

EXECUTIVE SUMMARY

Background

Rehabilitation services in primary health care (PHC) settings are important for the treatment of chronic musculoskeletal conditions such as arthritis. However, a number of studies point to an underutilization of rehabilitation services for persons with arthritis by PHC physicians and an unmet need for rehabilitation services reported by persons with arthritis. There is no known cure for arthritis; thus, care for and management of this condition is important early in, and over, the course of the disease. PHC rehabilitation professionals offer non-pharmacological interventions that have both a preventive and therapeutic role in the management of arthritis. However, explicit service delivery models are lacking that operationalize a PHC and rehabilitation approach to arthritis care where rehabilitation professionals are working with the client, as well as collaborating and communicating with the other members of the PHC team. Such models are needed to ensure that persons with arthritis receive rehabilitation interventions early in the disease process and that their needs and preferences are considered in the continuum of care. Explicit service delivery models would also ensure that rehabilitation services are integrated into PHC and that the role of PHC rehabilitation is clearly defined in the continuum of care for chronic diseases such as arthritis.

Purpose

The purpose of this project is to present a framework for the delivery of comprehensive PHC rehabilitation services for adults with arthritis in Ontario.

Methodology

Literature review - Academic literature, grey literature, and practice guidelines relating to arthritis and rehabilitation, both at the individual/service level and at the system/societal level, were examined.

Key informant interviews - Key informant interviews were completed with 25 individuals who were known experts and in a position to inform our study about key elements of a multidisciplinary model for arthritis care. Key informants were selected to represent various professions, practice sectors, and geographic areas (i.e. rural vs. urban). The interviews followed a semi-structured format. Data were analyzed using content analysis and a constant comparative approach.

Results

Literature Review

Relevant information from the literature review is presented according to Starfield's (1992) health services system model of structure, process, and outcome. It is important to note that there is conceptual overlap between structure and process for this report in the areas of client-

centred care and multidisciplinary collaborative care. Topics addressed under structure include client and team members; utilization/access; and funding; as well as the process of client-centred care and the process of multidisciplinary collaborative care. Topics addressed under process relate to the management of arthritis and include rehabilitation best practices in the areas of education, exercise, joint protection, orthoses, modalities, assistive devices, and work/employment. Topics addressed under outcome are presented at both the level of the individual client and the system.

1. Structure

Client and Team Members

Positive outcomes have been reported in a team approach to care, especially with diverse and complex problems that may arise with a chronic disease such as arthritis. Working as a team is thought to be more productive than working as individuals in isolation. Team structure is reflected by the range of skills of its members with there being no optimal team size or composition. Physiotherapists and occupational therapists are among the more common members of the arthritis care team. Teams may designate one of their members as leader or champion. Teams should consider multiple factors in the care of clients with arthritis including biopsychosocial needs.

Utilization/Access

Many client-level factors contribute to the use of health care and rehabilitation services including physical (e.g. mobility, pain) and sociodemographic (e.g. age, sex, education), as well as the presence of comorbidity and psychosocial well-being. It is important to understand the determinants of use of services by persons with arthritis in order to identify strategies to improve or minimize barriers that prevent the utilization of important services. Individuals with chronic diseases such as arthritis require a range of comprehensive health care services. However, services are not consistently available resulting in unmet needs for services (e.g. rehabilitation services, educational programs, assistive devices, home modifications).

Funding

Because patients with chronic conditions such as arthritis are more likely to receive rehabilitation services in publicly-funded compared to privately-funded practice settings, the shift to private sources of payment for rehabilitation services is expected to further reduce access to much needed services for persons with arthritis.

Client-Centred Care

Important components of client-centred rehabilitation include: individualization of programs to the needs of the client for a smooth transition between rehabilitation programs and the community; sharing of information and education that is appropriate, timely, and according to clients' wishes; family and peer involvement in the rehabilitation process (e.g. emotional support); coordination and continuity within and across sectors (e.g. access to rehabilitation through more than one door, follow-up as a continuum of access); and outcomes that are meaningful to the client (i.e. understanding the consequences of the disease and disability should be based on the perspectives of those living with the disease).

