

## 1998-99 Information Technology Services - Medicine Annual Report Highlights

### The network and major information resources

- Electronic mail, MEDLINE and the Web are the most important electronic resources at the School of Medicine. Almost two-thirds (61%) of faculty, staff and students use electronic mail *and* consider it crucial to their work. For MEDLINE and the Web, the figures are 49% and 36%, respectively.
- The number of electronic mail users has increased by 19%.
- Use of electronic journals almost tripled. They are now used by two-thirds of the School of Medicine.
- Use of OVID databases (including MEDLINE) was stable again this year.
- One-third more people are accessing the network each day from off-campus than last year. Half (52%) of the faculty, staff and students access library resources from off-campus locations.

### Services

- Almost two thirds (61%) of faculty and staff have called the Help Desk and more than half (54%) have used Desktop Support this year. Even though 36% more faculty and staff have used the Help Desk this year than last, the number of calls to the Help Desk has remained stable. This is partly due to fewer repeat calls for the same issue (e.g., status inquires have declined by 13% from last year).
- For the second year in a row, information requests have increased more than any other kind of Help Desk call (by 56% this year and 79% last year).
- Each Help Desk staff member resolves an average of 24 calls per day. Each Desktop Support technician completes an average of 5 service calls per day.
- Desktop Support met its turnaround goals 90% of the time last year.
- Ratings of service providers' skill all averaged 'somewhat high'. Skill ratings have increased for both Desktop Support (up 13%) and the Help Desk (up 8%) and have remained stable for other ITS-Med computing services and for Library services. Of all services, ITS-Med's Video Production received the highest skill rating (averaging 'high') and Central ITS services (training and the MicroCenter) received the lowest (averaging between 'somewhat high' and 'neither high nor low').
- Use of training services has generally declined. Fewer people reported attending Library (down 17%) and Central ITS (down 26%) training classes. Reported attendance of ITS-Med training classes did not change.

### The Web

- The School's web server received 61% more hits this year.
- Use of the main pages of MedMenu, Yale-New Haven Hospital, Orthopaedics & Rehabilitation and the Child Study Center all received more than double the number of hits compared to last year.
- Usage decreased for the main pages of Anesthesiology, Emerging Infections Information Network, Surgery, the Medical Library, Diagnostic Radiology, and Scientific Affairs and Grant & Contract Administration.
- Main pages that were consistently among the top 10 most accessed include: the Medical Center, the Center for Advanced Instructional Media, YSM, the Library, MedMenu, the Library's Selected Internet Resources database, the Library's Internet Search page, the University directory, the server search, ITS-Med's Desktop Support, the Child Study Center, BBS, the Yale Heart Book, the Computer Resource Lab, the Keck DNA Sequencing FTP access, the YSM Admissions Viewbook, and the Hospital's Clinical Workstation.
- The greatest growth among users of the YSM web server was from US non-profit organizations, major online service providers, international users, and Yale users.

### Public workstations

- Hospital public workstations began a gradual conversion from server-based NetMenu to Web-based MedMenu. Because logging is different on the two systems, comparisons between this year and previous years are not reliable for either Library (which were converted in May 1998) or Hospital workstations.
- The following six resources accounted for 86% of connections from the Medical Library's public workstations: Biomed VAX email, OVID/MEDLINE, Yale Library Catalog (OPAC), Pantheon/Minerva email, electronic journals, and the Selected Internet Resources (SIR) database.
- Approximately 91% of MedMenu usage occurs inside the Medical Library.
- Of the average 31 connections per library workstation per day, users connect 11 times to the Biomed VAX, 8 times to MEDLINE, 3 times to the Yale Library Catalog, twice to Pantheon/Minerva, and once to electronic journals.
- CCSS, Clinical Laboratory, the Internet, GroupWise email, ChartView, Biomed email and Wordperfect together account for 86% of Hospital public workstation usage.
- Of the average 9 connections per Hospital workstation per day, CCSS is used an average of 3 times, Clinical Laboratory and the Internet twice, and Groupwise email and ChartView once every three days. Full-text resources are used an average of once every two days per machine. Bibliographic databases are accessed from each workstation once every five days on average.

**Information Technology Services - Medicine Annual Report  
July 1998-June 1999**

**Resources & applications**

Type of application	1998-99	1997-98	1996-97	1995-96	% change from	
					1994-95	last year
AS/400 applications	125,822	117,755	-	-	-	7%
Biomed Vax	790,512	777,431	756,078	610,771	473,929	2%
# of logons/user/month	42	39	36	31	29	7%
Clinical Reporting System	4,707	5,770	6,588	3,829	-	-18%
% of Med. Center community using	24%	23%	13%	-	-	4%
mean rating of importance*	2.7	3.0	3.2	-	-	-9%
# of accesses/user/month	6.0	-	-	-	-	-
Electronic journals**	54,426	18,889	9,432	-	-	188%
% of Med. Center community using	66%	58%	51%	-	-	14%
mean rating of importance*	3.8	3.6	3.3	-	-	6%
Electronic mail (# messages sent)	10,709,287	9,298,551	5,551,564	3,000,528	-	15%
# of messages/user/day	6	6	4	3	-	-3%
% of Med. Center community using	96%	94%	86%	78%	70%	2%
mean rating of importance*	4.6	4.4	4.4	-	-	4%
OVID databases	212,340	211,930	194,061	142,494	101,154	0%
# of sessions/user/month	5.7	6.1	6.2	-	-	-7%
% of Med. Center community using	80%	84%	84%	76%	76%	-5%
mean rating of importance*	4.4	4.2	4.2	-	-	4%
Medical Center World Wide Web	17,433,340	10,701,005	5,046,538	2,028,988	-	63%
% of Med. Center community using	87%	87%	87%	72%	48%	0%
mean rating of importance*	4.1	4.0	4.0	-	-	1%
Medical Center home page	1,191,838	724,806	344,245	75,491	-	64%
Hospital home page	111,418	34,313	15,646	10,367	-	225%
School of Medicine home page	152,997	117,518	74,360	42,306	-	30%
Medical Library home page	149,600	174,273	124,463	47,310	-	-14%
Off-campus usage (remote access)						
# users/day	377	286	-	-	-	32%
% of Med School using remote access	65%	58%	-	-	-	12%
mean rating of importance*	4.1	4.2	-	-	-	-2%
% using computing resources off-campus	81%	78%	72%	60%	61%	4%
% using library resources off-campus	52%	43%	34%	24%	-	21%

**Services**

	% of YSM using			Skill rating***		
	1998-99	1997-98	% change	1998-99	1997-98	% change
Computing services						
Help Desk	61%	45%	36%	3.9	3.6	8%
Desktop Support	55%	52%	6%	4.0	3.5	13%
ITS-Med programming	20%	26%	-23%	3.7	3.7	1%
ITS-Med training	25%	24%	4%	3.9	3.8	3%
Web design	6%	-	-	4.3	-	-
Media services						
Audio visual	24%	-	-	4.6	-	-
Graphics	30%	-	-	4.4	-	-
Photography	42%	-	-	4.4	-	-
Video production	10%	-	-	4.8	-	-
Library services						
Library ref desk	48%	58%	-17%	3.8	3.7	2%
Library training	14%	20%	-30%	4.0	4.0	2%
Library on-site	3%	-	-	4.0	-	-
ITS Central services						
MCSC	42%	46%	-9%	3.6	3.3	7%
ITS-Central training	14%	19%	-26%	3.6	3.4	6%

**Public workstation usage**

Type of application	# of connections			% change from		
	1998-99	1997-98	1996-97	1995-96	1994-95	last year
Medical Library****	420,059	350,874	346,745	284,205	208,277	20%
Hospital****	380,148	433,843	560,731	266,617	59,498	-12%

**Help Desk**

	1998-99	1997-98	% change from	
			1/97-6/97	last year
Calls per month	2,925	3,025	2,475	-3%
Calls per day	142	146	117	-3%
% of clients using/month	39%	33%	27%	18%
% of faculty & staff using	61%	45%	44%	36%
# of callers/month	1,398	1,299	953	8%
# of Yale affiliates using Web page/month	1,162	694	467	67%
skill rating: annual survey***	3.9	3.6	3.7	8%
skill rating: specific service call***	4.5	-	-	-
Type of call				
Administrative systems	79	85	92	-8%
Call transfer	301	301	311	0%
Email/Scheduling	362	302	284	20%
Information request	635	406	227	56%
Network problem	395	394	384	0%
PC/printer problem	383	416	387	-8%
Status inquiries	146	168	212	-13%

**Desktop Support**

	1998-99	1997-98	% change from	
			1/97-6/97	last year
Tasks per month	1,262	-	-	-
Tasks per day	61	-	-	-
% billable tasks	80%	-	-	-
# delayed tasks/month	136	-	-	-
New service installations/month	617	-	-	-
Service cancellations/month	38	-	-	-
Trouble-shooting visits/month	326	-	-	-
Met turnaround	90%	-	-	-
% of faculty & staff using	55%	52%	52%	6%
skill rating: annual survey***	4.0	3.5	3.6	13%
skill rating: specific service call***	4.6	4.5	4.8	2%

**Background information**

	Schools of Medicine & Nursing				Hospital				ITS-Med clients		
	1998-99	1997-98	1996-97	1995-96	1998-99	1997-98	1996-97	1995-96	1998-99	1997-98	last year
Personal computers	6,800	6,800	7,000	7,000	2,100	2,100	2,200	2,200	4,565	4,205	9%
Electronic mail users	7,523	6,320	5,492	4,089	1,700	1,700	1,000	1,000	1,092	773	41%
Networked computers	4,900	4,400	3,800	2,500	1,700	1,700	1,575	1,575	648	118	449%
Full-time faculty	1,765	1,278	1,370	1,270	-	-	-	-	114	113	1%
Medical & graduate students	869	1,118	1,155	907	-	-	-	-	1,367	770	78%
Residents & postdocs	1,048	1,127	1,090	916	460	440	440	388	1,457	not avail.	-
Full-time staff	2,332	2,267	2,230	2,392	3,440	3,526	3,625	4,600	114	not avail.	-
Nursing staff	-	-	-	-	1,540	1,659	1,312	1,250	-	-	-
Number of beds	-	-	-	-	900	900	900	900	-	-	-

\*Importance was rated on a 5-point scale: useles (1), not very useful (2), somewhat useful (3), extremely useful (4), crucial to my work (5)

\*\*Was Core Biomedical Collection before 1998-99

\*\*\*Skill was rated on a 5-point scale: very low (1), somewhat low (2), neither high nor low (3), somewhat high (4), very high (5)

\*\*\*\* In May 1998 Library workstations were converted from server-based NetMenu to Web-based MedMenu; Hospital workstations began a gradual conversion this year.

