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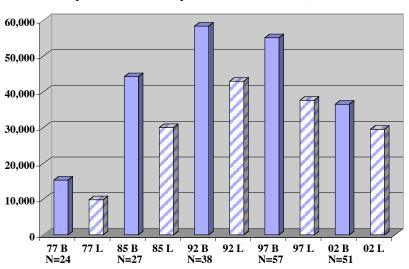
Special Supplement 2002 Interlibrary Loan Survey Report Colorado Council of Medical Librarians (CCML)

Submitted by the CCML Survey Task Force:

Rosalind Dudden, Chair; Members: Margaret Bandy, Amanda Enyeart, Kate Elder, and Sara Katsh

# Introduction

This survey is the sixth in a series of CCML interlibrary loan (ILL) activity surveys. Fiftyfive libraries participated in this survey of 2002 interlibrary loan data. There were 51 Primary Access Libraries (PALs) and four university libraries from Colorado and Wyoming, two of which are the their state's Resource Library.



C	hart 1	
ILL Activity of the Primary	y Access Libraries,	1977 - 2002

(B)orrowing/(L)ending - Year:	77 B	77 L	85 B	85 L	92 B	92 L	97 B	97 L	02 B	02 L
Total:	15,291	9,817	44,238	30,008	58,380	42,973	55,159	37,631	36,533	29,519
% of Change:			189%	206%	32%	43%	-6%	-12%	-34%	-22%
Number of Participants:	N=24		N=27		N=38		N=57		N=51	

September 2004 ♦ Volume 27 Number 3 Supplement – 2002 CCML ILL Survey Also on the web at: http://www.ccmlnet.org/

The National Network of Libraries of Medicine (NN/LM) has designated primary Access Libraries (PALS)® to include hospital libraries and all other network member libraries that are not Resource Libraries. They generally represent the health professional's first point of access into the NN/LM network. These libraries are encouraged to develop adequate resources to respond to their users' basic information needs and to cooperate with other local libraries to share resources among themselves before sending requests to Resource Libraries.

As indicated in Chart 1, the PALs group borrowed 36,533 documents and loaned 29,519, utilizing *DOCLINE* and *OCLC*. There is a corresponding 34% and 22% decline in activity since 1997. This follows a nation-wide trend in declining ILL figures, often attributed to the purchase of electronic journal aggregations. This report analyzes the data and makes recommendations for improved efficiency of interlibrary loan services.

### Background

Copies of all five previous surveys have been archived on CCMLNet. (http://www.ccmlnet.org/illresources.html)

Sue A. O'Neill, a library science graduate student at the University of Denver, conducted the first CCML ILL survey in 1977 for her master's thesis project. Completed before the existence of electronic borrowing/lending systems, this early effort nonetheless established methodology that would be repeated in subsequent surveys.

The second *CCML* survey, based on 1981-1985 ILL data, reflected the use of electronic borrowing/lending mechanisms for the first time. These included *OCTANET*, Region 4's precursor to *DOCLINE*, and *Mile High Mail*, an early electronic messaging system used by many *CCML* members to request ILLs. The *CCLS* courier service, also introduced during this five-year period, was used to expedite delivery of ILL materials. The study included a thirty-question survey used to document ILL procedures and to determine the concerns of CCML members regarding ILL.

Reported in the July 1991 issue of *Council Quotes*, the third survey was based on 1990 CCML ILL data, reflecting the first full year of *DOCLINE* use. It was estimated that *DOCLINE*, introduced in 1989, accounted for 85% - 90% of all ILL activity among CCML member libraries in 1990. Data for items requested via fax, mail, *OCLC*, and telephone were not included. This survey focused on how CCML libraries were integrating *DOCLINE* into ILL procedures and processes. Data analysis yielded recommendations for using *DOCLINE* more efficiently, including a suggested CCML *DOCLINE* routing table.

The fourth survey was based on 1992 *CCML* ILL data; results were published in the September 1993 issue *of Council Quotes*. Unlike the previous surveys, this survey included *OCLC* in addition to *DOCLINE* borrowing/lending statistics and represented 95% of all CCML ILL activity.

The fifth survey was based on 1997 *CCML* ILL data. Fifty-four libraries participated in this survey including 50 Primary Access Libraries (PALs) and four university libraries from Colorado and Wyoming. Wyoming was included for the first time. The survey included twelve tables with the net-borrowing and net-lending tables as well as extensive commentary on the use of *DOCLINE*. Members are referred to the archived copy for information on such things as the impact of unfilled and non-receipted *DOCLINE* requests.

Chart 2 shows comparative data for 12 libraries that have participated in the five surveys.

