



Vital health computing infrastructure for Trials, Artificial Intelligence, and a Learning Health System (VITAL)

2026-27 Corporate Plan

UNITY HEALTH TORONTO

Corporate Plan Requirements

As part of your Contribution Agreement (section 7.4. entitled, “Corporate Plan”): a Corporate Plan, shall be submitted to the Minister’s satisfaction, be made available to the general public and be published in both official languages of Canada.



Objectives and Expected Outcomes

Program objectives for FY2026-27 and expected outcomes:

Objective 1: Infrastructure implemented for near real-time data extraction and standardization from at least 100 hospitals across Ontario, Alberta and Quebec

- *Short term outcome:* Near real-time data pipelines developed in ON and QC for efficient extraction in standardized formats.
- *Medium term outcome:* Data are extracted into provincial repositories from participating hospitals across the three provinces.
- *Long term outcome:* Data from multiple provinces is available for dynamic use for AI and innovation, including clinical trials and public health monitoring.

Objective 2: Secure research and analytics environment developed in each province, with high-performance computing, and initial set of AI tools

- *Short term outcome:* Personnel hired in each province to establish provincial program teams necessary for development of local infrastructure.
- *Medium term outcome:* Infrastructure and access service for multi-jurisdictional data projects established in each province; development of initial suite of AI tools.
- *Long term outcome:* Support the next generation of Canadian-led companies in Health AI and allow Canadians to access the latest innovative technologies.

Objective 3: Initial development of single data access portal

- *Short term outcome:* Provincial policies and processes harmonized to enable data from multiple provinces to be accessed via a single portal.
- *Medium term outcome:* Usability and pilot testing of a portal that will inform full development, while adhering to the policies and regulations in place.
- *Long term outcome:* Develop national health AI computing infrastructure activated with high value health data assets.

Objective 4: Feasibility testing of data federation software to connect infrastructures across the 3 provinces

- *Short term outcome:* Development of cross-provincial data federation and analysis framework.
- *Medium term outcome:* Statistical development for federated software available for testing via single access portal.
- *Long term outcome:* By harnessing data from multiple provinces, VITAL will attract and retain world-class research and innovation talent in scientific areas that are aligned with Canada's priorities.



Objective 5: Robust data governance policies implemented, including initiation of policies to enable responsible commercialization and industry partnerships

- *Short term outcome:* Engagement of provinces and key stakeholders on shared vision for near real-time data use for research and innovation.
- *Medium term outcome:* VITAL data and AI models made available for research and innovation via single access portal, made possible by approved robust data governance policies.
- *Long term outcome:* Develop new research partnerships with industry and commercialization of new discoveries.

Objective 6: Established Indigenous leadership, Indigenous community partnerships and Indigenous data governance. Established technical infrastructure development with Indigenous partners.

- *Short term outcome:* Ontario-based Indigenous health care organizations formally engaged in data governance agreements.
- *Medium term outcome:* Enriching hospital data sets to enable more accurate understanding of Indigenous populations.
- *Long term outcome:* Facilitate research that is relevant to Indigenous people and communities, with appropriate Indigenous-led governance to respect data sovereignty and privacy.

Planned Activities

High level description of planned *Eligible Activities* for upcoming quarters and associated *Key Performance Indicators*:

First Quarter (April - June)

- 1. Develop VITAL Infrastructure Roadmap and Requirements (*Eligible Activity a, b, i*)**
 - Create an overarching roadmap for VITAL infrastructure across Ontario, Quebec and Alberta, including planned purchases, and conduct requirements gathering at local, provincial, and central levels to inform system design and implementation.
 - KPI Alignment: *Immediate KPI 1 & Intermediate KPI 1* – Supports expansion of compute infrastructure and ensures alignment with user and stakeholder needs.
- 2. Onboard Technical Lead – Quebec (*Eligible Activity a, h*)**
 - Onboard a Quebec-based Technical Lead to support the design, integration, and implementation of high-performance compute infrastructure within Quebec, and to coordinate alignment with pan-provincial AI infrastructure initiatives.
 - KPI Alignment: *Immediate KPIs 1 & 2; Intermediate KPI 2* – Strengthens regional leadership capacity and supports the development, attraction, and retention of skilled AI professionals for AI infrastructure design and management.
- 3. Legal and Policy Framework Development (*Eligible Activity e, f, g*)**



- Stakeholder engagement on legal opinions provided by Torys LLP and INQ Law to refine potential approaches for VITAL to enable industry-sponsored research, IP and commercialization.
- KPI Alignment: *Immediate KPI 3* – Advances secure and responsible data governance and establishes frameworks to enable Canadian datasets for AI research and collaboration.

