

# Information Technology-Medicine Monthly Report

March 1997

## Applications

<u>Type of application</u>	<u>this month</u>	<u>Mar-96</u>	<u>% change</u>
CINAHL	415	281	48%
Core Biomedical Collection	1,026	150	584%
Current Contents	3931*	514	250%
Electronic mail (# messages sent)	564,961	303,190	86%
messages per user per day	3.6	-	-
HealthSTAR	304	170	79%
Medline	17,053	11,338	50%
searches per active user per month	6.0	-	-
Medical Center World Wide Web			
Medical Center home page	41,023	8,081	408%
Hospital home page	1,613	892	81%
School of Medicine home page	7,125	2,917	144%
Medical Library home page	12,820	6,034	112%

\*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 3/97
Full-time faculty, 1996-97
Medical & graduate students, 1996-97
Residents & postdocs, 1996-97
Full-time staff, 1996-97
Nursing staff, 1996-97
Number of beds, 1996-97

## Schools of Hospital Medicine & Nursing

Hospital	2,200	7,000
Medicine	1,000	4,089
Nursing	1,575	3,532
	-	1,370
	-	1,155
	440	1,090
	3,625	2,230
	1,312	-
	900	-

## Help Desk

		<u>Type of call</u>	<u># of calls</u>	<u>resolved by Help Desk</u>	<u>resolved same day</u>	<u>resolved next day</u>	<u>resolved in 2 weeks</u>
Total calls	2449	Network	451	85%	73%	80%	98%
Calls per day	117	PC/printer	406	58%	64%	76%	96%
% of ITS-Med clients using Help Desk	27%	Email/Scheduling	386	92%	78%	85%	100%
# of callers	954	Call transfer	298	100%	98%	98%	100%
# of Yale affiliates using Web page	487	New work orders	238	58%	31%	38%	83%
# of new network connects (approx.)	55	Information request	214	100%	95%	98%	100%
Departments accounting for 5% or more of all calls		Status request	194	98%	98%	99%	100%
	Internal Medicine	Administrative system:	99	62%	68%	78%	97%
	Surgery	Billing	49	82%	64%	66%	93%
	Pediatrics						
	Child Study Center						
	OPS						

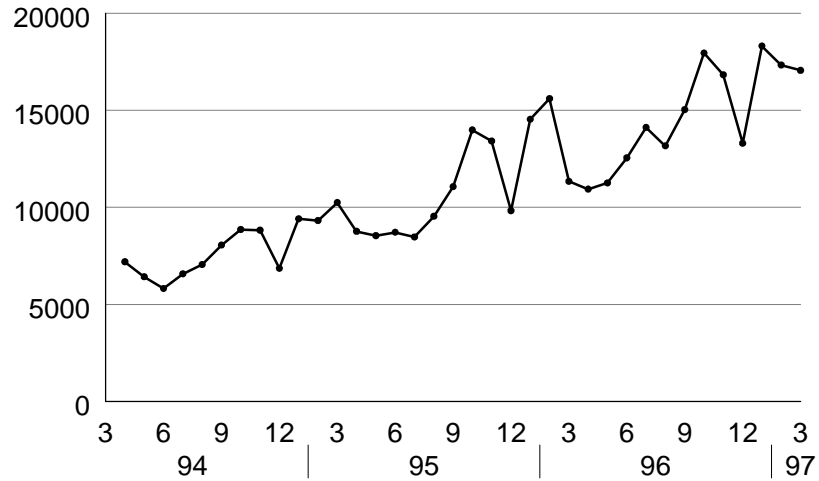
## NetMenu workstations

<u>Type of application</u>	<u>Library NetMenu</u>			<u>Hospital NetMenu</u>			<u>Nursing NetMenu</u>		
	<u># of connections this month</u>	<u>Mar-96</u>	<u>% change</u>	<u># of connections this month</u>	<u>Mar-96</u>	<u>% change</u>	<u># of connections this month</u>	<u>Mar-96</u>	<u>% change</u>
Medical Education	2,353	1,694	39%	-	-	-	-	-	-
Bibliographic databases & search tools	7,899	10,486	-25%	1,587	1903	-17%	244	298	-18%
Full text & factual databases	292	509	-43%	2,339	1823	28%	14	12	-
Grant & research information	7	64	-89%	-	-	-	3	1	-
Clinical assistance	5	33	-85%	28	33	-15%	2	2	-
Email/news/networks	20,475	17,061	20%	10,037	5420	85%	335	307	9%
Word processing & utilities	520	404	29%	1,650	1234	34%	-	-	-
Hospital information systems	-	-	-	25,227	16640	52%	-	-	-
Procedure recorders	-	-	-	313	371	-16%	-	-	-
<b>Total</b>	<b>31,551</b>	<b>30,251</b>	<b>4%</b>	<b>41,181</b>	<b>27,424</b>	<b>50%</b>	<b>598</b>	<b>620</b>	<b>-4%</b>
connections per workstation	1,214	1,441	-16%	433	429	1%	299	310	

