Guide for Implementing Digital Testing Services for Sexually Transmitted and Blood-Borne Infections (STBBI)

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Executive Summary

To be developed

Introduction

Purpose of This Guide

This guide is designed to support digital health innovators and organizations implementing digital sexually transmitted and bloodborne infection (STBBI) testing services. This guide draws from the lessons learned from implementing <u>GetCheckedOnline.com</u> (GCO), a digital STBBI testing service in British Columbia (BC), Canada. This guide provides actionable tips, key components, useful insights, and practical tools for successful program implementation.

There are many different ways that digital STBBI testing services can be implemented, with all having the common feature of providing a way for people to get tested without seeing a healthcare provider first. GetCheckedOnline is one example, alongside other models such as online postal self-sampling programs. We recognize that GetCheckedOnline has been developed and implemented within its own specific context, which we will first describe below so that you can consider how it compares to your specific context and program goals. Still, we hope there are some lessons learned from our experience that will support you and your work. While specific to digital STBBI testing services, this guidance may also be helpful to implementers of other digital sexual health innovations.

GetCheckedOnline

The year 2024 marked the 10-year anniversary of GetCheckedOnline, BC's digital testing program for STBBI. Growing from one community and just over 240 completed test visits in its first year, to nine communities across all health regions of the province with over 3,000 test visits per month a decade later, there is continued interest from both public and community partners in further scale-up across the province. Evidence has shown that GetCheckedOnline:

- Increases the uptake of STBBI testing and treatment.
- Reduces barriers people face to getting tested.
- Engages and empowers people in testing.
- Reaches people who are more likely to have an infection.
- Leads to more frequent testing, helping reduce the spread of STBBI.
- Improves the capacity and use of sexual health services.
- Reduces demands on primary care for testing.
- Improves health equity in the population.
- Avoids costs to the health system and improves sustainability.

To learn more the outcomes of the program, our team has prepared a companion document describing what we know about the impacts of the service over the past 10 years (Gilbert, M et. al. *Ten years later: The impacts of GetCheckedOnline*. 2024. <u>Digital and Sexual Health Initiative</u>).

How does GetCheckedOnline Work?

GetCheckedOnline is operating in multiple communities across British Columbia including in large urban, small urban and rural locations. Testing is free for anyone and allows individuals to test for chlamydia, gonorrhea, syphilis, HIV, and hepatitis C without having to see a healthcare provider first.



There are three steps that GetCheckedOnline users take when using the online testing program:



Create an account. Users are asked to provide some personal information, including name (or pseudonyms), date of birth, gender, city and phone number.



Give samples at a lab. Users answer the assessment questions to create an online lab form and take it to a participating lab location (these are private laboratories already operating within the BC system and supporting GetCheckedOnline specimen collection). Users can print the form, or it can be scanned from their phone. At the lab, they will give a blood and/or urine sample and may be given a swab kit.



Get your test results. Users receive an email from GetCheckedOnline letting them know when all their test results have been entered into their account. All results are viewable, including positive results. If any of the results are positive or require follow-up, a nurse will contact them.

The health system context for GetCheckedOnline

The BC health system is a provincially operated and publicly funded system that provides healthcare services to residents through the Medical Services Plan (MSP) and the province's health authorities. Regional health authorities are responsible for delivering most healthcare services, including hospitals, community care, and public health programs. Additionally, the Provincial Health Services Authority (PHSA) manages specialized services such as cancer care, mental health, and infectious disease control, and the First Nations Health Authority supports culturally safe healthcare services for First Nations communities across BC.

The GetCheckedOnline program is operated by the BC Centre for Disease Control (BCCDC), the provincial public health agency of the PHSA, in partnership with the BCCDC Public Health Laboratory and regional health authorities. GetCheckedOnline is a virtual extension of an existing provincial STBBI clinic at BCCDC which offers testing and other related services. The program is integrated with existing laboratory, clinical, and surveillance systems in British Columbia.

