

Taking the pulse of team functioning in interprofessional primary health care teams

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Interprofessional teams are delivering primary health care (PHC) in many regions of Canada.¹ Team functioning is an important parameter to measure when assessing the quality of interprofessional PHC.² Measurement can be time-consuming and resource intensive; thus, there is a need for a straightforward method to measure team functioning.

Here we describe a collaboration initiated by the Thames Valley Family Health Team (TVFHT) in south-western Ontario and researchers at the Centre for Studies in Family Medicine at Western University in London, Ont. We illustrate a practical method that PHC leaders can employ to survey team members in order to monitor team functioning. The TVFHT is one of the largest family health teams in the province, with 15 practice sites. Family health teams commonly include family physicians, registered nurses, social workers, nurse practitioners, dietitians, and pharmacists and are intended to improve PHC through interdisciplinary teamwork.^{3,4} The results of regularly conducted team member surveys assessing team functioning can highlight areas for future team-building initiatives.

Methods

The methods followed a specific stepwise process. The first step was to compile descriptive family health team data, thereby providing the context in which to interpret the results. In the second step, researchers worked with the TVFHT to develop the survey. Questions were asked about demographic characteristics; work satisfaction (1 item); team functioning (14-item Team Climate Inventory)⁵; management (4-item Providing Effective Resources and Knowledge scale)⁶; and the effects of teamwork on job function (9 items).

In the third step, team members were surveyed using anonymous Google Docs online surveys, which generated a spreadsheet containing the completed survey data. An invitation and letter of information, containing a secure link to the survey, were sent to team members, followed by 4 reminder e-mails 1 week apart. Responses were available only to the researchers (B.L.R., J.B.B., E.K.R.M.). Analysis was conducted in SPSS, version 21. Scores were computed for satisfaction, the Team Climate Inventory, and the Providing Effective Resources and Knowledge scale.

During the fourth step, survey process measures were tracked by the researchers to facilitate future survey improvements including response rates, missing data by question, and respondent difficulty in answering questions.

Ethics approval was received from the Western University Review Board for Health Sciences Research Involving Human Subjects.

Results

Table 1 provides descriptive data and the main survey results. Pretesting found that the survey took no longer than 15 minutes. The response rate was 59%, with 32% for physicians and 87% for other team members (interprofessional health care providers and staff). A mean of 3.5% of responses per question were missing, mainly for questions about how strongly respondents believed working in teams was helpful, and assessment of their own and colleagues' agreement with team objectives.

A few respondents expressed concern about confidentiality and were reassured that no identifying information would be released to the TVFHT or published. When respondents who worked at more than 1 site found it difficult to answer site-specific questions, they were instructed to respond according to the site where they were residing when completing the survey.

Discussion

This paper describes a practical method for surveying interprofessional teams concerning team functioning. There are a number of lessons to be learned from this

Table 1. Characteristics of TVFHT team members and survey responses: *There are 15 TVFHT sites with a total of 146 906 enrolled patients; 55% of TVFHT staff* were working full time.*

ITEM	VALUE
TVFHT team member characteristics (N=200), n	
• Physicians	103
• Nurses	34
• Interprofessional health care providers	42
• Administrative staff	21
• Providers and staff working at multiple locations	21
Survey responses (N = 117), mean (SD)	
• Physician satisfaction score (n = 32) (-3 to +3)	1.7 (1.2)
• TVFHT staff* satisfaction score (n=81) (out of 6)	5.0 (1.2)
• Team Climate Inventory score (out of 5)	3.8 (0.67)
• PERK scale score (out of 5)	3.8 (0.83)

PERK—Providing Effective Resources and Knowledge, TVFHT—Thames Valley Family Health Team.

*Staff includes interprofessional health care providers and administrative staff.

study that might have applicability to other PHC teams. First, survey construction, data collection, and analysis were straightforward. The availability of software that provides automatic generation of spreadsheets eliminated the need for data entry and facilitated the computation of simple descriptive statistics. Time to complete the survey was reasonable and there were few difficulties with most of the questions.


This study was conducted in collaboration with researchers, which allowed TVFHT leadership to be at arm's length from individual survey responses. Questions about confidentiality were thus easily addressed. The TVFHT now has a survey instrument available and could conduct the future survey iterations independently. However, they might choose to collaborate with the researchers again in order to share their findings with other teams in a public forum such as through a peer-reviewed manuscript. When implementing a survey, teams must decide whether it is feasible or desirable to have an outside organization administer the survey. Should teams decide to conduct the survey independently, senior leadership must clearly state that they will not have access to individual responses and will only examine aggregated data to protect confidentiality.

A limitation was the low response rate for physician team members, which is consistent with response rates found in the literature.^{7,8} The TVFHT will consider possible reasons for nonresponse. Is the decision to respond in and of itself an indicator of the importance individuals place on team functioning? What might encourage physicians to respond?

The TVFHT has experienced growth in sites and staffing. Within 3 years, the number of family physicians increased by 27% and the number of interprofessional health care providers and administrative staff increased by 47%. Interprofessional health care providers and administrative staff working at multiple sites almost quadrupled. Consequently, for the next survey iteration, TVFHT will reflect on the definition of *team* and whether it should be allowed to vary by individual. When administering surveys, organizations must provide direction to respondents on how to characterize *team*.

While TVFHT intends to monitor team functioning regularly, it might be difficult to examine statistical differences over time because of the small sample size. As well, staff composition will change, meaning surveys

will not follow the same cohort of individuals over time. Therefore, it is important that all PHC teams interpret survey findings in light of their own contexts, including substantial changes that occur between survey administrations.⁹ The TVFHT leadership can use the survey results to understand ongoing team processes such as making use of all team members' scopes of practice, enhancing patterns of communication, and being more responsive to team needs.

The success and sustainability of PHC teams relies on ongoing feedback and subsequent recalibration. This paper provides a practical and easily applied survey method to evaluate essential information for enhancing interdisciplinary team functioning. 

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Competing interests

None declared

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