OntarioMD

Electronic Medical Records

CORE EMR SPECIFICATION

Section 1: EMR Baseline Requirements

Version 4.2

FINAL

Date: April 1, 2015

Ontario
eHealth Ontario

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GLOSSARY

TERM	MEANING
Baseline Requirements	Those elements of the EMR Specification that are identified herein as the Baseline Requirements applicable to an EMR Offering.
CDS	Core Data Set The sub-set of patient medical data that can be transferred between two EMR systems and as defined in the CDS XSD Schema.
CMS	Clinical Management System – Referred to as EMR starting from EMR Specification v4.0
CNO	College of Nurses of Ontario
CNO Number	The 7 or 8 alphanumeric unique identifier assigned by CNO to registered nurses (RNs), nurse practitioners (NPs) and registered practical nurses (RPNs) in Ontario.
CPP	Cumulative Patient Profile
CPSO	The College of Physicians and Surgeons of Ontario
CPSO Number	The 5 or 6 digit unique identifier number assigned by CPSO to physicians, allowing them to practice medicine in Ontario.
Data Dictionary	The collection of discrete data elements including their definition and relationships and referenced by Ontario EMR Requirements Repository.
DIN	Drug Identification Number
EMR	Electronic Medical Record
EMR Offering	A specific software version of an EMR product and the services and support for that particular product, all as more particularly described in the EMR Certification Agreement.
EMR specification	An EMR specification is one of several Ontario EMR Specifications that define functional and non-functional requirements for an EMR Offering in Ontario. Each specification in the Ontario EMR Specifications focuses on a particular component, functionality or interoperability and will be updated over time as new requirements and/or enhancements are introduced.
HCN	Health Card Number The lifetime identification number assigned to all eligible residents within a jurisdiction (province) for the purpose of receiving provincially funded insured health services.
HRM System	OntarioMD Hospital Report Manager System The OntarioMD integration engine that enables the electronic transmission of patient text based report from a hospital (or other facilities) to their practice-based EMR's providers.
HRM Reports	The hospital reports that are downloaded from the HRM system (sFTP server) in xml format and compliant with HRM – XSD Schema
ICD	International Classification of Diseases ICD standards: ICD-9, ICD9-CM, ICD10, ICD10-CM, ICD10-PCS, ICD10-CA / CCI
ISO	International Standards Organization
Lab Request/Order	A valid request to perform one or more tests / observations on one or more specimens. A "Lab Request/Order" is initiated by a provider using the EMR or by manually filling in a laboratory requisition form.
M	Mandatory requirement. An EMR Offering must have this function or provide this service.
MOHLTC	Ministry of Health and Long-Term Care
MRI	Machine Readable Input

TERM	MEANING
MRP	Most Responsible Physician The attending physician who is primarily responsible for the day-to-day care of patient. In absence, the covering physician will fulfill the MRP role.
OHCN	Ontario Health Card Number The lifetime identification number assigned to all eligible residents in Ontario for the purpose of receiving provincially funded insured health services.
OHIP	Ontario Health Insurance Program
OHISC	Ontario Health Informatics Standards Council
OLIS	Ontario Laboratories Information System
OMA	Ontario Medical Association
OntarioMD	OntarioMD Inc., a wholly owned subsidiary of the Ontario Medical Association (OMA)
Ontario EMR Requirements Repository	The collection of functional requirements and discrete data elements published by OntarioMD; includes new, existing and retired requirements.
Provider	A person who provides healthcare services to patients.
RA	Remittance Advice
SOAP	Subjective, Objective, Assessment, and Plan. The SOAP note is a format for documenting patient encounters.
SNOMED	Systematized Nomenclature of Medicine
Specification	The Ontario EMR Specification, as amended from time to time and developed by OntarioMD. in partnership with eHealth Ontario.
Standard Coding System	A code that identifies the coding scheme used in the source system to classify diseases, procedures and a wide variety of signs, symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or disease. Recognized Standard Coding Systems: ICD, CPT, SNOWMED, ICPC, ENCODE-FM
W	Weighted requirement. The EMR Offering will receive a point value if the requirement is met.
WHO	World Health Organization
WSIB	Workplace Safety Insurance Board
XML	Extensible Mark-up Language
XSD Schema	The XML-based language used to describe and control XML document contents.