4. Governance Structures and Strategic Oversight (*Eligible Activity j, i*)

- Operationalize VITAL's governance framework by convening inaugural and recurring meetings of key bodies (e.g., Scientific Advisory Committee), finalizing Terms of Reference, and establishing decision-making and reporting processes to ensure effective oversight and continuity of national AI infrastructure initiatives.
- KPI Alignment: *Intermediate KPI 2* – Strengthens governance, supports leadership capacity, and ensures robust management of AI infrastructure.

5. Indigenous Data Partnerships and Governance (*Eligible Activity e, f, i*)

- Continue governance and protocol development for Ontario Indigenous primary care data linkages and begin establishing a formal Indigenous community data partnership in Quebec.
- KPI Alignment: *Immediate KPI 3 and Ultimate KPI 1* – Supports Indigenous data sovereignty and contributes to a responsive, inclusive national AI ecosystem.

6. Official Launch of VITAL and Ministerial Announcement (*Eligible Activity i, b, j*)

- Organize the official launch of VITAL, formally announcing the initiative and its federal funding support. The launch, featuring participation from the Minister of AI and key partners, will position VITAL as a coordinated national AI research infrastructure and signal the Government of Canada's commitment to advancing secure, responsible, and inclusive AI-enabled health data innovation.
- KPI Alignment: *Intermediate KPI 1* – Expands national awareness and engagement across the AI research ecosystem; *Intermediate KPI 2* – Reinforces leadership, coordination, and visibility of Canada's AI infrastructure initiatives.

7. Stakeholder Engagement and Public Advisory Development (*Eligible Activity i, b*)

- Develop a patient and public advisory engagement plan for VITAL in collaboration with patient partners across Canada, including identification of appropriate advisory structures, engagement mechanisms, and implementation pathways.
- KPI Alignment: *Intermediate KPI 1* – Expands researcher and institutional engagement while promoting transparency and accountability.

Second Quarter (July - September)

8. Progress the Ontario Near Real-time Data Extraction Pilot Project and Establish Data Extraction Pipeline (*Eligible Activity a, b, i*)

- Secure approval for the VITAL pilot REB protocol and develop the end-to-end data extraction pipelines to support multi-institutional research.



- KPI Alignment: *Immediate KPI 1* – Expands publicly accessible AI compute capacity and establishes foundational infrastructure for AI research.

9. Draft Data Governance Policies (*Eligible Activity e, f, g*)

- Draft VITAL's core data governance framework, including key policies that consider industry-sponsored research, intellectual property, and commercialization for stakeholder input.
- KPI Alignment: *Immediate KPI 3* – Strengthens data governance and protection of Canadian datasets; *Intermediate KPI 2* – Builds capacity among AI professionals to engage in governance, IP, and commercialization frameworks.

Third Quarter (October – December)

10. Ongoing Reporting and Engagement with Provincial and Government Stakeholders (*Eligible Activity j, i, b*)

- Continue to conduct monthly meetings with VITAL platform leads, manage financial oversight, reporting to funder and maintain partnerships with government and institutional stakeholders.
- KPI Alignment: *Immediate KPI 1 & Intermediate KPI 1* – Ensures operational continuity, transparent reporting, and alignment of national AI compute infrastructure objectives.

11. Use Case Development and Implementation (*Eligible Activity b, e, i*):

- Advance the development, coordination, and implementation of priority use cases across Alberta, Quebec and Ontario to demonstrate the application and value of VITAL's infrastructure in supporting multi-institutional AI research.
- KPI Alignment: *Intermediate KPI 1* – Increases utilization of AI infrastructure and data through collaborative research initiatives.

