

Information Technology-Medicine Monthly Report

January 1997

Overall resource usage

| <u>Type of application</u> | <u>this month</u> | <u>Jan-96</u> | <u>% change</u> |
|------------------------------------|-------------------|---------------|-----------------|
| CINAHL | 393 | 388 | 1% |
| Core Biomedical Collection | 878 | 285 | 208% |
| Current Contents | 4489* | 552 | 226% |
| Electronic mail (# messages sent) | 621,590 | 242,233 | 157% |
| messages per user per day | 3.9 | - | - |
| HealthSTAR | 313 | 261 | 20% |
| Medline | 18,307 | 14,533 | 26% |
| searches per active user per month | 2.9 | - | - |
| Medical Center World Wide Web | | | |
| Medical Center home page | 28,326 | 6,749 | 320% |
| Hospital home page | 1,205 | 773 | 56% |
| School of Medicine home page | 5,229 | 2,848 | 84% |
| Medical Library home page | 10,032 | 4,799 | 109% |

*As of 8/96, Current Contents usage includes automatic searches

Background information

Personal computers as of 11/96
 Electronic mail users as of 6/96
 Networked computers as of 1/97
 Full-time faculty, 1995-96
 Medical & graduate students, 1995-96
 Residents & postdocs, 1995-96
 Full-time staff, 1995-96
 Nursing staff, 1995-96
 Number of beds, 1995-96

Schools of Hospital Medicine & Nursing

2,200 7,000
 1,000 4,089
 1,575 3,366
 - 1,270
 - 907
 388 916
 4,600 2,392
 1,250 -
 900 -

Usage of NetMenu workstations

| <u>Type of application</u> | <u>Library NetMenu</u> | | | <u>Hospital NetMenu</u> | | | <u>Nursing NetMenu</u> | | |
|--|-------------------------|---------------|-----------------|-------------------------|---------------|-----------------|------------------------|---------------|-----------------|
| | <u># of connections</u> | <u>Jan-96</u> | <u>% change</u> | <u>this month</u> | <u>Jan-96</u> | <u>% change</u> | <u>this month</u> | <u>Jan-96</u> | <u>% change</u> |
| Medical Education | 3,233 | 1,241 | 161% | - | - | - | - | - | - |
| Bibliographic databases & search tools | 8,325 | 7,734 | 8% | 1,794 | 1414 | 27% | 291 | 266 | 9% |
| Full text & factual databases | 374 | 422 | -11% | 2,101 | 1888 | 11% | 7 | 1 | - |
| Grant & research information | 33 | 124 | -73% | - | - | - | 5 | 1 | - |
| Clinical assistance | 21 | 95 | -78% | 37 | 31 | 19% | 0 | 0 | - |
| Email/news/networks | 22,686 | 15,412 | 47% | 8,706 | 3704 | 135% | 347 | 158 | 120% |
| Word processing & utilities | 457 | 228 | 100% | 1,437 | 1043 | 38% | - | - | - |
| Hospital information systems | - | - | - | 23,173 | 12902 | 80% | - | - | - |
| Procedure recorders | - | - | - | 291 | 361 | -19% | - | - | - |
| Total | 35,129 | 25,256 | 39% | 37,539 | 21,343 | 76% | 650 | 426 | 53% |
| connections per workstation | 1,351 | 1,203 | 12% | 408 | 374 | 9% | 325 | 213 | |

Inventory of NetMenu workstations

| <u>Location</u> | <u># of workstations</u> | |
|-----------------|--------------------------|---------------|
| | <u>this month</u> | <u>Jan-96</u> |
| Libraries | 28 | 25 |
| Hospital | 92 | 57 |
| Total | 120 | 82 |

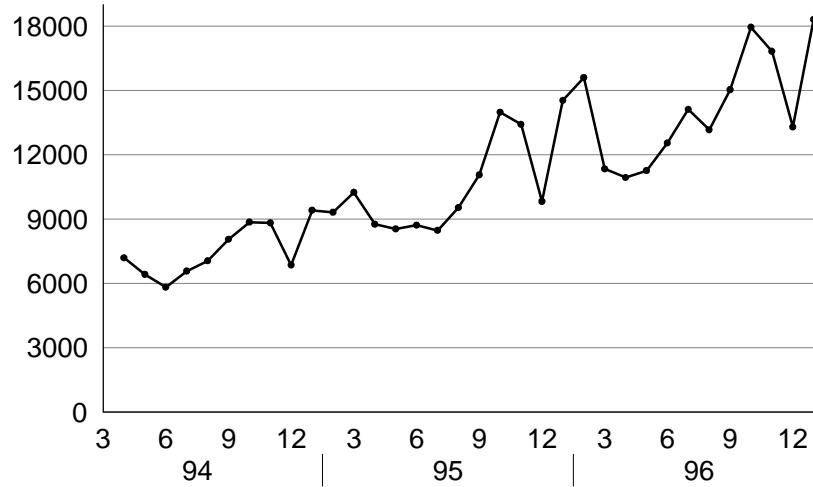
Noteworthy changes

Desktop Support began and completed 'Operation Desktop Storm'

