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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# TABLE OF CONTENTS

EXECUTIVE SUMMARY ................................................................. 1

INTRODUCTION ................................................................................. 1

METHODS ......................................................................................... 1

1. Procedure .................................................................................. 1
2. The Questionnaire ...................................................................... 2
3. Analysis ..................................................................................... 2

RESULTS ............................................................................................. 3

1. Characteristics of Clients .......................................................... 3
   a. Services received .................................................................... 3
   b. Demographic characteristics .................................................. 4
   c. Diagnosis ................................................................................ 5
2. Level of Disability ........................................................................ 6
   a. Disability Scores (Health Assessment Questionnaire) .......... 6
3. Mobility ....................................................................................... 7
4. Therapists’ Assessment of Suitability for Groups ................. 8

DISCUSSION .................................................................................... 10

Appendix A THE ARTHRITIS SOCIETY CONSULTATION AND THERAPY
   SERVICE CLIENT SURVEY
LIST OF TABLES AND FIGURES

Table 2.1  DEMOGRAPHIC CHARACTERISTICS OF CLIENTS

Figure 1.1 QUESTIONNAIRES RETURNED BY SERVICE
Figure 1.2 MOST FREQUENTLY REPORTED DIAGNOSES
Figure 2.1 LEVEL OF DISABILITY-FUNCTIONAL DIFFICULTIES
Figure 2.2 LEVEL OF DISABILITY-FUNCTIONAL ACTIVITIES REQUIRING ASSISTANCE FROM ANOTHER PERSON
Figure 3.1 INDEPENDENT MOBILITY
Figure 3.2 FREQUENCY OF OUTINGS
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). 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. 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

![Pie chart showing services: Physiotherapy 61%, Social Work 5%, Group 6%, Occupational Therapy 15%, Hydrotherapy 13%]

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 consulates 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) |

<table>
<thead>
<tr>
<th><strong>Employment Status</strong></th>
<th>Employed:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full-time</td>
<td>20 (9.4%)</td>
</tr>
<tr>
<td></td>
<td>Part-time</td>
<td>14 (6.6%)</td>
</tr>
<tr>
<td></td>
<td>Self-employed</td>
<td>4 (1.9%)</td>
</tr>
<tr>
<td><strong>Not Employed:</strong></td>
<td>Retired/Voluntarily not working</td>
<td>50 (23.5%)</td>
</tr>
<tr>
<td></td>
<td>Homemaking</td>
<td>56 (26.3%)</td>
</tr>
<tr>
<td></td>
<td>LTD</td>
<td>13 (6.1%)</td>
</tr>
<tr>
<td></td>
<td>Other*</td>
<td>27 (12.7%)</td>
</tr>
</tbody>
</table>

*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).
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.
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
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.

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 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.

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.
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

<table>
<thead>
<tr>
<th>Percent of Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; once a week</td>
</tr>
<tr>
<td>79.4</td>
</tr>
<tr>
<td>Once weekly/several times monthly</td>
</tr>
<tr>
<td>14.5</td>
</tr>
<tr>
<td>Once monthly or less</td>
</tr>
<tr>
<td>5.2</td>
</tr>
</tbody>
</table>
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.


APPENDIX A:
The Arthritis Society Consultation and Therapy Service

CLIENT SURVEY

Dear Client:

We are asking all people seen by the Arthritis Society Consultation and Therapy Service to complete a Client Survey during the month of May. This information will help us identify the needs of all people with arthritis and help us plan for future services and programs. Make sure that you complete all 5 pages. All information given in this survey will be kept confidential and will not affect your current treatment. If you have any questions, please call Lyn Maguire or Linda Rothman at 416-926-5156.

CLIENT NAME ____________________________ Date of Birth ___/___/____ SEX: □ M □ F
First Surname
(please print) dd/ mm/ yy

1. Please check (✓) the main kind(s) of arthritis that you have.

☐ Rheumatoid Arthritis
☐ Osteoarthritis/Degenerative Arthritis
☐ Scleroderma
☐ Reiter's Syndrome
☐ Tendonitis/Bursitis
☐ Systemic Lupus Erythematosus
☐ Other ____________________________
☐ Fibromyalgia
☐ Gout
☐ Psoriatic Arthritis
☐ Low Back Pain
☐ Osteoporosis
☐ Ankylosing Spondylitis
☐ Don't Know

Therapist Only

Completed by:
☐ Client independently
☐ Therapist assisted
☐ Other assistance
Consult Only ☐ yes ☐ no
New Referral ☐ yes ☐ no
Today's Date ___/___/____ dd/ mm/ yy
Therapist Name ________________________________
Region ________________________________
Date of Opening ___/___/____ dd/ mm/ yy

For future programs: Suitable for clinics/groups ☐ yes ☐ no
2. Please check the **one** response which best describes your *usual* abilities OVER THE PAST WEEK:

<table>
<thead>
<tr>
<th></th>
<th>Without Any Difficulty</th>
<th>With Some Difficulty</th>
<th>With Much Difficulty</th>
<th>Unable To Do</th>
</tr>
</thead>
</table>

**DRESSING AND GROOMING**

Are you able to:
- Dress yourself, including tying shoelaces and doing buttons ...........................................
- Shampoo your hair ...........................................

**ARISING**

Are you able to:
- Stand up from an armless straight chair ............
- Get in and out of bed ......................................

**EATING**

Are you able to:
- Cut your meat ..............................................
- Lift a full cup or glass to your mouth ..............
- Open a new milk carton ...................................

**WALKING**

Are you able to:
- Walk outdoors on flat ground .........................
- Climb up five steps .....................................

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

- Cane
- Walker
- Built up or Special Utensils
- Crutches
- Special or Built Up Chair
- Wheelchair
- Devices used for dressing (button hook, zipper pull, long-handed shoe horn etc.)

Other (Please Specify) ........................................................................................................................................

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

- Eating
- Dressing and Grooming
- Arising
- Walking
5. Please check the one response which best describes your usual abilities OVER THE PAST WEEK:

<table>
<thead>
<tr>
<th>HYGIENE</th>
<th>Without Any Difficulty</th>
<th>With Some Difficulty</th>
<th>With Much Difficulty</th>
<th>Unable To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you able to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wash and dry your entire body</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Take a tub bath</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Get on and off the toilet</td>
<td></td>
<td></td>
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</table>

| 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)

<table>
<thead>
<tr>
<th>None</th>
<th>Moderate</th>
<th>Extreme</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

- Move from room to room □ Yes □ No
- Go out of your home □ Yes □ No
- Leave the immediate surroundings of your home (yard, sidewalk) □ Yes □ No
- Move to another floor in your home □ Yes □ No → □ 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 □ Yes □ No
- Go out of your home □ Yes □ No
- Leave the immediate surroundings of your home (yard, sidewalk) □ Yes □ No
- Move to another floor in your home □ Yes □ No → □ Does not apply

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

□ Yes □ 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)

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

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

- □ every day
- □ several times a week
- □ once a week
- □ several times a month
- □ once a month
- □ less than once a month
- □ a few times a year
- □ never

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 □
  - Left □

- Hip:
  - Right □
  - Left □

- □ Other joint(s) (please specify) ________________________________

Thank You!