

ARTHRITIS COMMUNITY RESEARCH & EVALUATION UNIT (ACREU)

The Wellesley Hospital Research Institute

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CENTRAL WEST ONTARIO

DELIVERY OF COMMUNITY-BASED SERVICES FOR PEOPLE WITH ARTHRITIS

A Survey of Disability and Mobility among Consultation and Therapy Service Clients seen in May 1993

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Prepared by:

Linda Rothman

Elizabeth M. Badley

Mailing Address:

c/o The Wellesley Hospital
160 Wellesley Street East
Toronto, Ontario
M4Y 1J3

Location:

Churwell Site, 4th Floor
65 Wellesley Street East
Toronto, Ontario



The Wellesley
Hospital

*In partnership with The Arthritis Society
Ontario Division*



University of
Toronto

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**THE ARTHRITIS SOCIETY CONSULTATION AND THERAPY
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EXECUTIVE SUMMARY

- With current emphasis on efficient health service delivery in Ontario, it has become important to investigate methods of defining the optimal balance between home-based versus group and ambulatory care services for people with arthritis. With this in mind, a survey of all adult clients seen by The Arthritis Society's Consultation and Therapy Service (CTS) was conducted in May, 1993. Since April 1, 1994, the CTS has been divided up according to District Health Council Regions. This report is for clients living in the Central West Region.
- The survey used a self-administered questionnaire to gather data on disability, pain, and mobility in the community. A total of 232 questionnaires were returned in the Central West Region, from 213 clients. Most questionnaires (88%) were from home therapy services. The findings from this survey are broadly applicable to all clients seen in this region annually.
- The average age of clients seen in the Central West Region was 58 years and 85% were female. The most frequently reported diagnoses were rheumatoid arthritis (55%), followed by osteoarthritis (32%), low back pain (13%) and fibromyalgia (12%). In the Central West Region osteoarthritis was checked off more frequently alone than in combination with other diagnoses. In the province, osteoarthritis was more frequently checked off in combination with other diagnoses, especially with rheumatoid arthritis. One quarter of clients surveyed in this region indicated at least one other non-musculoskeletal comorbid condition.
- Clients in the Central West Region reported significantly less disability than clients in the Central East and North East Regions. The average level of disability was however comparable to that of the province overall. The majority of clients had much difficulty or were unable to grip, do errands/chores, hygiene activities, and reach. Forty four percent of clients reported having much difficulty or being unable to walk. Assistive devices were most commonly used for hygiene activities. The most commonly used assistive devices were canes and jar openers.
- Sixteen percent of clients reported some restriction in independent mobility, with 12% being unable to leave the immediate surroundings of their homes independently.
- Most clients in the Central West Region reported going out of their homes more than once a week (79%). Eighty four percent of clients in this region had access to a car in their households.
- Therapists indicated that 56% of clients seen at home in this region could potentially go out to participate in a group setting.

- It is estimated that 12-44% of clients in the Central West Region need to be seen at home, based on the proportion of clients with reduced mobility and the therapists' assessment. Home therapy services will continue to be a necessity for those clients too disabled or otherwise unable to attend services in a group setting. Clients who could receive the bulk of their care in ambulatory settings may also require at least one visit for assessment of the home environment.
- The results of this survey provide some preliminary information that could be used to develop guidelines to facilitate decision-making with regard to type of service delivery for clients with arthritis, with the goal of providing more efficient services.

THE ARTHRITIS SOCIETY CONSULTATION AND THERAPY SERVICE (CTS) CLIENT SURVEY May, 1993: Central West Region

I. INTRODUCTION:

The Arthritis Society, Ontario, together with the Arthritis Community Research and Evaluation Unit (ACREU) conducted a survey of the Consultation and Therapy Service (CTS) clients seen over one month, to gather information regarding disability and mobility status of this client group. Data collected during this survey were analyzed provincially, and by Arthritis Society regions in the original report (see provincial report, for more details). Since April 1, 1994, the CTS has been divided up according to District Health Council (DHC) Regions. Five additional DHC regional reports have been prepared. The following report is for the Central West Region.

The goal of the survey was to provide information about the disability and mobility status of CTS clients to enhance service planning and development.

