Amendment No.: 04

Amendment 04 is issued for the following purpose:

- 1. Respond to questions submitted;
- 2. Modify the Security Requirements of the RFP;
- 3. Amend mandatory criteria M3 of the Evaluation Criteria;
- 4. Provide a revised Annex A Statement of Work that: adds text related to access to provincially and/or territorially held data; and includes the revised Project Schedule from solicitation amendment 03.
- 5. Extend the date of bid closing to July 27, 2017

1. QUESTIONS

Ouestion 1

We are concerned that the Canada to Own Intellectual Property Rights (IP) clauses in the Resulting Contract Clauses of the RFP are overly broad in scope and can be perceived as Canada attempting to assume title or ownership in all data to Canada. The data to be accessed or held by us for use in completing the deliverables required in the Statement of Work is third party data that can only be accessed or held by us following authorization to do so by that party.

Response 1

Canada considers that the data to be collected by the contractor under the resulting contract does not fall within the definition of "Background Information" under clause IP2. As such, Canada is not seeking to own or obtain a license to the data. However, it remains the contractor's responsibility to be able to access, use and provide such data as required for the purposes of fulfilling its obligations under the Statement of Work to Canada.

2. SECURITY REQUIREMENTS

SECTION 1 – BID SUBMISSION REQUIREMENTS:

Delete article 1.6, SECURITY REQUIREMENTS in its entirety and replace with:

1.6 SECURITY REQUIREMENTS

This RFP does not contain a Security Requirement.

APPENDIX 1 – RESULTING CONTRACT CLAUSES:

Delete article 1.3 SECURITY REQUIREMENTS in its entirety and replace with:

1.3 SECURITY REQUIREMENTS

There is no security requirement applicable to this Contract.

Unscreened contractors must be escorted by an employee or Commissionaire at all times when visiting GoC facilities.

Information which is to be used in the development of the contracted product(s), as reference material or otherwise made available to the contractor, must be unclassified material and considered to be releasable to the public by PHAC/HC and/or The Government of Canada.

No Protected or Classified information is to be made available to the contractor, used in the production of the contracted product, or produced as a result of this contract.

ANNEX C – SECURITY REQUIREMENTS:

Delete CONTRACT SECURITY CLAUSES and SECURITY REQUIREMENTS CHECKLIST (SRCL) in their entirety and replace with:

ANNEX C – SECURITY REQUIREMENTS

THERE IS NO SECURITY REQUIREMENT

Amendment No.: 04

3. MANDATORY CRITERIA M3

SECTION II - BID EVALUATION PROCEDURES AND EVALUATION CRITERIA: Delete the table of Mandatory Technical Criteria in its entirety and replace with the following:

	addresses the r	requirement
Mandatory Technical Criteria	Met (Yes/No)	Cross- Reference to bid (indicate page #)
Bidder Experience in Public Health and Health Administrative Data	Domains	
The Bidder must demonstrate a minimum of three (3) years' experience the five (5) years preceding the date of bid closing working in both public health and health administrative data domains. Bidders experience will be further evaluated in point rated criterion R1.		
Experience Publishing Publications Using Administrative Data		
The Bidder must demonstrate experience publishing publications using administrative data by providing one (1) example of such a publication. The example should be in either MS Word or PDF format. Additional examples of such work will be further evaluated in point rated criterion R2.		
Administrative Databases	Held CCDSS	
The Bidder must demonstrate ability to access and work with provincially or territorially held CCDSS administrative databases (physician billing and hospital records) and electronic medical record database which includes records for at least 10,000 individuals, or similar reference standard data such as medical charts, by describing one (1) project undertaken within the five (5) years preceding the date of bid closing where it accessed the stated databases.		
The Bidder must certify that it currently has the authorization required from provincial/territorial authorities to access the administrative databases described in the Statement of Work by completing, and including the following certification in its Technical Proposal: Certification: The Bidder certifies that at the time of bid closing it holds any authorization required by the relevant provincial/territorial authorities to access and work with the data in the administrative databases described in the Statement of Work. Bidder: Individual Authorized on behalf of the Bidder: Name: Title: Signature:		
	Bidder Experience in Public Health and Health Administrative Data The Bidder must demonstrate a minimum of three (3) years' experience the five (5) years preceding the date of bid closing working in both public health and health administrative data domains. Bidders experience will be further evaluated in point rated criterion R1. Experience Publishing Publications Using Administrative Data The Bidder must demonstrate experience publishing publications using administrative data by providing one (1) example of such a publication. The example should be in either MS Word or PDF format. Additional examples of such work will be further evaluated in point rated criterion R2. Bidder Ability to Access and Work with Provincially or Territorially Administrative Databases The Bidder must demonstrate ability to access and work with provincially or territorially held CCDSS administrative databases (physician billing and hospital records) and electronic medical record database which includes records for at least 10,000 individuals, or similar reference standard data such as medical charts, by describing one (1) project undertaken within the five (5) years preceding the date of bid closing where it accessed the stated databases. The Bidder must certify that it currently has the authorization required from provincial/territorial authorities to access the administrative databases described in the Statement of Work by completing, and including the following certification in its Technical Proposal: Certification: The Bidder certifies that at the time of bid closing it holds any authorization required by the relevant provincial/territorial authorities to access and work with the data in the administrative databases described in the Statement of Work. Bidder: Individual Authorized on behalf of the Bidder: Name: Individual Authorized on behalf of the Bidder:	Bidder Experience in Public Health and Health Administrative Data Domains The Bidder must demonstrate a minimum of three (3) years' experience the five (5) years preceding the date of bid closing working in both public health and health administrative data domains. Bidders experience will be further evaluated in point rated criterion R1. Experience Publishing Publications Using Administrative Data The Bidder must demonstrate experience publishing publications using administrative data by providing one (1) example of such a publication. The example should be in either MS Word or PDF format. Additional examples of such work will be further evaluated in point rated criterion R2. Bidder Ability to Access and Work with Provincially or Territorially Held CCDSS Administrative Databases The Bidder must demonstrate ability to access and work with provincially or territorially held CCDSS administrative databases (physician billing and hospital records) and electronic medical record database which includes records for at least 10,000 individuals, or similar reference standard data such as medical charts, by describing one (1) project undertaken within the five (5) years preceding the date of bid closing where it accessed the stated databases. The Bidder must certify that it currently has the authorization required from provincial/territorial authorities to access the administrative databases described in the Statement of Work by completing, and including the following certification in its Technical Proposal: Certification: The Bidder certifies that at the time of bid closing it holds any authorization required by the relevant provincial/territorial authorities to access and work with the data in the administrative databases described in the Statement of Work. Bidder: Individual Authorized on behalf of the Bidder: Name: Individual Authorized on behalf of the Bidder:

Amendment No.: 04

M4	Ability to Conduct Validation Studies	
	The Bidder must demonstrate its ability conduct validation studies by describing one (1) project where it: ueried linked databases using statistical software such as SAS; prepared written technical reports: summarizing research literature	
	 and interpreted data and the method for doing so; made recommendations for ongoing surveillance. 	

4. ANNEX A – STATEMENT OF WORK

Delete the Annex A of the RFP in its entirety and replace with:

ANNEX A – STATEMENT OF WORK

CCDSS Validation - multi-year disease specific

1. SCOPE

1.1. Introduction

The Public Health Agency of Canada (PHAC) has a requirement to conduct a study analysing the continued validity of several case definitions for identifying patients with specific chronic conditions.

This validation study will provide background information to the Agency, the provinces and territories, and other relevant organizations to guide future related work and to better understand whether coding in administrative data can be used reliably for national surveillance purposes for specific chronic conditions.

1.2. Objectives of the Requirement

The objectives of this project are:

- 1. to conduct and maintain for the duration of the contract, an environmental scan of existing validation work for the surveillance of chronic diseases in Canadian provincial/territorial jurisdictions using administrative data held by the provinces and/or territories;
- 2. develop a plan to identify priority case definitions for chronic diseases to be validated in this project; and
- 3. to provide evidence of the validity of case definitions, over an identified time, of specific chronic conditions for national chronic disease surveillance purposes, using information from provincial/territorial administrative databases (physician billing database, hospital discharge abstracts, emergency room visit database [NACRS] and other databases such as laboratory or pharmaceutical databases as required), validated against a reference standard in multiple provincial/territorial jurisdictions.

