



Real-World Implementation of a Complex Health Intervention Across Multiple Communities: The Example of Health TAPeSTRy

Executive Summary

Implementing a complex health intervention in multiple communities is an exercise in pragmatism; even when following the same program protocol, practical experiences on the ground will differ. We studied this with the Health TAPeSTRy program and in this brief we will summarize what we have learned to inform the work of others.

Community differences that had an influence on implementation of the Health TAPeSTRy program included the: size and spread of the community, size of the primary care teams, presence of a “champion” in the primary care team, linkages between the volunteer coordinator and the primary care team, and information given back to clients.

Based on these findings, to improve program implementation, we recommend:

- 1) Providing clear and defined roles for every stakeholder
- 2) Identifying a project champion in each location
- 3) Engaging all stakeholders in relevant elements from the beginning of implementation
- 4) Targeting clients who should most benefit from the intervention with specific recruitment
- 5) Preparing for differences in implementation based on community size or remoteness
- 6) Preparing for differences in implementation based on clinic size or resources

Context: The Background

Multi-component interventions aimed at improving health outcomes are common in research and in program development. However, implementing and evaluating them in a real-world setting is a long-term, multi-phase process. After a program has been shown to be feasible and effective, the next logical steps are scaling up and spreading its reach. For a program to be successfully implemented at this stage, and its effects to be reproduced in new settings, understanding the influence of contextual elements of the new settings is key.

What We Did: The Methods

Health TAPeSTRy (Health Teams Advancing Patient Experience, Strengthening Quality) is a community-based intervention rooted in primary care. Trained volunteer pairs visit older adult clients at home to collect health and social information via a custom-built web app. This information goes back to their interprofessional primary care team, who work with them to meet their health goals and needs, and providers and volunteers support clients in connecting to community resources.

Health TAPeSTRy had previously been proven effective (with positive impacts on physical activity and decreased hospitalization) in a randomized controlled trial (RCT) in one

community (Hamilton, Ontario). In this second large-scale implementation, we sought to implement Health TAPESTRY in six communities across Ontario. While there were multiple sub-studies evaluating different program elements, the two key parts that informed this policy brief were:

- A qualitative case study that looked at differences between the six communities (e.g., in aspects like size of the community and the practice, and in the ways they differed in implementing Health TAPESTRY elements like volunteer coordination and the interprofessional team)
- An RCT which looked at the feasibility of implementation across the six communities (the focus of this policy brief) as well as the reproducibility of the effects seen in the first RCT.
- An economic analysis which determined the cost-effectiveness of Health TAPESTRY in the Hamilton site.

What We Discovered: The Findings

Health TAPESTRY was successfully implemented in the six communities. There were high levels of adherence to the program protocol but with some adaptation based on local contextual differences. These differences likely drove the varying effectiveness of the program, as the effect on hospitalizations and physical activity observed in the first RCT were not reproduced overall. However, it appeared they were to some degree reproduced in the Hamilton site, where the program was also indicated to be cost-effective compared to usual care, with an intervention cost of \$293 per patient.

The contextual differences described above included:

- The size and spread of the community – which affected both volunteer recruitment (e.g., in interest and population numbers) and volunteer onboarding (e.g., in transportation and access)
- The size of the primary care teams – while smaller teams had fewer resources (e.g., types of interprofessional care providers who could see clients), they were also generally clearer on each person's role in the program and seemed to have more physician buy-in to the program
- The presence of a “champion” in the primary care team – which again impacted role clarity and physician buy-in, and seemed to improve general program implementation
- The linkages between volunteer coordinator and primary care team – more linkages (e.g., volunteer coordinator sitting in primary care team meetings) built more positive perspectives about each other
- The information given back to clients – more clients said they had a positive experience in communities that provided clients a summary of their responses and suggested next steps

Recommendations for Improving Program Implementation

- 1) Provide clear and defined roles for every stakeholder in the program.
- 2) Identify a project champion in each location.
- 3) Engage all stakeholders in all relevant elements from the beginning of implementation to build buy-in (e.g., family physicians in Health TAPESTRY).
- 4) Target the clients who should benefit *the most* from the intervention (based on intervention aims and protocol) using specific recruitment efforts (e.g., through recruiting from existing programming or sub-populations).

- 5) Prepare for differences in implementation based on *community size or remoteness* (e.g., know from the start that volunteer recruitment may be more difficult and may take longer in smaller, more rural communities).
- 6) Prepare for differences in implementation based on *clinic size or resources* (e.g., know that smaller clinics with fewer allied health professionals will likely have gaps).

Further Reading

Gaber J, Datta J, Clark R, Lamarche L, Parascandalo F, Di Pelino S, Forsyth P, Oliver D, Mangin D, & Price D. (2022). Understanding how context and culture in six communities can shape implementation of a complex intervention: A comparative case study. *BMC Health Services Research*, 22: 221. <https://doi.org/10.1186/s12913-022-07615-0>; <https://rdcu.be/cHfFe>

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