REPORT NO 5

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

RESULTS ON ADOPTION, IMPLEMENTATION, AND MAINTENANCE USING PROCESS MAPPING

1. Summary of the process mapping

Step 1: Recruitment

• Recruitment involves either direct recruitment from clinic visits or patients self-identifying as interested in joining the Prep program. A brief intake conversation takes place (5-10 minutes) to gauge interest, provide basic information, and assess the patient's risk level for HIV.

Step 2. Eligible clients booked for first appointment

- Initial Eligibility Scoring is done by a PHN using a risk assessment tool, which helps determine if the patient qualifies for the program.
- Demographic data is collected, and patients are asked about health insurance coverage, their internet access and ability to engage with the program.
- Behind the scenes, nurses check the patient's vaccination history and any prior lab results (e.g., hepatitis, HIV) in Panorama and other medical databases.
- Once eligibility is confirmed, patients are scheduled for their first in-person appointment. Followup appointments are typically scheduled for every three months (by phone) and annually for inperson visits.
- Communication involves sending out emails with instructions, reminders for requisitions, and scheduling confirmations.

Step 3. In-Person Visit (First Visit and Annual Follow-Ups)

- In-person appointments involve a comprehensive assessment, including a physical exam by a physician, collection of throat and rectal swabs, and administration of vaccines (e.g., hepatitis A/B, HPV) if necessary.
- Nurses also provide education on Prep and immunizations during this visit.
- Vaccinations are a key part of the in-person visits, particularly for high-risk individuals (e.g., MSM).
- The Physician prescribes PrEP for clients, if deemed appropriate, and the prescription is sent to the pharmacy.

Step 4. Testing and Lab Work

- Routine testing (e.g., HIV tests, hepatitis C, urine samples) is a critical part of the PrEP clinic's protocol. Blood work is typically done off-site, and the results are entered into the clinic's system (Oscar) for physician review.
- Nurses also offer site-specific testing (rectal/throat swabs) for patients during their in-person visit, ensuring thorough monitoring of potential infections.

Step 5. Follow-Up and Ongoing Support

- Follow-up appointments with a physician are scheduled every three months via phone (for continuous PrEP users) and annually for in-person visits.
- Nurses provide ongoing education, reminders for testing, and check-ups on the patient's health status.
- SMS reminders are sent by program assistants (PA's) prior to every appointment.
- PA's support monthly OHIP billing.
- The clinic also handles rescheduling appointments for patients who miss their visits or need to rebook.

2. Implementation process

Tables 1 to 6 summarize the results of process mapping, and describes the activities done by the staff, the time spent in each activity, their perceptions, needs and recommendations for improving the process.

2.1. Initiating conversations and assessing eligibility for PrEP

Table 1 summarizes the approach and feedback regarding processes for assessing PrEP eligibility.

Phone calls guided clients through a multi-step process that usually lasts more than 30 minutes. During these calls, nurses engage in open conversations, assess client's risk using HIRI, and prompt access to available resources. After the call, an email is sent detailing the services and lab access, while client information is entered into OSCAR. This process is carried out solely by the clinic's nurse staff. Clients may choose to not pursue further assistance, consider available resources, or complete preliminary steps and then decide uptake of PrEP. Those who express interest are provided with a code that grants access to the portal for laboratory requisitions.

Staff appreciated the flexibility and non-judgmental nature of the approach, which facilitates open conversations and allows clients to make informed decisions through reminders and access to comprehensive resources. However, there are significant concerns about the process being overly lengthy and inefficient, particularly the time-consuming data entry in OSCAR and the challenges of booking appointments due to limited available schedules. Staff suggested that the integration of electronic self-assessment tools and systems that enable clients to book their own appointments could help streamline the process.

Table 1. Summary of main perspectives of staff on assessing client's eligibility

| Service offered | Staff perspectives-positive aspects | Staff perspectives- gaps |
|--|---|---|
| Assessing PrEP Eligibility | | |
| | | Long and no too efficient process |
| Phone or calls by nurse, driven | | |
| clients to different paths | | -Staff wonder if the process of entering information into |
| Takes more than 30 minutes | Conversations are tailored to | OSCAR, booking and communicating with clients |
| Allows staff to prompt resources, open conversations, | the clients | could be shorter and more efficient |
| conduct HIRI assessment | PrEP is introduced to conversations with family | egicieni |
| Email with all information explaining services, access to | doctors, clients of sexual health clinic, without scripts | Electronic reminders, self eligibility |
| labs | Flexibility | -Some staff recommend using self assessment questionnaires |
| Entering information in OSCAR | -Clients are offered access to | or other electronic tools to facilitate more streamlined |
| 100% of the work is done by the nurses in the clinic | resources to make an informed decision | conversations |
| The path ends here for those not | Appropriateness | Booking own appointments |
| interested. Some are prompted to other resources, and others may complete preliminary work and then did not want to start. | -They offered a non-judgmental environment, respecting decisions, preferences and talking openly without stigma. | -Staff mentioned the possibility of having a system that allows clients to book their own appointments |
| If client is interested, staff give | | Limited available schedule |
| code to access the portal to obtain requisitions | | -Given the presence of one |
| Count requisitions | | doctor, appointment days and |
| | | times are limited and may create |
| | | barriers to access for some |
| | | potential clients |

