THE ARTHRITIS SOCIETY - CONSULTATION & THERAPY SERVICE (CTS)

1993 - 1994 ANNUAL SUMMARY OF CLIENTS AND REFERRALS

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I. Introduction

The Consultation and Therapy Service of The Arthritis Society (Ontario Division) provides rehabilitation services to adults and children with rheumatic diseases. Services are provided on both an individual and group basis. Service providers include physiotherapists, occupational therapists, and social workers.

This report summarizes CTS client, referral and service data for the fiscal period April 1/93 to March 31/94. Prior to January 1/94, clients required a referral from a physician. This is no longer necessary due to a change in legislation. In the 1993-94 period, the CTS was organized into four service areas. These areas were designated: 'East' (A); 'Central' (B); 'South West' (D); and 'North' (E) (see map in Appendix A).

2. Data Collection and Analysis

Information regarding clients, referrals and services was recorded by CTS staff on Case Data Forms (see Appendix B). One form was completed for each service provided; thus, if a client received two types of service, there would be two forms. Similarly, if a person was referred for the same type of service several times, that client would have a new Case Data Form (CDF) completed each time (s)he was referred.

Information was recorded when the case was opened and when it was closed. 'Opening' and 'closing' copies of the CDFs were sent to the CTS head office once a month. At this location, the information was entered into a computer file using dBase IV. Each record in this data base contains all the information on one CDF, i.e. the client's demographic and disease characteristics; date and source of referral, and details about type, amount, and provider of CTS service.

Analysis of the data was carried out by staff of the Arthritis Community Research & Evaluation Unit (ACREU). ACREU is a research partner of CTS. SPSS, a statistical software program, was used for the analysis.

Two units of analysis were used: i) client and ii) referral, and the results are presented accordingly.

3. Results

The results presented in this report are for all referrals to CTS in which the first day of service occurred during the period, April 1/93 to March 31/94.

Note that Table 1.0 is the only table that includes results for both clients and referrals. For the remainder of the analyses, data pertaining to clients and referrals are presented separately. Client summaries are found in Tables 1.1 to 1.19, and referral summaries in Tables 2.1 to 2.17. For each of these analyses, the information is summarized as a 'Total' (i.e. all cases throughout the province) and as four subgroups which represent the four service areas.

Note that in most of the tables the number of cases (n) is provided for the Total analysis but not for the areas; however, this information is available upon request. Also, all percentages in the report are for valid cases only, i.e. cases with missing data are excluded. However, the number (n) of missing cases is shown in order to identify data collection problems and to assist in the interpretation of results.

Table 1.0 is a summary of the number of clients and referrals grouped according to **service area**. A total of 4,972 **clients** were referred to CTS and began receiving service during the 1993-94 period. It is important to note that this total does **not** include clients who were receiving service during this time but whose case was opened prior to April 1/93.

The total number of **referrals** for the 1993-94 period was 5,789; thus some of the clients were referred for more than one type of service or were referred for a specific service more than once.

Factors influencing the geographic variation in numbers of clients and referrals include availability of CTS staff and programs in a particular area, as well as referral patterns and locations of physicians.

3a. Clients

Residential Locations

Table 1.1 lists the main cities and towns where CTS clients were residing. Those marked with an asterisk are designated as rural according to postal code criteria. Only locations with ten or more clients are included.

Demographic Characteristics

Demographic summaries are found in Tables 1.2 to 1.10.

The data in Table1.2 indicate that CTS clients were predominately **female** and the proportion of **males** was highest in area A.

Data regarding **age** (Tables 1.3 & 1.4) show that clients tended to be middle aged or older with 74.0% age 45 or older and 38.1% in the age 65 or older group. The mean was 56.4 years and there was a large range in ages from 14 months to 96 years. Note that decimals are used for the minimum age in Table 1.4 as ages less than 2 years were recorded in months.

There was little regional variation in the age mean and range; however, the more detailed age group analysis shows some area differences. Area B had a relatively high proportion of clients under age 18; this finding may reflect the availability of pediatric rheumatologists in this region. Area D had the highest percent of elderly clients; however, the difference was moderate.

Note in Tables 1.5 & 1.6 that the analysis was restricted to adult clients (age 18 and over). For **marital status**, the relatively high proportion in the widowed group reflects the fact that CTS clients were disproportionately female and elderly compared to the general population.

The relatively older age of CTS clients was also a factor regarding **education level** (Table 1.6); 16.8% of adult clients were in the 'elementary or less' category and close to half had not completed high school. Also note in Table 1.6 that education information was missing for 86 individuals; either the staff did not ask the client or the client refused to supply the information.

Individuals whose primary **language** (Table 1.7) is one other than English or French represented 10.3% of CTS clients. As evidenced in the area comparisons, area B had the highest proportion of these individuals, 19.4%. This is not surprising considering that many of area B's clients were residing in metropolitan Toronto, a city with a multiculturally diverse population. Also not unexpected is the finding that Francophone clients were residing mainly in the 'North' (E) or the 'East' (A) regions of the province.

Household size information, presented in Table 1.8, indicates that 25.3% of clients were living alone and area D had the highest proportion of this group. Information regarding living arrangements is useful to service providers considering that clients with musculoskeletal diseases may experience disability and require assistance.

It must be noted that the data in this table may involve bias regarding clients who were not living in a private dwelling; for example, residents of a senior's facility. It is not known how CTS staff were recording this information. It is possible that these cases are among those designated as missing

data.

Tables 1.9 & 1.10 summarize **employment** data for clients age 18 to 64. Note that individuals working full or part time have been grouped together. This was necessary due to a limitation of the CDF. It contained a category, 'self-employed', and for those clients no information was collected regarding full or part-time status.

Close to two-thirds of clients in this age group were not working at the time they received service. There was regional variation with area B having the highest proportion of clients unemployed. **Reasons for not working** are shown in Table 1.10. Percentages are not used because individuals could give more than one reason. Of interest, are the number of clients who were unemployed due to health problems; 596 individuals stated that they were on either sickleave or short or long term disability.

Disease Characteristics

Summaries of disease related information are found in Tables 1.11 to 1.19.

Primary diagnosis data for clients of all ages are shown in Table 1.11. Then the data for adults and children are presented separately in Tables 1.12 & 1.13. It is important to interpret Table 1.11 with caution regarding the numbers for rheumatoid and juvenile arthritis. The data in the table represent the diagnostic codes that were recorded on the CDFs; however, analysis revealed inconsistencies regarding how individuals were classified. Some clients in the RA category were children and some JA clients were adults with juvenile onset; similarly, some adults coded as RA on the CDF also had their disease onset in childhood.

