

Care for People with Arthritis

Policy: Decisions, Impacts and Gaps

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Executive Summary

This report describes policy issues and decisions at the federal and provincial levels (British Columbia, Alberta and Ontario) that impact care, management and access for people with arthritis. It focuses on major policy issues in the current time, including chronic disease management and access to care. Within access to care, policies related to timely access to care, maximizing scope of practice and access to various health professions are discussed.

Key messages:

- British Columbia (BC), Alberta and Ontario have Chronic Disease Management (CDM) strategies in place.
- CDM strategies generally have focused on cardiovascular disease, diabetes and obesity, sometimes as a collective and in other cases as single disease entities. BC has recently reviewed their CDM strategy and, while they continue to utilize the expanded CDM model, they recognize and focus on chronic diseases in general (rather than specifying individual conditions) given that many of these diseases/ conditions co-exist. Alberta continues to evolve its CDM strategy. Ontario has focused on diabetes. However, a recent report from the Ontario Medical Association has recommended that CDM for arthritis be made a priority.
- Federal and provincial policy initiatives focus on reduction in wait times for identified priorities that include hip and knee replacement surgery. Wait time reduction strategies have been implemented in BC, Alberta and Ontario with varying results although the overall trend has been reduced wait times.
- However, vulnerability of wait time strategies is demonstrated by Alberta's struggle to meet wait time bench marks for joint replacement in many areas of the province. Vulnerability in this case is largely attributed to limited funding of resources. Federal funding for provincial initiatives related to wait time strategies ended March 2010.
- Access to publicly-insured biologic medications for people with inflammatory arthritis is restricted in all provinces with resulting concerns that delays in access to these drugs compromise patient outcome.
- Timely access to rehabilitation in hospital outpatient departments has been challenging given the trends to reduce the amount of ambulatory care provided. Outside of the hospital setting, access is also limited in all provinces unless the patient is insured through third party payors or is able (and willing) to pay out of pocket costs.
- Federal and provincial governments have responded to human health resource shortages by streamlining credentials for foreign graduates and allowing professionals to practice to their maximal scope.
- Policy and initiatives related to access to care are constantly evolving.

- Given that Arthritis Self-Management Programmes, that follow similar cognitive behavioural principles of CDM programmes, have shown positive effects in terms of people's perceptions of their ability to manage their arthritis with modest improvements in pain and function, further integration of arthritis management into CDM may prove beneficial. As primary care initiatives evolve and further incorporate CDM principles, there may be opportunities for improved access and delivery of care for people with arthritis.

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1.0 Introduction

The sustainability of Canada's universal health care system is a high priority across the gradient of public and private stakeholders ^{1,2}. Despite ongoing struggles to meet growing demand, the mostly publicly funded and privately delivered system is generally assumed to be doing well in achieving equitable access for certain services ³. Although the national and provincial health systems have undergone reform in recent decades, the founding principle can be traced back to the 1950s when health delivery mostly was based on a model where physicians provided acute care services in hospitals ⁴. The policy legacy of previous generations has shaped and formed the current health system, and as such, there remains a strong focus on acute care, hospitals and physicians ⁵. However, the escalating prevalence of chronic disease has highlighted the need for health systems worldwide to embrace care beyond the acute system.

Although it is a shared responsibility, the federal government's primary role is to finance a large proportion of provincial and territorial health systems. The logistics of how services will be provided remains a provincial matter. Thus, the Canadian health care landscape is a complex patchwork of 10 provincial and 3 territorial health systems that must comply with national rules and regulations under the Canada Health Act in order to be eligible for federal funding. Hence, policy decisions at federal, provincial, regional and local levels all influence the proverbial "who, what, where and how" publicly funded health care will be delivered to Canadians. This has meant that federal policy is enacted in various ways at the provincial or territorial level. Additionally, provincial structures differ such that provincial policy may be interpreted differently within regions of a province. British Columbia (BC) and Ontario have health regions. Alberta eliminated its nine health regions in 2008 and created a single health service provider, Alberta Health Services (AHS), for the province ^a. In BC and Ontario, the provincial Ministries of Health have a custodial role. Each of the health regions is fiscally responsible for delivery of health care services within their region. In addition, to oversee provincial health services, provincial Ministries of Health have variable mandates. For example, Alberta and Ontario have a mandate for research whereas BC does not. All governments are facing fiscal challenges related to health care provision ^a.

Health Canada has identified some national health priorities for Canadians. However, the above described federal structure creates scope to interpret how these priorities are enacted, and as such, access to care is highly variable across the Canadian landscape. Key national priorities include chronic disease management (CDM), and improvement in timely access to care for six priority areas where wait times are considered problematic. One of these priority areas directly related to people with arthritis is wait times for joint replacement. Additionally, recognizing that health human resources (HHR) are critical to the delivery of services, there also are priorities around inter-professional care with a focus on ensuring all professionals are working to their maximal scope of practice.

Arthritis is a chronic disease and access to timely, appropriate care by the right professional was identified as a right of all people with arthritis by the National Summit on Arthritis Care and Management ⁶. This current report summarizes key policies that facilitate and restrict care for people with arthritis.

^a Footnote: It was announced in early February 2010 that the government will settle all health care deficits for providers within the province and that there will be a substantial increase (6%) in the budget for the new fiscal year. In contrast, new budgets for Ontario (Health care items in this week's budgets, HealthEdition.com March 26, 2010 Volume 14 Issue 12 – accessed 11 April 2010) and BC provide little if any growth such that some services may be reduced as hospitals and service agencies attempt to balance budgets.

2.0 Purpose and Objectives

The purpose of this report is to describe the policies related to CDM and access to care that impact care for people with arthritis at a federal, provincial, regional and local level for each of BC, Alberta and Ontario (our three provinces of interest).

The specific objectives were to describe for each of BC, Alberta and Ontario:

- 1) provincial policy for CDM;
- 2) Health Canada policy related to wait time priorities (e.g., wait times for hip and knee replacement) and how it has been implemented;
- 3) provincial response to Health Canada policy related to inter-professional care and maximizing scope of practice for health professionals; and,
- 4) provincial legislation related to funding of health care providers.

3.0 Methods

A search was conducted of the published literature from 2004 to May 2009 using Medline and from 2004 to Aug 2009 for both Cinahl and Embase [see Appendix A]. The following search terms were used: health care systems, performance, approaches – similarities/differences between provinces/countries; health care structure (i.e., health care planning areas); health care access and barriers as it informs policy development; health care reforms, shifts, strategies as it relates to arthritis and chronic diseases (kept aside seniors, aging); funding and delivery approaches; rural and urban health care differences; funding and wait times; health care initiatives at a broad level as it relates to arthritis management. The above key words were combined with arthritis & related conditions (includes gout, lupus, scleroderma, etc.); arthritis discussed in conjunction with other chronic diseases; chronic diseases; and musculoskeletal (MSK) disorders/complaints/pain/symptoms. Additionally, federal and provincial government web sites were searched related to the above topics; these searches were extended prior to 2000 based on citations of more recent documents. Subsequent government and other grey literature information to 17 July 2010 were included where it provided updates relevant to existing content.

Literature related only to children and adolescents; transition from adolescent into adulthood; solely pain/pain syndrome; and, to specific chronic conditions/diseases (e.g., rheumatic fever, chronic obstructive lung disease, cancer, etc.) were excluded.

4.0 Results

4.1 Chronic Disease Management

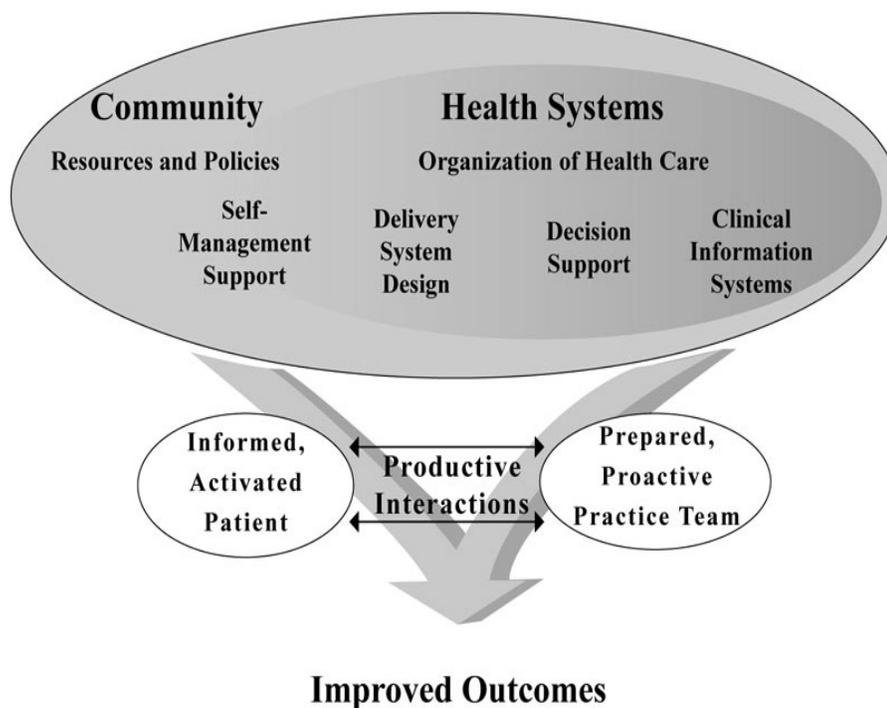
Given the burden of disease, CDM has become a primary focus for the Canadian health care system. Chronic diseases are prolonged illnesses that rarely are cured⁷. The most common diseases are hypertension, diabetes, asthma, arthritis and mental health conditions such as depression. They are highly prevalent (in Ontario alone, 70% of people ages 12 years and older have a chronic condition) and people often have more than one disease, particularly as they age⁸. Chronic diseases place a significant burden

on the individual and society. They reduce quality of life and are a major cause of disability, premature death and health care utilization. Hence, the economic burden of chronic disease is very high⁹⁻¹¹. In response, there has been a focus on prevention and management to promote maintenance of independence and well-being for people with chronic diseases. BC, Alberta and Ontario all have implemented CDM Strategies.