Chart 2 12 Libraries for which data exists, 1977-2002

	77	85	92	97	02
Borrowed	8,027	22,005	23,935	22,358	14,956
% of change		174%	9%	-7%	-33%
Loaned	5,633	18,542	19,592	18,869	12,313
% of change		229%	6%	-4%	-35%

AORN

Centura St. Anthony Hospital CO Mental Health Inst Pueblo Denv Med Libr Pres/St. Luke's Med Ctr Exempla St. Joseph Hospital Exempla Lutheran Medical Center Memorial Hospital National Jewish Med Res Ctr Porter Adventist Hospital Rose Medical Center St. Mary's Hospital & Medical Center VA Medical Center – Denver

# **Selection of Participants**

The current survey is based on 2002 *DOCLINE* and *OCLC* data for CCML libraries. To identify potential survey participants, the NLM *DOCUSER* database was searched, yielding 164 records for libraries in Colorado and Wyoming. *(DOCUSER, Document Delivery User, supports the DOCLINE system by providing interlibrary loan information about participating libraries.) Of the libraries identified in <i>DOCUSER*, 14 were closed, 94 were non-active *DOCLINE* user libraries and 55 were active libraries that were candidates for the survey. Four active libraries did not participate because they had no activity and one non-active library turned out to be active. Data was obtained from three of the closed libraries. This put 55 libraries in the survey. There were 51 Primary Access Libraries (PALs) and four university libraries from Colorado and Wyoming.

In August of 2003, letters of agreement soliciting survey participation were mailed to the 51 active Colorado and Wyoming libraries, offering a choice of the following levels of participation:

**Local Participation:** The library's name and statistics can appear in the survey report and in the tables of the Council Quotes but will be blinded in the *JMLA*, called Library A or Library B, etc.

**Blinded Participation:** The library's statistics will appear in the survey report and in the tables of both the Council Quotes and the *JMLA*, but will be blinded in both, called Library A or Library B, etc.

Of these 51 libraries, 42 agreed to local participation in the study and 9 agreed to blinded participation.

## **Data Collection**

Participants were sent instructions on how to download their DOCLINE data from the website for the calendar year 2002 and put it into Excel. Jim Honour from National Jewish was hired to help the committee with the data acquisition and merging. If a library could not provide their files for technological reasons, Jim downloaded the data. Jim then merged all the four Excel files for the 55 libraries into 4 Excel files for analysis. Rosalind Dudden analyzed the four files using the Excel pivot table utility and produced the columns of data used in the charts. The *OCLC* data was obtained electronically and incorporated into the report.

### The 1997 report

The CCML Survey Task Force recommends reviewing the 1997 report on the CCML website (<u>http://www.ccmlnet.org/illresources.html</u>) to learn about some *DOCLINE* procedures that are not analyzed in this report. On page 5 and 6, the committee made recommendations that still hold up five years later. Updated or new recommendations are below. In that report, table 4 contains *DOCLINE* summary statistics that may be used to benchmark institutional borrowing/lending efficiency against other participating libraries. Table 9 talks about how unfilled requests impact the group as a whole. Table 10 addresses the problem of not accessing *DOCLINE* daily.

Based on the 1997 survey, the committee published a research article, available on PubMed Central: Dudden RF, Coldren S, Condon JE, Katsh S, Reiter CM, Roth PL. Interlibrary loan in primary access libraries: challenging the traditional view. Bull Med Libr Assoc. 2000 Oct;88(4):303-13. The article studies 3 hypotheses. The results showed that CCML primary access libraries comply with the recommended guideline to emphasize local borrowing by supplying each other with the majority of their ILLs, instead of overburdening libraries located at higher levels in the ILL hierarchy (H1). The closures of two CCML primary access libraries appear to have affected the entire ILL system, resulting in a greater volume of ILL activity for the state resource library and other *DOCLINE* libraries higher up in the ILL hierarchy and highlighting the contribution made by CCML primary access libraries (H2). CCML primary access libraries at higher levels in the ILL hierarchy with large numbers of requests (H3).

### Summary of the Tables and Data Analysis for 2002

*Table I* and *Table 2* provide overviews of the total 2002 *DOCLINE* and *OCLC* borrowing/lending activity of the participating libraries. This data, which reflects ILL activity between participating libraries and all of their borrowing/lending partners, not just within the group of participants, is sorted and ranked by the numbers of items borrowed and loaned, respectively.

*Table3* provides net borrower and net lender designations for the participating libraries. Net lender libraries are libraries that lend a greater number of items than they borrow; net borrower libraries borrow more than they lend. *Table 3* is based on *DOCLINE* data only. *OCLC* data was not included in this survey because, on the local level, *OCLC* was used less than 1% of the time to exchange materials. Also only 20 out of the 45 libraries used *OCLC*. ILL activity with libraries outside the group of 51 libraries is excluded from these tables.