2.2. PrEP counseling and preparation for first visit

Table 2 summarizes the approach and feedback regarding the service for PrEP counseling and preparation for first visit.

Staff counseling covers a range of topics designed to ensure clients are well-prepared before starting treatment. They discuss expectations, medication understanding, potential side effects, and the importance of strict adherence, emphasizing that success begins even before treatment starts. Staff also offered recommendations for finding funding for PrEP, weighing its benefits, and suggesting options like accessing free PrEP through specific programs, while providing resources to identify affordable

providers. In preparation for first visit, nurses review patient vaccination status and eligibility requirements, draft a follow-up email, and schedule appointments. Additionally, they discuss the necessity of daily adherence, prepare clients for possible adverse effects, and set clear expectations in case of a positive outcome.

Table 2. Summary of main perspectives of staff on counseling and preparation once they are interested in PrEP

| Service offered | Staff perspectives-positive aspects | Staff perspectives- gaps |
|---|--|---|
| Counselling typically includes: expectations, understanding medications, side effects, importance of adherence, and making sure that they are set up to be successful even before starting | | Cost of medication |
| Staff provide recommendations on places that offer funding for PREP; balance benefits; considering go Freddy for access to free PrEP; provide resources to identify those providers and how they can afford PrEP. | Nonjudgmental, patient centered Staff mentioned they leave the door open for discussions, not forcing any client to PrEP | -Staff acknowledge that the lack of coverage and the lack of alternatives for coverage in the clinic are barriers. Clients interested in prep that do not have coverage are referred to online providers who offer 3 months free. |
| In preparation, nurses revise the client's history to see if they have vaccinations, if they meet requirements of the program, then draft the email, and schedule the appointment | | Efficiency -Clients take time to meet requirements for first appointment and this makes use of schedules less efficient, one or two clients booked |
| Discussion on the importance of adherence and compliance, the need to take every day, anticipation of adverse effects, expectation if positive, etc. | | |

2.3. First in site visit

Table 3 summarizes the approach and feedback regarding the service for PrEP during the first visit.

The receptionist prints labels and requisitions while introducing the client to the nursing team. During the first visit, the physician provides counseling on the pros and cons of PrEP, discussing its valuable role

within the agency's mission and following up on the client's progress with the medication. The doctor, or the doctor in charge, manages most aspects of the visit, from booking appointments (especially when online) to overseeing the entire treatment process. Appointments are scheduled on Monday afternoons, with in-person sessions primarily offered during June, July, and August, while online appointments are available throughout the rest of the year. At each appointment, the next session is booked, and requisitions are sent by fax to the client's preferred pharmacy with confirmation that the fax was received.

Online tools are well-regarded; staff find that online requisitions, along with the ability to print results and upload them into OSCAR, make monitoring easier for clients who are comfortable with digital processes.

On the other hand, staff have raised several concerns. The reliance on a single person for booking appointments, especially during online visits led to inefficient use of time of the physician (who is responsible of the online booking). An increase in missing appointments further burdens the system, making rescheduling time-consuming. There are also delays in completing lab requisitions, which necessitates rebooking clients, particularly those who are less adept with online methods. Additionally, logistical problems with medications at the pharmacy can cause further delays, especially when clients need to travel or move, thereby placing additional strain on staff's time.