Institutional Resource Usage

MEDLINE

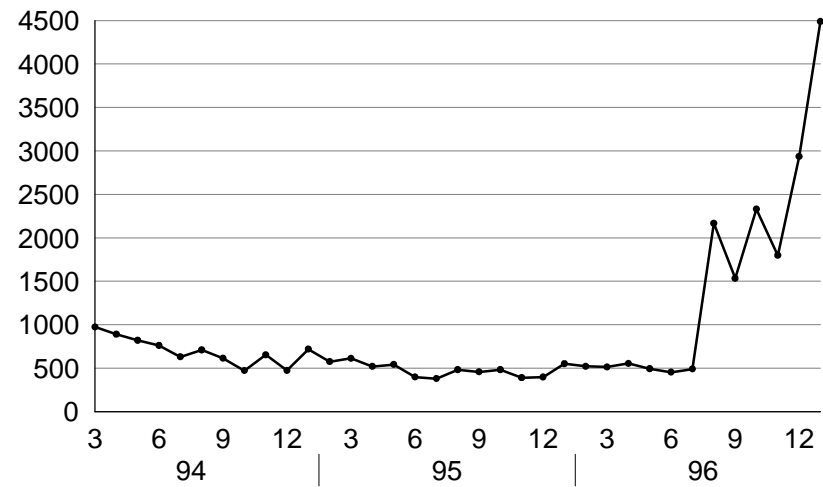
number of sessions per month



source: MEDLINE usage data

Current Contents

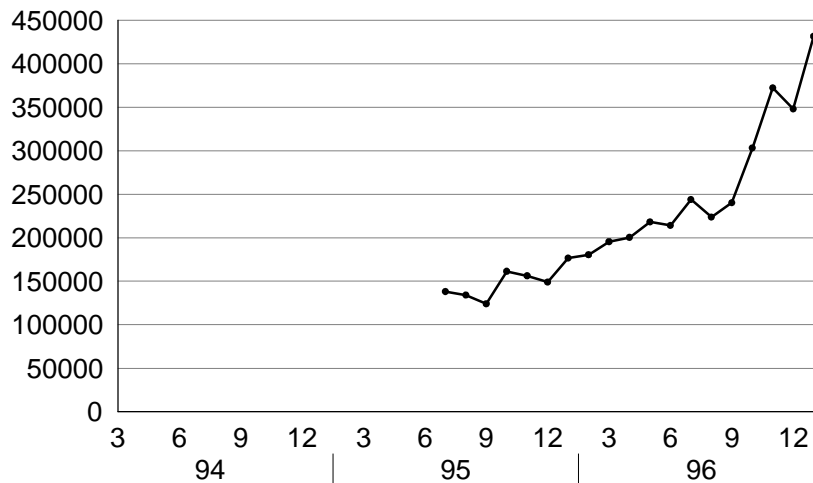
number of connections per month



source: Current Contents usage data