Table 1.11 shows that CTS was serving clients with a broad range of diseases; however, the majority of clients, more than 60%, had either rheumatoid or osteoarthritis and another 13% had fibrositis or fibromyalgia. As evidenced in the regional comparisons, area D was unique in having OA, rather than RA, as the most frequent diagnosis. Area B differed from the others in having more fibrositis/fibromyalgia than primary OA clients. Area A differed in having higher proportions of clients with polyarthritis, psoriatic arthritis, and ankylosing spondylitis, and a lower percentage of fibrositis/fibromyalgia.

The summary of **adults' diagnostic categories,** Table 1.12, shows a similar pattern to that of Table 1.11. Note that cases of pauciarticular and polyarticular onset JA have been combined, and as explained above, some clients with juvenile onset were found in the RA category. Table 1.13, **childrens' diagnostic categories,** indicates that the majority of this age group, 60%, had polyarticular or pauciarticular onset JA. Regional differences should be interpreted with caution due to the small number of cases.

Data for **disease duration** are presented in Tables 1.14 & 1.15. This information may involve some inaccuracies as duration was self-reported by the client, and clients may use different criteria regarding time of onset (e.g. first symptoms or physician diagnosis). Of interest, is the number of clients referred to CTS with a relatively short disease duration; 22.7% reported a duration of one year or less. Also, the 'Total' figures show considerable variability regarding disease duration.

Tables 1.16 & 1.17 pertain to **joint replacements.** The reported number of clients with joint replacements was small; however, this group may be somewhat under-represented. Joint replacement information may not have been obtained or recorded by CTS staff if it was considered irrelevant at the time they were providing service. No area comparison is provided for **type of joint replacement** due to the small

number of cases. And percentages are excluded in this table because some clients had had more than one replacement either of the same or different type.

Additional health status information was collected regarding concurrent conditions; up to three other health problems were recorded on the CDF. These data should be interpreted with caution as this information was self-reported by clients, and also, staff may not have recorded a condition if it was not considered pertinent to provision of CTS services.

A summary of the reported number of **concurrent conditions** is found in Table 1.18. Note that these percentages cannot be summed as the two bottom categories are included in the top one ('at least one other'). The data in Table 1.18 show that 45% of clients reported at least one other health problem besides the one for which they were referred. A relevant factor is the age profile of individuals served by CTS; 38% were age 65 or older.

Information about **types of concurrent conditions** is presented in Table 1.19. Percentages are not used because individuals could report more than one condition. The data shown are the number of clients who reported one or more health problems in a particular category. Note that the specific disease listed on the CDF was coded using the classification scheme presented in Appendix C (e.g. diabetes was coded as 'metabolic/nutritional/endocrine'). This scheme is based on one that Statistics Canada developed by modifying the ICD-9 coding system (International Classification of Diseases).

3 b. Referrals

Summaries of referral and service information are found in Tables 2.1 to 2.17.

Data pertaining to **types of service** are presented in Tables 2.1 & 2.2. A large majority of referrals, 89.5% were for a service received on an individual basis. The service clients were referred for most frequently was physiotherapy. Of services provided in a group setting, hydrotherapy was the predominate type. A major factor in the substantial regional variation regarding service type was availability (e.g. no social work in Area E). Additional factors include referral patterns of physicians and availability of rheumatologists in a given area.

Referral source information is summarized in Tables 2.3 & 2.4. 'regular', 'Homecare', 'clinic' and 'self' are considered as **'external'** sources; **'internal'** sources are CTS staff. Examples of the latter type are an occupational therapist referring a client she was treating to a social worker, or a social worker who was providing service to an individual, referring that person to a CTS support group.

As Table 2.3 shows, the majority of referrals for CTS service came from physicians who had seen a patient in their office ('regular'). Note the area differences regarding referrals from 'Homecare', which is a community-based agency, and also 'clinic' referrals. The relatively high proportion of 'clinic' referrals in area E ('North') reflects the fact that rheumatologists who are located in other parts of the province, travelled to this area to provide clinics. The low number of 'self' referrals is to be expected since the date of the legislative change allowing this was January 1/94.

The data regarding 'internal' referrals (see Table 2.4), with the highest proportion coming from physiotherapists, reflect the staff profile of CTS. Staffing allocation also

contributed to the regional differences seen in this table.

In Table 2.5, **physician type,** the data only pertain to referrals from three 'external' sources ('regular', 'Homecare', & 'clinic'). While the majority of these referrals, close to two thirds, came from rheumatologists, and almost a third from family practitioners, these proportions varied substantially across areas. While location of physicians' practices is a factor, another is the referral pattern of particular physicians.

Tables 2.6 to 2.8 list frequencies of referrals according to **diagnosis** of client. In interpreting these data, refer to the cautionary note, found in the 'clients' results section, regarding RA and juvenile arthritis. Summaries of diagnostic categories, using referral as the unit of analysis, are included in order to ascertain if the frequency distributions are similar or different as compared with the analysis using the individual client as the unit of analysis. Comparisons of the percentages in all three diagnostic tables pertaining to referrals (2.6 to 2.8) with those found in the client tables (1.11 to 1.13) indicate minimal differences.

Similarly, the data shown in Tables 2.9 & 2.10 for **disease duration** based on referral cases, show distribution patterns that are comparable to the same analysis for clients.

Information regarding the time interval between the date the referral is made and the date the client first receives service, known as the **wait time**, is presented in Tables 2.11 to 2.14. Table 2.11, which is the summary for referrals from all sources, shows a 'Total' mean wait time of 5.23 weeks. According to the area comparisons, area B had the longest average wait period and area E the shortest. The broad range in wait time from 0 (same day) to 86.6 weeks must be interpreted with caution. Very long wait periods could be due to the fact that a client was not available when CTS staff was able to provide service. For 6.1% of referrals, wait time was 0, and for 72.6%, it was 6 weeks or less.