Table 3. Summary of main perspectives of staff on assessing client's first visit in person

| Receptionists print labels, requisitions, introduce client to the nurses. Physician offers counseling about cons and pros of prep during the first visit, and follows up with them about how is going with the medication Physicians explain the valuable role of the PrEP in HIV prevention Most of the work is done by the doctor, doctor in charge or booking the patient, and managing all aspects of the therapy Appointments are offeredMonday afternoon, with all the in person appointments usually in June, July, August . The rest of the year. Positive perception of online tools Staff perceived that online requisitions have helped with monitoring clients that have access to printer and are familiar with online process Increase schedule will increase burden Participant having difficulty scheduling make the process of reschedule time consuming to staff Lab requisitions not on time -delays in completing requisitions make the process less efficient, as they need to rebook clients; clients less savyy with online methods have more trouble | First visit on-site | Staff perspectives-positive aspects | Staff perspectives- gaps |
|--|---|--|---|
| appointments are done by phone | Receptionists print labels, requisitions, introduce client to the nurses. Physician offers counseling about cons and pros of prep during the first visit, and follows up with them about how is going with the medication Physicians explain the valuable role of the PrEP in HIV prevention Most of the work is done by the doctor, doctor in charge or booking the patient, and managing all aspects of the therapy Appointments are offeredMonday afternoon, with all the in person appointments usually in June, July, August . The rest of the year, | Positive perception of online tools -Staff perceived that online requisitions have helped with monitoring clients that have access to printer and are familiar with online process Printing results and uploading them in OSCAR was perceived as an easy process; staff recommend having a place where they can see all lab | Gaps in scheduling -Staff wonder if the process of booking should rely on one person; it would be difficult to do this differently on phone appointments Increase schedule will increase burden -Participant having difficulty scheduling make the process of reschedule time consuming to staff Lab requisitions not on time -delays in completing requisitions make the process less efficient, as they need to rebook clients; clients less savvy |

| preferred pharmacy- need to confirm that fax was received. Most patients seen within 1 issues with pharmacies, particularly with faxing prescriptions. Those issues create delays in process and | At each appointment the next one is booked | Logistic issues with medications in pharmacy |
|--|--|--|
| | preferred pharmacy- need to confirm that fax was received. Most patients seen within 1 month. It takes at least 2 weeks for clients to receive blood work back, which is needed prior to first appointment, and appointment times are scheduled for an available Monday | particularly with faxing prescriptions. Those issues create delays in process and time for the doctor. Other issues include other logistics, like when the client has to move, has a |

2.4. Monitoring

Table 4 summarizes the approach and feedback regarding the service for PrEP monitoring

After the patient confirms taking the medication for the first time, they are scheduled for an appointment to discuss potential adverse effects and review exam results. Reminders are sent via text message 15 days before appointments. The program is structured around quarterly testing, which includes three phone appointments and one in-person session per year. Program assistants support clients and the clinic by sending reminder texts about labs and facilitating lab requisitions. If a patient tests positive for HIV, a referral pathway is activated. In-person visits focus on STI testing and verification of patient information; while blood work is not conducted during these visits, any missing vaccines are administered, with vaccination statuses verified through existing Ontario web resources.

Staff appreciate the flexibility in rescheduling missed appointments, the acceptability of a mixed phone and in-person schedule, and the overall respectful, non-judgmental approach that upholds privacy and confidentiality. Staff perceived that the adherence to the program and medication is good.

However, the process faces logistical challenges, including delays with lab reports, issues with printing requisitions, and difficulties related to medication logistics. The main challenge lies in managing blood work, which is not conducted on site, leading to inefficiencies in appointment preparation and an increased workload when patients miss appointments or require additional guidance through the monitoring process. Moreover, some clients are reluctant to have STI testing outside the clinic, and the limited scheduling options, with only one day per week available, add to the overall strain on staff.

Table 4. Summary of main perspectives of staff on assessing on monitoring process

| Monitoring | Staff perspectives-positive aspects | Staff perspectives- gaps |
|---|-------------------------------------|--------------------------|
| Once the patient confirms taking the medication for first time, | Flexible if missed appointments | Logistic issues |
| they are book an appointment to | | |

discuss adverse effects, review the exams

Send reminders- text messages-15 days before appointments

Testing every three months; phone appointments 3 times, one appointment in person

Program assistants send reminder texts to clients, reminders regarding labs, and facilitating lab requisitions

Referral path if tested positive for HIV

In person visits included testing for STIs, verification of information, they do not do blood work, they give the vaccines lacking

Verification of vaccination is also done using existing Ontario web pages

Yearly in-person visit takes 15-20 minutes, and often shorter (e.g., 5-10 minutes) for those are familiar with the program. Phone appointments every 3 months average 5 minutes or less. Physician also books next appointment during the call.

No physical materials are given to the client by the physician. Outside of direct client interaction, the physician completes tasks like reviewing bloodwork, and recording notes and sending prescriptions (approx. 5-10 mins beyond visit)...