## Overall usage for selected databases

	<u>1998-99 total</u>	<u>Jul-98</u>	<u>Aug-98</u>	<u>Sep-98</u>	<u>Oct-98</u>	<u>Nov-98</u>	<u>Dec-98</u>	<u>Jan-99</u>	<u>Feb-99</u>	<u>Mar-99</u>	<u>Apr-99</u>	<u>May-99</u>	<u>Jun-99</u>
<b>Summary</b>													
<b>AS/400 applications</b>	125,822	14,459	10,497	10,613	10,852	7,888	7,192	9,816	9,065	10,420	11,139	11,901	11,980
<b>Clinical Reporting System (CRS)</b>	4,960	314	368	372	345	554	310	563	251	498	395	466	524
<b>OVID sessions</b>	213,812	16,859	13,935	17,604	20,025	20,100	13,798	16,111	17,081	20,834	22,139	18,639	16,687
<b>Medical Center Web server</b>	17,433,340	1,002,890	1,040,921	1,220,255	1,376,407	1,376,407	1,352,920	1,545,299	1,568,689	1,734,951	1,789,042	1,600,024	1,825,535
<b>Electronic mail messages sent</b>	10,709,287	579,704	426,247	587,070	674,295	972,919	987,668	964,934	1,114,538	1,154,679	1,251,006	1,104,915	891,313

### Details: AS/400 applications

Animal Care and Use Committee	1,260	83	129	124	136	169	141	57	164	55	74	52	76
Business Management Systems	1,264	115	105	120	122	100	106	96	89	109	106	97	99
Clinical G/L Interface	128	26	18	10	10	14	2	18	8	0	10	2	10
Clinical Information	25	3	5	4	0	1	0	4	1	0	5	1	1
Clinical Information - Reports	20	3	3	1	2	0	1	1	1	0	5	0	3
Diagnostic Laboratory	3,116	350	275	216	286	229	218	309	226	300	275	209	223
Graduate and Continuing Education	767	65	53	60	72	58	48	59	65	87	69	61	70
Grants and Contracts	4,534	388	338	372	442	396	295	380	375	416	405	362	365
Grants and Contracts - Reports	426	10	21	32	125	59	27	28	25	11	34	21	33
Human Investigation Committee	1,060	69	67	82	70	66	88	105	111	99	103	92	108
Human Resources (CHR) - Inquiry	507	68	65	67	43	41	41	52	69	44	12	2	3
Human Resources (CHR) - Merit	4,059	301	58	62	48	35	22	14	32	46	606	1950	885
Human Resources (CHR) - Reports	165	12	1	4	0	0	0	2	7	1	37	45	56
Human Resources - General	521	35	27	47	53	37	29	29	34	28	55	49	98
Human Resources - Inquiry	39,095	4,072	3,222	3,340	3,738	2,626	2,358	3,313	2,950	3,356	3,466	3,298	3,356
Human Resources - Profiles	53,367	7,614	4,579	4,698	4,463	3,193	2,633	3,974	3,608	4,482	4,293	4,415	5,415
Human Resources - Reports	2,576	188	297	214	167	144	170	286	212	216	252	207	223
Internal Medicine	241	19	13	12	31	17	57	56	25	3	6	0	2
MED5 - Reports	23	2	3	1	2	1	2	7	1	1	1	0	2
Office of Public Information	146	-	-	-	-	-	11	10	25	11	7	56	26
Physician Associates Program	180	5	0	1	19	15	20	40	28	33	13	2	4
Space Inventory System	948	15	76	179	68	63	35	44	32	79	140	128	89
Student Research	293	7	38	13	43	7	5	66	21	36	42	7	8
Student Systems	4,101	409	479	322	285	132	313	356	340	396	348	336	385
Support Services	1,902	175	161	179	173	141	131	117	207	159	139	137	183
System Administration	2,338	100	162	152	139	72	150	106	176	306	530	265	180
Yale Animal Resource Center	2,679	323	295	293	298	272	286	281	231	138	106	91	65
Other/Miscellaneous	81	2	7	8	17	0	3	6	2	8		16	12

### Details: OVID databases

Biosis	10,264	559	499	1,289	945	919	1,363	714	890	896	923	585	682
CINAHL	3,521	194	150	312	472	390	216	238	296	352	377	272	252
Compendex	1,784	158	90	162	141	122	89	221	182	207	142	144	126
Curent Contents	14,487	1,281	1,209	1,485	2,289	1,012	884	1,179	1,167	1,211	1,003	800	967
Full-Text Journal Collections	54,426	3,028	2,079	2,790	1,763	7,050	1,785	3,515	4,090	6,931	8,265	6,464	6,666
HAPI	713	35	24	71	81	76	23	44	58	77	80	51	93
HealthStar	3,488	285	191	254	390	397	254	303	317	413	198	166	166
MEDLINE, current segment	76,899	8,172	6,552	7,768	7,466	6,468	4,927	6,004	6,163	6,782	6,316	5,132	5,149
MEDLINE back files	69,540	7,215	2,044	6,747	6,086	5,437	4,646	5,326	5,691	6,903	7,143	6,238	6,064
PsychInfo	18,933	925	913	1,306	1,868	2,163	1,495	1,328	1,466	1,926	2,987	1,375	1,181
access method: telnet sessions	64,606	6,909	5,910	7,270	6,862	5,033	3,830	4,503	4,296	5,996	5,604	4,408	3,985
access method: Web sessions	141,387	9,361	7,472	9,962	12,796	14,453	9,618	11,096	12,295	14,205	15,967	11,975	12,187
access method: Z39.50	6,127	591	552	417	371	646	353	525	495	653	562	427	535

# Medical Center Web usage report, July 1998-June 1999

## Usage for home pages of major sites on the Medical Center web server

### Greater than average growth

MedMenu  
 Yale-New Haven Hospital  
 US non-profit organizations  
 Major online service providers  
 Orthopaedics & Rehabilitation  
 Child Study Center  
 International  
 Yale

### Decreased usage

Anesthesiology  
 Emerging Infections Information Network  
 Surgery  
 Medical Library  
 Diagnostic Radiology  
 Scientific Affairs/Grant & Contract Administration

