Physical activity as medicine among family health teams: an environmental scan of physical activity services in an interdisciplinary primary care setting

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Abstract: A Family Health Team (FHT) is a multi-disciplinary primary healthcare model that may be an ideal setting to engage patients in physical activity. An environmental scan was conducted to determine the prevalence and characteristics of physical activity services offered by FHTs in Ontario. Of the 186 FHTs, 102 (55%) completed the survey. Almost 60% of responding FHTs offered a physical activity service; however, the availability, duration, size, and target population of the services varied depending on the individual FHT.

Key words: exercise therapy, family health team, health promotion, kinesiology.

Introduction

Physical inactivity is well-established as a modifiable risk factor for premature mortality and chronic disease (Naci and Ioannidis 2013). Alarmingly, only 15% of Canadians are achieving the recommended 150 min of moderate to vigorous physical activity per week (Colley et al. 2011). Physical activity, which includes purposeful exercise as well as other activities done as part of playing, working, recreation, or active transportation has well-established health benefits. However, the best way to engage Canadians in an active lifestyle remains largely unknown.

Primary care is a gateway to the healthcare system that is accessed by patients across age, race, and sex categories, and therefore may provide an effective setting to implement physical activity-promoting services. For example, primary care-based initiatives like the Exercise is Medicine campaign, which endeavours to integrate physical activity therapy into the healthcare system by making patients’ physical activity levels a standard “vital sign” question, are gaining increased traction across North America (Exercise as Medicine Canada 2013).

Family Health Teams (FHT) are part of a shift towards a multi-disciplinary primary care model that addresses the healthcare needs of a community by providing chronic disease management, disease prevention, and health promotion through comprehensive inter-professional care. Unlike traditional fee-for-service models, FHTs operate under a blended capititation system of care in which providers are paid based on the number of patients they serve regardless of the services they perform. Currently, FHTs serve a relatively small percentage of people from Ontario, Canada; however, their multidisciplinary structure may create an ideal environment to enable physical activity promotion.

Integrating Registered Kinesiologists with training in motivation building and behaviour change into interdisciplinary primary care teams has emerged as an effective approach to improve physical activity behaviour and health outcomes (Bouchard et al. 2012; Fortier et al. 2011). In Ontario, FHTs can apply for funds to hire Health Promoters, suggesting that there may be mechanisms for allied health professionals to provide health promotion or physical activity counselling. Currently, the number and types of physical activity promotion services offered by individual FHTs is unknown. Therefore, we have conducted an environmental scan of the prevalence and characteristics of physical activity services offered by FHTs, including the population reach, and any internal service evaluations being performed. Second, this environmental scan will characterize the qualifications of the individuals heading the programs and the presence of Health Promoters acting as physical activity therapists.

Methods

Sample

There are 186 FHTs providing healthcare services in 206 communities across 14 Local Health Integration Networks (LHINs) in Ontario. The smallest FHT serves over 1000 patients and the largest serves 240 000 patients. As of 2012, FHTs served over 2.86 million patients across the province of Ontario (Farrell 2012).

For this environmental scan, each of the 186 FHTs in the province of Ontario was contacted by the telephone number listed on the Ontario Ministry of Health and Long-Term Care (MOHLTC)
Table 1. Environmental scan questions.

<table>
<thead>
<tr>
<th>Question</th>
<th>Examples</th>
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<tbody>
<tr>
<td><strong>Physical activity service prevalence</strong></td>
<td><strong>Does your FHT offer services to increase your patients’ physical activity participation, or have any services with a physical activity component?</strong> The respondents were asked if (and how many) services their FHT offered that promoted physical activity.</td>
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<td><strong>Information was obtained regarding service restrictions.</strong></td>
<td>For example, could anyone from the community participate, or was the service only available to rostered patients?</td>
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<td><strong>How many individuals access the program or service annually?</strong></td>
<td>If the respondent was not confident in their estimate of the number of people enrolled annually, the question was rephrased: “There a maximum number of participants who can attend the program each session, and does the program fill up?”</td>
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<tr>
<td><strong>How long are individuals enrolled in the service, and how frequently are participants asked to attend?</strong></td>
<td>If the respondent was unsure of the service duration we asked: “How frequently, for example days per month or total visits, are participants asked to attend the program or service, and can patients attend multiple programs or sessions?”</td>
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<tr>
<td><strong>Do you have patient or process outcomes to evaluate the use or utility of the service?</strong></td>
<td>Example prompts included attendance sheets for each session, measures of health improvement, or a survey of program or service satisfaction.</td>
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<tr>
<td><strong>Personnel</strong></td>
<td>If not a designated Health Promoter, what are the qualifications or training of the person that facilitates the physical activity service?</td>
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Note: FHT, Family Health Team.