--Staff mentioned that when clients missed appointments they work hard to make sure they are rescheduled

Acceptability

-Staff perceived that clients like the mixed schedule of telephone and in-person appointments

Appropriateness

- -Staff perceived that they respect patient preferences in terms of testing for STIs.
- -No judgment, positive approval of decisions of clients
- -privacy space, and confidential
- -discretion in appointments, and scheduling so no more than 2 patients are in the same time in the same room

Offer alternative when lack of insurance (such as on demand PrEP)

Staff generally think clients are adherent to the program

- -Time with lab reports Some clients have trouble with printing requisitions
- -Logistic issued with medication
- -Main challenge is to do the blood work
- *-Not doing blood work in site*

Appointments

May be opportunities to make preparatory time before appointments more efficient

Missing appointments and increased work – burden for staff

Babysitting patients

- time increase helping patients navigating all aspects of monitoring, takes time to get familiar with whole process

Clients do not like to have STI testing outside clinic

The clinic schedule is not flexible, with one afternoon per week appointments

- Time estimations increase if there are issues (e.g., issues with pharmacy receiving the prescription can lead to 10-20 minute phone calls to resolve issues). Overall, the physician views their time as well spent

3. Implementation characteristics

The table 5 highlights positive aspects of the program. First of all, staff mentioned how tailored conversations serve as an integral part of the PrEP service, with discussions personalized and woven into broader health conversations with sexual health clinic clients. Staff note that these conversations help empower clients to make informed decisions and respect their autonomy.

The service is designed to guide clients through their options when they show interest in starting PrEP, ensuring that counseling and monitoring are centered around each person's specific needs, even as staff acknowledge challenges in adjusting schedules to accommodate these needs.

The environment is supportive, with a strong emphasis on maintaining engagement through reminders and comprehensive counseling that builds trust and strengthens community relationships.

Clients benefit from a non-judgmental approach and a safe, private space that respects their values, preferences, and sexuality. Positive feedback from clients underscores the acceptability of the services, as the approach not only builds trust but also adapts to individual requirements, including the management of blood work.

Table 5. Positive perceptions of staff about implementation process

| Topic | Summary |
|----------------|---|
| Tailored | Staff noted that discussions are personalized and integrated into broader health |
| | conversations, such as those with family doctors or sexual health clinic clients. |
| | Staff mentioned a respect of the autonomy of clients, agency on their decisions |
| making | , |
| _ | Staff mentioned having open conversation, "door open" |
| | Give clients ownership on the decision of start PrEP and continue of that, supporting every decision |
| | The service is designed to inform clients and guide them through available options if they express interest in starting PrEP. |
| | The counseling and monitoring is centered on person needs; staff mentioned the need to adjust schedules |
| Supportive | Use of reminders to maintain engagement |
| | Comprehensive counseling to increase trust and engagement Welcome friendly atmosphere providing resources to maintain client well informed |
| | |
| | PrEP programs serve as a mechanism to build trust and strengthen relationships between public health services and the community. |
| with community | between public hearth services and the community. |
| Respect for | A common topic is the fact that staff refer to offer a non judgemental approach |
| values, | in their conversations, and the environment of the clinic reflect that |

| preferences and sexuality | Safe and private space |
|---------------------------|---|
| | Acceptance of their sexuality |
| | Sensitive to the sexual preferences, cultural and gender safety |
| Acceptability of | Staff mentioned have heard from positive feedback from clients and talking |
| the services by | about their sexual health |
| clients | Acceptability of the services, interaction were positive, phone visit are regarded as positive experiences; importance of the mix approach Positive perception of the ay the access to the portal work |
| Opportunities to | Staff mentioned the importance of having possibility to introduce clients to |
| integrate other | other type of interventions related to their sexual health |
| conversations | |

4. Implementation challenges

Table 6 highlights several key challenges and potential improvements within the current process. It describes an inefficient intake process that takes over 30 minutes, primarily due to cumbersome data entry in OSCAR and complex scheduling procedures. Staff frequently engage in lengthy communications with clients, which, while important, add to the workload. Missed appointments require significant effort to reengage clients, and delays in prescriptions and lab results further slow the process.

The need for technological enhancements is emphasized, with suggestions including the implementation of self-assessment questionnaires, electronic reminders, and a client self-booking system. Staff also report difficulties with accessing web platforms for printing requisitions and managing work, indicating a demand for a more integrated system.

Funding constraints are another issue, as a lack of financial resources limits the capacity to hire additional physicians or nurses. Overlapping responsibilities create further inefficiencies; some tasks currently performed by doctors could be handled by nurses, and there is a suggestion to establish nurse-led clinics to better manage tasks such as assessing medication adherence.

Scheduling barriers are evident as well, with limited follow-up appointment availability and some clients having to be referred to Toronto for services. Logistic issues, including problems with pharmacies not receiving faxes and delays in confirming medication receipt, compound the challenges. Additionally, difficulties with clients printing requisitions require extra staff assistance.