	<u>1998-99</u>	<u>1997-98</u>	<u>1996-97</u>	<u>% change</u>		<u>1998-99</u>	<u>1997-98</u>	<u>1996-97</u>	<u>% change</u>
<b>Server total</b>	<b>17,216,642</b>	<b>10,701,005</b>	<b>5,046,538</b>	<b>61%</b>	<b>Academic Departments**</b>				
<b>Who connected</b>					Anesthesiology	3,263	5,142	4,007	-37%
Yale	5,477,149	2,756,355	1,282,683	99%	BBS	15,586	10,324	1,853	51%
other US educational institutions	1,890,682	1,125,220	593,207	68%	Boyer Center for Molecular Medicine	9,545	7,501	5,821	27%
US government & military	195,019	119,714	53,631	63%	Cancer Center	14,286	8,910	5,603	60%
US commercial institutions	3,312,514	2,185,458	923,039	52%	Cell Biology	13,788	8,944	6,059	54%
US non-profit organizations	243,976	94,243	48,572	159%	Cellular & Molecular Physiology	4,749	4,014	2,787	18%
Major online service providers	2,405,908	1,125,374	526,977	114%	Child Study Center	22,076	10,894	2,920	103%
International	2,837,278	1,412,356	722,470	101%	Comparative Medicine	2,165	1,535	858	41%
<b># of unique hosts connecting</b>	<b>1,355,761</b>	<b>964,361</b>	<b>584,553</b>	<b>41%</b>	Dermatology	10,434	7,273	5,814	43%
					Diagnostic Radiology	7,397	8,427	7,105	-12%
<b>Medical Center</b>	<b>1,191,838</b>	<b>724,806</b>	<b>344,245</b>	<b>64%</b>	Epidemiology & Public Health	43,208	26,231	16,371	65%
<b>Yale-New Haven Hospital</b>	<b>104,250</b>	<b>34,313</b>	<b>15,646</b>	<b>204%</b>	Genetics	10,426	10,298	5,230	1%
<b>School of Medicine</b>	<b>152,997</b>	<b>117,518</b>	<b>74,360</b>	<b>30%</b>	History of Medicine	3,358	1,991	1,223	69%
<b>School of Nursing</b>	<b>20,936</b>	<b>12,724</b>	<b>6,758</b>	<b>65%</b>	Immunobiology	7,735	5,460	1,820	42%
<b>Major resources</b>					Internal Medicine	9,996	6,608	3,544	51%
Admissions, School of Medicine*	3,202	2,886	6,162	11%	Laboratory Medicine	5,682	4,020	2,075	41%
CAIM Style Manual	1,036,698	927,001	444,376	12%	Neurobiology	10,131	8,094	6,394	25%
Computing page	13,557	9,760	4,443	39%	Neurology	8,825	6,307	3,714	40%
Core research facilities page	4,330	3,038	2,329	43%	Neuroscience Program	6,194	4,466	1,732	39%
Education page	3,354	2,920	3,925	15%	Neurosurgery	3,874	2,613	772	48%
Emerging Infections Information Network	17,328	25,236	20,462	-31%	Obstetrics & Gynecology	5,792	3,897	3,295	49%
Find a person	34,366	18,370	-	87%	Ophthalmology	11,634	6,950	5,576	67%
Find a physician	12,276	7,008	-	75%	Orthopaedics & Rehabilitation	4,703	2,210	1,572	113%
Medical Library	149,600	174,273	124,463	-14%	Pathology	14,407	13,400	6,914	8%
MedMenu	414,238	135,871	38,477	205%	Pediatrics	8,387	5,654	2,355	48%
Mission: Community Service	3,490	1,947	-	79%	Pharmacology	5,779	4,249	3,050	36%
Mission: Education	11,308	6,694	-	69%	Physician Associate Program	13,742	10,674	3,509	29%
Mission: Patient Care	5,109	2,941	-	74%	Psychiatry	15,809	12,154	8,944	30%
Mission: Research	14,552	9,092	-	60%	Surgery	2,040	2,519	3,328	-19%
Scientific Affairs/Grant & Contract Administration	11,197	12,125	9,926	-8%	Therapeutic Radiology	2,452	1,622	299	51%
Yale Faculty Practice	11,406	7,795	3,035	46%					
<b>Service departments</b>									
Biomedical Communications	4,895	4,697	4,258	4%					
CAIM	52,887	49,883	52,821	6%					
Center for Cell Imaging	8,118	5,919	3,832	37%					
Copy Centre	1,560	1,077	72	45%					
Desktop Support	40,441	23,174	12,964	75%					
Help Desk	2,756	1,762	-	56%					
Systems Support	4,708	2,896	1,613	63%					

## Details for Medical Library public workstation usage 1998-1999

In May 1998 Library workstations were converted from server-based NetMenu to Web-based MedMenu. Many additional resources were added. Some resources have been deleted from year to year (e.g., Expanded Academic Index, InfoFinder, World Wide Web); only resources used in 1998-99 are listed, but the yearly totals at the top of this report are based on all resources that were available that year, even if they are not listed in this report. Comparisons between 1998-99 and previous years should be made with great caution.

	total # of connections					% change from last year
	1998-99	1997-98	1996-97	1995-96	1994-95	
<b>TOTAL CONNECTIONS</b>	<b>420,059</b>	<b>350,874</b>	<b>346,745</b>	<b>284,205</b>	<b>208,277</b>	20%
<b>Application</b>						
<b>Electronic textbooks</b>	<b>12,755</b>	-	-	-	-	-
Electronic Textbooks	6,439	-	-	-	-	-
Harrison's	3216	100	-	-	-	3116%
MAXX	5	-	-	-	-	-
Medical Letter on Drugs and Therap.	560	-	-	-	-	-
Merck Manual	939	34	-	-	-	2662%
SAM: Scientific Amer. Medicine	546	69	46	184	571	691%
SIR - Texts	476	-	-	-	-	-
Stat!Ref-TextBooks	238	-	-	-	-	-
Williams-Obstetrics	336	-	-	-	-	-
<b>Medical Education</b>	<b>7,279</b>	<b>11,082</b>	<b>17,544</b>	<b>14,131</b>	<b>11,135</b>	<b>-37%</b>
Abdomen Quiz	156	749	1,198	497	-	-79%
Anatomic Explorer	142	320	638	769	1,099	-56%
Anatomic Explorer CT	62	248	422	451	931	-75%
Animated Embryo	206	329	461	653	569	-37%
Brainstem	42	232	318	334	228	-82%
Brainstorm	116	317	577	655	581	-63%
Breath sounds	71	180	195	179	304	-61%
Cardiac Angio	32	115	179	107	90	-72%
Cardiac Auscultation	45	192	362	380	562	-77%
Cardiac Echo	46	138	144	162	192	-67%
Cardiac MRI	25	87	130	143	257	-71%
Cardiac Perfusion Imaging: SP	26	29	45	37	44	-10%
Cardiac Perfusion Imaging: PI	12	54	50	80	55	-78%
Cardiothoracic Image Quiz	71	224	452	357	152	-68%
Cardiothoracic Imaging	31	160	238	364	558	-81%
Concise Atlas - Cardiothoracic	47	111	126	22	-	-58%
Concise Atlas - Chest	30	118	159	20	-	-75%
Concise Atlas - Head & Neck	13	137	269	-	-	-91%
Course evaluations	169	15	-	-	-	1027%
Educational Software	2,232	255	22	-	-	775%
Embryo images	97	217	814	1,051	318	-55%
EPS Review	26	69	108	117	109	-62%
Eroshenko's Interactive Histology	2	-	-	-	-	-
Extremities Quiz	89	279	829	344	-	-68%
Functional Anatomy of the Heart	8	31	-	-	-	-74%
Gross Anatomy Review	407	575	1,471	1,133	1493	-29%
HARP (Histological Anatomy Review)	40	84	239	225	298	-52%
Head Quiz	60	358	594	309	-	-83%
Histology Quizbank	31	83	294	120	-	-63%
Histology Video Review	4	91	185	201	330	-96%
HyperBRAIN	40	6	-	-	-	567%
Hyperheart	29	120	122	221	159	-76%
Interactive Brain Atlas	45	141	192	184	-	-68%
Kaplan's	229	-	-	-	-	-
KINEMAGE	13	58	61	109	98	-78%
Lazy Eye	116	158	135	139	181	-27%

<b>Application</b>	<b>total # of connections</b>					<b>% change from last year</b>
	<b>1998-99</b>	<b>1997-98</b>	<b>1996-97</b>	<b>1995-96</b>	<b>1994-95</b>	
MacBaby	202	358	651	785	532	-44%
Microbiology Quizbank	168	346	561	297	-	-51%
Neuroanatomy Review	91	153	218	193	189	-41%
Neuron Model: Tutorial	24	39	55	60	45	-38%
Neuron Model: Current Clamp	18	30	45	54	48	-40%
Neuron Model: Voltage Clamp	13	28	60	50	40	-54%
Pathology Quizbank	74	822	1,442	1,681	656	-91%
Perineum Quiz	51	197	379	224	-	-74%
PreTest (4 different fields)	273	327	382	107	-	-17%
Superhead	38	209	267	280	276	-82%
Thorax Quiz	61	328	640	313	-	-81%
USMLE Step 1	472	510	694	88	-	-7%
USMLE Step 2	287	599	599	42	-	-52%
WebPath	680	-	-	-	-	-
Wheater's Interactive Histology	17	45	50	-	-	-62%
<b>Other resources</b>	<b>400,025</b>	-	-	-	-	-
AIDS Drugs	154	-	-	-	-	-
Abbreviation Finding Aids	63	-	-	-	-	-
AIDSLine/Drugs/Trials	346	57	224	607	1,011	507%
AIDSTrials-ACTIS	103	11	-	-	-	838%
Applied Science	71	-	-	-	-	-
Best-Evidence	162	-	-	-	-	-
Bioethicsline	218	11	-	-	-	1882%
Biography Index	210	18	-	-	-	1067%
Biomed VAX (email)	154,768	111,366	122,837	103,964	69,532	39%
Biosis	729	334	566	1,766	2,850	118%
Books in Print	703	163	171	48	-	331%
Britannica Online	410	137	120	6	-	199%
Bulldog Access	390	317	540	375	-	23%
CancerNet	281	13	-	-	-	2062%
CIAO: Columbia Int'l Affairs Online	24	-	-	-	-	-
CINAHL	1,164	171	232	715	1,026	581%
Clinical Laboratory	214	1	-	-	-	21300%
Cochrane	611	11	-	-	-	5455%
Community of Science (was Faculty Research database)	974	216	202	8	-	351%
Compendex	919	7	-	-	-	13029%
Congressional Universe	226	10	-	-	-	2160%
CT CRISP	194	31	123	457	570	526%
Current Contents	569	316	728	1,965	3,951	80%
Current Diagnoses series	3,240	-	-	-	-	-
Diagnostic Imaging	194	5	-	-	-	3780%
DIRLINE	112	-	-	-	-	-
Dissertation Abstracts	347	20	-	-	-	1635%
EBMR	205	-	-	-	-	-
EconLit	37	-	-	-	-	-
Electronic journals	19,410	2,391	1,395	673	375	712%
Entrez	352	43	79	70	1	719%
EPIC	156	9	-	-	-	1633%
ERAS	78	40	-	-	-	95%
ERIC	183	70	83	8	-	161%
Eureka	279	61	75	33	-	357%
FEDIX	121	4	-	-	-	2925%
Formulary Catalog	192	12	-	-	-	1500%
FREIDA	949	420	792	974	844	126%
GDB	639	-	-	-	-	-
GenBank	233	45	139	211	320	418%
GPO	239	13	-	-	-	1738%
Grant Resources	195	5	-	-	-	3800%

