

# Building pedagogical models of social accountability in family medicine residency training: a logic analysis protocol

## Élaboration de modèles pédagogiques de responsabilité sociale en résidence de médecine familiale : protocole d'analyse logique

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## Introduction

Preparing future physicians to meet the complex and evolving health needs of the communities they serve is a pressing imperative in medical education.<sup>1</sup> As social accountability (SA) is increasingly emphasized, training programs are striving towards intentionally designed pedagogical models that effectively develop the competencies required for socially accountable practice within the patient-physician relationship and beyond, at the macro level of the economic, social, political and technological structures affecting health and the care delivery.<sup>2</sup> There is thus a growing need for innovative pedagogical approaches that not only address health priorities, but also guide learners toward meaningful, sustained engagement.

In 2022, Université Laval (UL) launched the Socially Engaged Residents niche program (SERnP)<sup>a</sup>, an optional *sur mesure* longitudinal program, offered to a small group of self-selected family medicine residents. The program is designed to support residents in developing competencies in working with patients and communities experiencing social vulnerability, and in contributing to health equity. Launched as a pilot, the program has not been evaluated

yet, and its pedagogical and theoretical underpinnings remain unexplored.

Logic analysis (LA) is an evaluative strategy that fits the broader stream of theory-based evaluation. It aims to clarify the plausibility of a program theory based on available knowledge.<sup>3,4</sup> The LA of an educational program can offer a structured method to clarify its underlying rationale, examine the coherence between its intended goals and pedagogical strategies, and inform the design or scaling of SA educational models. This article describes the protocol for the LA of the SERnP, which is part of a broader France-Quebec collaboration aimed at building a transferable pedagogical model for SA in family medicine training.

## Methods

The LA of the SERnP will rely on the participation of a steering committee including SERnP managers, teachers, community partners and residents. It involves three steps:

### Step 1: Building the logic model

First, the analysis requires program theory representation through a logic model highlighting the links between SERnP's resources, processes and expected results.<sup>3,5</sup> This

<sup>a</sup> Free translation for : *Créneau Résident.e.s socialement engagé.e.s (CRSE)*

will imply (i) a documentary search for official and working documents concerning the SERnP and (ii) group and individual meetings with key informants from the steering committee. The model revision will continue until a consensus is reached,<sup>5</sup> thus fostering a program representation that will be considered accurate by those concerned.<sup>3</sup>

### Step 2: Developing an integrative framework

The second phase of the analysis involves the development of an integrative framework based on available knowledge.<sup>3,4</sup> Such a framework will be designed using the results of a rapid review of the literature<sup>6</sup> conducted to identify pedagogical principles, features or activities a medical training program should adopt to promote learners' SA. The framework will also draw on some seminal and highly relevant work on SA in medical training (e.g., 7-18).

### Step 3: Re-examining the logic model using the framework built

Finally, the analysis will consist of comparing the logic model to the integrative framework, to highlight points of convergence and divergence.<sup>3,4</sup> This will be achieved through deliberative workshops with faculty and community members, along with multidisciplinary experts. Such a participatory approach will foster the convergence of diverse types of knowledge concerning the SERnP, leading to richer reflection and more relevant and nuanced conclusions.<sup>3</sup> By doing so, the approach addresses a key limitation of LA, which has traditionally been rooted in a post-positivist stance prioritizing scientific knowledge above other epistemologies.<sup>3</sup>

To enhance the LA, the project includes a descriptive qualitative study of the barriers and facilitators to residents' development of the competencies expected within the SERnP. This objective is likely to evolve to integrate questions that may arise from the steering committee following the LA. Data collection will rely on individual, semi-structured interviews with SERnP managers, teachers, residents and community partners. Interviews will be recorded and transcribed for analysis. A thematic analysis<sup>19</sup> will be performed to identify recurring themes from the corpus.

## Summary

As part of a France-Quebec collaboration, the research aims to provide relevant evaluative data about a program designed to develop UL's family medicine residents' competencies in working with patients and communities

experiencing social vulnerability, and in contributing to health equity. Methods involve a LA of the program, complemented by a descriptive qualitative study of the barriers and facilitators to competency development among residents. The results will offer valuable insights for medical educators by identifying key elements to consider when developing SA educational initiatives, while also informing local program improvement efforts and potential residency-wide expansion.

## Statement

The authors confirm that the project detailed in this paper meets the following criteria:

- REB approval: The project has been approved by Université Laval's research ethics committee (Approval #: 2024-371/08-10-2024)
- Scientific peer review: The France-Quebec collaboration project was reviewed by a jury as part of its funding by the Samuel de Champlain program (Fonds de recherche du Québec). The specific study that is the subject of this paper was also reviewed by a jury as part of its funding by the CIHR (postdoctoral fellowship, for the first author) and the *Chaire de recherche en santé durable (Concours de soutien aux jeunes leaders et à la relève en santé durable 2023-2024)*.

