Information Technology Services - Medicine Monthly Report May 1997

Highlights and milestones

- Outages from Administrative Systems and MAS1, 2, and 3 are now being tracked and reported.
- Online application for student admissions to the School of Medicine added using a Web interface to an Oracle database.
- Technology Evaluation and Planning created a Helpful Links Web page to catalog useful Web links to use as a supplement to Web bookmarks (http://info.med.yale.edu/computing/techops/evaluation/resources/).
- Technology Evaluation and Planning published an evaluation of virus protection standards for the University (http://info.med.yale.edu/computing/techops/evaluation/virus/virus-protection.html).
- Client Support resolved client problems significantly faster this month in three areas: administrative systems, billing queries, and new work orders.
- Use of the Core Biomedical Collection of full-text electronic journals has almost quadrupled since May 1996.
- The number of connections per public workstation has decreased slightly in both the Library (-16%) and the Hospital (-5%) since May 1996. Although the total number of connections to the public Hospital workstations has increased, the number of connections to bibliographic databases has declined by 10%.
- Use of Medline, electronic mail, and the Clinical Reporting System declined from April; the Medical Center's Web server and Current Contents saw increased usage from April to May.

Information Technology-Medicine Monthly Report

May 1997

Applications				Background information		Schools of				
Type of application	this month	May-96	% change	_	Hospital M	edicine & Nursing				
CINAHL	278	260	7%	Personal computers as of 11/96	2,200	7,000				
Core Biomedical Collection	1,102	262	321%	Electronic mail users as of 6/96	1,000	4,089				
Clinical Reporting System (CRS)	620	428	45%	Networked computers as of 3/97	1,575	3,625				
accesses per user per month	8	7	23%	Full-time faculty, 1996-97	-	1,370				
Current Contents	3922*	494	264%	Medical & graduate students, 1996-97	-	1,155				
Electronic mail (# messages sent)	464,333	302,991	53%	Residents & postdocs, 1996-97	440	1,090				
messages per user per day	2.9	-	-	Full-time staff, 1996-97	3,625	2,230				
HealthSTAR	336	131	156%	Nursing staff, 1996-97	1,312	-				
Medline	16,467	11,259	46%	Number of beds, 1996-97	900	-				
searches per active user per month	6.2	-	-							
Medical Center World Wide Web										
Medical Center home page	42,957	8,403	411%	System outages						
Hospital home page	1,714	1,142	50%	CRS system 8 hours on May 15 due to	hardware failur	es				
School of Medicine home page	8,641	3,760	130%							
Medical Library home page	13,220	6,155	115%							
*As of 8/96, Current Contents usage includes automatic searches										

Help Desk	ch	ange from		# of	calls change from	resolved by l	Help Desk change from	resolved no	ext day hange from
	this month las	st month	Type of call	this month	last month	this month	last month	this month	last month
Total calls	2519	-2%	PC/printer	422	-16%	59%	2%	80%	-2%
Calls per day	120	3%	New order	349	-17%	47%	12%	59%	59%
% of ITS-Med clients using Help Desk	26%	0%	Network	340	-25%	75%	-3%	81%	-4%
# of callers	967	7%	Transfer	312	20%	99%	0%	99%	0%
# of Yale affiliates using Web page	496	6%	Info	268	0%	99%	-1%	94%	-3%
# of new network connects	80	-4%	Email/Scheduli	1 264	-8%	92%	-3%	92%	2%
			Status queries	150	-1%	95%	0%	95%	1%
Departments accounting for 5%	Internal Medicin	e	Admin systems	92	-42%	66%	29%	80%	13%
or more of all calls	Surgery Pediatrics		Billing	72	7%	81%	-1%	60%	9%