Results

**Physical activity service prevalence**

Of the 186 FHTs in Ontario, 102 (54.8%) FHTs completed the survey. Response rates across LHINs ranged from 23.1% to 85.7%. Of the 102 FHTs that completed the survey, 57 (55.8%) offered a physical activity service or a service with a physical activity component. The number of services ranged from 1 to 7 services per site with the majority of respondents offering a single service (n = 24, 23.5%; Supplementary Table S1). In total, 117 physical activity services were reported by the 102 responding FHTs (Table 2). In many cases, physical activity education or prescription was a component of a service that included other aspects of health promotion such as nutrition education or pain management. Thirteen FHTs (12.7%) reported providing physical activity services only to specific clinical populations (e.g., those with diabetes, cardiovascular disease, etc.), 24 (23.5%) reported providing general physical activity promotion services, and 21 (20.5%) reported offering both. Only 5 FHTs reported offering a one-on-one physical activity counseling service.

**Physical activity service characteristics**

A high degree of variability was observed in the characteristics of the 117 physical activity services reported by responding FHTs (Table 3). Seventy-six services (64.9%) were restricted to rostered FHT patients as opposed to being available to anyone in the community. The number of participants enrolled in services ranged from less than 10 to over 200 people served annually. The majority of services (n = 50, 42.7%) were between 1 month and 6 months in duration. Sixty-seven services (57.3%) included an outcome measure of program efficacy or compliance with most services having multiple measures (Table 3).

**Personnel**

In total, 95 individuals facilitated the 117 physical activity services offered by the responding 57 FHTs with a physical activity service (Supplementary Table S2). Registered Nurses (n = 33, 34.7%) most often facilitated the services followed by Dieticians (n = 10, Supplementary data are available with the article through the journal Web site at http://nrcresearchpress.com/doi/suppl/10.1139/apnm-2014-0387.
10.5%) and Kinesiologists (n = 10, 10.5%). Two programs were facilitated by community volunteers either independently or under the guidance of a healthcare professional, and 4 programs were facilitated by paid personnel who were not healthcare professionals.

Of the 57 responding FHTs that offered a physical activity service, 30 (51.7%) employed a Health Promoter. Seven types of professionals filled the Health Promoter role, with Kinesiologists (n = 10, 33.3%), Registered Nurses (n = 3, 10.0%), and Recreation Therapists (n = 3, 10.0%) being the most common types of health professionals.

### Discussion

This environmental scan is the first investigation to report the current state of physical activity therapy offered by FHTs in Ontario. That half of responding FHTs reported offering a physical activity service is promising. However, it is probable that responders are early adopters. If nonresponders are not offering physical activity service, the availability of physical activity services varied depending on the FHT, and access was often restricted to people with health conditions or needs rather than available to all individuals. Fifty-seven percent of sampled FHTs offered a physical activity service, but many of the services were targeted at people with specific chronic conditions (e.g., diabetes and cardiovascular disease). Patients with other chronic conditions (e.g., neurologic impairment, osteoporosis), or those who may benefit from physical activity to prevent the development of chronic disease, are possibly being neglected.

The variability in physical activity services suggests that decision-making about program structure and content is made locally. The importance of a bottom-up, community-driven approach to service offering should not be understated; however, locally driven services may or may not be informed by best evidence or guidelines regarding what interventions are effective for changing behaviour or improving health outcomes in primary care. To provide the most effective physical activity therapy that meets the needs of all patients, it may be useful to develop top-down standards of care for physical activity services informed by research in exercise science, behaviour change, and implementation science such that they can be easily integrated into the local environment to meet community needs.

Quantitative measures of success are vital to securing funding and support for new health initiatives. It is troubling that only 57% of physical activity services report outcomes used for program evaluation. Without evaluations that can quantify changes in health, physical fitness, or behaviour change, it is difficult to demonstrate service effectiveness, advocate for continued economic backing, or provide impetus for the adoption of the innovation by the majority (Greenhalgh et al. 2004). Integration of physical activity promoting services into primary care is a relatively new innovation; therefore, measures to evaluate the reach and efficacy of physical activity therapy are especially important.

