Arthritis Extended-Role Practitioners: Impact on Community Practice (An Exploratory Study)

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ABSTRACT

Purpose: We compared practice of extended role practitioners and experienced therapists without extended practice training to determine differences in assessment and management of clients with inflammatory arthritis, in preparation for a randomized controlled trial.

Methods: Retrospective review of randomly selected charts of extended-role trained occupational therapists or physiotherapists and from experienced therapists matched on therapist discipline, geographical location, and time of referral. Three trained reviewers used standardized forms to extract data independently.

Results: We reviewed 58 charts of adult clients with inflammatory arthritis. Compared with experienced therapists, extended-role practitioners were more likely to receive referrals specifically for assessments (52% vs. 14%); to treat clients with undifferentiated arthritis (48% vs. 10%); to document comorbidities (90% vs. 66%); to advocate on behalf of the client with the client's family, physician, or specialist (52% vs. 21%); to recommend or provide exercise or physical activity (86% vs. 62%); to educate clients about pain management (41% vs. 28%), energy conservation (24% vs. 14%), and posture (21% vs. 7%); to recommend splints (41% vs. 31%); and to refer for or recommend radiologic or laboratory assessments (14% vs. 3%). Experienced therapists were more likely to provide education about joint protection (41% vs. 31%), community resources (31% vs. 7%), and assistive devices (45% vs. 21%).

Conclusions: We identified possible differences in practice between extended-role practitioners and experienced therapists without training for extended practice. Capturing these details in future studies evaluating the efficacy of extended role practitioner interventions will be important.

Key Words: arthritis; health manpower; education; professional; role; occupational therapy.

RÉSUMÉ

Objectif : Comparer la pratique des ergothérapeutes et des physiothérapeutes à responsabilités étendues à celle de thérapeutes d'expérience sans formation pour assumer des responsabilités étendues (les « thérapeutes d'expérience ») en vue d'établir les différences dans l'évaluation et la gestion de clients aux prises avec de l'arthrite inflammatoire, en vue d'une étude randomisée contrôlée.

Méthode : Examen rétrospectif de dossiers choisis au hasard provenant d'ergothérapeutes et de physiothérapeutes d'expérience à responsabilités étendues et de dossiers de thérapeutes d'expérience, jumelés en fonction de la discipline, de l'emplacement géographique et du moment où les patients ont été dirigés vers ces professionnels. Trois réviseurs formés à cet effet ont utilisé des formulaires normalisés pour l'extraction indépendante des données.

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Competing Interests: Sydney C. Lineker is director of research for The Arthritis Society. Katie London is the coordinator of the Advanced Clinician Practitioner in Arthritis Care (ACPAC) Program, St. Michael's Hospital. Rachel Shupak is the director of the ACPAC Program. Rayfel Schneider is head of the Pediatric Training Program for the ACPAC Program. This project was funded by a grant from the Arthritis Health Professions Association and The Arthritis Society.

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Résultats : Au total, 58 dossiers de patients adultes avec arthrite inflammatoire ont été examinés. Comparativement aux thérapeutes d'expérience, plus de clients étaient dirigés vers des professionnels à responsabilités étendues pour des évaluations (52 % comparativement à 14 %); pour traiter les clients atteints d'arthrite indifférenciée (48 % comparativement à 10 %); pour documenter des comorbidités (90 % comparativement à 66 %); pour prendre position au nom du client auprès de sa famille, d'un médecin ou d'un spécialiste (52 % comparativement à 21 %); pour recommander ou prescrire des exercices ou de l'activité physique (86 % comparativement à 62 %); pour éduquer les clients sur la gestion de la douleur (41 % comparativement à 28 %), sur les façons de conserver leur énergie (24 % comparativement à 14 %) et leur posture (21 % comparativement à 7 %); à recommander des orthèses (41 % comparativement à 31 %); et pour demander des examens en radiologie ou en laboratoire (14 % comparativement à 3 %). Les thérapeutes d'expérience avaient plus de probabilités de renseigner les patients sur la protection des articulations (41 % comparativement à 31 %), sur les ressources communautaires (31 % comparativement à 7 %) et sur les appareils d'assistance (45 % vs 21 %).

