have 2,719 active DOCLINE users. They will enter about 3 million requests this year. Network libraries will fill 94% of these. Of that number, more than half are filled by primary access libraries. The provision of free access to AIDS-related information has been a great success with usage of these files more than doubling. New databases on Health Services Research, HSTAT and HSTAR, have become instantly popular.

Continued on page 5



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The NLM Technical Bulletin is an administrative document sent to formal members of NLM's MEDLARS Online Network.

ELHILL® COMPUTER

MEDLARS® DATABASE	TOTAL RECORDS	DATES COVERED	DATE UPDATED	UPDATE TAG
AIDSDRUGS	220		27 MAY 95	9502(EM)
AIDSLINE®*	114,084	JAN 80-AUG 95	17 JUN 95	9508(EM)
AIDSTRIALS	658		10 JUN 95	9412(EM)
AVLINE®	28,805	THRU JUN 95	16 JUN 95	
BIOETHICSLINE®	45,849	JAN 73-MAY 95	20 MAY 95	9506(EM)
BIOTECHSEEK	6,209	JAN 90-JUN 95	03 JUN 95	9507(EM)
CANCERLIT®	1,124,232	JAN 63-JUN 95	03 JUN 95	9506(EM)
CATLINE®	750,593	THRU JUN 95	16 JUN 95	
CHEMID	267,994		06 FEB 93	
CHEMLINE®	1,362,958		20 APR 95	9402(EM)
DENTALPROJ™	821		02 AUG 94	
DIRLINE®	17,947		27 MAY 95	
DOCUSER®	14,275		17 JUN 95	
HEALTH	819,187	JAN 75-MAY 95	03 JUN 95	9507(EM)
HISTLINE®	152,112	JAN 70-JUN 95	17 JUN 95	9506(EM)
HSRProj	2,047		01 JUN 95	
HSTAR**	1,603,376	1985-JUN 95	10 JUN 95	9508(EM)
MEDLINE®***	1,203,761	JAN 92-JUN 95	17 JUN 95	9508(EM)
MED90	748,681	JAN 90-DEC 91	27 MAY 95	
MED85	1,688,445	JAN 85-DEC 89	21 JAN 95	
MED80	1,388,882	JAN 80-DEC 84	15 APR 95	
MED75	1,278,996	JAN 75-DEC 79	13 MAY 95	
MED66	1,986,347	JAN 66-DEC 74	03 JUN 95	
MESH VOCABULARY FILE®	101,512	1995	17 JUN 95	
NAME AUTHORITY FILE®	Removed from MEDLARS		08 APR 95	
PDQ®		THRU JUN 95	05 JUN 95	
POPLINE®	221,002	1970-JUN 95	03 JUN 95	9505(EM)
SDILINE®	33,307	MAY 95	27 MAY 95	9507(EM)
SERLINE®	85,849	THRU MAY 95		9505(EM)
TOXLINE®	1,400,208	1981-1995	13 MAY 95	9505(EM)
TOXLINE65	707,146	PRE 1965-1980	30 APR 94	
TOXLIT®	1,423,192	1981-1995	13 MAY 95	9505(EM)
TOXLIT65	586,405	1965-1980	01 SEP 87	

* AIDSLINE: PART 3 OF 5 FOR 9508 (EM) WEEKLY UPDATE
** HSTAR: PART 3 OF 5 FOR 9508 (EM) WEEKLY UPDATE
*** MEDLINE: PART 3 OF 5 FOR 9508 (EM) WEEKLY UPDATE

TOXNET® COMPUTER

CCRIS	6,540		04 MAY 95	
DART™	24,382		14 JUN 95	
EMIC	10,752		14 JUN 95	
EMICBACK	75,886		04 APR 94	
ETICBACK	49,591		04 APR 94	
GENE-TOX	2,960		09 JUN 94	
HSDB®	4,505		15 JUN 95	
IRIS	666		07 JUN 95	
RTECS®	129,460		09 MAY 95	
TRI87	80,359		27 MAR 95	
TRI88	87,498		27 MAR 95	
TRI89	87,350		27 MAR 95	
TRI90	86,749		24 MAR 95	
TRI91	84,853		05 JUN 95	
TRI92	82,331		05 JUN 95	
TRI93	79,984		05 JUN 95	
TRIFACTS	326		10 APR 92	

Technical Notes

Notification for Users of $DSFILE and SDIs via ftp

Users of the $DSFILE command and the NLM Automatic SDI Service who receive results via ftp may have noticed a change to our system. The following message used to appear each time a user of the $DSFILE command or a user of the FTP Automatic SDI Service logged into NLM's ELHILL system:

```
You have [#] Online print file available for ftp.
You have [#] Automatic SDI file available for ftp.
Please type $DSLIST to view your files and/or
            $DSPURGE to delete your files.
```

This message now appears only once a day the first time the User ID code is used to log into the system. Please inform your co-workers if you share a User ID code.

If you should have one or more files available for ftp but do not see a message, issue the $DSLIST command at any USER: prompt to see the contents of your ftp directory.

Leasing Information Available on the NLM Anonymous ftp Server and NLM Gopher

Information for persons interested in leasing NLM data became available electronically from NLM's ftp and gopher server on April 12, 1995. Use the following directions to locate this information:

ftp: The files are in the **nlminfo/agreements/leased** directory.

Gopher: Users may follow this path to get information:

NLM Fact Sheets, Newsletters, Reports, Agreements and Forms
NLM Agreements and Forms
Leasing Data from NLM

Users should download the readme.txt file as well as one copy of each of the 11 remaining files.

Non-U.S. requests for the MeSH Vocabulary, CATLINE, AVLINE, and SERLINE databases will be honored. However, NLM cannot lease other bibliographic files, such as MEDLINE or the factual databanks, to anyone outside the U.S. other than NLM's formally recognized International MEDLARS Centers.

Updates to the MeSH VOCABULARY FILE

The following are changes in the 1995 MeSH VOCABULARY FILE. None of these changes will impact searching the citation databases.

Supplemental Chemical Records

Beginning in August 1995, the format of the Heading Mapped To (HM), Pharmacological Action (PA), Indexing Information (II), and PI (Previous Indexing) data elements of the Supplementary Chemical Records will change so that an attached qualifier, if any, will appear in the full form rather than an abbreviated form. For example, in the chemical record for STS 456 the current HM field

ESTRADIOL/*analogs

would be replaced by

ESTRADIOL/*analogs & derivatives

N1 (Systematic Name) Descriptor

Almost all changes to current MeSH descriptors are made on an annual basis. However, in order to accomplish a large batch update of the N1 element, 2,595 N1 values will be added, beginning with June 1995.

New Bioethics Consultation Paper Available

The National Reference Center for Bioethics Literature at Georgetown University's Kennedy Institute of Ethics has published *Gender Issues in Health Care*, Scope Note 27 of the Scope Note Series from the National Reference Center for Bioethics Literature. The 14-page work is a compendium of government actions, association statements, books, and articles which document issues in women's health. It provides a broad overview of the ways in which the healthcare and bioethical literature have reported gender issues, and also provides an annotated bibliography useful to anyone interested in gender disparities in healthcare delivery.

Scope Note 27 also appears in the *Kennedy Institute of Ethics Journal* 1995 Mar;5(1). The separate reprint version, with the complete list of titles in the series, is available for $5.00 prepaid from the Kennedy Institute. Add $3.00 each for airmail outside North America.

The Scope Note Series offers an overview to topics in biomedical ethics and provides immediate reference to facts, opinions, and law and public policy (if applicable). All sources cited in Scope Notes are included in the collection of the National Reference Center for Bioethics Literature, and may be obtained through its document delivery service (subject to copyright law). Updates to topics covered in the Scope Note Series may be obtained by searching the BIOETHICSLINE database or by calling the National Reference Center for Bioethics Literature. Requests or questions should be directed to:

National Reference Center for
Bioethics Literature
Kennedy Institute of Ethics
Georgetown University
Washington, DC 20057-1065
800-MED-ETHX or 202-687-6738

Brief Overviews of the ELHILL 3.4 Proximity and Additional New Capabilities

Reminder: Overviews of the new ELHILL 3.4 proximity and additional new capabilities may be displayed with the $INFO commands listed in Figure 1.

Typing a particular $INFO topic--for example, **$INFO ADJNEAR**--will retrieve several paragraphs of explanation and instruction on how to use these new proximity operators. ❑

$INFO Topic	Lines	Description of text
PROXLONG	695	Long Description of Proximity
PROXINTO	28	Introduction to Proximity
ADJNEAR	78	ADJ & NEAR Operators
CONTAINS	80	CONTAINS Operator
QUALIFIC	58	Qualification with Proximity
CLUSTERS	70	Clusters with Proximity
CAUTIONS	86	Cautions Related to Proximity
PROXCHRT	32	Proximity Quick Reference Chart
PROXHINT	41	Proximity Search Hints
ADDLLONG	469	Additional Capabilities Long
NESTING	208	Nesting Capabilities
SETCMD	191	SET Command Capabilities
GFILE	59	Greetings File Parameter

Figure 1 - $INFO list of new ELHILL capabilities

FTS2000 Transition Schedule

Reminder: NLM is transitioning from the current telecommunications networks SprintNet (Telenet), TYMNET, and CompuServe to the new FTS2000 network. Please begin using the FTS2000 number 800-525-0216 according to the schedule below. If the date for your state has passed, you may begin using the new number immediately.

The article on pages 23-26 of the November-December 1994 *Technical Bulletin* explains the transition process in detail, including the new login procedure that must be used with the FTS2000 number. Grateful Med users need to select FTS2000 in the SETUP screen and type in 800-525-0216.

May and June 1995 - Regions 3 and 4
Users in the states of Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Utah, Wisconsin, and Wyoming should transition to the new FTS2000 AT&T network during May and June.

July and August 1995 - Regions 5 and 6
Users in the states of Alaska, Arkansas, Idaho, Louisiana, Montana, New Mexico, Oklahoma, Oregon, Texas, and Washington should transition to the FTS2000 network in July and August.

September and October 1995 - Regions 7 and 8
Users in the states of Arizona, California, Connecticut, Hawaii, Maine, Massachusetts, Nevada, New Hampshire, Rhode Island, Vermont, and American Samoa, Guam and military posts should transition to the new FTS2000 AT&T network.

If you have any difficulty with FTS2000, contact the MEDLARS Service Desk at 800-638-8480 or mms@nlm.nih.gov for assistance.

Continued from page 1

Still Growing

I am proud to report that last year we added 23,000 new online user codes—more than were added in the first 17 years of MEDLINE! Our 100,000th user was added this January. We estimate that additional thousands of users—no one can say how many for sure—have access to NLM data through private sector CD-ROM and online offerings. Fixed-fee and flat-rate arrangements for accessing NLM online databases are expanding rapidly. About 30 are in place now and many more are under consideration. They range in size from the entire National Institutes of Health to individual hospitals, universities, medical associations, and commercial organizations.

Internet Access and Capabilities

In the early 1990s while others turned to CD-ROM, NLM thought that Internet would be the new route to information in the health sciences. Besides providing Internet access to databases and developing historical and visible human images on the Net, the Library supported local Internet communication through a program with the National Academy of Sciences. Because of such efforts, Internet is now the fastest growing route of access to MEDLARS data. From about zero use three years ago, more than 25% of our network users now access NLM via the Internet.