1. INTRODUCTION

1.1 OVERVIEW OF THE CORE EMR SPECIFICATION

This specification is one of several Ontario EMR Specifications that define functional and non-functional requirements for an EMR Offering in Ontario. Each specification focuses on a particular component, functionality or interoperability and will be updated over time as new requirements and/or enhancements are introduced.

The Core EMR Specification is comprised of three sections:

- Section 1: EMR Baseline Requirements
- Section 2: Data Portability
- Section 3: Data Sharing

1.2 OVERVIEW OF THE EMR BASELINE REQUIREMENTS

Baseline Requirements define a minimum set of functional and non-functional requirements that are fundamental to an EMR Offering.

Some of the functional requirements refer to MOHLTC guidelines. Ministry guidelines are available through various sources. These include:

- http://www.health.gov.on.ca/english/providers/program/ohip/bulletins/bulletin_mn.html;
- http://www.health.gov.on.ca/; and
- https://www.ontariomd.ca/portal/server.pt/community/for_emr_vendors/227

OntarioMD will make reasonable efforts to post information received from the MOHLTC on its web site(s), however vendors are responsible for obtaining the necessary and most current information to meet the Baseline Requirements. OntarioMD shall not be responsible for the accuracy of the web site links that are contained in this document or for any information contained on such web sites. Respondents must contact the appropriate party to access the required information if links to these web sites are no longer available or if there is any doubt about accuracy or currency.

Functional requirements must be in line with all of the legal requirements under:

- Ontario Regulation 114/94 (*Medicine Act*, 1991)

  http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_91m30_e.htm

  and all policies (including updates) published by the

- The College of Physicians and Surgeons of Ontario's (CPSO) – including the policy on Medical Records. http://www.cpso.on.ca/policies/policies/default.aspx?ID=1686.

  This policy references various other legislative requirements, including those that may apply depending on the context within which a physician is practicing. Medical records are also a fundamental component of regulatory functions carried out by the CPSO under the authority of the *Regulated Health Professions Act*, *1991*.

  http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_91r18_e.htm

1.3 SCOPE OF THE EMR BASELINE REQUIREMENTS

The EMR Baseline requirements address requirements in each of the following categories:

Functional Requirements
- Demographic Management
- Electronic Medical Record (“EMR”) Management
- Immunization Management
- Medication Management
- Lab Test Management
- External Document Management
- Cumulative Patient Profile (“CPP”) Management
- Encounter Documentation
- Schedule Management
- Referral Management
- Reporting, Query and Communications
- Workflow Management
- Billing Management
- System Access Management
- Interface Requirements

Non-functional Requirements
- Data Management
- Auditing and Logging
- Implementation Support
- Licensing
- Privacy

Discrete Data Requirements
- Patient Demographics
- Patient Address
- Patient Alternative Contact
- Provider Information
- Family History
- Ongoing Health Conditions
- Past Medical & Surgical History
- Immunizations
- Medications
- Laboratory Test Results
- Allergies & Adverse Reactions
- Risk Factors
- Alerts & Special Needs
- Reports Received
- Appointments
- Care Elements

2. SPECIFICATION TRACEABILITY

2.1 HIGHLIGHTS OF CHANGES

Ontario EMR Specification v4.1 Appendix A was used as the basis to create this Core EMR Specification – Section 1: EMR Baseline Requirements.

This section describes changes from the previous version of the specification.

TYPE	# of Requirements v4.1	# of Requirements v4.2
New Requirements	30	3
Updated Requirements	20	24
Previous Requirements	148	168
Retired Requirements	N/A	2
Total Number of Requirements	198	195

NOTE: Due to splitting and/or merging requirements defined in the previous specification, the “Total Number of Requirements” in the current specification version is not to be calculated based on the “Total Number of Requirements” in the previous specification version.