Conclusions : Cette étude a cerné les différences possibles dans la pratique des professionnels à responsabilités étendues et des thérapeutes d'expérience sans formation pour des responsabilités étendues. Il sera important de tenir compte de ces détails lors d'études futures visant à évaluer l'efficacité des interventions des professionnels à responsabilités étendues.

A well-recognized decline in the number of arthritis care specialists (rheumatologists) and falling enrolment in rheumatology training programmes in Canada has substantially reduced the human resources available to care for clients with chronic musculoskeletal diseases.¹ The impact of this decline has been felt most severely in remote or under-serviced areas.² Also, geographic variation in the provision of rheumatology services across Ontario and no growth in service provision for adults with rheumatic diseases is ongoing.³ With the concomitant increase in the prevalence of arthritis and related conditions in the population,⁴ this disparity in supply and demand for arthritis care will continue to lead to difficulties in access to care, early diagnosis, and effective interventions. Clearly, leading change in this area will require a large-scale transformation in modes of service delivery and related educational initiatives to support these changes.

In the past two decades, new models of arthritis care have been successfully developed by incorporating extended practice roles for physiotherapists and occupational therapists.^{5–8} These initiatives have resulted in better patient education,⁹ improved management and efficiency,^{10–14} and high levels of patient satisfaction.^{6,15} The Advanced Clinician Practitioner in Arthritis Care (ACPAC) Program is an intensive extended practice academic–clinical training programme delivered over 10 months (1 week per month) through the University of Toronto's Faculty of Medicine, hosted by St. Michael's Hospital and the Hospital for Sick Children in Toronto.¹⁶ It involves more than 80 academic–clinical faculty, with clinical placements offered at 10 academic health care institutions across the greater Toronto area, and extends to adults the model of extended practice practitioner training in paediatric rheumatology that was developed in 1995 at the Hospital for Sick Children.^{5,6} The ACPAC Program was developed to promote an inter-professional approach to arthritis management and to improve access to care for patients across Ontario by providing advanced arthritis training to experienced occupational therapists and physiotherapists.^{16,17} Therapists acquire advanced skills in assessment, diagnosis, triage, and independent

management of selected musculoskeletal and arthritic disorders. The programme has completed its fourth year of operation, with 37 graduates as of June 2011.

A recent report¹⁸ from the Arthritis Community Research and Evaluation Unit (ACREU) concluded that evidence from process and outcome evaluation is critical to understanding and supporting the successful implementation and evolution of practice roles and models of care. The use of occupational therapists and physiotherapists in extended practice roles in arthritis and musculoskeletal care is rapidly evolving in Ontario, and extensive system-level evaluation of this new human health care resource is needed. ACREU's workshop Meeting the Challenge of Arthritis: Think Tank on Extended Roles for Rehabilitation Professionals,¹⁹ aimed at furthering the research agenda for new models of arthritis care using rehabilitation therapists in extended roles, identified several research priorities, including measuring the impact and value-added components of care provided. Graduates of the ACPAC Program have undergone extensive evaluations that have demonstrated satisfaction with their training, its relevance to their practices, their competency as measured by theoretical and clinical skills examination, and early changes reported in their respective clinical practices.^{8,17} Although these evaluations have demonstrated therapist competency and suggested system change, little is known about the value added to the health care system.

We conducted this study to determine the extent to which extended role practitioners trained in the ACPAC Program work differently because of their training and their extended practice roles. We compared practice patterns between occupational therapists and physiotherapists with extended practice training and experienced therapists without such training to determine differences in the assessment and management of clients with inflammatory arthritis. This work will generate hypotheses and inform the design of a randomized controlled trial (RCT) to evaluate the efficacy of extended practice-trained therapists' interventions on client outcomes.