Historically, health care has functioned under an acute care model that is focused on rapid diagnosis and initiation of an intervention¹²⁻¹⁴. The patient's role is to activate care through a physician. This is in direct contrast to the chronic disease model that promotes client-centered care. In client-centered care, there is shared responsibility for care between the patient and the health care team¹³. A key component of the CDM model is that the patient is taught self-management skills.

The Chronic Care Model (CCM)¹³ has been used to inform reorganization of health care processes and resources for CDM. The underlying premise of the CCM is that most people with chronic disease, regardless of the disease, face similar sequelae related to symptoms, disability, psychosocial impacts, complex medication management, and challenges in obtaining helpful medical care. As shown in Figure 1, the CCM includes six elements: health care organization; delivery system design; decision support; clinical information systems; self-management support; and, community. The presumption is that integration of these elements will lead to improved clinical and population outcomes. It should be noted that the elements of this model, with the exception of the community element, remain grounded in the health care system.

Figure 1: The Chronic Care Model¹⁵



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Each of the six elements of the CCM has a defined purpose¹⁵. These include a health system that creates a culture, organization and mechanism that promotes safe, high quality care. The delivery system design supports changes in the organization of care to assure delivery of effective, efficient clinical care and self-management support. Decision support promotes evidence-based clinical care that is consistent with patient preferences. Clinical information systems organize patient and population data to facilitate efficient and effective care. Self-management support empowers and prepares patients to manage their health and health care. Community resources are mobilized to meet the needs of patients.

BC has expanded on the CCM to create the Expanded Chronic Care Model (ECCM)¹⁶. The ECCM emphasizes the interaction of the health care system and community. As shown in Figure 2, the boundaries between the health care system and community are ‘leaky’ demonstrating the blending of the two. Additionally, self-management support, delivery system design, decision support and information systems are on the boundary of the health system and community as they can impact both sectors. Also, there is boarder consideration of prevention. It includes reduction of risk factors for those at high risk of disease development and initiatives to improve population health. The ECCM also adds three new elements: building healthy public policy, creating supportive environments and strengthening community action. Self-management support is broadened to include non-disease specific personal skills. Decision support is broadened to include education about chronic disease care and strategies for promoting health and well-being. Delivery system redesign, re-labeled ‘re-orient health services’, is broadened to support individuals and communities with a focus on prevention and health, as opposed to illness.

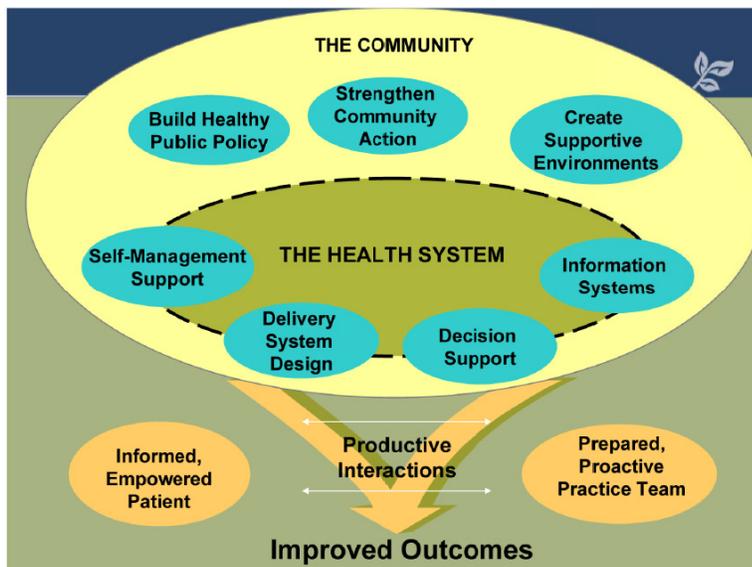
Figure 2: British Columbia’s Expanded Chronic Care Model¹⁶



Created by: Victoria Barr, Sylvia Robinson, Brenda Marin-Link, Lisa Underhill, Anita Dotts & Darlene Ravensdale (2002)
 Adapted from Glasgow, R., Orleans, C., Wagner, E., Curry, S., Solberg, L. (2001). "Does the Chronic Care Model also serve as a template for improving prevention?" *The Milbank Quarterly*, 79(4), and World Health Organization, Health and Welfare Canada and Canadian Public Health Association.(1986). Ottawa Charter of Health Promotion.

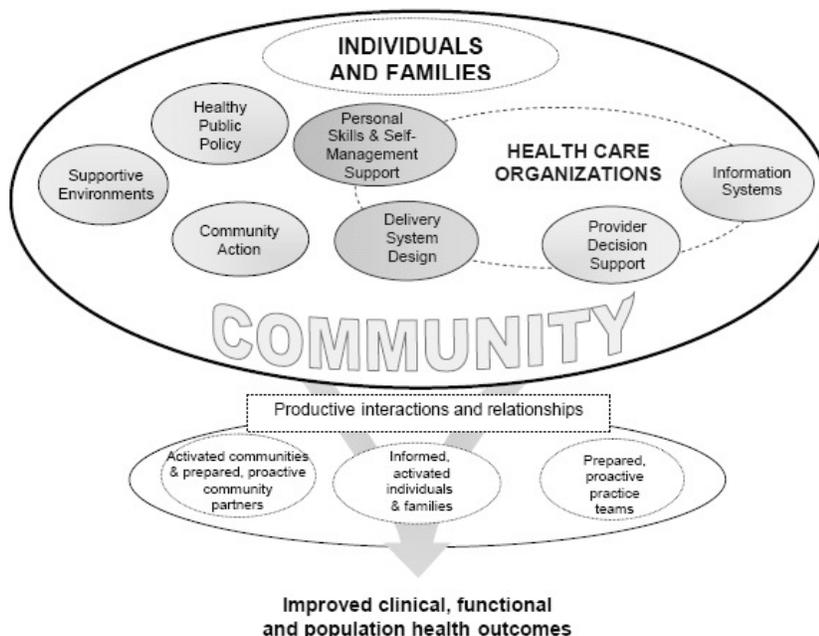
Alberta adopted the components of the CCM and the BC ECCM and their model was in various stages of development and implementation throughout the province when health care governance changed from a regional system to central oversight in 2008. The model maintains the interaction of the empowered patient and the proactive team components of the CCM, but incorporates the community linkages and components of the ECCM in the BC model (Figure 3). In contrast to the BC and Ontario models (Ontario’s model is described below) that specify improvement in outcomes at both a population and clinical level, the Alberta model does not specify beyond ‘improved outcomes’.

Figure 3: Alberta's Expanded Chronic Disease Model ¹⁷



Ontario has created its own model, the Chronic Disease Prevention and Management Model (CDPM) that combines the CCM and ECCM. The CDPM consists of eight elements: health care organization; personal skills and self-management supports; delivery system design; provider decision support; information systems; healthy public policy; supportive environments; and, community action. As with the models for BC and Alberta, these elements flow to improved outcomes. For Ontario, both clinical and population health outcomes are specified. In contrast to the models in BC and Alberta, individuals and their family are part of the care team.

Figure 4: Ontario's Chronic Disease Prevention and Management Model ¹⁸



Initially, within their CDM model, each of the provinces chose the diseases of focus. Despite a survey of physicians that identified rheumatoid arthritis (RA) and osteoarthritis (OA) as priorities for CDM development, BC focused on asthma, diabetes, congestive heart failure and depression¹⁹. Recently, BC has re-affirmed the ECCM as the framework supporting their approach to chronic disease management policy and programs (Personal communication, Sherry Bar, BC Ministry of Health, June 2010). As multi-morbidity is common, the focus is on chronic disease overall rather than specific diseases. Alberta's focus is less clear given the changing health care landscape but, for example, the legacy Calgary Health Region CDM model was applied to diabetes, dyslipidemia and hypertension in that region. Subsequently, the model was expanded to include chronic lung disease and congestive heart failure²⁰. Ontario similarly has focused on diabetes and heart disease. However, a recent report from the Ontario Medical Association recommends that arthritis be included in the CDM strategy²¹.

Given that MSK disease, of which arthritis is the most common disease, has the highest economic burden (cardiovascular disease is second and diabetes twelfth)²²⁻²⁶, it would seem prudent to include these diseases as a priority for chronic disease management within the CDM framework.

4.2 Access to Care

In a universal health care system, the issue of access to care should not be interpreted as the need to provide unlimited access to all service, for all people, at all times. On the other hand, access to care does mean that reasonable and timely access to health providers and delivery settings should be made available to people based on their health care needs. An extreme example of appropriate access is the need to provide treatments known to be effective for cancer patients immediately following diagnosis. Another example that is equally relevant is the need to provide appropriate services to clients with arthritis in order to allow them to live independently. Providing appropriate access to care has apparent client benefit. It also has apparent system-wide benefit in that providing appropriate access to care at the right time by the most appropriate profession can presumably reduce utilization of other more expensive medical and institutional interventions.

In the following, we review policies related to: 1) access to health care providers who provide care for people with arthritis across three jurisdictions, BC, Alberta and Ontario; and, 2) wait time strategies.

4.2.1 Access to Health Care Providers who Provide Care for People with Arthritis

Under the Canada Health Act (CHA), provincial health plans need only provide medically necessary hospital and physician services. All other services are beyond the boundaries of the CHA, although their medical necessity may be debated. Provincial plans may indeed provide other services beyond that which is required of them, such as publicly funded, community-based services, but they are under no legal obligation to do so. There is important variation in terms of access to community services within and across Canadian jurisdictions. The majority of services for people with arthritis occur outside of the inpatient hospital setting, and it is these community-based services that are the focus of this report.

Physicians

Primary care physicians can be accessed directly and their medically necessary care is funded under universal health care. In contrast, specialist care requires referral from a primary health care physician in most provinces. Alberta is an exception, as it allows specialists to accept referral from health care providers other than primary care physicians. However, the fee schedule is such that the specialist may bill at a lesser fee if the referral is not from another physician. Many physicians charge additional fees for services such as writing insurance letters.

Rehabilitation

Access to rehabilitation services in BC, Alberta, and Ontario is similar in that services provided within the confines of a hospital for inpatient care are funded under universal coverage in all provinces. Depending on the province, some physiotherapy (PT) services are covered in the community but occupational therapy (OT) services generally are not. In Ontario, Family Health Teams (FHTs) may now include an occupational therapist. These OT services are publically funded.

