## **REPORT NO 6**

# Process mapping, and REAIM framework to evaluate a PrEP Service Program in a Canadian Sexual Health Clinic

## **RESULTS ON REACH- STAFF INTERVIEWS**

# **Authorship credits**

Conceptualization	Beatriz Alvarado, Hugh Guan, Emma Nagy, Nicole Szumlanski,		
	Miriam Kamotho, Jorge Martinez		
Methodology	Beatriz Alvarado, Hugh Guan, Emma Nagy Nicole Szumlanski,		
	Miriam Kamotho, Jorge Martinez		
Validation	Beatriz Alvarado, Hugh Guan, Emma Nagy Nicole Szumlanski,		
	Miriam Kamotho, Jorge Martinez		
Formal analysis	Beatriz Alvarado, Emma Nagy		
Investigation	Emma Nagy, Beatriz Alvarado		
Resources	Jorge Luis Martinez, Hugh Guan, Nicole Szumlanski		
<b>Data Curation</b>	Emma Nagy, Beatriz Alvarado		
Writing - Original	Beatriz Alvarado, Emma Nagy		
Draft			
Project	Beatriz Alvarado, Hugh Guan, Emma Nagy, Nicole Szumlanski,		
administration	Miriam Kamotho, Jorge Martinez		
<b>Funding acquisition</b>	Jorge Luis Martinez, Beatriz Alvarado, Hugh Guan, Bradley		
	Stoner, Pilar Camargo		

#### **RATIONALE**

This report presents the evaluation of one sexual health clinic in Ontario, Canada in delivering PrEP services, using the RE-AIM framework to understand staff' perspectives. By examining the clinic's reach within the community, the effectiveness of its services, the adoption of its model by diverse client populations, and the sustainability of its delivery methods, this study aims to provide actionable insights for improving the delivery of services in other SHC or in other public health settings.

#### **DESIGN AND METHODS.**

This evaluation used a **mixed-methods design** and focused on five dimensions of the program, aligned with the **RE-AIM framework**: *reach, effectiveness, adoption, implementation, and maintenance*. Our objectives and research questions align with the RE-AIM framework as shown in Table 1.

We adopted a parallel mixed-method evaluation design to comprehensively assess PrEP services in a Sexual Health Clinic (SHC) setting. Our approach combines prospective and retrospective data collection with qualitative analysis to evaluate the implementation and outcomes of PrEP services. Ethics compliance was supported by Queens REB:

**Table 1. Key evaluation REACH questions** 

<b>REACH dimensions</b>	GENERAL QUESTION
Reach	What is the level of Reach? WHO is (was) intended to benefit and who participates or is exposed to the PrEP program?
	WHAT are the characteristics of populations reached by PrEP? WHO is not participating and why?

#### Recruitment and interviews

Staff were interviewed using audio/video calls through MS TEAMS by one of the researchers employed with the public health unit but not involved with the sexual health team or its services. The interview guide was developed to identify all five aspects of RE-AIM. Data was transcribed directly by MS TEAMS software and later reviewed by the interviewer for consistency. Data was shared with the other researcher for analysis using onedrive after deleting all personal information (if any).

#### Analysis of data

We used a hybrid thematic analysis for the qualitative data. We reviewed the transcripts and then summarized each of the answers for each question in a unique file. We applied deductive coding based on predefined RE-AIM categories and inductive coding for emerging themes. We used client and staff interviews to identify congruencies and discrepancies.

#### **RESULTS**

#### 1. Participants

Seven staff members, nurses, doctors, managers and administrative personnel were included. Due to the low number of persons, we limited the narratives.

#### 2. Unmeet needs

Staff were clear in identifying both the populations that the program reaches and those it does not. Participants noted that the program primarily serves more privileged groups, particularly gay and bisexual men. In contrast, populations such as sex workers, people who use drugs, transgender women, and unhoused individuals face significant barriers to accessing PrEP services. They observed that the clinic tends to engage individuals who can self-advocate, effectively navigate the healthcare system, and feel comfortable accessing services.