Column D in *Table 3* shows the borrowing/lending ratio for each library. This ratio is determined by dividing the number of items borrowed (Column A) by the sum of the number of items borrowed plus the number of items loaned (Column B).

For example, in *Table 3*, the AORN Library has a borrowing/lending ratio of .33 (329/[329 + 665]). In other words, 33% of AORN's total ILL activity involved borrowing, while lending accounted for 64% of its total ILL activity, making AORN a *DOCLINE* net lender. The borrowing/lending ratio of the institutions located within the highlighted rectangle is considered balanced, since their borrowing/lending ratios are between 40% and 60%. These libraries lend approximately as much as they borrow. Column E shows each individual library's ILL activity, expressed as a percentage of the group's total activity.

Clearly, libraries with large collections or specialized resources, such as AORN, are likely to September 2004 ◆ Volume 27 Number 3 Also on the web at: http://www.ccmlnet.org/ page 4 Supplement – 2002 CCML ILL Survey be net lenders, while hospital libraries with small core collections will be net borrowers. By using the net borrower/lender information found in *Table 3* to construct or revise *DOCLINE* routing tables, the group can better equalize ILL activity and minimize the burden on net lenders.

The number of libraries in the balance area between 40% and 60% has been decreasing with 14 libraries in this group in 1992, 12 in 1997 and 8 in 2002. Questions to ask are how will this affect our traditional reciprocal borrowing arrangements and why is this happening? One reason might be that several larger libraries have become smaller in 10 years and are no longer being asked to lend as much. Also several larger libraries have closed or merged. Larger libraries are becoming more technologically sophisticated and no longer want to borrow as much from smaller libraries which may not be staffed full time or may not have the technologies, thereby decreasing response time.

*Table 4*, which excludes *OCLC* data, arranges 2002 *DOCLINE* borrowing/lending activity according to the geographic distribution of CCML library borrowing/lending partners. For comparison purposes, 1997 data is provided. The data in this table shows a 40% decrease in the borrowing activity within the PALs libraries from 1997 to 2002. CCML is still meeting its NN/LM obligation to borrow among its Primary Access Libraries (PALs) group (53%), before resorting to borrowing from larger net lender libraries.

Nationally, interlibrary loan activity has been decreasing. It is hypothesized that this is due to the purchase of e-journal aggregations that include out of scope material that might have been borrowed before. Also a good percentage of borrowing took place to get materials that were at the bindery or missing. These can now be gotten online. This table shows a 27% decrease in borrowing and a 23% decrease in lending over all the libraries. The PALs libraries had a 178% increase in lending to libraries outside of the region. This could be attributed to the use of *DOCLINE* Freeshare or to the ability of NLM to re-route requests nationally after the libraries table was exhausted. Also, for specialized materials, new *SERHOLD* features allow borrowing libraries to locate titles and years held in other libraries and prefix the request to those specific libraries.

Almost all the various activities on *Table 4* have large percentages of change, either up or down. The introduction of e-journals during this 5-year period is undoubtedly affecting ILL activity and patterns and will continue to do so in the future as the smallest libraries start to participate in the new paradigm.

# Recommendations

*DOCLINE* routing tables include nine cells, with space for up to 20 institutions in each cell. While you do not need to fill up each cell, you should not be afraid to do so. It is always advisable, as well as courteous, to obtain permission from a library before including it in your routing table. NLM is automatically placed alone in cell ten.

Because the needs of each library vary, one routing table will not work for every institution; however, the following sample, designed for a CCML courier participant library, may be adapted for your institution:

- Cell 1 Courier participant libraries that are not net lenders (see Table 3)
- Cell 2 Other courier libraries (charging libraries and/or net lenders)
- Cell 3 Other courier libraries (charging libraries and/or heavy net lenders)
- Cell 4 Other non-courier Colorado libraries
- Cell 5 Denison Library, Colorado's resource library LIBID: COUCOL
- Cell 6 Other Region 4 resource libraries (List: http://nnlm.gov/mcr/admin/resourcelibs.php)
- Cell 7 Specialty libraries outside Region 4
- Cell 8 Other libraries outside Region 4
- Cell 9 Other libraries outside Region 4
- Cell 10 National Library of Medicine (requests are automatically routed to NLM last) LIBID: MDUNLM

## Other considerations for placement in a cell:

Excluding a library from the list or putting it in a higher cell.

Is the library staffed part-time?

Does the library own a small core collection that has no unique items?

### Including a library in the list or putting it in a lower cell.

Fast service?

Same specialty as your library? Special or reciprocal relationships, locally or nationally? *DOCLINE* Freeshare participant? Delivers via e-mail PDF or Ariel? Is a member of EFTS, if there is a charge?