<b>Application</b>	<b>total # of connections</b>				<b>1994-95</b>	<b>% change from last year</b>
	<b>1998-99</b>	<b>1997-98</b>	<b>1996-97</b>	<b>1995-96</b>		
GroupWise email	102	-	-	-	-	-
HAPI	490	-	-	-	-	-
HealthSTAR	1,299	66	120	416	23	1868%
HISTLINE	269	16	-	-	-	1581%
History of Science & Technology	111	149	155	18	-	-26%
HSTAT	146	3	-	-	-	4767%
ICD-9	201	11	-	-	-	1727%
Infection Control Manual	171	3	-	-	-	5600%
INSPEC	162	7	-	-	-	2214%
(IGM) Internet Grateful Med	707	13	-	-	-	5338%
IRIS	267	37	79	67	-	622%
Law Library Catalog	166	14	-	-	-	1086%
Martindale	247	-	-	-	-	-100%
Material Safety Data Sheets	187	6	-	-	-	3017%
MedMenu	1,686	-	-	-	-	-
Micromedex	640	119	99	137	26	438%
New England Journal of Medicine	403	92	151	402	-	338%
NEXIS-LEXIS	3,762	908	954	2,058	2,681	314%
NIH-Consensus-Dev-Statements	31	-	-	-	-	-
NIH-Guide to Grants & Contracts	296	19	8	292	541	1458%
NLM Locator	210	13	6	11	-	1515%
NO (Nursing Organization & Practice Manual)	114	53	16	-	-	115%
NTIS	161	4	-	-	-	3925%
OMIM	363	42	100	293	364	764%
OSH-ROM	178	3	-	-	-	5833%
Other	368	-	-	-	-	-
OVID/MEDLINE	106,160	57,083	53,402	56,187	53,810	86%
Pantheon/Minerva	32,930	30,698	20,937	1,043	-	7%
Patent Search	413	15	-	-	-	2653%
PDR	409	-	-	-	-	-
Periodicals Contents Index	212	20	-	-	-	960%
Phone Books	472	106	262	144	-	345%
Physican Data Query	309	45	78	274	349	587%
PolTox	45	-	-	-	-	-
POPLINE	235	24	-	-	-	879%
ProQuest-Direct	468	-	-	-	-	-
PsycINFO	836	1,171	1,363	2,332	3,216	-29%
PubMed (NCBI)	1,540	77	-	-	-	1900%
Research Workstation	248	20	-	-	-	1140%
Residents' Reprints	152	9	-	-	-	1589%
Selected Internet Resources (SIR)	9,348	1,228	-	-	-	661%
Sociofile	81	3	-	-	-	2600%
Stat!Ref	142	-	-	-	-	-
Statistical UNIVERse	158	-	-	-	-	-
Surgical Pathology	301	21	-	-	-	1333%
Toxline	115	-	-	-	-	-
TOXNET	184	20	-	-	-	820%
UnCover	160	4	-	-	-	3900%
Web of Science (was Science Citation Index)	2,104	954	1,401	2,168	2,070	121%
WilsonWeb	205	6	-	-	-	3317%
WorldCat	104	-	-	-	-	-
Yale Library Catalog (OPAC)	38,801	25,754	28,669	25,921	22,831	51%
Y-Axis	492	-	-	-	-	-

## MedMenu Medical Library usage during 1998-99

<u>Application</u>	<u>Monthly</u>													
	<u>Median</u>	<u>Annual total</u>	<u>Jul-98</u>	<u>Aug-98</u>	<u>Sep-98</u>	<u>Oct-98</u>	<u>Nov-98</u>	<u>Dec-98</u>	<u>Jan-99</u>	<u>Feb-99</u>	<u>Mar-99</u>	<u>Apr-99</u>	<u>May-99</u>	<u>Jun-99</u>
<b>TOTAL CONNECTIONS</b>	<b>36,114</b>	<b>420,059</b>	<b>28,067</b>	<b>24,625</b>	<b>32,449</b>	<b>37,899</b>	<b>37,550</b>	<b>29,401</b>	<b>36,409</b>	<b>39,027</b>	<b>40,866</b>	<b>42,282</b>	<b>35,665</b>	<b>35,819</b>
<b>Electronic textbooks</b>	<b>551</b>	<b>6,316</b>	<b>151</b>	<b>335</b>	<b>432</b>	<b>690</b>	<b>775</b>	<b>487</b>	<b>616</b>	<b>590</b>	<b>669</b>	<b>589</b>	<b>469</b>	<b>513</b>
Harrison's	276	3,216	88	181	179	309	424	233	331	326	334	335	242	234
MAXX	0	5	0	0	4	1	0	0	0	0	0	0	0	0
Medical Letter on Drugs and Therap.	50	560	9	50	71	67	43	38	56	50	57	41	25	53
Merck Manual	74	939	48	61	79	122	141	71	73	79	84	60	47	74
SAM: Scientific Amer. Medicine	51	546	0	5	17	75	70	48	44	54	71	42	63	57
SIR - Texts	45	476	0	0	41	45	53	46	55	37	54	60	44	41
Stat!Ref-TextBooks	20	238	0	18	20	31	18	21	15	17	28	25	20	25
Williams-Obstetrics	28	336	6	20	21	40	26	30	42	27	41	26	28	29
<b>Medical Education</b>	<b>636</b>	<b>7,279</b>	<b>317</b>	<b>383</b>	<b>416</b>	<b>461</b>	<b>703</b>	<b>366</b>	<b>813</b>	<b>569</b>	<b>855</b>	<b>788</b>	<b>855</b>	<b>753</b>
Abdomen Quiz	7	156	5	10	6	5	6	12	57	18	20	5	8	4
Anatomic Explorer	10	142	4	1	24	15	15	4	31	12	7	27	2	0
Anatomic Explorer CT	5	62	0	4	6	5	9	2	12	7	4	7	4	2
Animated Embryo	10	206	2	6	10	1	26	7	49	17	59	9	9	11
Brainstem	3	42	0	2	3	2	3	1	5	7	6	5	8	0
Brainstem Quiz	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brainstorm	5	116	2	1	2	6	2	6	2	5	37	33	15	5
Breath sounds	5	71	0	5	6	4	5	2	4	2	16	7	6	14
Cardiac Angio	3	32	1	0	0	5	2	3	11	0	4	3	3	0
Cardiac Auscultation	3	45	1	9	5	3	1	2	7	2	7	1	4	3
Cardiac Echo	3	46	2	3	2	0	1	2	4	4	15	8	5	0
Cardiac MRI	2	25	0	0	0	2	0	1	6	2	6	2	6	0
Cardiac Perfusion Imaging: SP	1	26	2	1	0	1	0	2	1	0	6	2	10	1
Cardiac Perfusion Imaging: PI	0	12	0	0	0	5	0	0	0	0	2	2	3	0
Cardiothoracic Image Quiz	3	71	3	1	0	3	2	1	33	6	11	6	4	1
Cardiothoracic Imaging	3	31	0	0	1	1	3	1	9	3	2	3	3	5
Concise Atlas - Cardiothoracic	2	47	1	0	1	3	3	0	19	3	14	3	0	0
Concise Atlas - Chest	1	30	0	1	2	0	10	0	9	0	6	0	2	0
Concise Atlas - Head & Neck	0	13	0	0	0	0	0	0	0	13	0	0	0	0
Course evaluations	16	169	12	18	21	15	22	16	20	0	16	12	13	4
Cranial Nerves	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Educational Software	168	2,232	157	137	171	165	265	156	246	188	277	229	136	105
Embryo images	5	97	5	3	3	0	22	5	30	8	10	2	4	5
EPS Review	2	26	0	1	1	1	2	2	3	0	11	2	3	0
Eroshenko's Interactive Histology	0	2	0	0	0	0	0	0	0	0	0	0	2	0
Extremities Quiz	3	89	0	1	3	12	42	1	3	8	15	1	3	0
Functional Anatomy of the Heart	0	8	8	0	0	0	0	0	0	0	0	0	0	0
Gross Anatomy Review	27	407	5	6	71	69	94	6	47	41	13	41	5	9
HARP (Histological Anatomy Review)	2	40	0	0	1	6	5	13	2	2	4	1	6	0
Head Quiz	2	60	1	2	1	1	5	0	1	25	16	4	3	1
Histology Quizbank	2	31	3	2	0	4	1	4	1	8	1	8	-2	1
Histology Video Review	0	4	0	0	0	0	0	0	0	2	0	2	-2	2
HyperBRAIN	1	40	0	1	6	3	1	0	1	11	13	1	2	1