The data in Table 2.12, which is restricted to referrals from three 'external' sources ('regular', 'Homecare', & 'clinic'), are very similar to that in Table 2.11. This is expected because these cases represent 97.4% of all referrals. However, when 'internal' referrals, i.e. those made by CTS staff, were analyzed separately (see Table 2.13), a longer mean wait time (over 7 weeks) was found for this group. There were no area differences in the mean wait for 'internal' referrals, although the maximum wait shows variation. The data in Table 2.14, which is the wait time analysis for 'self' referrals only, indicate a very short mean of 1.46 weeks and regional variation. Also note that the maximum wait time of 7.9 weeks for self referrals was much lower than the maximum wait times for referrals from other sources (seeTables 2.12 and 2.13). However, the data in Table 2.14 must be interpreted with caution as the number of self referrals was low (n=27).

Information regarding the number of times service was provided per referral is shown in Tables 2.15 & 2.17. This is referred to as **'attendance'**. Additional relevant information pertains to whether or not the referral was for an individual who was also a **Homecare** client (seeTable 2.16). CTS service visits made under the auspices of Homecare were recorded separately; however, these attendances are also subsumed under the 'Total Attendance'.

It is important to note that the data in these three tables are only available when the case is closed (i.e. the service has been completed); thus the information presented in the tables is restricted to the number of cases that were closed by the time the data were analyzed. Of the 5,789 referrals for service in this annual period, 4,582 cases were available for attendance analysis.

Data for **total attendance** are presented in

Table 2.15. The mean number of attendances per referral was 3.5, and the number of attendances ranged from a single contact to 32. There was some regional variation in total attendance with area A having the highest mean attendance and the highest maximum attendance.

As shown in Table 2.16, a small proportion of referrals (5.4%) were for individuals who were seen under **Homecare**, and Area D had a very small proportion compared to the other regions. A separate attendance analysis of the 246 referrals made for Homecare clients is presented in Table 2.17. It is evident that the mean for Homecare attendance (5.2) was higher than the mean for Total attendance (3.5 in Table 2.15). Also evident in Table 2.17, are area differences in Homecare attendance mean and range.

Table 1.0 Service Area

	CLIENTS		REFERRALS	
	n	%	n	%
Area A	1308	26.3	1430	24.7
Area B	1379	27.7	1839	31.8
Area D	1490	30.0	1672	28.9
Area E	795	16.0	848	14.6
Total	4972	100.0	5789	100.0

Table 1.1 Client Locations

Area A	n	**Area B**	n
Ottawa	358	Metro Toronto	573
Kingston	203	Hamilton	171
Peterborough	151	St. Catharines/Thorold	97
Belleville	46	Mississauga	88
Cornwall	24	Brampton/Bramalea	69
Napanee	20	Burlington	64
Brockville	19	Niagara Falls	33
Trenton	18	Thornhill	30
Lindsay	16	Welland	26
Bobcaygeon*	12	Stoney Creek	22
Picton*	12	Oakville	21
Prescott*	12	Markham/Unionville	20
Campbellford*	11	Brantford	17
Pembroke	11	Richmond Hill	16
Perth	11	Port Colborne	12
Havelock*	10	Milton	10
Smiths Falls	10		

Table 1.1 Client Locations (continued)

Area D	n	Area E	n
London	577	Sudbury	128
Kitchener/Waterloo	138	Timmins	88
Windsor	102	Sault St. Marie	85
Guelph	71	North Bay	70
Chatham	53	Kenora	66
Cambridge	46	Thunder Bay	55
Woodstock	38	Parry Sound	20
St. Thomas	30	Gravenhurst	15
Owen Sound	28	Bracebridge	11
Stratford	25	Chelmsford*	11
Goderich	15	Kapuskasing	11
Tillsonburg	12	Hanmer/Val Therese	10
Kincardine	10	South Porcupine*	10

Table 1.2 Sex

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
female	4098	82.4	75.4	86.8	84.1	83.3
male	874	17.6	24.6	13.2	15.9	16.7

Table 1.3 Age Group

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
under 18	192	3.9	2.9	7.7	1.1	3.9
18 - 29	209	4.2	5.4	4.1	3.4	3.9
30 - 44	894	18.0	17.9	18.9	17.0	18.4
45 - 64	1786	35.9	35.1	33.9	38.1	36.6
65 - 74	1027	20.7	22.0	18.3	21.4	21.1
75 & over	864	17.4	16.7	17.1	18.9	16.1

Table 1.4 Age

	TOTAL	AREA A	AREA B	AREA D	AREA E
mean	56.4	56.7	53.9	58.5	55.9
range	1.2 - 96	2.0 - 93	1.3 - 93	1.6 - 96	1.2 - 93

Table 1.5 Marital Status (age 18 and over)

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
married/common law	2924	61.3	63.2	58.1	60.7	64.9
widowed	999	21.0	19.1	21.1	21.6	22.5
separated/divorced	443	9.3	7.9	10.1	10.5	7.9
never married	402	8.4	9.8	10.7	7.2	4.7
missing (n)	(12)		(3)	(7)	(1)	(1)

Table 1.6 Education Level (age 18 and over)

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
elementary or less	789	16.8	12.3	18.7	17.1	20.7
some high school	1347	28.7	30.9	26.9	28.5	28.5
high school grad.	1178	25.1	24.3	22.9	27.5	25.3
some college	312	6.6	5.9	8.0	6.5	5.9
some university	177	3.8	4.0	4.3	3.7	2.6
college grad.	409	8.7	9.6	7.3	8.5	10.1
university grad.	385	8.2	9.4	9.4	6.9	6.7
post graduate	97	2.1	3.6	2.5	1.3	0.3
missing (n)	(86)		(4)	(34)	(18)	(30)

Table 1.7 Primary Language

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
English	4166	84.4	85.5	79.1	92.6	76.5
French	260	5.3	8.4	1.5	0.9	15.2
Italian	106	2.1	0.8	4.7	0.7	2.8
German	44	0.9	0.5	0.9	1.1	1.0
Portuguese	38	0.8	0.5	1.2	0.8	0.3
Polish	29	0.6	0.2	1.2	0.4	0.4
Chinese	12	0.2	0.5	0.3	0.0	0.1
other language	279	5.7	3.5	11.1	3.5	3.6
missing (n)	(38)		(9)	(5)	(3)	(21)

Table 1.8 Household Size

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
lives alone	1244	25.3	22.8	25.0	29.0	22.6
with 1 person	2002	40.6	44.4	32.1	42.7	45.7
with 2 people	641	13.0	13.3	14.5	11.4	13.0
with 3 people	685	13.9	13.1	18.0	11.6	12.3
with 4 people	240	4.9	4.5	6.9	3.1	5.3
with 5 or more	114	2.3	1.9	3.5	2.2	1.2
missing (n)	(46)		(3)	(10)	(9)	(24)