Medical Center Web server

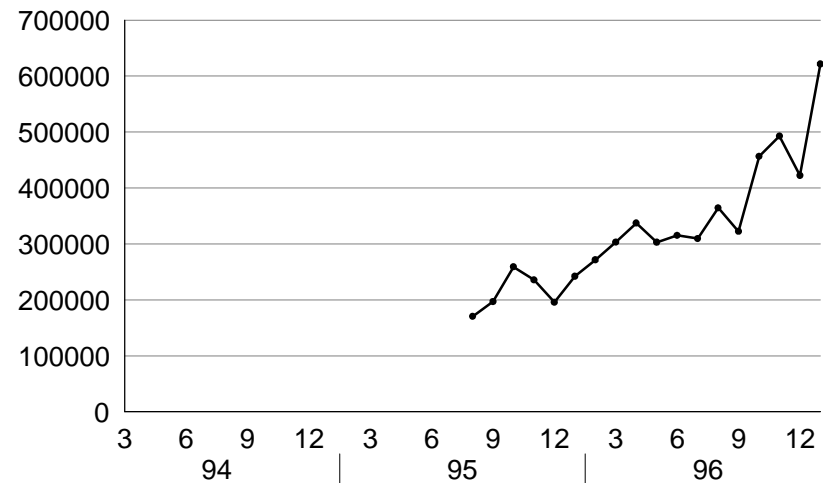
number of pages per month



source: WEB usage data

Electronic mail

number of messages per month

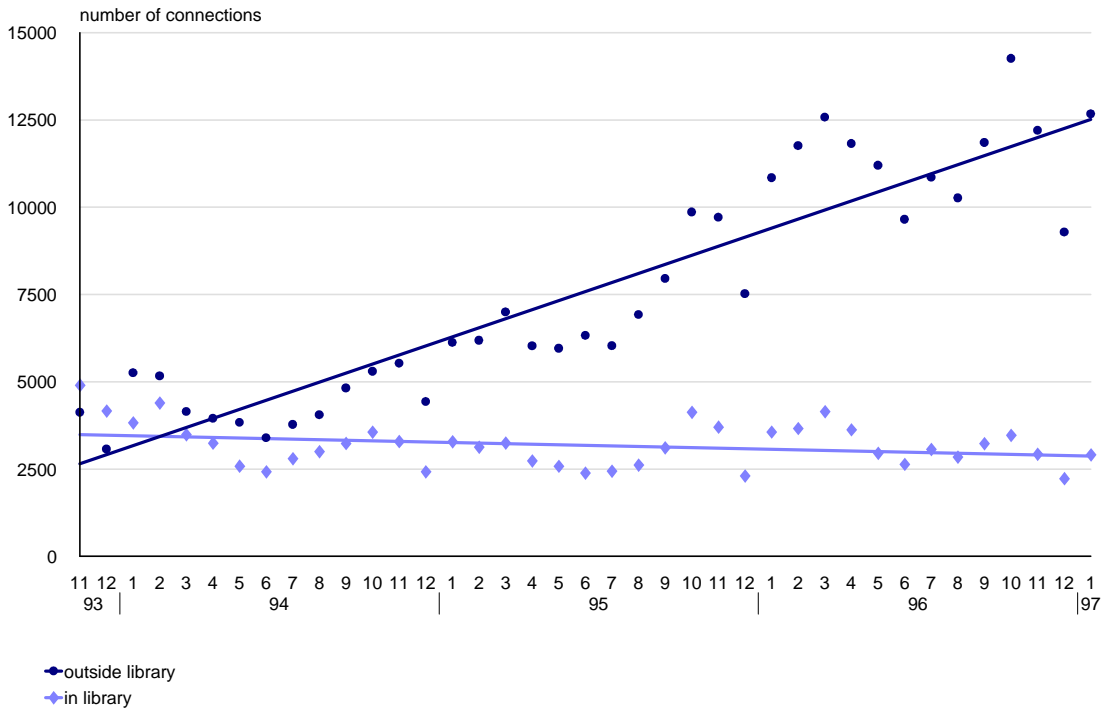


source: PMDF usage data