Table 6. Identified Gaps and recommendations

| Topic | Summary |
|----------------------|--|
| Inefficient Process: | The overall intake process is lengthy (over 30 minutes) and seen as cumbersome, particularly with data entry in OSCAR and scheduling procedures. |

| | T |
|-------------------------------|--|
| | Staff mentioned using a lot of time communicating back and forth with clients, while recognizing that the time that takes to engage with the clients is important. When an appointment is missing there is a lot of work to be done to try to maintain the person's engagement with all the reminders |
| | The delays in prescriptions and labs make the process less efficient, as they need to contact clients and figure out issues. |
| Technological | There is a suggestion to implement self-assessment questionnaires, electronic reminders, and a system that allows clients to book their own appointments to streamline the workflow |
| Enhancements Needed: | Problems with access to web and printing requisitions and completing work from the web page, staff recommending a platform where all can be seen |
| | Staff recommend having a platform where clients can book their own appointments |
| Lack of Funding | Staff mentioned lack of funding to increase capacity to hire more physicians or nurses. |
| Overlapping responsibilities: | Staff mentioned that although there are some policy changes in the organization, they felt that some of the services or task are duplicated, and that more of the work done can be put on the client The staff felt that some of the task of the doctor can be done by nurses, and mentioned the possibility of having a nurse lead clinic. |
| | Staff recommend extending the role of nurses in some aspects of the assessment of clients, such as adherence to medications |
| Scheduling barriers | Staff mentioned that the time available for booking follow up is limited for some participants; participant mentioned some have to be referred to Toronto where there are more available services. |
| Logistic issues | Staff refer issues with pharmacies, where faxes are not received and there are delays in knowing if the client has received or not the medication |
| | In some cases, the issues are related to difficulties of clients with printing requisitions. Client is called and help by staff |

5. Adaptations.

The clinic introduced multiple adaptations to improve PrEP services and overall care (Table 7). One change was adopting on-demand PrEP to address cost barriers and reach individuals who might otherwise not access it. The bigger changes was the implementation of a mixed delivery model—combining telephone appointments with one annual in-person visit—initially prompted by COVID-19 and now maintained due to positive client feedback and enhanced efficiency. Ongoing discussions among team members, guided by Ministry of Health recommendations, facilitated these adjustments.

To broaden outreach, the clinic revised its advertising strategies to be more inclusive, particularly for other populations than gay, bisexual, and other men who have sex with men, and updated its webpage accordingly. In addition, staff integrated new prevention strategies such as doxyprep and various vaccines, leveraging communication channels to encourage wider community uptake.

Changes were also made to data collection and monitoring systems. A nursing rotation system was established, with a designated "PrEP lead" nurse supported by rotating staff, ensuring efficient use of human resources.

Finally, alterations to the clinical workflow were introduced for greater efficiency but resulted in losing the ability to conduct on-site blood tests, leading to potential delays and reliance on patients for follow-up.

Table 7. Summary of adaptations

| Adaptation | Summary |
|--|--|
| Offering PreP on demand | Staff has adopted PrEP on demand to offer option for those not |
| | accessing PrEP because of cost |
| Switching to mixed model | Mainly related to covid-19, staff mentioned that they adopted telephone clinic appointments over the pandemic and after included one yearly visit in person; staff mentioned that those changes were received positively by clients and that change has made the delivery more efficient |
| | Staff highlighted that discussions between team members have made it possible to develop a plan for adapting the delivery according to MOH recommendations. |
| Advertisement of clinic | The narratives mentioned changes in how the clinic was advertised to GBM and how these changes have made the clinic more inclusive. One change was in the web page. |
| Introduction of other prevention tools | Overtime staff has included new conversations in the PrEP clinic, innovating in provision of doxyprep, mpox vaccines, and other vaccines. Staff mentioned that they use the communication channels with clients |
| | to increase message in their communities. |
| Tools | Staff described also changes in the tools they have used to collect data and monitoring. |
| Staff rotation | One adaptation was rotating nurses available for them to participate in the provision of PrEP. |

| PrEP LEAD | Adapting to the human resources available, the clinic has selected a PrEP lead, a nurse, and the rest of nurses support this role and rotate |
|-------------------------|--|
| Changing some logistics | Changing in clinical workflow was implemented to increase efficiency, they loss the ability to do blood work, and this might have increased |
| | some delays. |

6. Adoption

Narratives of staff allow us to identify the main determinants of the adoption of the services in the PrEP clinic. We use the CFIR framework to identify main aspects that have facilitated the adoption.