Table 1.9 Employment Status (age 18 - 64)

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
full or part time	998	34.8	40.2	29.8	35.3	33.3
not working	1872	65.2	59.8	70.2	64.7	66.7
missing (n)	(19)		(1)	(6)	(3)	(9)

Table 1.10 Reasons for Not Working (age 18 - 64)

	TOTAL
	n
long term disability	475
short term disability	36
sick leave	85
laidoff	34
looking for work	71
homemaker	707
retired	323
student	56
volunteer	29
maternity	5
other reason	267

Table 1.11 Diagnosis - All Clients

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
rheumatoid arthritis	1705	34.3	38.5	35.3	26.5	40.5
OA primary	1167	23.5	24.5	14.4	32.1	21.5
fibrositis/myalgia	653	13.1	5.8	18.6	15.9	10.6
other diagnosis	213	4.3	4.8	4.1	5.1	2.1
OA secondary	176	3.5	2.1	8.5	1.1	2.0
polyarthritis	142	2.9	4.8	2.5	2.1	1.8
psoriatic arthritis	134	2.7	4.0	2.1	2.3	2.3
degenerative disc	125	2.5	1.2	1.0	4.8	3.1
anky. spondylitis	124	2.5	5.8	1.6	1.5	0.6
other nonartic rheum	81	1.6	2.3	0.3	2.2	1.8
unspecified arthritis	74	1.5	0.5	0.6	2.2	3.3
JA pauciarticular	65	1.3	0.6	3.0	0.3	1.5
SLE systemic	57	1.1	1.2	1.5	0.2	2.4
JA polyarticular	54	1.1	0.5	1.9	0.8	1.3
scleroderma	45	0.9	0.8	1.2	0.7	0.9
polymyaglia rheum	26	0.5	0.5	0.4	0.6	0.8
osteoporosis	23	0.5	0.5	0.6	0.3	0.4
JA systemic	19	0.4	0.5	0.4	0.1	0.6
arth. - bowel disease	17	0.3	0.4	0.2	0.2	0.8
gout	17	0.3	0.2	0.2	0.5	0.5
mixed connective	16	0.3	0.2	0.7	0.1	0.3
polymyositis	12	0.2	0.0	0.7	0.1	0.3
arthritis - infection	8	0.2	0.2	0.0	0.1	0.4
dermatomyositis	6	0.1	0.2	0.2	0.1	0.0
pseudogout	4	0.1	0.0	0.1	0.1	0.3
SLE discoid	3	0.1	0.0	0.1	0.0	0.3
missing (n)	(6)		(5)	(1)	(0)	(0)

Table 1.12 Diagnosis - Adults (age 17 & over)

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
rheumatoid arthritis	1703	35.6	39.6	38.0	26.7	41.9
OA primary	1167	24.4	25.1	15.5	32.5	22.3
fibrositis/myalgia	635	13.3	5.5	19.4	16.0	10.7
other diagnosis	195	4.1	4.5	3.7	5.2	2.0
OA secondary	176	3.7	2.1	9.2	1.1	2.1
polyarthritis	138	2.9	4.8	2.5	2.1	1.8
psoriatic arthritis	132	2.8	4.1	2.1	2.4	2.3
degenerative disc	125	2.6	1.2	1.1	4.8	3.3
anky. spondylitis	118	2.5	5.7	1.5	1.5	0.7
other nonartic rheum	77	1.6	2.2	0.3	2.2	1.6
unspecified arthritis	74	1.5	0.6	0.6	2.2	3.4
SLE systemic	57	1.2	1.2	1.6	0.2	2.5
scleroderma	44	0.9	0.9	1.3	0.7	0.8
polymyaglia rheum	26	0.5	0.5	0.4	0.6	0.8
osteoporosis	23	0.5	0.6	0.6	0.3	0.4
gout	17	0.4	0.2	0.2	0.5	0.5
arth. - bowel disease	16	0.3	0.4	0.2	0.2	0.8
JA pauci or polyarth.	13	0.3	0.4	0.2	0.1	0.5
mixed connective	13	0.3	0.1	0.6	0.1	0.3
polymyositis	12	0.3	0.0	0.7	0.1	0.3
arthritis - infection	8	0.2	0.2	0.0	0.1	0.4
JA systemic	7	0.1	0.2	0.0	0.1	0.4
pseudogout	4	0.1	0.0	0.1	0.1	0.3
SLE discoid	3	0.1	0.0	0.1	0.0	0.3
dermatomyositis	3	0.1	0.1	0.1	0.1	0.0
missing (n)	(6)		(5)	(1)	(0)	(0)

Table 1.13 Diagnosis - Children (age 16 and under)

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
JA pauciarticular	60	33.3	11.8	38.8	25.0	44.4
JA polyartic. or RA	48	26.7	14.7	25.2	68.8	22.2
fibrositis/myalgia	18	10.0	17.6	8.7	6.3	7.4
other diagnosis	18	10.0	17.6	9.7	0.0	7.4
JA systemic	12	6.7	11.8	5.8	0.0	7.4
anky. spondylitis	6	3.3	8.8	2.9	0.0	0.0
polyarthritis	4	2.2	5.9	1.9	0.0	0.0
other nonartic rheum	4	2.2	5.9	0.0	0.0	7.4
dermatomyositis	3	1.7	2.9	1.9	0.0	0.0
mixed connective	3	1.7	2.9	1.9	0.0	0.0
psoriatic arthritis	2	1.1	0.0	1.9	0.0	0.0
arth. - bowel disease	1	0.6	0.0	1.0	0.0	0.0
scleroderma	1	0.6	0.0	0.0	0.0	3.7
missing (n)	(0)		(0)	(0)	(0)	(0)

Table 1.14 Disease Duration (groups)

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
less than 1 year	535	10.9	12.4	9.0	12.1	9.6
1 year	576	11.8	13.1	10.6	11.8	11.5
2-5 years	1414	28.9	27.8	28.7	30.0	28.7
6-10 years	985	20.1	18.5	21.3	20.3	20.4
more than 10 years	1388	28.3	28.3	30.3	25.7	29.8
missing (n)	(74)		(24)	(17)	(29)	(4)

Table 1.15 Disease Duration (years)