BRITISH COLUMBIA

In BC, publicly funded rehabilitation services can be accessed mainly in hospital-based outpatient clinics and through home care services.

Outpatient Services

Similar to Ontario, only a small number of hospitals offer outpatient rehabilitation services operated under the global hospital budget. An example is the Mary Pack Arthritis Program, which provides publicly funded PT, OT and social work services under the Vancouver General Hospital²⁷. The admission criteria are stringent, with those with inflammatory arthritis and post-hip or knee arthroplasty surgery having priority.

In January 2002, the BC Medical Services Plan (MSP) delisted a number of 'supplementary health care services', including outpatient PT, chiropractic, massage therapy and non-surgical podiatry. However, residents who meet specific criteria may receive a supplement of \$23 per visit from the MSP for up to 10 visits each calendar year. Individuals are eligible for the supplement if they are: 1) income assistance recipients; 2) refugees; 3) inmates of BC correctional facilities; 4) enrolled with MSP through the At Home Program; 5) residents of long-term care facilities receiving guaranteed income supplements; 6) enrolled with MSP as mental health clients; or, 6) First Nations people with valid BC Medical Plan coverage through the First Nations and Inuit Health Branch of Health Canada²⁸.

In addition to hospital outpatient clinics, publicly funded OT service is available in the public school system, early childhood development centres, and community health services operated by the health authorities. The costs of these services are usually covered by the institutes and services²⁹.

Home Care Services

For people with arthritis and other MSK conditions, the goals of home care services are to assist individuals to remain independent in their own home. Services also are provided for those who would otherwise require admission to hospital or a longer hospital stay. Those who are eligible for home care PT and OT services include: 1) BC residents who are Canadian citizens or have permanent resident status; and, 2) those who require care following discharge from hospital, care at home instead of hospitalization, or care due to a terminal illness³⁰. Individuals may be referred to home care services by a health professional, contact the Home and Community Care Office of the local health authority themselves, or have someone who represents them contact the office.

ALBERTA

Since April 2009, Alberta has reorganized to become one single provincial health board, AHS. The current restructuring brings together twelve formerly separate health entities in the province, including nine geographically-based health authorities offering a wide range of health supports and services and three provincial entities working specifically in the areas of mental health, addictions and cancer. This restructuring has directly affected PT and OT services. Within the former organizational structure, the availability and service delivery of PT and OT services varied across health regions. Centralization of

health services was to ensure that health supports and services were coordinated across the province. AHS is striving to provide a smooth transition of supports and services to a single provincial health authority. That being said, many of the rehabilitation services are currently undergoing restructuring but as of yet have not attained a single coordinated service delivery structure.

Alberta Health and Wellness (AHW) is responsible for the planning and delivery of health supports and services to more than 3.5 million persons living in Alberta. Medical services offered in Alberta include acute care, emergency services, home care, long-term care, public health and rehabilitation services. Rehabilitation services are similar to BC and Ontario and are available within acute care facilities, private clinics, home care, long-term care, community health and rehabilitation facilities and schools.

Community-Based Rehabilitation Services

Community-based rehabilitation services include audiology, community PT, OT, respiratory therapy and speech-language pathology. Community rehabilitation services do not include long-term care facilities or home care. No arthritis-specific community rehabilitation service exists in Alberta. Within the community, *direct access* to PT is available but generally is not covered by provincial health care such that third party or direct patient payment is required. Some insurers, however, may request a referral before reimbursing costs. OT services can be accessed directly or services may be offered through medical, health, educational and social systems. However, unlike some PT services, any non-hospital-based services for OT require third party or patient payment.

Many of the rehabilitation services used by persons with arthritis are not condition specific; that is, the services are not directly tailored to the needs of persons with arthritis. This in turn, makes identification of rehabilitation services for persons with arthritis a challenge. In the general scheme, rehabilitation services for arthritis can be accessed at the general hospital and tertiary hospital level, sub acute units, home care services, long-term care facilities, outpatient services (both single discipline and interdisciplinary services), and through community-based contracted PT private providers. Some of these private providers are funded through AHS while others are not. Persons with arthritis can also access services through community-based single discipline services, interdisciplinary and exercise programs, through chronic pain programs and chronic disease focused programs. Rehabilitation disciplines are also involved in rheumatology clinics located in the urban centres. The availability of any one of these services is geographically dependent. The involvement of rehabilitation services within primary care networks is only recently developing and it is currently very limited within the province.

The provincial Ministry of Health is responsible for policy directions, conducting research, establishing guidelines, and monitoring and evaluating programs and funding allocations. Within the regional system, each health region received a budget based on a capitation formula. Within Home Care, the province's Home Care Information System provides information as to the type of services and associated costs for each health region. Professional services (RN, PT, OT, nutrition, social work) are provided free within home care. Rehabilitation staff can provide care needs assessments, care co-ordination and professional services. Home care services are also available for persons with arthritis; however, services are typically restricted to those persons who are unable to access other services in the community.

Issues of service delivery on a provincial basis concern: 1) cluster of professional services in urban settings; 2) rising health care costs; 3) providing service to remote areas; and, 4) servicing Aboriginal populations.

Rural Health Service Delivery

Rural health service delivery is a concern within Alberta. Within the prairie provinces, a significant proportion of the population resides in rural settings. In 2006, the rural population of Alberta was 18%, Saskatchewan 35% and Manitoba 29%³¹. This presents a unique challenge to providing rehabilitation services in these rural and remote areas. Practical solutions have been developed such as visiting rheumatologists to rural or remote centre such as Fort McMurray. With some travelling rheumatology clinics, a physiotherapist and/or occupational therapist may accompany the rheumatologist. With other visiting clinics, they rely on the therapists within the community.

ONTARIO

Accessing publicly funded rehabilitation services in Ontario can, in theory, occur in many settings including hospital outpatient departments, publicly funded community-based clinics (PT only), home care services (through the Community Care Access Centres (CCACs)), primary care settings and other non-governmental organizations.

Hospital-Based Outpatient Services

Fewer and fewer hospitals have outpatient rehabilitation available as there is no requirement for these services under the CHA. For those hospitals that do provide this service, they have over time implemented strict eligibility criteria (e.g., service only to patients who have had specified procedures in the hospital, referral by a staff physician, or patients who live in a particular area). These services are provided under the global hospital budget and, in times of fiscal constraint, have been severely rationed or fully eliminated. The rationale for eliminating services is that rehabilitation is available in the community through other sources, including home care services (although home care services were created to provide service to those unable to travel outside their home for care). Some hospital outpatient services have been restructured to create a for-profit clinic (which does not violate the CHA), have contracted out services to external providers as a way to profit share, or rent space to an external provider. Mechanisms of provision of rehabilitation services that yield financial resources are added to the hospital global budget. The status of outpatient departments continues to evolve and little is known about the demand, supply and utilization of these services. The Greater Toronto Area Rehab Network is leading an initiative to gather these data³². What is known is that hospital ambulatory services are no longer the stable setting in which Canadians can receive outpatient rehabilitation services^{33,34}.

Community-Based Private and Provincial Government Funded Clinics

Currently, PT is provided in private clinics whereby the patient or a third party pays for services. There are also 80 designated physiotherapy clinics (DPCs) that are funded by the Ontario Ministry of Health and Long Term Care (MOHLTC). Eligibility for coverage at these clinics requires: PT be ordered by a physician (in contrast to independent practice that allows physiotherapists to assess and treat people without a referral in private clinics); individuals be younger than 20 years of age or 65 years of age or older; or individuals following discharge as a hospital patient and having PT needs directly connected to a condition, illness, or injury for which the individual was admitted to hospital (post-acute hospitalization)³⁵.

In the late 1960s, the Ontario Ministry of Health (MoH) (now called the Ministry of Health and Long Term Care) provided a unique opportunity to physiotherapists in Ontario. In order to reduce inpatient hospital stays, the MoH offered registered physiotherapist the opportunity to create a private practice (much like physicians) where people would access service at the community level, and the physiotherapists would bill, on a fee-for-service basis, the MoH for services (again, much like physicians). The model would be similar to the physician billing privileges, with the exception that the physiotherapist's billing number would not be specific to an individual physiotherapist, but rather to a specific clinic. At the time, approximately 120 physiotherapists entered into an agreement with the MoH

to do so. Soon after the MoH offer was made, the number of agreements was frozen and no new agreements have been issued since that time.

These DPCs were geographically based, meaning that the agreement holder can not move the clinic site beyond a specified location. The remuneration in these clinics is based on a fee-for-service model, meaning that there was a defined amount the clinic could invoice the MoH for each visit. Between the 1960s and the early 2000s, not much changed with these clinics in terms of eligibility or remuneration, although there has been much change within the profession. Current per visit charges continue to be just under \$13.00. Co-payment charges for assessment and re-assessment or additional group programs are common in these DPCs (Dorianne Sauve, Executive Director, Ontario Physiotherapy Association, personal communication, March 2010.)

In 2004, it was announced in the Ontario Budget that public funding for Schedule 5 clinics would be partially delisted as of April 2005. The partial delisting altered eligibility to the DPCs to those over 65 yrs, under 16 yrs, on social welfare programs, or who were admitted to overnight hospital stay (as described above). Prior to delisting, all residents of Ontario were eligible for a total of 150 annual PT visits.

It was hypothesized that the partial delisting could have consequences, including potential loss of PT access for low-income individuals, increased wait times for other health-care providers and negative health sequelae, potentially leading to increased incidence of chronic conditions. Landry et al. have reported that subsequent to the delisting 17.7% of people who required PT services were unable to get such services because they were no longer eligible³⁶. Moreover, others have reported that the partial delisting did not necessarily increase volumes at other public and private ambulatory setting, hinting that the delisting may have resulted in a proportion of the population who required services to forgo accessing these services due to inability or unwillingness to pay for services in the private market, or that individuals were not insured for such services through other casualty insurances^{37,38}.

In the community, OT has only ever been available through fee-for-service. As of the 2004 budget, chiropractor services also were fully de-listed. These services are now paid through third party coverage or by the patient.