2.2 RELATED DOCUMENTS AND REFERENCES

The following table lists all documents related to, or referenced in this specification.

DOCUMENT NAME	VERSION	DATE	PUBLISHING ORGANIZATION	LINK
Core EMR Specification – Section 2: Data Portability	Final / v4.2	1-Apr-2015	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/current_emr_specifications
Core EMR Specification – Section 3: Data Sharing	Final / v4.2	1-Apr-2015	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/current_emr_specifications
Data Dictionary	Final / v4.2	1-Apr-2015	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/current_emr_specifications
EMR Code Tables	Final / v4.2	1-Apr-2015	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/current_emr_specifications

DOCUMENT NAME	VERSION	DATE	PUBLISHING ORGANIZATION	LINK
Server Hardening Checklist	N/A	2011	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/historical_documents
OMA Physician's Guide to Third-Party & Other Uninsured Services	N/A	2013	Ontario Medical Association	To Be Provided
CPSO Policy Statement #4-12 Medical Records	N/A	May 2012	CPSO	http://www.cpso.on.ca/policies-publications/policy/medical-records
Ontario Regulation 114/94 (*Medicine Act*, 1991)	N/A	1991	Service Ontario	http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_91m30_e.htm
MOHLTC Guidelines • Preventive Care • Chronic Disease Management • Primary Care Agreements	Various	Various	MOHLTC	http://www.health.gov.on.ca/en/pro/programs/ohip/bulletins/ http://www.health.gov.on.ca/
Canadian Immunization Guide	Seventh Edition	2006	Public Health Agency of Canada	http://www.phac-aspc.gc.ca/publicat/cig-gci/index-eng.php
Technical Specifications – Interface to Health Care Systems	2.0	Dec 2011	MOHLTC	http://www.health.gov.on.ca/en/pro/publications/ohip/
OHIP Fee Schedule Master	N/A	N/A	MOHLTC	http://www.health.gov.on.ca/english/providers/program/ohip/sob/schedule_master.html
Health Card Validation Reference Manual	2.0	Mar 2014	MOHLTC	http://www.health.gov.on.ca/english/providers/pub/ohip/ohipvalid_manual/ohipvalid_manual_mn.html
Patient Enrollment	N/A	N/A	MOHLTC	http://www.health.gov.on.ca/en/pro/programs/fht/docs/fht_enrolment.pdf

OntarioMD will periodically review and update the above list. It is essential that implementers keep current regarding any changes to these specifications.

3. CORE EMR: BASELINE REQUIREMENTS

The following terms and abbreviations are defined and shall be applied to all tables in this section:

Scoring: **M** = Mandatory criteria
W = Weighted criteria

Status: **N** = New requirement for this EMR Specification
P = Previous requirement from EMR-Specification v4.1
U = Updated from a previous EMR Specification v4.1
R = Retired from previous EMR Specification v4.1

OMD #: unique identifier that identifies each requirement within *Ontario EMR Requirements Repository*

