Solicitation 1000203413 - Artificial Intelligence (AI) pilot project for surveillance of suicide-related behaviours using social media

Q&A #7- #15

Question #7

Which are the preferred social media platforms or sites that are intended to be included in the scope of this project? Do we cover only the major social media sites such as Twitter or would other web sources be included for gathering data?

Answer #7

The purpose of this pilot project is to look at the utility of analyzing discussions of suicide-related behaviours using social media. The analysis of patterns and trends associated with suicide-related discussions on social media will complement traditional surveillance approaches already employed by PHAC, including data collected by Statistics Canada, Canadian Institute for Hospital Information (CIHI) and the Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP).

The Contractor may use the social media platforms of their choice. The social media channel(s) or datasets will be assessed in the request for proposal (RFP) process. Once proposals have been submitted, we will review and compare the key aspects of the various proposed approaches, including the identified social media channels, to determine which may be more or less suitable, given our requirements.

Question #8

Would Health Canada be providing the list of social media platforms for data gathering or is the incumbent vendor expected to conduct his own research to identify the web sources?

Answer #8

PHAC will not be providing a list of social media platforms for data gathering. The Contractor is expected to identify and use the social media platforms or sites.

Question #9

In the objective section, we note a mention that the data intended to be gathered will be complemented with data from other sources. Are other suicide-related surveillance data sources being used currently by Health Canada and could you share some examples of the reports generated from the harvesting and analysis of data from these sources?

Answer #9

Yes, the proposed tool is intended to supplement existing data sources. Traditional surveillance approaches already employed by PHAC, include other data collected by Statistics Canada, the Canadian Institute for Hospital Information (CIHI) and the Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP). The current data available to PHAC lacks timely information on suicide-related behaviors (i.e. plans, attempts, ideation) which is necessary to better understand related risk and protective factors and how that varies among different age groups and gender. Survey data, for example the Canadian Community Health Survey conducted by Statistics Canada, provides an estimate of some of these variables, which can be used to help validate information collected through the new tool. Through

this RFP, PHAC is looking for a more timely data stream for monitoring suicidal behaviours. A summary of key indicators on suicide deaths, attempts and ideation, and risk and protective factors can be found at:

https://www.canada.ca/en/public-health/services/reports-publications/health-promotion-chronic-disease-prevention-canada-research-policy-practice/vol-37-no-8-2017/at-a-glance-contextual-analysis-suicide-surveillance-indicators.html

We are unable to share examples of reports containing harvested data from other data sources. For the pilot project, the reports may contain, but not be limited to, presenting aggregate data of patterns and trends associated with suicide-related discussions on social media by sex, age group, ethnicity and geographic region. For example, written explanations of patterns and trends may be provided in writing, and data may presented in spreadsheets, summary and pivot tables or other formats (for example, including sum, averages, etc of aggregate data).

Below are some publications that contain information from previous analyses that we have conducted or contributed to:

Skinner, R., McFaull, S., Draca, J., Frechette, M., Kaur, J., Pearson, C., & Thompson, W. (2016). Suicide and self-inflicted injury hospitalizations in Canada (1979 to 2014/15). *Health promotion and chronic disease prevention in Canada: research, policy and practice*, *36*(11), 243.

Rhodes, A. E., Boyle, M. H., Bridge, J. A., Sinyor, M., Katz, L. Y., Bennett, K., ... & Cheung, A. (2017). The medical care of male and female youth who die by suicide: a population-based case control study. *Canadian journal of psychiatry*.

Question #10

Are we right to presume we are expected to rely on information provided by the user in his/her profile to determine factors such as sex, age group, ethnicity and region? These data provided by users in their profiles may or may not be accurate in some cases (e.g. users from other countries indicating Canada as country in their profile). The data will be provided as mentioned in the profile by the vendor.

Answer #10

While the Contractor will use the information provided in the user profile, they are expected to conduct sound and rigorous analyses of social media data to identify or infer sex, age group, ethnicity and geographic region.

Question #11

Is it possible to share some examples of existing reports for our reference that would enable us build the draft reports you have envisioned to be created from the harvested data?

