

Riding the wave of primary care research

Development of a primary health care research centre

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ABSTRACT

PROBLEM BEING ADDRESSED Family medicine departments and primary health care research centres across the country are growing in size and complexity and therefore require increasingly sophisticated management strategies. Conducting effective and relevant research relies on a stable and efficient organization.

OBJECTIVE OF THE PROGRAM To focus on the needs of individuals, teams, and the organization in order to ensure the success of research projects.

PROGRAM DESCRIPTION In order to ensure the success of research projects, the C.T. Lamont Primary Health Care Research Centre (CTLC) in Ottawa, Ont, used the following strategies: ensuring organizational support (ie, protected time for research and sustained funding for some investigators); arranging financial and infrastructure support; building skills and confidence (eg, education sessions); organizing linkages and collaborations (eg, forums among staff members); creating appropriate dissemination (eg, newsletter, website); and providing continuity and sustainability.

CONCLUSION In order to ensure progress in primary health care research, the CTLC created solutions that focused on the individual, team, and organizational levels. With its management strategies, the CTLC was successful in maintaining a high-functioning team and a well-organized research organization.

RÉSUMÉ

PROBLÈME À L'ÉTUDE Partout au pays, les centres de recherche des départements de médecine familiale et des établissements de soins primaires croissent en taille et en complexité et, conséquemment, requièrent des stratégies de gestion de plus en plus sophistiquées. Une recherche productive et pertinente exige une organisation efficace et stable.

OBJECTIF DU PROGRAMME Mettre l'accent sur les besoins des individus, des équipes et de l'organisation pour garantir le succès des projets de recherche.

DESCRIPTION DU PROGRAMME Pour garantir le succès des projets de recherche, le C. T. Lamont Primary Health Care Research Center (CTLC) d'Ottawa, Ontario, a adopté les stratégies suivantes: s'assurer d'un support organisationnel (p. ex. temps réservé à la recherche et financement ininterrompu pour certains chercheurs); garantir un financement et une infrastructure de soutien; améliorer la compétence et la confiance (p. ex. sessions de formation); favoriser les liens et les collaborations (p. ex. rencontres de discussion pour les membres du personnel); créer un mode de communication approprié (p. ex. bulletin d'information, site WEB); et assurer la continuité et un soutien continu.

CONCLUSION Afin de garantir la progression de la recherche en soins primaires, le CTLC a imaginé des solutions centrées sur les individus, les équipes et les instances organisationnelles. Grâce à ses stratégies de gestion, le CTLC a réussi à maintenir une équipe très performante et une organisation de recherche bien rodée.

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Primary health care (PHC) research is an expanding enterprise. Widespread reform of the organization and delivery of PHC services and increasing awareness of the importance of PHC to health outcomes have created a need to build research capacity in this important discipline.¹⁻³ Family medicine departments and PHC research centres across the country are growing in size and complexity, requiring adoption of increasingly sophisticated management strategies. Conducting effective and relevant research relies on a stable and efficient organization, where researchers and staff are able to thrive and work optimally.

In this article, we explain the evolution of one of these research centres: the C.T. Lamont Primary Health Care Research Centre (CTLC) in Ottawa, Ont. We present some of the serious obstacles we encountered and solutions we found to be essential in riding the wave of PHC research at CTLC. We used Cooke's framework for evaluating organizational research capacity⁴ as our guide. Our solutions, which were aimed at the individual, team, and organizational levels, focused on organizational support, building skills and confidence, linkages and collaborations, appropriate dissemination, continuity and sustainability, and infrastructure.