# Institutional Resource Usage

## MEDLINE

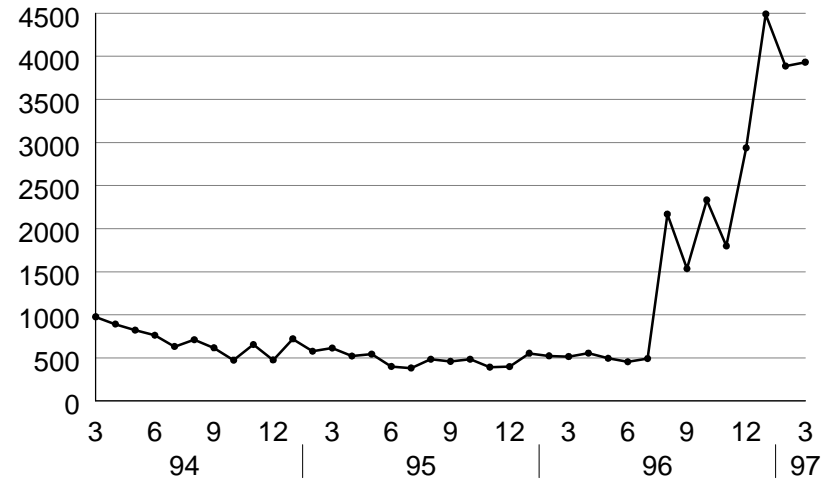
number of sessions per month



source: MEDLINE usage data

## Current Contents

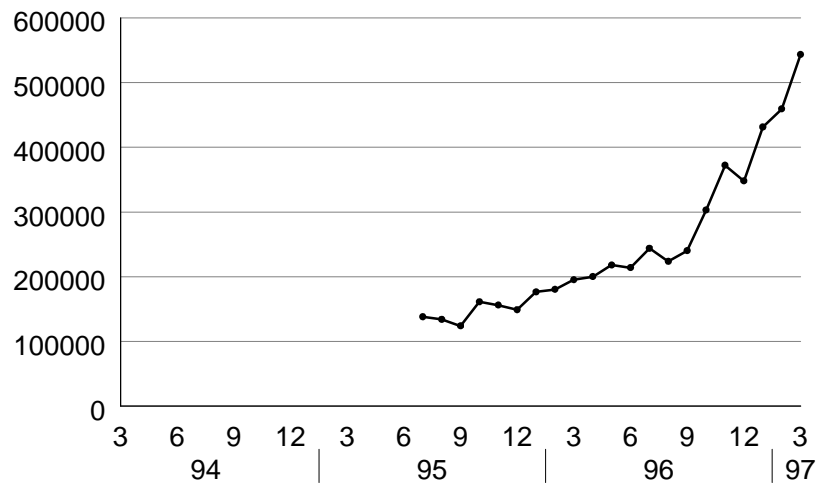
number of connections per month



source: Current Contents usage data

## Medical Center Web server

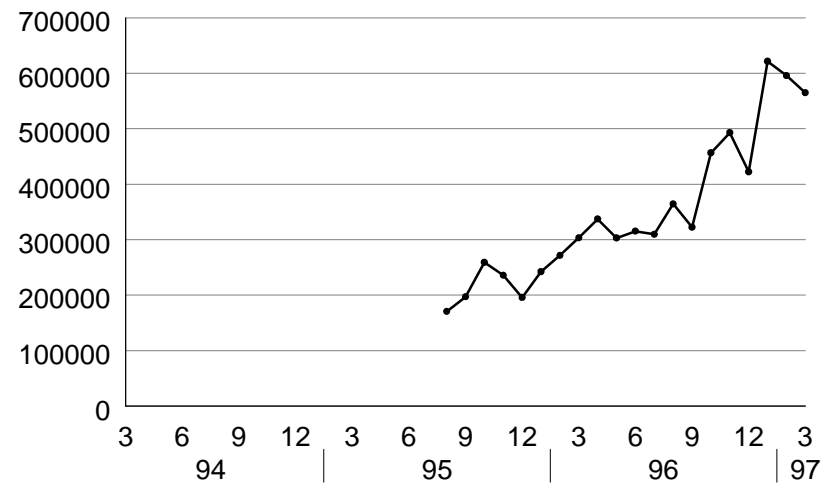
number of pages per month



source: WEB usage data

## Electronic mail

number of messages per month

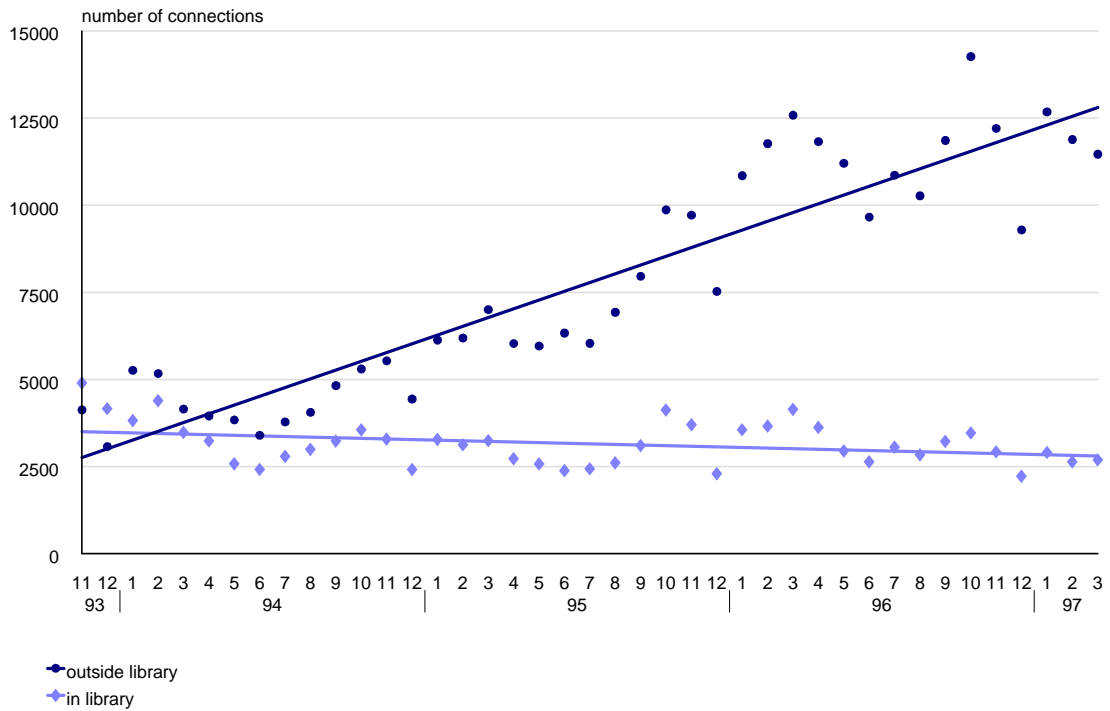


source: PMDF usage data

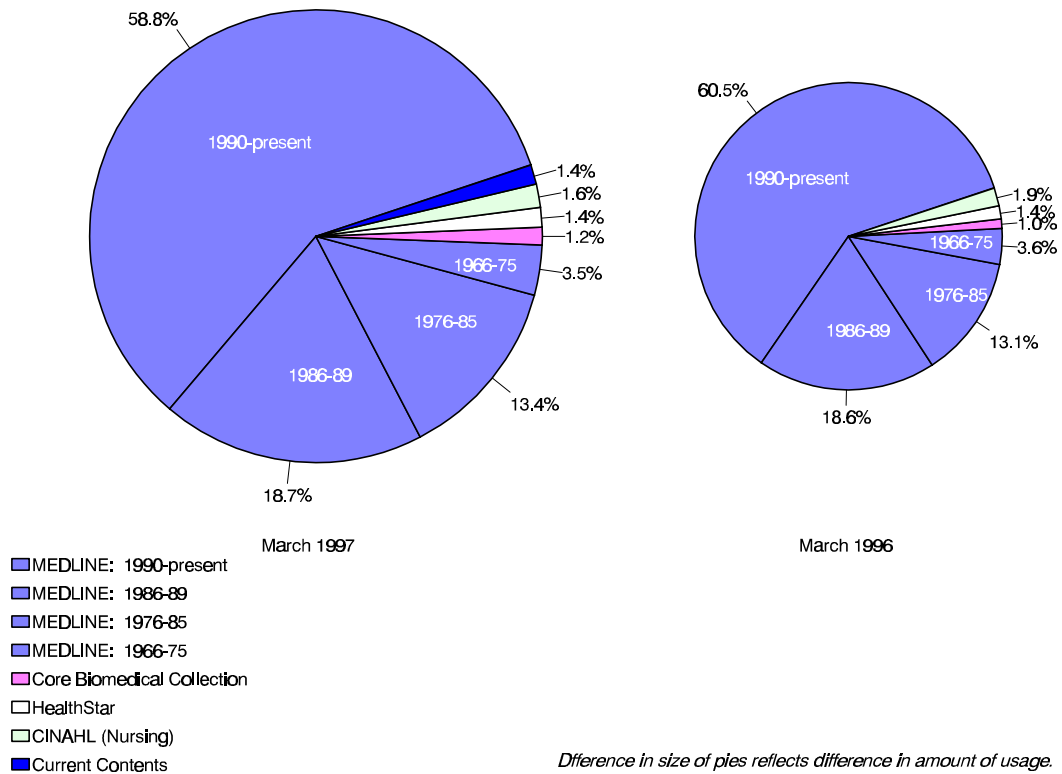
# OVID Usage

## OVID usage over time

includes MEDLINE, CINAHL, HealthStar, and Core Biomedical Collection

