SWITCH BC

Safety, Wellbeing, Innovation, Training & Collaboration in Healthcare

# Expression of Interest - Contractor: Data Analyst/Programmer

## Summary of the Opportunity

SWITCH BC is seeking proposals/quotes from contractors with expertise in data analysis, machine learning, and prototype development to support the Psychological Health and Safety (PHS) Baseline Project. Do you have strong skills in transforming large, complex datasets into actionable insights? Are you experienced in using automation and artificial intelligence (AI) to support qualitative and quantitative assessment? Then this is the contract for you!

The first and primary responsibility of the Contractor will be to analyze existing data sets provided by SWITCH BC—including both structured and unstructured inputs to establish an initial analysis framework that reflects key indicators aligned with the CSA Z1003-13 Standard. This includes organizing and synthesizing data into formats that support baseline reporting, system-level benchmarking, and further decision-making.

In addition, the Contractor will contribute expertise toward the potential design of an infrastructure that enables long-term monitoring, updates, and analysis of psychological health and safety indicators over time. The Contractor should be able to recommend and prototype solutions using platforms such as Azure, Microsoft Fabric, or Caspio, or provide rationale for other comparable platforms, in alignment with SWITCH BC's technical and privacy requirements.

## Background

SWITCH BC, as outlined in the organization's vision, mission, and mandate, is committed to promoting safe and healthy workplaces throughout the B.C. healthcare sector. In collaboration with health unions, employers, and Doctors of BC, SWITCH BC leads the development of systemwide programs that improve the health, safety, and wellbeing of health care workers.

The PHS Baseline Project is part of SWITCH BC's Measurement and Evaluation Framework and aims to establish a provincial baseline of psychological health and safety and assess the level of implementation of the CSA Standard Z1003-13. The insights and data produced from this project will inform future strategy, planning, and interventions across the system.

## Submission of Quotes

**Quotes must be submitted electronically before August 15, 2025, at 4 p.m. PST**. Quotes are based on a 6-month contract, estimated at 10 to 30 hours per week. SWITCH BC is an organization founded on values of collaboration and relationships, and as such we will require this Contractor to be available to collaborate with our team and partners during regular business hours of our organization between 8 a.m. – 4 p.m. PST, Monday to Friday. Quotes must not be sent by fax or mail.

The Proponent is solely responsible for ensuring that SWITCH BC receives complete quotes, including all attachments or enclosures, before the deadline. Late proposals will not be considered.

## Delivery of Quotes

Proposals must be in English and must be submitted electronically to PHS@switchbc.ca with the subject line: "Attention: SWITCH BC EOI – PHS Data Analyst / Programmer".

The proposal must include the hourly contractor rate and demonstrate relevant experience and knowledge related to data analysis, machine learning, and data infrastructure design.

**Contact: Direct any questions or requests for additional information to PHS@switchbc.ca**

Preference will be given to Canadian-based contractors.

## Maximum Contract Value

The total budget for this project is not to exceed $60,000 CAD (inclusive of all fees, taxes, and expenses). Proposals exceeding this amount will not be considered.

## Contract

By submitting a quote, the Proponent agrees that, should the proposal be successful, the Proponent will enter into a contract with SWITCH BC.

## Ownership of Quotes

All quotes and other records submitted to SWITCH BC in relation to the expression of interest (EOI) become the property of SWITCH BC and will be held in confidence.

## Scope

This is a 6-month contract requires an estimated 10 to 30 hours per week to fulfill the responsibilities listed below. Activities may include participation in meetings, technical consultation on long-term infrastructure, analysis of large datasets including qualitative/quantitative information, and delivery of tools and reports.

The Contractor will:

- Provide analysis of SWITCH BC provided data, including survey responses, planning documents, and qualitative inputs.
- Utilize automation and methods (e.g., keyword clustering, sentiment analysis, natural language processing (NLP) tagging) to support the screening and synthesis of inputs.

- Identify opportunities to automate repetitive data handling tasks and streamline reporting processes.
- Contribute data-driven insights to the gap/strength analysis and recommendations reports, enhancing evidence quality.
- Support the design of long-term infrastructure, recommending tools such as Azure, Fabric, or Caspio, or providing rationale for other scalable solutions.
- Ensure deliverables align with SWITCH BC's privacy, ethical, and data governance standards.

## Service Requirements

The Contractor will be expected to undertake the following responsibilities and services in consultation with SWITCH BC:

- Conduct advanced data analysis using a mix of statistical and computer-supported methods using Canadian-based servers and/or software.
- Recommend platforms and infrastructure strategies to support long-term psychological health and safety monitoring.
- Design tools that link evidence to indicators for CSA Z1003-13 implementation tracking.
- Provide user guidance, rationale, and transparency for any applied tools or algorithms.
- Support SWITCH BC with technical documentation, handoff materials, and presentations to internal partners (as required).

**SWITCH BC will:**

- Provide overall direction via phone, email, and virtual meetings.
- Review, provide feedback, and approve drafts and final deliverables.
- Facilitate access to relevant test data and documentation, in line with agreements.

## Skill and Experience Requirements

**Experience:**

- Demonstrated expertise in analyzing complex, multi-source datasets.
- Experience using AI and NLP tools for qualitative data screening and synthesis.
- Experience designing data frameworks and prototypes that support insight generation and reporting.
- Familiarity with workplace mental health, occupational health and safety, or CSA Standards is an asset.

**In-Depth Knowledge:**

- Data architecture and analysis methodology, particularly mixed methods approach.

- Canadian privacy legislation and Freedom of Information and Protection of Privacy Act (FOIPPA) compliance when working with sensitive health data.
- Experience working with government or healthcare partners.

**Collaborative Skills:**

- Ability to work collaboratively with diverse interdisciplinary teams, including subject matter experts and system partners.
- Excellent communication skills and ability to present data and insights in an accessible manner.

**Technical Competence:**

- Proficiency in Python, R, or equivalent for building data pipelines and analytics tools.
- Experience with data visualization tools (e.g., Power BI, Tableau).
- Familiarity with tools/platforms such as Azure, Microsoft Fabric, or Caspio for scalable solution development.
- Experience working with qualitative data software (e.g., MAXQDA, NVivo) or integrating similar logic solutions.
- Ability to explain machine-assisted insights in a way that is accessible to non-technical partners.