NetMenu workstations	Library NetMenu			Hosp	oital NetMe	nu	Nursing NetMenu				
	# of connections			# of co	nnections		# of connections				
Type of application	this month	<u>May-96 %</u>	<u>6 change</u>	this month	May-96	% change	this month	May-96	% change		
Medical Education	1,150	1,677	-31%	-	-	-	-	-	-		
Bibliographic databases & search tools	6,046	7,048	-14%	1,322	1469	-10%	110	212	-48%		
Full text & factual databases	252	380	-34%	2,056	1799	14%	1	10	-90%		
Grant & research information	10	49	-80%	-	-	-	1	0	-		
Clinical assistance	8	17	-53%	25	33	-24%	2	3	-33%		
Email/news/networks	20,389	17,612	16%	9,471	6150	54%	158	314	-50%		
Word processing & utilities	544	371	47%	1,505	1218	24%	=	=	-		
Hospital information systems	=	-	-	22,793	18831	21%	=	=	-		
Procedure recorders	-	-	-	486	371	31%	-	-	-		
Total	28,399	27,154	5%	37,658	29,871	26%	272	539	-50%		
connections per workstation	1,092	1,293	-16%	392	415	-5%	136	270			

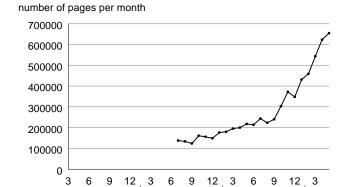
Institutional Resource Usage

source: MEDLINE usage data

MEDLINE

number of sessions per month 20000 15000 10000 5000 0 3 12 9 12 3 6 9 12 3 95 96 97

Medical Center Web server

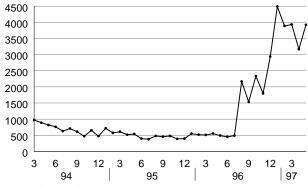


95

source: WEB usage data

Current Contents

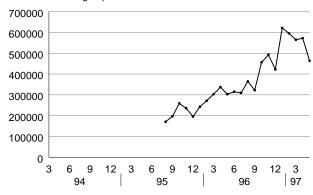
number of connections per month



source: Current Contents usage data

Electronic mail

number of messages per month



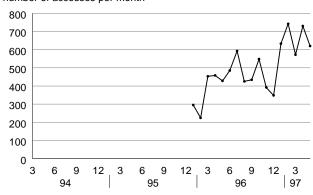
source: PMDF usage data

Clinical Reporting System

number of accesses per month

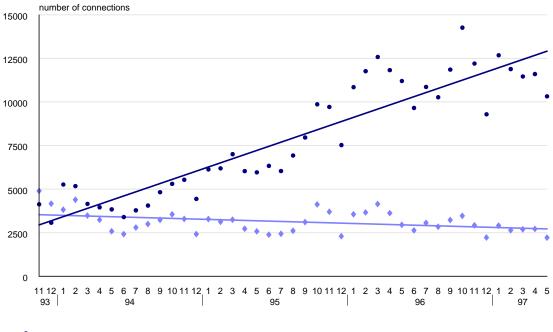
96

97



OVID usage over time

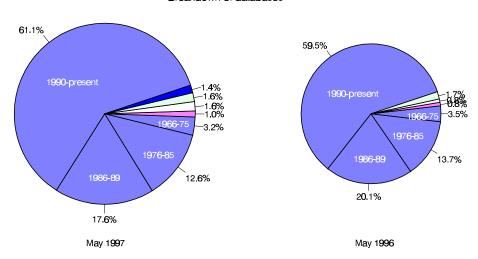
includes MEDLINE, CINAHL, HealthStar, and Core Biomedical Collection





→in library

OVID usage Breakdown of databases



■MEDLINE: 1990-present ■MEDLINE: 1986-89

■MEDLINE: 1976-85 ■MEDLINE: 1966-75

Core Biomedical Collection

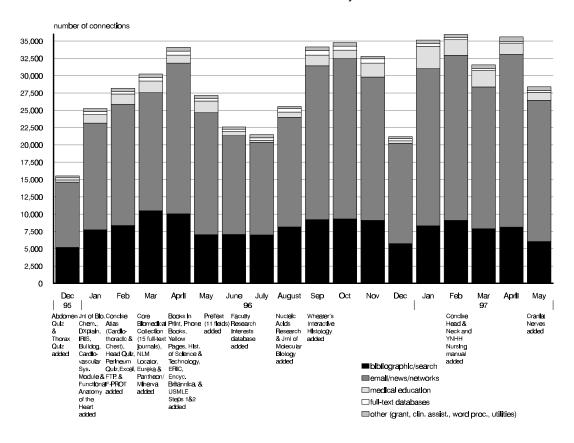
☐ HealthStar ☐ CINAHL (Nursing)