In BC, public and private laboratories conduct STBBI testing with most testing funded by the provincial government. For added confidentiality, STBBI tests can be done without using verified personal information when specimens are tested through the BCCDC Public Health Laboratory (e.g., using pseudonyms). This is the model for GetCheckedOnline, with specimen collection without identifiers done through a partnership with a private lab service available in many communities across BC.

GetCheckedOnline is a publicly funded and delivered program, which is important context for program implementation and sustainability as there are many ways to operate an innovative testing program, e.g. within the healthcare system, as a research study, as a community-based program, or in partnership with industry. While not a research project, research and evaluation has been embedded since the program's inception, supporting data-driven planning, implementation and decision-making.

How This Guide was Developed and How it Can Help

Together with an external consultant, the GetCheckedOnline program team documented key implementation lessons learned across its timeline, drawing from online conversations

conducted in the fall of 2024 with 45 staff from multiple regional and provincial agencies and organizations connected to GetCheckedOnline. Key themes, identified from notes taken during these conversations, were **used to** develop the content of this guide. The guide offers actionable recommendations from real-world implementation and common pitfalls to avoid based on the GetCheckedOnline experience.

The guide is structured around what we consider are five key components of the implementation of digital STBBI testing programs. Within each component, we have provided recommendations and examples from GetCheckedOnline implementation.



We also include a list of tips and types of tools and resources that may be helpful for each component. We have not recommended specific tools, recognizing that needs may vary depending on the specific health system context and goals of your program.

We have needed to consider each of these components at every phase of GetCheckedOnline implementation and are they are not intended as a linear sequence of steps. At the end of each component section, we have highlighted specific recommendations for earlier and later phases of implementation:

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Planning & Piloting Phase:

Planning and piloting include planning and development, feasibility and acceptability assessment, early implementation and testing (proof of concept or pilot), and adaptations or changes prior to full implementation.



Implementation & Scaling Phase:

Implementation and scaling (if that is intended) includes activities after the initial implementation (or pilot) including maintenance, adaptation, integrating into existing systems and ongoing sustainability.

Key Components to Consider when Implementing

The four components of this guide provide a structured approach to implementing a digital STBBI testing program that is user-centered, focused on health equity, integrated with existing healthcare systems, and designed for long-term impact and scalability. GetCheckedOnline's experience demonstrates that proactive planning, adaptability, relationship building and collaboration are key to overcoming challenges and maximizing benefits for both users and healthcare providers. Each component is described in more detail below.



Implementing a Digital STBBI Testing Program

Component 1: Assess and evaluate

Information gathering and evaluation is important at all stages to inform the ongoing work of implementation, to ensure digital STBBI testing programs address real needs while prioritizing equity, sustainability, and costs.



Recommendation: Identify Health Equity Gaps and Priority Populations

Define the Problem Clearly: Begin by • articulating the specific challenges your program (or project, initiative...) will address and for whom. It is important to identify who the program is intended to reach before you do the work of understanding what the needs and challenges are. GetCheckedOnline's main goal, aligned with population and public health goals, is to reduce STBBIs by increasing testing. Use data to understand the context of your goal. This can include epidemiology, clinical or service use data. For STBBI testing, consider barriers such as geographic inaccessibility, systemic inequities, language, or cultural safety concerns.

Example:

In GetCheckedOnline's case, the team identified two main goals to increase testing: 1) improving equity by focusing on underserved populations who face challenges accessing inperson healthcare services due to stigma, geography, or the need for confidentiality and 2) developing a user-centered testing approach. With the growth of the program this has been balanced with a focus on optimizing and managing costs.

• Conduct a Health Equity Impact Assessment:

Some people most in need of STBBI testing are not able to access testing due to equity issues. Things like long distances or wait times for STBBI services, limited access to sex-positive clinicians and culturally safe services, and stigma all impact whether people will engage with testing. A health equity impact assessment can help decision-makers identify populations most affected by inequities, to evaluate how interventions can reduce barriers, and to analyse how implementation impacts equity-deserving populations. It can also allow teams to surface points of tension to pre-empt potential negative consequence of implementation. Health equity impact assessments can be helpful in the planning phase (formative assessments) in addition to after implementation. Health equity means everyone has a fair opportunity to meet their health potential.