3.1 DEMOGRAPHIC MANAGEMENT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR01.01	Maintains patient demographic data for rostered patients.	At a minimum, the mandatory data elements defined in discrete data requirements for a rostered patient must be supported. *Refer to section 4.1 - Patient Demographics and 4.2 - Patient Address.*	M	P	
EMR01.02	Supports the assignment of a patient to the physician roster.	At a minimum, the mandatory data elements defined in discrete data requirements for the patient rostered to a physician must be supported. *Refer to discrete data elements Primary Physician, Patient Status and Patient Status Date in section 4.1 - Patient Demographic.*	M	U	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR01.03	Maintains the current and historical enrolment of a patient to the roster of a physician.	At a minimum, the mandatory data elements defined in discrete data requirements for an enrolled patient must be supported. *Refer to discrete data elements Enrolled To Physician, Enrolment Status, Enrolment Date, Enrolment Termination Date and Enrolment Termination Reason in section 4.1 - Patient Demographic Data.* The definitive patient enrolment to a physician used for payment is kept by the Ministry of Health and Long Term Care, not by the EMR. The user must be able to update the current and historical enrolment information. Patients are enrolled to a specific physician within a Physician Group, not to the Physician Group as a whole. Patients rostered to a physician can be either enrolled or non-enrolled. *For more information see:* *http://www.health.gov.on.ca/en/pro/programs/fht/docs/fht_enrolment.pdf*	M	U	
EMR01.04	Maintains multiple contacts.	At a minimum, the mandatory data elements defined in discrete data requirements for patient enrolment must be supported. *Refer to discrete data elements defined in section4.3 - Patient Alternative Contact.* A contact is a person named by the patient as someone who should be contacted in specific situations. At a minimum, the EMR Offering must support two contacts per patient. Each contact must support multiple contact purposes/roles, including Substitute Decision Maker and Emergency Contact.	M	P	
EMR01.05	Provides an automated method of identifying and preventing duplicate patient records.	The system should provide a method of preventing the creation of duplicate patient records. Duplicate records are identified by a name match, or by a health card number match. A health card number with a different version code should be considered the same patient record.	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR01.06	Supports merging of duplicate patient records.	Merging of patients refers to the merging of the entire patient medical record (not only patient demographics). Merging of duplicate records is a manual function controlled by the user. Automatic merging of duplicate records is not an acceptable solution. Prior to merging, the user must be notified of the permanence of the action and given an opportunity to confirm the merging of duplicate patient records. There is no requirement to undo merge.	M	P	
EMR01.07	Provides a means of access to the record of each patient by the patient's name and, if the patient has an Ontario health number, by the health number.	Based on Ontario Regulation 114/94, Section 20 (2).	M	P	
EMR01.08	Maintains demographic data for providers.	At a minimum, the mandatory data elements defined in discrete data requirements for a provider must be supported. *Refer to section 4.4 - Provider Information.*	M	P	

3.2 ELECTRONIC MEDICAL RECORD ("EMR") MANAGEMENT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR02.01	Maintains ongoing health conditions, medical problems and diagnoses.	At a minimum, the mandatory data elements defined in discrete data requirements for Ongoing Problems must be supported. *Refer to section 4.6 - Ongoing Health Conditions.*	M	P	
EMR02.02	Maintains past medical and surgical history.	At a minimum, the mandatory data elements defined in discrete data requirements for Past Medical and Surgical History must be supported. *Refer to section 4.7 - Past Medical and Surgical History.*	M	P	
EMR02.03	Maintains allergy and adverse reaction data.	At a minimum, the mandatory data elements defined in discrete data requirements for Allergies and Adverse Reactions must be supported. *Refer to section 4.11 - Allergies and Adverse Reactions.*	M	U	
EMR02.04	Maintains family medical history.	At a minimum, the mandatory data elements defined in discrete data requirements for Family Medical History must be supported. *Refer to section 4.5 - Family Medical History.*	M	P	
EMR02.05	Maintains medical alerts and special needs.	At a minimum, the mandatory data elements defined in discrete data requirements for Alerts and Special Needs must be supported. *Refer to section 4.13 - Alerts and Special Needs.*	M	P	
EMR02.06	Maintains immunizations data.	At a minimum, the mandatory data elements defined in discrete data requirements for Immunization must be supported. *Refer to section 4.8 - Immunizations.*	M	P	
EMR02.07	Maintains risk data.	At a minimum, the mandatory data elements defined in discrete data requirements for Risk Factors must be supported. *Refer to section 4.12 - Risk Factors.*	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR02.08	Maintains care element data.	At a minimum, the mandatory data elements defined in discrete data requirements for Care Elements must be supported. *Refer to section 4.16 - Care Elements.*	M	N	
EMR02.09	Maintains a record of preventive care/screening activities.	Additional fields (such as due dates, notes, etc.) are allowed. Preventive care and screening activities include (but are not limited to): Annual Physical exam, Influenza immunization, Mammography screening, Colorectal cancer screening, Pap Smear, Obesity screening, Tobacco use screening, Pre-natal checkup.	M	U	
EMR02.10	Preventive care/screening activities must automatically become visually distinct when past due in the patient chart.	Cannot be a work queue item. Must be visible within the EMR. Can be for any health maintenance activity.	M	P	
EMR02.11	Provide the ability to modify the medical record of a patient to ensure accuracy in accordance with CPSO Policy Statement on Medical Records.	Intent of the requirement is to ensure accurate information informs care decisions and changes to the medical record are documented. Any information modified within the medical record must be available for review. The record must also indicate who made the change, and when the change was made. This may be available within the system audit trail. The Vendor is required to conform to all subsequent releases of the CPSO Medical Records policy. *Refer to CPSO Medical Records policy: http://www.cpso.on.ca/uploadedFiles/policies/policies/policyitems/medical_records.pdf.*	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR02.12	Provides the user the ability to know the status of the EMR data on a past date.	At a minimum, this data includes the mandatory data elements for the following: - Ongoing Health Conditions data - Past Medical and Surgical History data - Allergy and Adverse Reaction data - Family Medical History data - Alerts and Special Needs data - Immunization data - Risk Factors data - Care Elements data System users must be able to identify which information was known at the time a medical decision was made. Searching through the audit trail in order to find the status of patient data on a particular date would not satisfy the requirement.	M	P	