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## References

1. Dubé TV. An imperative for transforming health professions education. *Med Educ.* 2024;58(1):8-10. <https://doi.org/10.1111/medu.15274>
2. Saniee N, Motamed S, Barati M, Goodarzi G., Hassanzadeh G., Kohpayehzadeh J, et al. Components of social accountability in medical education: a scoping review. *BMC Med Educ.* 2025;25:349. <https://doi.org/10.1186/s12909-025-06873-w>
3. Tremblay MC, Brousselle A, Richard L, Beaudet N. Defining, illustrating and reflecting on logic analysis with an example from a professional development program. *Eval Prog Plan.* 2013;40:64-73. <https://doi.org/10.1016/j.evalprogplan.2013.05.004>

4. Brousselle A & Champagne F. Program theory evaluation: logic analysis. *Eval Prog Plan*. 2011;34:69-78.  
<https://doi.org/10.1016/j.evalprogplan.2010.04.001>
5. Champagne F, Brousselle A, Hartz Z, Contandriopoulos AP. Modéliser les interventions. In A Brousselle, F Champagne, AP Contandriopoulos, Z Hartz (Eds), *L'évaluation : concepts et méthodes* (2<sup>nd</sup> ed.), pp 71-84. Les Presses de l'Université de Montréal.
6. Khangura S, Konnyu K, Cushman R, Grimshaw J, Moher D. Evidence summaries: the evolution of rapid review approach. *System Rev*. 2012;1(1):10. <https://doi.org/10.1186/2046-4053-1-10>
7. Abdalla ME, Taha MH, Onchonga D, et al. Exploring strategies, programs, and influencing factors for integrating social accountability into undergraduate medical education: a scoping review. *BMC Med Educ*. 2014;24.  
<https://doi.org/10.1186/s12909-024-06072-z>
8. Boelen C & Heck JE. *Defining and measuring the social accountability of medical schools*. World Health Organization; 1995.
9. Boelen C, Dharamsi S, Gibbs T. The social accountability of medical schools and its indicators. *Educ Health*. 2012;25(3):180-94. <https://doi.org/10.4103/1357-6283.109785>
10. Boelen C, Pearson D, Kaufman A, et al. Rendre une faculté de médecine socialement responsable. Guide AMEE No 109. *Pédagogie Médicale*. 2018;19(4):181-98.  
<https://doi.org/10.1051/pmed/2019027>
11. Buchman S, Woollard R, Meili R, Goel R. Practising social accountability: from theory to action. *Can Fam Phys*. 2012;62:15-8.
12. Dharamsi S, Ho A, Spadafora SM, Woollard R. The physician as health advocate: translating the quest for social responsibility into medical education and practice. *Acad Med*. 2011;86(9):1108-13.  
<https://doi.org/10.1097/ACM.0b013e318226b43b>
13. Ladner J, Maherzi A, Poitevien G, et al. Responsabilité sociale des facultés de médecine francophones : organisation, résultats et leçons apprises du projet de recherche action international des facultés de médecine francophones. *Pédagogie Médicale*. 2015;16(3):189-200.  
<https://doi.org/10.1051/pmed/2016004>
14. Lopez M, Pérez-Villalobos C, Suárez D, Ar AY. The training of a new social-responsible generation of health professionals with a patient-centered vision. *Ciència & Saúde de Coletiva*. 2022;27:3043-51. <https://doi.org/10.1590/1413-81232022278.07392021>
15. Mahdavyinia S, Larijani S, Mirfakhraee H, et al. The impact of socially accountable health professional education: systematic review. *J Fam Med Primary Care*. 2022;11(12):7543–7548.  
[https://doi.org/10.4103/jfmpc.jfmpc\\_835\\_22](https://doi.org/10.4103/jfmpc.jfmpc_835_22)
16. Preston R, Larkins S, Taylor J, Judd J. Building blocks for social accountability: a conceptual framework to guide medical schools. *BMC Med Educ*. 2016;16(1):1–10.  
<https://doi.org/10.1186/s12909-016-0741-y>
17. Reeve C, Woolley T, Ross SJ, et al. The impact of socially-accountable health professional education: a systematic review of the literature. *Med Teach*. 2017;39:67-73.  
<https://doi.org/10.1080/0142159X.2016.1231914>
18. Ventres W, Boelen C, Haq C. Time for action: key considerations for implementing social accountability in the education of health professionals. *Adv Health Sci Educ Theory Pract*. 2018;23(4):853–862. <https://doi.org/10.1007/s10459-017-9792-z>
19. Braun V & Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77-101.  
<https://doi.org/10.3109/09638237.2011.621471>