Health equity strives for the highest possible standard of health for all people and gives attention to those at greatest risk of poor health, based on social conditions. This means fairness in:

- distribution of resources needed for health,
- access to the opportunities available, and,
- supports offered to people when they are ill or trying to prevent illness.

Health equity exists when all people can reach their full health potential and are not disadvantaged from attaining it because of their race, ethnicity, religion, gender, age, social class, socioeconomic status, sexual orientation or other socially determined circumstance (<u>BC</u> <u>Centre for Disease Control</u>)

Recommendation: Identify Teams, Implementation Partners and Required Skill Sets

- Learn from Others: Identify similar or relevant projects, tools or resources that already exist, nationally or globally, and consult with and learn from the implementers. Don't start from scratch but build on the knowledge and experience of others.
- Map Expertise and Skills Needed: Conduct a mapping exercise to identify critical skills and expertise needed. For GetCheckedOnline this included people with clinical and laboratory knowledge (specimen collection, laboratory testing, linkage to care), information technology (IT) capabilities (building online testing platform), user-centered design, privacy and security expertise, project management, evaluation and research skills (to support data-driven planning and implementation). It also included people from community-based organizations representing the needs of the communities that were the intended audience for the program. However, this is not an exhaustive list and you will require a clear understanding of what you are building before you truly understand who you will need on the team. Given this, it is important to think "outside the box" about people and teams who may not be your usual partners. This can include people inside and outside your organization.

• Communicate Early with Key Partners: Communicating early and often with key organizations, teams and people that can contribute to the program's success is an important way to gather information about what is needed. These can include partner such as laboratories, community-based organizations and user groups, and healthcare providers who can help to identify other teams you may need to

Example:

GetCheckedOnlines's success relied on partnerships with private labs, IT specialists, and regional health authorities that informed diverse aspects of implementation.

engage. These discussions can also help to shape evaluation questions, by identifying potential impacts and knowledge gaps.

Recommendation: Build in Evaluation and Cost Assessment Mechanisms

- Define Goals and Metrics: Develop a clear evaluation framework with measurable outcomes to assess progress and effectiveness over time and across phases of work.
- Build Budget Metrics: Budget metrics (e.g., cost per test) will allow teams to map out projected costs to ensure financial feasibility during implementation phases. There will likely be unanticipated costs that will arise so being able to identify and plan for contingencies is recommended.
- Commit to Ongoing Evaluation and Budget Tracking: Incorporate mechanisms for realtime feedback, iterative quality improvement, and regular cost analysis to maintain alignment within program budgets and to be prepared when funding opportunities may arise.

Example:

GetCheckedOnline's integration of evaluation and connection to researchers in support of the program from the outset allowed the team to refine the program continuously and demonstrate its effectiveness to partners. For instance, early in the process the GetCheckedOnline team worked with academics and researchers at UBC and these relationships grew and evolved over time.

Working with real-time evidence built trust and buy-in for the program. Engaging with research and evaluation data also allowed the team to react to issues and allowed for course adjustment when needed.

- Leverage Existing Evidence: Draw on relevant research to build a strong case for the program's design, intended impact, and resource allocation.
- Build relationships with researchers: Establish partnerships with researchers who can support the program in exploring specific research questions and inquiries. Generating evidence about the program is important for partner engagement, scale up and sustainability of the program and is critical for demonstrating the effectiveness and acceptability of the program,



Practical Tips, Tools and Resources

- Partner Analysis or Mapping: Use a collaborative session with partners to outline key partners to engage and required roles and potential people or teams who can fill gaps.
- Health Equity Impact Assessment Toolkits: Use these to systematically analyze how your program affects different populations.
- Expertise/Skills Mapping Templates: Use customizable tools to document required skills and identify gaps.
- Evaluation and Budget Planning Frameworks: These are helpful for defining metrics, collecting data, estimating costs, and reporting results.