This will be a multi-year study with the flexibility to address different priority conditions as needed (a minimum of six (6) conditions).

Priority conditions may include any of the following: diabetes, hypertension, mental illness (overall, mood and anxiety disorders, schizophrenia and delusional disorders), chronic respiratory (COPD, asthma), ischemic heart disease, heart failure, osteoporosis and related fractures, stroke, multiple sclerosis (MS), Parkinsonism, arthritis and related joint conditions, Alzheimer's disease and other dementias, epilepsy, or cancer.

For each condition selected, the objectives of the validation component of this work are to:

1. Use provincially/territorially held administrative data sources (health insurance registry, hospital discharge abstract database, physician billings, emergency department visits, laboratory data, and/or prescription drug data) to define a case in the reference population based on established criteria/expert panel.

Amendment No.: 04

2. Validate case definitions provided by PHAC by calculating the sensitivity, specificity, positive predictive value and negative predictive value of each case definition against a reference data source over-time.

3. Determine the best administrative data algorithm to estimate specific chronic condition occurrence measures including prevalence and incidence.

1.3. Background and Specific Scope of the Requirement

The Canadian Chronic Disease Surveillance System (CCDSS) is a collaborative network of provincial and territorial surveillance systems supported by PHAC. The CCDSS was originally created to improve the breadth of information about the burden of diagnosed diabetes in Canada for a wide audience comprised of policy makers, researchers, health practitioners, and the general public. The Public Health Network's Task Group on the Surveillance of Chronic Disease and Injury decided on priority conditions under surveillance and made recommendations for ongoing surveillance. In 2009, the CCDSS was expanded to include the surveillance of hypertension and mental illness (overall and mood and anxiety disorders). Since then, additional expansion has added chronic respiratory (COPD, asthma), ischemic heart disease, heart failure, osteoporosis and related fractures, stroke, MS, Parkinsonism, Alzheimer's disease and other dementias and epilepsy. Additional pilot and feasibility work is underway regarding expansion to include: arthritis and related joint conditions, , and schizophrenia and delusional disorders.

Administrative health data are not collected for surveillance purposes, but rather for reimbursement purposes. Validation of administrative data is the process through which primary medical data (generally medical charts) are abstracted and reviewed to determine whether the patient actually experienced the event suggested by the algorithm applied to administrative data.

Previous disease specific validation studies for CCDSS have used Ontario's Electronic Medical Record Administrative data Linked Database (EMRALD) as a reference standard to test administrative data algorithms to assess validity of case definitions for diabetes, hypertension, myocardial infarction, ischemic heart disease, stroke, mental illness, epilepsy, MS and Parkinsonism.

2. REQUIREMENTS

2.1. Tasks, Activities, Deliverables and Milestones

Tasks

- 1. Conduct an environmental scan of existing (underway or planned; published or unpublished; may include key informant interviews) validation studies for chronic disease case definitions in Canadian jurisdictions using provincially/territorially held administrative data as well as internationally. The scan and subsequent updates will include additional information concerning gaps in data sources. The first scan will include identification of gaps with traditional validation data sources (e.g. use of chart review or electronic medical records will not capture those who do not encounter the health care system) and propose recommendations to address gaps. Subsequent scans will include assessment of gaps for physician billing data (e.g. incomplete shadow billing and alternate payment plans; out of province records, coverage of nurse practitioners, nurse visits in community hospitals) and for hospital billing data (e.g. out of province records).
- 2. Work with the project authority to develop a plan to identify and agree on priority case definitions (gaps) to be validated over time in this project.
- 3. Work with representatives from the Surveillance and Epidemiology Division, PHAC, to create detailed analysis plans and study designs.
- 4. Update and finalize reference standard case identification through consultation with medical experts as appropriate, and chart abstraction.
- 5. Query linked provincially/territorially held administrative databases using proposed analysis plans.
- 6. Prepare disease specific technical reports synthesizing the results of the validation study and documenting the codes developed and the analysis performed.
- 7. Provide SAS codes to the representatives of the Surveillance and Epidemiology Division.
- 8. Present methods, main results and recommendations of the validation study to the relevant CCDSS Working Groups by WebEx presentations as scheduled through consultation with the Project Authority.