Application	Monthly														
	Median	Annual total	Jul-98	Aug-98	Sep-98	Oct-98	Nov-98	Dec-98	Jan-99	Feb-99	Mar-99	Apr-99	May-99	Jun-99	
Hyperheart	1	29	0	3	0	1	2	7	8	1	5	1	1	0	
Interactive Brain Atlas	4	45	4	1	0	3	3	1	4	4	11	3	5	6	
Interactive Respiratory Physiology	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kaplan's	65	229	-	-	-	-	-	-	-	-	-	19	145	65	
KINEMAGE	1	13	0	1	2	1	1	0	0	0	5	0	1	2	
Lazy Eye	3	116	1	1	2	3	2	0	3	67	26	8	3	0	
MacBaby	7	202	1	1	3	4	43	25	83	8	11	3	15	5	
Microbiology Quizbank	7	168	1	3	10	8	58	47	7	2	6	2	23	1	
Neuroanatomy Review	4	91	0	3	17	5	2	3	4	17	28	4	5	3	
Neuron Model: Tutorial	1	24	0	0	3	3	1	0	0	3	11	2	0	1	
Neuron Model: Current Clamp	1	18	0	1	2	3	1	2	1	0	7	0	0	1	
Neuron Model: Voltage Clamp	1	13	1	1	1	3	1	1	2	0	3	0	0	0	
Pathology Quizbank	5	74	14	4	5	4	11	1	6	5	8	5	9	2	
Perineum Quiz	2	51	2	2	4	1	2	1	4	23	7	1	2	2	
PreTest (4 different fields)	12	273	31	74	5	11	8	8	12	6	42	35	30	11	
Superhead	4	38	0	3	1	4	6	4	4	5	8	1	1	1	
Thorax Quiz	4	61	1	8	3	2	6	4	26	4	2	4	0	1	
USMLE Step 1	16	472	5	22	3	64	3	5	11	13	18	79	31	218	
USMLE Step 2	20	287	41	39	8	2	4	8	22	17	58	40	8	40	
WebPath	0	680	0	0	0	0	0	0	0	0	0	154	310	216	
Wheater's Interactive Histology	1	17	1	1	1	2	2	0	3	0	1	1	1	4	
<b>Other resources</b>	<b>34,767</b>	<b>406,464</b>	<b>27,599</b>	<b>23,907</b>	<b>31,601</b>	<b>36,748</b>	<b>36,072</b>	<b>28,548</b>	<b>34,980</b>	<b>37,868</b>	<b>39,342</b>	<b>40,905</b>	<b>34,341</b>	<b>34,553</b>	
AIDSDrugs	16	154	0	0	11	18	17	19	21	18	21	15	14	0	
Abbreviation Finding Aids	0	63	0	0	0	0	0	0	0	0	29	0	34	0	
AIDSLine/Drugs/Trials	24	346	23	32	16	22	28	22	23	24	46	61	39	10	
AIDSTrials-ACTIS	9	103	0	0	6	19	14	19	0	0	18	16	11	0	
Applied Science	8	71	9	0	5	9	3	11	0	11	8	8	7	0	
Best-Evidence	15	162	13	0	0	0	39	27	0	16	28	19	20	0	
Bioethicsline	20	218	0	9	19	17	30	24	21	25	26	23	16	8	
Biography Index	17	210	10	15	18	29	20	19	15	26	13	20	11	14	
Biomed VAX	13,743	154,768	7,189	7,298	12,279	14,583	13,851	10,768	14,299	15,543	15,435	16,931	13,634	12,958	
Biosis	63	729	25	43	41	71	64	62	62	83	78	75	64	61	
Books in Print	61	703	88	54	35	76	81	65	25	67	81	57	56	18	
Britannica Online	36	410	37	35	26	46	40	36	41	29	37	35	19	29	
Bulldog Access	25	390	31	23	25	35	18	36	104	31	25	15	23	24	
Cancernet	23	281	14	14	18	38	37	26	37	24	21	24	16	12	
CIAO: Columbia Int'l Affairs Online	1	24	0	1	1	2	6	1	0	1	0	3	2	7	
CINAHL	60	1,164	26	30	34	74	62	54	51	72	81	57	241	382	
Clinical Laboratory	18	214	16	17	22	22	16	22	11	17	19	20	20	12	
Cochrane	45	611	35	43	37	88	88	78	44	48	53	45	29	23	
Community of Science	83	974	98	65	84	82	91	76	96	95	94	74	59	60	
Compendex	40	919	19	30	22	46	39	47	36	40	41	29	229	341	
Congressional Universe	17	226	9	7	7	26	27	27	17	16	33	40	9	8	
CT CRISP	16	194	11	11	14	20	18	16	15	35	18	17	9	10	
Current Contents	56	569	0	42	42	71	59	58	63	58	66	54	32	24	
Current Diagnoses	292	3,240	74	194	237	302	316	225	281	343	331	335	281	321	
Diagnostic Imaging	15	194	13	15	15	26	22	22	0	24	21	14	11	11	
DIRLINE	10	112	0	0	0	11	23	19	17	0	16	10	10	6	

Application	Monthly													
	Median	Annual total	Jul-98	Aug-98	Sep-98	Oct-98	Nov-98	Dec-98	Jan-99	Feb-99	Mar-99	Apr-99	May-99	Jun-99
Dissertation Abstracts	29	347	11	20	34	42	44	31	38	24	34	19	26	24
EBMR	21	205	0	0	0	3	29	32	31	30	30	22	19	9
EconLit	3	37	0	0	0	5	8	7	3	4	3	4	2	1
Electronic Journals	1,622	19,410	1,061	930	1,370	1,548	1,576	1,232	1,769	1,920	2,210	2,299	1,667	1,828
Electronic Textbooks	604	6,439	0	262	554	684	658	470	653	710	732	672	503	541
Entrez	29	352	8	13	22	23	30	45	43	48	32	25	28	35
EPIC	13	156	8	8	12	14	24	18	14	17	14	12	11	4
ERAS	3	78	0	6	14	32	0	6	2	0	11	3	3	1
ERIC	16	183	10	15	19	22	23	16	14	16	17	11	11	9
Eureka	20	279	20	13	20	20	16	22	16	22	15	14	61	40
FEDIX	9	121	7	5	8	18	12	15	9	15	14	7	5	6
Formulary Catalog	17	192	19	9	11	19	23	19	15	19	17	16	16	9
FREIDA	35	949	75	35	79	38	29	34	27	23	12	28	231	338
GDB	14	639	6	7	8	16	11	14	10	14	14	13	208	318
GenBank	17	233	10	14	12	22	27	16	10	29	15	33	28	17
GPO	19	239	0	16	13	39	31	26	18	23	19	23	16	15
Grant Resources	16	195	8	8	12	27	29	21	17	19	17	13	14	10
GroupWise	10	102	0	0	0	0	11	9	22	10	19	8	13	10
HAPI	44	490	27	29	26	51	61	50	52	51	49	38	30	26
HealthSTAR	75	1,299	25	31	49	63	80	84	59	87	207	69	228	317
HISTLINE	21	269	39	18	16	46	30	27	23	19	23	16	12	0
History of Science & Technology	9	111	5	7	4	15	7	11	9	15	9	13	12	4
HSTAT	14	146	10	6	8	18	20	18	14	17	14	13	8	0
ICD-9	13	201	9	8	13	27	25	13	22	29	19	12	12	12
Infection Control Manual	14	171	10	11	8	18	22	21	17	15	18	13	10	8
INSPEC	14	162	14	20	8	22	13	21	9	18	15	11	7	4
(IGM) Internet Grateful Med	59	707	10	41	42	40	69	70	98	83	101	64	53	36
IRIS	22	267	13	18	16	32	32	30	21	26	30	22	17	10
Law Library Catalog	14	166	9	7	10	15	12	17	12	15	21	15	26	7
Martindale	25	247	0	0	0	0	31	23	26	44	36	32	22	33
Material Safety Data Sheets	16	187	10	8	9	26	22	25	16	17	16	19	12	7
MedMenu information	143	1,686	160	121	143	197	146	107	116	143	170	142	125	116
Micromedex	51	640	75	28	37	83	66	48	57	53	44	62	42	45
New England Journal of Medicine	35	403	31	29	37	40	40	24	44	40	33	34	36	15
NEXIS-LEXIS	296	3,762	301	171	415	467	520	374	287	290	271	357	169	140
NIH-Consensus-Dev-Statements	3	31	0	3	1	3	1	6	3	4	2	5	1	2
NIH-Guide to Grants & Contracts	23	296	25	16	26	18	37	39	27	30	19	21	20	18
NLM Locator	18	210	20	16	17	25	11	18	15	20	19	25	17	7
NO (Nursing Organization & Practice Me	13	114	14	6	0	0	15	21	0	19	13	12	14	0
NTIS	14	161	7	8	11	21	18	23	17	15	14	13	9	5
OMIM	23	363	12	15	21	24	43	47	52	59	44	16	15	15
OSH-ROM	15	178	1	10	7	26	18	25	14	16	23	14	15	9
Other	0	368	0	0	0	0	0	283	0	82	0	3	0	0
OVID/MEDLINE	9,020	106,160	9,367	7,411	8,100	8,998	9,714	7,144	8,721	9,377	9,944	10,059	8,283	9,042
Pantheon/Minerva	2,739	32,930	3,858	2,876	2,603	2,601	2,174	1,892	2,207	2,753	3,099	3,309	2,833	2,725
Patent Search	24	413	13	11	19	36	23	28	24	26	31	20	177	5
PDR	45	409	0	0	0	0	45	37	50	55	62	64	51	45
Periodicals Contents Index	18	212	14	6	11	26	35	19	22	18	18	21	13	9
Phone Books	38	472	12	15	38	28	38	27	27	59	42	67	81	38