3.3 IMMUNIZATION MANAGEMENT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR03.01	Provides the capability to print an immunization summary for a patient.	Immunization Summary is meant to reproduce the information which would be on the Ontario Immunization Record (Yellow Card) and should be consistent with the content. Immunization Summary includes: - Patient Name - Patient Date of Birth - Patient Ontario Health Card Number - Complete list of Patient's Immunizations - Immunization Date - Name of Primary Physician	M	P	
EMR03.02	Immunization data entered through EMR data fields is integrated across the EMR Offering.	User should not be forced to re-enter data. Requiring user to re-enter immunization data in order to maintain Preventive Care, Chronic Disease Management, Reporting of Diabetes or any other current requirements involving immunization data is not an acceptable solution.	M	P	

3.4 MEDICATION MANAGEMENT

For the purposes of this section, the following terms are defined:

Current Medications – medications that are part of the patient's treatment plan. This includes all active long-term and active short-term medications at the time of viewing the record.

Long-term Medications - A medication which is expected to be continued beyond the present order and which the patient should be assumed to be taking unless explicitly stopped (also referred to as Continuous/Chronic). These are medications which the prescriber has identified as a part of the patients ongoing treatment plan.

Short-term Medications – A medication which the patient is only expected to consume for the duration of the current order and which is not expected to be renewed (also referred to as Acute). These are medications the prescriber has not identified as part of the patients long-term treatment plan.

Past Medications - medications which are no longer part of the patient's treatment plan.

PRN - A medication which the patient will consume intermittently based on the behavior of the condition for which the medication is indicated (also referred to as "As Needed"). Applies to both Long-term and Short-term medications.

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR04.01	Provides the ability to create patient prescription records.	At a minimum, the mandatory data elements defined in discrete data requirements for Medications must be supported *Refer to section 4.9 - Medications.* Prescription record provides the ability to identify if a medication was/is prescribed by both an internal and external provider, such as a specialist, including first and last name. Prescriptions may be new, or may be a record of a past prescription.	M	P	
EMR04.02	Maintains complete documentation of patient medications including: - medications ordered by other health care providers; - over-the-counter medications including herbal and nutritional supplements; and - past and current medications - active and inactive prescriptions	It is important to distinguish that there is a difference between the status of a medication in the treatment plan and the status of a prescription for that medication.	M	P	
EMR04.03	Provides the ability to create a prescription for a drug not in the out-of-box drugs list (e.g. for a compound script).	The system must also have the capability to add the drug to the medications list for the patient.	M	P	
EMR04.04	Supports creation of user - defined medication list.	EMR Offering to allow creation of the user's predefined list based on provider or condition.	M	P	This supports workflow time-saving.

