

Pan-Canadian Primary Health Care Electronic Medical Record Content Standard, Version 3.0—Frequently Asked Questions

Background and History

1. What is primary health care?

Primary health care (PHC) is the first level of care and usually the first point of contact that Canadians have with the health care system. PHC is the foundation of Canada's health system and the most common type of health care that Canadians experience. It supports individuals and families to make the best decisions for their health. It includes advice and interventions for health promotion, disease prevention, health assessments, diagnoses and treatments of episodic and chronic conditions, and supportive and rehabilitative care. Services are coordinated and are provided by health care professionals such as family physicians, nurses, dietitians, physiotherapists, pharmacists and social workers, among others.

2. What are electronic medical records and how are they different from electronic health records?

Electronic medical records (EMRs) are computerized systems that enable PHC clinicians to store, retrieve and manipulate encounter-related information about their patients electronically. The EMR contains the medical and treatment history of the patients in one practice. Advancing the adoption of EMRs that use pan-Canadian standards to exchange information with other points of care is important. Standards adoption is essential for achieving the health care benefits of the e-health investments being made across the country.

Electronic health records (EHRs) focus on the total health record of the patient, including medical and other treatments performed in various parts of the health care system. EHRs include EMR information, but they provide a broader view of a patient's care. They are built to share information with a variety of health care providers (e.g., lab workers, specialists), so they contain information from all the clinicians involved in the patient's care over his or her lifetime.

3. What is the PHC EMR Content Standard?

Working in collaboration with jurisdictions, clinicians and Canada Health Infoway, the Canadian Institute for Health Information (CIHI) developed the PHC EMR Content Standard (PHC EMR CS).



It includes priority data elements commonly collected through EMRs at the point of care in a standardized way, such as Health Concern, Social Behaviour and Reason for Visit. The standard is supported by code sets, which are not visible to end users but enable the collection of structured, comparable EMR data for improved clinical care and health system use. The original 106 data elements in the standard have been reduced to 45 priority elements known as the Priority Subset. The Priority Subset was validated and the final scope endorsed by the Jurisdictional Advisory Group (JAG) in December 2013.

For more information about the Priority Subset, please refer to [Pan-Canadian Primary Health Care Electronic Medical Record Content Standard, Version 3.0—Business View \(April 2014\)](#), available at www.cihi.ca/phc.

4. What are the benefits of the PHC EMR CS?

The PHC EMR CS is a pan-Canadian solution to facilitate the availability of structured EMR data. It enables the collection of comparable, standardized EMR data to support clinical quality improvement and health system use of EMR information. The Priority Subset data elements are aligned to jurisdictional priorities and PHC information needs. For instance, standardized EMR data will support population health analysis and PHC performance measurement to improve quality, outcomes, efficiency and access to care. For PHC clinicians, this means better EMR data for chronic disease management and additional insights into the quality of care, patient safety and efficiency in their practices.

A single pan-Canadian standard could also benefit EMR vendors through lower EMR implementation and maintenance costs in the longer term.

5. How were the PHC EMR CS Priority Subset data elements identified?

The Priority Subset data elements were identified based on the following criteria/considerations:

- Jurisdictions identified them for inclusion in their provincial EMR specifications.
- They have a high level of completeness, as revealed through an analysis of the EMR data in CIHI's PHC Voluntary Reporting System Prototype (now decommissioned).
- Key stakeholders identified them as critical to support priority PHC information needs.

For more information, please refer to [Pan-Canadian Primary Health Care Electronic Medical Record Content Standard, Version 3.0—Business View \(April 2014\)](#), available at www.cihi.ca/phc.

6. What is health system use of data and how will the PHC EMR CS support it?

Health system use (HSU) refers to the re-use of data collected for clinical care to inform broader health system management. The Priority Subset data elements that are captured in EMRs at the point of care support HSU needs, including clinical program management, health system management, research and population health analysis.

7. Who participated in the development of the PHC EMR CS?

CIHI led the development of the pan-Canadian PHC EMR CS in collaboration with Canada Health Infoway and the JAG. The JAG is made up of senior representatives from the federal, provincial and territorial governments and related agencies. In addition, jurisdictional stakeholders on the

Content Standard Working Group (CSWG) provided input about the original 106 data elements, and subsequently endorsed the Priority Subset in December 2013.

8. Who is driving the adoption and implementation of the PHC EMR CS?

In partnership with CIHI, Canada's federal, provincial and territorial (F/P/T) jurisdictions are driving the adoption and implementation of the PHC EMR CS. In addition to standards, other key enablers to adoption include leadership, data governance, capacity-building and policy frameworks at the jurisdictional level. CIHI supports F/P/T jurisdictions by providing PHC EMR CS products that are aligned with their priority needs. CIHI also offer subject matter expertise and technical guidance to implementers of the Priority Subset and Clinician-Friendly Pick-Lists (CFPLs).

9. What are Clinician-Friendly Pick-Lists?

CFPLs consist of common terms used in practice by PHC clinicians that have been mapped to appropriate code system(s) (see question 11). The CFPLs are intended to enable the collection of structured EMR data at the point of care. In turn, the structured data will support aggregate-level reporting at the practice and health system levels. CFPLs will serve as a backbone within a broader scope of terms captured at the point of care. For more information about the CFPL scope, please refer to *Pan-Canadian Primary Health Care Electronic Medical Record Content Standard, Version 3.0—Clinician-Friendly Pick-List Guide*, available at www.cihi.ca/phc.