The diversity in the qualifications among those instructing or facilitating physical activity services is concerning, as it suggests that not all individuals delivering physical activity prescription or counselling have the proper training. Expertise specific to exercise science is especially important when prescribing physical activity to individuals with health conditions or at risk of adverse events, where an understanding of absolute and relative contra-

### Table 2. Types of physical activity services offered by 102 responding FHTs.

| Type of service                      | n (N = 117) | %
|-------------------------------------|-------------|
| Diabetes education and treatment    | 25          | 24.5
| General health education            | 21          | 20.6
| Walking group                       | 18          | 17.6
| General fitness instruction         | 14          | 13.7
| CVD treatment                       | 9           | 8.8
| COPD treatment                      | 5           | 4.9
| Weight management                   | 4           | 3.9
| Personal exercise prescription      | 4           | 3.9
| Resistance training                 | 3           | 2.9
| Osteoporosis treatment              | 3           | 2.9
| Chronic pain treatment              | 3           | 2.9
| Mental health management            | 3           | 2.9
| Running group                       | 2           | 2.0
| Chronic disease management          | 2           | 2.0
| Active lifestyle                     | 1           | 1.0

Note: FHT, Family Health Team; COPD, chronic obstructive pulmonary disease; CVD, cardiovascular disease.

*Percentage of 102 responding FHTs (sum >100% as multiple services per site).

### Table 3. Characteristics of the 117 physical activity services offered by 57 FHTs.

(a) Physical activity service characteristics

| Who is eligible for programs?          | n (N = 117) | %
|----------------------------------------|-------------|
| Community                              | 41          | 35.0
| Patients only                          | 76          | 65.0
| No. of participants annually          |             |   |
| 0–10                                   | 3           | 2.6
| 11–25                                  | 17          | 14.5
| 26–50                                  | 16          | 13.7
| 51–100                                 | 11          | 9.4
| 101–200                                | 13          | 11.1
| 201+                                   | 24          | 20.5
| NR                                     | 33          | 28.2
| How long are participants enrolled?   |             |   |
| 1 visit                                | 4           | 3.4
| 2 wk–1 mo                              | 4           | 3.4
| 1–6 mo                                 | 50          | 42.7
| 6 mo–1 y                               | 12          | 10.3
| >1 y                                   | 1           | 0.9
| Ongoing/drop-in                        | 32          | 27.4
| NR                                     | 14          | 12.0
| Program outcomes                       |             |   |
| Yes                                    | 67          | 57.3
| No                                     | 24          | 20.5
| NR                                     | 26          | 22.2

(b) Types of outcome measures used

| Outcomes measures                      | n (N = 122) | %
|----------------------------------------|-------------|
| Physiological measure                  | 48          | 39.3
| Attendance list                        | 29          | 23.8
| Satisfaction survey                    | 12          | 9.8
| Behaviour change assessment            | 7           | 5.7
| Personal goal assessment               | 5           | 4.1
| Mood assessment                        | 4           | 3.3
| Step count (pedometer)                 | 4           | 3.3
| Nutrition log                          | 3           | 2.5
| Physical activity log                  | 2           | 1.6
| Functional assessment                  | 2           | 1.6
| NR                                     | 6           | 4.9

Note: FHT, Family Health Team; NR, no response.

*Percentage of 117 physical activity services.

†Percentage of 122 outcome measures used by 67 physical activity services.
is recommended that this study be replicated in other provinces to capture and share innovative primary care-based physical activity therapy practices taking place across the country.

Conclusion

Almost 60% of responding FHTs in Ontario offer a physical activity service. However, service availability varies depending on the FHT, and physical activity services are often restricted to specific conditions or needs rather than available to all. Health Promoters may be underutilized within Ontario’s FHTs, and individuals providing physical activity therapy do not always have qualifications related to physical activity prescription and counselling. Continued efforts are required to increase the prevalence and standardization of physical activity services to provide patient-centred, evidence-informed physical activity therapy through primary care. We feel that physical activity counsellors who are Registered Kinesiologists with expertise in physical activity prescription and behaviour change counselling are promising primary care providers.

Acknowledgements

The authors thank Eric Bowman, Parvaneh Nouri, Allison Stephenson, and Tina Ziebart for their contributions to the completion of the environmental scan. This work was funded by the Ontario Neurotrauma Foundation. L.G. is funded by the Canadian Institutes of Health Research as a New Investigator.

References