<b>Application</b>	<b>Monthly</b>													
	<b>Median</b>	<b>Annual total</b>	<b>Jul-98</b>	<b>Aug-98</b>	<b>Sep-98</b>	<b>Oct-98</b>	<b>Nov-98</b>	<b>Dec-98</b>	<b>Jan-99</b>	<b>Feb-99</b>	<b>Mar-99</b>	<b>Apr-99</b>	<b>May-99</b>	<b>Jun-99</b>
Physican Data Query	18	309	12	13	13	26	25	18	17	24	18	123	10	10
PolTox	0	45	0	0	0	0	0	0	0	0	0	0	45	0
POPLINE	20	235	10	12	17	35	22	26	23	21	23	19	14	13
ProQuest-Direct	41	468	17	14	24	39	35	43	18	45	50	87	47	49
PsycINFO	72	836	50	49	51	92	108	91	71	72	72	95	48	37
PubMed (NCBI)	128	1,540	122	83	130	140	125	88	152	112	121	183	136	148
Research Workstation	22	248	14	12	23	24	20	22	22	29	20	22	14	26
Residents' Reprints	12	152	8	8	9	15	21	19	16	12	16	11	11	6
Selected Internet Resources (SIR)	789	9,348	805	624	781	905	786	679	917	792	847	869	676	667
Sociofile	4	81	2	2	3	13	14	8	2	9	3	17	5	3
Stat!Ref	9	142	34	18	20	31	18	21	0	0	0	0	0	0
Statistical UNIVerse	13	158	0	1	1	0	1	35	26	21	29	19	14	11
Surgical Pathology	26	301	16	15	17	49	38	31	23	28	28	29	16	11
Toxline	12	115	0	0	0	0	17	19	15	15	16	14	9	10
TOXNET	15	184	12	11	12	22	19	19	17	18	17	12	13	12
UnCover	15	160	0	11	8	20	19	20	18	19	18	10	10	7
Web-of-Science	148	2,104	136	131	152	143	135	170	187	363	213	205	127	142
WilsonWeb	14	205	36	11	9	25	9	16	10	24	14	28	9	14
WorldCat	0	104	0	16	0	0	0	0	0	0	36	25	27	0
Yale Library Catalog (OPAC)	3,261	38,801	3,238	2,576	3,404	3,850	3,663	2,804	3,352	3,134	3,474	3,283	2,930	3,093
Y-Axis	42	492	13	15	30	48	39	35	43	46	57	54	72	40

## Details for Hospital public workstation usage

Application	total # of connections					% change from last year
	1998-99	1997-98	1996-97	1995-96	1994-95	
<b>Hospital information systems</b>	<b>226,414</b>	<b>250,647</b>	<b>348,209</b>	<b>164,049</b>	<b>38,474</b>	<b>-10%</b>
CCSS	115,263	128,896	179,996	83,855	19,226	-11%
ChartView	13,241	7,718	4,596	1,566	-	72%
Clinical laboratory	83,060	101,303	155,301	74,613	17,866	-18%
Clinical services	422	-	-	-	-	-
Diagnostic Imaging	1,520	1,762	2,317	1,597	202	-14%
Electronic Signature (ESA)	7,152	2,496	-	-	-	187%
EPIC	4,740	6,529	2,983	1,206	3	-27%
Office services	543	-	-	-	-	-
Surgical Pathology	473	1,943	3,016	1,212	1,177	-76%
<b>Bibliographic databases and search tools</b>	<b>8,932</b>	<b>14,292</b>	<b>23,802</b>	<b>17,333</b>	<b>9,285</b>	<b>-38%</b>
Cancernet	16	-	-	-	-	-
CINAHL	597	1,043	1,968	1,305	593	-43%
Current Contents	19	-	-	-	-	-
Health Planning and Admin./HealthSTAR	1,436	452	678	540	4	218%
OVID/MEDLINE	6,439	12,104	19,956	14,299	7,991	-47%
Yale Library Catalog (ORBIS)	425	684	1,200	1,189	681	-38%
<b>Procedure recorders</b>	<b>2,937</b>	<b>4,168</b>	<b>5,311</b>	<b>3,748</b>	<b>1,530</b>	<b>-30%</b>
Emergency	486	567	35	-	-	-14%
Medicine	974	779	1,349	883	792	25%
OB/GYN	392	1,671	2,244	1,764	-	-77%
Surgery	1,085	1,151	1,683	1,101	738	-6%
<b>Word processing &amp; utilities</b>	<b>10,966</b>	<b>14,032</b>	<b>20,941</b>	<b>10,932</b>	<b>295</b>	<b>-22%</b>
Clinical Workstation locations	508	608	1,033	555	-	-16%
Format disk	208	347	597	283	4	-40%
Virus scan	149	370	572	357	4	-60%
Word for Windows	2,378	-	-	-	-	-
Wordperfect	7,723	12,707	18,739	9,737	287	-39%
<b>Full text and factual databases</b>	<b>22,684</b>	<b>23,717</b>	<b>33,141</b>	<b>19,151</b>	<b>7,079</b>	<b>-4%</b>
AIDS/Drugs/Trials/Line-Bioethic	27	383	374	21	-	-93%
Cochrane Library	65	9	-	-	-	622%
Current Diagnosis & Treatment texts	429	-	-	-	-	-
Delineation of Clinical Privileges	197	214	757	30	-	-8%
Electronic Journals	1,404	16	-	-	-	8675%
Electronic Textbooks	1,726	-	-	-	-	-
Geriatric Medicine	5	-	-	-	-	-
Global Textbook of Anesthesiology	21	-	-	-	-	-
Harrison's	3,234	3,416	4,926	2,369	-	-5%
Infection Control Manual	194	25	-	-	-	676%
JCAHO Accreditation Manual	279	-	-	-	-	-
Laboratory Point of Care Testing Procedure	8	-	-	-	-	-
Little Brown Handbooks	1,130	1,767	2,635	2,654	1,623	-36%
Material Safety Data Sheets	15	-	-	-	-	-
Medical Letter on Drugs & Therapies	75	-	-	-	-	-
Merck Manual	679	794	1,416	1,534	1,229	-14%
Micromedex	5,931	13,239	16,246	7,683	4,176	-55%
New England Journal of Medicine	1,018	1,704	2,931	2,071	-	-40%
Nursing Procedures Manual	642	16	-	-	-	3913%
OMIM	7	-	-	-	-	-
Pharm InfoNet	146	-	-	-	-	-
Red Book on Pediatric Infections	221	297	535	367	51	-26%
Rosen's Emergency Medicine	352	487	803	439	-	-28%
STAT!-Reference	800	916	1,545	907	-	-13%
Virtual Hospital	77	-	-	-	-	-
Yale Directory	68	21	-	-	-	224%
YNHH Documents	2,406	14	-	-	-	17086%
YNHH Formulary	35	395	973	1,076	-	-91%
YNHH House Staff Training	1,237	-	-	-	-	-
YNHH Physician Phone Book	256	-	-	-	-	-
<b>Email/news/networks</b>	<b>108,007</b>	<b>126,717</b>	<b>128,705</b>	<b>50,963</b>	<b>2,409</b>	<b>-15%</b>
Biomed Email	8,507	10,078	12,570	7,610	1,394	-16%
DEC RAD Telnet	4	-	-	-	-	-
GroupWise Email	15,980	24,997	24,144	3,992	-	-36%
Home Page	144	-	-	-	-	-
Internet	82,999	91,642	91,991	39,361	1,015	-9%
Mainframe	21	-	-	-	-	-
Medical Library	50	-	-	-	-	-
Selected Internet Resources	302	-	-	-	-	-
<b>Clinical assistance</b>	<b>209</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>426</b>	<b>-</b>
Coag Advisor	209	-	-	-	-	-