Recommendations for the Planning & Piloting Phase:

- Initial Assessments: Use rapid-cycle assessments or evaluations during early planning processes to quickly identify critical gaps or needed refocusing.
- Small-Scale Mapping: Conduct localized expertise mapping with the pilot team to understand which skills are immediately available and where gaps exist. It is hard to know what you don't know, so try and probe key partners about who else should be engaged.

• **Baseline Evaluation:** Establish a pilot-specific baseline for evaluation metrics to monitor early performance and inform later scaling efforts. Explore research questions appropriate to the pilot phase and in support of program development.

Recommendations for the Implementation & Scaling Phase:

- Ongoing Assessments: Expand the rapid-cycle assessments and health equity assessments to cover additional settings and diverse communities or to address emerging issues as the program scales.
- Extended Partnerships: Integrate additional partners and experts from across larger geographic or system settings.
- Long-Term Evaluation: Develop robust evaluation frameworks that build on pilot data to ensure sustained impact and continuous improvement at scale. Revise research questions to include an examination of what is needed for scale up and sustainability.

Summary

Gathering the necessary information is a critical first step to ensuring your program is aligned with community needs and positioned for success and is an ongoing activity during all phases of implementation. Identifying and documenting equity gaps, engaging the right teams and partners, embedding research and evaluation, and considering cost implications, helps deliver meaningful, sustainable, and financially viable outcomes.

Component 2: Secure and Maintain Partner Buy-In

Digital innovations rely on support from a variety of partner groups. These include internal partners (people within the same organization or agency like operational leads, service providers or program managers), external partners (like end users, community-based organizations and health agencies) as well as partners at various levels of influence, from front-line providers to decision-makers and executive leaders. When implementing digital STBBI testing services it is important to engage a diverse group of partners with varied expertise, resources, and perspectives. This ensures buy-in and support for planning and throughout implementation.



Recommendation: Build Trust and a Shared Vision

- Invest in Program Staff with Relationship-Building Skills: Program staff build and maintain relationships across multidisciplinary teams. This requires a high level of social and emotional skills among staff, takes time and requires dedicated resources.
- Understand the Technology Environment: To ensure technical buy-in, take time to understand the environment or system within which the tool or innovation will be built and introduced. This supports engagement with technical partners.

 Develop Common Understanding and Shared Goals: Define a shared vision and goals for the program by involving key partners at the earliest stages. Teams may have not worked together before so developing and documenting a common understanding, shared goals and engagement tools (like group guidelines) will ensure each partner group can contribute equitably.

Example:

When expanding into additional geographic locations, GetCheckedOnline conducted early consultations with regional health authorities and community organizations to align objectives and secure collaboration.

- Work to Build Awareness with Community Organizations and Target Audiences: Take opportunities to build awareness about and promote your program early and often (communication is key!). Build on existing relationships with community organizations or develop engagement tools for people from the program's target audience (end-users). For instance, GetCheckedOnline did online promotion through social media, as well as worked with community partners to share information about the service. By building awareness, you can in turn build support and trust with community partners, user groups and people to facilitate adoption of the technology.
- Establish Open Lines of Communication: Maintain transparent, ongoing dialogue to build trust and understanding. Tailor your communication and engagement approaches to each partner group, for instance, communicating with a community-based user group will look differently than communicating with an executive team of a health authority.

Ideas:

Work with partners to collaboratively identify shared goals and values. Support cross-disciplinary discussion and document outcomes.

Build knowledge about your digital STBBI testing initiative with communities you serve by using consultations, public engagement opportunities, social media and other communication methods accompanied by accessible promotional materials.

Pitfalls to Avoid: Failing to involve partners from the start can lead to misalignment or resistance later.

Recommendation: Demonstrate the Value of the Service

• Highlight Evidence-Based Benefits: Use evaluation and research data and case studies to illustrate the program's impact on community health outcomes and system efficiency. Transparency helps to increase knowledge and buy-in from external partners.

Example:

GetCheckedOnline shared pilot data that showcased increased testing uptake and reduced barriers to care.

• Leverage Pilot Results: Share outcomes from initial pilot and implementation to build confidence and demonstrate scalability for future work.