This year the Library has made some decisions that will provide easier and faster access to NLM information over the Internet. We are providing materials previously only available in print form and access to many services through our World-Wide Web server. Using a client such as Mosaic or Netscape, you can link to a photograph, sound files, get into various home pages, and conduct online sessions via Telnet. Users must pay for MEDLARS access (except for the free files), but most other services are completely free.

The publications server provides access via anonymous ftp to *Gratefully Yours*, the *NLM Technical Bulletin*, the *Online Services Reference Manual*, fact sheets, bibliographies, AIDS information and more. Users with only e-mail access to the Internet may obtain publications from the anonymous ftp servers, too.

Database Changes

Let's talk about databases—what's in, what's out, what lies ahead. One database that's in is HSRPROJ: "HSR" as in health services research and "proj" as in projects. It provides access to ongoing research funded by federal and private contracts and grants. It made its debut with about 2,000 records with 1,500 expected to be added annually. Currently accessible only through command language searching, by summer we expect HSRPROJ will be added to Grateful Med with a form screen.

SPACELINE will blast off in a few months. The cooperative project with NASA will be ready for beta testing shortly. After beta testing it will be available to Grateful Med users as a separate update disk if requested. SPACELINE will contain about 65,000 records pertaining to the health of humans in space, the effects of space biology on living systems, research applications of space flight, and exobiology. SPACELINE will contain references to journal citations, books, chapters, technical reports and abstracts.

One file, the Name Authority File (NAF), has recently left our family of databases. This decision was based on low usage and expanded access to authority information through a variety of bibliographic utilities. The other file about to leave MEDLARS as a separate file is BIOTECHSEEK. By the end of July, nearly all its records will be transferred into MEDLINE "as is" and will be identified as Special List "B." Almost all 26 BIOTECHSEEK titles will continue to be indexed for MEDLINE, making that database even stronger in the biotechnology area.

A merger that may have broader impact is the one involving HEALTH and HSTAR. NLM and the American Hospital Association jointly are investigating the possible consolidation of these databases. We realize that their scope and target audience are similar. Work on this streamlining project is in its early stages, but a possible implementation time could be in mid-December, when the 1996 system becomes available.

Around July 3 a new faster, easier-to-use version of PDQ will be made available. The new PDQ retains the familiar menus but with new user prompts. Charges for the file will be about the same as for MEDLINE.

Indexing News

Now let me report some interesting developments in the indexing area. We are working on conversion of the 1965 *Cumulated Index Medicus* to machine-readable form by keying citations from the *Name Index* (i.e., author section). Others in the Library are looking at different approaches to the problems of converting older material to machine-readable forms. By next year at this time, we will probably have a status report for you on these projects.

NLM has been cooperating with a major publisher in a pilot project to test receipt of bibliographic data (not full text) in SGML (Standard Generalized Markup Language) format. The data are sent by the publisher via the Internet and loaded into NLM's online indexing system. Our goal is to determine whether publisher-supplied data in electronic form may be a timely, accurate, and cost-effective alternative to keyboarding citations.

Beginning in 1996, author-generated abstracts in MEDLINE will no longer be

truncated if they exceed 250 words or 400 words in the case of abstracts from articles of 10 pages or more. The only way an abstract will be truncated is if it exceeds the maximum number of characters permitted by the online indexing system and that's 4,096. In the past year only a handful of abstracts exceeded this field length. Over 40,000 abstracts are now truncated in MEDLINE from 1992 forward because of the 250/400 word limit; so this change will provide considerably more access points to a fairly large portion of MEDLINE!

Online Access

Let me mention a few activities that will make online access a little easier. The fixed-fee program has been a success. Many medical centers and hospitals now pay one annual fee for unlimited Internet access to our databases. They receive an agreed upon number of codes and can distribute them as they wish. I especially urge hospital librarians to consider this program. (Contact Karen Ginter at ginter@nlm.nih.gov)

Many of you may have seen a new welcome menu that was phased into our system over a six week period ending in April. This is the first phase of our online registration system that will allow a user to request a code and password, receive it immediately, and if desired order a copy of Grateful Med. There will be no need to contact NTIS separately because all requests will be transferred electronically between NLM and NTIS. Users can access the registration system in the way they would access MEDLARS. One of the many opportunities this system provides is an easy way to have individuals outside the U.S. request a code and a copy of Grateful Med. NLM soon will be announcing a new policy to serve users who are not served by the International MEDLARS Centers. Users in countries with Centers will be urged to seek service there and use NLM directly only if such online service is unavailable. Users from abroad must come to NLM over the Internet, use Grateful Med, and establish a credit card account with NTIS.

NLM offers several methods of online access to its bibliographic databases that are suitable for direct human inquiry. However, these do not provide standards-based protocols that support computer-based applications that can easily access bibliographic data. The Z39.50 protocol provides a uniform procedure for client computers to query information from bibliographic databases. Use of Z39.50 should facilitate access to NLM's data from any registered (i.e., has a MEDLARS User ID code/password) user's system which has Z39.50 client software. A remote site could use the same client it employs for searching other data of interest to search MEDLARS also, without its users at the remote site having to learn a new interface language.

NLM's first step has been to develop a prototype server (target) to provide access to MEDLINE, and eventually other MEDLARS databases. This server will operate over the Internet, allowing access from any computer on the network. NLM expects to begin beta testing of this server in May or June. It is important to note that NLM's initial efforts are concentrated on a prototype Z39.50 server; NLM has no current plans to maintain or support its own Z39.50 client. Decisions concerning full production service will be made after the testing is complete.

New ELHILL Search Features

One recent development we are quite excited about is ELHILL release 3.4, which provides proximity searching, as well as other new capabilities. It became available to command language users in March. Proximity searching permits the user to scan most fields in a record for concepts located within individual sentences. Three new operators, ADJ, NEAR, and CONTAINS, and a new concept of element groups called Clusters have been introduced.

Proximity searching deals with the occurrence of two (or more) terms or phrases in the same sentence. The adjacency operator, ADJ, is used to link two terms that should appear immediately adjacent to each other, left to right, in the same sentence. The NEAR operator is used to specify that the two terms that it links should appear in the same sentence in ANY order and with any number of words in between.

The additional capabilities available are: nesting, which is "parenthetical" searching using angle brackets; the SET command, which allows the searcher to change PROFILE settings for the current session only; the MMALL parameter, which allows the searcher to change the response to the Multi-meaning message; and the Greetings File or GFILE parameter, which allows searchers to modify their profile to connect to a file other than MEDLINE when they login. I urge you to try some searches for yourself, either here or when you get back home. You are encouraged to become proficient with proximity and other features by requesting a non-billed demonstration code from your Regional Online Training Center at 800-338-7657.

Grateful Med Update

This summer NLM will release both an interim Mac and PC version of Grateful Med that will allow access to HSTAR on the Mac and HSRPROJ and SPACELINE in both versions. The Grateful Med Windows version is also being programmed.

This version will have several improvements over the DOS version. In particular is the ability to search text phrases on one subject word line. The Input form screen will be radically modified. The redesign separates more clearly the limiting aspects such as age groups, publication types, journals, etc., from the basic search parameters.

Users will be able to state their preference for retrieval size and if an initial piece of retrieval looks relevant, they can then easily get the rest of the result set without having to disconnect, redial, send the

search again, and so forth. We probably will continue to support the DOS version for at least a year or two, and once the new interface is working well we expect to move it to the Mac so that the Windows version and the Mac version will become virtually the same.

The nice thing about the Windows version is that while it can be used via the Internet, it does not require it. Those with Internet should be aware of a prototype of our new product, once called NetCoach now called Internet Grateful Med. A product of the Library's System Reinvention initiative, Internet Grateful Med will have access to the UMLS Metathesaurus, the Information Sources Map and other knowledge sources. The current prototype helps a user create, submit, and refine a search in MEDLINE. It has all the features of Grateful Med plus links to the full text of AHCPR-supported clinical practice guidelines and 60,000 images in NLM's collection of Online Images from the History of Medicine. Many more links are planned.

DOCLINE Update

NLM has a new policy for DOCLINE requests that are for clinical emergencies. To request fax transmission for emergency patient care requests, the CLINICAL EMERGENCY requirement must be indicated on the request. DOCLINE participants should prefix these requests to NLM at LIBID 20209C. During the hours the Library is open, these requests will be filled within two hours. If NLM is unable to fill the requests, notification will be transmitted within two hours. This information is also available in the new ILL fact sheet. ❑

--prepared by Sheldon Kotzin
Chief, Bibliographic Services Division

NLM Online Users' Meeting - MLA 1995: Questions and Answers

[Editor's Note: There was an apparent equipment failure, resulting in a large gap in the recording of the questions and answers. The material below has been reconstructed from notes taken during the meeting.]

Question: When will the Windows version of Grateful Med be released?

Answer: We are still in the development stage of the Windows version of Grateful Med; however, we hope to release this version in 6 to 12 months.

Question: And what about a Novell version of Grateful Med?

Answer: The current version of Grateful Med does runs on a Novell Local Area Network. There are installation instructions available via ftp from the NLM anonymous ftp server (gmedserv.nlm.nih.gov) or from the MEDLARS Service Desk (800-638-8480). You may also request the installation instructions via e-mail (gmhelp@gmedserv.nlm.nih.gov).

Question: Can Canadians get demonstration codes to use for trying out the new proximity search features?

Answer: Yes. Demonstration codes are available from the Canada Institute of Scientific and Technical Information (CISTI). They can be reached at cisti.medlars@nrc.ca or 1-800-668-1222.

Question: Will there be development of World-Wide Web (WWW) access to MEDLINE?

Answer: Yes. Internet Grateful Med is a Web-based system for assisted searching in NLM's databases. The Internet Grateful Med prototype was developed by the Access Model project of NLM's System Reinvention initiative. In the NLM Access Model, an intelligent gateway system provides users with seamless access to multiple database systems of varying types including full-text and images.

The current Internet Grateful Med prototype helps a user create, submit and refine a search in MEDLINE. Internet Grateful Med also provides direct links to the full text of the Clinical Practice Guidelines supported by the Agency for Health Care Policy and Research offered online in NLM's HSTAT system. It further offers direct links to nearly 60,000 images in NLM's Web-served collection of Online Images from the History of Medicine Division.

The Internet Grateful Med prototype has just completed an alpha-testing phase inside NLM. Beta-testing with colleagues outside NLM will begin early this summer. Both new capabilities (including Loansome Doc and the searching of additional databases) and incremental refinements will be added to the system as it moves toward a production release later this year.

Question: How is NIH providing for Internet security?

Answer: Security, both internal and general, is a primary concern and a high priority for NIH. There is a multifaceted security system with firewalls and layers of security for NLM's computer system. A contract was let to Lawrence Livermore Laboratories to examine the security of our systems and we are in the process of implementing their recommendations. Security will continue to be an ongoing concern and priority.

User Comment: Individual users also need to be concerned with security. Local safeguards are installed for security purposes at the university level in Champaign-Urbana. There is a password check done to permit only authorized users entry to the system.

Question: (This is not a question but a comment from someone who has seen a developmental version of the Windows version of Grateful Med while visiting NLM.) I want to mention how much improved the Windows version of Grateful Med is.

Answer: Thank you. NLM is trying to develop a Windows version that incorporates as many options as possible with a user-friendly interface.

Question: Are there any plans to have Grateful Med access HSTAT (Health Services/Technology Assessment Text — the free electronic service that provides the full-text of clinical practice guidelines)?