<u>Intervention characteristics</u>

Staff generally perceived PrEP as an effective and necessary intervention, supported by robust research and filling the gap left by the lack of an HIV vaccine. They cited PrEP's proven cost-effectiveness and overall benefits to clients' confidence and sexual health—though some staff worried about a potential rise in other STIs if PrEP users forgo condoms. PrEP was also regarded as highly adaptable in its delivery, thanks in part to guidelines and medical directives that simplified implementation compared to other STI services. Staff further highlighted positive perceptions of implementation of PrEP, noting that offering PrEP -in site required relatively low costs for clinical personnel and could generate revenue.

Outer settings

Staff viewed PrEP as a beneficial intervention, particularly for at-risk populations. They also highlighted a need to broaden access to more diverse groups to foster equity in service delivery. Existing partnerships—with community organizations, other PrEP providers, and local leaders—played a key role in facilitating adoption of PrEP. Additionally, there was regional interest (lack of other PrEP providers) and external pressure (community organizations) to establish a dedicated PrEP clinic, providing further impetus for the local Public Health Unit to adopt PrEP in site.

Inner setting

Staff identified strong internal teamwork—evidenced by an effective training process—as a key facilitator for implementing PrEP. They also noted a supportive organizational culture grounded in respect, passion for work, and nonjudgmental service delivery, with leadership that actively champions innovation. Management's backing was a recurring theme, demonstrating tangible support from the unit's director and manager. Another important driver was a recognized "tension for change": staff felt compelled to serve more equity-deserving groups and enhance efficiency without increasing the budget, though they also acknowledged that PrEP may not be a top priority for the organization overall.

In terms of operational fit, PrEP was perceived as compatible with current public health mandates and existing clinic workflows, despite adding to staff workloads. Feedback mechanisms within the organization fostered an environment of continuous improvement. A positive learning climate supported skill-building through formal training, shadowing, and written policies. Staff reported being busy but generally well-resourced, noting that PrEP demands were manageable when shared across clinic days. Lastly, consistent access to training and knowledge—often provided by more experienced colleagues—helped staff feel equipped to deliver PrEP services effectively.

Table 8. Intervention characteristics

| SUB-DOMAIN | What facilitated the adoption of PrEP in the clinic? |
|----------------------------|--|
| | |
| Source of the intervention | Staff recognized that the effectiveness of PrEP is supported by research and that PrEP is needed as there is not vaccine available yet. |
| Effectiveness | PrEP is considered a therapy of proven effectiveness. Staff recognized that it is also a cost-effective intervention to eliminate HIV |
| | Some staff have concerns on the increase of other STIS as PrEP user decline the use of condoms. |
| | Staff recognized that besides effects on HIV, PrEP give clients a confidence in a better sexual health, improving their sexuality, and sense of responsibility |
| Adaptability | Many of the narratives of staff mentioned the capacity of make many adaptations in the delivery of PrEP. |
| Complexity | Guidelines and medical directives seem to make the adoption process easier; staff perceived implementation of PrEP simpler than any other STI service |
| Intervention design | Staff have positive perceptions about the use of guidelines and use of medical directives |
| Costs | Cost benefits, and low cost for nurse and physician involvement was noted, as compared to have only a STI clinic |
| | Staff recognized that the PrEP clinic increase revenue |

Table 9. Outer settings

| SUB-DOMAIN | What facilitators did we find? |
|--------------------------|--|
| Local attitudes | The general perception among staff is that PrEP is a positive intervention among risk populations |
| Local conditions | Staff perceived the need to extend the services to other populations, and increase equity delivery of their services |
| Networking/ partnerships | Networks with community organizations, other PrEP providers and community leaders have facilitated the adoption |

| External pressure | There was interest in the region to have a PrEP clinic, |
|-------------------|--|
| | with interest in expanding the role of PHU in delivering |
| | PrEP |