METHODS

We used descriptive methodology (retrospective chart review) to compare practice patterns, including investigations, assessments, therapeutic interventions, and outcomes, between occupational therapists and physiotherapists with extended practice training and experienced therapists without extended practice training.

Sample Selection

Therapists

The organizational setting under study (The Arthritis Society) employs 50 occupational therapists and physiotherapists who work in communities across the province and deliver care to people with complex forms of arthritis in clinics and in their homes. All therapists become experienced in arthritis care, because they receive advanced training in the assessment of polyarthritis when hired²⁰ and treat clients with arthritis exclusively. Therapists are funded by the Ontario Ministry of Health and Long-Term Care; therefore, services are offered to clients at no charge. At the time of this study, eight of these therapists had received additional training and had graduated from the ACPAC Program; five met inclusion criteria for the study (≥ 12 mo since programme graduation).

Client Charts

Charts were selected for review from a provincial client database using a random number table. Cases were considered eligible if the chart was opened after the therapist had graduated from the ACPAC Program and closed by May 31, 2009. The sample consisted of charts of adult clients with suspected or confirmed inflammatory arthritis who received an intervention at home or in a clinic. Although other therapists may have treated the client, we extracted only content recorded by the extended practice therapist. For each extended practice-trained therapist case identified, we chose a similar case for an experienced therapist without extended practice training (the experienced therapist group) from a random selection of charts and matched it on the basis of therapist discipline (occupational therapist or physiotherapist), region of the province, and time of referral. Because this study was exploratory, only 60 charts were selected.

A typical chart consisted of (1) a client data form to collect demographics, referral information, and disease characteristics, including diagnosis, disease duration, presence of comorbidities reported by clients at time of referral, dates of referral, first visit, last visit, and discharge (2); an assessment form for recording history, physical and functional assessments, client goals and goal resolution, and a summary of interventions and referrals (3); progress notes using the subjective, objective, assessment, and plan format (4); a client contact record including dates and type of visit (telephone, home, clinic,

group) and total attendances; and a discharge summary (5). Additional information might include a referral form, outcome measures, and laboratory and radiological reports. We calculated wait time as the number of days between date of referral and date of first visit.

Ethics approval was received from the University Health Network, Toronto, before data collection began.

Chart Extraction Forms and Process

Data extraction forms used previously for evaluation of a community-based physiotherapy programme²¹ were modified to include relevant interventions and to reflect the goals of the extended practice training programme;⁸ the forms were then pilot tested before being finalized. The data extraction forms contained variables related to physical findings, client goals, investigations, interventions (including referrals and communication with other health care providers), and outcomes measured.

Before chart review, the client's and therapist's names were removed from all pages, and only the client identification number was used to identify a client chart. Charts were allocated sequentially by identification number and were audited independently by each of three trained reviewers, representing three disciplines (physiotherapy, occupational therapy, social work), to reduce interpretation bias based on occupational focus. Training occurred over two days in a controlled environment under the supervision of the research team. On day 1, the group reviewed two charts, then four charts were reviewed individually, followed by questions and discussion. A member of the research team was available at all times to field questions. If a lack of consensus occurred on any one data element, it was discussed and consensus was reached. On day 2, eight charts were reviewed individually, followed again by discussion. The rest of the charts were reviewed individually as homework. Once all charts were completed, the research team reviewed a sample of 10% of the charts ($n = 6$) to verify consensus among the three reviewers.

Analysis

Data were managed and analyzed using SPSS/PC+ version 11.0 (SPSS Inc., Chicago, IL). Descriptive statistics were used to summarize the characteristics, investigations, goals, interventions, and referrals of clients seen by extended role practitioners and the experienced therapist group. Variables that showed a difference of 10% between groups were considered important for discussion in this article. This study's results will help determine the sample size required for a future RCT.