	TOTAL	AREA A	AREA B	AREA D	AREA E
mean	9.11	8.89	9.66	8.56	9.52
range	.02 - 77	.08 - 54	.04 - 70	.02 - 77	.16 - 65
missing (n)	(74)	(24)	(17)	(29)	(4)

Table 1.16 Joint Replacement

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
no	4896	98.5	98.4	99.1	97.5	99.4
yes	76	1.5	1.6	0.9	2.5	0.6

Table 1.17 Type of Joint Replacement

	TOTAL
	n
hip	45
knee	33
shoulder	3
elbow	1
hand/wrist	0
other joint	2

Table 1.18 Number of Concurrent Conditions

	TOTAL	AREA A	AREA B	AREA D	AREA E
	%	%	%	%	%
at least one other	44.8	40.0	46.1	50.7	39.4
2 or more	14.8	11.9	17.0	15.7	14.2
3 or more	4.1	12.8	5.2	4.2	4.3

Table 1.19 Types of Concurrent Conditions

	TOTAL	AREA A	AREA B	AREA D	AREA E
	n	n	n	n	n
no other condition	2744	785	743	734	482
other arth/rheum	530	82	149	237	62
stroke/circul/vascul	518	105	149	161	103
metabol/endocr/nutri	351	83	95	108	65
heart	324	73	103	92	56
other condition	271	74	90	89	18
digestive	244	64	79	62	39
respiratory	204	56	66	58	24
skin/allergies	111	34	30	28	19
back/neck	101	20	31	44	6
sensory	100	19	41	30	10
other MSD	97	20	21	49	7
neoplasms	80	26	16	21	17
nervous system	68	19	16	18	15
urinary/kidney	57	17	27	9	4
injuries/trauma	11	5	1	4	1

Table 2.1 Service Type

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
PT	3897	67.3	80.5	53.1	74.9	61.0
OT	964	16.7	8.1	30.1	5.9	23.1
social work	321	5.5	3.7	10.5	4.4	0.0
hydro groups	387	6.7	7.7	3.6	7.2	10.6
other groups	220	3.8	0.0	2.7	7.5	5.3

Table 2.2 Group Type

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
hydro	387	63.9	100.0	57.9	49.0	66.7
disease specific	88	14.5	0.0	14.9	28.7	0.0
education	86	14.2	0.0	0.0	16.6	33.3
support	27	4.5	0.0	11.4	5.7	0.0
relaxation	18	3.0	0.0	15.8	0.0	0.0
missing (n)	(1)		(0)	(1)	(0)	(0)

Table 2.3 Referral Source

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
regular	4978	86.4	87.0	85.6	96.4	67.3
Homecare	322	5.6	8.2	5.3	1.6	9.7
clinic	309	5.4	2.6	4.8	0.1	21.7
internal referral	127	2.2	2.2	3.9	1.4	0.0
self	27	0.5	0.0	0.4	0.5	1.3
missing (n)	(26)		(3)	(16)	(5)	(2)

Table 2.4 Internal Referral Source

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
PT	74	58.3	80.6	44.4	70.8	N/A
OT	26	20.5	6.5	30.6	8.3	N/A
social work	27	21.3	12.9	25.0	20.8	N/A

Table 2.5 Referring Physician Type

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
rheumatologist	3563	63.7	74.2	76.3	52.0	42.4
GP	1819	32.5	22.3	18.9	45.5	52.5
orthopedic	60	1.1	1.8	0.8	0.6	1.3
internist	59	1.1	0.4	1.4	0.2	3.2
other specialist	95	1.7	1.3	2.6	1.7	0.6
missing (n)	(13)		(0)	(3)	(10)	(0)

Table 2.6 Diagnosis - All Referrals

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
rheumatoid arthritis	2084	36.0	40.4	38.2	27.6	40.6
OA primary	1280	22.1	23.8	13.1	30.9	21.8
fibrositis/myalgia	778	13.5	5.5	17.7	16.7	11.2
other diagnosis	239	4.1	4.6	3.8	5.3	2.0
OA secondary	207	3.6	1.9	7.9	1.0	2.0
polyarthritis	175	3.0	5.1	3.0	2.0	1.7
psoriatic arthritis	162	2.8	3.9	2.4	2.5	2.2
anky. spondylitis	135	2.3	5.5	1.4	1.4	0.7
degenerative disc	132	2.3	1.1	1.0	4.4	2.9
other nonartic rheum	83	1.4	2.1	0.3	2.0	1.7
unspecified arthritis	75	1.3	0.5	0.5	2.0	3.1
JA pauciarticular	72	1.2	0.7	2.5	0.2	1.4
SLE systemic	68	1.2	1.2	1.3	0.4	2.4
JA polyarticular	65	1.1	0.4	1.8	0.8	1.3
scleroderma	58	1.0	0.8	1.4	0.8	0.8
polymyaglia rheum	27	0.5	0.5	0.3	0.5	0.7
osteoporosis	24	0.4	0.5	0.5	0.3	0.4
JA systemic	20	0.3	0.4	0.4	0.1	0.6
arth. - bowel disease	19	0.3	0.4	0.2	0.2	0.7
gout	19	0.3	0.2	0.2	0.4	0.6
mixed connective	17	0.3	0.1	0.6	0.1	0.2
polymyositis	17	0.3	0.0	0.8	0.1	0.2
arthritis - infection	8	0.1	0.2	0.0	0.1	0.4
dermatomyositis	7	0.1	0.1	0.2	0.1	0.0
SLE discoid	6	0.1	0.1	0.2	0.0	0.2
pseudogout	5	0.1	0.0	0.1	0.1	0.2
Lyme	1	0.0	0.0	0.1	0.0	0.0
missing (n)	(6)		(5)	(1)	(0)	(0)

Table 2.7 Diagnosis - Referrals for Adults (over age 16)