Table 1. Populations Being Reached and not Reached by the SHC services

Populations	Narratives
GBM, median age, knowledgeable of PrEP, and STIs	Yeah, so I think that the population served is majority are men having sex with men. And these are the population that are I would say just on a lighter note that are knowledgeable like they have maybe it's a working class people they have insurance they can afford. So which is good.
Population who can afford PrEP but also at high risk	We have like the people we're serving, I would say for the most part are home with privilege.
Meeting needs of people recently in the province without health insurance	we still see people without insurance or that recently moved to the province from and just don't have insurance for whatever reason. So I think there still can be a gap that filled by that just because all these other services still require people to have some type of insurance or provincial OHIP or things like that. But we don't.
Not meeting the needs of people who use drugs, Transgender women, Underhoused, lowincome populations, se workers	I would say Yep, from a logistical navigational standpoint, the populations we are not reaching are the ones that are higher risk. Under hosed, unhoused, hard to reach,

#### 3. Determinants of REACH

Many factors were identified by participants as determinants of unmet needs within certain populations. These factors were classified into systemic, organizational, and individual categories.

At **the systemic level**, staff mentioned that the lack of dedicated insurance coverage or funding for medication and lab work disproportionately affects uninsured and underinsured individuals, many of whom are sex workers, people who use drugs, and transgender women—leading to significant unmet needs by the clinic. Additionally, stigma remains a substantial barrier to PrEP uptake, particularly among older Gay bisexual men individuals, young adults, and those who are unfamiliar with PrEP. On the other hand, the negative healthcare experiences, especially among gay and bisexual men, have prompted many to seek care at the sexual health clinic, explaining the preference of these populations for these services.

At **organizational level**, restricted clinic hours, minimal advertisement, and limited staffing capacity has hampered outreach, while rigid eligibility tools may exclude individuals who do not fit conventional "high-risk" profiles. Staff mentioned that they often lack the time to address complex client needs, leaving many patients to navigate financial hurdles alone. Again, narratives of staff highlighted that people who use drugs, transgender women and sex workers may not find the clinic availability adequate

for them; and the clinic capacity is limited to offer additional support for addressing their social circumstances.

At **the individual level**, people with lower health literacy or who do not perceive themselves as at risk remain underserved, particularly if they face PrEP or HIV stigma or cannot self-advocate.

Table 2. Systemic Factors as determinants of REACH

<b>Factor Level</b>	Key points	Impact on REACH	Narrative supporting key points
	- No coverage for those without OHIP (e.g., out-of-province, undocumented).	Uninsured/underinsured clients cannot afford PrEP or lab costs.	
Lack of Insurance Coverage	- Many are in transition (moving, no primary care).	<ul><li>Gaps in care for high-risk groups (TGW, Sero discordant couples).</li><li>Frequent disruptions in continuity of care for</li></ul>	So I think there still can be a gap that filled by that just because all these other services still require people to have some type of insurance or provincial OHIP or things like that. But we don't.
	Those with insurance/means can	transient populations.	
	navigate coverage,		
	leaving the most at- risk (e.g., sex workers, PWUD) underserved		
Financial Barriers	- Patients lacking resources must rely on short-term or online free trials.  Financial burden often deters people from seeking or continuing PrEP.	- Creates a socioeconomic divide: only those who can afford or navigate subsidies get PrEP.  - High-risk individuals may remain unprotected due to cost.  -The population accessing PrEP services at this clinic tends to be older, more financially stable, and generally well-informed about	So for individuals that land in our labs, most of them have benefits and for those who don't, we basically leave it up to them to sort of source out how they're going to afford it or how they're going to find the, the, the programs that exist to help them.
		-The clinic's own statistics confirm that it mostly serves clients with comparatively	

		higher socioeconomic status.	
Socioeconomic & Stigma Dynamics	- GBM face stigma that may push them toward discreet or online services.  - Stigma may reduce willingness to seek in- person care.  _Young populations seem to search more privacy preferring public health related services  -Preference for public health because of known confidentiality and trust	- Reinforces a pattern where only relatively privileged or less-stigmatized individuals are served.  - Misses individuals requiring more confidential or nontraditional care options.  - Current clients are older, higher SES, and well-informed about STIs.	There's a lot of stigma, I feel like for that community [MSM] sometimes, which we're obviously trying to reduce. Yeah. It's challenging on both sides.
Provider Limitations	- Lack of time, experience, or comfort serving certain client populations (e.g., complex health or social needs).  - Fewer providers offering PrEP reduces overall capacity.  - Due to lack of providers, they are meeting needs of populations who does not have insurance and search for sexual health services	- Contributes to long wait times, referral gaps, and limited geographic coverage.  - Patients may abandon care if they cannot find a qualified or welcoming provider.  -Those without primary care provider- who are usually those disproportionally at risk- were less engage in PrEP continium	Um, I would say, I would say definitely. I think it's, um, a service that's harder to access for sure. A lot of, I think healthcare providers may or may not be super knowledgeable.

