



The Pre-Implementation Study of Feasibility and Acceptability of Using HIV Self-tests among PWID via SVM

DOCTORAL PROGRAM: PUBLIC HEALTH

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Problem Statement

► Implementation Challenge

- Georgia has the highest rates of injection drug use globally
- HIV testing gaps among PWID remain significant
- Only 34% engaged in HIV prevention services, and only 44.6% were tested for HIV in the past 12 months

► Goal

- Assess the process of delivering HIV self-tests through Syringe Vending Machines (SVMs) and Needle and Syringe Programs (NSPs)





← Touchscreen with default menu

Upper two shelves for sale



← Sigma card activation point

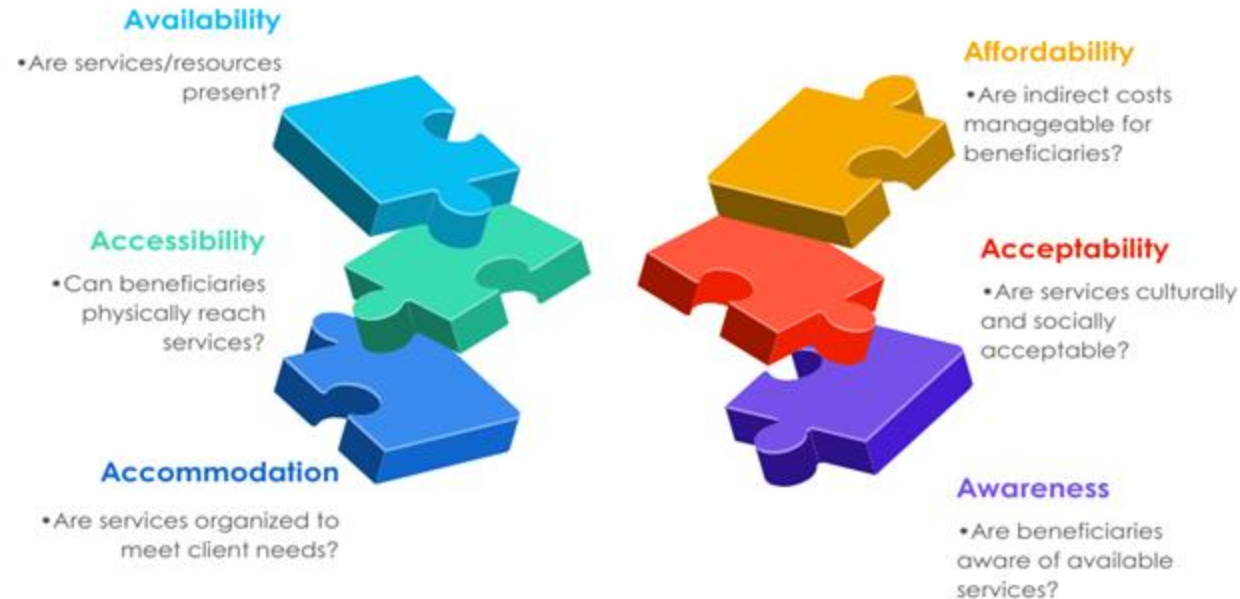
Lower 3 shelves for card holders



Conceptual Framework

Theory of Access to Healthcare

Based on Penchansky and Thomas's, modified by Saurman



Implementation Framework

- ▶ **RE-AIM framework: Reach, Effectiveness, Adoption and Implementation.**
- ▶ **Evidence-based practice**
 - HIV self-testing was developed to improve access to testing for people who avoid facility-based services due to stigma or barriers.



Methodology

Aim	Method	Framework Used	Access Dimensions	RE-AIM Dimension	Planned Sample
1. Explore adoption of HIVTK	Focus groups with PWID (engaged & non-engaged), NGT with NSP staff	Saurman's Theory of Access	Acceptability, Awareness, Accessibility, Affordability	Adoption	4 FGs (N=24–32), 1–2 NGT (N=5–10)
2. Evaluate implementation via SVMs	Focus groups with SVM users	Saurman's Theory of Access	Availability, Accommodation, Accessibility	Implementation	2 FGs (N=12–16)
3. Assess reach of HIVTK distribution	Quantitative analysis of SVM & NSP records	RE-AIM	—	Reach	Program records (2021-2024)
4. Measure effectiveness of distribution	Quantitative analysis (trends, repeat users)	RE-AIM	—	Effectiveness	Program records (2021-2024)

Early Findings

Table 1. Needle and Syringe Program (NSP) – 5 Centers in Tbilisi

Year	Total HIVST Distributed	Average Age	Male	Female	Positive cases
2023	256	42	245	11	0
2024	311	40	295	16	0

Table 2. Syringe Vending Machines (SVM) – 8 Machines in Tbilisi

Year	Total HIVST Distributed	Average Age	Male	Female	Positive Cases
2023	511	39	482	27	6
2024	374	40	311	63	0



Anticipated Challenges and Questions

- ▶ Is it appropriate to combine the Theory of Access for question design with the Nominal Group Technique (NGT) for group consensus?
- ▶ Which quantitative indicators best capture adoption and implementation?
- ▶ Are there recommended R packages or models for mixed quantitative data from service records?



Conclusions and Next Steps

- ▶ Currently preparing IRB approval documents for qualitative data collection
- ▶ Have quantitative data from SVM and NSP services in Tbilisi
- ▶ Aim to integrate findings to inform future HIV testing scale-up strategies