Specific objectives of the survey included:

1. To provide descriptive information for CTS clients overall, for the three home therapy services (physiotherapy, occupational therapy, and social work), for the ambulatory services (hydrotherapy, groups, clinics), and for the DHC Regions;
2. To provide information regarding disability in CTS clients;
3. To provide descriptive information

regarding pain reported by CTS clients;

4. To provide descriptive information regarding mobility in the community for CTS clients;
5. To investigate how the characteristics of clients might provide information to help determine the balance between home and ambulatory care services.

II. METHODS:

1. *Procedure*

Therapists were requested to give questionnaires to all CTS clients age 18 and over seen in the month of May, 1993. Clients who were seen in more than one service completed a questionnaire for each service.

2. *The Questionnaire*

The self-administered questionnaire was designed to measure clients' perceptions of their disability and mobility status. The questionnaire consisted of three sections (see Appendix A). The first section contained some basic questions relating to client characteristics, such as date of birth, diagnosis, and whether the client was a new referral and/or a consultation only. A consultation is defined by the CTS as a limited intervention for a client of three visits or less. Additional

demographic information was retrieved from client case data forms at The Arthritis Society (see provincial report for details).

The second section consisted of the disability and the pain subscales of the Health Assessment Questionnaire (HAQ)¹. The HAQ is a standardized validated questionnaire designed to measure disability in clients with arthritis. A disability index is calculated ranging from 0 to 3, with the level of disability increasing with the score (see provincial report for more details). The amount of pain experienced due to arthritis in the past week was measured on a scale of 1 to 7, with 1 labelled as "none", 4 labelled as "moderate", and 7 labelled as "extreme" pain.

The third section of the questionnaire was composed of several questions related to the client's level of mobility in their environment (mobility handicap). The mobility questions were originally developed in the context of an earlier population survey.² Clients were asked about their ability to move around in their home, and to leave their home and its immediate surroundings taking into account the assistive devices/equipment that they normally used.

3. Analysis

Analysis by service was not done in this regional report, as the majority of the clients surveyed were home therapy clients most of whom were seen by physiotherapy. Therefore, analysis was generally conducted by individual. The first completed questionnaire by each client was used for the analysis. Analysis by service (and by ambulatory versus home care clients) is reported in the provincial report.

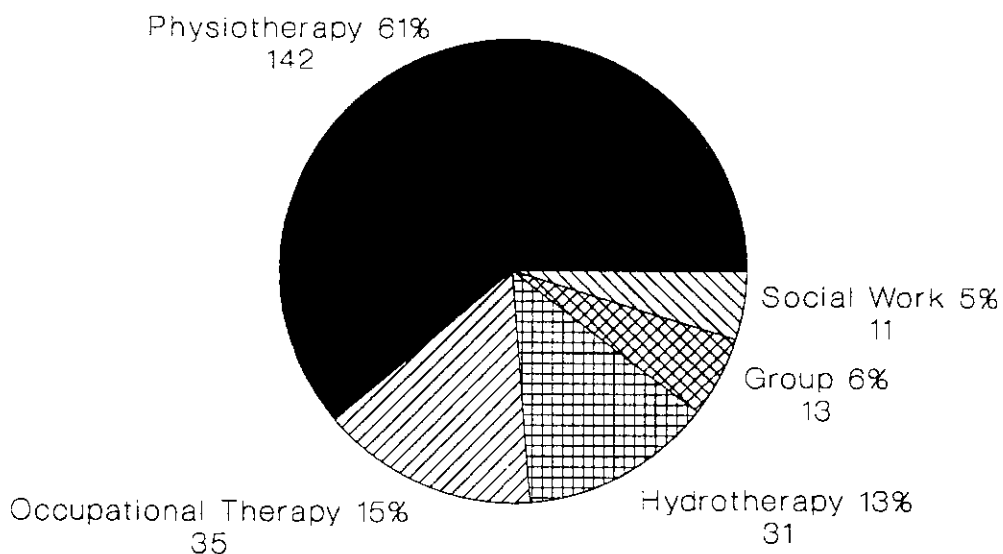
In the presentation of results, percentages have been calculated excluding missing data. The proportion with missing data from the client completed questionnaire is generally low.