Answer: HSTAT is already available, with an additional file, on the current PC/DOS version of Grateful Med. If you have Grateful Med version 6.6, you may obtain a disk from the National Information Center on Health Services Research and Health Care Technology (NICHSR). They can be reached at nichsr@nlm.nih.gov or 1-800-272-4787 (select 1,6,3,2) or 301-496-0176.

Question: What is the relationship of the NLM with QuickDoc?

Answer: NLM supports DOCLINE participants' use of QuickDoc. We have an excellent relationship with QuickDoc's developer Jay Daly. NLM informs Jay Daly of all system enhancements so that he can modify his product as needed.

Question: There is a problem with the 800 number to access DOCLINE. (A show of hands reveals 10-15 people in the audience who have experienced problems with the FTS2000 800 number).

Answer: There are some problems still being worked out with the new FTS2000 number, similar to the problems first experienced when Telenet and TYMNET were newly added networks. We are still in a "shakedown period." We are hopeful that the problems will soon be resolved. To report problems connecting to DOCLINE using the FTS2000 number, call 1-800-633-5666; to report ELHILL database connection problems using the FTS2000 number, call 1-800-638-8480.

Question: The Grateful Med program tries to dial out if it is unsuccessful connecting through Internet, even though my computer has no modem access available. What can be done to change this?

Answer: Grateful Med will only cycle through different access methods if you have configured them in Grateful Med's SETUP. To prevent this from happening simply delete the additional access methods from SETUP.

Question: What is the difference between the Windows version of Grateful Med and Internet Grateful Med?

Answer: Internet Grateful Med is a World-Wide Web (WWW) application, currently being tested, that provides access to many NLM resources such as the Unified Medical Language System and Images from the History of Medicine. Internet Grateful Med is resident at NLM and user access is provided through a WWW client such as Netscape or Mosaic.

Microsoft Windows™ is a graphical interface for IBM and IBM-compatible personal computers. The Windows version of Grateful Med is a pc-based software program that must be installed on your own local computer. The Windows version of Grateful Med now under development, allows access to the NLM databases through either a modem or the Internet.

Both versions of Grateful Med require a MEDLARS User ID code for access to the databases.

Question: Will Microsoft 95 Windows™ work with the Windows version of Grateful Med?

Answer: Microsoft has devoted many resources to ensure that all current Windows applications will work with Windows 95. So although we have not tested Grateful Med under Windows 95 because both are not yet in final form, we have every reason to assume it will work.

Question: Will DOCLINE be adding holdings lists for monographs?

Answer: There are no plans for this enhancement. There is currently low usage on DOCLINE for monograph loans.

Question: Is the low monograph usage a result of the lack of information about the availability of materials?

Answer: NLM continuously monitors the type of material requested through DOCLINE. By far the largest segment of material is the journal literature. Yet NLM understands that some organizations would like to see a DOCLINE/OCLC link. NLM is evaluating the feasibility of creating such a link. We have asked the Regional DOCLINE Coordinators to provide us with information on the need for such a link and information on the use of monographs.

Question: Why is it so difficult to get articles faxed when the default choice is not fax? Why can't a fax request go to anyone and then it would be up to the receiving Library to decide whether or not they want to fill it?

Answer: The fax option was designed to expedite a fax request through the system. This system enhancement routes a fax request to DOCLINE participants who have indicated that they provide routine fax service. If a fax request is routed like a non-fax request then it could possibly route to a potential lender that does not have a fax machine or does not routinely provide fax ILL service. This would delay the request for the borrower. For emergency fax requests there is a new NLM LIBID. (See page 7 of this issue.)

DOCLINE participants are encouraged to maintain an up-to-date DOCUSER record. If an organization is able to provide routine fax ILL services then they should contact their Regional DOCLINE Coordinator and have their DOCUSER record updated accordingly.

Question: Are there plans to give individual searchers more space in the computer so that they can perform larger searches on the computer; that is, run more than 25 search statements and receive fewer overflow messages (e.g., STORPSTG OVFLW OR PROCPSTG OVFLW)?

Answer: The number of postings retrieved before receiving the overflow messages has been doubled in the last year. The number of search statements is not going to change. NLM is currently in the process of looking at new retrieval systems to take us into the next century. As part of its system reinvention initiative, the Library is identifying the qualities required in a new search system. There will not be major changes to the current "legacy" search system, which has been an excellent and remarkably flexible system for the last 25 years. ❑

CHEMLINE Regeneration

The newly rebuilt CHEMLINE was released to the public on April 20, 1995. The file now contains over 1,360,000 chemical records, reflecting the addition of more than 100,000 new records since its last update in Spring 1994. CHEMLINE records provide chemical identification data as well as locators for l6 ELHILL and 15 TOXNET databases. Among the databases shown in CHEMLINE's Locator (LO) field, HSTAR (Health Services and Technology Assessment Research) on ELHILL and TRI92 (Toxic Chemical Release Inventory for 1992) on TOXNET are new with this regeneration. CHEMLINE also provides locators to DSL (Domestic Substance List of Canada), EINECS (European Inventory of Existing Commercial Chemical Substances), and TSCAINV (Toxic Substances Control Act Chemical Inventory), which are the only locators pointing to files residing outside of MEDLARS.

The new RC (Registry Numbers of Components) field, initiated with the 1993 regeneration, has been enhanced substantially this year. Some 29,000 records, compared to 24,000 in 1993, now contain data in the RC field. By its very definition, the RC field is found only in multicomponent chemical records such as those of chemical mixtures or addition compounds. For example, a chemical mixture made up of two or more chemical substances, especially if the mixture has some unique properties, is assigned a Registry Number of its own. The CHEMLINE record for Anacin™ is shown as an example in Figure 1. The Registry Number at the top of the record, 53908-20-6, represents Anacin™, which is a mixture made up of two distinct chemicals, aspirin (benzoic acid, 2-(acetloxy)-) and caffeine (3,7-dihydro-1,3,7-trimethyl-1H-purine-2,6-dione). The Registry Numbers 50-78-2 and 58-08-2 in the RC field represent the components, aspirin and caffeine respectively.

```
RN  -  53908-20-6
RC  -  50-78-2          • New Registry Number of Components field
RC  -  58-08-2
MF  -  C9-H8-O4.C8-H10-N4-O2
N1  -  Benzoic acid, 2-(acetyloxy)-, mixt. with 3,7-dihydro-1,3,7-
           trimethyl-1H-purine-2,6-dione (9CI) [MF1]
SY  -  Anacin [CAS]
SY  -  Anadin [CAS]
SY  -  Cafiaspirin [CAS]
LO  -  EMICBACK
LO  -  ETICBACK
LO  -  TOXLINE
LO  -  TOXLINE65
LO  -  TOXLIT
LO  -  TOXLIT65
```

Figure 1- The CHEMLINE Record for Anacin™

The regeneration, which is distinct from an update of CHEMLINE, involves rebuilding the entire file from the ground up. All up-to-date data are merged by the Registry Number from all source files that contribute data to CHEMLINE. Even by computer processing, the task of assembling over 1.3 million records is formidable, especially with so many different source files with frequent and varying updating cycles. Due to an inadvertent omission in the merging process, the locators for some 3,500 chemical substances to MED75 are missing from the regenerated file. We expect to correct this omission as soon as possible. At the time of regeneration, all records in CHEMLINE acquire a new Entry Month (EM) reflecting the month and year the file was rebuilt. For this year's regeneration, the EM is 9502. ❑

--prepared by Barbara Cassatt
Specialized Information Services

The Vocabulary of Health Care Reform

As various proposals to reform the delivery and financing of health care in the United States continue to evolve within the context of both federal and state political processes, an understanding of the vocabulary used to express aspects of these proposals is helpful in searching the Health Planning and Administration (HEALTH) database and the *Hospital and Health Administration Index* (formerly, *Hospital Literature Index*). HEALTH is produced cooperatively by the National Library of Medicine and the American Hospital Association. The *Hospital and Health Administration Index* is produced from this database and published three times a year by the American Hospital Association. Both of these bibliographic sources contain numerous citations on health care reform, most of which are indexed under the MeSH headings: HEALTH CARE REFORM, HEALTH POLICY, or STATE HEALTH PLANS. HEALTH POLICY was used to index reform prior to 1994, and STATE HEALTH PLANS was and continues to be used to specify reform by the individual states. These three MeSH headings refer to reform in general.

If increased specificity is sought about various aspects of either state or federal health care reform plans, the following definitions may help searchers to understand these particular concepts. **Following each definition are MeSH headings (upper case)** to which these aspects of health care reform may be indexed in HEALTH or the *Hospital and Health Administration Index*, in addition to the MeSH headings, HEALTH CARE REFORM, HEALTH POLICY, or STATE HEALTH PLANS. Relevant MeSH headings added in 1995 are annotated with [1995] following the term; however, the MeSH headings under which the concept was indexed prior to 1995 are retained for searching citations added to HEALTH and the *Index* in 1994 and previous years. Online users who want to target more specific aspects of reform should also consider proximity searching of relevant terms, e.g. accountable@health@plan or using the three MeSH terms mentioned above as the basis for further Text Word (TW) searching.

Accountable health plan (AHP). The proposed delivery system in managed competition proposals. Similar to health maintenance organizations (HMO), an AHP would assume responsibility for delivering medical care and offer a standardized, federally defined benefit plan set by a National Health Board. Also called an accountable health partnership.

COMPETITIVE MEDICAL PLANS
INSURANCE CARRIERS
INSURANCE POOLS
MANAGED CARE PROGRAMS
REGIONAL HEALTH PLANNING

All-payer system. A payment system in which all payers of health care bills, including the government, private insurers, large companies, or individuals, pay rates set by the government for services, such as rates set under the Medicare prospective pricing system.

INSURANCE, HEALTH, REIMBURSEMENT
PROSPECTIVE PAYMENT SYSTEM
RATE SETTING AND REVIEW
REIMBURSEMENT MECHANISMS

Any-willing-provider law. A law that requires managed health care plans to contract with any qualified physician or hospital willing to meet their conditions. Any-willing-provider laws are also often discussed in the context of due process and provider contracting requirements.

CONTRACT SERVICES
MANAGED CARE PROGRAMS
PREFERRED PROVIDER ORGANIZATIONS

Capitation. A payment system in which the purchaser pays the insurer or provider a fixed amount for each enrollee for a defined package of health services over a given period, regardless of how extensively enrollees use those services or whether the costs of care exceed the fixed amount.

CAPITATION FEE
GROUP PRACTICE, PREPAID
HEALTH MAINTENANCE ORGANIZATIONS
MANAGED CARE PROGRAMS
PREPAID HEALTH PLANS

Community accountability. The responsibility of providers in a community care network to document for members (or enrollees) their progress toward specific community health goals and their maintenance of specific clinical standards.

COMMUNITY HEALTH PLANNING [1995]
COMMUNITY-INSTITUTIONAL RELATIONS
SOCIAL RESPONSIBILITY

Community care network[SM*]. An organization or group of organizations made up of a range of providers, from hospitals and physicians to home health agencies and nursing homes, that will cooperate in providing the whole spectrum of services a patient will need, from preventive care to long-term care, through a coordinated, client-centered continuum of care in specific geographic areas, usually with capitated payment. Also called integrated care, integrated delivery network, or integrated health care system. Community care networks are a focus of the American Hospital Association's reform proposal.

* Community Care Networks, Inc. and San Diego Community Healthcare Alliance uses the name Community Care Network as its service mark and reserves all rights.

