

**Evaluation of the Primary Therapist Model of Service Delivery
as Implemented by The Arthritis Society, Consultation and
Rehabilitation Service
Phase I: Therapist Survey**

Prepared by

**Sydney C Lineker
Hazel Wood
Elizabeth M Badley
Leta Stegne
Annette Wilkins**



**The Arthritis Community Research and Evaluation Unit
The Arthritis and Immune Disorder Research Centre
The Toronto Hospital**

September 1998

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	<i>i</i>
LIST OF TABLES AND APPENDICES	<i>iii</i>
INTRODUCTION	1
Arthritis in the Population	1
The Primary Therapist Model	2
PRESENT STATE OF KNOWLEDGE	2
BARRIERS TO THE IMPLEMENTATION OF THE PRIMARY THERAPIST MODEL	2
OBJECTIVES	2
RESEARCH DESIGN	3
ANALYSIS	3
RESULTS	3
DISCUSSION	8
CONCLUSIONS	9
REFERENCES	10

LIST OF TABLES AND APPENDICES

- Table 1: Therapist and Practice Characteristics
- Table 2: Questionnaire Results for the Province, by Dicipline (PT/OT only) and office type: % with selected responses to each question
- Table 3: Correlations of therapist confidence (Question 2)
- Appendix 1: Consultation and Rehabilitation Service Office Locations
- Appendix 2: Consultation and Rehabilitation Service Organizational Chart
- Appendix 3: Primary Therapist Model Staff Survey

Introduction

Arthritis in the Population

Arthritis and rheumatism affects over 1.4 million people in Ontario. Musculoskeletal conditions including arthritis and rheumatism are the leading causes of chronic health problems, long-term disabilities and consultations with a health professional and rank second for restricted activity days and use of both prescription and non-prescription drugs in the Ontario population¹⁻⁴. Two and a half percent of the Ontario population report long-term disability due to arthritis and rheumatism⁴. It is estimated that arthritis disability will almost double by the year 2020. This implies a 3% growth per annum in the number of people requiring care⁵. Comprehensive management for this population includes occupational and physical therapy. There is evidence in the literature to suggest that these services improve outcomes for people with arthritis⁶⁻¹².

The Arthritis Society, Consultation and Rehabilitation Service (CARS) is a community based service providing occupational and physical therapy and social work services to clients of all ages with arthritis. Service is organized by regions which align with the District Health Council (DHC) planning regions. Staff in each region are supervised by a regional director (see Appendix 1: Office Locations and Appendix 2: Organizational Chart). This service is funded by the Ontario Ministry of Health. Therapists work out of 23 offices across Ontario and in 1996/97, provided direct service to over 6,000 clients with arthritis in the home, group, clinic, workplace or school settings.

Until recently, like many other agencies, this service was structured to provide discipline-specific care. Occupational therapists (OTs) and physical therapists (PTs) each required a separate referral and assessment and provided a defined range of treatments. This model of service delivery may result in lack of continuity of care and be intrusive and confusing to the client and may lead to the duplication of services. As well, the current health care environment demands that therapists increase their efficiency in order to extend their coverage and reach more people. Shifting to the primary therapist model was one strategy implemented by The Arthritis Society, Consultation and Rehabilitation Service (CARS) (previously the Consultation and Therapy Service) to address these issues.

The Primary Therapist Model

In April, 1994, the CARS initiated the use of the primary therapist model for the assessment and management of clients, believing this model to be more efficient (less duplication of services, reduced travel and recording time) and more acceptable to clients (less intrusive). The primary therapist model was defined as a model in which "assessment, treatment and case-management (physical, functional and psychosocial) is provided by a multi-skilled therapist in consultation with, or with referral to peers or other services as necessary". The first therapist available, regardless of the service requested, became the primary therapist or service coordinator. Some components of this model were already in place. Since 1976, all CARS therapists whether OTs or PTs, receive the same specialized training in the assessment of polyarthritis as part of their orientation⁶. The core assessment and charting requirements are the same for both disciplines. In 1994, the CARS made organizational and administrative

changes to further develop this model of service delivery. Enhancing the skills of therapists in each discipline supported the shift to this new model. This enabled the therapists to use each other in a consultative fashion rather than transferring the client to another therapist for completion of the program.

The literature refers to this model using a variety of terms; generic therapists, multi-skilled or cross-trained workers and interdisciplinary teams.