Idea: Tailor messaging to each external partner's priorities to make the benefits clear and compelling. For example, use common language and performance measures.

Pitfalls to Avoid: Underestimating the importance of evidence-sharing can result in waning support.

Recommendation: Address Concerns and Barriers

• Proactively Identify Concerns: Through communication with partner groups, understand, document and address specific challenges like privacy and security, resource allocation, or workload. When working with diverse groups these concerns may be varied and conflicting but by discussing early and working on solutions together you can build trust within the program.

Example:

GetCheckedOnline worked closely with IT and privacy experts to ensure compliance with data protection standards, which helped alleviate partners concerns about whether data would be secure.

• **Provide Tailored Solutions**: Reassure partners with clear protocols and implementation plans, regular communication to highlight needed improvements, actively problem-solve issues as they emerge and follow-up by sharing evidence of successful implementation.

Idea: Hold regular and targeted meetings with partners to explore and address their priorities and apprehensions.

Pitfalls to Avoid: Ignoring concerns or providing generic solutions can erode trust and derail partnerships.

Practical Tips, Tools and Resources

Become Familiar with Organizational Requirements: Determine what is required for this type of program within your organization (e.g. are there specific process for assessing privacy impacts or data security).

- Partner Engagement Frameworks: These frameworks can provide a structured approach to help identify, engage, and sustain partnerships.
- Value Proposition Communication Guides: Templates and strategies for crafting compelling messaging.
- Risk Mitigation Checklists: Tools to anticipate and address common concerns, ensuring confidence in partners.

- Local Champions: Identify and secure support from early champions within communities or populations who can advocate for the innovation.
- Governance and Partner Agreements: Determine the appropriate governance structure for your pilot project. Establish short-term, pilot-specific agreements with local health agencies and partners.
- **Tailored Messaging:** Develop and test communication materials such as program promotion materials or knowledge mobilization materials on a small scale to refine the messaging and ensure cultural relevance.

Recommendations for the Implementation & Scaling Phase:

- Formalize Governance: Expand and formalize governance structures to include broader partner representation.
- Wider Engagement: Initiate high-level advocacy and engagement efforts with senior leadership at regional or national levels.
- Integrated Communication: Roll out standardized promotional campaigns and communication materials across all partners to ensure a consistent message.

Summary

Securing partner buy-in is a dynamic, ongoing process that requires trust, clear communication, and evidence-based value demonstration. By proactively addressing concerns, tailoring engagement strategies, and leveraging practical tools, your program can build strong, enduring partnerships that drive success.

Component 3: Develop a Flexible, Scalable Intervention

Developing digital health tools that are adaptable to changing needs and scalable to different contexts is essential for long-term success. GetCheckedOnline's experience highlights the importance of designing user-friendly platforms, working towards system interoperability, and iterating based on real-world feedback.

Recommendation: Prioritize Community and Clinical Needs

- Have Clearly Defined Requirements: Know what you want to build before you start building it and continually link development activities back to the main goals of the program.
- Employ User-Centred Design Approaches (UCD): UCD centres users' needs and focuses on iteration and user engagement at every step of the process. The goal is to identify, plan for and integrate user requirements into the digital innovation.
- Design Digital Platforms That Are User-Friendly and Secure: Ensure that the digital service is intuitive to use and prioritize privacy and security while meeting clinical requirements.
- Prioritize Training of Frontline Providers: when launching a new digital STBBI program it is important to actively train and build the capacity of frontline providers who are interacting with service users (e.g., clinicians who will be providing results and arranging treatment).
- Offer Multiple Specimen Collection Options: Providing users with flexibility in how and where they submit specimens improves accessibility and uptake. It is also important to provide users options for STBBI testing (types

Example:

GetCheckedOnline partnered with private laboratories (already operating within the BC system) to facilitate a non-nominal testing option for GetCheckedOnline (where people can test without using their real names or identifiers). This has increased engagement among populations with privacy concerns. However, this has required some processes that are not integrated into existing systems and required some manual work arounds. Moving into a sustainability phase, this has been highlighted as an important challenge to problemsolve.

of tests and types of specimens), as the more choices for testing that service users have the more likely they are to get tested. This will require adaptation as new testing technologies come onto the market.