For general information on DOCLINE, see this website:

<u>http://www.nnlm.gov/mcr/admin/docdel.php</u>, or contact the office of the National Network of Libraries of Medicine/Midcontinental Region. (800-338-7657)

#### 2002 CCML INTERLIBRARY LOAN SURVEY TOTAL DOCLINE AND OCLC COMBINED SORTED BY NUMBER OF ITEMS BORROWS (E)

						Α	В	С	D	Е	F
	STATE	CITY	INSTITUTION NAME	OCLC	DOCLINE	BORROWED	LOANED	BORROWED	LOANED	BORROWED	LOANED
			PRIMARY ACCESS LIBRARIES	CODE	LIBID!!	DOCLINE	DOCLINE	OCLC	OCLC	TOTAL	TOTAL
1	CO		Porter Adventist Hospital	DVH	COUPMD	2,861	1,212	86	179	2,947	1,391
2	CO	CO Sprgs	Memorial Hospital - Colo Sprgs	CYE	COUCSS	2,719	1,319	176	25	2,895	1,344
3	CO CO		Children's Hospital Exempla Saint Joseph Hospital	CYB DNJ	COUTCH COUSJD	2,142	2,807	250 70	1,715 64	2,392 2.006	4,522
4	CO			CYD	COUDMS	1,930	1,132	60	74	1,841	1,196
6	CO		Swedish Medical Center	DNS	COUZAM	1,781	2,124	87	408	1,552	2,532
7	CO		Exempla Lutheran Medical Center	DND	COULTR	1,346	1,462	182	100	1,528	1,462
8	CO		National Jewish Med Res Ctr	DNB	COUZAL	1,403	1,384	50	120	1,453	1,504
9	CO	Denver	Denver Health Medical Center	DMJ	COUDGC	1,049	1,189	170	331	1,219	1,520
10	CO		Medical Center of Aurora		COUPAH	1,212	145			1,212	145
11			Penrose/St. Francis Health Services	CYG	COUPEA	1,030	1,740	82	54	1,112	1,794
12	CO		Boulder Community Hospital		COUBOU	1,076	120			1,076	120
13			Poudre Valley Hospital	CO5	COUZFP	1,022	289	31	21	1,053	289
14 15			Parkview Episcopal Medical Center North Colorado Medical Center	COE	COUPEP COUZCY	827 882	322 449	180 14	31	1,007 896	353 449
15		- /	St. Mary Corwin Medical Center	CYF COS	COUZET	744	206	87	68	896	274
17			St. Mary's Hospital and Medical Center	XVY	COUSMG	776	1,259	34	08	810	1,259
18	CO	Vail	Vail Valley Medical Center	21.1.1	COUVYA	792	1,255	57		792	1,255
19	WY		Campbell County Memorial Hospital		WYUCBL	779	75			779	75
20	CO	Longmont	Longmont United Hospital		COULGM	714	0			714	0
21	CO		Mercy Medical Center - Durango		COUMDU	686	21			686	21
22			AORN	DNF	COUAON	563	1,056	67	191	630	1,247
23	CO		U.S. Air Force Academy		COUZMA	579	113			579	113
24	CO		CO Mental Health Inst Pueblo	COH	COUPBC	356	360	222	23	578	383
25		Casper	Wyoming Medical Center		WYUNCY	527 509	79 287			527	79