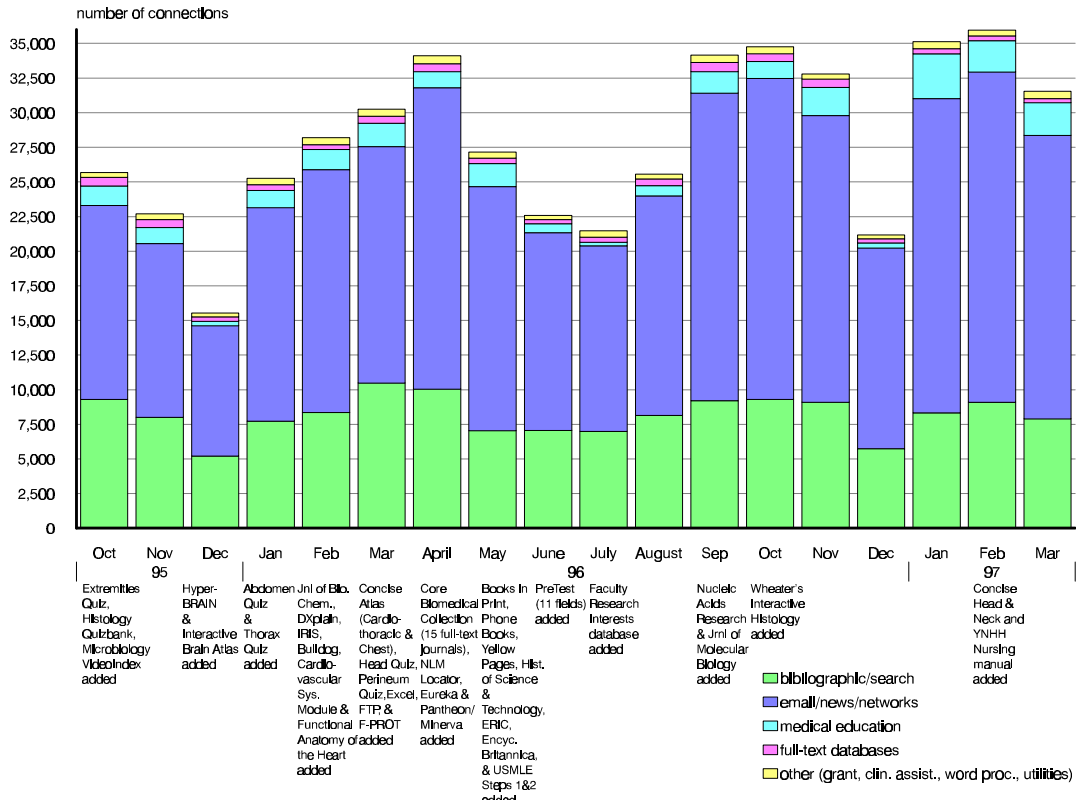


## OVID usage Breakdown of databases

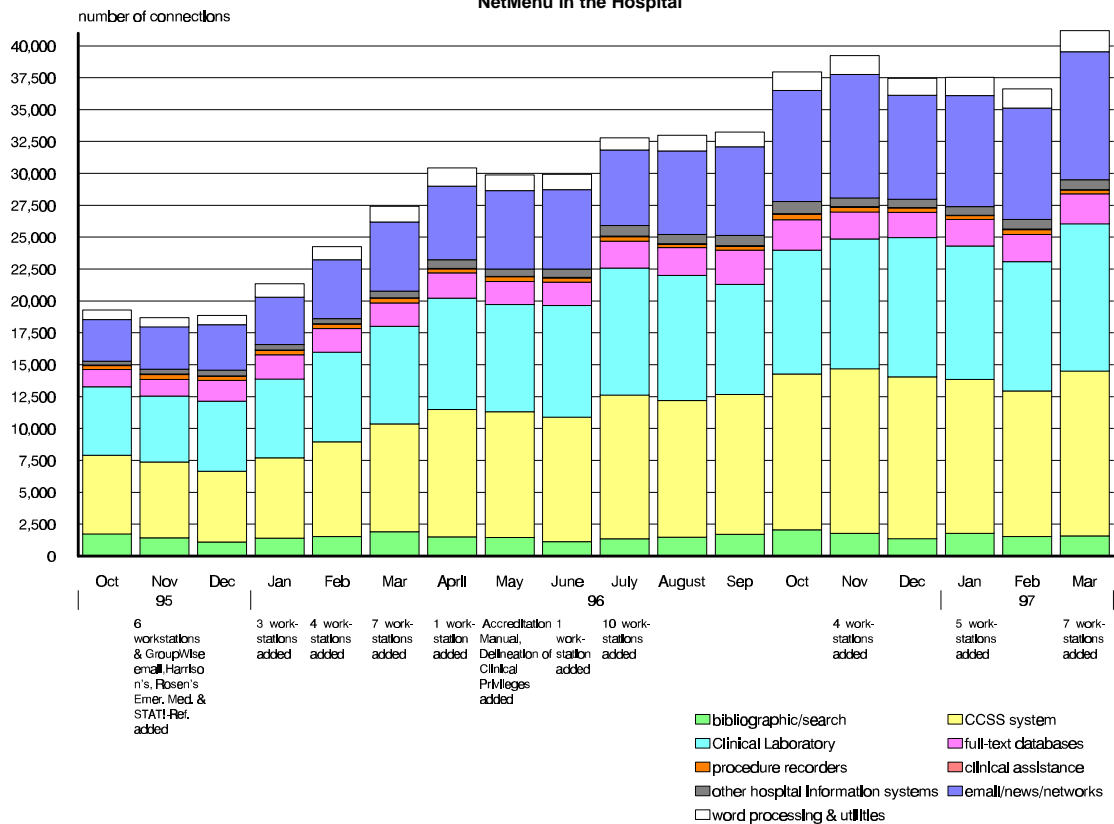


# NetMenu workstation usage

## NetMenu in the Medical Library



## NetMenu in the Hospital



# Overall usage for selected databases

	<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>	<u>Feb-97</u>	<u>Mar-97</u>
<b>Summary</b>													
<b>Current Contents*</b>	514	554	494	454	491	2167*	1534*	2331*	1798*	2,937	4,489	3,886	3,931
<b>MEDLINE</b>	11,338	10,935	11,259	12,549	14,114	13,163	15,035	17,947	16,825	13,296	18,307	17,329	17,053