RESULTS

A total of 355 charts met inclusion criteria, and 60 were chosen randomly for review: 30 from extended-role practitioners (two occupational therapists; three physiotherapists) and 30 from the experienced therapist group (five occupational therapists; seven physiotherapists).

Table 1 Referral Characteristics of Clients, by Provider Type

Referral characteristics	No. and (%) of charts	
	Extended-role practitioners; <i>n</i> = 29*	Experienced therapists; <i>n</i> = 29†
Percentage living in rural communities	24 (82.8)	17 (58.6)
Referral source		
Health professional	14 (48.3)	15 (57.7)
Clinic	8 (27.6)	1 (3.8)
Self	6 (20.7)	10 (38.5)
Third party	1 (3.4)	0
Referring provider type‡		
Rheumatologist or internist	12 (54.5)	11 (61.1)
General practitioner	3 (13.6)	4 (22.2)
Other health professional	7 (31.8)	3 (16.7)
Mean wait time and (SD), d	55.14 (87.72)	39.00 (28.92)

*3 charts missing for referral source; 7 charts missing for referring provider type.

†18 charts missing for referring provide type.

Each chart extraction form contained 173 data elements. For the six charts reviewed for consensus, the error rate was 0.07% (74 of 1,038 data elements); that is, one therapist recorded something different from the other two therapists for 74 data elements. These data elements were reviewed and corrected by a member of the research team (SCL). No further checking of data was done. Two charts were excluded because of insufficient data, which left 58 charts for review (29 for each therapist group).

Demographics

The charts represented clients with these characteristics: 79% female, mean age of 59 (range 19–87) years, 76% English speaking, 55% married or common law, 29% living alone, 78% not working for pay, and 36% with post-secondary education. We found no significant demographic differences between the clients of extended role practitioners and those of experienced therapists (χ^2 test comparing proportions or independent *t*-test comparing means, *p* > 0.10).

Referral Characteristics

More clients seen by extended-role practitioners (52%, vs. 14% for experienced therapists) were referred specifically for assessment rather than management. Table 1 provides the referral characteristics of clients seen by extended-role practitioners and experienced therapists. More clients seen by extended-role practitioners lived in rural communities (83% vs. 59%). The source of referrals was different, with extended-role practitioners receiving more referrals from rheumatology clinics (28% vs. 4%)

and experienced therapists receiving more self-referrals (39% vs. 21%).

Disease Characteristics

Table 2 summarizes the disease characteristics of clients of extended-role practitioners and experienced therapists. We found a difference in client disability level: experienced therapists saw more clients with no functional limitation and more clients with severe disease (American College of Rheumatology [ACR] classes I and IV²²) and extended-role practitioners saw more clients with mild disease (ACR class II). We also found differences in clients' presenting diagnoses: experienced therapists saw more clients with established rheumatoid arthritis (76% vs. 45%), and extended-role practitioners saw more clients with sero-negative (31% vs. 14%) or undifferentiated (10% vs. 0%) arthritis and more clients without a confirmed diagnosis (48% vs. 10%). Extended-role practitioners more frequently documented the presence of comorbidities (90% vs. 66%).

Assessments

Client goals identified by extended-role practitioners and experienced therapists were similar. The top five client goals were to decrease pain,¹ enhance knowledge,² improve activities of daily living,³ decrease stiffness,⁴ and provide assistive devices⁵ (data not shown). Table 3 provides data on the type and number of baseline assessments conducted by extended-role practitioners and experienced therapists. Extended-role practitioners more frequently recorded baseline joint count, morning stiffness, grip strength, and other outcome measures than