26 27	CO CO	Fort Carson	Evans Army Community Hospital	AMB	Library A COUUFC	465	912	42	236	509 507	287 1,148
27	CO	Fort Carson	Evans Anny Community Hospitar	AMD	Library B	405	912	42	230	415	1,148
29	CO	CO Sprgs	U.S. Olympic Committee	USO	COUZFR	260	352	140	833	400	1,185
30			Community Hospital - Grand Junction	050	COUZCF	370	42	110	000	370	42
31	WY				Library J	364	21			364	21
32	WY				Library G	337	86			337	86
33	CO		Gambro Inc	(DNL)	COUCOB	309	171			309	171
34	CO	Denver	Rose Medical Center	CYH	COURSE	294	160			294	160
35	WY				Library H	285	9			285	9
36	CO	01 1	M 111 21 01 11		Library F	231	0			231	0 33
37 38	WY CO	Sheridan Denver	Memorial Hospital - Sheridan CO Mental Health Inst Fort Logan		WYUHZB COUZFO	223	33 216			223	216
39	CO		Jefferson Center for Mental Health	XVW	COUZFO	176	62	22		198	62
40	WY	Lakewood	Jenerson Center for Mental Health		Library I	129	21	22		129	21
41	CO	Denver	Center for Toxicology		COUTLB	127	132			127	132
42	CO	Aurora	TRICARE Support Office		COUOCA	121	4			121	4
43	WY	Sheridan	VA Medical Center - Sheridan	(BZB)	WYUWYV	111	364			111	364
44	CO	Gr Junct	VA Medical Center - Grand Junction	(HJX)	COUGJV	106	374			106	374
45	CO			(HJG)	Library E	87	560			87	560
46	CO	CI		DNG	Library D	51	64			51	64
47 48	WY CO	Cheyenne	VA Medical Center - Cheyenne		WYUZDX Library C	37	321			37	321 94
48 49	CO	Denver	Regis University		COURGS	5	94			2	94
50	CO	Lakewood	AMC Cancer Research Center	CYA	COUZDG	0	77			0	77
51	WY		Whedon Cancer Foundation	(CFW)	WYUWCF	0	15			0	15
			R PRIMARY ACCESS LIBRARIES	// /		34,481	25,167	2,052	4,352	36,533	29,519
			F TOTAL FOR DOCLINE/OCLC ACT	IVITY:		94.4%	85.3%	5.6%	14.7%	,	,
			UNIVERSITY LIBRARIES								
52	WY			WYU	WYUUWY	86	2,396	10,912	12,684	10,998	15,080
53			Univ CO Health Sciences Center	COU	COUCOL	5,319	6,477	252	2,062	5,571	8,539
54			Colorado State University-Pueblo	COS	COUZFQ	6	782	3,971	3,816	3,977	4,598
55	CO		Univ CO Boulder CTRC		COUDZB	75	0		10.5	75	0
$\vdash$			R UNIVERSITY LIBRARIES			5,486	9,655	15,135	18,562	20,621	28,217
			OF TOTAL FOR DOCLINE/OCLC ACT	IVITY:		26.6%	34.2%	73.4%	65.8%		
$\vdash$		GRAND TO				39,967	34,822	17,187	22,914	57,154	57,736
		PERCENT 0	<b>F TOTAL FOR DOCLINE/OCLC ACT</b>	IVIIY:		69.9%	60.3%	30.1%	39.7%		

