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

Contact: <u>marie-eve.toutant@fmed.ulaval.ca</u> or <u>simon.deslauriers.1@ulaval.ca</u>











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 universityaffiliated family medicine clinic in Quebec City

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

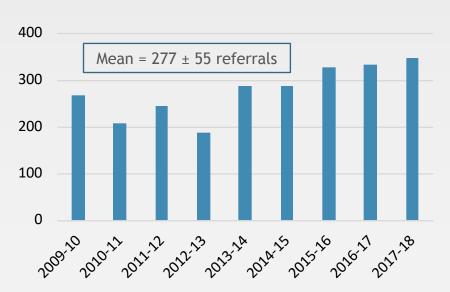
Descriptive statistics were used to document the number of interprofessional education and collaboration activities

Physiotherapist-physician collaboration

Results from our project

Characteristics of the teaching family medicine clinic

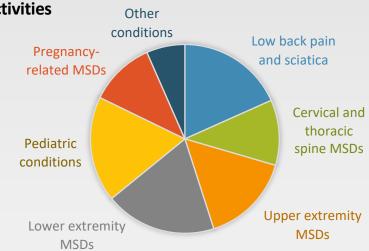
- 24 medical residents, 20 family physicians, nurses, social worker, pharmacist, PT
- 13,000 rostered patients
- PT services offered to non-insured patients



Collaboration activities

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

Figure 1 (left): Physiotherapy referrals per year





Upcoming innovations

<u>Advanced access</u>: same-day PT consultation for patients referred by their family physician

<u>Pre-consultation</u>: pediatric patients seen by a nursing assistant prior to the PT consultation to record the child's birth and developmental history

Physiotherapist-physician collaboration

Results from our project

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

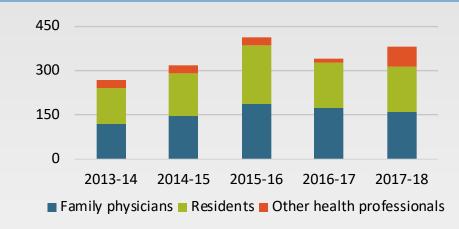


Figure 3: Number of informal discussions with the PT per year, per health professional

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



Upcoming innovations

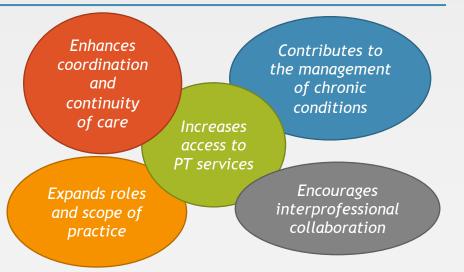
<u>Spreading of lessons</u>: Planned teaching lessons are being given by the PT to medical residents at every teaching clinics in Quebec City.

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



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

References

Clark et al. (2010) *BMC Med Educ* 10(93).

Cott et al. (2011) *Physiother Can* 63(3).

DiGiovanni et al. (2016) *Clin Orthop Relat Res* 474(4).

Dufour et al. (2014) *J Interprof Care* 28(5).

Gocan et al. (2014) *J of Res Interprof Practice Educ* 3.3.

Ludvigsson et al. (2012) *Physiotherapy* 98(2).

MacKay et al. (2010) *Arthritis Care Res* 62(2). McColl et al. (2009) *Arch Phys Med Rehabil* 90(9). Ontario Physiotherapy Association (OPA) (2015)

"Physiotherapists in primary health care".

Paz-Lourido & Kuisma (2013) *J Interprof Care* 27(3).

Pinney et al. (2001) *J Bone Joint Surg Am* 83-A(9).

Truntzer et al. (2014) *Perspect Med Educ* 3(3).