Current Contents

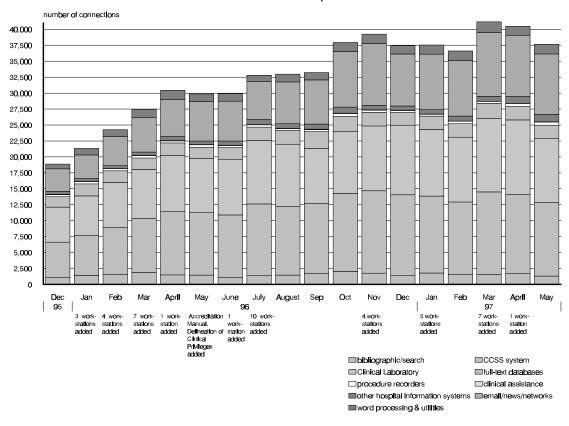
Dfference in size of pies reflects difference in amount of usage.

NetMenu workstation usage

NetMenu in the Medical Library



NetMenu in the Hospital



Overall usage for selected databases

	<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>	<u> Apr-97</u>	<u>May-97</u>
Summary													
Current Contents*	494	454	491	2167*	1534*	2331*	1798*	2,937	4,489	3,886	3,931	3,165	3,922
MEDLINE	11,259	12,549	14,114	13,163	15,035	17,947	16,825	13,296	18,307	17,329	17,053	18,577	16,467
Medical Center Web server	218,039	213,995	243,844	223,670	240,165	303,126	372,135	347,928	431,339	459,226	543,310	623,284	654,313
Electronic mail messages sent	302,991	315,220	309,517	364,477	322,377	456,571	492,880	422,342	621,590	595,748	564,961	572,553	464,333
Clinical Reporting System (CR	428	485	593	425	434	548	392	348	633	742	572	730	620
Details: OVID													
1966-75 search sets	4,264	4,314	4,447	5,243	5,101	4,805	5,091	3,823	5,349	5,818	5,752	5,530	5,545
1976-85 search sets	16,766	16,462	20,241	19,270	20,888	19,234	18,694	15,755	20,618	21,255	22,001	21,843	22,084
1986-89 search sets	24,559	23,762	30,139	27,276	30,458	29,425	27,587	23,185	31,520	29,664	30,687	29,999	30,913
1990-present search sets	72,710	78,495	90,799	79,185	100,386	106,766	96,388	76,264	102,575	105,377	96,592	99,365	107,291
Core Biomedical Collection searc	945	1,922	3,725	2,351	2,520	2,043	1,870	1,912	2,197	1,841	1,960	2,152	1,737
HealthStar search sets	966	815	946	1,077	2,488	3,945	3,709	2,129	2,301	4,321	2,247	3,502	2,843
nursing search sets	2,078	1,612	1,541	1,075	2,828	3,795	3,543	1,972	2,904	3,645	2,703	3,175	2,740
access method: telnet sessions	-	-	-	-	-	-	-	11,725	15,781	14,668	13,785	14,558	12,716
access method: Web sessions	-	-	-	-	-	-	-	1,381	2,325	2,231	2,900	3,672	3,471
access method: Z39.50	-	-	-	-	-	-	-		215	434	363	323	284
Details: Current Contents													
Current Contents total*	494	454	491	2,167	1,534	2,331	1,798	2,937	4,489	3,886	3,931	3,165	3,922
Ovid version	-	_	_	_	-	-	-	1,633	2,413	2,181	2,227	2,372	2,410
Basis version, interactive session	-	_	_	_	-	_	-	196	289	229	221	37	0
Basis version, automatic searche	-	-	-	-	-	-	-	1,108	1,787	1,476	1,483	756	1,512