<b>Medical Center Web server</b>	195,382	200,197	218,039	213,995	243,844	223,670	240,165	303,126	372,135	347,928	431,339	459,226	543,310
<b>Electronic mail messages sent</b>	303,190	337,167	302,991	315,220	309,517	364,477	322,377	456,571	492,880	422,342	621,590	595,748	564,961

## Details: OVID

1966-75 search sets	3,398	4,280	4,264	4,314	4,447	5,243	5,101	4,805	5,091	3,823	5,349	5,818	5,752
1976-85 search sets	12,270	14,996	16,766	16,462	20,241	19,270	20,888	19,234	18,694	15,755	20,618	21,255	22,001
1986-89 search sets	17,497	21,324	24,559	23,762	30,139	27,276	30,458	29,425	27,587	23,185	31,520	29,664	30,687
1990-present search sets	56,808	67,533	72,710	78,495	90,799	79,185	100,386	106,766	96,388	76,264	102,575	105,377	96,592
Core Biomedical Collection searc	893	789	945	1,922	3,725	2,351	2,520	2,043	1,870	1,912	2,197	1,841	1,960
HealthStar search sets	1,283	2,066	966	815	946	1,077	2,488	3,945	3,709	2,129	2,301	4,321	2,247
nursing search sets	1,779	2,366	2,078	1,612	1,541	1,075	2,828	3,795	3,543	1,972	2,904	3,645	2,703
access method: telnet sessions	-	-	-	-	-	-	-	-	-	11,725	15,781	14,668	13,785
access method: Web sessions	-	-	-	-	-	-	-	-	-	1,381	2,325	2,231	2,900
access method: Z39.50	-	-	-	-	-	-	-	-	-	-	215	434	363