PRESENT STATE OF KNOWLEDGE

A review of the literature did not identify any studies that systematically evaluated the impact of the use of primary care therapists, multi-skilled or generic health-care workers. However, a study by Principi et al¹⁴ described a generic model of service delivery in an inpatient geriatric assessment unit. The complete geriatric assessment was completed by a single team member. The authors reported that over time, this model resulted in multi-skilled staff and the discarding of role delineations. Case managers were able to manage most cases alone and only sought professional expertise for special patient needs they felt that they were unable to address. They noted that patients, especially the elderly, coped best when communicating with one person. They also noted that this model resulted in a decrease in time taken to complete the baseline assessment and no overlap in assessment procedures. However, this model requires that the therapists act as consultants and not all therapists are confident in this role. Lysack et al¹⁵ surveyed 200 Ontario OTs regarding their role in the community and the educational preparation

they received for this role. Eighty-five percent of the respondents described their role as consultants, yet only 21% said they were adequately prepared for this role.

Marshall¹⁶ described the process undertaken at Sunnybrook Health Sciences Centre, Toronto, Canada, to broaden the scope of practice of their service workers and amalgamate six service positions into one service assistant position. The authors noted that anecdotally, patients reported an increase in attention and service provided and that service assistants reported enhanced opportunities to interact with patients, an increased challenge in their job and a better working environment.

BARRIERS TO THE IMPLEMENTATION OF THE PRIMARY THERAPIST MODEL

Feedback from CARS staff and regional directors in 1996 indicated that the primary therapist model had not been fully implemented across Ontario. This was due in part to different staffing and administrative procedures in each office. As well, some staff reported a lack of confidence in this role and expressed concerns about the other discipline's ability to safely meet the needs of clients or that some of the clients' needs would not be addressed at all. If therapists fail to change their way of practice then potential efficiencies of this model will not be realized. This study was undertaken as the first phase in the evaluation of the primary therapist model as implemented by the CARS.

Objective 1: To identify the strengths and weaknesses of the primary therapist model

from the therapists' perspectives.

Objective 2: To identify factors which influence therapists' confidence in their role as a primary therapist.

Objective 3: To make recommendations for future CARS staff development.

RESEARCH DESIGN

A questionnaire (Appendix 3), developed with therapist input and pre-tested on non-CARS OTs and PTs, was sent to all CARS OTs, PTs and social workers (SWs) in December 1996. The questionnaire included 18 questions which asked about the therapists' understanding of and confidence in their role as primary therapists and consultants, job satisfaction, their perceptions about their preparation for this expanded role and its impact on the efficiency and quality of client care, the training and support they received to work in this model and recommendations and suggestions for additional training. Demographic information included undergraduate and post-graduate training, number of years since graduation, number of years in rheumatology, and the number of years employed by CARS or in home care. Information about their current practice was also included (geographical area, single or multiple service office, availability of other health professionals for consultation).

ANALYSIS

Results are presented using descriptive statistics (proportions and means). Pearson's Correlation Coefficients were used to correlate therapist confidence in the primary therapist model with practice and therapist characteristics. Results are presented for the

province as a whole and also by discipline and type of office (single versus multiple services). Missing and not applicable values are excluded from the analyses.

RESULTS

Forty-eight therapists from 21 therapy offices and representing the 5 DHC regions in Ontario returned questionnaires for an overall response rate of 92%. Therapist and practice characteristics are presented in Table 1. The majority of the staff were PTs working out of offices providing multiple services (i.e. with staff of more than one discipline). The majority of therapists had undergraduate training at the Bachelor's level (56%) or were combined trained with a diploma in physical and occupational therapy (31%). Overall, staff had been practising for an average of 20.7 years (min,max: 2,42). They reported an average of 11.9 (min,max: 0,36) years experience in rheumatology, 1.8 (min,max:0,20) years experience in home care (other than with CARS) and 10.0 (min,max:0,34) years service with CARS. Most staff indicated that they had at least some access to other disciplines for consultation within CARS (96%) and in their regions (94%).

The primary therapist model applies primarily to CARS OTs and PTs; the same expectations do not apply to the social workers, therefore they have been deleted from the following analyses. Table 2 presents the survey responses for the province, by discipline and type of office.