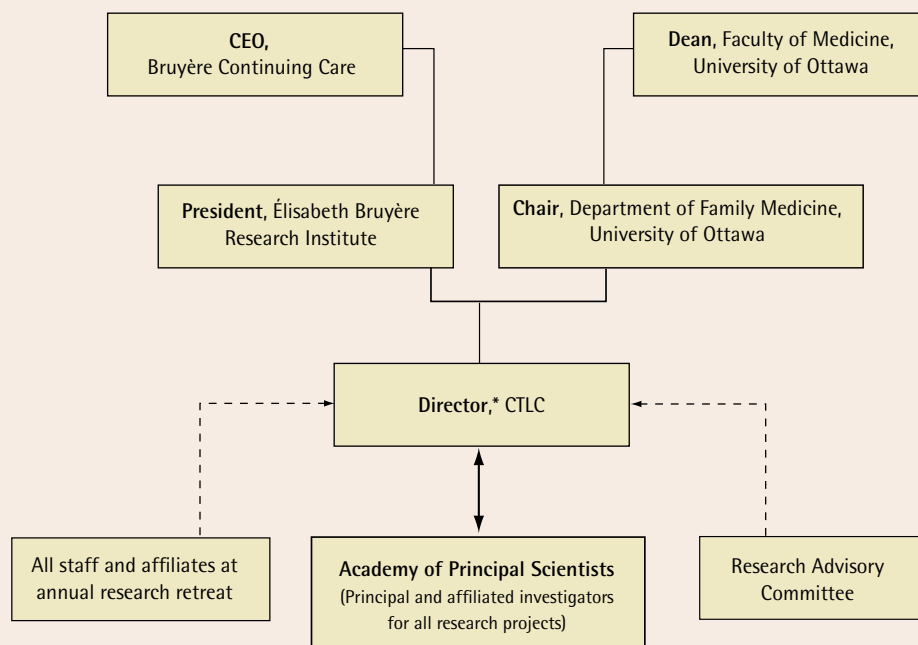
Numerous challenges are associated with building a well-organized, productive, and sustainable research

organization within a relatively new field of scientific endeavour; these challenges include waves of high activity and low activity, lack of space (leading to an increase in virtual centres), lack of funding for training opportunities, and most important, lack of continuous funding.⁵ In addition, many PHC research organizations are challenged with building high-functioning, productive, motivated, and loyal teams of staff members and researchers. All of these factors lead to short-term employee contracts, high turnover, minimal employment benefits, and job insecurity. The literature suggests that there are a number of essential requirements to building and sustaining high-functioning teams: sufficient time, tools, development and networking opportunities, team-building initiatives, clear definition of goals, support, feedback, and sufficient opportunities to contribute.⁶⁻¹⁰ We will describe here the structure and processes that have supported us in implementing these guiding principles.

Historical overview

The CTLC, founded in 2000, is a centre within the Élisabeth Bruyère Research Institute (EBRI) and is the research arm of the Department of Family Medicine (DFM) at the University of Ottawa. (The organizational structure of CTLC is presented in **Figures 1** and **2**). The

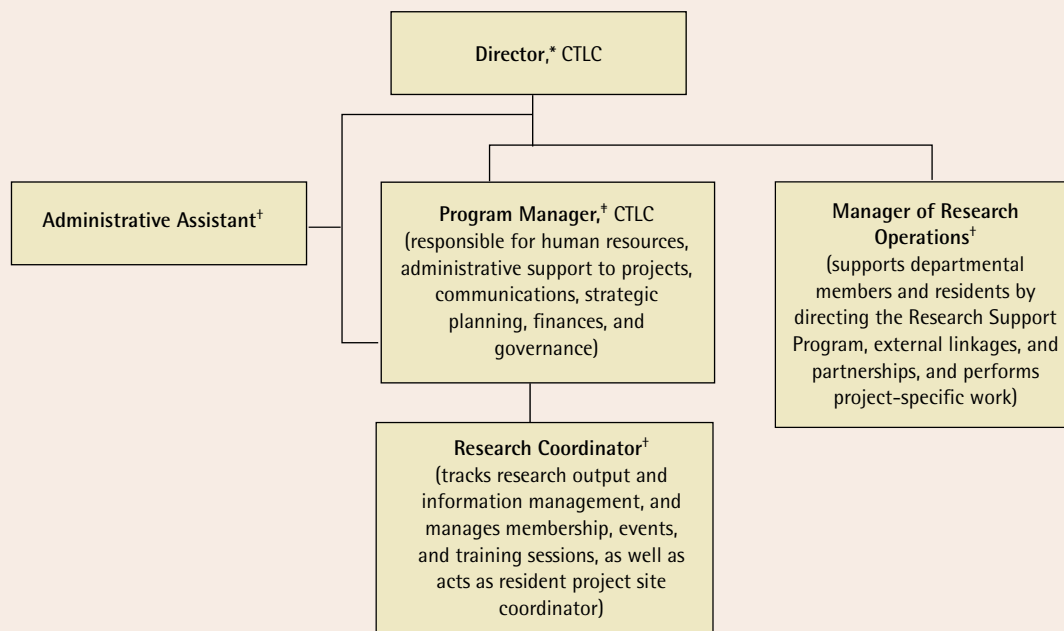
Figure 1. The CTLC organizational chart: Senior governance.