Home Care Services

Home-based rehabilitation services including to residents of long-term care facilities are provided through the CCACs. This includes PT and OT services funded by the MOHLTC. In 1997, managed competition was introduced such that the CCACs contract service providers to provide patient care. As such, public dollars flow to private providers. The intent of home-based services is to provide care to those who are unable to travel to access community-based services outside their residence.

The evolution of the home care sector in Ontario has been documented by Baranek³⁹. However, an important policy inflection occurred in 1996 when the province introduced market-based reforms as a way in which to drive system efficiencies. The theory holds that if a provider is required to compete for a service contract, that same provider (or group of providers) will seek to maximize cost and clinical efficiency. Hence, the province implemented managed competition for contracts for home care services. Although the evidence on performance is unclear, Randall⁴⁰⁻⁴² has argued that such reforms have resulted in higher costs, have reduced innovation in service delivery and have reduced the amount of rehabilitation services provided.

Primary Care Settings

Community Health Centres (CHCs) in Ontario provide primary care under a government funded model. Many provide PT and OT services. FHTs in Ontario provide multi-disciplinary care; however, the list of health professionals who can be funded under the FHTs does not include physiotherapists. In late 2009, occupational therapists were added to the list of health professionals who can be funded within FHTs.

Non-Governmental Organization

Some not-for profit organizations also provide rehabilitation services in Ontario. Specific to arthritis, The Arthritis Society, Ontario Division, funded by the MOHTLC, employs 55 health professionals who work in the community. These include 28 full-time therapists (16 physiotherapists, 11 occupational therapists, 1 social worker) and 27 part-time therapists (17 physiotherapists, 1 PT assistant, 4 occupational therapists, 1 OT assistant, 4 social workers). The therapists are able to cover 90% of the province and deliver education and care in the home, in 111 clinics, through a variety of groups, over the telephone or through telemedicine at no charge to the client. Additionally, therapists who have acquired advanced skills through formal training (extended role practitioners) provide assessment, diagnosis, triage and independent management of selected MSK disorders including arthritis.

4.2.1.1 Health Human Resources: Strategies to Maximize Available Resources

While policy at the federal and provincial level informs how people with arthritis access services, access is predicated on the assumption that financial and human resources are available. HHR shortages are a major concern at the federal and provincial governmental levels. The objectives of the Pan-Canadian Health Human Resource Planning initiative⁴³ are to: enhance and strengthen the evidence base and capacity for coordinated HHR planning to better support federal/provincial/territorial areas, jurisdictional and nationwide activities; and, create a culture in which key HHR issues of jurisdictional, inter-jurisdictional and pan-Canadian concern can be identified and addressed. Some of the key activities include the development of a minimum data set for health professions other than nurses and physicians in Canadian provinces and territories; the development of national, supply-based database and reporting systems for pharmacists, occupational therapists, physiotherapists, medical laboratory technologists and medical radiation technologists by the Canadian Institutes for Health Information (CIHI); and, the development of education indicators in conjunction with federal, provincial and territorial ministries of health and education, health provider organizations, CIHI, HHR researchers and other related organizations to determine the needs associated with education data to support HHR planning. Additionally, Health Canada has initiatives through provincial and territorial agreements to streamline processes to facilitate and standardize foreign trainees to obtain credentials to allow them to practice in various jurisdictions in Canada.

Evolving Scope of Practice for Health Professionals

At a provincial level where legislation governs scope of practice for various health professionals, BC, Alberta and Ontario have and continue to review scope of practice for a number of health professionals including physiotherapists, occupational therapists, pharmacists and nurses. Physiotherapy scope of practice in Ontario will include additional authorized acts as outlined in Bill 179⁴⁴ (specific to arthritis are ordering of X-rays, MRI and limited blood work) when passed into law sometime in 2010. The goal is to ensure that all professions are able to work to their maximum scope of practice. Current scope of practice for various health professionals working with people with arthritis are detailed in the 'Care for People with Arthritis: Health Human Resources' report⁴⁵. Further developments are anticipated in the coming months.

4.2.2 Wait Times Management

Overall quality of health care services across Canada is perceived to be good, although a recent report from the Commonwealth Fund rated Canada second last (of 6 countries) in terms of quality and access; Canada's rating was the same in the 2004 Commonwealth Fund report⁴⁶. The major challenge becomes providing appropriate access to care in a timely fashion. Herein lies the dilemma, demand for health care services is presumed to be growing due to a number of factors at the same time as the publicly funded health care system increasingly is operating under tight cost constraints. This equates to an undersupply of health care services with resulting rationing of services expressed as increased wait times for services. Timely access to health care is a concern to the majority of Canadians. It became a prominent political issue in the early 1990s. As such, initiatives were implemented at the federal and provincial level to target wait times in priority areas, one of which was joint replacement⁴⁷.

Timely access to health care is critical for people with arthritis. There is evidence that early diagnosis and treatment of inflammatory arthritis reduces disability, deformity and early death⁴⁸⁻⁵⁵. Additionally, physical therapy⁵⁶⁻⁶⁰, exercise⁶¹⁻⁶⁸, weight reduction for those overweight⁶⁹⁻⁷², a variety of pain therapies^{73,74}, self-management⁷⁵⁻⁸⁸, and total joint replacement (TJR) surgery for later stage disease⁸⁹⁻⁹¹ have been shown to reduce pain and disability caused by degenerative arthritis. The discussion that follows addresses the background and initiatives related to reducing access to joint replacement. Initiatives related to early diagnosis and management of inflammatory arthritis are addressed in the report on 'Models of Care Delivery for People with Arthritis' as these have tended to be more local initiatives and are rooted in the process of how care is delivered (i.e., models of care)⁹².

4.2.2.1 FEDERAL INITIATIVES

As part of the 2004 Federal Health Accord, the provincial and territorial First Ministers, after agreeing that access to timely care across Canada was the major concern and a national priority, agreed on a 10-year action plan for health care⁴⁷ based on the following principles:

- universality, accessibility, portability, comprehensiveness, and public administration;
- access to medically necessary health services based on need, not ability to pay;
- reforms focused on the needs of patients to ensure that all Canadians have access to the health care services they need, when they need them;
- collaboration between all governments, working together in common purpose to meet the evolving health care needs of Canadians;
- advancement through the sharing of best practices;
- continued accountability and provision of information to make progress transparent to citizens; and,
- jurisdictional flexibility

Within this plan, reducing wait times and improving access was targeted for five areas, two of which were hip and knee replacement and diagnostic imaging (more specifically magnetic resonance imaging). The Federal Wait Times Reduction Fund was established to augment provincial and territorial investments with a focus on jurisdictional priorities such as training and hiring more health professionals, clearing backlogs, building capacity for regional centres of excellence, expanding appropriate ambulatory and community care programs and/or tools to manage wait times. The First Ministers agreed to collect and provide data to Canadians that would indicate their progress toward reducing wait times. This included agreement by each jurisdiction to develop, establish and report comparable indicators of access to health professionals and to diagnostic and treatment procedures, with a first report to their citizens to be developed by all jurisdictions by December 31, 2005; establishment of evidence-based benchmarks for

wait times for the priority areas by December 31, 2005; and, establishment and reporting of multi-year benchmark targets for the priority areas by December 31, 2007.

Additionally, the federal government attempted to work with the provinces and territories to establish a wait time guarantee for each of the priority areas⁹³. However, each jurisdiction agreed to develop a wait time guarantee in just *one* of the five priority areas or primary care by 2010. The areas chosen by each of the provinces or territories depended on its "priorities, capacity and different starting points". Joint replacement was not selected by any of the jurisdictions.

A question that should be asked is why the federal government has such an interest in reduced wait times, and the establishment of guarantees. While the reasons are surely multiple, the Supreme Court of Canada ruling in the case of *Jacques Chaoulli and George Zeliotis versus the Attorney Generals of Quebec and Canada* in 2005 likely was influential. Briefly, the background on the case is that a patient, Georges Zeliotis and his physician, Jacques Chaoulli, challenged the Charter of Rights and Freedoms of Canada. Mr. Zeliotis approach his physician Dr. Chaoulli who indicated that Zeliotis required joint arthroplasty surgery but that he would have to wait what they concluded to be an excessive amount of time. When Zeliotis asked whether he could purchase such medical intervention in the private market, he was informed that such options are not available as they would contravene the CHA. The two launched their challenge arguing that it is essentially against their rights to limit private purchasing of medical interventions, given that the publicly funded health system was unable to provide such services in a timely fashion. The majority of the Supreme courts justices ruled in favour of Chaoulli and Zeliotis agreeing that this constituted a violation of the Charter. Flood et al. have provided an in-depth legal and policy analysis of this scenario. While no direct association can be drawn, it was only following this rule that provinces and regions began in earnest their path towards reducing wait times⁹⁴.

Although joint replacement was not a specified priority, each of the BC, Alberta and Ontario governments has undertaken initiatives to reduce wait times for total hip (THR) and total knee replacement (TKR) surgery. Although these initiatives vary by province, there are commonalities in terms of increased funding for prostheses; increased operating room efficiencies so that more surgery can be done within a day; establishment and implementation of standardized care pathways through the continuum of care; maximizing scope of practice for health professionals to allow triage of patients who need surgery to the orthopaedic surgeon; and increased linkages with community programs such as chronic disease and arthritis self-management programs. Additionally, each province has established a registry to track wait times for THR and TKR provincially and in regions within the province.

The success of such initiatives across Canada is variable, as data below from our highlighted provinces of BC, Alberta and Ontario demonstrate. A recent report from Canadian Institutes of Health Information (CIHI) has criticized the inability to sustain initial improvements in wait times for joint replacement in Alberta⁹⁵.

4.2.2.2 PROVINCIAL INITIATIVES

British Columbia

BC records and provides public access to provincial-level data⁹⁶. Only non-emergent surgeries are wait-listed. For the final quarter of 2009, the median wait time for orthopaedic surgery was 8.3 weeks; 15,418 individuals waiting for surgery. The median wait for THR was 10.3 weeks (1,461 individuals waiting) and 12.7 weeks for TKR (3,035 individuals waiting). However, it should be noted that the BC Ministry of Health reports audit information that indicates 'significant weaknesses' in the data. Table 1 shows the reduction in wait times for THR and TKR for 2001 to 2009. Wait times have been halved⁹⁷.