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

Medical Center Web usage report, May 1997

Top 10 pages accessed by Yale users

Top 10 pages accessed by external users

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this month	<u>last month</u>	this month	<u>last month</u>				
Medical Center	Medical Center	Center for Advanced Instructional Media	Center for Advanced Instructional Me				
Medical Library	Medical Library	Medical Center page	Medical Center page				
School of Medicine	School of Medicine	School of Medicine	School of Medicine				
Medical Library's Internet search page	MedMenu	Server search	Server search				
MedMenu	Server search	School of Medicine's admissions viewbook	School of Medicine's admissions view				
Desktop Support	Desktop Support	Medical Library	Medical Library				
Server search	Medical Library's Internet search page	Child Study Center's Autism/PDD Clinic	Emerging Infections Information Net				
MedMenu's informational page about OVID	MedMenu's informational page about OVID	Academic departments page	Child Study Center's Autism/PDD Cl				
Scientific Affairs and Grant & Contract Administration	or Scientific Affairs and Grant & Contract Administ	r: Yale-New Haven Hospital	Yale-New Haven Hospital				
Medical Library's other Yale sites page	Medical Library's other Yale sites page	Emerging Infections Information Network	Academic departments page				

	<u>May-97</u>	May-96	% change		May-97	May-96 %	change
Server total 6	554,313	218,039	200%	Academic Departments**			
Who connected	,	,		Anesthesiology	476	206	131%
Yale	137,505	39,920	244%	BBS	408	_	_
other US educational institutions	63,226	36,967	71%	Boyer Center for Molecular Medicine	633	195	225%
US government & military	6,648	2,215	200%	Cancer Center	650	491	32%
US commercial institutions	133,104	42,608	212%	Cell Biology	687	291	136%
US non-profit organizations	9,343	1,971	374%	Cellular & Molecular Physiology	334	310	8%
Major online service providers	92,186	17,124	438%	Child Study Center	577	_	_
International	97,192	32,944	195%	Comparative Medicine	132	42	214%
# of unique hosts connecting	66,688	32,140	107%	Dermatology	578	396	46%
•				Diagnostic Radiology	679	233	191%
Medical Center	42,957	8,906	382%	Epidemiology & Public Health	1625	962	69%
Yale-New Haven Hospital	1,714	880	95%	Genetics	547	268	104%
School of Medicine	8,641	3,227	168%	History of Medicine	160	78	105%
School of Nursing	682	_	-	Immunobiology	384	-	_
Major resources				Internal Medicine	410	172	138%
School's organizational chart	61	109	-44%	Laboratory Medicine	217	56	288%
Computing page	561	191	194%	Neurobiology	575	399	44%
Core research facilities page	214	132	62%	Neurology	479	176	172%
Education page	328	284	15%	Neuroscience Program	234	-	-
Emerging Infections Information Network	2,615	1,094	139%	Neurosurgery	150	-	-
Medical Library	13,220	6,155	115%	Obstetrics & Gynecology	335	139	141%
MedMenu	4277	1029	316%	Ophthalmology	588	359	64%
Scientific Affairs and Grant & Contrac Ad	1,414	257	450%	Orthopaedics & Rehabilitation	200	47	-
School of Medicine application	851*	448	90%	Pathology	694	380	83%
Yale Faculty Practice	504	-	-	Pediatrics	321	-	-
Service departments				Pharmacology	346	176	97%
Academic Computing	108	49	120%	Physician Associate Program	475	-	-
Biomedical Communications	462	505	-9%	Psychiatry	864	598	44%
C/AIM	4,883	3,945	24%	Surgery	378	167	126%
Center for Cell Imaging	447	174	157%	Therapeutic Radiology	110	-	-
Desktop Support	1541	95	1522%				
Medical Administrative Systems	109	237	-54%				
Systems Support	245	-	-				
Technology Operations	309	-	_		C		

The number reported for May is the number of unique users who registered for applications. are not listed because they reside on other servers.