Idea: Build resources and processes in support of the clinical care pathway from testing to care and treatment to help integrate digital testing innovations into existing systems and structures.

Pitfalls to Avoid: Failing to align digital tools with clinical workflows may create inefficiencies and additional work for healthcare providers.

Recommendation: Incorporate Iterative Development Processes

- Build Flexibility into the Design: Ensure that digital platforms can adapt to emerging clinical guidelines, policy changes, and user feedback.
- Pilot Tools Before Full Deployment: Implement phased rollouts to test usability, address system issues, and refine processes and implementation steps based on feedback.

Example:

GetCheckedOnline launched in phases, beginning with a limited rollout before expanding province-wide, allowing time to address operational challenges.

- Leverage Real-Time Data for Continuous Adaptation: Regularly review analytics, feedback, and system performance to refine tools and enhance user experience in a timely fashion.
- Scale Up and Out: Once implemented, if programs are intended to scale up or grow to support other geographic locations or populations it is important to engage new partners relevant to these scalings and understand their current context and goals. GetCheckedOnline scaled up to different regions in BC in a staged manner to manage growth and to be responsive to partners' needs.

Pitfalls to Avoid: A rigid development approach that doesn't allow for modifications may lead to outdated or ineffective tools.

Recommendation: Consider System Compatibility

• Integrate as Much as Possible with Existing Healthcare Systems: Ensure compatibility with clinical, laboratory reporting systems, electronic medical records (EMRs), and surveillance systems, when possible, to streamline workflows. For example, ensure that your program captures the data elements in the format needed for these systems. However, if a program is very innovative this may not be possible at the start. The more you can embed the program

Example:

GetCheckedOnline partnered with private labs, (already working within the BC clinical care system) to ensure specimen collection was as smooth and integrated as possible into existing collection procedures and data systems.

and integrate tasks and work in these systems, the more efficient the program will be. Make sure to plan this integration work into scale-up.

Recommendation: Design for Sustainability

- Design with Future Growth and Scale-up in Mind: Plan from the outset for increases in demand, system capacity and performance, and potential scale up, as this will likely inform decisions about design and implementation of the service. Use data to make decisions about where to scale up and the implementation components needed to support expansion.
- Align With Organizational IT and Privacy Policies: Address security, data sharing, and risk management considerations from the outset to prevent barriers to scale-up.
- Balance Automation and Manual Processes: While automation improves efficiency, some workflows (e.g., test result entry) may still

Example:

GetCheckedOnline engaged organizational privacy and security teams early in the design process to ensure compliance with evolving provincial data security policies. require manual intervention. However, if there are opportunities to integrate workflows into existing systems this is ideal.

Pitfalls to Avoid: Overlooking scalability during the initial development phase can result in costly rework and technical constraints later.

Practical Tips, Tools and Resources

- Information Security and Risk Assessments: Even if not required by your organization, these are important for digital STBBI testing programs due to the sensitivity of STBBI-related data. For example, privacy impact assessments (PIA) and security threat and risk assessments (STRA).
- Fully Understand Requirements of Technology Integration: Determine what other systems your program will touch and interact with and identify if interoperability is possible now or in the future (i.e. with lab and health records systems).
- Usability Testing Frameworks: Use established approaches and guidelines for conducting iterative testing with end-users before full deployment.

Recommendations for the Planning & Piloting Phase:

 Minimum Viable Product (MVP): Develop an MVP to test core functionalities and user interactions during the pilot phase. (An MVP is a version of the product or online tool with just enough features to be useable by early clients who can then provide feedback for future improvements)

- **Rapid Iterations:** Use agile development practices to implement quick fixes based on early user feedback.
- **Basic Integration:** Ensure initial integration with essential systems (e.g., primary data collection and reporting) while keeping the design simple.