## Details: Current Contents

<b>Current Contents total*</b>	<b>514</b>	<b>554</b>	<b>494</b>	<b>454</b>	<b>491</b>	<b>2,167</b>	<b>1,534</b>	<b>2,331</b>	<b>1,798</b>	<b>2,937</b>	<b>4,489</b>	<b>3,886</b>	<b>3,931</b>
Ovid version	-	-	-	-	-	-	-	-	-	1,633	2,413	2,181	2,227
Basis version, interactive sessior	-	-	-	-	-	-	-	-	-	196	289	229	221
Basis version, automatic searche	-	-	-	-	-	-	-	-	-	1,108	1,787	1,476	1,483

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

# Medical Center Web usage report, March 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
MedMenu	MedMenu
Medical Library's Internet search page	Medical Library's Internet search page
Server search	Server search
Desktop Support	Desktop Support
MedMenu's informational page about OVID	Scientific Affairs and Grant & Contract Administration
Scientific Affairs and Grant & Contract Administration	MedMenu's informational page about OVID
Course evaluations data entry page	Library's other Yale & New Haven area Web sites

## Top 10 pages accessed by external users

<u>this month</u>	<u>last month</u>
Center for Advanced Instructional Media	Center for Advanced Instructional Media
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	Emerging Infections Information Network
Yale-New Haven Hospital	Academic departments page
Emerging Infections Information Network	Yale Journal of Biology and Medicine

	<u>Mar-97</u>	<u>Mar-96</u>	<u>% change</u>
<b>Server total</b>	<b>543,310</b>	<b>195,382</b>	<b>178%</b>
<b>Who connected</b>			
Yale	140,784	29,723	<b>374%</b>
other US educational institutions	64,605	32,973	<b>96%</b>
US government & military	5,811	2,738	<b>112%</b>
US commercial institutions	95,309	41,853	<b>128%</b>
US non-profit organizations	3,672	2,265	<b>62%</b>
Major online service providers	58,692	19,446	<b>202%</b>
International	80,072	29,394	<b>172%</b>
<b># of unique hosts connecting</b>	<b>58,619</b>	<b>28,973</b>	<b>102%</b>
<b>Medical Center</b>	<b>41,023</b>	<b>8,081</b>	<b>408%</b>
<b>Yale-New Haven Hospital</b>	<b>1,613</b>	<b>892</b>	<b>81%</b>
<b>School of Medicine</b>	<b>7,125</b>	<b>2,917</b>	<b>144%</b>
<b>School of Nursing</b>	<b>682</b>	-	-
<b>Major resources</b>			
School's organizational chart	39	-	-
Computing page	520	198	<b>163%</b>
Core research facilities page	181	113	<b>60%</b>
Education page	416	173	<b>140%</b>
Emerging Infections Information Network	2,007	889	<b>126%</b>
Faculty Research Interests database	891	185	<b>382%</b>
Medical Library	12,820	6,034	<b>112%</b>
MedMenu	3329	1106	<b>201%</b>
Scientific Affairs and Grant & Contract Ad	1,346	403	<b>234%</b>
School of Medicine application	1,039	564	<b>84%</b>
Yale Faculty Practice	518	-	-
<b>Service departments</b>			
Academic Computing	94	-	-
Biomedical Communications	310	348	<b>-11%</b>
C/AIM	4,584	4,274	<b>7%</b>
Center for Cell Imaging	356	160	<b>123%</b>
Desktop Support	1378	124	<b>1011%</b>
Medical Administrative Systems	66	368	<b>-82%</b>