COMMUNITY HEALTH PLANNING [1995]
COMMUNITY HEALTH SERVICES
COMPREHENSIVE HEALTH CARE
CONTINUITY OF PATIENT CARE

DELIVERY OF HEALTH CARE
HEALTH CARE COALITIONS
HEALTH FACILITY MERGER
HOSPITAL-PHYSICIAN JOINT VENTURES
MULTI-INSTITUTIONAL SYSTEMS
ORGANIZATIONAL AFFILIATION
REGIONAL HEALTH PLANNING
REGIONAL MEDICAL PROGRAMS
SYSTEMS INTEGRATION [1995]

Community rating. A method of calculating health insurance premiums based on the average health demands and costs of a large community group like the population of a city or state, such that all individuals in the group pay the same premium. Currently, most insurance premiums are based on experience rating that looks at health demands and costs of smaller groups, such as an individual company.

ACTUARIAL ANALYSIS
FEES AND CHARGES
RATE SETTING AND REVIEW
REIMBURSEMENT MECHANISMS

Continuum of care. The comprehensive spectrum of health services from self-care and prevention through primary care, secondary care, tertiary care, aftercare, and long-term care.

COMPREHENSIVE HEALTH CARE
CONTINUITY OF PATIENT CARE

Cost shifting. The practice by providers of raising the price of health services for private-pay patients in order to subsidize insufficiently compensated or uncompensated health services.

COST ALLOCATION
MEDICAL INDIGENCY
UNCOMPENSATED CARE

Employer mandate. A requirement by the government that employers provide health insurance to employees.

HEALTH BENEFIT PLANS, EMPLOYEE

Experience rating. A method of calculating health insurance premiums for a group based initially on the sex, age, and other risk factors that the group presents. Subsequently, actual health demands and costs of the group are used to modify the group ratings and premiums. Premiums are set lower for the groups whose enrollees are healthier.

ACTUARIAL ANALYSIS
FEES AND CHARGES
RATE SETTING AND REVIEW
REIMBURSEMENT MECHANISMS

Fee-for-service. The traditional indemnity payment system for health services in which patients pay providers for each service rendered, with physicians exercising considerable autonomy in making diagnostic and therapeutic decisions. Indemnity insurance usually covers all or part of the service costs. This system gives the patient the choice of provider.

BLUE CROSS
BLUE SHIELD
FEE-FOR-SERVICE PLANS [1995]
FEES, MEDICAL
INSURANCE, HOSPITALIZATION
INSURANCE, PHYSICIAN SERVICES

Gatekeeper. A primary care health professional who is the first contact for patients seeking treatment in a managed care system. The gatekeeper evaluates the patient, determines the appropriate path of treatment, authorizes, and coordinates referral to any appropriate, specialized health care services. Also called patient care manager.

FAMILY PRACTICE
MANAGED CARE PROGRAMS
PHYSICIANS, FAMILY
PRIMARY HEALTH CARE
REFERRAL AND CONSULTATION

Global budget. A cap on overall private and public health care spending, taking into account all sources of funds. It is generally considered in terms of a national total budget that would be divided into state or regional budgets to cover the delivery of all health services. Also called total budget.
BUDGETS
HEALTH EXPENDITURES

Health alliance. A regional cooperative between government and the public formed to oversee the managed competition payment system. The alliance would ensure that accountable health plans within a region conform to federal coverage and quality standards, and see that they keep costs within any mandated budget. See also Accountable health plan (AHP) and Health insurance purchasing cooperative (HIPC).

COMPETITIVE MEDICAL PLANS
CONSUMER ORGANIZATIONS
GROUP PURCHASING
HEALTH CARE COALITIONS
INSURANCE POOLS
MANAGED CARE PROGRAMS

Health care plan. A joint venture between health practitioners and institutions (insurance companies, HMOs, or hospitals) that assumes responsibility for delivering health services under a prepayment contract. Physicians may work for or contract with a health care plan.

COMPREHENSIVE HEALTH CARE
DELIVERY OF HEALTH CARE
HOSPITAL-PHYSICIAN JOINT VENTURES
INSURANCE, HEALTH
MANAGED CARE PROGRAMS

Health insurance purchasing cooperative (HIPC). A state or regional consumer network formed in the context of a system of managed competition that combines the purchasing power of individuals and employers in order to negotiate with competing accountable health plans for the highest quality plan at the lowest price. See also Accountable health plan (AHP) and Health alliance.

COMPETITIVE MEDICAL PLANS
CONSUMER ORGANIZATIONS
GROUP PURCHASING
HEALTH CARE COALITIONS
HEALTH BENEFIT PLANS, EMPLOYEE

INSURANCE POOLS
MANAGED CARE PROGRAMS

Health security card. An electronic card to be carried by enrollees that contains the individual's unique identification number, information about the enrollee's health benefits, and any other information required by the National Health Board. The card resembles a credit card and is presented by the enrollee to the provider when seeking health services.

MEDICAL RECORDS SYSTEMS, COMPUTERIZED
PATIENT CREDIT AND COLLECTION
PATIENT IDENTIFICATION SYSTEMS

Integrated care. *See* **Community care network**.

Managed care. A network of physicians, hospitals, and insurers that controls what it spends on health care by monitoring and coordinating the health resources used by providers in treating a patient. Methods of managing care include gatekeeping, preauthorization for hospital care, and utilization management. Many forms of managed care currently exist, ranging from staff model HMOs to managed fee-for-service.

COMPETITIVE MEDICAL PLANS
GROUP PRACTICE, PREPAID
HEALTH MAINTENANCE ORGANIZATIONS
INDEPENDENT PRACTICE ASSOCIATIONS
MANAGED CARE PROGRAMS
PREFERRED PROVIDER ORGANIZATIONS
PREPAID HEALTH PLANS

Managed competition. Proposal by the Jackson Hole Group that would retain the current private system of purchasing and delivering health care, but would "manage" the competition between health plans. Under the proposal, consumers would choose health plans through large purchasing networks. Accountable health plans would compete for enrollees on the basis of price and quality rather than benefits and underwriting limitations.

COMPETITIVE MEDICAL PLANS
MANAGED CARE PROGRAMS

Managed cooperation/collaboration. The process of planned cooperation by multiple health service providers to form comprehensive, managed care networks for the benefit of the community.

COMMUNITY HEALTH PLANNING [1995]
COMMUNITY-INSTITUTIONAL RELATIONS
COMPREHENSIVE HEALTH CARE
INTERINSTITUTIONAL RELATIONS
MANAGED CARE PROGRAMS
ORGANIZATIONAL AFFILIATION
REGIONAL HEALTH PLANNING
REGIONAL MEDICAL PROGRAMS

Medical spending account. Savings mechanism intended to encourage more cost- conscious consumer purchasing of health care. Usually coupled with a catastrophic plan, employers and/or employees can set aside part of their pay to cover the plan's deductible. The account is funded by deductions from pretax income, and often any monies left in the account at the end of the year roll over into the next year.

CONSUMER PARTICIPATION
FINANCING, PERSONAL
HEALTH BENEFIT PLANS, EMPLOYEE
INVESTMENTS

National Health Board. A federal panel to be created in the executive branch of the federal government in order to monitor the establishment of health alliances and health insurance purchasing cooperatives and set federal standards for their health coverage, benefits, and quality that will ensure the health reform package works fairly.

GOVERNING BOARD
GOVERNMENT AGENCIES

Outcomes research. Investigation designed to determine the relative effectiveness of specific treatments for specific medical conditions.

HEALTH SERVICES RESEARCH
OUTCOME AND PROCESS ASSESSMENT (HEALTH CARE)
OUTCOME ASSESSMENT (HEALTH CARE)
TREATMENT OUTCOME

Physician-hospital organization (PHO). A partnership developed between physicians and hospitals, often organized around a single clinical specialty or specific clinical service, that provides health care services under a single contract with a purchaser, often on a capitation basis.

HOSPITAL-PHYSICIAN JOINT VENTURES
SPECIALTIES, MEDICAL

Point-of-service plan. A open-ended managed care plan that is structured to allow enrollees to go outside of the plan for care, with enrollees paying more, but not all, out-of-pocket expenses for outside services. Enrollees who pay for services outside the plan typically are reimbursed 60 to 70 percent by the plan.

CONSUMER PARTICIPATION
HEALTH MAINTENANCE ORGANIZATIONS
MANAGED CARE PROGRAMS
PATIENT PARTICIPATION
REFERRAL AND CONSULTATION
SPECIALTIES, MEDICAL

Portable insurance. Individual health insurance that follows enrollees, regardless of changes in their place of employment, without loss of benefits or waiting periods for coverage to take effect.

EMPLOYMENT
HEALTH BENEFIT PLANS, EMPLOYEE

Preexisting condition. A health problem that exists prior to the purchase of an

insurance policy. Preexisting conditions are frequently denied insurance coverage, or invoke a waiting period for coverage to take effect.

INSURANCE CLAIM REVIEW
INSURANCE, HEALTH, REIMBURSEMENT
INSURANCE
SELECTION BIAS

Seamless care. The experience by patients of smooth and easy movement from one service in the health care continuum to another.

CONTINUITY OF PATIENT CARE
EPISODE OF CARE
PROGRESSIVE PATIENT CARE

Single-payer system. A centralized health care payment system in which the government is the single payer for all health services, while most doctors, hospitals, and other health providers and services remain in the private sector. Canada has a single-payer system.

INSURANCE, HEALTH
NATIONAL HEALTH INSURANCE, UNITED STATES
NATIONAL HEALTH PROGRAMS [for systems in countries other than the United States]
STATE HEALTH PLANS [for systems within the individual states]

Socialized medicine. A health care system regulated, financed, and controlled by the government, in which the government assumes responsibility for the health needs of the population. Great Britain has socialized medicine.

STATE MEDICINE

Uniform claim form. A standardized health insurance claim form to be used by all insurance companies and health providers.

FORMS AND RECORDS CONTROL
INSURANCE CLAIM REPORTING

Universal access. Guaranteed access to health care for the general population through universal coverage.

HEALTH SERVICES ACCESSIBILITY

Universal coverage. The extension of a basic, publicly guaranteed set of health care benefits to all persons, rather than a subset of the population.

HEALTH SERVICES ACCESSIBILITY
INSURANCE, HEALTH
INSURANCE BENEFITS
NATIONAL HEALTH INSURANCE, UNITED STATES

Sources of Definitions

Numerous short glossaries of health care reform found in the recent literature were consulted in defining the terms above, as well as a comprehensive dictionary. The resulting definitions given in this article are frequently consensus combinations, both because the glossaries differ on the meaning of certain terms, and also because the terms themselves shift in wording and meaning as new proposals for reform arise and the political process continues. A list of references to these glossaries follows. Except for the Slee dictionary and the managed care glossary, most are simply a single page of definitions inserted within the body of an article or pamphlet.

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MEDLARS Service Desk Calls - an Analysis

Every year, for two weeks in the Spring, the MEDLARS Management Section conducts a survey of the calls that come into our Service Desk, primarily from our toll-free number, 800-638-8480. The main reason MEDLARS performs this survey is to determine the subject of calls to the Service Desk, i.e., **why do people call us?** We also collect information about other aspects of the call, e.g., the types of callers, and from what state they are calling. This report looks at a comparison of the results of the 1990 and 1994 surveys. It is interesting to compare these two surveys because at the time of the 1990 survey the Service Desk was open only during our regular business hours: Monday to Friday 8:30 a.m. to 5 p.m. ET. In 1992 we began phasing in our extended Service Desk coverage which eventually settled on the hours Monday - Friday 5 to 11 p.m. and Saturday 8:30 a.m. to 5 p.m. ET. Also, in 1993 we added a phone mail system that offers recorded messages of frequently requested information and an opportunity for callers to leave address information in order to have materials mailed to them. (See box on page 16.)

