Scalable Innovation for a Sustainable Public Health System

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Recommendations

It is recommended that the Board of Health receive this report for information.

Key Points

- When WDGPH creates new innovative approaches, it aims to do so in a way that can be easily adapted across the broader public health system.
- phiz.ca, the Public Health Innovation Zone, is a new website geared towards public health leaders and professionals, that shares how technology can be used to advance public health practice
- Through April 20, 2026, phiz recorded 1,890 users and 6,139 views, 22 external pilot engagements across 12 Ontario public health units
- WDGPH has shown that building strong digital capability can both improve local public health work and contribute to the sustainability of the wider public health system

Background

WDGPH has approached digital innovation as an engineered practice, using disciplined methods that make local solutions more reliable, portable, and scalable. This has allowed innovation developed for local service improvement to be more readily shared with other organizations. WDGPH has seen both a strong rate of internal implementation and growing external interest, creating the need for a more intentional knowledge-sharing approach.

During fall 2025 WDGPH developed a platform to share this kind of work, which it called phiz - the Public Health Innovation Zone. By December 2025 the site officially launched at phiz.ca.

Since its launch, phiz.ca has maintained an average publishing cadence of an article every two weeks. It has also begun inviting expressions of interest from public health units interested in joining pilot cohorts. Pilots range from consultations and toolkits to time-limited managed services and technology demonstrations. This has enabled WDGPH to improve its own approaches while supporting implementation in other health units.

The website phiz.ca does not duplicate WDGPH's public website (wdgpublichealth.ca) and is not a source of resident-facing health guidance. Instead, it provides a space to share implementation knowledge, lessons learned, and reusable approaches arising from WDGPH's work.

This work reflects a more mature stage of innovation capability at WDGPH. This maturity supports local improvement first while also contributing back practical digital capability to the broader public health system.

Discussion

Local Capability with Broader Value

WDGPH's digital innovation work is rooted in improving how the organization serves the local community. This includes reducing manual burden, improving consistency, strengthening analytics, modernizing workflows, and supporting better operational decision-making. It also includes building the internal conditions needed to use automation and AI responsibly in public health practice.

Over time, that capability has matured to the point that some of what WDGPH develops locally can also be useful to other public health organizations.

This does not mean every tool should be scaled provincially or adopted everywhere. However, WDGPH has shown that when local work is transparent and well governed, it can strengthen system-wide public health capability instead of staying confined to a single organization.

Practical Examples of Local-First Innovation

Immunization notice generation and related workflow innovation

The local-first innovation that has produced most value externally so far is WDGPH's work on custom immunization notices and related immunization workflow improvement. This has become the Agency's most established shared innovation. The offering is built around a templated notice system that produces consistent, branded immunization notices and summaries from immunization data using reusable export workflows and auditable templates and has been reported on in previous innovation reports.

While external support has been provided for the use of basic functionality, new advanced functionality has been developed locally to further improve WDGPH workflows. This past year WDGPH simultaneously rolled out a custom vaccine record submission portal, piloted email use for notices as encrypted PDFs, and the use of personalized QR codes for streamlined vaccine record submission in approximately 60 seconds. WDGPH has continued to push how much it can reduce repetitive handling, improve data quality, and make the client response process easier and faster.

VaxLink

VaxLink is another strong example of a local-first innovation that reduces repetitive documentation in clinical immunization settings. Typically staff still need to visually decode vial labels, manually transcribe lot numbers, and verify expiry dates by hand. VaxLink supports vaccine barcodes and filling supported chart fields inside select web-based clinical workflows automatically, including Ontario's immunization record repository, Panorama. It leverages the Public Health Agency of Canada's National Vaccine Catalogue to validate and enrich the information. [1]

Locally, VaxLink addresses a routine point-of-care task that consumes staff time and creates avoidable transcription risk. It shows that common workflow issues can be solved by building on existing systems (rather than waiting to replace them), using high-quality information sources, and keeping staff accountable for final confirmation.

CCHS Tool

The CCHS Tool represents a different but equally important form of innovation: making complex analytics more accessible and sustainable. The Canadian Community Health Survey is a key

dataset for public health units, and many organizations dedicate substantial analyst and epidemiologist time to producing similar outputs through locally developed scripts and methods. WDGPH's approach is to create a more accessible interface for geographic filtering, variable selection, and statistically rigorous analysis using bootstrap methods and confidence intervals. This project aims to reduce time spent on analyzing this important dataset by 75%, allowing that effort to be put back into getting the insights into action such as community engagement activity.

For WDGPH, this supports local analytic capacity. For the sector, it points toward a more efficient and shareable model for population health analysis in an area where many organizations face the same work.

Architecture consultations and sustainable digital foundations

WDGPH has also seen demand for consultation on the digital infrastructure needed to sustain innovation over time. In practice, some health units are interested in automation, analytics, and AI-assisted work, but may still be missing foundational data, or workflow infrastructure needed to support those efforts reliably. WDGPH's architecture consultations respond to that need by sharing practical guidance on data environments, information flow, automation patterns, governance, and implementation lessons learned.