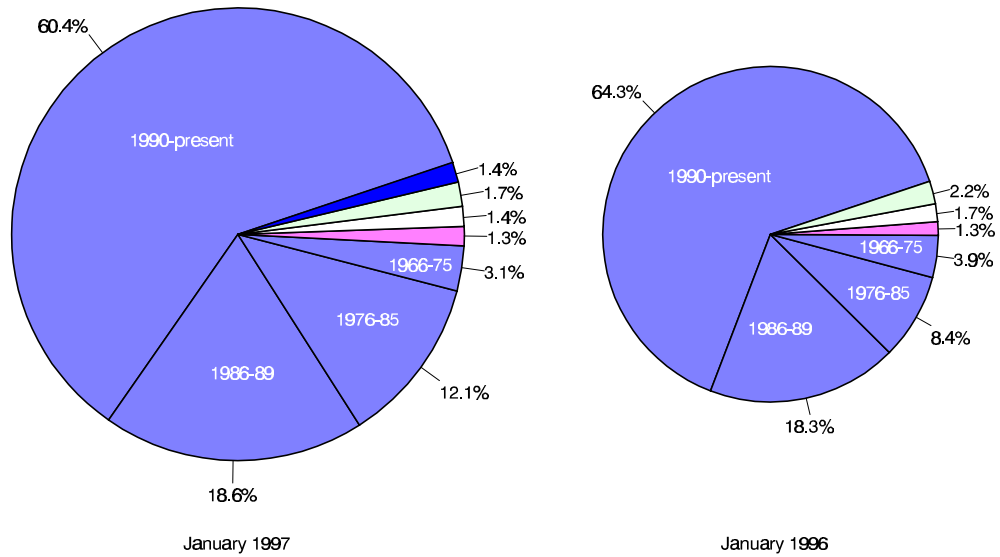
OVID Usage

OVID usage over time

includes MEDLINE, CINAHL, HealthStar, and Core Biomedical Collection



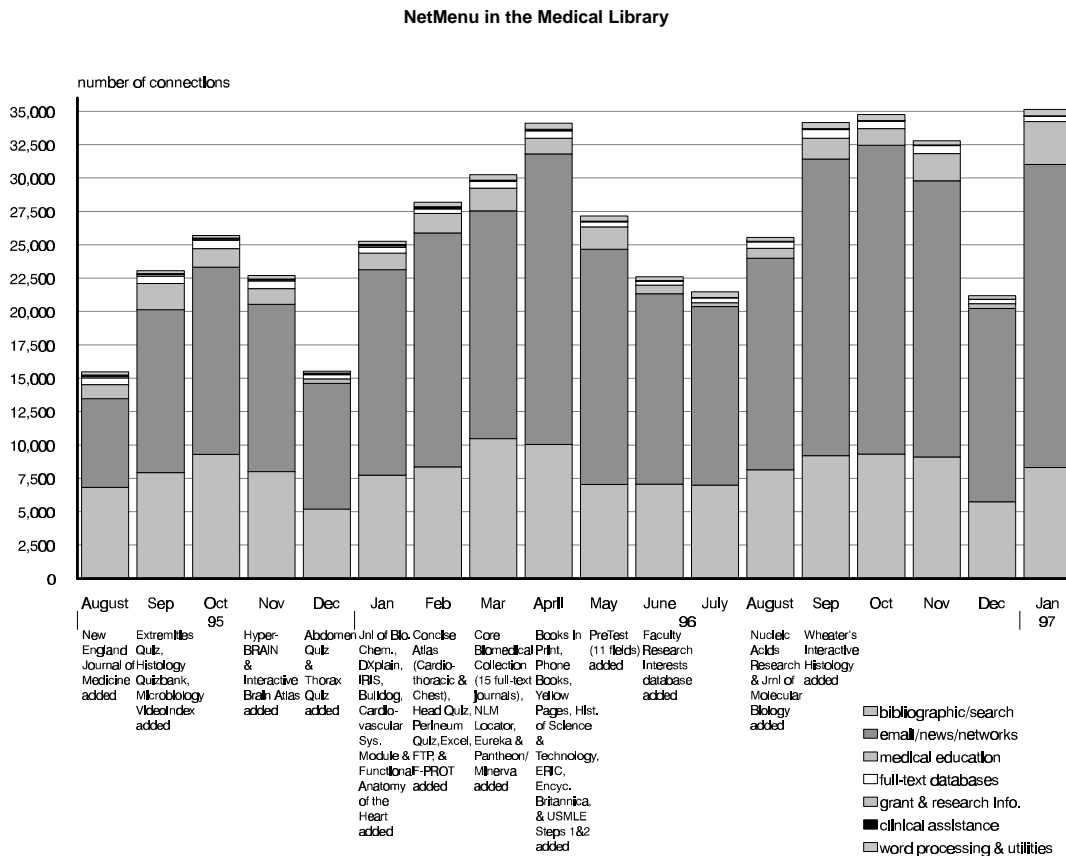
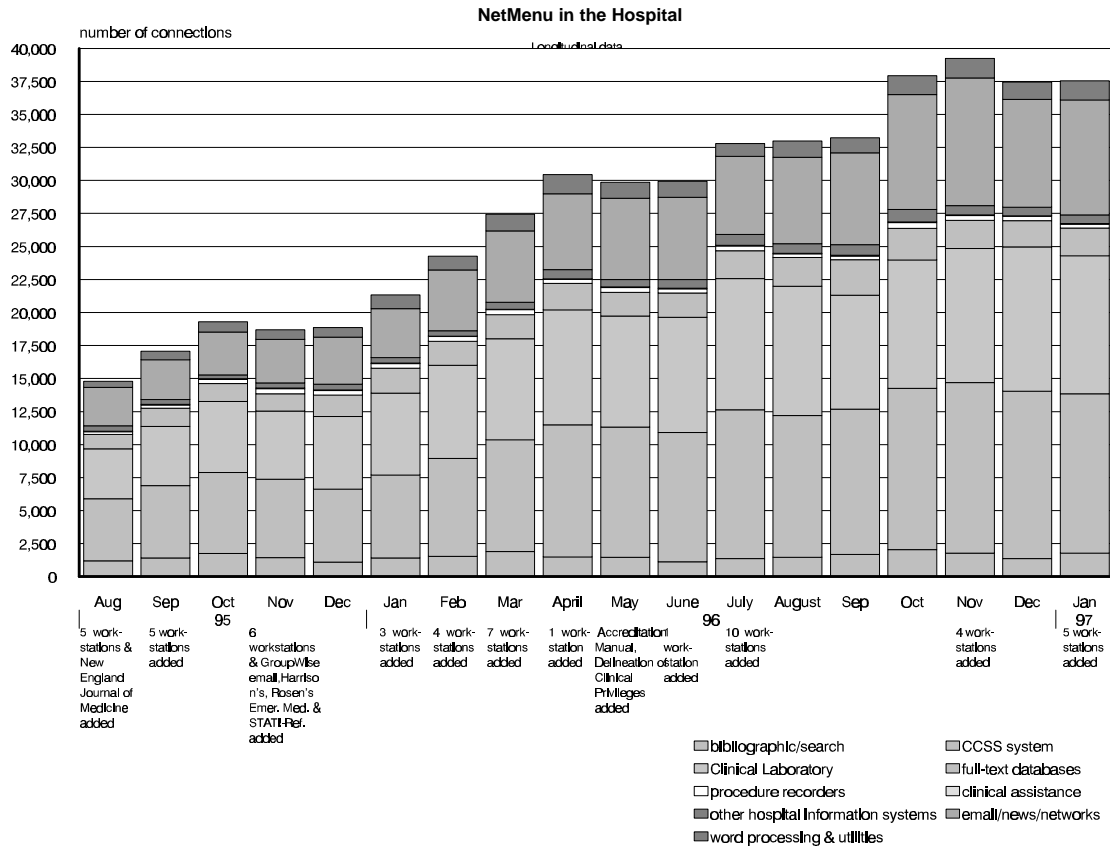
OVID usage Breakdown of databases