CEO—chief executive officer, CTLC—C.T. Lamont Primary Health Care Research Centre.

*Administration organizational chart of CTLC begins at Director in Figure 2.

Figure 2. The organizational chart of the CTLC and the DFM at the University of Ottawa: Administration.



CTLC—C.T. Lamont Primary Health Care Research Centre, DFM—Department of Family Medicine, EBRI—Élisabeth Bruyère Research Institute.

*Supported by the DFM Practice Plan and EBRI.

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EBRI is a hospital-based research institute and has a partnership with Bruyère Continuing Care (Bruyère) and the University of Ottawa. Bruyère, which boasts 3 main sites and 753 beds, offers services in complex continuing care, rehabilitation, palliative care, and primary care. Bruyère is a family-physician focused environment and has an active academic family health team (2 sites).

In early 2004, the CTLC, which had averaged approximately \$1 million in new funding each year, found itself with a greater number of much larger studies to manage (35 projects with \$18 million in funding) owing to a wave of successful grant applications coming from a one-time government investment in PHC research. The research agenda at this time began to focus on PHC reform issues, particularly related to system or structural factors. Despite the large inflow of project monies, the CTLC had little core funding, few permanent staff, and few policies to guide a transition to a much larger enterprise. In a matter of months, the CTLC needed to recruit staff, develop teams, and foster external linkages.

Over a 2-year period, the group learned by trial and error in a quest to develop a strong plan for growth and a successful future. During this time, the CTLC membership grew from 3 to 9 investigators and employed

46 research and administrative staff. In the summer of 2006, the strong foundation that had been developed became essential when the funding wave of activity decreased and the CTLC was forced to face the challenges of ensuring the sustainability of its research program. As we headed into the crest of the wave during the summer of 2006, we took the opportunity to refocus and to prepare for the future by pouring our energies into a new strategic planning process. Part of this process included an environmental scan, in which we identified the MacColl Institute for Healthcare Innovation in Seattle (United States) and the National Primary Care Research and Development Centre in Manchester (United Kingdom) as examples of primary care research centres with a global impact. These centres served as examples of what was possible and assisted us in developing the next stages of our research agenda.

Between 2007 and 2008, the CTLC has passed through its transition phase into a stable level of activity. The investigator team remains at 9, although the number of collaborating investigators has grown. As of early 2009, we employed 28 research and administrative staff who were working on 30 active grants of more than \$5 million. In order to sustain this activity level, there

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is a steady stream of proposals submitted for review. A fundamental factor in reaching this point has been the infrastructure and organizational support of our parenting bodies, the EBRI and the DFM.

Organizational support

It has been essential that there be protected time for research and sustained funding for some investigators. An early and very important initiative of the CTLC was to ensure that the clinical investigators had sufficient protected time to pursue grant writing, oversee their projects, and prepare publications. We adapted the mechanisms introduced by Talbot and Rosser¹¹ at the University of Toronto in Ontario to make this happen in our context and to build a cohesive environment in which researchers could thrive. The first step was to ensure that the Research Director had sufficient protected time. The departmental Practice Plan (a financial partnership of physicians in the DFM) made this possible by agreeing to fund additional protected time. The need for this support was brief, as the Research Director received a salary award shortly thereafter. Consequently, the Practice Plan members agreed to support protected time for a second clinician investigator, who also received a career scientist award almost immediately afterward.

These initial successes reinforced the support of the Practice Plan members, and they began to see the research enterprise as being self-supporting. We have been surprised by the effects of relatively small amounts of seed funding on building a strong investigator team. For example, a few months of salary support for a new investigator can lead to career scientist-funding support, which enables the investigator to be self-funded. This process has occurred 4 times for 3 of our investigators.

Before a recent expansion in the number of residents admitted to the DFM program, one-quarter of the geographic full-time members of the DFM were clinician investigators, with at least half of their time protected to do research. The clinician investigators are paid on a par with their clinician teacher colleagues. Although it is more challenging to find funding to support scientists who are not family physicians, we now include a pharmacist, an anthropologist, and a health economist among our principal scientists.