Early Reach and Engagement Through Phiz

Through April 20, 2026, phiz recorded 1,890 users and 6,139 views. Usage patterns, including time spent on site and views per visit, suggest that visitors engage with implementation-focused content and explore beyond a single page. This shows that phiz has attracted meaningful professional interest in practical public health innovation.

Since its launch, phiz has published 13 posts spanning December 2025 through April 2026. That content has concentrated on three practical areas relevant to public health organizations:

Table 1: *Posts on phiz.ca can be grouped within 3 categories with distinct focuses and target audiences within public health leadership and professional staff*

Area	Focus
Service and workflow improvement	Reducing manual burden, improving consistency, and modernizing operational processes
Analytics, reporting, and decision support	Strengthening how information is analyzed, interpreted, and shared to support action
Infrastructure and governance for responsible innovation	Building the documentation, data, technical environments, and governance needed for scalable, supportable, and safe innovation, including responsible AI use

Early Evidence of External Demand

WDGPH's internal pilot tracker shows 22 external engagements as of April 17, 2026: 15 expressions of interest in upcoming pilot cohorts, 2 in progress, and 5 complete. These engagements span operational, analytical, and digital infrastructure topics.

A single health unit may engage in more than one pilot, sometimes across multiple teams. For that reason, the number of pilot engagements is higher than the number of participating organizations. Overall, current pilot activity spans 12 external health units.

Current engagement spans organizations of different population sizes served, governance models, and merger histories. Tables 2 through 4 offer cross-tabulations across each of these, demonstrating that interest is not confined to one organizational type.

Notably, WDGPH, a medium-sized health unit is seeing strong engagement from large and extra-large peers, representing 14 of 22 pilot engagements to date.

Table 2: *Pilots have received interest across a range of PHUs by population served.*

Population served	Total PHUs	Engaged PHUs	Share Engaged	Total Pilots
Small (< 250k)	13	4	31%	5
Medium (250-500k)	3	2	67%	3
Large (500k to 1M)	8	4	50%	8
Extra large (1M+)	4	2	50%	6

Table 3: *Pilots have received interest by both PHUs with autonomous boards of health, and those that are embedded within regional governments or single-tier municipalities.*

Governance model	Total PHUs	Engaged PHUs	Share Engaged	Total Pilots
Autonomous	18	8	44%	12
Embedded	10	4	40%	10

Table 4: *Interest and participation in pilots has included PHUs that have undergone recent mergers that are looking to unify with new modern approaches to public health practice.*

Has recently merged?	Total PHUs	Engaged PHUs	Share Engaged	Total Pilots
Yes	4	2	50%	3
No	24	10	42%	19

Health Equity Implications

Digital innovation can support health equity when it improves consistency, reduces avoidable delays, and makes effective approaches more available across organizations with different levels of technical capacity. Shared methods and tools may help reduce the disadvantage faced by health units that have fewer specialized digital, analytics, or engineering resources.

For WDGPH residents, equitable digital innovation means that improvements in automation, analytics, and AI-assisted workflows should support better quality, timeliness, and consistency without creating new barriers. This is especially important for people who may be affected by accessibility barriers, language barriers, limited digital confidence, disability, rural access challenges, or greater dependence on staff-mediated services.

At the same time, digital and AI-enabled approaches can worsen inequities if accessibility, explainability, privacy, human review, and organizational readiness are not addressed. WDGPH's emphasis on responsible implementation helps mitigate these risks. It is also important that digital innovation not be treated as digital-only service delivery; residents must continue to be served through approaches that remain understandable, accountable, and practical in real-world public health settings.

Conclusion

WDGPH's digital innovation work has reached a new level of maturity. Work designed to improve local services is increasingly being built in ways that are reusable beyond the health unit's geographic boundaries.

Notably phiz, the Public Health Innovation Zone, is the clearest expression of that shift. It provides a professional-facing platform for sharing practical digital innovation with other public health organizations. Early analytics show reach and meaningful professional interest, while pilot activity shows that external demand is real and spans multiple types of health units.

WDGPH is demonstrating it can have a large impact in the broader public health system as a medium-sized public health unit with responsible innovation practice. When innovations that benefit local service delivery, are combined with an effective knowledge translation strategy, WDGPH contributes to a more sustainable public health system.

Ontario Public Health Standards

Foundational Standards

- ☒ Population Health Assessment
- ☒ Health Equity
- ☒ Effective Public Health Practice
- ☐ Emergency Management

Program Standards

- ☐ Chronic Disease Prevention and Well-Being
- ☐ Food Safety
- ☐ Healthy Environments
- ☐ Healthy Growth and Development
- ☒ Immunization
- ☐ Infectious and Communicable Diseases Prevention and Control
- ☐ Safe Water
- ☐ School Health
- ☐ Substance Use and Injury Prevention

2024-2028 WDGPH Strategic Goals

More details about these strategic goals can be found in WDGPH's 2024-2028 Strategic Plan.

- ☐ Improve health outcomes
- ☐ Focus on children's health
- ☒ Build strong partnerships
- ☒ Innovate our programs and services
- ☒ Lead the way toward a sustainable Public Health system

References

1. Public Health Agency of Canada. National Vaccine Catalogue: browse the catalogue [Internet]. [date unknown] [cited 2026 Apr 17]. Available from: https://nvc-cnv.canada.ca/en/vaccine-catalogue