The Data

In 1990, 1,620 calls came in to the MEDLARS Service Desk during the survey period. In the 1994 survey, 1,667 calls were logged, and fifteen percent of these came in during our evening and Saturday hours.

Figure 1 shows the percentages of questions according to the system being used. Questions that are not clearly Grateful Med, PDQ, TOXNET, or from users of other vendors are lumped in the "ELHILL, NLM, Miscellaneous" category.

System	1990	1994
ELHILL, NLM, Misc.	67%	49%
Grateful Med	27%	46%
PDQ	3%	3%
TOXNET	2%	2%
Other Vendors	<1%	1%

Figure 1 - Questions by "System"

Figure 2 below shows how long calls took. During the 1990 survey, over half the calls took less than 3 minutes. During the '94 survey we see that calls took longer to answer.

Minutes	1990	1994
1 - 2+	52%	35%
3 - 5+	30%	34%
6 - 10+	9%	19%
11 - 20+	2%	6%
21+	1%	1%
Unknown	6%	4%

Figure 2 - Length of Calls (in minutes)

Figure 3 below shows the percentage of callers who were health professionals, librarians, or "others." As the percentage of librarians has decreased, the percentage of health professionals and "others" has increased. We are getting noticeably more calls from lawyers, computer technicians, and the general public.

Caller Classification	1990	1994
Health Professional, etc.	40%	44%
Librarian	41%	28%
Other	10%	16%
Unknown	9%	11%

Figure 3 - Classification of Caller

As shown in Figure 4 below, the most calls come from Region 2.

Region		1990	1994
Region 1	(DE, NJ, NY, PA)	18%	18%
Region 2	(AL, DC, GA, FL, MD, MS, NC, PR, TN, SC, VA, VI, WV)	23%	24%
Region 3	(KY, MI, OH, IN, IL, WI, MN, IA, ND, SD)	15%	13%
Region 4	(CO, KS, MO, NE, UT, WY)	5%	2%
Region 5	(AR, LA, NM, OK, TX)	7%	6%
Region 6	(AK, ID, MT, OR, WA)	4%	3%
Region 7	(AS, AZ, CA, GU, HI, MP, NV)	11%	14%
Region 8	(CT, MA, ME, NH, RI, VT)	6%	7%
Canada		<1%	1%
Unknown		11%	12%

Figure 4 - Calls by Region

Subject Classification

The topics discussed during the calls were classified and then tallied. The list of topics used to classify questions is considerable, and similar to MeSH vocabulary, new topics must be added each year to reflect new reasons why people call us.

Here is a list of the topics used for the 1994 survey in descending order of frequency:

Technical Grateful Med (GM) support
Telecommunications/Internet
Help using GM/ELHILL/PDQ TOXNET
Searching (strategies)
Application requests/Help filling out an application
Lost Codes/Passwords
General MEDLARS questions
Status of an application
Database questions
Reference questions (these are referred to NLM's Reference Section or elsewhere)
GM update questions
General GM questions
Free AIDS access
General NLM questions
Billing questions
Requests for handouts
Hardware/Software (non-GM) questions
Journal-related questions
Login/Connection questions
Referral/Transfer calls
Full text/Document delivery
Loansome Doc
Training program questions
ELHILL problems
Auto SDI program
Manuals/MeSH tools
Cost to search
Fixed/Flat rate programs
How To/Demo disks
GM Bulletin Board
Student program
Demonstration codes
Disconnecting "hung up" codes
Technical Bulletin & *Gratefully Yours* questions
Clinical Alert questions
Requests for lists of CD-ROM vendors
Data leasing program
Reporting database errors
Offline print questions/cancellations.

The five most common topics of calls during the 1990 and 1994 surveys are shown in Figures 5 and 6.

Help with search strategy	27%
Application requests/assistance	11%
Help using GM/ELHILL/PDQ/TOXNET	9%
Technical GM support	6%
General GM (ordering)	6%

Figure 5 - Five Most Common Topics of Calls in 1990

Technical GM support	14%
Telecommunications/Internet	10%
Help using GM/ELHILL/PDQ/TOXNET	8%
Help with search strategy	8%
Application requests/assistance	8%

Figure 6 - Five Most Common Topics of Calls in 1994

Although four out of five topics are in both lists (Figures 5 and 6), the order has shifted. There has also been an overall reduction in the percentages of all topics. In 1990 the total of the percentages for the top five topics was 59%. In 1994 this total is down to 48%. This is primarily because, as mentioned above, each year the list of topics grows. For example, in 1990 we did not get questions about the flat-rate/fixed-fee program or Clinical Alerts because these programs were not yet available.

Summary

The MEDLARS Service Desk staff handled over 40,000 calls in 1994. The Service Desk Survey is conducted for two weeks a year to gather information primarily about the types of calls that we get and to see how this changes over the years. We also use this information to help in the training of new MEDLARS Service Desk staff, and in the design of the MEDLARS Service Desk phone mail system. The 1994 survey further underscores the diversity of subjects that make their way to our Service Desk. Although many callers are still seeking assistance with searches, the vast majority of callers have questions of either a technical or administrative nature. ❑

--prepared by Annette Morris Nahin
MEDLARS Management Section

Phone Mail and E-mail

The MEDLARS Service Desk Phone Mail System (implemented in March 1993) has been ***invaluable*** in helping us handle the huge increase in MEDLARS users from 1986 (less than 10,000 users) to now (over 100,000 users). This system provides recorded information that answers some of the most frequently asked questions. Callers are offered four choices from the main menu. The first three choices are available around the clock and provide information about: 1) MEDLARS, Grateful Med, and how to apply for access; 2) billing questions; and 3) Grateful Med updates. The fourth option on the menu is to be connected with a MEDLARS Service Desk representative. During 1994 over 80,000 callers entered the system. Approximately half of these listened to the recorded information and did not have to speak directly with a Service Desk representative. Each month anywhere between 300 and 700 callers utilize the first option which allows them to leave name/address information in order to be sent an application/information packet.

MEDLARS staff also respond to requests for information sent to two e-mail addresses: **gmhelp@gmedserv.nlm.nih.gov** for Grateful Med questions, and **mms@nlm.nih.gov** for MEDLARS-related questions. During 1994, over 2,800 messages were received at these addresses. ❑

A Review of Automatic SDI Service: Retrieving Results Through ftp

In the September-October 1993 *Technical Bulletin*, the National Library of Medicine announced the availability of a new delivery method for participants in the Automatic SDI Current Awareness Program: receiving search results electronically over the Internet via ftp (file transfer protocol). We thought it was time to review this feature because many users may have obtained Internet access since the article was first printed. Please refer to the original article for further details.

Requirements

All participants in the NLM Automatic SDI Program may use the ftp service if they:

1) have Internet access; specifically, the ability to ftp files.

2) send a copy of the NLM AUTOMATIC SDI SERVICE REQUEST FORM to the MEDLARS Management Section indicating the databases to be switched to the ftp service. The Request Form is available via anonymous ftp from nlmpubs.nlm.nih.gov in the directory nlminfo/agreements/sdi_form.wp and via gopher from gopher.nlm.nih.gov in the directory NLM Fact Sheets, Newsletters, Reports, Agreements and Forms/NLM Agreements and Forms/Obtaining an Online Access Code for NLM Databases/ SDI Service Application Form.

File Structure

The files containing SDI search results are ASCII text files. The files look almost identical to the printouts you receive in the mail. The title page remains the same as does the final line (****END OF OFFLINE PRINT****), but the page headers (page breaks) and page numbers have been removed. Each month, one file is created per User ID code, per database, containing the results of all the Automatic SDI searches for that database. Please note that only one delivery method can be designated for each database per User ID code.

Stored search results are being offered electronically to make the data available faster in a more versatile format. ASCII text format was chosen because it is the most generic format available. Because the original data are not stored as ASCII text and the diacritical marks do not translate consistently and accurately, and because we did not want to restrict the use of the data to specific software or printers, we have taken all diacritics out prior to creating the file for ftp. If diacritics are important to your work, we recommend you continue to receive your results on paper sent via the U.S. Postal Service rather than using ftp.

Pricing

New charges for characters were developed for stored search retrieval transmitted via ftp. The new pricing component reflects the reduction in NLM costs because paper, envelopes, and postage are not needed. Domestic users are charged as follows:

ftp Character Charge:

MEDLINE and all files except TOXLIT:	$0.10 per 2,000 characters via ftp
TOXLIT:	$2.05 per 2,000 characters via ftp (includes $1.95 royalty charge)

Search Execution Charge:

MEDLINE and all files except TOXLIT:	$1.50 per search
TOXLIT:	$9.83 per search (includes $8.33 royalty charge)

Pricing Table

Non-U.S. users are charged an additional $0.10 per 2,000 characters for SDILINE, HEALTH, CANCERLIT, POPLINE, TOXLINE/TOXLIT, BIOETHICSLINE, and HSTAR.

Pricing for Automatic SDI search execution and references printed when sent through the U.S. Postal Service has not changed.

Notification and Time Period for Retrieving Files

The SDI files for ftping are created according to the database update schedules published in the Appendixes of the September-October *Technical Bulletin* each year. The $INFO SDI command shows by database the dates on which all SDIs were last processed and are expected to be run for the next update. Files remain on the MEDLARS ftp server for 10 business days following their creation. Saturdays and Sundays are not included as business days. In the original article it was reported that each time you logged in to ELHILL a message would appear informing you that there were Automatic SDI files associated with your User ID code on the MEDLARS ftp server. This policy has since changed and now the first time each day that you login to ELHILL a message will appear whenever there are Automatic SDI files associated with that User ID code on the MEDLARS ftp server. Please inform your co-workers if you share a User ID code. Notices will be placed in the online NEWS indicating when databases have been updated or if there is a delay in processing the Automatic SDI searches.