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
rheumatoid arthritis	2082	37.3	41.4	40.8	27.8	42.0
OA primary	1280	22.9	24.4	13.9	31.2	22.6
fibrositis/myalgia	760	13.6	5.2	18.4	16.8	11.4
other diagnosis	221	4.0	4.2	3.4	5.3	1.8
OA secondary	207	3.7	1.9	8.5	1.0	2.1
polyarthritis	171	3.1	5.0	3.1	2.0	1.7
psoriatic arthritis	160	2.9	4.0	2.5	2.5	2.3
degenerative disc	132	2.4	1.1	1.1	4.4	3.1
anky. spondylitis	128	2.3	5.5	1.3	1.5	0.6
other nonartic. rheum	79	1.4	2.0	0.3	2.1	1.5
unspecified arthritis	75	1.3	0.5	0.5	2.0	3.2
SLE systemic	68	1.2	1.2	1.4	0.4	2.4
scleroderma	57	1.0	0.9	1.5	0.8	0.7
polymyaglia rheum	27	0.5	0.5	0.3	0.5	0.7
osteoporosis	24	0.4	0.5	0.5	0.3	0.4
gout	19	0.3	0.2	0.2	0.4	0.6
arth. - bowel disease	18	0.3	0.4	0.2	0.2	0.7
JA pauci. or polyarth.	18	0.3	0.5	0.2	0.2	0.5
polymyositis	17	0.3	0.0	0.8	0.1	0.2
mixed connective	14	0.3	0.1	0.5	0.1	0.2
arthritis - infection	8	0.1	0.2	0.0	0.1	0.4
JA systemic	7	0.1	0.1	0.0	0.1	0.4
SLE discoid	6	0.1	0.1	0.2	0.0	0.2
pseudogout	5	0.1	0.0	0.1	0.1	0.2
dermatomyositis	3	0.1	0.1	0.1	0.1	0.0
Lyme	1	0.0	0.0	0.1	0.0	0.0
missing (n)	(6)		(5)	(1)	(0)	(0)

Table 2.8 Diagnosis - Referrals for Children (age 16 & under)

	TOTAL		AREA A	AREA	AREA D	AREA E
	n	%	%	%	%	%
JA pauciarticular	64	32.7	11.8	37.9	23.5	41.4
JA polyartic or RA	57	29.1	14.7	28.4	70.6	24.1
fibrositis/myalgia	18	9.2	17.6	7.8	5.9	6.9
other diagnosis	18	9.2	17.6	8.6	0.0	6.9
JA systemic	13	6.6	11.8	6.0	0.0	6.9
anky. spondylitis	7	3.6	8.8	2.6	0.0	3.4
polyarthritis	4	2.0	5.9	1.7	0.0	0.0
dermatomyositis	4	2.0	2.9	2.6	0.0	0.0
other nonartic rheum	4	2.0	5.9	0.0	0.0	6.9
mixed connective	3	1.5	2.9	1.7	0.0	0.0
psoriatic arthritis	2	1.0	0.0	1.7	0.0	0.0
arth. - bowel disease	1	0.5	0.0	0.9	0.0	0.0
scleroderma	1	0.5	0.0	0.0	0.0	3.4
missing (n)	(0)		(0)	(0)	(0)	(0)

Table 2.9 Disease Duration (groups)

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
less than 1 year	607	10.6	12.5	8.7	11.9	9.4
1 year	680	11.9	12.9	11.2	11.9	11.8
2-5 years	1642	28.8	27.7	27.6	30.9	29.0
6-10 years	1141	20.0	18.5	21.0	19.8	20.7
more than 10 years	1636	28.7	28.5	31.5	25.5	29.0
missing (n)	(83)		(27)	(21)	(31)	(4)

Table 2.10 Disease Duration (years)

	TOTAL	AREA A	AREA B	AREA D	AREA E
mean	9.18	8.96	9.88	8.47	9.40
range	0.02 - 77	0.08 - 54	0.04 - 70	0.02 - 77	0.16 - 65
missing (n)	(83)	(27)	(21)	(31)	(4)

Table 2.11 Wait Time (weeks) - All Referrals

	TOTAL	AREA A	AREA B	AREA D	AREA E
mean	5.23	4.73	6.72	5.26	2.81
range	0 - 86.6	0 - 77.6	0 - 86.6	0 - 73.4	0 - 60.7
missing (n)	(2)	(1)	(1)	(0)	(0)

Table 2.12 Wait Time (weeks) - External Referrals

	TOTAL	AREA A	AREA B	AREA D	AREA E
mean	5.19	4.66	6.68	5.25	2.84
range	0 - 77.6	0 - 77.6	0 - 58.3	0 - 73.4	0 - 60.7
missing (n)	(1)	(1)	(0)	(0)	(0)

Table 2.13 Wait Time (weeks) - Internal Referrals

	TOTAL	AREA A	AREA B	AREA D	AREA E
mean	7.34	7.42	7.10	7.96	N/A
range	0 - 86.6	0 - 37.1	0 - 86.6	0 - 61.4	N/A
missing (n)	(1)	(0)	(1)	(0)	N/A

Table 2.14 Wait Time (weeks) - Self Referrals

	TOTAL	AREA A	AREA B	AREA D	AREA E
mean	1.46	N/A	3.59	0.18	0.86
range	0 - 7.9	N/A	0.7 - 7.9	0 - 0.6	0 - 1.9
missing (n)	(0)	N/A	(0)	(0)	(0)

Table 2.15 Total Attendance

	TOTAL	AREA A	AREA B	AREA D	AREA E
mean	3.50	3.77	3.41	3.61	2.92
range	1 - 32	1 - 32	1 - 19	1 - 20	1 - 21