III. RESULTS:

1. *Characteristics of CTS Clients*

a. Services received

**Figure 1.1
QUESTIONNAIRE RETURNED BY SERVICE**



The total of 232 questionnaires were returned from the Central West Region from 214 clients. The findings for these clients can be taken to be generally applicable to the clients seen in this region annually (see provincial report for details). Most of the questionnaires were completed by home therapy clients

(81%), with physiotherapy clients completing 61% of all surveys. The majority of clients were continuing clients with 32% of those who responded identified as new referrals. Of the new referrals, 22% were identified as consults only.

b. Demographic characteristics

TABLE 2.1: Demographic Characteristics of Clients (N = 213).

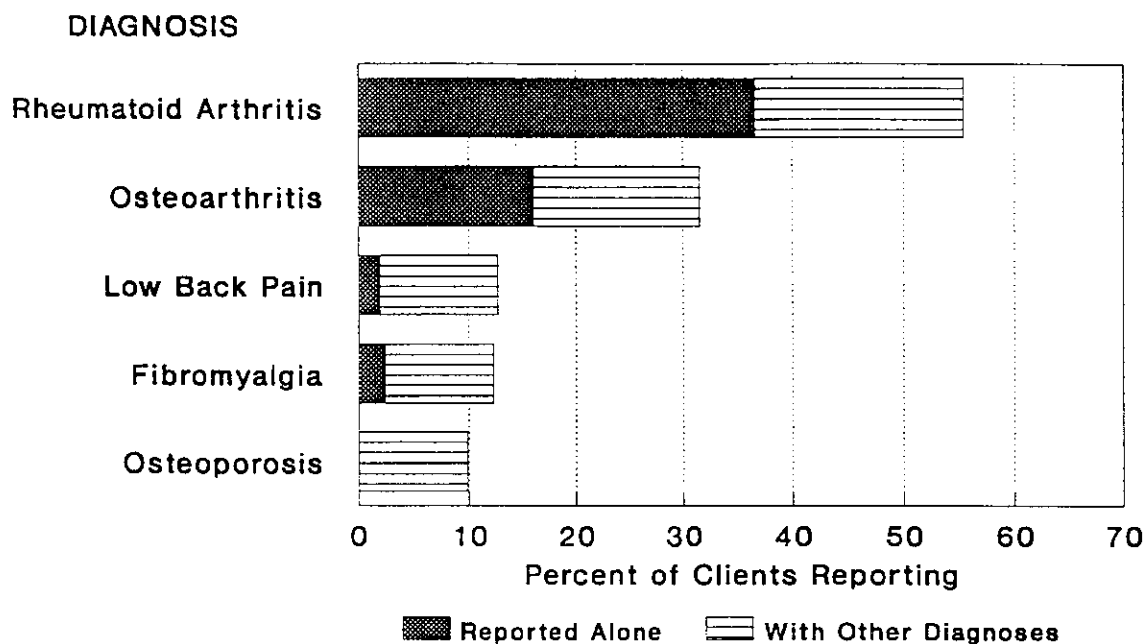
Age (years)	Mean (s.d.)	58.4 (15.8)
Sex	Female	180 (84.5%)
Marital Status	Married/Common law	128 (66.3%)
Primary Language	English	172 (90.5%)
Household Size	Lives Alone	47 (24.7%)
Total Years of Education	Mean (s.d.)	10.9 (3.5)
Employment Status	Employed: Full-time	20 (9.4%)
	Part-time	14 (6.6)
	Self-employed	4 (1.9)
	Not Employed: Retired/Voluntarily not working	50 (23.5%)
	Homemaking	56 (26.3%)
	LTD	13 (6.1%)
	Other*	27 (12.7%)

*Other category includes: student, unemployed/looking for work, volunteer, maternity leave, temporarily laid off, sick leave, short term disability.

The average age of clients seen in the month of May was 58 years (Table 2.1). Most clients were women (85%) who were married or living common law (66.3%). Ninety one percent of clients who responded reported English as their

first language and 25% of clients lived alone. The majority of clients were not working for pay, and were either retired or voluntarily not working, homemakers, or on long term disability (LTD).