Table 1: Median Wait Times (Weeks) For Patients on THR and TKR Wait Registry 2001/02 to 2008/09 in BC

Fiscal Year	Hip Replacements	Knee Replacements
2008/09	10.0	13.0
2007/08	11.0	16.9
2006/07	13.3	19.9
2005/06	16.8	25.0
2004/05	22.1	28.9
2003/04	20.1	28.7
2002/03	17.0	22.8
2001/02	18.7	25.4

A more recent report by CIHI that provided comparative data from April to September 2009 across the provinces and territories indicated that the median wait time for TKR was 85 days and that 90% of people had their surgery by 275 days (or 77% had surgery within the benchmark of 182 days)⁹⁵. In contrast, the median wait for THR was 73 days and the 90th percentile was 223 days (or 85% having THR within the benchmark). The overall trend for BC was a decrease in waiting times for both TKR and THR from 2006 through 2009.

BC is involved in federal, inter-provincial and local initiatives aimed at managing surgical wait times⁹⁸. At the federal level, BC works with Canada Health Infoway to establish common standards to define and measure wait times for surgery in all provinces and to improve access to accurate health information. Inter-provincial and territorial work has endorsed benchmarks for national wait times. Provinces vary slightly in the wait time benchmarks but there is general agreement that primary elective THR and TKR should be done within a maximum of 4 to 6 months (182 days) once the surgeon and patient agree that surgery is warranted⁹⁹. At a provincial level, the Provincial Surgical Services Project (PSSP) brought together government, health authorities and physicians to develop new tools to help assess patients and manage wait lists more effectively. The PSSP is a collaborative, province-wide project with the aim of improving access to surgery in BC through the creation and implementation of a Surgical Wait List Registry. The purpose of the registry is to produce more clinically relevant, accurate and comprehensive information. The surgeons use consistent processes to classify their patients' surgical needs, ensuring patients timely access to surgery in relation to their need and within agreed time frames. Implementation occurred in 2006.

In addition to the above initiatives, local programs also were developed and implemented. One example is the OsteoArthritis Service Integration System (OASIS) program developed by the Vancouver Coastal Health Region¹⁰⁰ that has been in place since 2006. Before OASIS there were no programs in BC that coordinated care for people with OA. Based on consultations with people who have OA, care givers and family doctors, OASIS was developed to address the following care gaps:

- There was no one source of information for people with OA and it required a lot of time and effort to research resources and support services.
- Many people did not have the information they needed to self-manage their OA.

- Many of the resources, services and education programs that were available were for people *after* they had surgery. Very little information was available about prevention, non-surgical options and pre-operative care.
- People with multiple health problems and those who have trouble speaking and understanding English often had problems accessing care when and where they needed it.

The mission of OASIS is ‘to enable individuals with all stages of OA to achieve optimal health outcomes, by providing multi-disciplinary assessment of needs, personalized plans, and timely, relevant education’. Engagement of stakeholders; creation of resources for communicating about the program and available resources; partnering with community programs and resources; and development of standardized processes and tools are integral to the program. There also is a strong emphasis on personalized care and self-management. Quality improvement cycles have been integrated.

These types of endeavours in BC, while focusing on priority issues related to reduction of wait times driven from federal policy in consort with the provinces and territories, are in conformity with the provincial emphasis on chronic disease management. This is despite the fact that arthritis was not explicitly stated as a focus in the BC Chronic Disease Model.

Alberta

Alberta also provides access to wait times for primary elective THR and TKR on a hospital level ¹⁰¹. The provincial benchmark is 90% of people having their surgery within 26-30 weeks (182-210 days) for THR and 26-45 weeks (182-315 days) for TKR. For example, Tables 2 and 3 present the data for the first quarter of 2009 as provided by AHS for primary elective THR and TKR respectively. The province as a whole did not meet the provincial targets for THR or TKR; 50% of sites met the target for THR and 37% of sites met the target for TKR. Similar data for the second quarter of 2009 using a 26 week benchmark are presented in a report from AHS ¹⁰².

Table 2: Alberta Wait Times for Primary Elective Hip Replacements (April 1 to June 30, 2009)

Site	Number of THR	% That Met Benchmark*	Median Wait Time in Weeks	Number of weeks by which 90% of patients had their surgery
Foothills Medical Centre	26	88%	14.7	36.4
Health Resource Centre	138	93%	8.2	22.3
Misericordia Community Hospital	59	68%	19.6	41.6
Peter Lougheed Centre	46	87%	14.1	34.2
Royal Alexandra Hospital	162	69%	17.4	43.5
Red Deer Regional Hospital	59	95%	13.7	23.9
Rockyview General Hospital	63	90%	14.4	26.3
University of Alberta Hospital	44	93%	8.6	23.1
Total	597	83%	13.1	33.2

*AHS Strategic Direction Target: 90% of patients within 26-30 weeks

Table 3: Alberta Wait Times for Primary Elective Knee Replacements (April 1 to June 30, 2009)

Site	Number of TKR	% That Met Benchmark*	Median Wait Time in Weeks	Number of weeks by which 90% of patients had their surgery
Foothills Medical Centre	27	81%	15.9	39.2
Health Resource Centre	113	96%	9.9	22.1
Misericordia Community Hospital	114	41%	30.2	86.7
Peter Lougheed Centre	111	77%	15.7	37.9
Royal Alexandra Hospital	245	58%	24.3	54.7
Red Deer Regional Hospital	62	89%	15.9	27.0
Rockyview General Hospital	146	80%	15.7	32.1
University of Alberta Hospital	46	89%	12.7	26.3
Total	864	72%	18.0	48.0

*AHS Strategic Direction Target: 90% of patients within 26-45 weeks

The more recent CIHI report of March 2010 that provided comparative data across the provinces and territories showed slightly different results from the above and indicated that the median wait time for TKR was 120 days and that 90% of people had their surgery by 352 days (or 71% had surgery within the benchmark of 182 days)⁹⁵. In contrast, the median wait for THR was 93 days and the 90th percentile was 250 days (or 81% having THR within the benchmark). It should be noted that these data from CIHI include primary and revision hip and knee replacement whereas the AHS data include only primary elective hip and knee replacement. Irrespective, the overall trend for Alberta was a decrease in wait times for knee replacement from 2006 through 2009 while wait times for hip replacement were stable during the same period.

While some facilities still do not meet the wait time benchmarks, overall there has been an improvement in the wait times particularly since the Alberta Hip and Knee Replacement Pilot Project in 2005-06. The pilot evaluated an innovative evidence-based model of care for hip and knee replacement patients. The new model was designed to improve the quality and efficiency of care. The pilot was conducted by the Alberta Orthopaedic Society, Alberta Bone and Joint Health Institute, Alberta's Ministry of Health and Wellness and provincial health authorities. At the time of the pilot, waits from surgical consultation to surgery for patients receiving conventional care averaged 290 days¹⁰³.

The Alberta Hip and Knee Replacement Pilot Project was conducted by the Alberta Bone & Joint Institute to evaluate its new model of care for people with hip and knee OA¹⁰⁴. This evidence-based model of care included the following tenants:

- Fully integrated continuous services delivered in a multidisciplinary environment.
- Assessment, diagnosis and non-surgical treatment centralized in single-purpose hip and knee clinics.
- A shared-care approach that puts patients at the centre of their care.
- The right care provided to the right individuals for the right reasons in the right way by the right provider in the right setting at the right time.
- The skills and knowledge of Alberta’s health professionals used to maximal value.
- Clear patient and provider responsibilities supported by accountability mechanisms.

Table 4 shows the major components of the model of care.

Table 4: Alberta Model of Care for Hip and Knee Replacement – the path of care¹⁰⁵

Stage	New Clinical Pathway
Referral	<ul style="list-style-type: none"> • Standardized referral templates • Choice to refer to next available surgeon • Benchmark wait times for 1st orthopaedic consult
Presurgery	<ul style="list-style-type: none"> • Establishment of central intake clinics • Case manager assigned to each patient • Patient “buddy system” for all clinical encounters • Patient education session • Increased patient awareness and accountability by means of patient contracts for presurgery optimization and defining expectations postsurgery • Standardized criteria for health resource use presurgery (e.g., physiotherapy, home care assessments) • Prebooking for all clinic and medical visits and procedures
Surgery and Inpatient Length of Stay (LOS)	<ul style="list-style-type: none"> • Benchmark wait times for surgery • Standardized pain, anti-thrombosis, nausea and anesthesia protocols • Benchmark inpatient and subacute care LOS • Estimated inpatient LOS • Predetermined discharge criteria • Dedicated operating room teams • Dedicated THR and TKR inpatient beds • Mobilization on day of surgery
Postsurgery	<ul style="list-style-type: none"> • Measurement of patient outcomes • Standardized criteria for health resource use postsurgery (e.g., physiotherapy, occupational therapy, home care)
All Stages	<ul style="list-style-type: none"> • Implementation of information templates to enhance processes and adherence to the care path

This model was evaluated in the context of a randomized trial in 2005-06 when there were nine health regions in Alberta. The trial was conducted in Alberta’s three most populous health regions (Capital Health Authority, Calgary Health Region and the David Thompson Regional Health Authority), which

together performed 80% of the hip and knee replacements in Alberta ¹⁰⁵. Participants were randomized to the new care pathway or usual care (i.e., assignment to a wait list for surgery). The key findings of the trial were: 1) wait from referral to consultation with a surgeon averaged 21 working days, compared to 145 days for patients who had conventional care; 2) wait from consultation to surgery averaged 37 working days, compared with 290 days; 3) LOS in acute care averaged 4.7 days, compared with 6 days; and 4) there was a greater reduction of pain and faster and greater improvement in physical function (measured by a standardized patient-reported questionnaire). In addition, 85% of new care pathway patients were mobilized on the day of their surgery, compared with 31% of patients who had conventional care, and new care pathway patients and their care providers were generally more satisfied. Results also showed that efficiency gains did not compromise patient safety ¹⁰³.