Fourth Quarter (January – March)

12. Data Flow Architecture and Governance Framework Development in Alberta & Quebec (*Eligible Activity a, d, g, i*):

- Advance the development and implementation of data flow architecture and governance frameworks to enable secure, multi-jurisdictional data access, including initiating data collection from participating sites and enabling access to key provincial data sources for multi-province research.
- KPI Alignment: *Immediate KPI 2; Intermediate KPI 1* – Supports increased utilization of Canadian data and advances secure, interoperable data access across participating institutions.

13. Pilot Evaluation and Selection for Broader Implementation (*Eligible Activity a, b, i*)

- Conduct evaluation of the Ontario near real-time pilot for wider implementation across additional Ontario hospitals.
- KPI Alignment: *Immediate KPI 1* – Supports expansion of publicly accessible AI compute infrastructure; *Intermediate KPI 1* – Enables broader access to standardized datasets for Canadian researchers and institutions.



14. Finalize Governance Policies (*Eligible Activity e, f, g*)

- Incorporate stakeholder feedback and complete formal approval and adoption of VITAL's data governance framework and policies governing industry-sponsored research, intellectual property, and commercialization.
- KPI Alignment: *Immediate KPI 3* – Advances responsible and secure governance of Canadian health datasets; *Intermediate KPI 2* – Strengthens professional capacity in ethical AI system design, data stewardship, and commercialization management.

15. Program Operations and Workforce Planning (*Eligible Activity j, h*)

- Enhance operational capacity through upgrades to the GEMINI workspace to accommodate new staff, and develop a comprehensive staffing plan for the next fiscal year to support ongoing program delivery and growth.
- KPI Alignment: *Intermediate KPI 2* – Supports the development, attraction, and retention of skilled personnel and ensures effective operational management of AI infrastructure initiatives.

16. Establish Indigenous Data Linkages (*Eligible Activity e, i*)

- Complete first data linkages with initial Indigenous Primary Health Care Organizations
- KPI Alignment: *Immediate KPI 3* – Expands availability of Canadian datasets for AI research; *Ultimate KPI 1* – Supports inclusive data access aligned with community needs and AI user requirements.

17. Single-Access Portal Design and Development (*Eligible Activity a, b, c, i*):

- Advance the design and future-state roadmap for a single-access portal across the three provinces to enable streamlined, secure access to data and compute resources across jurisdictions, including defining platform architecture and deployment approach.
- KPI Alignment: *Intermediate KPI 1* – Enhances accessibility to AI compute and data infrastructure for researchers and institutions.

18. Data Standardization and Interoperability Advancement (*Eligible Activity d, e, g*):

- Advance data standardization efforts across Alberta, Ontario and Quebec, including completion of clinical data mapping (e.g., to OMOP CDM) and implementation of interoperable approaches to support high-quality, harmonized datasets for multi-site research.
- KPI Alignment: *Immediate KPI 2* – Increases the number and usability of standardized Canadian datasets for AI research.

19. Strengthen Formal Indigenous Community Data Partnership in Quebec and Alberta (*Eligible Activity e, i*)

- Work towards partnerships with an Indigenous communities in Quebec and Alberta to support data governance, stewardship, and research collaboration in alignment with Indigenous leadership and data sovereignty principles.
- KPI Alignment: *Immediate KPI 3* – Strengthens secure and ethical use of Canadian datasets; *Ultimate KPI 1* – Ensures infrastructure meets evolving needs of Indigenous partners and broader AI ecosystem.



Equity, Diversity and Inclusion

Overview of how EDI is actively being considered in the planned activities, and how the advancement of EDI is being measured:

Equity, Diversity, and Inclusion (EDI) are embedded as core principles across VITAL's design, governance, and implementation. VITAL is advancing EDI by incorporating inclusive engagement practices, supporting equitable access to data and infrastructure, and ensuring that governance structures and research activities reflect diverse perspectives across participating provinces.

VITAL is actively exploring opportunities to engage with Indigenous communities and partners across participating provinces to support culturally appropriate approaches to data governance, linkage, and use. These efforts aim to address gaps in data availability and improve the relevance and accessibility of health information for Indigenous communities, while respecting principles of Indigenous data sovereignty and jurisdiction-specific engagement practices.