Table 1: Therapist and Practice Characteristics (n=48)

Office Type (%)	
Multiple service	77
Single service	23
Discipline (%)	
PT	69
OT	21
SW	10
Level of Training (%)	
BSCOT/PT or BSW	56
DipPOT	31
MSW/Other	13
Practice characteristics (mean # years)	
overall	20.7 (10.40)
in rheumatology	11.9 (9.2)
with home care (other than CARS)	1.8 (3.5)
with CARS	10.0 (8.4)
Access to other disciplines for consultation within CARS (%)	
not at all	4
some	94
ideal	2
Access to other disciplines for consultation within the region (%)	
not at all	2
some	60
ideal	31
N/A/missing	6

Therapists were asked how satisfied they were with their current clinical responsibilities or scope of practice. Overall job satisfaction was high with 81% of the therapists reporting that they were satisfied with clinical responsibilities. This varied by discipline with more PTs reporting that they were satisfied (88%) than OTs (60%). Most therapists were confident in their role as a consultant to other health professionals (88%).

Table 2: Questionnaire Results for the Province, by Discipline (PT/OT only) and office type: % with selected responses to each question

Question (Question #)	Province (n=43) %	PT (n=33) %	OT (n=10) %	Single Service Office (n=12) %	Multiple Service Office (n=31) %
Feel satisfied with clinical responsibilities (Q6)	81	88	60	83	81
Confident in consultant role (Q10c)	88	91	80	83	90
Understand role (Q1)	95	97	90	92	97
Feel confident in primary therapist role (Q2)	78**	84*	56*	73*	80*
Easy transition (Q3)	59#	70#	33*	71#	56#
Management support (Q16)					
none	8#	7#	10	9*	7#
some	92	93	90	81	93
Increased need for support (Q14) from:					
peer group	53#	41#	89*	44***	56#
director	32#	24#	56*	44***	28#
professional body	6#	0#	29***	0***	9#
regulatory body	3#	0#	14***	0***	5#
Undergraduate preparation (Q7)					
not at all	27**	29**	20	18*	30*
some	73	71	80	82	70
Changed practice (Q4)					
no change	34**	45**	0	55*	27*
some	66	55	100	45	73
Model overall (Q11)					
positive	74*	78*	60	82*	71
negative	7	3	20	0	10
undecided	19	19	20	18	19
Client care (Q12)					
improved	41#	36#	56*	56***	36#
worse	15	8	33	0	20
undecided	44	56	11	44	44
Efficiency (Q13)					
increased	55#	55#	56*	24#	65#
decreased	23	14	44	38	17
undecided	23	32	0	38	18
Preferred model (Q15):					
therapist provides all services	18***	20***	10	33***	13
therapist assesses and brings in others as needed	78	77	80	56	84
both	5	3	10	11	3

*one missing or not applicable (NA) ***three missing or NA **two missing or NA # >three missing or NA

Table 3: Correlations of therapist confidence (Question 2) (n=43):

	r	p value
Understanding of the role	.49	.000
Undergraduate preparation	.38	.08
Overall feeling about model	.38	.34
Years with CARS	.43	.003
Satisfaction with clinical role	.34	.015
Access to other disciplines within CARS	-.16	.320
Access to other disciplines regionally	-.21	.199
Ease of transition	.53	.001
Need for support (peer)	-.46	.003
Need for support (director)	-.53	.001
Impact on client care	.26	.070
Impact on efficiency	.35	.026

Most therapists (95%) understood their role as a primary therapist. Nine therapists (22%) indicated that they were not confident in this role. Confidence varied by discipline with more PTs reporting that they were confident in their role (84%) than OTs (56%). Therapists with a diploma in physical and occupational therapy (n=14) were significantly more confident than those with a BSc (n=27) (p=.01). Confidence in the primary therapist role correlated positively with therapist understanding of the primary therapist role, their undergraduate preparation, their overall feeling about the model, the number of years with CARS and their satisfaction with their clinical responsibilities in general (Table 3). Just over half of the therapists reported that the transition to a primary therapist model of care was easy (59%). Ease of transition varied by discipline and type of office. The majority of PTs reported an easy transition to the primary therapist role (70%) while only one third of OTs found the transition to be easy. Seventy-one percent of therapists in single service offices and 56% of those in multiple

service offices felt the transition was easy. Ease of transition correlated positively with confidence in the primary therapist role (Table 3). Most therapists indicated that they had received at least some management support during this transition (92%). Many therapists, particularly the OTs, indicated that they felt a need for more support from peers and/or their director as a result of the change to this model. In single service offices, more therapists indicated a need for support from their director. In multi service offices, more therapists indicated a need for more support from their peers. Need for support from their peers and their director was negatively correlated with their confidence in their role as a primary therapist (Table 3).