Table 2.16 Homecare Service

	TOTAL		AREA A	AREA B	AREA D	AREA E
	n	%	%	%	%	%
yes	246	5.4	9.2	5.7	0.6	9.0
no	4336	94.6	90.8	94.3	99.4	91.0

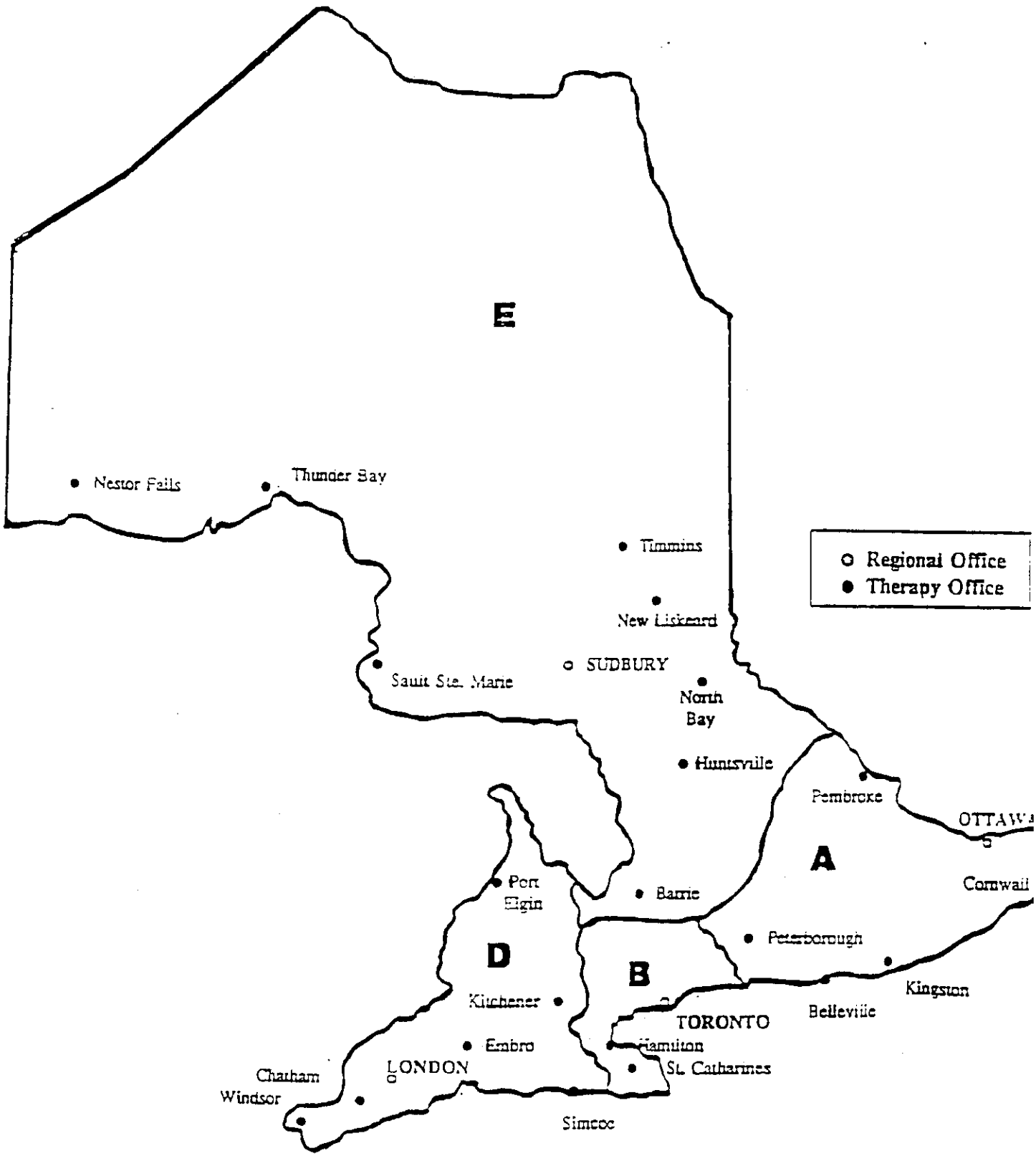
Table 2.17 Homecare Attendance

	TOTAL	AREA A	AREA B	AREA D	AREA E
mean	5.20	5.94	5.13	9.13	3.32
range	1 - 32	1 - 32	1 - 16	3 - 19	1 - 13

APPENDIX A

Ontario Division

CONSULTATION AND THERAPY SERVICE BY SERVICE AREA



APPENDIX B

CASE DATA

Serial No.	R
Service Area	
Group I.D.	

Service | PT | GROUP | SW | OT |

Client Name _____ (First) _____ (Last) Health Card # _____

Address _____ (Street) _____ (City) _____ (Postal Code)

Date of Birth | Day | Month | Year | Age _____ ☎ home _____ bus. _____

Gender | M | F | If under 18 years of age: parent or guardian _____

Marital Status | M | W | Sep | D | CL | NM | Seen before by CTS? | Y | N |

Primary Diagnosis *(see ICD codes)* _____ Confirmed ☐ Suspected ☐ If Other *(specify)* _____

Disease Duration(yrs) _____

Referring Physician _____ | RHEUM | GP | INT | ORTH | OTHER |

Address _____ (Street) _____ (City) _____ (Postal Code) ☎ _____

Referral Source | Reg | HC | Clinic | Self | | PT | OT | SW | *Inter-Office*

Consultant/Family Physician _____

Address _____ (Street) _____ (City) _____ (Postal Code) ☎ _____

Date of Referral | Day | Month | Year | Date of Opening | Day | Month | Year |

Employment Status: ☐ Employed Fulltime ☐ Part-time ☐ Self-employed

Occupation _____

If not working for pay *(check one or more)*: ☐ Homemaker ☐ Student ☐ Retired/Voluntarily Not Working

☐ Unemployed and Looking for Work ☐ Volunteer Work ☐ Maternity Leave ☐ Temporarily Laid Off

☐ Sick Leave ☐ LTD ☐ STD ☐ Other *(specify)* _____

Highest Level of Education Achieved: ☐ Elementary (or less) ☐ Some High School ☐ High School Graduate

☐ Some College ☐ Some University ☐ College Graduate ☐ University Graduate ☐ Post-Graduate Degree

Total # Years _____

Primary Language: ☐ English ☐ French ☐ Other *(specify)* _____

Concurrent Disorders/Precautions _____

Household Size: Spouse | Y | N | Children(#) _____ Other Relative(#) _____ Non-Relative(#) _____ Total(# incl. client) _____

_____ *Therapist's Signature*

COMPLETE BELOW THIS LINE ON CLOSURE

Date of Last Visit | Day | Month | Year | Home Care | Y | N | Total Attendances _____

Date of Closure | Day | Month | Year | Total HC Att. _____ No Shows _____

APPENDIX C

CLASSIFICATION OF CONCURRENT CONDITIONS

1: OTHER ARTHRITIS AND RHEUMATISM

Acromioplasty
Amyloidosis
Ankylosing Spondylitis
Erysipelas Infection
Arthritis - Unspecified
Arthropathies
Atlanto-Axial Subluxation
Baker's Cyst
Bursitis
Charcot
Chondrocalcinosis
Chondromalacia
Crohn's Disease
Congential Hip Dislocation
Connective Tissue Disease
Crest
Degenerative Disc Disease
Dermatomyositis
Discoid Lupus (SLE)
Dislocated Patella
Enthesis
Feltys Syndrome
Fibromyalgia
Fibrositis
FMS
Frozen Shoulder
Generalized Other Arthritis
Gout
Hand Reconstruction
JA
JRA
Kyphosis
Lyme Disease
Metatarsalgia
Myofascial Pain Syndrome
Osgoode Slatter
Osteoarthritis
Osteochondritis Osteoporosis
Patellofemoral Disease
Plantar Fasciitis
Polymyalgia Rheumatica
Polymyositis
Pseudogout
Psoriatic Arthritis
Raynaud's Disease
Rheumatism
Rheumatoid Arthritis
Reiter's Syndrome
Scleroderma
Sjogren's Syndrome
Spurs
Subluxation cervical spine
Systemic Lupus
Temporal Arthritis
Tendinitis/Tendonitis
Tenosynovitis
Torn Knee Cartilage
Tuberculosis (joint)
Tuberculosis Spondylitis
Vasculitis
Wegener's Granulomatosis