**FIGURE 1.2
MOST FREQUENTLY
REPORTED DIAGNOSES**



As the clients could report more than one diagnosis, Figure 1.2 depicts the proportion who checked off one diagnosis as well as in combinations with other musculoskeletal diagnoses.

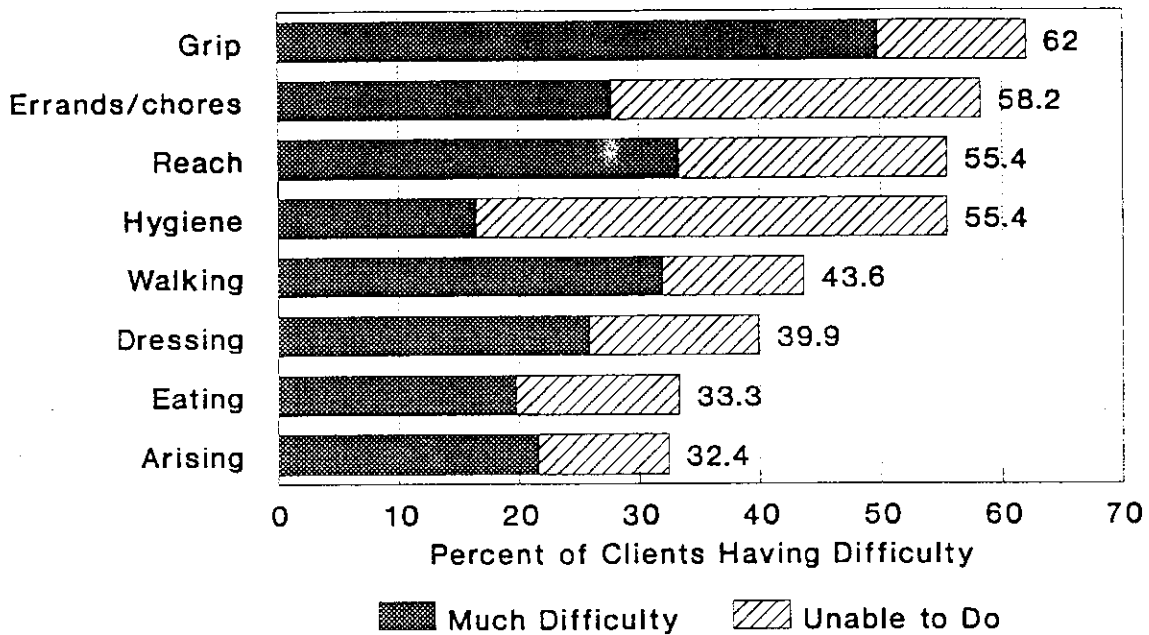
The most prevalent diagnosis reported was rheumatoid arthritis (55%), followed by osteoarthritis (32%), low back pain (13%) and fibromyalgia (12%). Both rheumatoid arthritis and osteoarthritis were checked off more frequently alone than in combination with other diagnoses. In the provincial study osteoarthritis was

more frequently checked off in combination with other diagnoses, especially with rheumatoid arthritis. Low back pain, fibromyalgia, and osteoporosis were more frequently checked off with other diagnoses. Thirty five percent of clients checked off more than one musculoskeletal diagnosis.

The mean duration of arthritis diagnoses was 11.4 years. Twenty five percent of clients surveyed in this region also indicated at least one other non-musculoskeletal comorbid condition.