Viewing Files Before Downloading

Whenever you login to ELHILL and see a message indicating you have files available on the MEDLARS ftp server, you have the option of viewing a list of the contents of your directory on the MEDLARS ftp server from any USER: prompt as shown in Figure 1 below. This feature allows you to check the size of your file before downloading; there is no character charge associated with the use of the $DSLIST command.

```
PLEASE ENTER LOGIN SELECTION

b                                          • b is the menu choice that connects you to MEDLINE.

PLEASE ENTER USERID/PASSWORD               • Log into ELHILL using your MEDLINE User ID code
abc44/parsley$$$$$$$                         and password.

WELCOME TO THE NATIONAL LIBRARY OF MEDICINE'S ELHILL SYSTEM.
YOU ARE NOW CONNECTED TO THE MEDLINE (1992-95) FILE.

You have 2 Automatic SDI files available to ftp.
Please type $DSLIST to view your files and/or
            $DSPURGE to delete your files.

SS 1/C?
USER:
$dslist                                    • Issue the $DSLIST command to see the contents of your
                                             directory on the MEDLARS ftp server.

DSID    ————Dataset-Name————    Lines   Chars    ——Created——
9123    DSPRINT.ABC44.SDS09123  6525    341444   04/30/95-09:02:40
9147    DSPRINT.ABC44.SDH09147  2647    94957    05/06/95-10:05:37

USER:
stop y
```

Figure 1 - Procedure for Viewing a List of the Contents of Your Directory on the MEDLARS ftp Server

Downloading Your Files

The SDI files are located on the MEDLARS ftp server, medlars.nlm.nih.gov. To access these files, you need to know the PDQ password or DOCLINE password associated with the User ID code used to store the searches. After logging onto MEDLARS and receiving a message indicating your SDI files are ready, logoff MEDLARS and follow the login procedure as shown in Figure 2 below.

ftp medlars.nlm.nih.gov	Connect to the MEDLARS ftp server.
login: [**User ID Code**] e.g., **ABC44**	Depending on your ftp software, you may have a different prompt such as "logon" or "user". In some cases you will not have any prompt; you just have to know to type the appropriate word. The User ID code keyed in must be the same User ID code used to create the stored search. Check with your system administrator if you are having problems.
password: [**your password]** e.g., **PDQA**	Remember, this is either your PDQ password OR your DOCLINE password, NOT your ELHILL password.
cd ['dsprint.userid'] e.g., **cd 'dsprint.abc44'**	Substitute your User ID code for **userid**. This will change you into the correct directory where your files are located. **YOU MUST INCLUDE THE SINGLE QUOTES!!**
dir	This provides a listing of files available for ftping. Remember, SDI files all start with SD; the third letter indicates the database.
get [filename] e.g., **get sds00721**	Many systems prompt you for a destination filename as well. If so, specify the entire filename including the drive and path (example c:\sdi\SDS00721). Check with your system administrator if you are having problems. Note: If you have more than one file to download, instead of typing "get [filename]" for each file, you can use the mget command by keying the command exactly as shown below: **mget ***
bye	To exit from the ftp session.

Figure 2 - Procedure for ftp of SDI Files

MySplit Program

While retrieving all stored searches under one User ID code as one file is convenient, working with the file after downloading can be cumbersome, particularly a file containing a large number of retrieved references in multiple stored searches. The MySplit program addresses this problem.

Running MySplit separates the individual stored search retrievals by creating one file for each stored search output contained in the master file. The individual files created are numbered sequentially beginning with XX000 (e.g., if your Automatic SDI file had three individual searches in it, they would be numbered XX000, XX001 and XX002). NAMES, an index to these XX files, is also created when you run MySplit. All files generated by MySplit are ASCII text files.

MySplit is available via anonymous ftp from the NLM anonymous ftp server for running on the your local system. The program is available for DOS, Macintosh, and UNIX operating systems. For those of you with other operating systems, an uncompiled copy of the C program is also available.

While MySplit was written by staff at the National Library of Medicine, we do not have plans for extensive troubleshooting. MySplit is not copyrighted and may be used and modified freely.

Retrieving MySplit

To retrieve a copy of MySplit, follow the procedure shown in Figure 3 below. How you use MySplit will depend on your operating system. The readme file provides a complete description of how to use MySplit. A sample SDI file is available for testing and experimentation. The readme and sample files are located in the same directory as the MySplit program.

ftp nlmpubs.nlm.nih.gov	Connect to the NLM anonymous ftp server.
login: **anonymous**	Depending on your ftp software, you may have a different prompt such as "logon" or "user". In some cases you will not have any prompt; you just have to know to type the appropriate word. Check with your system administrator if you are having problems.
password: **[your e-mail address]**	Type your e-mail address.
cd nlmpubs/online/sdi	This moves you into the correct directory where the files are located. Be advised, this machine is case sensitive so be sure to use lower case letters for the directory names.
dir	This gives you a list of files in this directory. You will see several files listed: readme mysplit.exe - DOS version mysplit.sea.hqx - Macintosh version mysplit.unix - UNIX version mysplit.c - source code sds00725 - sample SDI file for SDILINE
bin	This command switches you to binary mode. Because these are executable programs, you must change to binary mode BEFORE you retrieve the file. You do not need to issue this command if you are going to retrieve mysplit.c because it is an ASCII text file.
get [filename]	Where filename is the file you want to retrieve. For example, if you are in a UNIX environment you would type: **get mysplit.unix** Keep in mind that this computer IS CASE SENSITIVE!!
bye	To exit from the ftp session.

Figure 3 - Procedure for Retrieving MySplit

Purging Your SDI File

When you have completed processing your output for your Automatic SDI searches for the month, you should delete the file from the MEDLARS ftp server. The system is set up to delete SDI files automatically after ten business days. However, these files consume NLM systems resources and thus the files should be deleted as soon as they are no longer needed. This interaction is shown in Figure 4 below.

```
PLEASE ENTER  LOGIN SELECTION
b
PLEASE ENTER USERID/PASSWORD
abc44/parsley$$$$$$$                    • Log into ELHILL using your MEDLINE User ID code and password.

WELCOME TO THE NATIONAL LIBRARY OF MEDICINE'S ELHILL SYSTEM.
YOU ARE NOW CONNECTED TO THE MEDLINE (1992-1995) FILE.

SS1/C?
USER:
$dslist                                 • Type $DSLIST to see a directory of files available to you for ftp.

DSID  ————————Dataset-Name————————  Lines  Chars  ————————Created————————
6705        DSPRINT.ABC44.DS06705      6723  318780       03/02/95-14:44:06

USER:
$dspurge 6705                           • Type $DSPURGE followed by the DSID number.

DSPRINT.ABC44.DS06705 - Purged          • The computer responds by stating that the file has been
                                          purged. The purging of the file is immediate; it cannot
                                          be restored.

USER:
stop y
```

Figure 4 - Procedure for Purging SDI Files

Summary

The ftp capability provides Automatic SDI Program participants with greater flexibility and a faster method for receiving their searches each month. Remember that this article is a review of the original article published in the September-October 1993 issue of the *Technical Bulletin*, pages 25-33. For a full description and detailed instructions please refer to that article. ❑

--prepared by Vivian A. Auld
MEDLARS Management Section

New Shelflisting Procedures and Policies for W1 Serials

In early 1995, NLM instituted two changes related to the assignment of Cutter-like numbers to serials classed in the form number W1. The overall intent of these changes is to provide improved control of serials at the point of initial receipt and to make the serial literature available more quickly in support of NLM interlibrary loan services.

NLM now assigns complete call numbers at the point of receipt to all serials classed in W1. Previously, complete call numbers with Cutter-like numbers were assigned upon receipt only for certain lower priority W1 serials, chiefly government publications and foreign language serials. As time allows, NLM is retrospectively assigning fully shelflisted call numbers to all as yet uncataloged W1 serials, replacing the tag "IN PROCESS" in the call number field in SERLINE.

Another change, implemented in March 1995, relates specifically to shelflisting policy for serial title changes. When a new serial record created as a result of a change of title or main entry continues the numbering of its previous title which is already in the NLM collection, the new W1 serial title will retain the shelflist number of the title it continues. This shelflisting policy corresponds to that used for cuttering of serials classed in call numbers other than W1 and reflects a resumption of prior NLM shelflisting practice for serials as applied before 1962.

There are two exceptions to this practice where the serial Cutter-like number of the prior title will generally not be retained:

1) If a new title is the result of a merger of two or more earlier serials or represents a split of an earlier serial into two or more new titles, a new serial shelflist number will be assigned.

2) If a new serial title is cataloged and shelflisted before the title change is recognized, the serial shelflisting will not be adjusted to conform to the above policy and the shelflist number assigned at the point of receipt will be retained.

As a result of both the procedural and the policy changes, the SERLINE record for a serial classed in the form number W1 will contain a fully shelflisted call number, whether or not the title has been fully cataloged.

NLM recognizes that this change in shelflisting policy for serial title continuations negates the use of the serial call number as a device for the alphabetical arrangement of the serial titles in its collection. NLM does not consider this a serious disadvantage in its closed stack environment. On the positive side, new serials will be more rapidly labeled, shelved, and made available to users through full call numbers resident in the SERLINE file and accessible via NLM Locator, NLM's public access catalog. ❑

--prepared by Alice Jacobs
Technical Services Division

SERIALS UPDATE

INDEXED TITLES UPDATED, MAY-JUNE 1995

The following titles cited in MEDLINE, HEALTH, and HSTAR have recently been selected for indexing, undergone a title change, or ceased publication. This list is not cumulative; the information provided is only for titles whose status has changed since the last UPDATE. More detailed information may be found in SERLINE. For further information, please contact MMS or Ms. Esther Baldinger, Technical Services Division at 301-496-3784 or elb@nlm.nih.gov.

Serials Update information may also be obtained by anonymous ftp from the host nlm.pubs.nlm.nih.gov. The file is in the directory /online/journals. The same Update information may also be obtained from the NLM Gopher; first gopher to gopher.nlm.nih.gov, then select Online Services, then select Journal Title Lists. Questions about ftp from the NLM anonymous server should be addressed to:

ftpadmin@nlmpubs.nlm.nih.gov

and questions about the NLM Gopher should be addressed to:

admin@gopher.nlm.nih.gov

TITLES SELECTED FOR INDEXING, MARCH-APRIL 1995

IM ADVANCES IN ENDOCRINOLOGY AND METABOLISM
ADV ENDOCRINOL METAB
1,1990—
MOSBY YEAR BOOK
ST. LOUIS MO UNITED STATES
INDEXING BEGAN WITH V6,1995.
W1 AD552L 1049-6734
SR0067174 JC: CB4
MOSBY-YEAR BOOK INC.
P.O.BOX 28430
ST. LOUIS MO 6346-3318

IM CLINICAL ANATOMY
CLIN ANAT
1N1,1988—
WILEY-LISS
NEW YORK NY UNITED STATES
FREQUENCY VARIES: QUARTERLY, VOLS. 1-3 (1988-1990); BIMONTHLY, VOL. 4 (1991)- .
OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION OF CLINICAL ANATOMISTS AND THE BRITISH ASSOCIATION OF CLINICAL ANATOMISTS.
INDEXING BEGAN WITH V8N1,1995.
W1 CL653 0897-3806
SR0062062 JC: CB6
WILEY-LISS
605 THIRD AVE.
NEW YORK NY 10158-0012

IM CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY
CLIN DIAGN LAB IMMUNOL
1,1994—
AMERICAN SOCIETY FOR MICROBIOLOGY (ASM)
WASHINGTON DC UNITED STATES
CUMULATED ANNUALLY ON CD-ROM WITH SAME TITLE; ALSO AVAILABLE AS PART OF ASM JOURNALS ON CD, WHICH ARE NOT IN THE NLM COLLECTION.
INDEXING BEGAN WITH V2N1,1995.
W1 CL654C 1071-412X
SR0078892 JC: CB7
SUBSCRIPTIONS DEPT.
AMERICAN SOCIETY FOR MICROBIOLOGY
1325 MASSACHUSETTS AVE. NW
WASHINGTON DC 20005-4171

INI CREATIVE NURSING
CREAT NURS
1N1,OCT 1994—
CREATIVE NURSING MANAGEMENT
MINNEAPOLIS MN UNITED STATES
CONTINUES: PRIMARILY NURSING, WHICH IS NOT IN THE NLM COLLECTION.
INDEXING BEGAN WITH V1N1,OCT 1994.
IN PROCESS 1078-4535
SR0082761 JC: CBF
CREATIVE NURSING MANAGEMENT INC.
614 E. GRANT ST.
MINNEAPOLIS MN 55409