Therapists were asked to what degree their undergraduate education had prepared them to work in the primary therapist model. A majority of therapists (73%) indicated that they had received at least some preparation for this role, however, 27% of the therapists reported they had received no undergraduate

preparation for this role.

In an open-ended question, therapists were asked what had helped them make the transition to the primary therapist model. Therapists identified their previous work experiences, (on a rheumatic disease unit (RDU) or in a rehabilitation facility, with Home Care or Public Health, or experience in orthopaedics or geriatrics); working with therapists of other disciplines; and courses or workshops (adult education, geriatrics, splinting, orthotics). Other therapists mentioned being versatile, working with clients, role models and case conferences helped them make the transition to this role.

Therapists were asked what specific *CARS training/education* had been helpful. They mentioned inservice education and staff meetings, work in a single service office, experience, splinting and orthotics workshops, meeting with other CARS staff and networking, The Arthritis Society training program, one on one sessions and consults with other disciplines, courses and conferences, CARS orientation and journal articles or reading.

Therapists were asked how much they had changed their practice as a result of the primary therapist model. Two thirds of the therapists indicated that they had changed their practice in some way. This varied by discipline (PTs - 55%, OTs -100%) and type of office with more therapists in multiple service offices indicating that they had changed their practice. In response to an open-ended question about how their practice had changed, therapists mentioned that they thought the model was more holistic with a broader scope; they had learned new skills and increased their knowledge; there was less duplication; there were fewer or more

appropriate internal referrals; they were more aware of environmental and psychosocial issues; they did more group work; they had time for other activities; they had more autonomy; they provided more consultation and they referred more to other agencies. On the negative side, therapists reported that there was extra work (longer time with each client); they received less support from colleagues resulting in a feeling of being overwhelmed; that treatment was watered down; that they weren't able to practice their specialized skills and that they were not comfortable with the added responsibility.

Overall, 74% of therapists felt positive about the primary therapist model, in particular, PTs and those working in single service offices. Many staff, particularly PTs, were undecided about the impact of the model on the quality of client care (44%) and their ability to work efficiently(23%). Feelings about the model overall and its impact on therapist efficiency were correlated with therapist confidence in the role as primary therapist (Table 3).

Therapists were asked which type of primary therapist model they preferred. Most therapists (78%), particularly those who worked in a multiple service office, preferred a model where the primary therapist assessed and then brought in other disciplines as needed.

Therapists were asked what additional education would help them in their role as a primary therapist. Responses included recommendations for opportunities to interact with other disciplines (advanced inservice education, internships, consults, one on one time with other disciplines, case conferences, job shadowing). Specific requests from OTs related to modalities, shoulder and lower extremity assessment and management, and exercise. PT requests related to splinting,

orthotics, psychosocial issues and workplace assessments.

DISCUSSION

This study identified some of the strengths and weaknesses of the primary therapist model of service delivery as implemented by one agency, The Arthritis Society, Consultation and Rehabilitation Service. From the therapists' perspectives, the strengths of the model included a more holistic approach to client care, an opportunity to expand therapists' skills, less duplication of services to the client, and more appropriate referrals to other health professionals or community agencies. Weaknesses of the model appeared to relate to therapists' lack of comfort with the increased responsibility, their concern about treatment being "watered down" and being more isolated from their colleagues. There were some concerns expressed about how this model might effect the quality of client care and therapist efficiency and some therapists were still undecided about the model. This suggests that more time and training may be needed for staff to adjust to their expanded roles.

The work environment appeared to be an important factor influencing therapist confidence in the primary therapist role. Confidence correlated with the number of years of experience with CARS, suggesting that on the job training and experience with CARS can help develop confidence in this area. Qualitative responses suggested that other similar work environments (in RDUs, rehabilitation, home care and public health) also helped prepare therapists to work in this model. These results may influence hiring practices by helping CARS and other employers identify therapists who potentially

could work confidently in a primary therapist role. Particularly in under serviced areas, the primary therapist model could be an important strategy in delivering comprehensive care.

Fewer OTs than PTs were confident in the primary therapist role and all OTs reported changing their practice when this model was implemented compared to 55% of the PTs. This may be because most CARS OTs worked in multiple service offices or because there were differences in the types of skills the therapists were required to learn e.g. exercise prescription for OTs versus splinting and orthotics for PTs.