10. What stakeholder input informed the development of the CFPLs?

In March 2014, the draft list of clinician-friendly terms was circulated and reviewed by a cross-section of stakeholders, including clinicians, nurse practitioners, decision-support specialists, ministerial representatives and Canada Health Infoway. Their feedback informed the refinement of the CFPL terms and confirmed that the scope met priority clinical requirements and broader PHC information needs. In May 2014, the updated CFPLs and mapping plan were reviewed and supported by the JAG.

11. What code systems were leveraged to support the CFPLs?

The CFPLs leveraged high-level code systems: the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Canada (ICD-10-CA), the International Statistical Classification of Diseases and Related Health Problems, Ninth Revision (ICD-9) and the Canadian Classification of Health Interventions (CCI). In addition, a constrained scope of the Systematized Nomenclature of Medicine—Clinical Terms (SNOMED CT) was used for selected CFPLs.

12. How will the PHC reference sets support the PHC EMR CS?

The PHC reference sets (ref sets) provide implementers with a list of allowable codes (e.g., SNOMED CT and Logical Observation Identifiers Names and Codes [LOINC]) to enable structured EMR data at the point of care. Patient Gender, Visit Type and Patient Identifier Type are examples of ref sets supporting the PHC EMR CS. Some ref sets have been constrained to support the focused scope of the CFPLs (e.g., Vaccine Administered, Referral Service). For more information

about the ref sets, visit Canada Health Infoway's website at https://infocentral.infoway-inforoute.ca/2_Standards.

Adoption, Implementation and Maintenance

13. What are the current PHC EMR CS products and where can they be accessed?

The PHC EMR CS and supporting products are available on CIHI's website at www.cihi.ca/phc and on Canada Health Infoway's Infocentral website at https://infocentral.infoway-inforoute.ca/2_Standards:

- PHC EMR CS Information Sheet
- Business View Version 3.0
- Data Models Version 3.0
- Technical Guide Version 3.0
- PHC EMR CS Version 3.0—Clinician-Friendly Pick-List Guide
- CFPL Spreadsheets Version 1.0*

* For information about obtaining the CFPL Spreadsheets Version 1.0, please send an email to vendors@cihi.ca.

14. Is a licence agreement associated with the CFPLs?

In order to protect the integrity of the CFPL terms and associated mappings to ICD-10-CA/CCI, licence agreements are required with commercial vendors, governments, non-commercial entities and others.

These agreements provide stakeholders with access to the CFPL Spreadsheets so they can develop and implement the CFPLs as part of their EMR vendor requirements. Stakeholders are required to sign a licence agreement and pay a nominal fee to receive the CFPLs. For additional information about licence agreements, send an email to vendors@cihi.ca.

15. What is the maintenance plan for the Priority Subset and CFPLs?

CIHI will develop a maintenance plan that will include a stakeholder change request process and input from the JAG. Future versions of the Priority Subset and CFPLs will be informed by implementation experiences. Canada Health Infoway will continue to retain accountability for the existing PHC ref sets that are associated with the PHC EMR CS.

Technical Considerations

16. Can additional data elements be implemented beyond the Priority Subset?

Jurisdictions may define and collect data elements beyond the Priority Subset, depending on their particular programs and needs. When considering additional data elements, it is recommended

that jurisdictional stakeholders retain the core relationships in the PHC EMR CS Data Models to facilitate use of the data for subsequent PHC priority indicator calculation. The PHC EMR CS Version 2.1 Data Models may serve as a reference for data relationships beyond the Priority Subset. For more information, please refer to [Pan-Canadian Primary Health Care Electronic Medical Record Content Standard, Version 3.0—Technical Guide \(April 2014\)](#), available at www.cihi.ca/phc.

17. Will CIHI continue to maintain the pan-Canadian Data Extract Specification?

CIHI's current focus is on providing tools to facilitate the capture of structured EMR data at the point of care. As such, the previously released pan-Canadian Data Extract Specification (DES) v2.1 has not been updated. CIHI will evaluate the need to update the DES, depending on the needs of jurisdictions that choose to implement the PHC EMR CS. CIHI is interested in collaborating with jurisdictions that are implementing the PHC EMR CS, including the CFPLs.

18. What are the key changes in the updated Data Models that support the PHC EMR CS?

The PHC EMR CS Data Models Version 3.0 support the Priority Subset of 45 data elements. Many of the data elements supported in the previous version no longer exist in the new Data Models. The associations between entities have also been loosened to provide flexibility in storing data as well as to minimize potential data loss (e.g., the association between Intervention and Encounter is now optional). Additionally, new associations between entities have been added (e.g., the association between Referral Request and Referral Result). For more information, please refer to [Pan-Canadian Primary Health Care Electronic Medical Record Content Standard, Version 3.0—Technical Guide \(April 2014\)](#), available at www.cihi.ca/phc.

Privacy

19. When implementing the PHC EMR CS, what consideration should be given to privacy policies and legislation?

Users of the PHC EMR CS should comply with the 10 privacy principles established in the Canadian Standards Association's *Model Code for the Protection of Personal Information*, relevant F/P/T jurisdictional privacy legislation and guidance provided by privacy oversight bodies.

For more information, please contact CIHI at phc@cihi.ca.