Amendment No.: 04

9. Work with a minimum of one provincial and/or territorial partner in addition to its own jurisdiction in order to include results from multiple provincial/territorial jurisdictions. At least one of the provinces must be Ontario, British Columbia or Quebec due to the need for a large sample size.

10. Test PHAC-provided case definitions along with additional variations to identify cases of specified chronic diseases in an appropriate reference standard population with a sufficient number of records to provide reliable results (at least 10,000 records) and query the linked administrative databases in order to assess measures of the validity of case definitions.

Deliverables

- 1. Disease specific draft reports.
- 2. Disease specific final reports based on comments received through PHAC review of draft report to ensure that it meets requirements for the final deliverable. The Contractor will prepare a report documenting the codes selected and the analysis performed, and synthesizing the results of the validation study. In particular, the technical reports will include the following:
 - Background and rationale for conducting this analysis, a description of the provincial/territorial administrative data sources to be accessed and the codes used to extract the data;
 - Methodology used to query the administrative databases, extract the data, and validate the case definitions;
 - Results of the analyses;
 - Recommendations regarding which case definition algorithms should be used for national surveillance:
 - Recommendations regarding filling gaps in administrative data sources (as described within the description of the environmental scan) and regarding addressing privacy concerns encountered with some jurisdictions.

All draft and final reports will include aggregated summary data and will not contain personal information of individuals.

Validation of case definitions for a minimum of six (6) conditions is required.

2.2. Specifications and Standards

Results are expected to be synthesized in disease specific technical reports that document methodology, details on the analysis performed, and results that include an assessment of the 'best' case definition algorithms for national surveillance. Variations in methodology, analyses and/or results for specific conditions should be clearly noted in the technical reports.

Details of the analysis including case definitions, ICD codes, applicable databases, and other specifications in the form of disease specific frameworks will be provided.

2.3. Technical, Operational and Organizational Environment

All tools for the implementation for this project will be provided by the Contractor.

2.4. Method and Source of Acceptance

All required reports will be provided to the Departmental Representative both in hard copy and electronic format using Microsoft Word for text and Excel or Powerpoint files for tables or figures. Coding will be provided in SAS format.

2.5. Reporting Requirements

The Contractor will communicate with the Technical Authority on a monthly or as needed basis through conference calls (when discussion and decisions are necessary) or email status updates.

2.6. Project Management Control Procedures

The individual identified in the contract as the Project Authority will monitor progress through regular conference calls or emails, receive the deliverables, and ensure the payment schedule is matched to the measurement of performance (specified in the timelines) throughout the contract.

Amendment No.: 04

The Contractor Project Lead will be required to attend one face-to-face meeting annually with PHAC representatives in Ottawa.

3. ADDITIONAL INFORMATION

3.1. Canada's Obligations

PHAC will provide coordination and guidance to the Contractor through the Departmental Representative who will:

- ensure availability of a Project Coordinator/Technical Authority to coordinate activities;
- provide all relevant background information including CCDSS documentation and reference material previously collected to support CCDSS expansion;
- coordinate access to consulation with related working group members; and
- provide guidance and approval for draft reports within 10 working days.

3.2. Contractor's Obligations

Unless otherwise specified, the Contractor must use its own equipment and software for the performance of this Statement of Work.

3.3. Location of Work, Work site and Delivery Point

All work will take place at the Contractor's worksite and will be delivered to the Surveillance and Epidemiology Division, CCDP, Public Health Agency of Canada, 785 Carling Avenue, Address Locator: 6806A, Ottawa, Ontario K1A 0K9.

Due to existing workload and deadlines, all personnel assigned to this contract must be ready to work in close and frequent contact with the Departmental Representative and other departmental personnel.

3.4. Language of Work

The final reports will be submitted in English.