 $\label{thm:conditional} \textbf{Table 3.Organizational factors as determinants of REACH}$ 

Factor Level	Key point	Impact on REACH	Narrative supporting key points
Limited Support to address needs	- Some staff/providers see financial navigation (e.g., subsidy	- Uninsured clients face dead ends after initial consultation.	so certainly and I know this probably has come up, but we actually have no other funding

	applications) as beyond their role.  - Acknowledgment that cost barriers directly affect HIV prevention but remain insufficiently addressed.  -However, there is a shared sense that these financial barriers directly undermine HIV prevention efforts.	- Clinic is reluctant to advertise services they cannot fully support.  -Limited support for sexual workers or people who use drugs who may need additional services	source to provide clients that come to us that watch prep or we couldn't even advertise that we have other funding sources so that we could provide prep in a non barriered way financially, right,
Scheduling & Accessibilit y	- Clinic hours often clash with the schedules of sex workers, people who are unhoused, etc.  - Originally focused on gay men, now broader in scope but still missing key groups  - Updated language and online tools are attempts at inclusivity but may inadvertently exclude certain populations.  -Restricted clinic hours and staffing hinder the ability to fully meet demand, suggesting an underestimation of how many people need PrEP.	<ul> <li>Hard-to-reach groups cannot attend during standard times.</li> <li>Limited walk-in or after-hours options reduce uptake among atrisk communities.</li> </ul>	Certainly the building does have an impact. Um, just because sometimes there's some stigma around coming to our building, it's very, um, modern and not maybe in a place that is comfortable for certain people to, to enter into our building. Hmm. So that does impact who could access our services even the time of day that we offer services because we have no evening clinics, right.
Capacity Constraints	-Limited staffing and space hamper the ability to conduct outreach or navigate funding for each client.  - Growth of the program is hampered by resource limitations.	Limited staff hamper possibility to extend advertisement and offer services for populations with social barriers, in addition to being at risk of HIV	Yeah. And then reach out. Yeah. I actually was kind of a question I have myself about the program is like, are we purposely not like recruiting people or do we think we're at capacity, which I think there's an argument to be made for that also.

Demand- Driven Approach & Minimal Recruitmen t	-Expansion is often reactive, relying on client self-referrals and website info.  - No active recruitment/advertising to high-risk groups.  - Rapid HIV testing visits sometimes omit PrEP discussions.	Virtual visits might expand reach, but not all have internet or are comfortable with telehealth. —  - Potentially high-need populations are unaware of the service.  - Underutilization of touchpoints (e.g., quick test visits) for PrEP education.	I don't think we do a lot of recruitment at all. I could be totally off base I wouldn't say the information is like obvious on our website, which is probably where most clientele would be accessing information.
Eligibility tools	Standardized "high-risk" scoring systems might not capture the unique circumstances of certain populations	This can inadvertently exclude or overlook individuals who need PrEP. (e.g., PWUD, TGW).	There's some limitations like for instance in the tool that we use around risk for eligibility that although it's been deemed a very effective tool from a research standpoint, I think it hasn't been potentially looked at to include these populations over time. So we may be missing out on other pieces to that risk evaluation.

Table 4. Individual factors as determinants of REACH

<b>Factor Level</b>	Key points	Impact on REACH	Narrative supporting key points
Knowledge & Health Literacy	Current users generally informed about STIs and healthcare navigation.  - Others may not grasp their HIV risk or know PrEP exists.	- Patients with lower health literacy are less likely to seek PrEP or understand its benefits  - Reinforces disparities in who can access preventive services.	Yeah, but not a ton if I find the clientele to be pretty knowledgeable. And a lot of our clientele we've we've had for a little while.
Self- Perception of Risk	-Older adults or individuals facing stigma around HIV may minimize or not acknowledge their potential risk.	- Missed opportunities for prevention if patients never initiate conversations about HIV risk.	like looking at our clientele and like they're HIRI score and stuff. I think a lot of them do not, you know, score very high risk. Most of our clients that I've seen,