Recommendations for the Implementation & Scaling Phase:

- Maintenance and upgrades: Digital technologies and standards change over time. Upgrade platform capabilities with new functionalities such as advances in analytics, new privacy and security measures, and changing interoperability with clinical and lab systems. Make sure you allocate resources for this work.
- **Comprehensive Testing:** Conduct extensive testing and quality assurance as the platform is scaled to ensure reliability across diverse environments.
- Full Integration: Establish seamless integration with broader healthcare infrastructures, including advanced data sharing and real-time monitoring systems.

Summary

Developing flexible, scalable tools requires a balance between clinical and user needs, iterative refinement, and strategic planning for future growth. By designing adaptable platforms, integrating with existing healthcare systems, and prioritizing continuous improvement, digital health initiatives can enhance accessibility and sustainability.

Component 4: Plan for Sustainability

Ensuring the long-term success of digital health initiatives requires intentional sustainability planning, starting early in the planning phase and continuing through implementation. This also includes a focus on the systems for implementing the program, including strengthening collaborations with implementation partners, considering future resource requirements, integrating with existing policies and strategies, and workforce planning.

Recommendation: Strengthen Cross-Sector Collaborations

- Maintain Partnerships and Cultivate Formal Collaboration: Building off earlier relationship-building work, establish formal collaborations with implementing partners (e.g., health agencies, laboratories, surveillance teams, IT teams, and clinical providers) to align objectives, streamline processes and ensure operational supports are in place for implementation.
- Develop Clear Agreements and Governance Structures: Define roles, responsibilities, and decision-making authority to ensure accountability and smooth operations.
- Foster Trust and Transparency: Regular engagement and clear communication among partners help navigate competing priorities and build long-term commitment.

Example:

GetCheckedOnline facilitated cross-sector collaboration by developing agreements with private labs, enabling seamless lab integration while addressing privacy and regulatory concerns.

Pitfalls to Avoid: Lack of clear agreements and communication can lead to confusion, misaligned priorities, and implementation delays.

Recommendation: Ensure a Sufficient, Sustainable Workforce

• Assess and Plan for Staffing Needs: Identify the required skill sets, including technical, clinical, and project management expertise. Invest in a wide variety of skills on your staff team including, relationship building, communication and project management.

- Ensure Dedicated Human Resources: Transition from relying on "side-of-desk" work to formally resourced positions.
- Provide Training and Capacity Building: Ensure that all staff, including frontline providers and IT teams, receive adequate training to support digital health and implementation workflows.

Example:

GetCheckedOnline's success was driven by a stable team with deep institutional knowledge, but concerns were raised about potential disruptions if key staff left.

• Develop Sustainable Staffing Models and Succession Planning: Institutionalize knowledge through standardized processes and documentation to prevent disruptions due to staff turnover and limit reliance on individual team champions. Establish leadership continuity plans to maintain momentum during staffing transitions.

Pitfalls to Avoid:

Without clear role definitions and workforce planning, programs may face operational disruptions over time.

Insufficient staffing and inadequate training can lead to inefficiencies, burnout, and service disruptions.

Recommendation: Develop a Long-Term Funding Strategy

- Define Funding and Resource Phases: Clearly define when the pilot ends, full implementation begins, and scale-up is planned.
- Advocate for Integration into Existing Healthcare Budgets: Positioning the program as important and complementary to public health services and strategies can

Example:

GetCheckedOnline initially relied on targeted pilot funding, which posed sustainability challenges. Business cases were required to secure ongoing financial support.

work towards securing long-term funding. This can be done by using data collected through program evaluation and research to build a data-driven business case.

- Explore Multiple Funding Streams: When considering long-term funding models it is helpful to explore diverse funding approaches like government health funding, public-private partnerships, and grants to diversify funding sources. These need to be weighed carefully alongside your program goals and values.
- Consider Alternative Funding Models: Public-private partnerships or commercializing aspects of the program may provide additional revenue sources. However, continued attention should be placed on equity and access and the related pros and cons with engaging in different funding models.
- Quantify Cost Savings and Impact:

Demonstrate the program's value through cost-savings or other economic analysis and efficiency improvements. Public health innovations can be viewed as a cost pressure because of the preventative and longer-term nature of the work. Work needs to be done to shift this perception by studying the longterm impacts of population and public health

Example:

GetCheckedOnline's ability to shift STBBI testing demand away from primary care reduced system burden, but clearer economic modeling was needed to make this case effectively.

initiatives and how these impact health system costs and savings.

