

## **Amendment 001**

### **This version has been replaced August 24, 2018**

**CHALLENGE TITLE:** An innovative platform to facilitate evidence-informed decision-making

**CHALLENGE SPONSOR:** Public Health Agency of Canada (PHAC)

**Steps to apply:**

Step 1: read this challenge

Step 2: read the [Call for Proposals](#)

Step 3: [propose your solution](#)

**Funding Mechanism:** Contract

**MAXIMUM CONTRACT VALUE:**

Multiple contracts could result from this Challenge.

The maximum funding available for any Phase 1 Contract resulting from this Challenge is \$150,000.00 CAD (plus tax) including shipping, travel and living expenses, as applicable.

The maximum funding available for any Phase 2 Contract resulting from this Challenge is \$500,000.00 CAD (plus tax) including shipping, travel and living expenses, as applicable. Only eligible businesses that have completed Phase 1 could be considered for Phase 2.

This disclosure is made in good faith and does not commit Canada to contract for the total approximate funding.

**TRAVEL:** For Phase 1 it is anticipated that two meetings will require the successful bidder(s) to travel to the location identified below:

- i) Kick-off meeting - 130 Colonnade Rd., Ottawa ON
- ii) Final Review Meeting - 130 Colonnade Rd., Ottawa ON

**Problem Summary Statement**

The Public Health Agency of Canada (PHAC) is seeking an innovative platform/platforms that will provide Canadians with immediate access to relevant, trustworthy, public health information adapted to their specific questions and needs, based on core content from PHAC in areas such as but not limited to immunization and travel health.

**Problem statement**

The Internet has become an important primary source of information for many Canadians, but identifying and accessing accurate and unbiased health information has become increasingly difficult. Providing Canadians with evidence-based advice on how to maintain and improve their health is a key public health priority.

There is a need to develop and pilot an innovative platform that provides Canadians with immediate access (within seconds) to relevant, trustworthy, public health information adapted to their specific question and needs, based on core content available through Public Health Agency of Canada (PHAC) and other Government of Canada websites and sources.

**Desired outcomes and considerations**

Improved health, safety and well-being of Canadians achieved through increased access to credible, evidence-based, information through Government of Canada websites and/or other mobile technologies.

- The desired innovative platform will provide Canadians with immediate access (within seconds) to relevant, trustworthy, public health information adapted to their specific question and needs, based on core content available through PHAC (and other Government of Canada) websites and sources.
- The technology will ideally rest on the PHAC website, and should have interoperability with existing government of Canada online databases and applications.
- The innovation will be measured for accuracy based on the technical content communicated to users, and also measured for ease of use and clarity of communication.

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- The innovation should respond to queries in a natural language format with plain language outputs, and redirection to relevant PHAC websites.
- The desired technology will respond to queries in multiple languages including, but not limited to, both official languages English and French.
- Over time, a desired outcome is for the technology to have capacity for adaptation in order to refine the user experience and better meet the information needs of Canadians.
- Ongoing monitoring and review of the technology performance should be possible via internal reporting functions of the platform.

#### **Background and context**

Recent technological advances have fundamentally changed the way complex data is analyzed, interpreted and presented. Novel software platforms, based on natural language processing, have demonstrated an ability to emulate human performance and are increasingly being utilized for speech and text recognition. For example, through the "chat bot" technology, computers are being used to comprehend the structure and meaning of human language, therefore allowing interaction (i.e. question answering) using natural sentences. There is also increased availability of mobile applications that can push technology to users as well as "game-ification" as a means to improve user experiences.

Having been successfully applied in other areas, such as banking, automotive and intelligence industries, it is believed that recent advancements in artificial intelligence (AI) can be applied to directly support PHAC to improve the health of Canadians. Communicating complex public health analyses and vaccine recommendations through an AI platform would represent a truly innovative advance in public health promotion. Provision of evidence-based information and increasing access to resources that promote good health and prevent disease and injury is a common goal for all programs across the organization. In addition, the use of novel technologies has the potential to lower cost and increase precision and productivity, as well as to facilitate advancements in the operation and utilization of existing programs.

The Government of Canada plays an essential role in supporting the public health of Canadians and, more specifically, PHAC is mandated to improve the health of Canadians and reduce health disparities in Canada. To achieve these goals, PHAC provides evidence-based information to a wide range of audiences, from health practitioners through to the general public, on many different health-related issues. However, in an increasingly complex world in which many different factors intersect to affect the health and well-being of Canadians, identifying relevant and credible information is becoming increasingly difficult. As the volume and complexity of information grows, innovative platforms will be required to support Canadians in identifying and accessing reliable, personalized information so to empower them in making informed, evidence-based, decisions about their health based on credible government content.

Innovative Solutions Canada is designed to seek truly novel solutions from Canadian small business. Challenges posted through ISC may appear to provide few details or specifications on what the desired solutions should look like. This is intentional. Challenge statements will contain some guidance on desired outcomes, but will not prescribe how a solution should work or function. We leave that to the creativity and ingenuity of Canada's innovators.

#### **Enquiries**

All enquiries must be submitted in writing to the Contracting Authority no later than ten calendar days before the Challenge Notice closing date. Enquiries received after that time may not be answered.