	<u>Mar-97</u>	<u>Mar-96</u>	<u>% change</u>
<b>Academic Departments*</b>			
Anesthesiology	389	213	<b>83%</b>
BBS	348	-	-
Boyer Center for Molecular Medicine	648	173	<b>275%</b>
Cancer Center	591	166	<b>256%</b>
Cell Biology	610	396	<b>54%</b>
Cellular & Molecular Physiology	269	119	<b>126%</b>
Child Study Center	475	-	-
Comparative Medicine	82	-	-
Dermatology	605	208	<b>191%</b>
Diagnostic Radiology	815	178	<b>358%</b>
Epidemiology & Public Health	1549	910	<b>70%</b>
Genetics	816	448	<b>82%</b>
History of Medicine	117	-	-
Immunobiology	275	-	-
Internal Medicine	307	233	<b>32%</b>
Laboratory Medicine	189	-	-
Neurobiology	691	274	<b>152%</b>
Neurology	414	191	<b>117%</b>
Neuroscience Program	240	-	-
Neurosurgery	129	369	<b>-65%</b>
Obstetrics & Gynecology	286	108	<b>165%</b>
Ophthalmology	570	411	<b>39%</b>
Orthopaedics & Rehabilitation	153	-	-
Pathology	679	237	<b>186%</b>
Pediatrics	312	-	-
Pharmacology	284	120	<b>137%</b>
Physician Associate Program	424	-	-
Psychiatry	808	656	<b>23%</b>
Surgery	315	137	<b>130%</b>
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>Mar-97</u>	<u>Mar-96</u>	<u>% change</u>
<b>Hospital information systems</b>	<b>25227</b>	<b>16640</b>	<b>52%</b>
CCSS	12922	8464	53%
ChartView	320	109	194%
Clinical laboratory	11543	7653	51%
Diagnostic Imaging	123	176	-30%
EPIC	109	109	0%
Surgical Pathology	210	129	63%
<b>Bibliographic databases and search tools</b>	<b>1587</b>	<b>1903</b>	<b>-17%</b>
CINAHL	142	168	-15%
Health Planning and Administration	49	43	14%
MEDLINE	1313	1602	-18%
Yale Library Catalog (OPAC)	83	90	-8%
<b>Word processing &amp; utilities</b>	<b>1650</b>	<b>1234</b>	<b>34%</b>
Clinical Workstation locations	63	73	-14%
Format disk	55	37	49%
Virus scan	51	39	31%
Wordperfect	1481	1085	36%
<b>Clinical assistance</b>	<b>28</b>	<b>33</b>	<b>-15%</b>
Coag Advisor	28	33	-15%

<u>Application</u>	<u>total # of connections</u>		
	<u>Mar-97</u>	<u>Mar-96</u>	<u>% change</u>
<b>Full text and factual databases</b>	<b>2339</b>	<b>1823</b>	<b>28%</b>
Delineation of Clinical Privileges	13	-	-
Harrison's	343	342	0%
JCAHO Accreditation Manual	18	-	-
Little Brown Handbooks	156	190	-18%
Merck Manual	95	96	-1%
Micromedex	1297	644	101%
New England Journal of Medicine	186	265	-30%
Red Book on Pediatric Infections	34	27	26%
Rosen's Emergency Medicine	45	69	-35%
STAT!-Reference	105	116	-9%
YNHH Physician Phone Book	47	74	-36%
<b>Email/news/networks</b>	<b>10037</b>	<b>5420</b>	<b>85%</b>
Biomed Email	979	792	24%
GroupWise Email	2051	800	156%
Internet access	7007	3828	83%
<b>Procedure recorders</b>	<b>313</b>	<b>371</b>	<b>-16%</b>
Medicine	65	69	-6%
Ob/Gyn	127	205	-38%
Surgery	121	97	25%