Answer #11

We are unable to share examples of reports containing harvested data from other data sources. For the pilot project, the reports may contain, but not be limited to, presenting aggregate data of patterns and trends associated with suicide-related discussions on social media by sex, age group, ethnicity and

geographic region. For example, written explanations of patterns and trends may be provided in writing, and data may presented in spreadsheets, summary and pivot tables or other formats (for example, including sum, averages, etc of aggregate data).

A summary of key indicators on suicide deaths, attempts and ideation, and risk and protective factors can be found at:

https://www.canada.ca/en/public-health/services/reports-publications/health-promotion-chronic-disease-prevention-canada-research-policy-practice/vol-37-no-8-2017/at-a-glance-contextual-analysis-suicide-surveillance-indicators.html

Below are a few publications that contain some information from previous analyses that we have conducted or contributed to using traditional data sources:

Skinner, R., McFaull, S., Draca, J., Frechette, M., Kaur, J., Pearson, C., & Thompson, W. (2016). Suicide and self-inflicted injury hospitalizations in Canada (1979 to 2014/15). *Health promotion and chronic disease prevention in Canada: research, policy and practice*, *36*(11), 243.

Rhodes, A. E., Boyle, M. H., Bridge, J. A., Sinyor, M., Katz, L. Y., Bennett, K., ... & Cheung, A. (2017). The medical care of male and female youth who die by suicide: a population-based case control study. *Canadian journal of psychiatry*.

Question #12

Will keywords and term search exclusion and inclusion criteria, including suicide-related words and phrases be defined for both English and French languages?

Answer #12

Yes, keywords and term searches for this project may include suicide-related words and phrases in English and/or French languages. PHAC will work with the Contractor to assist in defining search exclusion and inclusion criteria.

Question #13

What support could we expect from Health Canada for this project?

Answer #13

As identified in the RFP, PHAC will provide support including advice on issue, context and search keywords and terms, and review all deliverables. PHAC will provide feedback as and if necessary.

Specifically:

- Project initiation phase: PHAC will meet with the Contractor to discuss overall work, deliverables and objectives and timelines. PHAC will provide an overview of issue and work needed, and discuss and clarify any issues.
- Drafting of the Workplan: PHAC will review the work plan and provide the Contractor with feedback.
- Program Build: PHAC will work with the Contractor to develop a draft analytical framework and identify exclusion and inclusion criteria for keywords and terms included in the project. PHAC will provide additional feedback, as and if necessary.

- Surveillance Phase: PHAC will work with the Contractor while the Contractor drafts the surveillance tool, as and if necessary.
- Draft Baseline Report: PHAC will be available to answers questions and provide support to the Contractor while the Contractor drafts the report. PHAC will review the initial draft report and provide feedback. PHAC will probe the findings presented in the report and work with the Contractor to further refine key word and term search criteria over the course of up to two (2) more iterative draft reports, if necessary.
- Continued surveillance: PHAC will work with Contractor on the surveillance tool and provide feedback, as and if necessary.
- Draft Final Report: PHAC will answer any questions throughout the drafting process and will review the draft final report with initial surveillance data. PHAC will determine if the proof of concept demonstrates potential for future surveillance using the AI technology for social media data mining, and provide feedback, as and if necessary. PHAC will meet with the Contractor to discuss the draft final report and any issues.
- Draft reporting tool: PHAC will evaluate the draft reporting tool, and provide feedback as and if necessary.

Question #14

Proprietary question: Once the AI for the surveillance solution has determined that a person is at risk, how will PHAC route the information to the mental healthcare professionals who will respond to the situation? Will their be specific response times and other measurable actions defined to ensure that this is accomplished in the necessary timeframes?

Answer #14

This pilot project surveillance tool is not intended for emergency response dispatch to individual-level interventions. The Contractor will provide PHAC with aggregate data for various populations (not identifiable individual data) and will not predict suicides by individuals or include any interaction with people on social media or otherwise.

Question #15:

- Based on our analysis, can a four(4) week extension be granted for this RFP?
- Would you consider extending the deadline to 15 October 2018?

Answer #15:

The solicitation end date will be extended to October 1 2018 (thus allowing a two week extension). Please refer to amendment #1 of the RFP 1000203413