2. Level of Disability

Figure 2.1
FUNCTIONAL ACTIVITIES
Performance

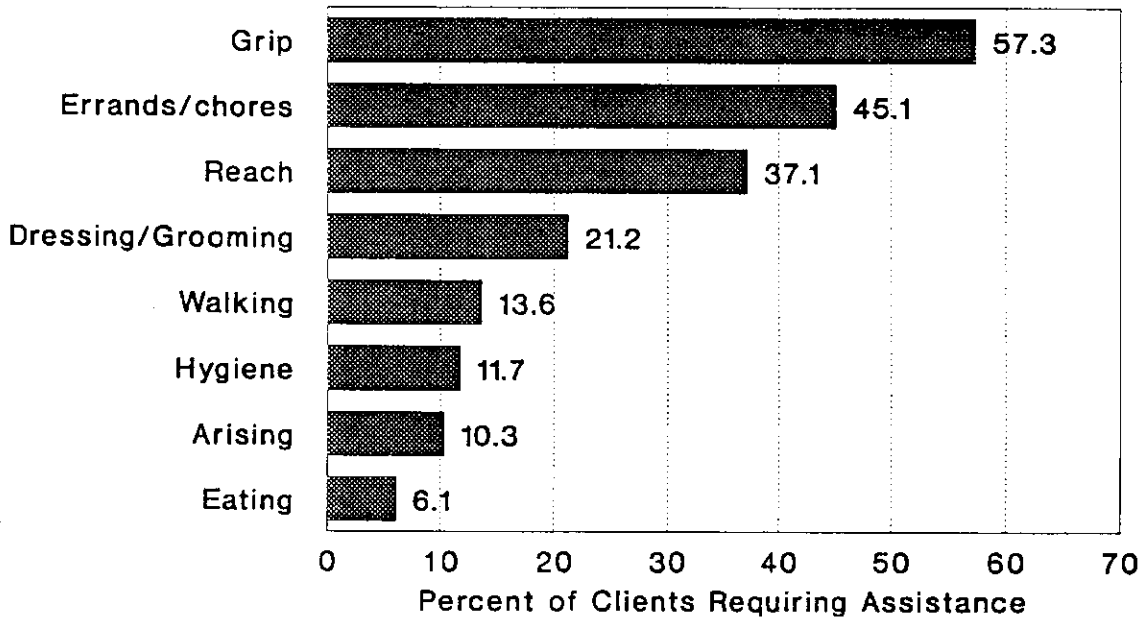


The majority of clients had the most difficulty with grip, errands/chores, hygiene, and reach (Figure 2.1). Smaller proportions of clients were unable to grip as compared to the other top categories, but experienced much difficulty in activities requiring gripping. Forty-four percent of clients reported having much difficulty or being unable to walk.

These findings are generally similar to those shown in Figure 2.2, which portrays the functional activities that clients required assistance from another person. A large proportion of clients required assistance with gripping/opening, errands/chores, and reach.

More than one quarter of clients used a cane for walking. Assistive devices were most commonly used for hygiene activities; 27% of clients used a raised toilet seat, 25% used a bathtub bar, and

Figure 2.2
HAQ FUNCTIONAL CATEGORIES
Activities Requiring Assistance
from Another Person



16% used a bathtub seat. A large proportion of clients also used jar openers to assist them with gripping/opening (25%). Clients in the Central West Region used overall, an average of 2.4 assistive devices.

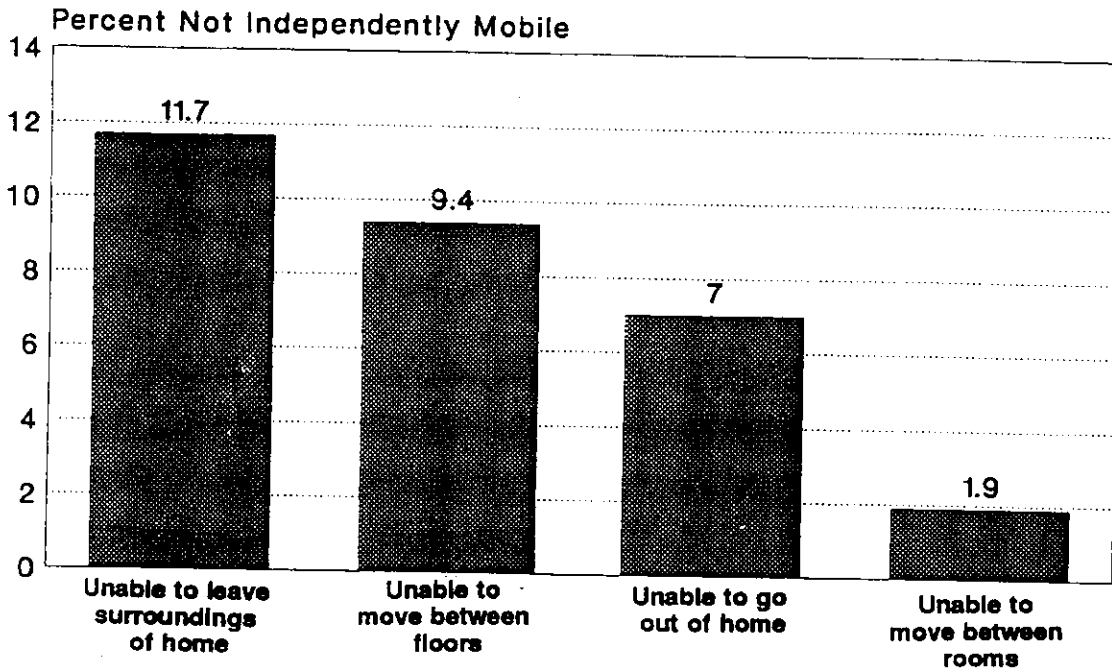
comparable to the average provincial score (see provincial report for more details regarding HAQ scores). Generally, HAQ scores increased with age, and were greater for females than for males.