Ontario

Ontario provides wait times data for THR and TKR on many levels including aggregated provincial, regional (through the Local Integrated Health Network (LHINs)), and individual hospital level based on time from decision for surgery to surgery date. The provincial benchmark is 90% of people having their surgery within 182 days for both THR and TKR. The provincial wait for THR was 180 days and for TKR was 162 days as of 11 February 2010 ¹⁰⁶. Of the 14 LHINs, four had waits in excess of the benchmark for THR and TKR and one additional LHIN had a high wait for TKR (Table 5). The reasons for these longer waits are clearly multi-faceted and likely include not only the number of available surgeons but the demographics of the population and the geographic dispersion of the population. For example, the North East and North West LHIN's represent very large geographic regions and while they have a relatively low number of surgeons per population other LHINs with lower numbers of surgeons are below the wait times (e.g., Central LHIN, Central East LHIN) ⁴⁵. However, these LHINs border the Toronto Central LHIN, with a high number of orthopaedic surgeons, and there is significant cross-boundary flow at the borders of these LHINs as they are all urban Greater Toronto borders ^{45,107}. Hamilton Niagara Haldimand Brant LHIN is above the benchmark for TKR. In this case, the long wait may reflect need as this LHIN has the highest rates of obesity in the province ⁹⁵, a known risk factor for knee OA ^{69,108,109}. TKR is an effective treatment for moderate to severe knee OA.

The CIHI report reflecting data from April to September 2009 indicates that 50% of Ontarians have their hip and knee replacement surgery respectively by 62 and 67 days while 90% have their surgery by 160 (93%) and 184 (90%) days respectively. (These data reflect primary elective and revision joint replacement.) Overall, there has been a trend to decreased wait times for both hip and knee replacement between 2006 and 2009 ⁹⁵.

Table 5: Wait for THR and TKR in Ontario by LHIN - 11 February 2010

	Wait in days	
	THR	TKR
Ontario	180	162
<i>Local Health Integrated Networks (LHIN)</i>		
Erie St. Clair	132	132
South West	145	174
Waterloo Wellington	105	124
Hamilton Niagara Haldimand Brant	182	213*
Central West	158	162
Mississauga Halton	127	160
Toronto Central	112	126
Central	139	158
Central East	169	175
South East	151	141
Champlain	311*	233*
North Simcoe Muskoka	195*	250*
North East	394*	399*
North West	233*	252*

*Wait times above provincial benchmark of 182 days.

Since the initiation of the Ontario wait times strategy, wait times have dropped 57% for knee replacement and 52.7% for hip replacement¹¹⁰. In addition to the mandatory reporting of wait times and the feedback loop to monitor performance in relation to the benchmark, a number of initiatives facilitated the ability to reduce wait times. These included additional financial incentives from the MOHLTC whereby specified hospitals were given additional budget for prostheses (hospitals in Ontario now sign an agreement with their LHIN committing to a specified volume of THR and TKR surgeries per annum). However, efficiencies were required to allow these additional surgeries to occur. Particularly, improved patient flow through the continuum of care was required.

Processes to achieve these efficiencies began as a demonstration project in the Greater Toronto Area (GTA), funded through the Ontario Wait Times Strategy in 2005¹¹¹. The demonstration project was a partnership of 26 organizations (Total Joint Network (TJN)) including acute care and rehabilitation hospitals, CCACs that provide home-based nursing, rehabilitation and personal support workers, The Arthritis Society, and the GTA Rehab Network. The group worked to develop standardized processes

based on best available evidence for determining discharge destination criteria from the acute hospital to rehabilitation (Ontario and particularly the GTA) has a number of inpatient rehabilitation beds that traditionally were used for THR and TKR) and care pathways including LOS targets across the continuum of care based on best-practices for medical (e.g., standardized prophylaxis for deep vein thrombosis), surgical and rehabilitation management. Additionally, stakeholder partnerships were established to facilitate patient flow across the continuum of care (e.g., repatriation agreements among facilities/organizations providing care). As part of the project, data were tracked that were fed back to the organizations on a monthly basis. It included the volume of THR and TKR surgeries by acute care hospital and rehabilitation institution/organization, discharge destination and LOS in each part of the continuum of care. Additionally, a subgroup of the patients participated in an outcomes study to ensure that the anticipated large improvements in pain and physical disability were maintained given the changes in care¹¹². While this project achieved results in terms of increased surgical volumes and efficiencies while maintaining patient outcomes, it was a 'local' project and did not address many of the issues of wait times elsewhere in the province. Hence, under the Ontario Wait Times Strategy additional initiatives were developed to further address wait times for THR and TKR.

A working group with representation from designated institutions convened under the Ontario Wait Times Strategy to develop and establish a triage model of care^{113,114} for people referred for consideration of primary THR or TKR. The critical tenants of the model included a central intake system for referral from a primary care physician and assessment by a physiotherapist or occupational therapist with advanced skills who was working in an extended role. (Further details about these skills and roles are discussed in more detail below and in the reports on 'Models of Care Delivery for People with Arthritis'⁹² and 'Care for People with Arthritis: Health Human Resources'⁴⁵). Based on the assessment, people considered candidates for joint replacement surgery went on to see the surgeon for a discussion about surgery, booking of any additional required tests and ultimately booking of surgery. People were offered the choice of seeing the surgeon with the first available appointment or of waiting to see the surgeon of their choice. People who required conservative management were, as appropriate, given education related to the disease, exercise, information about community resources related to wellness and self-management programs, etc. Additionally, a letter was sent to the referring physician regarding the recommendations/plan for the patient. For patients going on to surgery, they accessed the standardized process related to pre-surgery education, acute care and rehabilitation based on the work of the TJN.

The MOHLTC reconstituted the Orthopaedic Expert Panel as the Ontario Bone & Joint Health Network (hereafter referred to as the expert panel) in 2008¹¹⁵. The expert panel membership includes orthopaedic surgeons, an inpatient rehabilitation physician, a LHIN CEO, a hospital CEO, a geriatrician, a primary care physician, a physiotherapist, an occupational therapist, nursing representative and a health services researcher. This representation allows the support of system change across the continuum of care for people with orthopaedic conditions. The initial focus of the expert panel was to create and implement a strategy to achieve the benchmark wait times for hip and knee replacements of 182 days from the surgeon's office to surgery, and for hip fracture care of 2 days from admission to surgery. Centralized intake and assessment approaches using advanced practice clinicians based on the above model were launched in ten of the LHINs. By the end of the fiscal year 2008/09, the hip and knee replacement provincial target was achieved and was below the 182 days to surgery. The panel continues to monitor wait times but now has expanded its mandate to other aspects of orthopaedics (e.g., hip fracture).

National Model of Care for Hip and Knee Replacement

Under an initiative from Bone and Joint Canada, the Canadian National Hip & Knee Knowledge Translation Network was established in 2007. This network developed the National Model of Care based on stakeholder input from across the country. A toolkit was then developed that could be used to assist the implementation of the model of care. The programs developed in BC, Alberta and Ontario provide the framework for significant components of this national work, the details of which can be found at www.boneandjointcanada.com. The current mandate of the Network is to facilitate and support uptake and implementation of the model of care across Canada.

Waiting: Arthritis Diagnosis and Management of Inflammatory Arthritis

Federal and provincial initiatives have focused on a procedure, joint replacement. However, for people with inflammatory arthritis, diagnosis and early management are the critical focus related to waiting.

Early diagnosis and management of inflammatory arthritis is critical to the prevention of deformity, disability and mortality⁵⁰. Models of care to facilitate diagnosis and initiation of treatment have been developed regionally and in local areas and are described in the report on ‘Models of Care Delivery for People with Arthritis’⁹². In addition to diagnosis, early treatment with disease modifying drugs (DMARDS) is critical for people with inflammatory arthritis. There are a proportion of people whose disease activity is not controlled with DMARDS and these individuals require treatment with biologics. The cost of these drugs is extremely high and most provinces have these drugs on a restricted access list. This means that a person must demonstrate failure of DMARDS and meet provincial criteria in order to have access to and receive coverage under their provincial health plan for biologics. There is concern that this process delays access to treatment for those in need. A recent arthritis consumer report provides an overview of the drugs available and funded, and the perception of ease of access¹¹⁶. Access to the common biologic agents is similar in BC, Alberta and Ontario, generally on a case-by-case basis, with the exception of infliximab. In Ontario, infliximab has been declined for people with psoriatic arthritis (i.e., it is not included in the formulary)¹¹⁶.

Given that health care is under the jurisdiction of the provinces, it is not surprising that the criteria for access to biologics vary by province and can be quite complex. BC and Ontario provide two examples. In BC, the PharmaCare program helps eligible residents with the expense of eligible biologics prescribed by rheumatologists. For coverage of the first 8 to 12 weeks, patients must be refractory to methotrexate plus two other DMARDS (i.e., the medication doesn’t work, causes side effects, or is contraindicated for the patient). For continuing coverage, patients must be reassessed by a rheumatologist at the end of the initial period of coverage, and then annually, to determine their response to treatment. The assessment report is reviewed and approved by the Drug Benefit Adjudication Advisory Committee¹¹⁷.

In Ontario, people with RA require blood work demonstrating that they are rheumatoid factor positive/cyclic citrullinated peptide positive or have an increased erythrocyte sedimentation rate, usually with erosions on x-ray. Additionally, people must have demonstrated failure to the disease modifying drug methotrexate at a full dose of 25 mg/week, including through subcutaneous administration. Also, they need to have failed at least three months of Leflunomide and to have failed combination therapy. Generally, approval for a biologic also requires that a patient has been on hydroxychloroquine and sulfasalazine. Finally, if the person is intolerant to their medications, supporting documentation (e.g., elevated liver markers such as aspartate aminotransferase or alanine aminotransferase; or computed tomography that shows interstitial lung disease) is required.

5.0 Discussion

Rising costs and access to health care for Canadians are prime concerns and federal and provincial/territorial governments have implemented a number of policies and initiatives to address these concerns. As outlined above, while some of these policies are not specific to people with arthritis, they can or do impact this population or subgroups of this population. In some cases, policies have been designed to facilitate access; in other cases, policies have limited access.