Details for NetMenu Medical Library usage

<u>Application</u>	<u>total # of connections</u>			<u>Application</u>	<u>total # of connections</u>			<u>Application</u>	<u>total # of connections</u>		
	<u>Mar-97</u>	<u>Mar-96</u>	<u>% change</u>		<u>Mar-97</u>	<u>Mar-96</u>	<u>% change</u>		<u>Mar-97</u>	<u>Mar-96</u>	<u>% change</u>
<b>Bibliographic databases and search tools</b>	<b>7899</b>	<b>10486</b>	<b>-25%</b>	<b>Full text and factual databases</b>	<b>292</b>	<b>509</b>	<b>-43%</b>	<b>Medical Education</b>	<b>2353</b>	<b>1694</b>	<b>39%</b>
AIDSLINE	7	32	-78%	AIDSTrials/AIDSDrugs/DIRLINE	0	2	-100%	Abdomen Quiz	185	149	24%
Biosis	40	76	-47%	Academic Press Journals	4	-	-	Anatomic Explorer	33	53	-38%
Books in Print	11	-	-	American Journal of Medicine	6	7	-	Anatomic Explorer CT	21	41	-49%
CINAHL	9	28	-68%	American Journal of Obstetrics	2	-	-	Animated Embryo	32	29	10%
Current Contents	70	89	-21%	American Journal of Surgery	1	6	-	Brainstem	39	72	-46%
ERIC	10	-	-	Annals of Internal Medicine	2	4	-	Brainstorm	75	106	-29%
Eureka	10	8	-	Archives of General Psychiatry	15	6	-	Breath sounds	32	15	113%
Expanded Academic Index	20	37	-46%	BMJ	6	10	-	Cardiac Angio	22	27	-19%
Health Planning and Administration	2	10	-80%	Britannica Online	4	-	-	Cardiac Auscultation	47	48	-2%
InfoFinder	102	269	-62%	Canadian Medical Association Journa	2	1	-	Cardiac Echo	20	11	82%
MEDLINE	4732	6558	-28%	Circulation	0	4	-	Cardiac MRI	10	13	-23%
PsycINFO	144	131	10%	Electronic Journals	9	-	-	Cardiac Perfusion Imaging: SP	1	7	-86%
Science Citation Index	173	158	9%	Faculty Research Interests database	11	-	-	Cardiac Perfusion Imaging: PI	2	3	-33%
Search term lookup	4	10	-60%	FREIDA	31	90	-66%	Cardiothoracic Image Quiz	117	62	89%
Yale Library Catalog (OPAC)	2565	3078	-17%	GenBank	16	17	-6%	Cardiothoracic Imaging	26	16	63%
<b>Email/news/networks</b>	<b>20475</b>	<b>17061</b>	<b>20%</b>	History of Science & Technology	24	-	-	Concise Atlas - Cardiothoracic	11	6	83%
Biomed Email	10925	10063	9%	Journal of Biological Chemistry	8	16	-50%	Concise Altas - Chest	30	13	131%
Bulldog Access	25	28	-11%	Journal of Bone & Joint Surgery	0	1	-	Concise Altas - Extremities	26	-	-
MEDINFO (Yale-New Haven gopher)	-	32	-	Journal of Clinical Investigation	0	5	-	Concise Altas - Head & Neck	64	-	-
NIH gopher	-	47	-	Journal of Molecular Biology	1	-	-	Embryo images	71	47	51%
Pantheon/Minerva	2401	24	-	JAMA	4	7	-	EPS Review	11	11	0%
World Wide Web	7094	6721	6%	Lancet	4	10	-	Extremities Quiz	145	64	127%
YaleInfo	30	146	-79%	Legislate	0	21	-100%	Forebrain (Syracuse)	12	10	20%
<b>word processing &amp; utilities (CRL)</b>	<b>520</b>	<b>404</b>	<b>29%</b>	Legislate	0	21	-100%	Gross Anatomy Review	115	94	22%
Epi Info	24	10	140%	Micromedex	10	16	-38%	HARP (Histological Anatomy Rev	8	9	-11%
Excel for Windows	64	33	94%	MMWR	4	12	-67%	Head Quiz	242	140	73%
Format disk	12	6	100%	Network Entrez	3	17	-82%	Histology Quizbank	6	10	-40%
FTP for Windows	28	0	#DIV/0!	New England Journal of Medicine	10	21	-52%	Histology Video Review	11	4	175%
Health Risk Appraisal	1	1	-	NEXIS	61	189	-68%	HyperCELL	5	1	400%
Virus Scanner (F-PROT)	11	26	-58%	Nucleic Acids Research	0	-	-	Hyperheart	7	18	-61%
Wordperfect for Windows	380	281	35%	OMIM/GDB	8	10	-20%	Interactive Brain Atlas	34	23	48%
				Pediatrics	4	9	-	Interactive Respiratory Physiology	11	-	-
				Phone Books	11	-	-	KINEMAGE	3	9	-67%
				Science	22	23	-	Lazy Eye	21	17	24%
				Scientific American Medicine Consul	3	5	-40%	MacBaby	74	115	-36%
				YNHH Nursing Organization and Pra	6	-	-	Microbiology Quizbank	32	20	-
				<b>Grant and research information</b>	<b>7</b>	<b>64</b>	<b>-89%</b>	Neuroanatomy Review	35	31	13%
				Community of Science	0	-	-	Neuron Model: Tutorial	15	4	275%
				CT CRISP	1	33	-97%	Neuron Model: Current Clamp	12	5	140%
				IRIS	6	9	-33%	Neuron Model: Voltage Clamp	14	7	100%
				<b>Clinical assistance</b>	<b>5</b>	<b>33</b>	<b>-85%</b>	Pathology Quizbank	192	114	68%
				Coag Advisor	1	4	-75%	Perineum Quiz	153	106	44%
				Physician Data Query (PDQ)	4	19	-79%	PreTest (11 different fields)	19	-	-
								Superhead	70	47	49%
								Thorax Quiz	123	113	9%
								USMLE Step 1	64	-	-
								USMLE Step 2	53	-	-
								Wheat's Interactive Histology	2	-	-