4. PROJECT SCHEDULE

4.1. Schedule and Estimated Level of Effort (Work Breakdown Structure)

Year 1/Task 1

Complete initial environmental scan and recommend priority minimum of six (6) priority conditions

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Task Activities	Deliverable
Environmental scan of existing validation	Approach to scan and priority setting
studies	Report identifying gaps with traditional validation
 Develop approach to scan and priority 	data sources
setting	Priority case definitions for validation
Identify priority case definitions (gaps) to	Recommendations to address gaps
be validated	Identified plans and designs
Create analysis plans and study designs	Recommendation of minimum six (6) priority
	conditions

Year 2/Task 2

Validation of minimum two (2) priority conditions

Task Activities	Deliverable
 Validation Scan Update validation scan Conduct scan on assessment of gaps for physician billing data 	Report of scan

Amendment No.: 04

Validation of minimum two (2) priority Abstraction manual for data abstraction conditions Draft disease specific technical report Update reference standard case Final report. identification and chart abstraction Provide SAS codes Develop manual for data abstraction Conduct data abstraction Set up abstraction database Query linked administrative databases using proposed analysis plan Prepare disease specific technical report synthesizing the results of codes developed and the analysis performed Review and revise draft report to ensure it meets requirements for final report deliverable based on PHAC feedback

Year 3/Task 3 Update environmental scan and priority recommendations. Validation of minimum two (2) priority conditions

Task Activities	Deliverable
Validation Scan Update validation scan. Conduct scan on assessment of gaps for hospital billing data Update reference standard case	Report of scan Abstraction manual for data abstraction
 Opdate reference standard case identification and chart abstraction Validation of minimum 2 priority conditions Develop manual for data abstraction Conduct data abstraction Set up abstraction database Query linked administrative databases using proposed analysis plan Prepare disease specific technical report synthesizing the results of codes developed and the analysis performed 	 Draft disease specific technical report Final report. Provide SAS codes
 Review and revise draft report to ensure it meets requirements for final report deliverable based on PHAC feedback 	

Year 4/Task 4

Update environmental scan and priority recommendations. Validation of minimum two (2) priority conditions

Task Activities	Deliverable
Year 4 Validation Scan	Report of scan
 Update validation scan. 	
 Conduct scan on assessment for other gaps 	
identified in project	

Amendment No.: 04

•	Update reference standard case	
	identification and chart abstraction	

- Validation of minimum 2 priority conditions
- Develop manual for data abstraction
- Conduct data abstraction
- Set up abstraction database
- Query linked administrative databases using proposed analysis plan
- Prepare disease specific technical report synthesizing the results of codes developed and the analysis performed
- Review and revise draft report to ensure it meets requirements for final report deliverable based on PHAC feedback

- Abstraction manual for data abstraction
- Draft disease specific technical report
- Final report.
- Provide SAS codes

5. REQUIRED RESOURCES OR TYPES OF ROLES TO BE PERFORMED

The Contractor must have ready established access to different provincially or territorially held CCDSS administrative databases (physician billing and hospital records) and electronic medical record database or similar reference standard data as agreed to by the Technical Authority.

The Contractor must have the ability to query linked databases using statistical software such as SAS, and prepare written technical reports summarizing literature, describing methods and interpreting data, and making recommendations for ongoing surveillance.

6. APPLICABLE DOCUMENTS AND GLOSSARY

a. Applicable Documents

Documentation will be provided by the Technical Authority as needed (e.g. disease specific CCDSS algorithms and frameworks).

b. Relevant Terms, Acronyms and Glossaries

CCDP Centre for Chronic Disease Prevention
CCDSS Canadian Chronic Disease Surveillance System
COPD Chronic obstructive pulmonary disease

EMRALD Electron Medical Record Administrative data Linked Database

ICD International Classification of Diseases
NACRS National Ambulatory Care Reporting System

PHAC Public Health Agency of Canada

5. BID CLOSING

Delete July 12, 2017 and replace with July 27, 2017 at A4, BID CLOSING DATE, and A10, BID DELIVERY, on page 1 of the RFP.

All other terms and conditions of the RFP remain unchanged.