Table 2 Client Disease Characteristics, by Provider Type

Disease characteristics	No. and (%) of charts*	
	Extended-role practitioners; <i>n</i> = 29†	Experienced therapists; <i>n</i> = 29
ACR class		
I (able to perform all usual activities)	2 (7.7)	9 (31.0)
II (limited in avocational activities)	15 (57.7)	5 (17.2)
III (limited in avocational and vocational activities)	7 (26.9)	10 (34.5)
IV (limited in avocational, vocational and self-care activities)	2 (7.7)	5 (17.2)
Primary diagnosis		
Rheumatoid arthritis	13 (44.8)	22 (75.9)
Sero-negative arthritis	9 (31.0)	4 (13.8)
Undifferentiated arthritis	3 (10.3)	0
Other	4 (13.8)	3 (10.3)
Primary diagnosis (% confirmed)	14 (51.9)	26 (89.7)
Comorbidity (% yes)	26 (89.7)	19 (65.5)
Clinical features; mean and (SD)		
Joint count	5.5 (4.99)	5.7 (6.97)
Morning stiffness, h	1.7 (4.92)	2.3 (6.03)
Grip strength right/20	165.6 (95.18)	206.7 (96.00)
Grip strength left/20	141.7 (75.26)	192.1 (96.05)
Visual analogue scale, (Pain)/10	6.4 (3.72)	4.2 (3.36)
Duration of disease, y	8.9 (11.48)	10.9 (9.62)

*Unless otherwise specified.

†Three charts missing for ACR class.

ACR = American College of Rheumatology.

Table 3 Type and Number of Baseline Assessments Performed, by Provider Type

Assessment type recorded	No. and (%) of charts*	
	Extended-role practitioners; <i>n</i> = 29	Experienced therapists; <i>n</i> = 29
Joint count	24 (82.8)	21 (72.4)
Morning stiffness	23 (79.3)	15 (51.7)
Grip strength	21 (72.4)	14 (48.3)
VAS pain	11 (37.9)	10 (34.5)
Other outcomes	14 (48.3)	9 (31.0)
No. of outcome measures; mean and (SD)	1.28 (2.14)	0.90 (1.92)

*Unless otherwise specified.

VAS = visual analogue scale.

did experienced therapists. The data were insufficient to compare the frequency of use of these outcome measures at follow-up.

Therapist Interventions

Table 4 outlines the treatment characteristics and the most common types of interventions provided by extended-role practitioners and experienced therapists. The mean number of contacts with clients was similar

for the two groups (extended-role practitioners, mean 1.9; experienced therapists, mean 1.7); however, time from opening the case to discharge (length of treatment) was longer for clients seen by extended-role practitioners (mean 74.4 vs. 30.9 d), and more client contacts took place over the phone (mean 2.2 vs. 1.2).

The most frequent interventions provided by both groups of therapists were educating clients about their disease and providing or recommending exercise or

Table 4 Characteristics of Interventions and Most Common Types of Interventions, by Provider Type

Treatment characteristics and type of intervention	No. and (%) of charts*	
	Extended-role practitioners; <i>n</i> = 29	Experienced therapists; <i>n</i> = 29
Mean length of treatment and (SD), d	74.4 (71.4)	30.9 (46.3)
Mean no. of contacts and (SD)	1.9 (1.2)	1.7 (1.2)
Home visits	1.9 (1.2)	1.5 (0.7)
Clinic attendance	1.4 (0.7)	1.6 (1.1)
Telephone contacts	2.2 (1.8)	1.2 (0.6)
Therapist interventions (% yes)		
Education		
Diagnosis or disease	15 (51.7)	17 (58.6)
Joint protection	9 (31.0)	12 (41.4)
Pain management	12 (41.4)	8 (27.6)
Energy conservation	7 (24.1)	4 (13.8)
Self-advocacy	7 (24.1)	4 (13.8)
Community resources	2 (6.9)	9 (31.0)
Posture	6 (20.7)	2 (6.9)
Self-efficacy	5 (17.2)	3 (10.3)
Other	5 (17.2)	4 (13.8)
Education about medication		
DMARDS	7 (24.1)	5 (17.2)
Other	5 (17.2)	4 (13.8)
Therapist support and advocacy with		
Family, general practitioner, specialist	15 (51.7)	6 (20.7)
Other	5 (17.2)	4 (13.8)
Modalities		
Exercise and physical activity	25 (86.2)	18 (62.1)
Splint	12 (41.4)	9 (31.0)
Assistive devices	6 (20.7)	13 (44.8)
Heat–oil and glove–ice	9 (31.0)	9 (31.0)
Footwear, orthotics, insoles	5 (17.2)	7 (24.1)
Referrals		
Internal (physical therapist, occupational therapist, social worker)	4 (13.8)	2 (6.9)
Home care or CCAC	3 (10.3)	3 (10.3)
Rheumatologist	2 (6.9)	1 (3.4)
General practitioner	2 (6.9)	0
X-rays and lab work	4 (13.8)	1 (3.4)
Other	6 (20.7)	2 (6.9)
Referral to programs or resources		
ASMP	1 (3.4)	4 (13.8)
Other	3 (10.3)	3 (10.3)