a. Disability scores
(Health Assessment
Questionnaire)

The average HAQ score obtained by clients in the Central West Region was 1.42. This score was significantly less (indicating less disability) than those obtained by clients in the Central East and North East Regions, but was

Clients with rheumatoid arthritis only (excluding those with any other musculoskeletal diagnosis), had a significantly higher average HAQ score than those with only osteoarthritis. There were very few clients with fibromyalgia only in this region (n = 5), and therefore, it was not possible to compare disability scores for this diagnostic group.

Figure 3.1
MOBILITY ACTIVITIES
Restrictions in Independent Mobility*



*with regularly used assistive devices

3. Mobility

a. Independent mobility and confinement to home

Inability to leave the surroundings of the home was the most frequently reported mobility-related limitation (Figure 3.1). Of the clients surveyed in the Central West Region, 12% reported that they were unable to leave the immediate surroundings of their homes independently. Limitations were also reported in the ability to move between floors (9%), and to go out of the home independently (7%). Most clients were

able to move from room to room inside of the home independently. Independent mobility decreased with increasing age (see provincial report for more details).

Overall, 16% of clients seen by the CTS in the Central West Region during the month of May, reported restriction in independent mobility within their homes, or upon leaving their homes.

Clients with some restriction in their mobility had a significantly higher HAQ disability index than those who didn't (2.44 vs. 1.22, $p < .001$).