Undergraduate preparation for this role also appeared to be an issue. Over one quarter of the therapists indicated that they had received no training to work in this model at the undergraduate level and confidence in the primary therapist role was correlated with therapist perception of their undergraduate training in this area. Undergraduate/graduate training programs for OTs and PTs continue to train students for traditional roles in hospitals¹⁷ and only recently have tried to address the need for therapists trained to work in community settings. Although on-the-job training is the most common method of training multi skilled workers, it is not clear whether this is the most appropriate method¹⁸. Should training take place at the undergraduate/graduate level or as add-on skills for practising clinicians? The results of this study suggest that there may be potential for identifying and developing cross disciplinary skill sets for OTs and PTs working in a community setting, some of which could be taught in the undergraduate programs as basic to all therapists (e.g. use of community resources, identification of psychosocial issues) and some which may be more appropriately taught by employers, e.g.

splinting for arthritis. This was supported by the fact that therapists with a diploma in PT and OT combined were more confident than those with a BSc in either discipline. As suggested by Foto¹⁹, identification of a common set of OT/PT skills offers potential to develop a core curriculum for OTs and PTs at the undergraduate/graduate level.

These results identified some of the needs of therapists working in community settings and suggested methods to support staff by offering or supporting appropriate methods for continuing health education. In particular, therapists recommended more opportunities to learn from the other disciplines and specific training in skills traditionally thought to be outside their scope of practice e.g. splinting for PTs and exercise and modalities for OTs. Taylor et al note that in the current health care environment, therapists need to re-examine their role and scope of practice²⁰. They define scope of practice as "the universal foundation of practice". They remind us that scope of practice is separate and distinct from the services delivered, however, the services or intervention must be based on the scope of practice or theoretical foundation of the specific discipline²⁰. Some discussion of these issues may help therapists better understand the primary therapist role and increase their comfort level with that role.

The primary therapist model currently used by the CARS may serve as a model for other facilities providing community care and help administrators identify potential within their facility for implementing a similar model. This study identified some of the potential barriers to implementing this model in other settings, including lack of a supportive environment. Principi et al¹⁴ noted that in a facility working under a traditional medical model, institutional policies and procedures

may need to be revised in order to facilitate an expanded role for therapists.

Further discussion around additional on-site training of therapists is required. There was variation in needs and recommendations made, suggesting that training may need to be offered regionally for some topics and by discipline or individually for others.

CONCLUSIONS

Further work needs to be done to more fully describe the CARS expectations around this model of care i.e what are the common assessment and management skills for PTs and OTs in this setting and to identify appropriate training strategies to enhance the primary therapist model. Concerns about quality of client care and the efficiency of this model need to be explored further. As a result of this study, some training has already taken place around the assessment and management of osteoarthritis, workplace assessment, splinting and orthotics. Since some staff were undecided about the benefits of this model at the time of the survey, we will repeat this survey to evaluate whether this training or time working in the new model has had any impact on therapists' perceptions.

REFERENCES

- 1 Badley EM. The impact of disabling arthritis. *Arthritis Care and Research* 1995;8:4;221-8.
- 2 Badley EM, Yoshida K, Webster GK, Stephens M. Disablement and chronic health problems in Ontario; Ontario Health Survey, Working Paper No. 5, 1990.
- 3 Badley EM, Rasooly I, Webster GK. Relative importance of musculoskeletal disorders as a cause of chronic health problems, disability, and health care utilization: findings from the 1990 Ontario Health Survey. *J Rheumatol* 21:505-14, 1994.
- 4 Badley EM, Webster GK, Rasooly I. The impact of musculoskeletal disorders in the population: are they just aches and pains? findings from the 1990 Ontario Health Survey. *J Rheumatol* 22:733- 9,1995.
- 5 Badley EM, Crotty M. An international comparison of the estimated effect of the aging of the population on the major cause of disablement, musculoskeletal disorders. *J Rheumatol* 22:1934-40, 1995.
- 6 Bell MJ, Lineker SC, Wilkins AL, Goldsmith CH, Badley EM. A randomized controlled trial to evaluate the efficacy of community based physical therapy in the treatment of people with rheumatoid arthritis. *J Rheumatology* 25;231-7,1998.
- 7 College of Physiotherapists of Ontario (1998). Draft report: Results of rheumatoid arthritis practice review pilot project: 1997-98. College of Physiotherapists of Ontario.
- 8 Glazier R. Managing early presentation of rheumatoid arthritis: systematic overview. *Can Fam Physician* 1996;42,914-22.
- 9 Helewa A, Smythe HA, Goldsmith CH. Can specially trained physiotherapists improve the care of patients with rheumatoid arthritis? A randomized controlled trial. *J Rheumatology* 1993;21:70-9.
- 10 Helewa A, Goldsmith DH, Lee P, Bombardier C, Hanes B, Smythe HA, Tugwell P. Effects of occupational therapy home service on patients with rheumatoid arthritis. *Lancet* 1991;337:1453-1456.
- 11 Elsbett-Koeppen R, Badley EM. Nonpharmacological treatment modalities in the treatment of arthritis: patient education, exercise and social support. ACREU working paper 98-4, 1998.