IM CURRENT OPINION IN BIOTECHNOLOGY
CURR OPIN BIOTECHNOL
1N1,OCT 1990—
CURRENT BIOLOGY
LONDON ENGLAND
INCLUDES BIBLIOGRAPHY OF THE CURRENT WORLD LITERATURE.
INDEXING FOR BIOTECHSEEK BEGAN WITH V1N1,OCT 1990. SELECTIVELY INDEXED FOR BIOTECHSEEK.
INDEXING FOR IM BEGAN WITH V6N1,1995.
W1 CU799GBL 0958-1669
SR0065966 JC: A92
CURRENT BIOLOGY LTD.
34-42 CLEVELAND ST
LONDON W1P 5FB
ENGLAND

IM CURRENT OPINION IN GENERAL SURGERY
CURR OPIN GEN SURG
1993—
CURRENT SCIENCE
PHILADELPHIA PA UNITED STATES
INDEXING BEGAN WITH 1995.
W1 CU799GCN 1065-6243
SR0075594 JC: CB8

IM CURRENT THERAPY IN ENDOCRINOLOGY AND METABOLISM
CURR THER ENDOCRINOL METAB
1985/86—
B.C.DECKER
TORONTO CANADA
EARLIER VOLS. ISSUED WITH TITLE: CURRENT THERAPY IN ENDOCRINOLOGY.
INDEXING BEGAN WITH V5,1994.
W1 CU819D 0831-652X
SR0054336 JC: CB9
B.C.DECKER
3228 SOUTH SERVICE ROAD
BURLINGTON ONTARIO L7N 3H8
CANADA

IM CURRENT TOPICS IN NEUROENDOCRINOLOGY
CURR TOP NEUROENDOCRINOL
1,1982—
SPRINGER VERLAG
BERLIN GERMANY
INDEXING BEGAN WITH 1995.
W1 CU82Q 0723-1229
C57930000 JC: CCA

IM DNA RESEARCH
DNA RES
1,1994—
KAZUSA DNA RESEARCH INSTITUTE AND UNIVERSAL ACADEMY PRESS
TOKYO JAPAN
AN INTERNATIONAL JOURNAL FOR RAPID PUBLICATION OF REPORTS ON GENES AND GENOMES.
INDEXING BEGAN WITH V2N1,1995.
W1 DN125G 1340-2838
SR0080606 JC: CCB
UNIVERSAL ACADEMY PRESS
BOX 235
TOKYO 10091 JAPAN

TITLES SELECTED FOR INDEXING, MARCH-APRIL 1995

IM GENE THERAPY
GENE THER
1,1994—
STOCKTON PRESS
BASINGSTOKE ENGLAND
INDEXING BEGAN WITH V2N1,JAN 1995.
W1 GE184Q 0969-7128
SR0077524 JC: CCE
STOCKTON PRESS
HOUNDMILLS
BASINGSTOKE
RG21 2SX ENGLAND

HLI HEALTH DATA MANAGEMENT
HEALTH DATA MANAG
2N1,1994—
FAULKNER AND GRAY
NEW YORK NY UNITED STATES
CONTINUES: MEDICAL CLAIMS MANAGEMENT, WHICH IS NOT IN THE NLM COLLECTION.
INDEXING BEGAN WITH V2N1,JAN 1994.
ON ORDER
SR0083081 JC: CCZ
FAULKNER AND GRAY
11 PENN PLAZA
NEW YORK NY 10001

IM IMMUNITY
IMMUNITY
1N1,APR 1994—
CELL PRESS
CAMBRIDGE MA UNITED STATES
INDEXING BEGAN WITH V1N1,1994.
W1 IM4723 1074-7613
SR0080300 JC: CCF
CELL PRESS
50 CHURCH ST
CAMBRIDGE MA 02138

IM INTERNATIONAL JOURNAL OF FOOD SCIENCES AND NUTRITION
INT J FOOD SCI NUTR
VOL. 43, NO. 1 (JUNE 1992)-
SCIENTIFIC AND MEDICAL DIVISION, MACMILLAN PRESS
BASINGSTOKE ENGLAND
CONTINUES: FOOD SCIENCES AND NUTRITION. SUPPLEMENTS ACCOMPANY SOME ISSUES.
INDEXING BEGAN WITH V46N1,MAR 1995.
W1 IN766JR 0963-7486
SR0075666 JC: CCG

IM JOURNAL OF APPLIED BIOMATERIALS
J APPL BIOMATER
1N1,SPRING 1990—
JOHN WILEY
NEW YORK NY UNITED STATES
AN OFFICIAL JOURNAL OF THE SOCIETY FOR BIOMATERIALS. PREVIOUSLY PUBLISHED AS A SUPPLEMENT TO: JOURNAL OF BIOMEDICAL MATERIALS RESEARCH.
V1,1990-V5,1994 SELECTIVELY INDEXED FOR HSTAR. INDEXING FOR IM BEGAN WITH V6N1,SPRING 1995.
W1 JO539X 1045-4861
SR0066414 JC: BCT

IM KNEE SURGERY, SPORTS TRAUMATOLOGY, ARTHROSCOPY
KNEE SURG SPORTS TRAUMATOL ARTHROSC
1,1993—
SPRINGER INTERNATIONAL
HEIDELBERG GERMANY
INDEXING BEGAN WITH V3N1,1995.
W1 KN583 0942-2056
SR0075352 JC: CCH

IM MAGNETIC RESONANCE IMAGING CLINICS OF NORTH AMERICA
MAGN RESON IMAGING CLIN N AM
1N1,SEP 1993—
SAUNDERS
PHILADELPHIA PA UNITED STATES
SPINE TITLE: MRI CLINICS.
INDEXING BEGAN WITH V3N1,SEP 1995.
W1 MA34HM 1064-9689
SR0078504 JC: CCI

IM MEDICAL ANTHROPOLOGY QUARTERLY
MED ANTHROPOL Q
14N2,FEB 1983-17N5,NOV 1986; NS 1N1,MAR 1987—
SOCIETY FOR MEDICAL ANTHROPOLOGY
WASHINGTON DC UNITED STATES
CONTINUES: MEDICAL ANTHROPOLOGY NEWSLETTER.
INDEXING BEGAN WITH V9N1,MAR 1995.
W1 ME206D 0745-5194
M11790000 JC: CCJ
SOCIETY FOR MEDICAL ANTHROPOLOGY
1703 NEW HAMPSHIRE AVENUE
WASHINGTON DC 20009

IM MEMORY
MEMORY
1,1993—
LAWRENCE ERLBAUM ASSOCIATES
HOVE ENGLAND
INDEXING BEGAN WITH V2N1,1995.
W1 ME9036 0965-8211
SR0075388 JC: CCK

IM NEUROIMMUNOMODULATION
NEUROIMMUNOMODULATION
1,1994—
KARGER MEDICAL AND SCIENTIFIC PUBLISHERS
BASEL SWITZERLAND
VOLS. FOR JAN. 1994- ALSO CALLED V. 1, NO. 1- .
INDEXING BEGAN WITH V2N1,JAN 1995.
W1 NE328GP 1021-7401
SR0077881 JC: CCL

IM NIHON RINSHO MENEKI GAKKAI KAISHI
NIHON RINSHO MENEKI GAKKAI KAISHI
1,1978—
NIHON RINSHO MENEKI GAKKAI
TOKYO JAPAN
INDEXING BEGAN WITH V18N1,FEB 1995.
W1 NI426WGM 0911-4300
SR0067349 JC: CCM
NIHON RINSHO MENEKI GAKKAI
TOKYO DAIGAKU IGAKUBU FUZOKU BYOIN DAI 3 NAIKA
3-1 HONGO 7-CHOME
BUNKYOKU TOKYO 113 JAPAN

IM OSTEOARTHRITIS AND CARTILAGE
OSTEOARTHRITIS CARTILAGE
1,1993—
W.B. SAUNDERS FOR THE OSTEOARTHRITIS RESEARCH SOCIETY
LONDON ENGLAND
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IMPRINT VARIES.
INDEXING BEGAN WITH V3N1,1995.
W1 OS792 1063-4584
SR0075344 JC: CCO
W.B. SAUNDERS COMPANY LTD.
BAILLIERE TINDALL LTD.
24-28 OVAL ROAD
LONDON NW1 7DX ENGLAND

IM PROCEEDINGS / ... INTERNATIONAL CONFERENCE ON INTELLIGENT SYSTEMS FOR MOLECULAR BIOLOGY
PROC INT CONF INTELL SYST MOL BIOL
1ST,1993—
AAAI PRESS
MENLO PARK CA UNITED STATES
INDEXING BEGAN WITH V3,1995.
ON ORDER
SR0082710 JC: CCP
AAAI PRESS
445 BURGESS DRIVE
MENLO PARK CA 94025

IM PROTEIN PROFILE
PROTEIN PROFILE
1,1994—
ACADEMIC PRESS
LONDON ENGLAND
INDEXING BEGAN WITH V2N1,1995.
W1 PR788G 1070-3667
SR0078953 JC: CCQ
ACADEMIC PRESS LTD.
FOOTS CRAY; SIDCUP
KENT DA 14 5HP ENGLAND

IM THERAPEUTIC IMMUNOLOGY
THER IMMUNOL
1,1994—
BLACKWELL SCIENTIFIC PUBLICATIONS
OXFORD ENGLAND
INDEXING BEGAN WITH V2N1,JAN 1995.
W1 TH144 0967-0149
SR0075710 JC: CCS
BLACKWELL SCIENTIFIC PUBLICATIONS
OSNEY MEADOW
OXFORD OX2 0EL ENGLAND

TITLE CHANGES, MARCH-APRIL 1995

IM ANNALS OF ALLERGY, ASTHMA, AND IMMUNOLOGY
ANN ALLERGY ASTHMA IMMUNOL
74,1995—
AMERICAN COLLEGE OF ALLERGY, ASTHMA, AND IMMUNOLOGY
MCLEAN VA UNITED STATES
OFFICIAL PUBLICATION OF THE AMERICAN COLLEGE OF ALLERGY, ASTHMA, AND IMMUNOLOGY.
CONTINUES: ANNALS OF ALLERGY.
INDEXING BEGAN WITH V74N1,JAN 1995.
W1 AN56 1081-1206
SR0083476 JC: CBM

IM EUROPEAN JOURNAL OF ORAL SCIENCES
IDL EUR J ORAL SCI
VOL. 103, NO. 1 (FEB. 1995)-
MUNKSGAARD
COPENHAGEN DENMARK
OFFICIAL PUBLICATION OF NOF--THE SCANDINAVIAN DIVISION OF THE INTERNATIONAL ASSOCIATION FOR DENTAL RESEARCH, AND THE CONTINENTAL EUROPEAN DIVISION OF THE INTERNATIONAL ASSOCIATION FOR DENTAL RESEARCH. CONTINUES: SCANDINAVIAN JOURNAL OF DENTAL RESEARCH.
INDEXING BEGAN WITH V103N1,FEB. 1995.
W1 SC148N 0909-8836
SR0083563 JC: CBQ

HLI MICHIGAN HEALTH AND HOSPITALS
MICH HEALTH HOSP
3N6,1995—
MICHIGAN HEALTH AND HOSPITAL ASSOCIATION
LANSING MI UNITED STATES
CONTINUES: MICHIGAN HOSPITALS.
INDEXING BEGAN WITH V30N6,1995.
W1 MI203
SR0083405 JC: CBL