**Yale-New Haven Hospital Clinical Workstation usage during 1998-99**

<b>Application</b>	<b>Total</b>	<b>Jul-98</b>	<b>Aug-98</b>	<b>Sep-98</b>	<b>Oct-98</b>	<b>Nov-98</b>	<b>Dec-98</b>	<b>Jan-99</b>	<b>Feb-99</b>	<b>Mar-99</b>	<b>Apr-99</b>	<b>May-99</b>	<b>Jun-99</b>
<b>TOTAL CONNECTIONS</b>	<b>380,292</b>	<b>41,317</b>	<b>38,271</b>	<b>40,565</b>	<b>40,205</b>	<b>38,434</b>	<b>12,108</b>	<b>12,396</b>	<b>9,979</b>	<b>38,319</b>	<b>33,888</b>	<b>35,947</b>	<b>38,863</b>
<b>Hospital information systems</b>	<b>226,414</b>	<b>22,940</b>	<b>21,943</b>	<b>23,380</b>	<b>22,786</b>	<b>21,584</b>	<b>5,294</b>	<b>6,974</b>	<b>4,671</b>	<b>25,422</b>	<b>23,518</b>	<b>23,187</b>	<b>24,715</b>
CCSS	115,263	11,881	11,510	12,262	12,013	11,725	2,815	4,134	2,837	11,907	11,512	10,829	11,838
ChartView	13,241	1,189	1,306	1,206	1,292	1,230	324	36	23	1,725	1,745	1,604	1,561
Clinical laboratory	83,060	8,639	7,926	8,369	8,033	7,114	1,782	2,672	1,711	10,364	9,140	9,000	8,310
Clinical services	422	-	-	-	-	-	-	-	-	-	-	-	422
Diagnostic Imaging	1,520	108	96	83	96	111	28	13	14	68	31	249	623
Electronic Signature (ESA)	7,152	519	608	717	687	706	186	47	31	1,065	905	865	816
EPIC	4,740	539	438	680	626	644	150	62	44	274	165	586	532
Office services	543	-	-	-	-	-	-	-	-	-	-	-	543
Surgical Pathology	473	65	59	63	39	54	9	10	11	19	20	54	70
<b>Bibliographic databases and search tools</b>	<b>8,931</b>	<b>888</b>	<b>712</b>	<b>635</b>	<b>731</b>	<b>679</b>	<b>186</b>	<b>185</b>	<b>137</b>	<b>1,254</b>	<b>1,343</b>	<b>1,095</b>	<b>1,086</b>
CancerNet	16	-	-	-	-	-	-	-	-	1	-	9	6
CINAHL	597	92	77	68	102	85	15	18	11	40	33	16	40
Current Contents	19	-	0	-	-	-	-	-	-	4	6	3	6
Health Planning and Admin.	369	51	35	70	50	58	20	16	12	10	10	19	18
HealthSTAR-OVID	1,067	0	-	0	0	0	-	-	-	4	1057	1	5
MEDLINE	6,439	676	541	454	527	478	137	143	104	1,175	193	1,022	989
Yale Library Catalog (ORBIS)	425	69	59	43	52	58	14	8	10	21	44	25	22
<b>Word processing &amp; utilities</b>	<b>10,966</b>	<b>1,417</b>	<b>1,198</b>	<b>1,424</b>	<b>1,426</b>	<b>1,179</b>	<b>243</b>	<b>283</b>	<b>328</b>	<b>992</b>	<b>311</b>	<b>1,145</b>	<b>1,020</b>
Clinical Workstation locations	508	80	63	70	61	52	14	18	17	26	24	47	36
Format disk	208	20	14	26	33	24	3	6	8	18	22	18	16
Virus scan	149	27	18	24	18	19	2	3	8	9	9	8	4
Word for Windows	2,378	-	-	-	-	-	-	-	-	783	-	839	756
Wordperfect	7,723	1,290	1,103	1,304	1,314	1,084	224	256	295	156	256	233	208
<b>Procedure recorders</b>	<b>3,081</b>	<b>368</b>	<b>310</b>	<b>268</b>	<b>328</b>	<b>323</b>	<b>175</b>	<b>43</b>	<b>37</b>	<b>360</b>	<b>162</b>	<b>257</b>	<b>450</b>
ED	486	67	54	77	47	31	4	2	1	35	56	71	41
Medicine	974	72	47	53	142	127	137	12	14	146	44	101	79
Ob/Gyn	392	112	92	7	10	26	4	2	4	37	37	14	47
Surgery	1,085	117	117	131	129	139	30	27	18	142	25	71	139
<b>Full text and factual databases</b>	<b>22,684</b>	<b>1,753</b>	<b>1,600</b>	<b>1,329</b>	<b>1,491</b>	<b>1,259</b>	<b>354</b>	<b>438</b>	<b>416</b>	<b>3,286</b>	<b>3,206</b>	<b>3,214</b>	<b>4,338</b>
AIDS/Drugs/Trials/Line-Bioethic	27	-	-	-	-	-	-	-	-	4	3	5	15
Cochrane Library	65	-	-	-	-	-	-	-	-	17	19	15	14
Current Diagnosis & Treatment texts	429	-	-	-	-	-	-	-	-	151	-	118	160
Delineation of Clinical Privileges	197	21	16	18	14	12	0	3	2	13	5	11	82
Electronic Journals	1,404	-	-	-	-	-	-	-	-	352	368	288	396
Electronic Textbooks	1,726	-	-	-	-	-	-	-	-	437	428	430	431
Geriatric Medicine	5	-	-	-	-	-	-	-	-	-	-	-	5
Global Textbook of Anesthesiology	21	-	-	-	-	-	-	-	-	12	-	9	0
Harrison's	3,234	333	295	259	278	260	65	57	57	502	476	370	282
Infection Control Manual	194	-	-	-	-	-	-	-	-	24	15	26	129
JCAHO Accreditation Manual	279	23	10	15	30	21	15	6	6	39	43	32	39
Laboratory Point of Care Testing Procedure	8	-	-	-	-	-	-	-	-	3	-	2	3
Little Brown Handbooks	1,130	169	132	104	110	113	28	32	26	127	109	92	88

<b>Application</b>	<b>Total</b>	<b>Jul-98</b>	<b>Aug-98</b>	<b>Sep-98</b>	<b>Oct-98</b>	<b>Nov-98</b>	<b>Dec-98</b>	<b>Jan-99</b>	<b>Feb-99</b>	<b>Mar-99</b>	<b>Apr-99</b>	<b>May-99</b>	<b>Jun-99</b>
Material Safety Data Sheets	15	-	-	-	-	-	-	-	-	3	-	1	11
Medical Letter on Drugs & Therapies	75	-	-	-	-	-	-	-	-	23	-	29	23
Merck Manual	679	87	51	43	63	56	15	5	14	85	83	92	85
Micromedex	5,931	704	758	591	653	504	151	279	237	513	593	473	475
New England Journal of Medicine	1,018	197	161	123	161	147	36	24	39	32	32	29	37
Nursing Procedures Manual	642									80	93	125	344
OMIM	7	-	-	-	-	-	-	-	-	3	-	1	3
Pharm InfoNet	146	-	-	-	-	-	-	-	-	49	29	31	37
Red Book on Pediatric Infections	221	27	28	12	19	23	6	3	2	28	25	15	33
Rosen's Emergency Medicine	352	52	21	30	30	18	11	7	4	43	47	47	42
STAT!-Reference	800	98	96	79	91	85	22	14	23	34	174	39	45
Virtual Hospital	77	-	-	-	-	-	-	-	-	50	-	11	16
Yale Directory	68	-	-	-	-	-	-	-	-	17	7	11	33
YNHH Documents	2,406	-	-	-	-	-	-	-	-	432	456	469	1,049
YNHH Formulary	35	-	-	-	-	-	-	-	-	11	5	8	11
YNHH House Staff Training	1,237	-	-	-	-	-	-	-	-	183	177	431	446
YNHH Physician Phone Book	256	42	32	55	42	20	5	8	6	19	19	4	4
<b>Email/news/networks</b>	<b>108,007</b>	<b>13,905</b>	<b>12,486</b>	<b>13,503</b>	<b>13,423</b>	<b>13,371</b>	<b>5,851</b>	<b>4,465</b>	<b>4,384</b>	<b>6,994</b>	<b>5,337</b>	<b>7,046</b>	<b>7,242</b>
Biomed Email	8,507	1,098	607	812	961	1,095	206	176	183	1,084	577	856	852
DEC RAD Telnet	4					3	1	-	-				
GroupWise Email	15,980	2,027	1,689	1,796	2,066	1,734	566	762	260	2,114	506	280	2,180
Home Page	144	-	-	-	-	-	-	-	-				144
Internet	82,999	10780	10190	10895	10396	10539	5078	3527	3941	3,761	4249	5897	3746
Mainframe	21	-	-	-	-	-	-	-	-	9	5	2	5
Medical Library	50	-	-	-	-	-	-	-	-	14	-	10	26
Selected Internet Resources	302	-	-	-	-	-	-	-	-	12	-	1	289
<b>Clinical Assistance</b>	<b>209</b>	<b>46</b>	<b>22</b>	<b>26</b>	<b>20</b>	<b>39</b>	<b>5</b>	<b>8</b>	<b>6</b>	<b>11</b>	<b>11</b>	<b>3</b>	<b>12</b>
Coag Advisor	209	46	22	26	20	39	5	8	6	11	11	3	12