- MEDLINE: 1990-present
- MEDLINE: 1986-89
- MEDLINE: 1976-85
- MEDLINE: 1966-75
- Core Biomedical Collection
- HealthStar
- CINAHL (Nursing)
- Current Contents

Difference in size of pies reflects difference in amount of usage.

NetMenu workstation usage



Overall usage for selected databases

| | <u>Jan-96</u> | <u>Feb-96</u> | <u>Mar-96</u> | <u>Apr-96</u> | <u>May-96</u> | <u>Jun-96</u> | <u>Jul-96</u> | <u>Aug-96</u> | <u>Sep-96</u> | <u>Oct-96</u> | <u>Nov-96</u> | <u>Dec-96</u> | <u>Jan-97</u> |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Summary | | | | | | | | | | | | | |
| Current Contents* | 552 | 522 | 514 | 554 | 494 | 454 | 491 | 2167* | 1534* | 2331* | 1798* | 2,937 | 4,489 |
| MEDLINE | 14,533 | 15,599 | 11,338 | 10,935 | 11,259 | 12,549 | 14,114 | 13,163 | 15,035 | 17,947 | 16,825 | 13,296 | 18,307 |
| Medical Center Web server | 176,546 | 180,348 | 195,382 | 200,197 | 218,039 | 213,995 | 243,844 | 223,670 | 240,165 | 303,126 | 372,135 | 347,928 | 431,339 |
| Electronic mail messages sent | 242,233 | 271,489 | 303,190 | 337,167 | 302,991 | 315,220 | 309,517 | 364,477 | 322,377 | 456,571 | 492,880 | 422,342 | 621,590 |

Details: OVID

| | | | | | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|---------|
| 1966-75 search sets | 4,390 | 4,485 | 3,398 | 4,280 | 4,264 | 4,314 | 4,447 | 5,243 | 5,101 | 4,805 | 5,091 | 3,823 | 5,349 |
| 1976-85 search sets | 9,334 | 7,796 | 12,270 | 14,996 | 16,766 | 16,462 | 20,241 | 19,270 | 20,888 | 19,234 | 18,694 | 15,755 | 20,618 |
| 1986-89 search sets | 20,327 | 20,509 | 17,497 | 21,324 | 24,559 | 23,762 | 30,139 | 27,276 | 30,458 | 29,425 | 27,587 | 23,185 | 31,520 |
| 1990-present search sets | 71,578 | 72,196 | 56,808 | 67,533 | 72,710 | 78,495 | 90,799 | 79,185 | 100,386 | 106,766 | 96,388 | 76,264 | 102,575 |
| Core Biomedical Collection search sets | 1,396 | 1,244 | 893 | 789 | 945 | 1,922 | 3,725 | 2,351 | 2,520 | 2,043 | 1,870 | 1,912 | 2,197 |
| HealthStar search sets | 1,855 | 2,176 | 1,283 | 2,066 | 966 | 815 | 946 | 1,077 | 2,488 | 3,945 | 3,709 | 2,129 | 2,301 |
| nursing search sets | 2,433 | 3,135 | 1,779 | 2,366 | 2,078 | 1,612 | 1,541 | 1,075 | 2,828 | 3,795 | 3,543 | 1,972 | 2,904 |
| access method: telnet sessions | - | - | - | - | - | - | - | - | - | - | - | - | 11,725 |
| access method: Web sessions | - | - | - | - | - | - | - | - | - | - | - | - | 1,381 |

Details: Current Contents

| | | | | | | | | | | | | | |
|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Current Contents total* | 552 | 522 | 514 | 554 | 494 | 454 | 491 | 2,167 | 1,534 | 2,331 | 1,798 | 2,937 | 4,489 |
| Ovid version | - | - | - | - | - | - | - | - | - | - | - | 1,633 | 2,413 |
| Basis version, interactive sessions | - | - | - | - | - | - | - | - | - | - | - | 196 | 289 |
| Basis version, automatic searches | - | - | - | - | - | - | - | - | - | - | - | 1,108 | 1,787 |

*Current Contents usage includes automatic searches as of 8/96 and Ovid access as of 12/96