Financial and infrastructure support

For investigators and research staff at the CTLC, there are 2 sources of sustained funding: the EBRI and the DFM. These sources fund the following positions (Figure 2):

- Director
- Program Manager
- Manager of Research Operations
- Administrative Assistant

In terms of nonsalary support, Bruyère offers the CTLC excellent office space and infrastructure. In

addition, the EBRI provides \$75 000 a year of base funding and core support services, such as human resources, financial management, and communications assistance. As a hospital-based research institute, the EBRI has the advantage of receiving support from the hospital's Bruyère Foundation. The foundation, the DFM, the DFM Practice Plan, and the Faculty of Medicine have recently combined efforts and resources to endow a Research Chair in Primary Care and Healthy Living.

In recent years, the DFM has provided \$500 000 annually in support. Three-quarters of this amount comes from a provincial government Alternative Funding Plan for physicians to support teaching and research. The DFM Practice Plan has contributed an additional \$60 000 per year. Strategic leadership and sustainable funding from the EBRI and the DFM have been the essential ingredients for the success we have achieved at the CTLC.

Skills and confidence building

The CTLC has developed several in-house initiatives that have been essential in developing our research capacity. Frequent education sessions taught by internal instructors or off-site facilitators are available to staff and investigators. These include management education sessions, writing seminars, and software training. Volunteer senior staff and investigators offer a series of 6 2-hour research mini-courses in the summer months. The courses are geared toward research staff members and their professional development, with course content based on their preidentified interests. Each session focuses on an introduction to a different area of interest concentrated within several aspects of research. In addition, staff members of all levels participate in local presentations in which they present the results of investigators' work. This provides a valuable experience, as it gives employees a sense of ownership of the project and an opportunity to build confidence with presenting to an audience.

All employees experience performance evaluations 3 months after they are hired and annually thereafter. These evaluations focus on continuous learning and feedback for improvement rather than on a review of problems. Although employees might work for only a short period of time with the CTLC, their future career development remains a very important aspect of these evaluations.

A formal mentoring program was developed for staff and investigators. Based on a careful review of the literature, the program is supported by biannual presentations about successful mentoring experiences. The program encourages staff and investigators to plan their career development.

Linkages and collaborations

It is essential to have a sense of collegiality, belonging, and connectedness to ensure satisfaction at work.¹² In

addition, opportunities for research staff and investigators to learn from one another can be very rich and valuable. The CTLC organizes monthly Research-in-Progress Rounds, a forum for investigators and graduate students to present key developments and concerns regarding their research and to exchange ideas within a problem-focused rather than lecture-type atmosphere. These forums enable investigators and research staff to network, learn from and support one another, and facilitate the strengthening of teamwork skills. Every 2 months, the Research-in-Progress Rounds feature a research program presentation by one of the investigators. This innovation helps people know what their colleagues are doing. At these sessions, external researchers are also invited to share their research program, an innovation that is especially helpful to new investigators at the CTLC who are striving to get connected to the broader community. Special sessions for project managers encourage them to work through relevant issues and to learn about new internal and external developments and events. The sessions provide an opportunity to resolve common problems, to discuss areas of concern, and to avoid “reinventing the wheel.”

Journal Club, which is another important forum, encourages staff members to learn from one another, socialize, and network. These informal dialogue sessions are held monthly and are structured around the critical appraisal of an article chosen by one of the group members.

At our annual research retreat, all research staff and stakeholders have an opportunity to network, share research, and discuss the strategic direction of the CTLC. At this forum, each participant has a voice and is given the chance to influence the future of the CTLC.

Appropriate dissemination

A bilingual newsletter, issued every 2 weeks, keeps employees informed on various pertinent topics. The newsletter provides synopses of past events and information on upcoming events (eg, workshops, symposiums, fund-raisers, and announcements for funding or employment opportunities). Other newsletter items include recognition of employees' contributions, as well as introducing and welcoming new team members. A comprehensive website (www.bruyere.org/bins/content_page.asp?cid=12-130) provides visibility for the CTLC and outlines the CTLC's origin, research priorities, location, staff, projects, and publications. It also provides audio podcast interviews related to presentations by visitors and investigators. The website serves as a key resource for PHC research methodology and project planning.

Continuity and sustainability

Most research projects require specialized, often part-time, services that the investigator team cannot provide. We addressed this lack of easily accessible specialized

services by providing core research centre services centrally, including data management services, project evaluation expertise, communications support, and statistical support. Individual researchers or projects pay for the services they use. Through a centrally coordinated process, researchers and staff can also access library services, as well as writing assistance or coordination.