VITAL's pilot to automate real-time data collection in Ontario will inform the broader expansion of the platform to a wide selection of hospitals, including approximately 20 hospitals in remote and rural areas, thereby enhancing geographic equity in data representation and access. VITAL's governance structures will support broad and inclusive membership representation, embedding EDI principles within decision-making bodies through the selection of members reflecting diverse socio-demographic characteristics (e.g., geography, language, age, race, and lived experience).

In addition, as part of VITAL's governance framework to be developed in the coming year, a dedicated Equity, Diversity, Inclusion, and Reconciliation (EDIR) function (e.g., subcommittee or equivalent mechanism) will be established to guide and oversee the development of EDI-related strategies across teams, research methods, infrastructure, and knowledge mobilization activities.

The advancement of EDI will be measured through the completion of the above activities, as well as VITAL's broader efforts to identify and address systemic barriers across its research domains. This includes the development and implementation of EDI-informed policies and practices by the EDIR function in areas such as data collection and access, research project approvals, recruitment, and codes of conduct. VITAL will also assess workforce composition to identify gaps in representation within its teams, informing targeted recruitment and engagement of staff and advisors, including patient partners and members of the public.

Potential Lapse

Mitigation strategies to prevent lapse of ISED funds:



The overall risk of lapsing ISED VITAL funds is low due to strengthened planning, established program infrastructure, and proactive mitigation strategies implemented following Year 1. While Year 1 included expected ramp-up and implementation timing challenges typical of a new program, all Year 1 funds were ultimately fully utilized, demonstrating strong financial management and the team's ability to actively monitor and adjust spending to meet funding requirements. Key learnings from this initial phase have been directly applied to Year 2 to further reduce risk. Mitigation strategies include:

1. Established Initial Sub-Award Agreements Enabling Timely Fund Flow: In Year 1, delays in executing initial sub-award agreements impacted the timing of fund disbursement. This was a one-time setup challenge. Initial agreements are now in place, allowing us to flow funds more quickly through amendments - resulting in more predictable disbursements, removing a key administrative bottleneck, and better aligning planned and actual expenditures.
2. Refined and Informed Site Engagement Timelines: Early site engagement for the VITAL Ontario near-real-time pilot took longer than anticipated due to competing priorities at participating organizations. Year 1 experience has informed more accurate scheduling assumptions. Costs have been appropriately re-profiled, and improved planning ensures that site onboarding and participation will proceed in closer alignment with forecasted expenditures. Additionally, foundational work done on developing data pipelines completed during this period supports more efficient scaling and implementation.
3. Improved Procurement Planning and Lead-Time Management: Initial large-scale procurement activities, particularly for compute infrastructure, experienced longer-than-expected lead times due to external supplier constraints. Procurement timelines have been recalibrated to incorporate extended lead times, reflecting current market conditions. Future purchases are being initiated earlier with better coordination across technical and operational teams, ensuring alignment with project milestones and reducing the risk of delayed expenditures.
4. Enhanced Forecasting and Active Financial Monitoring: Forecasts have been refined using actual Year 1 data and lessons learned, with more conservative and evidence-based assumptions. Improved forecast accuracy, coupled with ongoing financial monitoring, enables early identification of variances and timely corrective actions to ensure full fund utilization within the fiscal year.

Building on a strong Year 1 foundation, where all funds were fully expended, VITAL has significantly reduced the risk of lapsing funds in Year 2. With key structures now in place, improved planning assumptions, and proactive mitigation strategies across agreements, site engagement, and procurement, the program is well-positioned to execute planned activities and expenditures with a high degree of confidence and alignment to funding timelines.



Performance Measurement

Performance measurement framework and monitoring strategies:

Overall, VITAL's performance measurement framework indicators progressed as expected in Year 1. Performance measurement across a distributed network spanning three provinces presents inherent challenges; however, these are mitigated by VITAL's strong governance structures, including the VITAL Coordinating Committee, and by close, transparent collaboration with provincial platform leads, all of whom are experienced scientists and leaders. Year 2 objectives, established at the start of the year, will be monitored routinely both centrally by the VITAL team and in partnership with provincial stakeholders to ensure timely oversight and accountability. Any deviations in performance will be identified and addressed promptly through ongoing monitoring processes. No updates to the existing performance measurement framework are anticipated at this time, with Year 2 key performance indicators (KPIs) scheduled to be finalized and outlined in June.