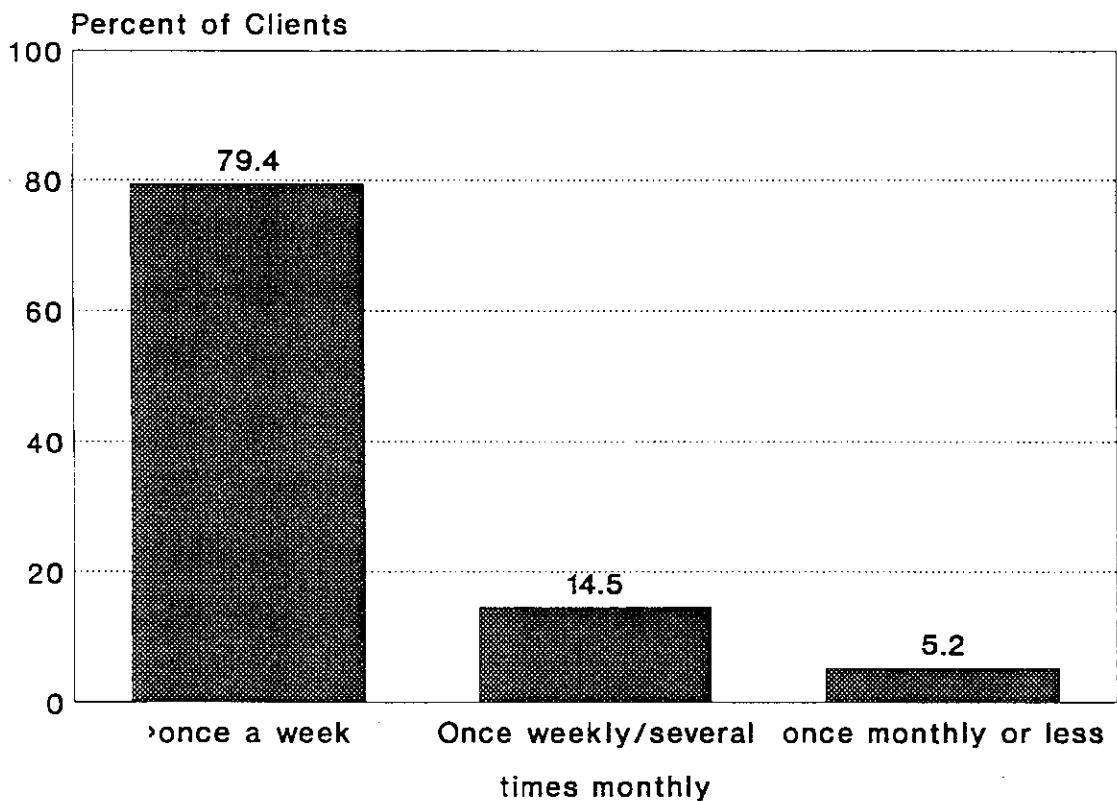
b. Frequency of outings

Most CTS clients in this region go out of their homes more than once a week (Figure 3.2). Fifteen percent of clients get out once weekly or several times monthly, and 5% of clients are only able to get out once a month or less. Frequency of outings decreased with increasing age (see provincial report for more details). Eighty four percent of clients in this region had access to a car in their households.

4. **Therapists' Assessment of Suitability for Groups**

Therapists who saw clients at home were requested to check off which of their clients they felt would be suitable candidates to go out of their homes for group therapy in an ambulatory setting. Therapists indicated that 56% of clients seen at home in this region could potentially go out to receive therapy in a group setting.

Figure 3.2
FREQUENCY OF OUTINGS



IV. DISCUSSION:

The primary purpose of the Consultation and Therapy Service (CTS) client survey was to provide information regarding clients' disability and mobility status in order to enhance service planning and development. An important question underpinning the survey was what proportion of home therapy clients needed to receive their care in the home, and what proportion could participate in ambulatory care programs.

There were several differences found in clients in the Central West Region as compared to CTS clients provincially. In the Central West Region osteoarthritis was checked off more frequently alone than in combination with other diagnoses. In the provincial study, osteoarthritis was more frequently checked off in combination with other diagnoses, especially with rheumatoid arthritis. The average HAQ score for clients in this region was 1.5, which was similar to that of the home therapy clients throughout the province. This score did however, indicate significantly less disability than those obtained by clients in the Central East and North East Regions. Clients with rheumatoid arthritis only (excluding any other musculoskeletal diagnosis), had significantly higher HAQ scores than those with osteoarthritis which was similar to the provincial results. There were however, very few clients with fibromyalgia only in this region (n = 5), and therefore, it was not possible to compare disability scores for this diagnostic group (see provincial report for more details regarding HAQ scores).

The reporting of restrictions in mobility in the Central West Region was generally

comparable to the provincial results. Sixteen percent of clients in this region had some restriction in independent mobility, and twenty percent reported going out only once weekly or less often.

While all clients may benefit from home-based services, it appears that many who are currently seen at home could potentially be seen in an ambulatory setting. A limited appraisal suggests that the proportion of clients who need to be seen at home in this region ranges from 12%-44%. Conversely 56%-78% of home therapy clients could potentially participate in groups in ambulatory settings. This is based on the proportions of clients unable to leave the surroundings of their homes independently, and clients whom the therapists identified could not participate in therapy in an ambulatory setting.

An increased level of ambulatory care provision could lead to greater efficiency in the use of staff, and savings of both time and travel costs of therapist home visits. Results indicate that home therapy services will however, continue to be a necessity, not only for those clients too disabled or otherwise unable to attend services in a group setting, but also for ambulatory clients who may require important input in the home environment to facilitate their continued independence in the community.

