Physiotherapist-physician collaboration to help manage musculoskeletal disorders in primary care: an interprofessional model of practice in a teaching family medicine clinic

Authors:
Simon Deslauriers, PT MSc 1,2,
Marie-Eve Toutant, PT 2
Miriam Lacasse, MD MSc CCMF 2
François Desmeules, PT PhD 3,4
Kadija Perreault, PT PhD 1,2

Affiliations: 1 Center for Interdisciplinary Research in Rehabilitation and Social Integration (CIRRIS), Centre intégré universitaire en santé et services sociaux de la Capitale-Nationale (CIUSSS-CN); 2 Faculty of Medicine, Université Laval; 3 School of Rehabilitation, Faculty of Medicine, Université de Montréal; 4 Maisonneuve-Rosemont Hospital Research Centre

Contact: marie-eve.toutant@fmed.ulaval.ca or simon.deslauriers.1@ulaval.ca
Physiotherapist-physician collaboration
to improve the management of musculoskeletal disorders in primary care

**Background**
Every year, one in four Canadians consults a primary care physician for a musculoskeletal disorders (MSDs).

Physicians and medical students report a low level of confidence, lack of knowledge and insufficient education regarding the management of MSDs.

A physiotherapist-physician collaboration may help improve the management of persons with MSDs in primary care.

Yet, few family medicine clinics have integrated a physiotherapist (PT) into their primary care team.

**Objective**
To describe the interprofessional education and collaboration activities implemented in an innovative model of collaboration between physiotherapists and family physicians/residents in a teaching family medicine clinic.

**Methods**
In 2009, a physiotherapist joined an interdisciplinary team in a publicly-funded university-affiliated family medicine clinic in Quebec City.

Clinical and administrative data were collected between 2009 and 2017 in the context of a program evaluation.

Descriptive statistics were used to document the number of interprofessional education and collaboration activities.

Characteristics of the teaching family medicine clinic
• 24 medical residents, 20 family physicians, nurses, social worker, pharmacist, PT
• 13,000 rostered patients
• PT services offered to non-insured patients

Collaboration activities
Figure 2 (right): Distribution of references per reason of referral, from 2009-15

Figure 1 (left): Physiotherapy referrals per year

Mean = 277 ± 55 referrals

Results from our project

Collaboration activities

Mean = 277 ± 55 referrals

Upcoming innovations

Advanced access: same-day PT consultation for patients referred by their family physician

Pre-consultation: pediatric patients seen by a nursing assistant prior to the PT consultation to record the child’s birth and developmental history
Physiotherapist-physician collaboration

Education activities
• 9.1 ± 4.1 planned teaching lessons per year
• 28.8 ± 6.1 PT observation sessions by the residents per year
• 345.4 ± 54.9 informal discussions per year (see Figure 3)
• Weekly formal interprofessional meetings

Participation in the walk-in clinic
• Walk-in clinic has a dedicated daily slot for patients with MSDs. The medical resident is accompanied by the PT, who can provide advice and training (see vignette below).
• Survey of medical residents (n=17) regarding the participation of the PT to the walk-in clinic
  • 93% found it relevant to their medical training
  • 99% found the practice relevant for the patient

Figure 3: Number of informal discussions with the PT per year, per health professional

Walk-in clinic vignette
• Mr. R consults at the walk-in clinic for a shoulder pain
• Medical resident and PT conduct a 20 min joint assessment
• PT provides feedback to the resident and advice and exercises to the patient

Results from our project

Upcoming innovations

Spreading of lessons: Planned teaching lessons are being given by the PT to medical residents at every teaching clinics in Quebec City.
Physiotherapist-physician collaboration

The present model of collaboration encompasses several interprofessional education and collaboration activities.

The PT contributes to the musculoskeletal training of medical residents and provides an on-site expertise in MSD readily available to the primary care team. This interprofessional model opens the door to innovative practices (e.g., supervision of medical residents at the walk-in clinic).

Benefits of this primary care model

- Enhances coordination and continuity of care
- Contributes to the management of chronic conditions
- Increases access to PT services
- Expands roles and scope of practice
- Encourages interprofessional collaboration

References
Cott et al. (2011) Physiother Can 63(3).
Dufour et al. (2014) J Interprof Care 28(5).
Ludvigsson et al. (2012) Physiotherapy 98(2).
Ludvigsson et al. (2012) Physiotherapy 98(2).

Take-home messages

- An innovative model to improve primary care services
- PT can have a clinician, teacher and consultant role in teaching clinics
- There is a need to further promote this model and implement it in other primary care settings