Multidisciplinary Collaborative Care

The structure of the team is linked to what services are provided by its members and how services are received by the client. The provision and receipt of services should be client-centred and involve ongoing communication among team members as well as communication among teams within the different rehabilitation settings. The goals of a collaborative care team for arthritis care may include control of the clients' symptoms, prevention of disease progression, education of the client to perform self-care, and assisting the client to accept and cope with the functional limitations associated with arthritis.

2. Process

Rehabilitation Best Practices in the Management of Arthritis

There is conclusive evidence in the literature for the following rehabilitation interventions for persons with RA and OA: client education, exercise (aerobic and strengthening), joint protection instruction, and assistive devices. Indicative evidence exists for the use of orthoses (hand/wrist splint and foot orthosis) in RA. Limited or emerging evidence exists in the literature regarding the effectiveness of the following interventions: vocational/work rehabilitation and physiotherapy modalities. However, the Ottawa Panel supports and recommends the use of TENS, low-level laser therapy, ultrasound, and thermotherapy for RA. Recent RCTs have shown that acupuncture for OA of the knee is effective.

Persons with arthritis should receive these rehabilitation interventions early in the disease process. However, all interventions should be optimally timed based on client receptivity and need. An educational-behavioral approach appears to be an effective manner in which to deliver rehabilitation interventions for persons with arthritis.

3. Outcome

International Classification of Functioning, Disability, and Health (ICF)

Arthritis has an impact on all three levels of functioning in the ICF framework: body function and structure (e.g. pain, muscle weakness), activity (walking), and participation (e.g. work and leisure). It therefore follows that any interventions for arthritis should target these same three levels of functioning in the ICF framework. However, the majority of rehabilitation best practice evidence for arthritis has focused on outcomes at the level of body function/structure and activity. For example, at the body function and structure level, education interventions have resulted in outcomes of decreased pain and decreased morning stiffness. Similarly, at the activity level, exercise interventions have resulted in improved functional status of individuals with arthritis. Although further research aimed at all three levels of functioning in the ICF framework is warranted, it is especially lacking at the participation level.

Cost

There are several cost-effective rehabilitation treatments for arthritis including group exercise, splinting, assistive devices, and home modifications. All of these treatments could be provided by an appropriately trained arthritis health professional (e.g. occupational therapist, physiotherapist, nurse specialist).

Key Informant Interviews

Emergent themes from the interviews included feasible options for models of care for arthritis. Three models of care for arthritis were most commonly identified by participants:

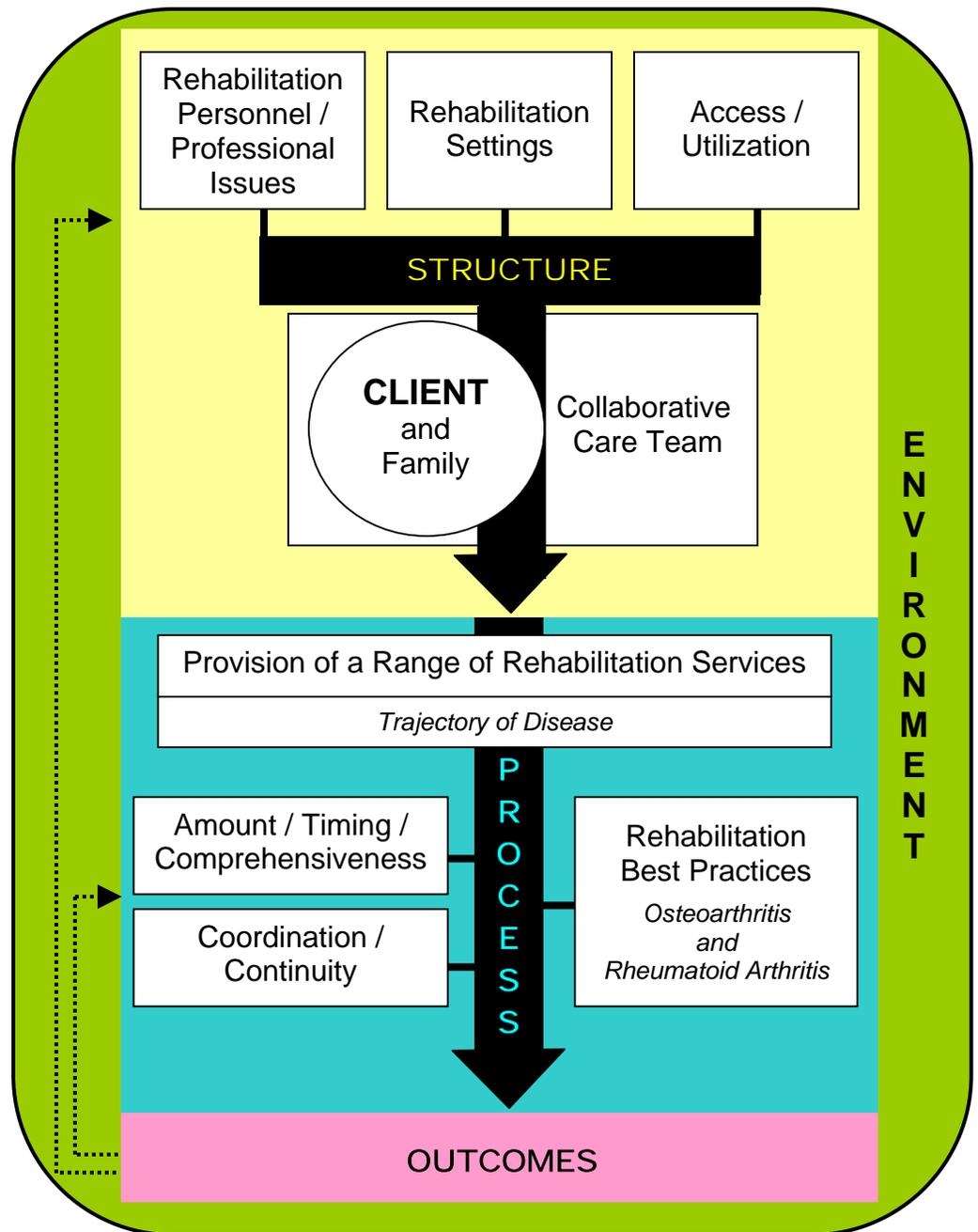
- 1) Multidisciplinary team care (collaboratives);
- 2) Allied health professionals in advanced clinical roles;
- and 3) Telemedicine.

The following 10 components of models of care for arthritis were identified as important in any model of care for arthritis:

1. Collaborative, multidisciplinary teams
2. Provider skill, education, and awareness and client education/awareness
3. Stable and predictable funding
4. Continuity of care across the continuum
5. Regulation to support rehabilitation professionals in the management of arthritis
6. Conceptual approaches/frameworks such as self-management and client-centredness
7. Primary and secondary prevention strategies
8. Timely access to services early in the disease process
9. Community action and development initiatives
10. Methods for evaluation

Conclusions and Recommendations

Elements of a PHC and rehabilitation model, *A Client-Centred Health Service Model of Primary Health Care and Rehabilitation for Arthritis*, are presented as a framework for the delivery of comprehensive rehabilitation services for adults with arthritis in Ontario (see Figure



3, page 43). The key elements of the model include structure, process, and outcome as outlined in Starfield's (1992) model of health services system. Structure is defined as elements that enable the provision of PHC services for persons with arthritis. Process encompasses activities related to the provision of care by the health care providers and the receipt of care by the client. The structure should be in place for the process to occur. Outcomes are reflected in the health status of individuals with arthritis as well as at the system level.

The client and family are central to this model, with the client and family being key members of the collaborative PHC team. Also incorporated into our proposed model for PHC and rehabilitation are several important components including client-centredness, collaborative health care teams, the social determinants of health, self-efficacy and the stages of change, community action, and the ICF. Longitudinal continuity of care, for persons with arthritis, considering the trajectory of the disease, is another critical factor highlighted in this model. Care for, and management of, persons with arthritis is important early in, and over, the course of the disease. At various stages of the disease trajectory clients with arthritis need to access the services of the 'right' health care provider at the 'right' time. Although this model focuses on arthritis, it highlights important factors that are relevant to the management of many chronic diseases.