^{*}The application was converted to an Oracle-based application on a new server this month. **Molecular Biochemistry & Biophysics and the Center for Medical Informatics

Details for NetMenu Hospital usage

	total # of co	nnections			total # of connections				
Application	<u>May-97</u>	May-96 %	<u>6 change</u>	<u>Application</u>	<u>May-97</u>	<u>May-96</u>	<u>% change</u>		
Hospital information systems	22793	18831	21%	Full text and factual databases	2056	1799	14%		
CCSS	11515	9854	17%	Delineation of Clinical Privileges	17	-	-		
ChartView	461	109	323%	Harrison's	310	340	-9%		
Clinical laboratory	10092	8405	20%	JCAHO Accreditation Manual	23	-	-		
Diagnostic Imaging	193	150	29%	Little Brown Handbooks	159	186	-15%		
EPIC	370	195	90%	Merck Manual	71	101	-30%		
Surgical Pathology	162	118	37%	Micromedex	1092	655	67%		
				New England Journal of Medicine	152	244	-38%		
Bibliographic databases and search tools	1322	1469	-10%	Red Book on Pediatric Infections	44	29	52%		
CINAHL	68	121	-44%	Rosen's Emergency Medicine	44	45	-2%		
Health Planning and Administration	28	60	-53%	STAT!-Reference	87	127	-31%		
MEDLINE	1179	1207	-2%	YNHH Physician Phone Book	57	72	-21%		
Yale Library Catalog (OPAC)	47	81	-42%						
				Email/news/networks	9471	6150	54%		
Word processing & utilities	1505	1218	24%	Biomed Email	666	665	0%		
Clinical Workstation locations	53	85	-38%	GroupWise Email	2026	761	166%		
Format disk	38	35	9%	Internet access	6779	4724	44%		
Virus scan	42	32	31%						
Wordperfect	1372	1066	29%	Procedure recorders	486	371	31%		
-				Medicine	75	80	-6%		
Clinical assistance	25	33	-24%	Ob/Gyn	89	175	-49%		
Coag Advisor	25	33	-24%	Surgery	322	116	178%		