Medical Center Web usage report, January 1997

Top 10 pages accessed by Yale users

| <u>this month</u> | <u>last month</u> |
|--|--|
| Medical Center | Medical Center |
| Medical Library | Medical Library |
| School of Medicine | School of Medicine |
| Server search | MedMenu |
| Desktop Support | Desktop Support |
| MedMenu | Server search |
| Medical Library's Internet search page | Medical Library's Internet search page |
| Scientific Affairs and Grant & Contract Administration | Library's other Yale & New Haven area Web sites page |
| Library's other Yale & New Haven area Web sites page | Other Yale & New Haven area Web sites page |
| Academic departments page | MedMenu's alphabetical list of resources |

Top 10 pages accessed by external users

| <u>this month</u> | <u>last month</u> |
|--|--|
| C/AIM style manual | C/AIM style manual |
| Medical Center page | Medical Center page |
| School of Medicine | School of Medicine |
| Server search | Server search |
| Medical Library | Medical Library |
| School of Medicine's admissions viewbook | School of Medicine's admissions viewbook |
| Child Study Center's Autism/PDD Clinic | Child Study Center's Autism/PDD Clinic |
| Academic departments page | Academic departments page |
| Emerging Infections Information Network | Yale-New Haven Hospital |
| Yale-New Haven Hospital | Yale Journal of Biology and Medicine |

| | <u>Jan-97</u> | <u>Jan-96</u> | <u>% change</u> |
|--|----------------|----------------|-----------------|
| Server total | 431,339 | 176,546 | 144% |
| Who connected | | | |
| Yale | 158,053 | 23,709 | 567% |
| other US educational institutions | 43,328 | 31,536 | 37% |
| US government & military | 3,533 | 4,636 | -24% |
| US commercial institutions | 62,225 | 38,325 | 62% |
| US non-profit organizations | 2,986 | 2,039 | 46% |
| Major online service providers | 35,954 | 16,078 | 124% |
| International | 48,716 | 27,164 | 79% |
| # of unique hosts connecting | 46,516 | 26,887 | 73% |
| Medical Center | 40,094 | 6,749 | 494% |
| Yale-New Haven Hospital | 1,573 | 773 | 103% |
| School of Medicine | 7,703 | 2,848 | 170% |
| School of Nursing | 690 | - | - |
| Major resources | | | |
| School's organizational chart | 45 | - | - |
| Computing page | 483 | 74 | 553% |
| Core research facilities page | 157 | 44 | 257% |
| Education page | 435 | 100 | 335% |
| Emerging Infections Information Network | 1,996 | - | - |
| Faculty Research Interests database | 921 | - | - |
| Medical Library | 13,288 | 4,799 | 177% |
| MedMenu | 3305 | - | - |
| Scientific Affairs and Grant & Contract Administration | 1,467 | 200 | 634% |
| School of Medicine application | 293 | 169 | 73% |
| Yale Faculty Practice | 338 | - | - |
| Service departments | | | |
| Academic Computing | 115 | - | - |
| Biomedical Communications | 347 | 282 | 23% |
| C/AIM | 4,628 | 5,232 | -12% |
| Center for Cell Imaging | 403 | 217 | 86% |
| Desktop Support | 1501 | - | - |
| Medical Administrative Systems | 86 | 336 | -74% |

| | <u>Jan-97</u> | <u>Jan-96</u> | <u>% change</u> |
|-------------------------------------|---------------|---------------|-----------------|
| Academic Departments* | | | |
| Anesthesiology | 359 | 231 | 55% |
| Boyer Center for Molecular Medicine | 676 | 166 | 307% |
| Cancer Center | 575 | 16 | 3494% |
| Cell Biology | 551 | 560 | -2% |
| Cellular & Molecular Physiology | 237 | 121 | 96% |
| Child Study Center | 298 | - | - |
| Comparative Medicine | 66 | - | - |
| Dermatology | 566 | - | - |
| Diagnostic Radiology | 789 | 215 | 267% |
| Epidemiology & Public Health | 1484 | 756 | 96% |
| Genetics | 402 | 315 | 28% |
| History of Medicine | 118 | - | - |
| Immunobiology | 249 | - | - |
| Internal Medicine | 342 | 46 | 643% |
| Laboratory Medicine | 155 | - | - |
| Neurobiology | 560 | 164 | 241% |
| Neurology | 358 | 215 | 67% |
| Neuroscience Program | 160 | - | - |
| Neurosurgery | 77 | - | - |
| Obstetrics & Gynecology | 269 | 76 | 254% |
| Ophthalmology | 536 | 369 | 45% |
| Orthopaedics & Rehabilitation | 141 | - | - |
| Pathology | 819 | - | - |
| Pediatrics | 247 | - | - |
| Pharmacology | 317 | 156 | 103% |
| Physician Associate Program | 343 | - | - |
| Psychiatry | 905 | 716 | 26% |
| Surgery | 312 | 143 | 118% |
| Therapeutic Radiology | - | - | - |

*Molecular Biochemistry & Biophysics and the Center for Medical Informatics are not listed because they reside on other servers.