## Help Desk calls

	<b>Mean YTD</b>	<b>Mean, 90 day</b>	Mean FY97 98	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
# of calls	<b>2925</b>	<b>3030</b>	3025	2533	2736	2988	3399	2861	2468	2853	2930	3239	2679	2875	3537
calls per day	<b>142</b>	<b>144</b>	146	115	130	142	155	151	145	143	147	141	128	144	161
# of callers	<b>1398</b>	<b>1458</b>	1299	1279	1328	1466	1536	1359	1238	1389	1247	1563	1332	1397	1645
% of clients calling the Help Desk	<b>39%</b>	<b>36%</b>	-	41%	41%	46%	40%	40%	36%	39%	33%	40%	34%	35%	40%
callers making 1 call	<b>60.1%</b>	<b>62.0%</b>	-	59.2%	58.6%	65.9%	57.9%	58.9%	55.1%	60.8%	55.0%	63.5%	67.4%	59.1%	59.5%
callers making 2-5 calls	<b>34.4%</b>	<b>33.6%</b>	-	36.3%	35.8%	37.5%	34.4%	34.6%	31.1%	33.3%	38.7%	30.0%	32.7%	35.1%	32.9%
callers making > 5 calls	<b>6.2%</b>	<b>6.7%</b>	-	4.5%	5.6%	6.9%	7.7%	6.5%	4.9%	5.8%	6.3%	6.5%	6.7%	5.8%	7.6%
% calls generating work orders	<b>12.5%</b>	<b>11.2%</b>	-	12.0%	12.0%	13.3%	14.8%	11.9%	12.0%	<i>not valid</i>	<i>not valid</i>	<i>not valid</i>	<i>not valid</i>	<i>not valid</i>	11.2%
<b>origin of call</b>															
phone	<b>91.8%</b>	<b>98.2%</b>	-	92.0%	91.4%	88.3%	80.4%	79.0%	89.8%	90.0%	97.8%	98.8%	98.5%	98.6%	97.4%
email	<b>0.9%</b>	<b>1.0%</b>	-	0.8%	1.0%	1.3%	0.5%	0.7%	0.6%	1.0%	0.9%	1.0%	1.1%	1.1%	0.7%
answering service	<b>6.9%</b>	<b>0.0%</b>	-	7.0%	7.5%	10.4%	19.0%	20.2%	9.5%	8.9%	0.1%	0.0%	0.0%	0.0%	0.1%
walk-in	<b>0.7%</b>	<b>0.8%</b>	-	-	-	-	-	-	-	-	1.2%	0.2%	0.4%	0.2%	1.7%
<b>caller's service category</b>															
core network service	<b>90.6%</b>	<b>91.1%</b>	-	91.0%	90.0%	92.0%	91.3%	90.2%	91.1%	89.4%	90.5%	88.7%	91.4%	92.1%	89.7%
machine-only	<b>8.1%</b>	<b>8.0%</b>	-	8.0%	7.8%	6.2%	7.6%	8.7%	7.3%	9.1%	8.3%	10.1%	7.8%	6.7%	9.6%
remote access (local)	<b>1.1%</b>	<b>0.9%</b>	-	0.6%	2.0%	1.5%	1.0%	1.0%	1.2%	1.4%	1.1%	1.0%	0.9%	1.1%	0.8%
<b>call type</b>															
Call from staff	<b>39</b>	<b>16</b>	-	44	57	72	34	40	43	66	30	32	13	13	23
Call transfer	<b>301</b>	<b>363</b>	301	327	342	291	222	195	218	259	317	352	394	332	362
Complaint	<b>16</b>	<b>14</b>	-	12	12	31	15	18	10	15	25	17	15	9	18
Compliment	<b>1</b>	<b>1</b>	-	3	2	0	2	3	0	0	0	1	1	1	1
Existing order: other	<b>30</b>	<b>31</b>	-	19	29	22	40	31	36	15	27	53	30	25	37
Follow-up to existing order	<b>86</b>	<b>73</b>	-	64	85	100	122	80	78	97	87	106	92	45	81
Information request	<b>635</b>	<b>645</b>	406	536	621	714	666	596	530	588	661	776	631	605	700
New service	<b>55</b>	<b>34</b>	-	57	69	108	85	52	50	41	35	57	26	31	46
Other	<b>193</b>	<b>102</b>	-	187	167	165	303	338	297	327	137	86	87	71	148
Problem report	<b>1332</b>	<b>1470</b>	1198	1144	1157	1250	1581	1185	1074	1308	1409	1463	1229	1545	1636
Service cancellation	<b>8</b>	<b>4</b>	-	18	13	11	10	7	3	5	10	7	7	4	2
Status inquiry	<b>146</b>	<b>124</b>	168	122	137	136	179	182	119	137	159	208	105	111	156

## Client & Technology Support tasks

	Mean, YTD	Mean, 90 day	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
# of work orders addec	<b>1088</b>	<b>937</b>	1323	1057	1157	1520	1102	900	1054	1056	1077	805	906	1101
# of work orders completec	<b>1054</b>	<b>975</b>	946	1046	1074	1200	994	1093	1123	942	1298	927	913	1086
# of tasks addec	<b>1262</b>	<b>1087</b>	1396	1146	1247	1753	1310	1021	1226	1402	1382	964	1049	1249
# of tasks added per day	<b>61</b>	<b>52</b>	63	55	59	80	69	60	61	70	60	46	52	57
# of tasks completec	<b>1254</b>	<b>1134</b>	1180	1196	1236	1429	1426	1262	991	1371	1551	1135	1030	1238
% billable work orders	<b>79.5%</b>	<b>79.7%</b>	85.5%	87.1%	86.1%	79.1%	74.6%	78.7%	84.3%	64.2%	75.2%	81.6%	83.8%	73.8%
<b>turnaround met</b>														
overall	<b>84.5%</b>	<b>96.0%</b>	84.0%	72.6%	83.2%	54.2%	63.2%	90.5%	93.7%	87.7%	97.1%	94.2%	94.4%	99.5%
normal	<b>83.9%</b>	<b>99.0%</b>	63.6%	74.3%	84.8%	47.7%	59.9%	95.0%	96.2%	88.6%	99.2%	98.2%	98.8%	100.0%
emergency	<b>80.8%</b>	<b>87.5%</b>	69.2%	66.9%	78.9%	75.1%	75.2%	80.1%	85.1%	85.6%	91.2%	82.8%	81.2%	98.5%
# delayec	<b>136.0</b>	<b>174.7</b>	22	80	96	93	89	80	141	243	264	122	171	231
<b>reasons for delay</b>														
client	<b>55.4%</b>	<b>52.1%</b>	35.3%	47.8%	61.1%	60.0%	57.6%	62.0%	57.3%	62.2%	65.6%	60.7%	51.0%	44.7%
Telecom	<b>9.6%</b>	<b>14.2%</b>	29.4%	8.7%	3.2%	8.3%	0.0%	7.0%	8.4%	4.4%	3.6%	15.6%	12.7%	14.2%
MCSC	<b>7.6%</b>	<b>2.3%</b>	23.5%	18.8%	10.6%	5.8%	2.4%	5.6%	1.6%	8.0%	7.5%	0.8%	3.8%	2.2%
outside vendor	<b>3.6%</b>	<b>4.0%</b>								3.1%	3.2%	2.5%	4.5%	4.9%
project	<b>7.8%</b>	<b>8.5%</b>								6.7%	6.7%	4.9%	14.0%	6.6%
other	<b>22.6%</b>	<b>18.8%</b>	11.8%	24.6%	25.4%	25.9%	40.0%	25.4%	32.7%	15.6%	13.4%	15.5%	13.4%	27.4%
<b>source</b>														
email	<b>0.2%</b>	<b>0.2%</b>				0.9%	0.0%	0.1%	0.0%	0.3%	0.1%	0.1%	0.4%	0.2%
fax	<b>29.1%</b>	<b>34.7%</b>				20.3%	23.6%	20.7%	23.5%	34.2%	35.8%	36.8%	30.8%	36.5%
phone	<b>70.4%</b>	<b>64.8%</b>				78.8%	76.2%	79.2%	76.5%	65.2%	63.7%	62.9%	68.3%	63.2%
walk-in	<b>0.2%</b>	<b>0.2%</b>				0.0%	0.0%	0.0%	0.0%	0.3%	0.4%	0.2%	0.4%	0.1%
<b>task priority</b>														
normal	<b>76.0%</b>	<b>75.6%</b>	75.0%	74.1%	75.3%	75.3%	78.5%	73.8%	77.2%	79.8%	76.6%	74.5%	75.5%	76.9%
emergency	<b>23.8%</b>	<b>24.3%</b>	24.9%	25.8%	24.5%	24.4%	21.5%	25.5%	22.8%	19.9%	23.2%	25.4%	24.4%	23.0%
non-supported	<b>0.2%</b>	<b>0.1%</b>	0.1%	0.1%	0.2%	0.2%	0.0%	0.8%	0.0%	0.3%	0.1%	0.1%	0.1%	0.2%
<b>task assignments</b>														
Desktop Support	<b>66%</b>	<b>71%</b>	50%	68.6%	65.9%	64.6%	56.6%	65.5%	76.7%	66.1%	65.7%	72.1%	72.1%	70.0%
Help Desk	<b>8.9%</b>	<b>2.6%</b>	34.6%	13.7%	10.3%	6.2%	9.0%	7.1%	8.2%	8.6%	0.8%	2.0%	3.5%	2.2%
Systems Support	<b>19.5%</b>	<b>25.6%</b>	15.0%	17.6%	12.2%	15.6%	17.3%	12.5%	14.5%	24.6%	28.4%	25.4%	23.7%	27.6%
Special Project (email conversior	<b>7.5%</b>	<b>0.1%</b>	15.0%	17.6%	11.6%	12.3%	16.9%	15.0%	0.4%	0.1%	0.1%	0.0%	0.2%	0.2%
<b>task assignments by team: number of tasks</b>														
1	<b>140</b>	<b>145</b>					118	105	156	150	156	131	151	154
2	<b>153</b>	<b>132</b>					146	148	183	155	194	113	119	165
3	<b>207</b>	<b>213</b>					196	154	212	243	209	195	210	234
4	<b>88</b>	<b>84</b>					68	61	98	98	131	91	87	73
5	<b>141</b>	<b>119</b>					160	132	177	171	129	107	113	138
<b>task assignments by team: total hours spent</b>														
1	<b>165</b>	<b>194</b>					95	115	192	152	184	174	192	217
2	<b>196</b>	<b>198</b>					127	251	180	238	180	143	173	279
3	<b>231</b>	<b>288</b>					180	168	185	229	219	209	252	402
4	<b>79</b>	<b>93</b>					40	62	83	68	104	86	116	76
5	<b>152</b>	<b>165</b>					136	110	177	170	127	131	178	186