Details for NetMenu Medical Library usage

	total #	of connection			total #	of connecti			total #	of connection	
<u>Application</u>	<u>May-97</u>	<u>May-96 %</u>	change	<u>Application</u>	<u>May-97</u>	<u>May-96 % change</u>		<u>Application</u>	<u>May-97</u>	<u>May-96 %</u>	<u>change</u>
Bibliographic databases				Full text and factual databases	252	380	-34%	Brainstem Quiz	33	_	_
and search tools	6046	7048	-14%	Academic Press Journals	13	-	-	Brainstorm	105	181	-42%
AIDSLINE	14	14	0%	American Journal of Medicine	6	15	-60%	Breath sounds	3	18	-83%
Biosis	45	72	-38%	American Journal of Obstetrics	ĩ	-	-	Cardiac Angio	3	15	-80%
Books in Print	3	24	-88%	American Journal of Surgery	4	6	-33%	Cardiac Auscultation	8	14	-43%
CINAHL	10	17	-41%	Annals of Internal Medicine	2	1	100%	Cardiac Echo	7	6	17%
Current Contents	25	72	-65%	Archives of General Psychiatry	0	2	-100%	Cardiac MRI	5	9	-44%
ERIC	1	4	-75%	BMJ	1	6	-83%	Cardiac Perfusion Imaging: SP	2	8	-75%
Eureka	8	8	0%	Britannica Online	8	3	167%	Cardiac Perfusion Imaging: Pl	1	9	-89%
Expanded Academic Index	15	19	-21%	Canadian Medical Association Journal	4	0	-	Cardiothoracic Image Quiz	15	9	67%
Health Planning and Administration	3	13	-77%	Circulation	1	2	-50%	Cardiothoracic Imaging	3	8	-63%
InfoFinder	73	233	-69%	Electronic Journals	7	-	-	Concise Atlas - Cardiothoracic	3	4	-25%
MEDLINE	3840	4161	-8%	Faculty Research Interests database	10	-	-	Concise Altas - Chest	3	1	200%
PsycINFO	55	129	-57%	FREIDA	25	62	-60%	Concise Altas - Extremities	3	-	-
Science Citation Index	90	164	-45%	GenBank	5	7	-29%	Concise Altas - Head & Neck	8	-	-
Search term lookup	2	12	-83%	History of Science & Technology	10	15	-33%	Cranial Nerves	10	-	-
Yale Library Catalog (OPAC)	1862	2106	-12%	Journal of Biological Chemistry	5	16	-69%	Embryo images	21	49	-57%
				Journal of Bone & Joint Surgery	0	1	-100%	EPS Review	4	8	-50%
Email/news/networks	20389	17612	16%	Journal of Clinical Investigation	1	3	-67%	Extremities Quiz	14	10	40%
Biomed Email	10489	10713	-2%	Journal of Molecular Biology	2	-	-	Forebrain (Syracuse)	8	7	14%
Bulldog Access	80	95	-16%	JAMA	5	6	-17%	Gross Anatomy Review	20	50	-60%
Pantheon/Minerva	2429	250	872%	Lancet	2	4	-50%	HARP (Histological Anatomy Review	4	18	-78%
World Wide Web	7365	6532	13%	Legislate	3	2	50%	Head and Neuroanatomy Quiz	47	17	176%
YaleInfo	26	0	-	Micromedex	8	5	60%	Histology Quizbank	6	33	-82%
				MMWR	9	3	200%	Histology Video Review	5	11	-55%
word processing & utilities (CRL)	544	371	47%	Network Entrez	15	3	400%	HyperCELL	1	8	-88%
Epi Info	29	13	123%	New England Journal of Medicine	14	24	-42%	Hyperheart	3	5	-40%
Excel for Windows	23	20	15%	NEXIS	55	105	-48%	Interactive Brain Atlas	12	52	-77%
Format disk	8	10	-20%	Nucleic Acids Research	1		-	Interactive Respiratory Physiology	8	20	-60%
FTP for Windows	31	0		OMIM/GDB	0	6	-100%	KINEMAGE	6	9	-33%
Health Risk Appraisal	1	1	0%	Pediatrics	3	6	-50%	Lazy Eye	7	11	-36%
Virus Scanner (F-PROT)	18	15	20%	Phone Books	11	50	-78%	MacBaby	9	34	-74%
Wordperfect for Windows	434	312	39%	Science	15	10	50%	Microbiology Quizbank	91	137	-34%
	10	40	000/	Scientific American Medicine Consult	3	3	0%	Neuroanatomy Review	20	26	-23%
Grant and research information	10	49	-80%	YNHH Nursing Organization and Practic	3	-	-	Neuron Model: Tutorial	2	27	-93%
Community of Science	2	25	-	M.P. IEL	1150	1.000	210/	Neuron Model: Current Clamp	0	11	-100%
CT CRISP	2	25 8	-92%	Medical Education	1150	1677	-31% 22%	Neuron Model: Voltage Clamp	2 2 4 9	8	-75%
IRIS	6	8	-25%	Abdomen Quiz	55	45 32	-47%	Pathology Quizbank	248 7	507 9	-51%
CIII 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	15	530/	Anatomic Explorer	17	32 36	-47% -50%	Perineum Quiz		70	-22%
Clinical assistance	8 4	17	-53% 300%	Anatomic Explorer CT	18	36 24	-50% -50%	PreTest (11 different fields)	81		16%
Coag Advisor Physician Data Query (PDQ)	4	1 5	-20%	Animated Embryo Brainstem	12 23	24 43	-50% -47%	Superhead Thorax Quiz	8 17	12 11	-33% 55%
rnysician Data Query (PDQ)	4	3	-20%	DIAIIISICIII	23	43	-4/70	USMLE Step 1	118	33	258%
								USMLE Step 1 USMLE Step 2	40	33 13	258% 208%
								Wheater's Interactive Histology	40	13	200%
								wheater's interactive mistology	4	-	-