*Unless otherwise specified.

DMARDS = disease-modifying anti-rheumatic drugs; CCAC = Community Care Access Centre; ASMP = Arthritis Self-Management Program.

physical therapeutic modalities. Extended-role practitioners were more likely than experienced therapists to educate clients about pain management, energy conservation, and posture; advocate on behalf of the client with his or her family, physician, or specialist; recommend or provide a prescription for splints and exercise or advice regarding physical activity; and refer for or recommend radiologic or laboratory assessments. Experienced therapists more frequently provided education about joint protection and community resources and provided or recommended the use of assistive devices.

DISCUSSION

As documented in the charts reviewed, clients of extended-role practitioners and experienced therapists without extended practice training appear to be different in terms of referral and disease characteristics. Clients of extended-role practitioners were more likely to be referred specifically for assessment rather than management and were more likely to present with undifferentiated or suspected arthritis. Extended-role practitioners were also more likely to document comorbidities; however, we were unable to determine whether they inquired more about comorbidities or whether more of their clients had comorbidities. The identification and documentation of comorbid conditions to arrive at a differential diagnosis is an investigative skill taught in the ACPAC Program and may be important given that a high percentage of people with arthritis report other concurrent chronic diseases that may require intervention.¹

These findings point to a potentially important role for extended-role practitioners in collaborating with general practitioners and other primary care providers in assessing early or undifferentiated arthritis and in managing those clients with complex disease. In a study by MacKay and colleagues,²³ hospital therapists working in extended practice roles were shown to appropriately triage and refer patients with hip and knee arthritis to orthopaedic surgeons. Future studies need to evaluate the ability of extended-role practitioners working in the community to effectively triage clients with early or suspected arthritis to specialists such as rheumatologists and orthopaedic surgeons, as well as to community arthritis programmes. Diagnostic uncertainty and the presence of comorbidities may explain the tendency to order more laboratory and radiologic tests and to advocate more extensively with general practitioners and specialists, which may in turn translate into longer intervention times. However, longer interventions may also reflect a different model of service delivery; extended-role practitioners working in the community often follow clients in clinics held infrequently and in remote locations.

Extended-role practitioners' and experienced therapists' practice characteristics also appear to differ in terms of the nature of baseline assessments, length of

treatment, and interventions delivered. Extended-role practitioners were more likely to display competencies emphasized during their extended practice training, such as recommending or ordering radiologic or laboratory tests and the use of outcome measures, although only measures at the impairment level were commonly documented in the charts used for this study.

The experienced therapist group treated clients who were more likely to have a confirmed diagnosis, have more severe disease, and be referred for management rather than assessment, which might explain the more frequent need to educate about joint protection, provide assistive devices, and link clients with community resources. Why extended-role practitioners more frequently provided education about pain management, energy conservation, and posture and recommended physical activity or exercise interventions is unclear; however, this difference might be explained by level of disease severity. Further exploration of this finding is warranted.