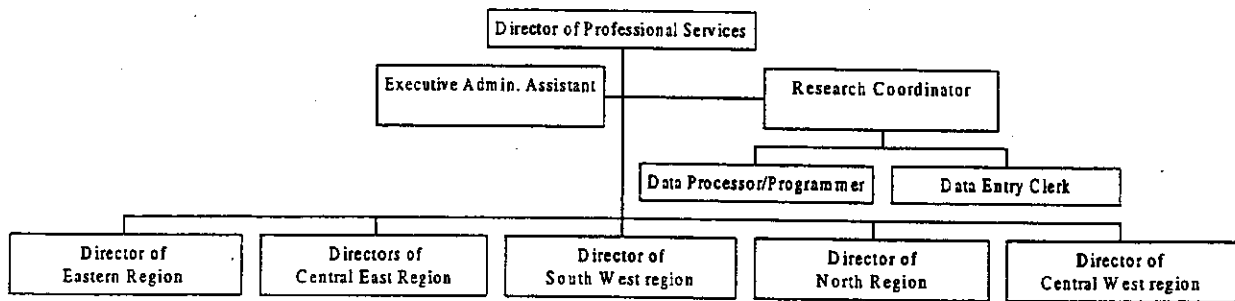
- 12 Helewa A, Smythe HA, Goldsmith CH, Groh J, Thomas MC, Stokes BA, Sugarman J. The Total Assessment of Rheumatoid Polyarthritis - evaluation of a training program for physiotherapists and occupational therapists. *J Rheumatol* 14,87-92, 1987.
- 13 Bell M, McConnell S, Thorne C, Badley EM & the CRA OA and Exercise Guideline Subgroup. A critical appraisal of the efficacy of exercise in the treatment of osteoarthritis. Submitted for publication, 1998.
- 14 Principi E, Lever J, Vertesi A, Molloy DW, Tuttle IM. Use of multiskilled assessors on an interdisciplinary geriatric team. *Physiotherapy Canada* 48:2:127-30, 1996.
- 15 Lysack C, Stadnyk R, Paterson M, Macleod K, Krefting L. Professional expertise of occupational therapist in community practice: results of an Ontario survey. *CJOT* 623,123-47, 1995.
- 16 Marshall K. Multi skilling - re-engineering work process. *Health care Management FORUM* 8:2:32-36, 1995.
- 17 Billey V. Multi skilling and the allied health workforce. *Can J Med Tech* 57:178-9, 1995.
- 18 The Challenges and Opportunities of multiskilling in health care. Report for the 53rd annual general meeting of the Canadian Association of Medical Radiation Technologists. *Can J Med Rad Tech* 26:3,100-7, 1995.
- 19 Foto M. Multi skilling: who, how, when, and why? *AJOT* 50:1:7-9, 1996.
- 20 Taylor JS, McGlynn-Vittori M, Ellerton C. A conceptual role-shift model: shaping and defining future physical therapy in hospital settings. *Physiotherapy Canada Summer* 1997,171-177.

Consultation and Rehabilitation Service Office Locations



District Health Regions	
A	Eastern Region
B	Central East Region
C	Central West Region
D	South West Region
E	North Region

Consultation and Rehabilitation Service Organizational Chart



3. Did you feel that your transition into the Primary Therapist Model was:

① ② ③ ④ ⑤ N/A
Very Difficult Very Easy

If N/A, please explain: _____

Comments: _____

4. To what degree do you feel the Primary Therapist Model has changed the way you practice:

① ② ③ ④ ⑤
No Change Great Change

Comments: _____

5. In what ways have you modified your practice (e.g. increased scope, learned new skills, fewer intra-office referrals):