Table 11. Inner settings

| SUB-DOMAIN | What facilitators did we find? | | | |
|-------------------------|---|--|--|--|
| Internal networks | Staff mentioned they work well as a team. One aspect that demonstrated this is the training process | | | |
| Culture | Values: respect, passion for work, | | | |
| | Felt compelled to address the needs of their populations and increase access. | | | |
| | Non judgemental delivery of services | | | |
| | Internal supportive culture, with positive perceptions from external partners | | | |
| | A culture of innovation | | | |
| Leadership support | One strong narrative from staff was the support they received from the manager and director of the unit. | | | |
| Tension for change | Narratives of staff made the importance that reaching more equity deserving groups was part of the reasons PrEP clini was implemented; with additional benefits of increasing efficiencies without increasing budget However, staff recognized that PrEP may not be a top priority for the | | | |
| Compatibility | organization, but is aligned with the organization's mission PrEP is compatible with current work, felt that the clinic is the right place for PrEP. | | | |
| | Compatibility with mandates as public health | | | |
| | However staff recognized that the addition of PrEP increases work of the staff | | | |
| Objectives and feedback | There is a climate in the organization for improvement and receiving feedback, as in the case of training other staff on PrEP services | | | |
| Learning climate | Training receive for prep program was good, having written policies help with getting ready; staff mentioned that need to learn more about certain types of vaccines and review regarding medication; many other things were familiar for a nurse point of view | | | |
| | Most of the training is done through shadow other nurse, over time the trainings improve but still continue to be from staff to staff, participants look for feedback from staff about the process | | | |

| Availability of resources | The demand was perceived as high but in reality, the staff seems to be fine with the amount of work and the split of work across the clinics. |
|-------------------------------------|---|
| | The staff has other demands, they felt they are busy but seems to have managed the changes |
| Access to information and knowledge | Staff mentioned that they have received training in PrEP and staff in the position of PrEP also received training by other staff. |

7. Maintenance

One prominent narrative from staff was the evolution and stabilization of the program. Participants noted that although the program has undergone many changes, it has eventually settled into a working process supported by dedicated program staff. This stability has enabled a smoother operational flow, even as they continue to adapt to new demands.

Another significant aspect mentioned by staff was the impact of program expansion on staff workload and resource allocation. The introduction and growth of PrEP services have increased the workload for staff, with some noting that it has added to the clinic's overall responsibilities. This is compounded by challenges such as billing adjustments and the need to manage competing priorities—balancing the demands of PrEP with other reportable infections and public health obligations.

Evaluation and continuous improvement also stand out as important aspects for sustainability of the clinic. Staff recognized that ongoing program evaluation not only would help maintain the current services but also would inform adjustments for future initiatives. Regular assessments, even if constrained by budget limitations, are seen as crucial for guiding improvements and sharing effective practices with other organizations.

Participants emphasized the need for a systematic approach to tracking changes, consistent data recording, and streamlined training processes. Effective internal communication systems—through policies, emails, and regular updates—are critical for keeping the team aligned, although gaps remain in monitoring PrEP-specific changes.

Another aspect that seems to be positive in maintenance of the program has been the inclusion of residents in public health and a dedicated rotation of nurses; however, there are concerns about sustainability if key personnel, like the sole doctor or experienced nurses, leave the program. This has sparked discussions about potentially transitioning to a nurse-led clinic model. In this regard, staff noted the need to have a more formal training in PrEP give the uncertainty of stability of personnel with more experience on PrEP.

Finally, external factors and future uncertainties influenced perceptions about the program's sustainability. Issues such as the merging of units, shifting public health priorities, evolving treatment options (like online PrEP or injectables), and insurance coverage are all seen as potential challenges that may necessitate further adaptations in the program's structure and processes.

Table 12. Maintenance topics

| Topics | Summary | | |
|--|---|--|--|
| Staff Workload | The program expansion has added to staff responsibilities, whit some discussions on the difficulties in the future of handling other priorities, e.g. other infections. | | |
| | Staff mentioned concerns about sustainability if key personnel (such as the sole doctor or experienced nurses) leave. | | |
| | There has been positive impact of including residents in public health, especially to meet the lack of availability of prescribers. | | |
| Evaluation and Continuous | Staff mentioned the importance of regularly assessing the | | |
| Improvement | program and using evaluations to inform future changes and maintenance. | | |
| | Through evaluation, they plan to share findings and effective practices with other organizations. | | |
| Resource allocation and Billing | of evaluations. They mentioned issues with billing adjustments | | |
| | and managing competing priorities. | | |
| | Issues around billing targets, cost recovery, and insurance | | |
| | coverage. | | |
| | - Coverage. | | |
| Communication and Data | There is a need for a consistent approach to tracking changes in | | |
| Management | the program. | | |
| Leadership and organizational structures | Use of policies, emails, and regular updates to keep staff informed. | | |
| | Discussions about the possibility of transitioning to a nurse-led clinic model. | | |
| | They mentioned the need for a more efficient training process for staff. | | |
| External Factors and Future Uncertainties | Considerations of merging units, shifting public health priorities, and evolving treatment options (e.g., online PrEP, injectables). | | |
| | Uncertainty about the long-term viability of the current clinic model in the face of external challenges. | | |

SUMMARY OF IMPLEMENTATION

1. Initiating Conversations and Assessing Eligibility

| Lengthy Intake Process: |
|----------------------------------|
| Nurses spend more than 30 |
| minutes on phone calls assessing |
| clients via HIRI, discussing |
| options, and entering data into |
| OSCAR |

Positive Approach: Staff pride themselves on a nonjudgmental, flexible method that tailors conversations to each client's needs.

