

Implementing Primary Health Care EMR Content Standard Supports Improving Patient Care and Health System Management

Across Canada, primary health care (PHC) is one of the busiest parts of the health care system; as such, it has a major influence on the performance of the health system overall and on the health status of the population. Health system managers and policy-makers from across Canada have identified the need for more and better PHC information as a major priority to support health system improvements. Much of this priority information can be made available through PHC electronic medical records (EMRs), provided EMRs are enabled to support

this need. To this end, CIHI, jurisdictions and Canada Health Infoway developed the Pan-Canadian Primary Health Care Electronic Medical Record Content Standard (PHC EMR CS) to ensure PHC EMRs can make available high-quality, high-priority PHC data to support both patient care and health system management needs. Efforts are now under way to maximize the implementation of the PHC EMR CS in PHC EMRs across Canada. Analyzing EMR data from primary care benefits all four aspects of health system use, as described below.

PHC EMR CS and Indicators—Benefits

Improving Patient Care and Health System Management
Implementation of the PHC EMR CS creates the capacity necessary to populate priority indicators and realize benefits in all four health system use areas

Health System Use

Clinical Program Management	Health System Management	Health of the Public	Research
Use of data to improve frontline health care programs and services	Use of data to improve the effectiveness and efficiency of the health care system	Use of data to understand the health of the public and for public health activities	Use of data for health research
Potential Benefits <ul style="list-style-type: none"> • Supports clinical alerts, e-referrals and reminders, leading to improved patient care, safety and outcomes • Supports the identification of high-risk patients requiring follow-up • Supports quality improvement and clinical program planning information needs 	Potential Benefits <ul style="list-style-type: none"> • Availability of priority indicators to assess and improve performance over time and across regions • Data for better health system management decision-making • Reduction of data collection burden and costs through privacy-appropriate reuse of data collected at point of care 	Potential Benefits <ul style="list-style-type: none"> • More-informed decisions around screening and interventions based on data trends across populations • Leads to improved disease prevention and population health status 	Potential Benefits <ul style="list-style-type: none"> • More and better-quality data and information with which to answer research questions • Leads to new evidence-based knowledge and improved screening, diagnoses and management of the health system
Example: Diabetes Percentage and list of diabetes patients in the practice that need to be called in for screening/monitoring	Percentage of diabetes patients in regions that did not get diabetes complication risk screening and management in past year	Percentage of overweight/obese adults who did not get advice on how to prevent diabetes in past year, by health region	Percentage of diabetes patients in province that did not get a protein urine test in past year, by household income and ethnicity group

PHC EMR CS Implementation Across Canada: Expected Benefits

Health System Use (HSU) of Data	Priority PHC EMR data can be accessed in a highly efficient and privacy-appropriate manner at the patient, provider, practice, regional and jurisdictional levels to support a range of patient care and HSU purposes.		
Use	<ul style="list-style-type: none"> • Practice-level monitoring of patients, practice subgroups and appropriate patient follow-ups • Jurisdictional- and regional-level policy development, performance improvement, public health programming and accountability initiatives • Quality improvement initiatives like CIHI's PHC Voluntary Reporting System (an EMR data source and feedback reporting system) • Research to improve clinical knowledge and best practices 		
Sample Indicators	<p>Screening and Monitoring Indicators</p> <ul style="list-style-type: none"> • Percentage of patients with diabetes mellitus who received annual complication risk screening within past 15 months • Percentage of patients who had their blood pressure measured and managed within past 15 months • Percentage of patients who have had a heart attack and are currently prescribed a beta-blocking drug <p>Outcome-Related Indicators</p> <ul style="list-style-type: none"> • Percentage of patients with diabetes mellitus for whom HgA1C was at target over last 15 months • Percentage of patients with hypertension (duration of at least one year) who had blood pressure under control over the past 15 months 		
Decisions/Impact	<ul style="list-style-type: none"> • Provide comparative data to evaluate and inform new health care practices • Ability to compare performance with similar clinicians and practices, resulting in improved performance and evaluation of policies and programs • Data informing quality improvement initiatives to identify gaps in care • PHC teams understand performance and have data to prioritize and evaluate quality improvement 		
Outcomes	<p>Implementation of the PHC EMR CS in EMRs across Canada will result in the following outcomes:</p> <table border="0"> <tr> <td data-bbox="310 1125 748 1398"> <p>Short Term</p> <ul style="list-style-type: none"> • More standardized EMR data • More comparable EMR data • Better functionality within EMRs • Improved interoperability with EMRs/electronic health records • Lower EMR development costs </td> <td data-bbox="748 1125 1570 1398"> <p>Long Term</p> <ul style="list-style-type: none"> • Increased PHC data availability for multiple health system use purposes • More informed decisions based on better PHC performance measurement and quality improvement data • Improved PHC and broader health system performance • Better integration of care; safer PHC • Improved health status and chronic disease prevention and care • A more efficient and competitive EMR industry </td> </tr> </table>	<p>Short Term</p> <ul style="list-style-type: none"> • More standardized EMR data • More comparable EMR data • Better functionality within EMRs • Improved interoperability with EMRs/electronic health records • Lower EMR development costs 	<p>Long Term</p> <ul style="list-style-type: none"> • Increased PHC data availability for multiple health system use purposes • More informed decisions based on better PHC performance measurement and quality improvement data • Improved PHC and broader health system performance • Better integration of care; safer PHC • Improved health status and chronic disease prevention and care • A more efficient and competitive EMR industry
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Why should clinicians care about standards?

“Data standards allow comparisons between patients within the practice as well as comparisons across practices, and they facilitate surveillance and a population health approach to primary health care.”

—Dr. Alan Katz, Family Physician, Winnipeg, Manitoba

Once implemented, the PHC EMR CS will increase the availability of well-defined and comparable data, which will enable clinicians to access important clinical insights from the data in their EMRs, such as drug–drug interaction alerts, reminders for follow-up care, e-referrals or trending to understand how patients are doing over time.

Why should health system managers and policy-makers care about standards?

“This standard enables the consistent capture of information in EMRs that will help inform efforts to better manage the health system.”

—Tom Fogg, Quality and Innovation Consultant, Primary Health Care Branch, Manitoba Health

Contact Us

For more information, along with a list of indicators that can be calculated with the implementation of the PHC EMR CS, as well as examples of products that support clinicians and health system managers, please go to www.cihi.ca/phc or send us an email at phc@cihi.ca.