Details for NetMenu Hospital usage

| <u>Application</u> | <u>total # of connections</u> | | | <u>Application</u> | <u>total # of connections</u> | | |
|---|-------------------------------|---------------|-----------------|--|-------------------------------|---------------|-----------------|
| | <u>Jan-97</u> | <u>Jan-96</u> | <u>% change</u> | | <u>Jan-97</u> | <u>Jan-96</u> | <u>% change</u> |
| Hospital information systems | 23173 | 12902 | 80% | Full text and factual databases | 2101 | 1888 | 11% |
| CCSS | 12059 | 6285 | 92% | Delineation of Clinical Privileges | 15 | - | - |
| ChartView | 194 | 133 | 46% | Harrison's | 335 | 349 | -4% |
| Clinical laboratory | 10447 | 6188 | 69% | JCAHO Accreditation Manual | 16 | - | - |
| Diagnostic Imaging | 148 | 114 | 30% | Little Brown Handbooks | 198 | 228 | -13% |
| EPIC | 142 | 106 | 34% | Merck Manual | 98 | 82 | 20% |
| Surgical Pathology | 183 | 76 | 141% | Micromedex | 994 | 725 | 37% |
| | | | | New England Journal of Medicine | 208 | 198 | 5% |
| Bibliographic databases and search tools | 1794 | 1414 | 27% | Red Book on Pediatric Infections | 36 | 21 | 71% |
| CINAHL | 142 | 100 | 42% | Rosen's Emergency Medicine | 35 | 61 | -43% |
| Health Planning and Administration | 48 | 36 | 33% | STAT!-Reference | 102 | 130 | -22% |
| MEDLINE | 1521 | 1208 | 26% | YNHH Physician Phone Book | 64 | 94 | -32% |
| Yale Library Catalog (OPAC) | 83 | 70 | 19% | | | | |
| | | | | Email/news/networks | 8706 | 3704 | 135% |
| Word processing & utilities | 1437 | 1043 | 38% | Biomed Email | 746 | 526 | 42% |
| Clinical Workstation locations | 70 | 69 | 1% | GroupWise Email | 1272 | 213 | 497% |
| Format disk | 45 | 27 | 67% | Internet access | 6688 | 2965 | 126% |
| Virus scan | 59 | 29 | 103% | | | | |
| Wordperfect | 1263 | 918 | 38% | Procedure recorders | 291 | 361 | -19% |
| | | | | Medicine | 65 | 74 | -12% |
| Clinical assistance | 37 | 31 | 19% | Ob/Gyn | 173 | 209 | -17% |
| Coag Advisor | 37 | 31 | 19% | Surgery | 53 | 78 | -32% |