The CTLC also offers a research support service for the teachers and administrators of the DFM. This service not only offers methodologic consultations, but also provides project management services, data warehousing, analysis, and statistical support for the less experienced researchers in the DFM.

As funding and staffing grew, the policies and procedures of our parent organizations (ie, the EBRI and the DFM) that supported us became increasingly important. In many cases, we were also able to use the policies and procedures of Bruyère. For tasks such as job postings, staff hiring, budget preparation, and reporting, we could rely on the processes and expertise of people who specialized in these areas within the larger organization. However, when we faced unique issues or when the larger organization could not meet our needs, it was essential for the CTLC to have its own policies, such as those addressing authorship for publication, financial guidelines, and specific policies for guests of the CTLC.

One of these unique issues was to address continuity of staffing through a \$150 000 transition fund provided by the DFM. This fund helps support research staff between projects to ensure we do not lose invaluable trained staff. We have used the fund to extend 11 employee contracts while we waited to see if funding would be renewed for a project. In every case, new project money was obtained before we had to spend any of the transition fund money. It is an ongoing challenge for the CTLC to offer competitive benefits packages for staff, as most staff members are contract employees. This places us at a disadvantage to other organizations within the Ottawa community, such as Health Canada.

Strategic planning

Riding the wave of PHC research during our first substantial influx of funding required planning, developing, connecting, and, most important, coping. As with any organization in the midst of development, we realized the benefit of working with an empowered team and the importance of constant reevaluation. Our strategic planning process during 2006 gave us the opportunity to formally evaluate our past strategies through surveys and interviews with staff, investigators, and representatives from our parent organizations. This led to a renewed sense of focus for our research agenda, which addresses PHC services by building on our core strengths:

- practice-relevant research of the organization and delivery of PHC,

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- innovative, mixed methodologies, and
- collaborative relationship building.

The proposals submitted and funded over the past 2 years have reflected these priorities. Our strategic approach to our work has provided useful boundaries while enabling sufficient flexibility.

Conclusion

With a clear vision and a refreshed set of values and strategic goals, we are able to continue our rapid growth and are poised to drive progress in PHC research. In our experience, we found it important to create approaches that focused on the needs of individuals, teams, and our organization in order to ensure the success of research projects. In sharing our experiences and lessons learned, we hope to expand our networks and encourage others to take similar measures and share their experiences as they dive into the waters of PHC research. This research will play an essential role in guiding the reforms and practices occurring in the delivery of health services throughout Canada. Together we can build a strong capacity for this work through high-functioning, rigorous, and relevant centres of excellence for this important discipline. 🌟

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Contributors

Drs Hogg, Russell, Pottie, Liddy, Johnston, and Chambers and **Ms Donskov** contributed to concept, design, and implementation of the program; data gathering; interpretation; and preparing the manuscript for submission.

Competing interests

None declared

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EDITOR'S KEY POINTS

- Conducting effective and relevant research relies on a stable and efficient organization, which enables researchers and staff to work optimally; however, there are numerous challenges associated with building a well-organized, productive research organization.
- This article presents the obstacles (eg, little core funding, few permanent staff members, few policies to guide a transition to a larger enterprise) and solutions of the C.T. Lamont Primary Health Care Research Centre in riding the wave of primary care research.
- Through initiatives that focused on organizational support, building skills and confidence, linkages and collaborations, continuity and sustainability, and infrastructure, the C.T. Lamont Primary Health Care Research Centre was successful in creating a well-organized and productive research organization

POINTS DE REPÈRE DU RÉDACTEUR

- Une recherche productive et pertinente dépend d'une organisation efficace et stable permettant aux chercheurs et au personnel de travailler dans des conditions optimales; la mise sur pied d'une telle organisation doit toutefois affronter plusieurs défis.
- Cet article décrit les obstacles rencontrés (faible niveau de financement pour l'infrastructure, petit nombre de membres permanents du personnel, peu de politiques pour indiquer comment faire la transition vers une entreprise plus importante) et les solutions mises au point par le C. T. Lamont Primary Health Care Research Center en surfant sur la vague de la recherche en soins primaires.
- Grâce à des initiatives visant le support organisationnel, l'amélioration des compétences et de la confiance, les liens et les collaborations, la continuité et la poursuite des efforts, et l'infrastructure, le C. T. Lamont Primary Health Care Research Center a réussi à créer une organisation de recherche productive et bien rodée.