	- Misconceptions of "low risk" can prevent people from considering PrEP.	- Stigma and lack of awareness lead to underutilization- of PrEP among those who need it	
Advocacy & Navigation Skills	- People with the ability to find coverage or advocate for themselves more readily secure PrEP.  - Those with fewer resources or lower self-advocacy skills remain underserved	<ul> <li>Access is highly dependent on one's capacity to navigate the system.</li> <li>Vulnerable or marginalized groups are left behind without added support., eg, people living with mental health problems</li> </ul>	Like they probably have the connection to resources or like ability to access like the Internet and find out about our services.

#### 4. Suggested Solutions and Approaches

Clinic staff recognized that various strategies exist to address the identified barriers; however, they are uncertain whether many of these strategies can be implemented with the current resource levels. Despite these concerns, staff have proposed several approaches to bridge the existing gaps. These include establishing reliable funding streams, refining outreach efforts through enhanced community collaboration, offering more flexible service delivery options (such as mobile units or extended-hour clinics), updating risk-assessment tools, and providing navigational support. While these measures are aimed at ensuring that PrEP programs meet the diverse needs of all high-risk populations, not all may be feasible within the clinic setting at this time.

- 4.1. Dedicated Funding: A primary recommendation was to establish reliable financial support—whether through government grants or insurance reforms—to cover PrEP medication and related laboratory costs for individuals who do not have coverage. Currently, many high-risk groups (e.g., sex workers, people who use drugs, transgender individuals) are left behind due to prohibitive out-of-pocket expenses.
- 4.2. Refined Outreach and Collaboration: To reach populations that are currently underserved or absent from clinic rosters, participants recommended forming partnerships with community-based organizations—such as shelters, street health services, harm reduction programs, sex worker advocacy groups, and university health centers. These partnerships are discussed also as essential to increase capacity and connections to offer supportive services (e.g addressing social determinants).
- 4. 3. Flexible Service Delivery: Another key suggestion was to offering extended or weekend hours, mobile clinics, and services at venues frequented by populations whose needs are unmeet. Such flexibility helps accommodate those who have irregular or demanding schedules, including people working nights or managing unstable housing situations.
- 4. 4. Normalizing Conversations: Staff also emphasized the necessity of proactively discussing PrEP with all clients, regardless of perceived risk. Because an individual might not see themselves as high-risk, but could have partners who are, open dialogue helps uncover hidden exposures and ensures people can make

informed decisions about HIV prevention. Normalizing these conversations—through routine STI screenings, quick test visits, and general health check-ups—can reduce stigma, increase awareness, and potentially reach those who wouldn't otherwise pursue PrEP. Training of primary care providers will be essential activity to increase awareness and start those conversations.

- 4.5. Enhanced Risk Assessment Tools: Narratives of staff highlighted the fact that current standardized scoring systems may fail to capture nuanced risk factors encountered by populations whose need are unmeet, inadvertently excluding individuals who need PrEP. Participants recommended updating or expanding these tools to reflect the realities of different communities—such as people who inject drugs, transgender women, and Sero discordant couples. Indeed, they suggested incorporating broader social determinants of health into risk assessment to help providers better understand and address the specific challenges faced by each individual.
- 4. 6. Navigational Support: many participants highlighted the value of having case managers who can guide clients through the complexities of insurance applications, subsidy programs, and follow-up care. This kind of support was mentioned as particularly beneficial for those with limited English proficiency, low health literacy, or a history of negative interactions with healthcare systems. Case managers can significantly reduce the stress and confusion that discourage many staff participants from initiating or continuing PrEP. For this aspect, participants suggested more clinic capacity, or increasing knowledge of path for fundings for clients, and ultimately having PrEP free for all.
- 4. 7. Strategic Goals and Program Capacity: Underlying all of these suggestions is the need for clinics to clarify their capacity and objectives: whether they aim to serve all individuals at elevated risk or focus on a subset of "high-risk" groups. Aligning program resources and strategies with these goals would be essential for ensuring that expansion is both practical and impactful. Participants also suggested a continuous evaluation of who is being reached—and who remains underserved—to recalibrate outreach, funding, and service delivery.