¹Fries JF, Spitz P, Young DY. The dimensions of health outcomes: the health assessment questionnaire disability and pain scales. *J. Rheumatol* 1982;9: 137-45.

²Badley EM, Tennant A. Calderdale health and disablement survey. Manchester, England. Arthritis and Rheumatism Council for Research, 1988.

5. Please check the one response which best describes your usual abilities OVER THE PAST WEEK:

Without Any Difficulty	With Some Difficulty	With Much Difficulty	Unable To Do
------------------------------	----------------------------	----------------------------	--------------------

HYGIENE

Are you able to:

- Wash and dry your entire body..... _____
- Take a tub bath..... _____
- Get on and off the toilet..... _____

REACH

Are you able to:

- Reach and get down a 5 pound object (such as a bag of sugar from just above your head).. _____
- Bend down to pick up clothing from the floor... _____

GRIP

Are you able to:

- Open car doors..... _____
- Open jars which have been previously opened _____
- Turn faucets on and off..... _____

ACTIVITIES

Are you able to:

- Run errands and shop..... _____
- Get in and out of a car..... _____
- Do chores such as vacuuming or yardwork.... _____

6. Please check any AIDS or DEVICES that you usually use for any of these activities:

- Raised Toilet Seat
- Bathtub Bar
- Bathtub Seat
- Long-Handled Appliances for Reach
- Jar Opener (for jars previously opened)
- Long-Handled Appliances in Bathroom
- Other (Please Specify) _____

7. Please check any categories for which you usually need HELP FROM ANOTHER PERSON:

- Hygiene
- Gripping and Opening Things
- Reach
- Errands and Chores

8. How much pain have you had because of your arthritis in the past week?
(Please circle one number)

None			Moderate			Extreme
1	2	3	4	5	6	7

9. On your own, or using any assistive devices/equipment that you normally use, are you usually able to:

- | | | |
|--|------------------------------|---|
| Move from room to room | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Go out of your home | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Leave the immediate surroundings of your home (yard, sidewalk) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Move to another floor in your home | <input type="checkbox"/> Yes | <input type="checkbox"/> No → <input type="checkbox"/> Does not apply |

** If you have answered "yes" (or does not apply) to all of the above, skip to question #11.

10. WITH HELP from another person, are you usually able to:

- | | | |
|--|------------------------------|---|
| Move from room to room | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Go out of your home | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Leave the immediate surroundings of your home (yard, sidewalk) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Move to another floor in your home | <input type="checkbox"/> Yes | <input type="checkbox"/> No → <input type="checkbox"/> Does not apply |

11. Do you have access to a car in your household, as either a driver or a passenger?
(excluding taxis)

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

12. Do you use:

- Taxis..... Yes No
Public Transit..... Yes No
Transportation for people with disabilities..... Yes No
Rides from family/friends who do not live with you..... Yes No

13. Where do you usually go, when you go out? (Please check all that apply)

- | | | |
|---|--|---|
| <input type="checkbox"/> Shop/do errands | <input type="checkbox"/> Work outside of home | <input type="checkbox"/> Overnight trips |
| <input type="checkbox"/> Visit friends/relatives | <input type="checkbox"/> Religious institution | <input type="checkbox"/> Meetings/club |
| <input type="checkbox"/> Hairdresser/barber | <input type="checkbox"/> Walk the dog | <input type="checkbox"/> Medical appointments |
| <input type="checkbox"/> Recreational activities
(e.g. movies, sports theatre) | <input type="checkbox"/> Volunteer | <input type="checkbox"/> Take the children to
school/daycare |
- Other (please specify) _____

14. Generally, how often do you usually go out? (Please check only one)

- | | | |
|---|---|---|
| <input type="checkbox"/> every day | <input type="checkbox"/> several times a month | <input type="checkbox"/> a few times a year |
| <input type="checkbox"/> several times a week | <input type="checkbox"/> once a month | <input type="checkbox"/> never |
| <input type="checkbox"/> once a week | <input type="checkbox"/> less than once a month | |

15. Have you had any of your joints replaced in the last six months?

- Yes No

If yes, please check which joint(s):

- Knee: Right Hip: Right
Left Left

Other joint(s) (please specify) _____

Thank You!