#### 2002 CCML INTERLIBRARY LOAN SURVEY TOTAL DOCLINE AND OCLC COMBINED SORTED BY NUMBER OF ITEMS LENT (F)

						Α	В	С	D	Е	F
	STATE	CITY	INSTITUTION NAME	OCLC	DOCLINE	BORROWED				BORROWED	
			PRIMARY ACCESS LIBRARIES	CODE	LIBID!!	DOCLINE	DOCLINE	OCLC	OCLC	TOTAL	TOTAL
1			Children's Hospital	CYB	COUTCH	2,142	2,807	250	1,715	2,392	4,522
2			Swedish Medical Center	DNS	COUZAM	1,465	2,124	87	408	1,552	2,532
3				CYD	COUDMS COUPEA	1,781 1,030	1,798 1,740	60 82	74 54	1,841 1,112	1,872 1,794
5			Penrose/St. Francis Health Services Denver Health Medical Center	CYG DMJ	COUPEA	1,030	1,740	170	331	1,112	1,794
6			National Jewish Med Res Ctr	DNB	COUZAL	1,049	1,189	50	120	1,453	1,520
7			Exempla Lutheran Medical Center	DND	COULTR	1,346	1,462	182	120	1,433	1,462
8			Porter Adventist Hospital	DVH	COUPMD	2,861	1,212	86	179	2,947	1,391
9	CO		Memorial Hospital - Colo Sprgs	CYE	COUCSS	2,719	1,319	176	25	2,895	1,344
10	CO	Gr Junct	St. Mary's Hospital and Medical Center	XVY	COUSMG	776	1,259	34		810	1,259
11			AORN	DNF	COUAON	563	1,056	67	191	630	1,247
12			Exempla Saint Joseph Hospital	DNJ	COUSJD	1,936	1,132	70	64	2,006	1,196
13			U.S. Olympic Committee	USO	COUZFR	260	352	140	833	400	1,185
14		Fort Carson	Evans Army Community Hospital	AMB	COUUFC	465	912	42	236	507	1,148
15 16	CO CO	Greeley	North Colorado Medical Center	CYF	Library E COUZCY	87 882	560 449	14		87 896	560 449
17			CO Mental Health Inst Pueblo	COH	COUPBC	356	360	222	23	578	383
18			VA Medical Center - Grand Junction	(HJX)	COUGJV	106	374	LLL	23	106	374
19			VA Medical Center - Sheridan	(BZB)	WYUWYV	111	364			111	364
20			Parkview Episcopal Medical Center	COE	COUPEP	827	322	180	31	1,007	353
21			VA Medical Center - Cheyenne		WYUZDX	37	321			37	321
22	CO	Ft. Collins	Poudre Valley Hospital	CO5	COUZFP	1,022	289	31		1,053	289
23	CO				Library A	509	287			509	287
24			St. Mary Corwin Medical Center	CQS	COUCWN	744	206	87	68	831	274
25			CO Mental Health Inst Fort Logan		COUZFO	200	216			200	216
26			Gambro Inc	(DNL)	COUCOB	309	171			309	171
27			Rose Medical Center	СҮН	COURSE	294	160			294	160
28			Medical Center of Aurora		COUPAH COUTLB	1,212	145 132			1,212	145 132
29 30			Center for Toxicology Boulder Community Hospital		COUILB	127 1,076	132			127 1,076	132
31			Regis University		COURGS	1,070	118			1,070	120
32			U.S. Air Force Academy		COUZMA	579	113			579	113
33	CO	COM Media			Library C	5	94			5	94
34	WY				Library G	337	86			337	86
35	WY	Casper	Wyoming Medical Center		WYUNCY	527	79			527	79
36			AMC Cancer Research Center	CYA	COUZDG	0	77			0	77
37		Gillette	Campbell County Memorial Hospital		WYUCBL	779	75			779	75
38	CO				Library D	51	64			51	64
39			Jefferson Center for Mental Health	XVW	COUJHC	176	62	22		198	62
40			Community Hospital - Grand Junction		COUZCF WYUHZB	370 223	42			370 223	42
41			Memorial Hospital - Sheridan Mercy Medical Center - Durango		COUMDU	686	21			686	21
43	WY	Durango	Mercy Medical Center - Durango		Library I	129	21			129	21
44	WY				Library J	364	21			364	21
45		Sheridan	Whedon Cancer Foundation	(CFW)	WYUWCF	0	15			0	15
46		Vail	Vail Valley Medical Center		COUVYA	792	11			792	11
47	WY				Library H	285	9			285	9
48		Aurora	TRICARE Support Office		COUOCA	121	4			121	4
49	CO				Library B	415	0			415	0
50		Longmont	Longmont United Hospital		COULGM	714	0			714	0
51	CO				Library F	231	0			231	0
┝─┤			R PRIMARY ACCESS LIBRARIES			34,481	25,167	2,052	4,352	36,533	29,519
$\vdash$		PERCENT (	OF TOTAL FOR DOCLINE/OCLC ACT	IVITY:		94.4%	85.3%	5.6%	14.7%		
$\vdash$											
			UNIVERSITY LIBRARIES								
52			University of Wyoming	WYU	WYUUWY	<u>86</u>	2,396	10,912	12,684	10,998	15,080
53 54			Univ CO Health Sciences Center	COU	COUCOL COUZFQ	5,319	6,477 782	252 3,971	2,062 3,816	5,571 3,977	8,539 4,598
55			Colorado State University-Pueblo Univ CO Boulder CTRC	COS	COUZFQ	6 75	/82	3,9/1	3,010	3,977 75	4,398
55			R UNIVERSITY LIBRARIES		COUDEB	5,486	9,655	15,135	18,562	20,621	28,217
$\vdash$			K UNIVERSITY LIBRARIES DF TOTAL FOR DOCLINE/OCLC ACT	IVITV.		26.6%	9,055 34.2%	73.4%	18,562 65.8%	20,021	20,217
$\vdash$				1 1 1 1 1 :						57 154	E7 734
$\vdash$		GRAND TO				39,967 69.9%	34,822	17,187	22,914	57,154	57,736
		FERCENT	OF TOTAL FOR DOCLINE/OCLC ACT	1 1 1 1 1 1	1	09.9%	60.3%	30.1%	39.7%		

### 2002 CCML INTERLIBRARY LOAN SURVEY DOCLINE NET LENDER/NET BORROWER DETERMINATION (D) BORROWING AND LENDING WITHIN CCML ONLY (EXCLUDING THE FOUR UNIVERSITY LIBRARIES)