**Table 5. Suggested Solutions and Approaches** 

Suggested solutions	Key points	Narratives from staff
Dedicated Funding	Participants believe that having a reliable source of funding (e.g., government or charitable subsidies) would significantly improve PrEP access for uninsured and underinsured clients.  Improved funding could also allow for more active outreach and advertising to populations most in need.  Establish programs or partnerships to cover medication and lab costs for uninsured clients, reducing financial barriers.	I mean, other than the fact that we have no funding for PrEP medications. That would be a piece that if you could have your clinic tied to a funding source. Yep.
Refined Outreach &		We should maybe change gear
Collaboration	Collaborate with community organizations (e.g., street health, shelters, sex worker	just to see if it's going to attract other people because there could be some people using

	advocacy groups, universities) to reach underserved groups.  Tailor messaging and education to the specific needs of TGW, PWUD, sex workers, and older adults.  Changes in advertisement of services over the years to be more inclusive as most of the messages were for GBM  Increasing the awareness of their services and PrEP among primary care providers and searching opportunities to talk to them.	drugs, injectable drugs, but they're still they're working.  So if you were to reach that client[referring to those with limited navigational resources], you may need to take the clinic to them, like physically take the services to them.
Flexible Service Delivery	Offer extended or weekend clinic hours, mobile/outreach services, or community-based models to accommodate those with irregular schedules.  Offer injectable to meet needs of populations that cannot connect online	So there are injectable HIV Prep medications that have just been approved and are being approved. So the questions become, how do we integrate our Prep injectables into our clinic
	Offering PrEP on demand may be another	
Navigational Support	way to handle issues with coverage.  Incorporate patient navigators or case managers to help clients with insurance applications, subsidy programs, and follow-up care.	So we could do a better job recruiting the people who are at greatest risk by equipping ourselves with like, well, you know, knowledge to know how to find funding.
Strategic Goals & Program Capacity:	Clarifying whether the clinic aims to serve all high-risk populations—or only those who fit existing criteria—would help refine outreach strategies and allocate resources appropriately.  Continual assessment of who is being served, and who is left out, is critical for ensuring that PrEP programs effectively reach everyone in need.  Update or expand current risk-scoring methods to reflect the realities of diverse	. oh, is our, is our client health stable? Is it going up, is it going down? What's the, what's the general demographics? Are we hitting certain types of target needs? And it also helped us set goals for the future of what would we want the client to look like?

	populations, ensuring more inclusive criteria.  Conversations need to be tailored to specific	
	audiences to ensure messages resonate and foster engagement	
Normalizing conversations	Increase opportunities to have conversations with clients to increase awareness across their networks	So I think kind of quick test clinic is probably our main way to kind of get people in because they're obviously accessing our services versus like Queens or anything like that.
	Participants underscore that not all clients directly perceive themselves as "high risk," but they may have partners who are at risk—hence, proactive discussions about PrEP are vital.	
	These conversations ensure individuals can make informed decisions, even if their personal risk profile is initially unclear.	

#### 5. Summary of findings

Through our evaluation of REACH, sexual health clinics have been effective in reaching key populations, including urban residents, gay and bisexual men, and individuals already engaged with the healthcare system—many of whom are at high risk and actively seeking sexual health services. These findings are consistent with the epidemiological profile of PrEP uptake in the province [1].

However, significant gaps remain in reaching other equity-deserving groups such as people who use drugs, transgender individuals, and sex workers. Participants noted that these populations encounter multiple barriers, including limited access due to socioeconomic conditions, transportation challenges, and systemic stigma. Moreover, the fact that PrEP is not covered by provincial funding exacerbates these challenges, as it limits the clinic's ability to promote and provide services to individuals who cannot afford the medication or lack comprehensive insurance.

Addressing these disparities will require targeted outreach and adaptive service delivery models to ensure that all communities have equitable access to sexual health resources and HIV prevention strategies. Participants proposed several innovative strategies to extend services to those currently unreached, including establishing reliable funding streams, refining outreach through community collaborations, offering more flexible service delivery options (such as mobile clinics and extended hours), updating risk-assessment tools, and providing navigational support. However, many of these initiatives were deemed unfeasible without increased funding and policy changes—such as making PrEP available free of charge—to sustainably support these efforts.