Efficiency Concerns: Staff recommend electronic self-assessment tools, a self-booking system, and improved scheduling options to reduce the workload and simplify data entry.

2. PrEP Counseling and Preparation for the First Visit

Comprehensive Counseling:

Topics include medication understanding, side effects, adherence, and cost or funding strategies (e.g., free PrEP programs).

Nonjudgmental Environment:

Staff respect clients' autonomy, keeping the "door open" for questions and allowing clients to decide whether to start or continue PrEP.

Challenges: High medication costs for uninsured patients, and inefficiencies when clients take longer to fulfill prerequisites before their first appointment

3. First On-Site Visit

Physician-Led Appointment:

The physician handles most tasks, including counseling, booking appointments, and managing prescriptions.

Online vs. In-Person

Scheduling: Monday afternoon slots are set aside for on-site visits (mainly in summer), while online appointments run the rest of the year.

Gaps in Scheduling &

Logistics: Reliance on a single person for booking, missed appointments, and delays in faxing prescriptions cause time inefficiencies.

4. Monitoring

Quarterly Check-Ins: Clients typically have three phone appointments and one in-person session per year, supported by text reminders and program assistants.

Flexibility & Acceptability: Mixed online and in-person follow-ups are popular among clients, maintaining privacy and respect for preferences (e.g., STI testing options).

Logistical Barriers: Blood work must be done off-site; missed appointments increase staff workload; and pharmacy or printing challenges require extra support.

5. Overall Implementation (Strengths)

Tailored Conversations & Trust Building: Staff integrate PrEP discussions into broader sexual health contexts, fostering a supportive, nonjudgmental atmosphere.

Adaptability & Innovation: Virtual visits, reminder systems, and on-demand PrEP reflect a

willingness to evolve the service to fit client needs.

Positive Client Feedback: Clients appreciate the safe, private space and the comprehensive counseling that respects their autonomy and sexuality.

6. Key Challenges

Inefficient Processes: Data entry in OSCAR, complex scheduling, and lengthy calls inflate staff workload.

Technology Gaps: Staff want selfassessment questionnaires. electronic reminders, and an integrated booking system to reduce manual tasks and reliance on paper/faxes.

Funding & Staffing Constraints: Limited resources hinder the hiring of additional staff, creating overlapping responsibilities and bottlenecks (e.g., physician-dependent tasks).

Logistical Hurdles: Pharmacy communication issues. delayed lab work, and client difficulties (e.g., printing requisitions) add complexity.

7. Adaptations

Mixed Delivery Model:

Initially driven by COVID-19, the blend of online and annual in-person visits remains due to positive outcomes.

Broadened Outreach & Prevention Tools: Marketing to more diverse populations, adding doxyprep and other vaccines, and revising clinic workflows

Staffing Changes: Assigning a "PrEP lead" nurse and rotating others helps distribute workload, although on-site blood tests are no longer available.

SUMMARY OF ADOPTION

| Evidence-Based Intervention: | | | |
|-------------------------------------|--|--|--|
| Staff see PrEP as effective, cost- | | | |
| efficient, and adaptable, backed | | | |
| by clinical research and a gap in | | | |
| HIV prevention tools. | | | |

Positive Local Attitudes & Partnerships: Community networks and demand drove the creation of a dedicated PrEP clinic.

Organizational Culture & Leadership Support: A nonjudgmental service ethos, strong teamwork, and managerial backing were pivotal facilitators.

SUMMARY OF MAINTENANCE

| Program Evolution & | Workload and | Ongoing Evaluation | External |
|-------------------------------|-----------------------|--------------------------|--------------------------|
| Stabilization: Despite | Resource Allocation: | & Continuous | Uncertainties: |
| initial changes, | Expanding PrEP | Improvement: Staff | Merging of units, |
| dedicated roles (e.g., a | services increases | emphasize tracking | shifting public health |
| PrEP lead) have helped | responsibilities and | changes, consistent data | priorities, new |
| streamline the process. | raises sustainability | recording, and | treatment modalities |
| | concerns if key | formalized training | (e.g., injectable PrEP), |
| | personnel leave. | processes to sustain and | and insurance coverage |
| | | adapt the program. | remain potential future |
| | | | challenges. |
| | | | |
| | | | |