IM QUARTERLY JOURNAL OF NUCLEAR MEDICINE
Q J NUCL MED
39,1995—
EDIZIONI MINERVA MEDICA
TORINO ITALY
CONTINUES: JOURNAL OF NUCLEAR BIOLOGY AND MEDICINE.
INDEXING BEGAN WITH V39,1995.
ON ORDER-TITLECHANGE
SR0083502 JC: CBO

TITLES NO LONGER INDEXED, MARCH-APRIL 1995

IDL ANESTHESIA AND PAIN CONTROL IN DENTISTRY
ANESTH PAIN CONTROL DENT
1N1,WINTER 1992-2N4,FALL 1993
QUINTESSENCE PUBLISHING
CAROL STREAM IL UNITED STATES
OFFICIAL JOURNAL OF THE INTERNATIONAL FEDERATION OF DENTAL ANESTHESIOLOGY SOCIETIES AND EUROPEAN FEDERATION FOR THE ADVANCEMENT OF ANAESTHESIA IN DENTISTRY.
INDEXING BEGAN WITH V1N1,1992.
W1 AN217KG 1055-7601
SR0071853 JC: BMF

IM CHRONOBIOLOGIA
CHRONOBIOLOGIA
1,1974-21,1994
ASSOCIATED CHRONOBIOLOGIA RESEARCHERS
MILANO ITALY
INDEXING BEGAN WITH V1N1,JAN-MAR 1974.
W1 CH972 0390-0037
C20700000 JC: D7P

HLI CORNELL LAW REVIEW
CORNELL LAW REV
53,1967—
CORNELL UNIV LAW SCHOOL
ITHACA NY UNITED STATES
CONTINUES CORNELL LAW QUARTERLY. THIS TITLE IS NOT IN THE NLM COLLECTION.
INDEXING BEGAN WITH V60N4,APR 1975 AND CEASED WITH V79N6,SEP 1994.
REGIONAL HOLDINGS 0010-8847
C49160000 JC: DRX

IM ENDOCRINE REGULATIONS
ENDOCR REGUL
25,1991—
SAP- SLOVAK ACADEMIC PRESS SPOL.S.R.O
BRATISLAVA CZECH REPUBLIC
CONTINUES: ENDOCRINOLOGIA EXPERIMENTALIS.
INDEXING BEGAN WITH V25N1/2,1991 AND CEASED WITH V28N4,DEC 1994.
W1 EN367CH 1210-0668
SR0072018 JC: A73

IM ENDOKRYNOLOGIA POLSKA
ENDOKRYNOL POL
1,1950—
ZARZAD GLOWNY POLSKIEGO TOWARZYSTWA ENDOKRYNOLOGICZNEGO
WARSZAWA POLAND
IMPRINT VARIES.
INDEXING BEGAN WITH 16N4,JUL-AUG 1965 AND CEASED WITH V44N4,1993.
W1 EN397 0423-104X
E07340000 JC: EHN

IM FAMILY PRACTICE RESEARCH JOURNAL
FAM PRACT RES J
1N1,FALL 1981-14N4,DEC 1994
HUMAN SCIENCES PRESS
NEW YORK NY UNITED STATES
VOLS. FOR WINTER 1981- ISSUED WITH TITLE: FAMILY PRACTICE RESEARCH JOURNAL. VOLS. FOR FALL 1981-WINTER 1986 CO-SPONSORED BY THE MICHIGAN ACADEMY OF FAMILY PHYSICIANS AND BY THE FAMILY HEALTH RESEARCH, EDUCATION AND SERVICE INSTITUTE; VOLS.FOR SPRING 1987- BY THE CALIFORNIA, MICHIGAN, MINNESOTA, AND OHIO ACADEMIES OF FAMILY PHYSICIANS. VOL. 8 (1988-89) COMPLETE IN TWO ISSUES.
INDEXING BEGAN WITH V5N3, SPRING 1986.
W1 FA454CP 0270-2304
F01095000 JC: 123

IM FORTSCHRITTE AUF DEM GEBIETE DER RONTGENSTRAHLEN UND DER NEUEN BILDGEBENDEN VERFAHREN. ERGANZUNGSBAND
FORTSCHR GEB RONTGENSTRAHLEN NEUEN BILDGEB VERFAHR ERGANZUNGSBD
130,1992
GEORG THIEME VERLAG
STUTTGART GERMANY
SUPPLEMENT TO: ROFO.
FORTSCHRITTE AUF DEM GEBIETE DER RONTGENSTRAHLEN UND DER NEUEN BILDGEBENDEN VERFAHREN.
CONTINUES: FORTSCHRITTE AUF DEM GEBIETE DER RONTGENSTRAHLEN UND DER NUKLEARMEDIZIN. ERGANZUNGSBAND.
INDEXING BEGAN WITH V130,1992.
W1 FO814
SR0078649 JC: BWK

HLI HEALTH MANAGEMENT QUARTERLY
HEALTH MANAGE Q
FALL 1984-1986N4,9N1,1987-16N4,1994
BAXTER FOUNDATION
DEERFIELD IL UNITED STATES
CONTINUES: HOSPITAL MANAGEMENT QUARTERLY.
INDEXING BEGAN WITH FALL,1984.
W1 HE413Q 0091-323X
SR0053511 JC: HMS

TITLES NO LONGER INDEXED, MARCH-APRIL 1995

IM HELVETICA CHIRURGICA ACTA
HELV CHIR ACTA
12,1945-60,1994
SCHWABE
BASEL SWITZERLAND
CONTINUES: SURGICAL SECTION OF HELVETICA MEDICA ACTA AND ASSUMES ITS VOLUME NUMBERING. VOL.54 NO.5, FEB 1988 MISLABELLED VOL.54 NO.5, FEB 1987.
INDEXING FOR ONLINE FILES BEGAN WITH V31N4,OCT 1964.
W1 HE851 0018-0181
H10860000 JC: G4P

HLI INTERNATIONAL JOURNAL OF PARTIAL HOSPITALIZATION
INT J PARTIAL HOSP
1N1,JAN 1982-8N2,DEC 1992
PLENUM
NEW YORK NY UNITED STATES
INDEXING BEGAN WITH V1N1, JAN 1982.
W1 IN771ND 0272-4308
I27643000 JC: GTB

HLI LAW AND CONTEMPORARY PROBLEMS
LAW CONTEMP PROBL
1,1933-
DUKE UNIVERSITY SCHOOL OF LAW
DURHAM NC UNITED STATES
THIS TITLE IS NOT IN THE NLM COLLECTION
INDEXING BEGAN WITH V43N1, WINTER-SPRING 1979 AND CEASED WITH V57N4,AUTUMN 1994.
REGIONAL HOLDINGS 0023-9186
L03210000 JC: KZ5

INI NURSING EDUCATORS MICROWORLD
NURS EDUC MICROWORLD
1N5,JUN/JUL 1987-8N2,MAR/APR 1994
DISKOVERY, COMPUTER-ASSISTED HEALTHCARE EDUCATION
SARATOGA CA UNITED STATES
IMPRINT VARIES. CONTINUES: NURSE EDUCATORS MICROWORLD.
INDEXING BEGAN WITH V2N4,APR-MAY 1988.
W1 NU5954 0893-1356
SR0061847 JC: OCU

IM POPULATION REPORTS. SERIES K: INJECTABLES AND IMPLANTS
POPUL REP K
N1,MAR,1975—
POPULATION INFORMATION PROGRAM, JOHNS HOPKINS UNIVERSITY
BALTIMORE MD UNITED STATES
INDEXING BEGAN WITH V11N2,MAY 1983 AND CEASED WITH N4,NOV 1992.
W1 PO671SC 0097-9104
P19700000 JC: E5R

IM PROBLEMY ENDOKRINOLOGII
PROBL ENDOKRINOL (MOSK)
13,1967—
MEDITSINA
MOSKVA RUSSIA
CONTINUES PROBLEMY ENDOKRINOLOGII I GORMONOTERAPII
INDEXING BEGAN WITH V13N1,JAN-FEB 1967 AND CEASED WITH V40N6,NOV-DEC 1994.
W1 PR5784 0375-9660
P26700000 JC: PNH

IM ROMANIAN JOURNAL OF ENDOCRINOLOGY
ROM J ENDOCRINOL
30N1/2,1992—
EDITURA ACADEMIEI ROMANE
BUCURESTI ROMANIA
CONTINUES: ENDOCRINOLOGIE.
INDEXING BEGAN WITH V30N1/2,1992 AND CEASED WITH V31N3-4,1993.
W1 RO326S
SR0077224 JC: BSD

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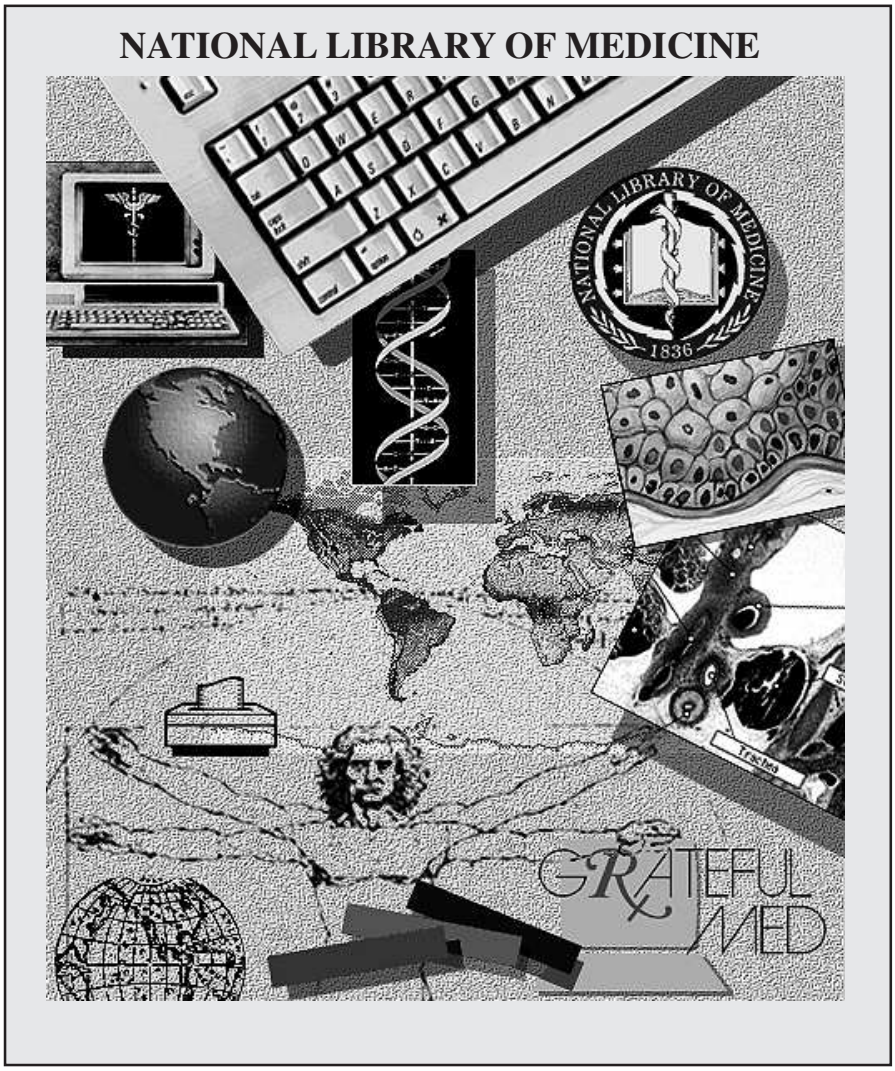

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