2: BACK & NECK DISORDERS INCLUDING TRAUMA

Arachnoiditis
C 1-2 Instability
CDDD
Compression # Back
Compression Fractures
Discs - damaged/removed
D.I.S.H. Disease
Dorsopathies
Foraminectomy
Friedrichs Ataxia
Fusion (Back and Spine)
Laminectomy
Motor Vehicle Accident (MVA)
Neck Disorders
Rye Neck
Sciatica
Scoliosis
Spastic Torticollis
Spinal cord decompression
Spinal cord injury
Spinal Stenosis
Spondylolisthesis
Stenosis L5
Trauma - Back
Whiplash

3: OTHER MSD INCLUDING TRAUMA (Excluding #1 and #2)

Calcium on Shoulder
Chondropathies
Dislocated Shoulder
Fusion(wrist & ankle joints)
Hip Pin Plate
Iliotibial Band Syndrome
Musculoskeletal Deformities
Osteomyelitis
Osteopathies
Osteosclerosis
Patellectomy
Rotator Cuff
Tennis Elbow
Trauma - excluding back

4: HEART

Acute Rheumatic Fever
Angina
Angioderma
Aorta Repair
Aortic Valve Replacement
Atrial Fibrillation
Arrhythmia
Bypass Surgery
Cardiac Embolism
Cardiac Murmers
Cardio Myopathy
Congestive Heart Failure
Coronary Artery Disease
Ischaemic Heart Disease
Mitral Valve Prolapse
Myocardial Infarction
Pacemaker
Palpitation
Pulmonary Circulation
Rheumatic Heart Disease
Tachycardia
Transient Ischemic Attack

5: STROKE, CIRCULATORY, VASCULAR

Acquired Factor 8 Deficiency
Anemia
Aneurysm
Arteries, Diseases
Arteriosclerotic heart disease/ateriosclerosis
Blood Disease
Capillaries Diseases
Cerebral Vascular Accident/Stroke
Cerebrovascular Disease
Cholesterol
Hemiplegia
High Blood Pressure
Hypermobility
Hypertension
Intermittent Claudication
Lymphatic Disease
Mitral Stenosis
Necrosis
Peripheral Vascular Disease
Phlebitis
Syncope
Thrombocytopenia
Vasculitis
Veins, Diseases
Vertebral Artery Compromise

6: RESPIRATORY

Asthma
Bronchitis
Bronchiectasis
Congestive obstructive pulmonary disease
Emphysema
Histoplasmosis
Pleurisy
Pneumonia
Pseudomonas
Pulmonary Edema
Pulmonary Fibrosis
Respiratory Failure
Shortness of Breath
Silicosis

7: NEOPLASMS/CARCINOMA

Cancer
Hodgkins Disease
Lumpectomy
Leukemia
Lipoma
Mastectomy
Melanoma
Meningioma
Myeloma
Wharton's Tumor

8: DIGESTIVE

Anorexia Nervosa
Bowel Disease
Bowel Surgery
Bowel Syndrome
Celiac Disease
Colitis
Colostomy
Diverticulitis
Esophagus Reflex Disorder
Gastrectomy
GI Bleed
Hiatus Hernia
Intestinal Infection
Irritable Bowel Syndrome
Pancreatitis
Pyloric Stenosis
Spastic Bowel Syndrome
Ulcerative Colitis

9: GENITO/URINARY & KIDNEY

Bladder
Cirrhosis
Cystitis
Cystocele
Genitourinary System, disease
Hepatitis
Hysterectomy
Nephritis
Nephrotic Syndrome
Ovarian Cysts
Prolapsed Uterus
Pyelonephrosis
Renal Failure
Urinary - Problems/diseases

10: INJURIES & TRAUMA (excluding #2 and #3)

11: METABOLIC, NUTRITIONAL & ENDOCRINE

Abnormal Glucose Test
Diabetes
Dwarfism
Goiter
Hypoglycemia
Hypothyroid
Paget's Disease
Thyroid Disease

12: NERVOUS SYSTEM

Ataxia
Balance Disturbance
Coordination Problems
Foot Drop
Guillain Barre Syndrome
Intercostal Neuralgia
Multiple Sclerosis
Myopathy
Nervous System, diseases
Neuralgia
Neurological Condition
Neuropathy
Neuro Surgery
Parkinson's Disease
Paralysis
Parathesia
Paraplegia from Polio
Peripheral Neuropathy
Plexopathy
Poliomyelitis
Post Polio
Sclerosis
Seizures
Shingles
Thoracic Outlet Syndrome
TIC Douloureaux

13: SENSORY

Adnexa Oculi
Blind
Corneal Perforation
Deaf
Dry Eyes
Ear Problem
Glaucoma
Iritis
Meniere's Disease
Retinitis
Retinoid Pigmentosa
Tunnel Vision
Uveitis
Vertigo

14: SKIN ALLERGIES

Allergies
Alopecia
Eczema
Foot Ulcers
Hay Fever
Psoriasis
Rosarea
Skin Disease
Skin Lesions

15: OTHER TYPES OF DISORDERS

Alopecia Universalis
Alzheimer's Disease
Amputee/Amputation
Anxiety Disorders
Bipolar Disorders
Cellulitis
Cerebral Palsy
Cognitive Impairment
Congenital Disorders
Dementia
Depression
Dizziness
Down's Sydrome
Endometriosis
Fever
Grave's Disease
Head Injury
Hemachromatosis
Hyperactivity
Hypothermia
Lithium Toxicity
Meningitis
Mental Disorders
Mental Retardation
Migraine
Myasthenia Gravis
Obesity
Sarcoid/Sarcoidosis
Schizophrenia
Septic
Spina Bifida
Suicidal
Tremors
Underweight