Pitfalls to Avoid: Dependence on short-term grants without a transition plan to permanent funding can lead to program instability.

Recommendation: Integrate With Existing Systems and Policies

- Align With Relevant Health Policies and Strategies: Embedding digital health tools within relevant health policies and strategies optimizes support for the program, ensures long-term viability and reduces regulatory barriers (e.g., policies and strategies related to STBBI or digital health).
- Plan for Infrastructure Growth: Ensure that digital health tools, surveillance reporting and laboratory systems can scale with increased demand and geographic or population-based expansion.

- Ensure Compatibility with Healthcare Infrastructure: Address technical and administrative requirements for seamless integration into existing systems. Establish mechanisms for long-term program ownership within public health agencies.
- Adapt to Changing Priorities: Be flexible in responding to shifts in healthcare priorities, policies, and budget constraints, as well as factors outside of the program's control (e.g.,

Example:

GetCheckedOnline aligned with BCCDC programs and

public health emergencies like the COVID-19 pandemic)

Pitfalls to Avoid: Delayed alignment with policies and strategies can create administrative hurdles that slow or prevent full adoption.

Practical Tools and Resources

- Partnership Agreement Templates: Standardized documents for defining roles and responsibilities across sectors.
- \geq Workforce and Succession Planning Guides: Tools for supporting leadership continuity, assessing staffing needs and developing sustainable human resource strategies.
- Business Case Development Guides: Templates for making the financial case for continued program investment.
- Sustainability Planning Frameworks: Structured tools to assess financial, operational, and policy integration needs.

Recommendations for the Planning & Piloting Phase:

- Focused Training: Provide targeted training for pilot teams to ensure they are prepared for rapid implementation and troubleshooting.
- Business Model Testing: Explore different funding models and partnerships during the pilot phase to gauge sustainability.
- Initial Evaluation: Establish a pilot-specific evaluation plan that measures cost-savings and impact and explores feasibility indicators, informing future funding strategies.

Recommendations for the Implementation & Scaling Phase:

- Long-Term Agreements: Transition pilot partnerships into long-term, formalized agreements that support sustainability, and bring on new partners as needed (e.g., federal agencies, funding bodies).
- Sustainable Funding: Comprehensively evaluate resource needs for sustaining the program. Align the program with national, provincial or regional healthcare funding streams to ensure long-term viability.
- Workforce Development: Implement ongoing training and succession planning programs to maintain system readiness and ensure sustained operational excellence.

Final Reflections

Implementing digital STBBI testing services like GetCheckedOnline (or other similarly complex digital sexual health services) is hard work. In this guide we've described the key components of the work that have been central to the current success of GetCheckedOnline and critical to our ongoing work of sustaining and scaling-up the program in BC. While the exact details of the intervention, health systems and population contexts will likely be different for you, we hope these lessons we've learned will be helpful to you in developing digital STBBI testing services, and perhaps for other digital sexual health services. We hope that your work of implementation will be easier as a result.

One last piece of advice. While there's more comfort with digital health services now than there was 15 years ago when we first started planning GetCheckedOnline, you're likely going to encounter unexpected challenges or barriers no matter how well you plan. These can impose delays or require backtracking and developing new work-arounds. Build room for uncertainty, overcoming challenges and creative problem solving into plans and timelines if you can. But most importantly, persevere and don't give up!

Contact us

We'd welcome your feedback on this guide and whether you found it useful. You can reach us by email at <u>DISHIresearch@bccdc.ca</u>. We look forward to hearing from you!

You can find out more information about our research team and work related to GetCheckedOnline at our Digital & Sexual Health Initiative Website (www.dishiresearch.com).