CDM strategies, wait time strategies and HHR strategies have largely been implemented to facilitate and improve access to care.

CDM is a focus of federal, provincial, regional and local health care jurisdictions and providers. As noted above, strategies and programs continue to evolve and develop, many with a focus on multi-morbidity and others with a disease-specific focus. Arthritis has generally not been a priority with CDM strategies and programs unless encompassed within 'multi-morbidity'. Rather, cardiovascular disease and diabetes generally are targets in CDM strategies for all provinces. Arthritis is notable by its omission, particularly as a MSK disease (of which arthritis is the primary condition) has the highest economic burden^{11,118}. The exception is the Arthritis Self-Management Program (ASMP) described in the report on 'Models of Care Delivery for People with Arthritis'⁹². It is a health promotion program that uses a cognitive behavioural approach to provide people with skills to self-manage aspects of their disease. The ASMP is supported by The Arthritis Society and is offered in a number of locations across the country¹¹⁹.

CDM strategies rely on patient willingness to engage and change behaviour, and programs have significant attrition^{120,121}. Access may be an issue for people in rural/remote areas and even where programs exist, there are challenges to provide the service for those in the workforce. Innovative implementation strategies are required to attract participants and support adherence. Studies are beginning to evaluate the effectiveness and cost-effectiveness of these CDM programs.

Strategies have focused on improving wait times for hip and knee replacement surgery and, as such, focus on a limited aspect of disease severity and the continuum of care for people with arthritis. Overall, there have been achievements in reducing wait times in BC, Alberta and Ontario; however, the magnitude of the results are variable. Programs initiated to improve wait times are potentially vulnerable given the strain on health budgets. The resources required for joint replacement surgery include the front end consultation and work-up with the team/surgeon and the in hospital costs including the prosthesis and post-operative rehabilitation. Access to post-operative rehabilitation, particularly for those undergoing knee replacement, is becoming more limited as hospitals close their outpatient departments to contain costs^{33,34}. Patients largely must pay out of pocket, rely on third party insurance coverage or, in Ontario, access one of a limited number of designated clinics covered by OHIP. Additionally, as hospitals struggle to contain their budgets there is concern that prosthesis budgets will be affected. It is unclear how fiscal realities will impact wait times in the coming months and years.

People receiving joint replacement represent a very small proportion of people with arthritis who see a physician. In Ontario, 1 to 2 per 1,000 who consult a physician for arthritis go on to have joint replacement surgery¹²². Hence, there is a very large proportion of people with arthritis who otherwise require access to conservative management. Access to early diagnosis and treatment (particularly for inflammatory arthritis) and CDM programs and rehabilitation are critical, yet funding models for various health professions may limit access for those in need. Primary care continues to be the main access point to the health care system. As team-based primary care continues to evolve, models that incorporate CDM strategies, rehabilitation, etc within the team likely will benefit people with arthritis. Such a model provides opportunity to enhance conservative management while facilitating referral to specialist care for those who require it.

Provision of service is predicated on having the necessary skilled HHR. The challenges of matching supply and demand of HHR have long been recognized. Initiatives to improve data capture of HHR for various professions to support better supply and demand forecasting are in progress as are initiatives to allow easier credentialing for foreign trainees⁴⁵. These initiatives as well as the legislative changes in progress related to enhancing scope of practice for many professionals (e.g., pharmacists, physiotherapists, etc.) are all designed to limit the gap between supply and need/demand.

The paradigm for management of chronic diseases like arthritis includes the patient as an active participant in their health care with access to an integrated team of professionals with the skills to help them manage their disease. Policy related to CDM, access to and scope of practice for professionals and how professionals work together support this paradigm and have implications for how models of care are constructed, operationalized and implemented.

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Appendix A: Search Strategy for Peer-Reviewed Literature – Key Words and Results

Search Strategy for Medline

Executed on 27 May 2009

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) 1950 to Present

#	Searches	Results	Search Type
1	arthritis/ or arthritis, psoriatic/ or arthritis, rheumatoid/ or gout/ or osteoarthritis/ or spondylarthritis/	111705	Advanced
2	arthr*.mp.	214422	Advanced
3	osteoarthr*.mp.	41107	Advanced
4	systemic lupus erythematosus.mp. or Lupus Erythematosus, Systemic/	42569	Advanced
5	lupus.mp.	53715	Advanced
6	Spondylarthropathies/ or Spondylitis, Ankylosing/ or spondyloarthropathy.mp. or Spondylitis/	13050	Advanced
7	ankyl*.mp.	15610	Advanced
8	spondy*.mp.	24978	Advanced
9	reiter*.mp.	5004	Advanced
10	scleroderma.mp. or Scleroderma, Systemic/	16964	Advanced
11	sclerod*.mp.	17393	Advanced
12	Rheumatic Diseases/ or rheumatic disease*.mp.	20265	Advanced
13	rheuma*.mp.	137454	Advanced
14	gout*.mp.	10505	Advanced
15	polyarthr*.mp.	8429	Advanced
16	oligoarthr*.mp.	613	Advanced
17	Sjogren's Syndrome/ or sjogren*.mp.	10971	Advanced
18	sjoegren*.mp.	63	Advanced
19	Still's Disease, Adult-Onset/ or still* disease*.mp.	1273	Advanced
20	bechterew*.mp.	545	Advanced
21	Joint Diseases/ or joint disease*.mp.	22220	Advanced
22	coxarthr*.mp.	1387	Advanced
23	spinal osteophytosis/	3158	Advanced
24	spinal osteophyt*.mp.	3165	Advanced
25	Arthritis, Gouty/	594	Advanced
26	Osteoarthritis, Hip/ or Osteoarthritis, Spine/ or Osteoarthritis, Knee/	8182	Advanced
27	musculoskeletal diseases/ or bone diseases/ or cartilage diseases/ or fasciitis/ or foot deformities/ or foot diseases/ or hand deformities/ or joint diseases/ or muscular diseases/	84399	Advanced

	or musculoskeletal abnormalities/ or rheumatic diseases/ or tennis elbow/		
28	(musculoskeletal adj6 disease*).mp.	6637	Advanced
29	MSK.mp.	219	Advanced
30	(musculoskeletal adj6 injur*).mp.	1464	Advanced
31	(musculoskeletal adj6 condition*).mp.	986	Advanced
32	(musculoskeletal adj6 disorder*).mp.	2972	Advanced
33	Chronic Disease/	183698	Advanced
34	(chronic adj6 disease*).mp.	277991	Advanced
35	(chronic adj6 injur*).mp.	8845	Advanced
36	(chronic adj6 condition*).mp.	15118	Advanced
37	(chronic adj6 disorder*).mp.	17105	Advanced
38	(chronic adj6 illness*).mp.	10392	Advanced
39	or/1-38	723650	Advanced
40	polic*.mp.	159661	Advanced
41	shift*.mp.	193896	Advanced
42	reform*.mp.	39867	Advanced
43	health* plan*.mp.	43936	Advanced
44	government*.mp.	95860	Advanced
45	Public Policy/	23710	Advanced
46	Health Care Reform/	19021	Advanced
47	exp Health Planning/	181793	Advanced
48	healthcare planning.mp.	90	Advanced
49	health care planning.mp.	473	Advanced
50	Health Care Sector/	4276	Advanced
51	sector*.mp.	36512	Advanced
52	exp Insurance, Health/	104418	Advanced
53	Universal Coverage/	1170	Advanced
54	health* system*.mp.	19236	Advanced
55	health care system*.mp.	16779	Advanced
56	Health Transition/	570	Advanced
57	transition*.mp.	165037	Advanced
58	transformation*.mp.	156508	Advanced
59	funding*.mp.	16334	Advanced
60	or/40-59	1000917	Advanced
61	39 and 60	26547	Advanced
62	limit 61 to (english language and yr="2004 - 2009" and ("all adult (19 plus years)" or "young adult (19 to 24 years)" or "adult (19 to 44 years)" or "young adult and adult (19-24 and 19-44)" or "middle age (45 to 64 years)" or "middle aged (45 plus years)" or "all aged (65 and over)" or "aged (80 and over)"))	4056	Advanced

Search Strategy for Embase

Executed on 27 Aug 2009

EMBASE 1980 to 2009 Week 34

#	Searches	Results	Search Type
	Arthritis Segment		
1	arthritis/	24793	Advanced
2	psoriatic arthritis/	4321	Advanced
3	rheumatoid arthritis/	60342	Advanced
4	gout/	5252	Advanced
5	osteoarthritis/	24517	Advanced
6	osteoarthr*.mp.	39686	Advanced
7	spondylarthritis/	221	Advanced
8	arthr*.mp.	208830	Advanced
9	systemic lupus erythematosus/	31107	Advanced
10	lupus.mp.	46815	Advanced
11	spondyloarthropathy/	2625	Advanced
12	ankylosing spondylitis/	7562	Advanced
13	spondylitis/	1849	Advanced
14	ankyl*.mp.	10631	Advanced
15	spondy*.mp.	22196	Advanced
16	reiter*.mp.	3746	Advanced
17	systemic sclerosis/	6551	Advanced
18	sclerod*.mp.	10126	Advanced
19	rheumatic disease/	10338	Advanced
20	rheuma*.mp.	105292	Advanced
21	gout*.mp.	6407	Advanced
22	polyarthr*.mp.	6398	Advanced
23	oligoarthr*.mp.	607	Advanced
24	Sjogren syndrome/	8812	Advanced
25	sjogren*.mp.	7359	Advanced
26	sjogren*.mp.	9066	Advanced
27	adult onset Still disease/	307	Advanced
28	still* disease*.mp.	1021	Advanced
29	bechterew*.mp.	275	Advanced
30	joint disease*.mp.	5015	Advanced
31	arthropathy/	7552	Advanced
32	coxarthr*.mp.	704	Advanced
33	spinal osteophyt*.mp.	19	Advanced
34	hip osteoarthritis/	3087	Advanced