This study is the first Canadian one to compare the practices of extended-role practitioners in the management of clients with inflammatory arthritis with the practices of experienced therapists trained in arthritis care but without extended practice training. The findings from this chart review may underestimate the differences in practice among therapists working for other organizations, because all therapists in this study received advanced training in the assessment and management of arthritis when hired²⁰ and saw clients with complex arthritis exclusively. As well, our findings may not be generalizable to therapists working in extended practice roles in other settings who may not have received their training through the ACPAC Program.

Kirkpatrick's model of evaluation of educational outcomes²⁴ includes four levels: (1) reaction, (2) learning, (3) behaviour, and (4) impact on patients or the organization. Previous evaluations of therapists trained for extended practice have examined the first three levels,²⁵ but practice changes have been reported only qualitatively and have not been compared against the practice of therapists without such training. This study's results suggest that the training does result in behavioural changes (level 3), with differences noted in baseline assessments (use of outcome measures, documentation of comorbidities), exercise prescription, referral for laboratory and radiologic tests, and advocacy on behalf of the client through collaboration with physicians and specialists. Development of inter-professional collaborative skills is one of the training programme's objectives, and these skills and attitudes are emphasized throughout the programme. The demonstration of these skills by this study's extended-role practitioners may indicate translation of such knowledge into practice. Future studies need to examine level 4 (patient- and organization-level) outcomes.

Limitations of a retrospective chart audit must be

considered when interpreting this study's results. Chart audit is only one method of assessing clinician performance, and in some situations important behaviours are underreported.^{26,27} For instance, in this study differences in the frequency of recording comorbidities or prescribing exercise may reflect differences in documentation rather than actual differences in performance. Because so few outcome measures were used in the sample of charts selected, we were unable to identify measures that might reflect change or determine sample size for a future RCT. A prospective study is needed to pilot test potential measures. As well, in this small sample observed differences in interventions and practice patterns may have resulted because of differences in client characteristics, but some of the areas in which differences were notable (e.g., documentation of comorbidities, advocacy with specialists) are emphasized in the extended practice training programme.

CONCLUSIONS

On the basis of the results of this chart review, we have identified potential differences between the practices of extended-role practitioners and experienced therapists without extended practice training that will inform the generation of hypotheses and the design of future research evaluating the efficacy and cost-effectiveness of extended-role practitioners in arthritis care. We also identified a potentially important role for extended-role practitioners in working collaboratively with other health care providers to assess clients with undifferentiated disease or those with complex needs.

KEY MESSAGES

What Is Already Known on This Topic

In the past two decades, successful new models of arthritis care have been developed by incorporating extended practice roles for occupational therapists and physiotherapists. These initiatives have resulted in better patient education, improved management and efficiency, and high levels of patient satisfaction. Graduates of the ACPAC extended practice training programme have undergone extensive evaluation that has demonstrated satisfaction with their training, its relevance to their practices, their competency as measured by theoretical and clinical skills examination, and early changes implemented in their respective clinical practices. Although these evaluations have demonstrated therapist competency and suggested system change, little is known about the impact of this advanced training on clients with arthritis and the value added to the health care system.

What This Study Adds

This is the first Canadian study to compare the role of extended-role practitioners in the assessment and management of clients with inflammatory arthritis with that of experienced therapists who had not received ex-

tended practice training. We identified a unique and potentially important role for extended-role practitioners in the assessment of clients presenting with complex disease or undifferentiated arthritis in primary care on the basis of their use of advanced assessment skills. We also identified potential differences in extended-role practitioners' behaviour compared with that of experienced therapists without extended practice training in terms of education, exercise prescription, and client advocacy. These results will inform the generation of hypotheses and the design of future research evaluating the efficacy and cost-effectiveness of extended-role practitioners in arthritis care.

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