				Α	В	С	D	Е
				BORROWED(B)	LOANED(L)	B+L	B/(B+L)	( <b>B+L</b> )
				CCML ONLY	CCML ONLY			/(BT+BL)
51 librari	ies		DOCLINE	DOCLINE	DOCLINE			
STATE	CITY	INSTITUTION NAME	LIBID!!	BORROWS	LOANS			
CO	Denver	Regis University	COURGS	0	54	54	0.00	0.15%
WY	Sheridan	Whedon Cancer Foundation	WYUWCF	0	3	3	0.00	0.01%
WY	Cheyenne	VA Medical Center - Cheyenne	WYUZDX	15	171	186	0.08	0.51%
CO			Library E	44	341	385	0.11	1.05%
CO	Denver	Center for Toxicology	COUTLB	17	106	123	0.14	0.33%
CO	Gr Junct	VA Medical Center - Grand Junction	COUGJV	18	100	118	0.15	0.32%
CO	Fort Carson	Evans Army Community Hospital	COUUFC	102	542	644	0.16	1.75%
CO	CO Sprgs	Penrose/St. Francis Health Services	COUPEA	491	1695	2,186	0.22	5.95%
WY	Sheridan	VA Medical Center - Sheridan	WYUWYV	26	64	90	0.29	0.25%
CO	Denver	National Jewish Med Res Ctr	COUZAL	438	1048	1,486	0.29	4.05%
CO	Gr Junct	St. Mary's Hospital and Medical Center	COUSMG	351	756	1,107	0.32	3.01%
CO	Denver	AORN	COUAON	329	665	994	0.33	2.71%
CO	Englewood	Swedish Medical Center	COUZAM	642	1286	1,928	0.33	5.25%
CO			Library C	3	6	9	0.33	0.02%
CO	CO Sprgs	U.S. Olympic Committee	COUZFR	120	225	345	0.35	0.94%
CO		Exempla Lutheran Medical Center	COULTR	794	1362	2,156	0.37	5.87%
CO	Denver	Denver Health Medical Center	COUDGC	600	986	1,586	0.38	4.32%
CO	Pueblo	CO Mental Health Inst Pueblo	COUPBC	200	326	526	0.38	1.43%
CO	Denver	Denver Med Libr Pres/St. Luke's Med Ctr		1036	1660	2,696	0.38	7.34%
CO			Library D	36	56	92	0.39	0.25%
CO	Denver	Children's Hospital	COUTCH	956	1145	2,101	0.46	5.72%
CO	Denver	CO Mental Health Inst Fort Logan	COUZFO	148	168	316	0.47	0.86%
CO	Denver	Rose Medical Center	COURSE	143	159	302	0.47	0.82%
				NET LENDERS	UP FROM HERE			
				NET BORROWER	S DOWN FRO	M HERE		
CO	Denver	Exempla Saint Joseph Hospital	COUSJD	1179	1071	2,250	0.52	6.13%
CO			Library A	319	272	591	0.54	1.61%
CO	Denver	Porter Adventist Hospital	COUPMD	1399	1151	2,550	0.55	6.94%
CO	Lakewood	Gambro Inc	COUCOB	176	139	315	0.56	0.86%
CO	CO Sprgs	Memorial Hospital - Colo Sprgs	COUCSS	1663	1244	2,907	0.57	7.92%
CO	Greeley	North Colorado Medical Center	COUZCY	490	316	806	0.61	2.19%
WY	-		Library I	37	21	58	0.64	0.16%
WY	Sheridan	Memorial Hospital - Sheridan	WYUHZB	13	6	19	0.68	0.05%
WY	Casper	Wyoming Medical Center	WYUNCY	170	77	247	0.69	0.67%
CO	Lakewood	Jefferson Center for Mental Health	COUJHC	100	40	140	0.71	0.38%
WY			Library G	161	63	224	0.72	0.61%
CO	Ft. Collins	Poudre Valley Hospital	COUZFP	589	220	809	0.73	2.20%
CO	Pueblo	Parkview Episcopal Medical Center	COUPEP	631	207	838	0.75	2.28%
	Gillette	Campbell County Memorial Hospital	WYUCBL	177	56	233	0.76	0.63%
CO	USAF Acad	U.S. Air Force Academy	COUZMA	347	105	452	0.77	1.23%
CO	Pueblo	St. Mary Corwin Medical Center	COUCWN	532	139	671	0.79	1.83%
WY		<i></i>	Library H	33	8	41	0.80	0.11%
CO	Boulder	Boulder Community Hospital	COUBOU	593	109	702	0.84	1.91%
CO	Aurora	Medical Center of Aurora	COUPAH	948	145	1,093	0.87	2.98%
	Gr Junct	Community Hospital - Grand Junction	COUZCF	312	30	342	0.91	0.93%
CO	Aurora	TRICARE Support Office	COUOCA	84	3	87	0.97	0.24%
CO	Durango	Mercy Medical Center - Durango	COUMDU	403	14	417	0.97	1.14%
CO	Vail	Vail Valley Medical Center	COUVYA	348	1	349	1.00	0.95%
CO			Library B	240	0	240	1.00	0.65%
CO	Longmont	Longmont United Hospital	COULGM	533	0	533	1.00	1.45%
CO	Lakewood	AMC Cancer Research Center	COUZDG	49	0	49	1.00	0.13%
CO			Library F	107	0	107	1.00	0.29%
WY	1		Library J	219	0	219	1.00	0.60%
VV I					0			

#### TABLE 4

#### 2002 CCML INTERLIBRARY LOAN SURVEY DOCLINE ONLY ANALYSIS OF GEOGRAPHIC SOURCE OF MATERIAL BOORROWED AND LOANED 1992-2002