35 spondylosis/	1330	Advanced
36 knee osteoarthritis/	7484	Advanced
MSK Segment		
37 musculoskeletal disease/	9198	Advanced
38 bone disease/	7665	Advanced
39 chondropathy/	1811	Advanced
40 fasciitis/	1159	Advanced
41 foot malformation/	2632	Advanced
42 foot disease/	2503	Advanced
43 hand malformation/	1625	Advanced
44 muscle disease/	5274	Advanced
45 musculoskeletal system malformation/	241	Advanced
46 tennis elbow/	997	Advanced
47 epicondylitis.mp.	1058	Advanced
48 (musculoskeletal adj6 disease*).mp.	10121	Advanced
49 MSK.mp.	208	Advanced
50 (musculoskeletal adj6 injur*).mp.	3939	Advanced
51 (musculoskeletal adj6 condition*).mp.	890	Advanced
52 (musculoskeletal adj6 disorder*).mp.	2995	Advanced
Chronic Diseases Segment		
53 Chronic disease/	36986	Advanced
54 (chronic adj6 disease*).mp.	147736	Advanced
55 (chronic adj6 injur*).mp.	7050	Advanced
56 (chronic adj6 condition*).mp.	12519	Advanced
57 (chronic adj6 disorder*).mp.	14079	Advanced
58 (chronic adj6 illness*).mp.	8004	Advanced
59 or/1-58	516699	Advanced
Policy Segment		
60 health care policy/	60510	Advanced
61 policy/	20176	Advanced
62 polic*.mp.	121607	Advanced
63 shift*.mp.	152062	Advanced
64 reform*.mp.	15709	Advanced
65 exp health care planning/	22515	Advanced
66 healthcare planning.mp.	67	Advanced
67 health care planning.mp.	22651	Advanced
68 government*.mp.	56851	Advanced
69 "health care cost"/	65644	Advanced
70 sector*.mp.	20993	Advanced
71 health care reform*.mp.	1643	Advanced

72	healthcare reform*.mp.	256	Advanced
73	exp health insurance/	51799	Advanced
74	insurance/	4111	Advanced
75	universal coverage*.mp.	298	Advanced
76	health care/	35289	Advanced
77	health* system*.mp.	43898	Advanced
78	health care system*.mp.	41765	Advanced
79	transition*.mp.	139662	Advanced
80	transformation*.mp.	123536	Advanced
81	funding*.mp.	14979	Advanced
82	or/60-81	731552	Advanced
Combined Results			
83	59 and 82	25930	Advanced
84	limit 83 to (adult <18 to 64 years> or aged <65+ years>)	7662	Advanced
85	limit 84 to (english language and yr="2004 -Current")	3623	Advanced

Search Strategy for Cinahl

Executed on 28 Aug 2009

CINAHL EBSCO

#	Query	Limiters/Expanders	Results
S84	S24 and S82	Limiters - Publication Year from: 2004-2009; English Language; Age Groups: Adult, 19-44 years, Middle Age, 45-64 years, Aged, 65+ years, Aged, 80 and over, All Adult Search modes - Boolean/Phrase	6805
S83	S24 and S82	Search modes - Boolean/Phrase	17940
Combined Results			
S82	S25 or S26 or S27 or S28 or S29 or S30 or S31 or S32 or S33 or S34 or S35 or S36 or S37 or S38 or S39 or S40 or S41 or S42 or S43 or S44 or S45 or S46 or S47 or S48 or S49 or S50 or S51 or S52 or S53 or S54 or S55 or S56 or S57 or S58 or S59 or S60 or S61 or S62 or S63 or S64 or S65 or S66 or S67 or S68 or S69 or S70 or S71 or S72 or S73 or S74 or S75 or S76 or S77 or S78 or S79 or S80 or S81	Search modes - Boolean/Phrase	86711
S81	TX chronic N6 illness*	Search modes - Boolean/Phrase	5528
S80	TX chronic N6 disorder*	Search modes -	3189

		Boolean/Phrase	
S79	TX chronic N6 condition*	Search modes - Boolean/Phrase	4715
S78	TX chronic N6 injur*	Search modes - Boolean/Phrase	1310
S77	TX chronic N6 disease*	Search modes - Boolean/Phrase	31183
S76	(MH "Chronic Disease")	Search modes - Boolean/Phrase	18038
		Chronic Diseases Segment	
S75	TX musculoskeletal N6 disorder*	Search modes - Boolean/Phrase	1318
S74	TX musculoskeletal N6 condition*	Search modes - Boolean/Phrase	523
S73	TX musculoskeletal N6 injur*	Search modes - Boolean/Phrase	1088
S72	TX MSK	Search modes - Boolean/Phrase	49
S71	TX musculoskeletal N6 disease*	Search modes - Boolean/Phrase	3043
S70	TX epicondylitis	Search modes - Boolean/Phrase	313
S69	(MH "Tennis Elbow")	Search modes - Boolean/Phrase	481
S68	(MH "Musculoskeletal Abnormalities")	Search modes - Boolean/Phrase	299
S67	(MH "Muscular Diseases")	Search modes - Boolean/Phrase	828
S66	(MH "Hand Deformities")	Search modes - Boolean/Phrase	25
S65	(MH "Foot Diseases")	Search modes - Boolean/Phrase	873
S64	(MH "Foot Deformities")	Search modes - Boolean/Phrase	326
S63	(MH "Fasciitis")	Search modes - Boolean/Phrase	97
S62	(MH "Cartilage Diseases")	Search modes - Boolean/Phrase	195
S61	(MH "Bone Diseases")	Search modes - Boolean/Phrase	631
S60	(MH "Musculoskeletal Diseases")	Search modes - Boolean/Phrase	2199
		MSK Segment	

S59	(MH "Osteoarthritis, Knee")	Search modes - Boolean/Phrase	578
S58	(MH "Osteoarthritis, Hip")	Search modes - Boolean/Phrase	287
S57	TX spinal osteophyt*	Search modes - Boolean/Phrase	102
S56	(MH "Spinal Osteophytosis")	Search modes - Boolean/Phrase	102
S55	TX coxarthr*	Search modes - Boolean/Phrase	24
S54	TX joint disease*	Search modes - Boolean/Phrase	2986
S53	(MH "Joint Diseases")	Search modes - Boolean/Phrase	1092
S52	TX bechterew*	Search modes - Boolean/Phrase	2
S51	TX still* disease*	Search modes - Boolean/Phrase	63
S50	(MH "Still's Disease, Adult-Onset")	Search modes - Boolean/Phrase	39
S49	TX sjoegren*	Search modes - Boolean/Phrase	4
S48	TX sjogren*	Search modes - Boolean/Phrase	743
S47	(MH "Sjogren's Syndrome")	Search modes - Boolean/Phrase	499
S46	TX oligoarthr*	Search modes - Boolean/Phrase	47
S45	TX polyarthr*	Search modes - Boolean/Phrase	171
S44	TX gout*	Search modes - Boolean/Phrase	952
S43	TX rheuma*	Search modes - Boolean/Phrase	16026
S42	(MH "Rheumatic Diseases")	Search modes - Boolean/Phrase	857
S41	TX sclerod*	Search modes - Boolean/Phrase	985
S40	(MH "Scleroderma, Systemic")	Search modes - Boolean/Phrase	794
S39	TX reiter*	Search modes - Boolean/Phrase	629
S38	TX spondy*	Search modes - Boolean/Phrase	1784

S37	TX ankyl*	Search modes - Boolean/Phrase	1004
S36	(MH "Spondylitis, Ankylosing")	Search modes - Boolean/Phrase	632
S35	(MH "Spondylarthropathies")	Search modes - Boolean/Phrase	50
S34	TX lupus	Search modes - Boolean/Phrase	2715
S33	(MH "Lupus Erythematosus, Systemic")	Search modes - Boolean/Phrase	2038
S32	TX arthr*	Search modes - Boolean/Phrase	29576
S31	(MH "Spondylarthritis")	Search modes - Boolean/Phrase	70
S30	TX osteoarthr*	Search modes - Boolean/Phrase	7231
S29	(MH "Osteoarthritis")	Search modes - Boolean/Phrase	4946
S28	(MH "Gout")	Search modes - Boolean/Phrase	725
S27	(MH "Arthritis, Rheumatoid")	Search modes - Boolean/Phrase	5772
S26	(MH "Arthritis, Psoriatic")	Search modes - Boolean/Phrase	295
S25	(MH "Arthritis")	Search modes - Boolean/Phrase	3270
		Arthritis Segment	
S24	S1 or S2 or S3 or S4 or S5 or S6 or S7 or S8 or S9 or S10 or S11 or S12 or S13 or S14 or S15 or S16 or S17 or S18 or S19 or S20 or S21 or S22 or S23	Search modes - Boolean/Phrase	290839
S23	TX funding*	Search modes - Boolean/Phrase	184005
S22	TX transformation*	Search modes - Boolean/Phrase	4263
S21	TX transition*	Search modes - Boolean/Phrase	12210
S20	(MH "Health Transition")	Search modes - Boolean/Phrase	14
S19	TX health care system*	Search modes - Boolean/Phrase	9156
S18	TX health* system*	Search modes - Boolean/Phrase	20493
S17	TX universal coverage	Search modes - Boolean/Phrase	204

S16	(MH "Insurance, Health")	Search modes - Boolean/Phrase	10422
S15	TX sector*	Search modes - Boolean/Phrase	10444
S14	(MH "Health Care Industry")	Search modes - Boolean/Phrase	3255
S13	TX healthcare planning	Search modes - Boolean/Phrase	40
S12	TX health care planning	Search modes - Boolean/Phrase	111
S11	(MH "Health and Welfare Planning")	Search modes - Boolean/Phrase	3445
S10	(MH "Health Care Reform")	Search modes - Boolean/Phrase	10149
S9	(MH "Public Policy")	Search modes - Boolean/Phrase	7044
S8	TX goverment*	Search modes - Boolean/Phrase	19
S7	TX health* plan*	Search modes - Boolean/Phrase	4744
S6	(MH "State Health Plans")	Search modes - Boolean/Phrase	1015
S5	(MH "Health Facility Planning")	Search modes - Boolean/Phrase	251
S4	TX reform*	Search modes - Boolean/Phrase	16468
S3	TX shift*	Search modes - Boolean/Phrase	15473
S2	TX polic*	Search modes - Boolean/Phrase	10380
S1	(MH "Health Policy")	Search modes - Boolean/Phrase	17874
		Policy Segment	