Details for NetMenu Medical Library usage

| Application | total # of connections | | | Application | total # of connections | | | Application | total # of connections | | |
|---|------------------------|--------------|-------------|--|------------------------|------------|-------------|------------------------------------|------------------------|-------------|-------------|
| | Jan-97 | Jan-96 | % change | | Jan-97 | Jan-96 | % change | | Jan-97 | Jan-96 | % change |
| Bibliographic databases and search tools | 8325 | 7734 | 8% | Full text and factual databases | 374 | 422 | -11% | Medical Education | 3233 | 1241 | 161% |
| AIDSLINE | 15 | 40 | -63% | AIDSTrials/AIDSDrugs/DIRLINE | 0 | 4 | -100% | Abdomen Quiz | 431 | 149 | 189% |
| Biosis | 46 | 144 | -68% | Academic Press Journals | 9 | - | - | Anatomic Explorer | 79 | 66 | 20% |
| Books in Print | 14 | - | - | American Journal of Medicine | 12 | - | - | Anatomic Explorer CT | 81 | 43 | 88% |
| CINAHL | 29 | 42 | -31% | American Journal of Obstetrics | 5 | - | - | Animated Embryo | 195 | 16 | 1119% |
| Current Contents | 98 | 148 | -34% | American Journal of Surgery | 10 | - | - | Brainstem | 11 | 22 | -50% |
| ERIC | 9 | - | - | Annals of Internal Medicine | 10 | - | - | Brainstorm | 18 | 13 | 38% |
| Eureka | 8 | - | - | Archives of General Psychiatry | 13 | - | - | Breath sounds | 35 | 16 | 119% |
| Expanded Academic Index | 15 | 35 | -57% | BMJ | 8 | - | - | Cardiac Angio | 41 | 11 | 273% |
| Health Planning and Administration | 4 | 31 | -87% | Britannica Online | 15 | - | - | Cardiac Auscultation | 48 | 34 | 41% |
| InfoFinder | 94 | 200 | -53% | Canadian Medical Association Journal | 1 | - | - | Cardiac Echo | 19 | 17 | 12% |
| MEDLINE | 5080 | 4730 | 7% | Circulation | 2 | - | - | Cardiac MRI | 36 | 28 | 29% |
| PsycINFO | 132 | 110 | 20% | Electronic Journals | 6 | - | - | Cardiac Perfusion Imaging: SP | 6 | 3 | 100% |
| Science Citation Index | 239 | 170 | 41% | Faculty Research Interests database | 9 | - | - | Cardiac Perfusion Imaging: PI | 9 | 6 | 50% |
| Search term lookup | 0 | 18 | -100% | FREIDA | 37 | 51 | -27% | Cardiothoracic Image Quiz | 175 | 137 | 28% |
| Yale Library Catalog (OPAC) | 2542 | 2066 | 23% | GenBank | 15 | 23 | -35% | Cardiothoracic Imaging | 46 | 105 | -56% |
| Email/news/networks | 22686 | 15412 | 47% | History of Science & Technology | 6 | - | - | Concise Atlas - Cardiothoracic | 33 | - | - |
| Biomed Email | 12242 | 10168 | 20% | Journal of Biological Chemistry | 13 | 6 | 117% | Concise Atlas - Chest | 28 | - | - |
| Bulldog Access | 136 | 88 | 55% | Journal of Bone & Joint Surgery | 2 | - | - | Concise Atlas - Extremities | 2 | - | - |
| MEDINFO (Yale-New Haven gopher) | - | 269 | - | Journal of Clinical Investigation | 7 | - | - | Embryo images | 549 | 35 | 1469% |
| NIH gopher | - | 52 | - | Journal of Molecular Biology | 2 | - | - | EPS Review | 14 | 12 | 17% |
| Pantheon/Minerva | 2450 | - | - | JAMA | 16 | - | - | Extremities Quiz | 15 | 16 | -6% |
| World Wide Web | 7822 | 4251 | 84% | Lancet | 9 | - | - | Forebrain (Syracuse) | 5 | 1 | 400% |
| YaleInfo | 36 | 584 | -94% | Legislate | 0 | 25 | -100% | Gross Anatomy Review | 181 | 113 | 60% |
| word processing & utilities (CRL) | 457 | 228 | 100% | Micromedex | 11 | 13 | -15% | HARP (Histological Anatomy Review) | 5 | 7 | -29% |
| Epi Info | 11 | 10 | 10% | MMWR | 2 | 21 | -90% | Head Quiz | 22 | - | - |
| Excel for Windows | 46 | - | - | Network Entrez | 4 | 13 | -69% | Histology Quizbank | 5 | 7 | -29% |
| Format disk | 9 | 8 | 13% | New England Journal of Medicine | 17 | 24 | -29% | Histology Video Review | 7 | 3 | 133% |
| FTP for Windows | 22 | - | - | NEXIS | 88 | 190 | -54% | HyperCELL | 1 | 6 | -83% |
| Health Risk Appraisal | 3 | 2 | 50% | Nucleic Acids Research | 1 | - | - | Hyperheart | 21 | 14 | 50% |
| Virus Scanner (F-PROT) | 14 | - | - | OMIM/GDB | 1 | 40 | -98% | Interactive Brain Atlas | 14 | 7 | 100% |
| Wordperfect for Windows | 352 | 208 | 69% | Pediatrics | 10 | - | - | Interactive Respiratory Physiology | 4 | - | - |
| | | | | Phone Books | 6 | - | - | KINEMAGE | 5 | 3 | 67% |
| | | | | Science | 26 | - | - | Lazy Eye | 17 | 19 | -11% |
| | | | | Scientific American Medicine Consult | 1 | 11 | -91% | MacBaby | 437 | 31 | 1310% |
| | | | | Grant and research information | 33 | 124 | -73% | Microbiology Quizbank | 28 | - | - |
| | | | | Community of Science | 5 | - | - | Neuroanatomy Review | 15 | 11 | 36% |
| | | | | CT CRISP | 18 | 46 | -61% | Neuron Model: Tutorial | 15 | 4 | 275% |
| | | | | IRIS | 10 | 15 | -33% | Neuron Model: Current Clamp | 4 | 1 | 300% |
| | | | | Clinical assistance | 21 | 95 | -78% | Neuron Model: Voltage Clamp | 14 | 2 | 600% |
| | | | | Coag Advisor | 1 | 23 | -96% | Pathology Quizbank | 101 | 107 | -6% |
| | | | | Hepatitis Advisor | 6 | - | - | Perineum Quiz | 14 | - | - |
| | | | | Physician Data Query (PDQ) | 14 | 24 | -42% | PreTest (11 different fields) | 22 | - | - |
| | | | | | | | | Superhead | 15 | 24 | -38% |
| | | | | | | | | Thorax Quiz | 303 | 105 | 189% |
| | | | | | | | | USMLE Step 1 | 46 | - | - |
| | | | | | | | | USMLE Step 2 | 60 | - | - |
| | | | | | | | | Wheater's Interactive Histology | 1 | - | - |