Considerations for implementing pharmacist testing programs for HIV and Hepatitis C

Analysis from two Canadian studies in community pharmacy and rural corrections sites

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Objective

To identify key implementation factors from two Canadian studies of pharmacist testing programs for HIV and hepatitis C (HCV) in community pharmacies[1] and rural corrections centres.[2]

Pharmacist testing programs have demonstrated success in improving access and equity, finding new infections, and connecting people to treatment and prevention services.

Translating results from research studies to implementation requires consideration of key factors to set the program up for success.

Methods

- Applied the Consolidated Framework for Implementation Research (CFIR)[3] to assess how Innovation, Outer Setting, Inner Setting and Individuals domain constructs contributed to implementation.[4,5]
- Constructs coded as having positive (+), negative (-), or neutral (0) influence on implementation for each study. Summary valence was derived by comparing influences across both studies.
- Two analysts assessed and assigned valence scores; differences in assessments were discussed until resolved.

Results

- Complexity of the pharmacist testing innovation was a negative factor. However, adaptability and trialability of the testing innovation supported success.
- Critical constructs for implementation success:
  - external partnerships +
  - enabling scope of practice +
  - culture +
  - provision of pharmacist training +
    - pre- and post-test counselling
    - administration, interpretation of tests
    - offering testing without stigma
    - positive test result counselling
  - communications +/-
    - \+ communication within pharmacy teams, to clients, and in linkage to care
    - \- systems did not support documentation of test results in health records.

Pharmacist testing: Valence of CFIR constructs by domain

Construct	Community pharmacy		Corrections		Summary valence
Innovation characteristics - the pharmacist testing program					
Evidence strength/quality	+		+		positive
Relative advantage	+		+		positive
Adaptability	+		+		positive
Trialability	+		+		positive
Complexity	-		-		negative
Outer setting					
Partnerships/connections	+		+		**critical**
Policies/laws	+		+		**critical**
Inner setting					
Physical infrastructure	+		-		mixed
Work infrastructure	+		+		positive
Relational connections	+		+		positive
Communications	0		+		**critical**
Culture (created/influenced)	+		+		**critical**
Tension for change	0		+		mixed
Compatibility	+		+		positive
Relative priority	-		0		mixed
Incentive systems	+		0		mixed
Available resources	+		+		positive
Training/access to information	+		+		**critical**
Individual domain					
Managerial support	+		+		positive
Individual characteristics	**Pharmacist**	**User**	**Pharmacist**	**User**	
Need	0	+	0	+	mixed
Capability	+	+	+	+	positive
Opportunity	0	0	+	+	mixed
Motivation	+	+	+	+	positive

*Adapted from Kegler et al., 2022.

Conclusions

This study provides insight into necessary attributes for successful pharmacist testing programs in community pharmacy and corrections settings that may inform implementation and scale-up in other contexts.

Adapting innovations for implementation and scale-up requires careful consideration to keep necessary factors for success while streamlining modifiable factors for efficiency and sustainability.

References: [1]Kelly DV, Butt AC, Hughes C, et al.. Implementation of a community pharmacist-led testing program for HIV, hepatitis C and syphilis in Canada. *Implement Sci Commun*, 03 August 2026, PREPRINT (v. 1) available at Research Square, https://doi.org/10.21203/rs.3.rs-10270968/v1. [2]Coombs M. *The implementation of a pharmacist-led testing service for HIV and hepatitis C in rural Newfoundland and Labrador correctional facilities: A pilot study.* 2026. Memorial University of Newfoundland, MSc (Pharmacy) thesis. [3]*CFIR Constructs & Definitions.* CFIR Research Group 2025. [4]Kegler MC, Rana S, Vandenberg AE, et al.. Use of the consolidated framework for implementation research in a mixed methods evaluation of the EQUIPPED medication safety program in four academic health system emergency departments. *Front. Health Serv, 2022,* 2:1053489. [5]Damschroder LJ, Lowery JC. Evaluation of a large-scale weight management program using the consolidated framework for implementation research (CFIR). *Implement Sci,* 2013, 10;8(1):51.

CIHR IRSC Canadian Institutes of Health Research / Instituts de recherche en santé du Canada