	Α	B	С	D		Е	F	G	Н		RESOURCE
PRIMARY ACCESS LIBRARIES	1997	% Total	2002	% Total		1997	% Total	2002	% Total	LIBID	LIBRARY
	BORRO	WED	BORROV	NED		LOANED	)	LOANED	)		
TOTAL CO WAY DODDOWED WITHIN COOLD	30.484	60%	18,361	53%		30.484	90%	18,361	73%		
TOTAL CO-WY BORROWED WITHIN GROUP % of change		00%	-40%	55%		30,484	90%	-40%	15%		
N-STATE RESOURCE LIBRARIES			-40%					-40%			
COLORADO	5,976		3.272			783		905		COUCOL	Univ of CO Health Sci Ctr
WYOMING	719		385	110		107	20	14	107	WYUUWY	Univ of Wyoming
TOTAI		13%	3,657	11%		890	3%	919	4%		
% of change			-45%					3%			
IN REGION RESOURCE LIBRARIES										NOTION.	
MISSOURI	317		399			0		1		MOUSTL	Saint Louis Univ
	1,727		226			0		0		MOUWSL	
	801		933			0		0			Univ of Missouri-Col
KANSAS	658		283			93		2			Univ of Kansas
NEBRASKA	602		252			67		44		NEUNEB	Univ of Nebraska Med Ctr
	280		143			0		3		NEUCRU	Creighton Univ
UTAH	623		503			0		10		UTUUTA	Univ of Utah
	5,008	10%	2,739	8%		160	0%	60	0%		
% of chang			-45%					-63%			
NATIONAL LIBRARY OF MEDICINE	1,919	4%	1,119	3%		0		0		MDUNLM	NLM
% of change			-42%								
ALL OTHER LIBRARIES FROM NATIONAL	6.179	12%	8,605	25%		2.098	6%	5,827	23%		
DOCLINE ROUTING TABLE % of change			39%	25.70		2,070	570	178%	20.70		
LIBRARIES ACCESSED: BORROWING:317; LENDING:30			5770					17070			
PRIMARY ACCESS LIBRARIES TOTAL:	50.649	100%	34.481	100%		33,996	100%	25,167	100%		
% of change		100 //	-32%	100 //		55,770	100 //	-26%	100 //		
% of change	s.		-3270		_			-20%			
	_										
UNIVERSITIES OF COLORADO (HSC) AND WYOMING											
FROM/TO CCML LIBRAIRES											
University of CO Health Sci Ctr	_		1,157					3,352			
Univeristy of Wyoming			20					397			
Total	889	21%	1,177	21%		6,695	60%	3,749	42%		
% of change	:		32%					-44%			
IN REGION RESOURCE LIBRARIES											
MISSOURI	180		180			342		526		MOUSTL	Saint Louis Univ
	636		21			308		441		MOUWSL	Washington Univ
	80		29			64		144			Univ of Missouri-Col
KANSAS	169		57			109		178		KSUKAN	Univ of Kansas
NEBRASKA	313		237			894		648		NEUNEB	Univ of Nebraska Med Ctr
	12		141			133		107		NEUCRU	Creighton Univ
COLORADO	281		11			133		233		COUCOL	Univ of CO Health Sci Ctr
WYOMING	14		233			281		11			Univ of Wyoming
UTAH	62		139			6		158			Univ of Utah
UIAn	1.747		1.048	19%		2,151	19%	2.446	28%	OTOOTA	Univ of Utan
% of change		41%	-40%	19%		2,151	19%	2,440	20%		
			-40%					14%		MDUNUM	NIM
NATIONAL LIBRARY OF MEDICINE			0.5.5					-		MDUNLM	INLIVI
University of CO Health Sci Ctr			255					0			
University of Wyoming			35					0			
Total	292	7%	290	5%		0	0%	0			
% of change			-1%								
ALL OTHER LIBRARIES FROM NATIONAL											
DOCLINE ROUTING TABLE % of change											
University of CO Health Sci Ctr	1,280		2,948			1,798		1,606			
University of Wyoming	67		23			523		1072			
	1,347	32%	2,971	54%		2,321	21%	2,678	30%		
% of change	:		121%					15%			
UNIVERSITIES OF CO AND WY - TOTAL	4,275	100%	5,486	100%		11,167	100%	8,873	100%		
% of change			28%					-21%			
OTHER TWO COLORADO UNIVERSITIES			81					782			
TOTAL FOR ALL ACTIVITY (TABLE 1):	54,924		39,967			45,163		34,822			
% of change			-27%			-0,100		-23%			
70 OI Change	~	1	-21%	1		1		-23%			1