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR04.05	The system provides the ability for a provider to print a prescription for a patient.	Printed prescription must be able to include: - provider information (name, address, phone number) - patient information (name, address, phone number) - name of medication - strength and strength unit - form - dosage - frequency - duration and/or quantity - refills - refill duration and/or refill quantity - start date - notes to pharmacist It is acceptable that prescriptions are printed to a standard 8.5 x 11 sheet of paper. If prescription spans multiple pages, all demographic info and signatures must be repeated. Multiple prescriptions can be printed on a single form. The system must identify each user and the timestamp for each time the prescription is printed/re-printed. Accessing the audit log for this information is not an acceptable solution.	M	P	Example: - prescription printed by office staff on behalf of the provider, - prescription printed again by provider after patient loses original prescription
EMR04.06	Performs drug-to-drug interaction checking: - indicating severity; - allowing override; and - using a drug interaction database with Canadian drug codes	This decision support tool must be a publicly available, commercial off-the-shelf (COTS) drug database. A drug interaction database that is current must be used.	M	P	
EMR04.07	Performs drug-to-allergy and drug-to-intolerance interaction checking: - indicating patient allergy severity; - allowing override; and - using an interaction database with Canadian drug codes	This decision support tool must be a publicly available, commercial off-the-shelf (COTS) drug database. A drug interaction database that is current must be used.	M	P	
EMR04.08	Performs expanded drug interaction review.	This decision support tool must be a publicly available, commercial off-the-shelf (COTS) drug database. A drug interaction database that is current must be used. One or more of: - drug / condition interactions, - drug / lab interactions, - recommended dosing, - therapeutic alternatives	W	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR04.09	Provides options to manage medication alerting for drug-drug interactions at the provider level.	Allow the ability to set the threshold for the display of medication alerts at the user (provider) level. After the first time a warning is presented to a user, the user should be provided the option to default to “managed” that particular warning in subsequent viewings. If a previously managed alert does not display, in the situation where medication information in the interaction database or the condition of the patient is updated, alerts previously defaulted to “managed” will retrigger. If applicable, settings made at the provider level will supersede settings made at the organization level.	M	U	
EMR04.10	EMR provides options to manage medication alerting for drug-drug interactions at the organization level.	The ability to set the threshold for the display of medication alerts at organization level. If a previously managed alert does not display, in the situation where medication information in the interaction database or the condition of the patient is updated, alerts previously defaulted to “managed” will retrigger.	W	U	
EMR04.11	EMR provides options to manage medication alerting for drug-drug interactions at the per patient/per provider level.	Allow the ability to set the display of medication alerts at the per patient/per provider level. If a previously managed alert does not display, in the situation where medication information in the interaction database or the condition of the patient is updated, alerts previously defaulted to “managed” will retrigger. If applicable, settings made at the per patient/per provider level will supersede settings made at the provider or organization level.	W	U	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR04.12	Provides a view of the current medication treatment plan, allowing the ability to change the view of medications between Current, Past, and All.	Purpose of this requirement is to assist providers in organizing the view of medication information for a particular patient. To maintain an accurate view of a patient's medication treatment plan, the ability to display current medications, rather than a chronological list of medication prescribing activities is essential. Current medications and historical medications do not have to be separate screens, as long as the current medications are grouped, displayed and identified as current. Provide views for current and past treatment plans showing drug name, and prescription date at a minimum. The CPSO medical records policy requires the ability to display at a minimum a list of the chronic medications in the patient's treatment plan.	M	P	
EMR04.13	Presents a patient's medication dosage information over time for a user-selected medication.	At a minimum, medication name, dosage, and start date must be displayed. User must be able to select any medication in the patient's medication list. Information must be printable. Printed information must include all data elements referenced in the requirement.	M	P	
EMR04.14	Provides the ability for a user to view the date of the last update to the drug database.	At a minimum, date of last update information must be viewable from within the medication module of the EMR (e.g. from a menu item accessible from the medications module). It is strongly recommended this date is included within a centralized source of dates and licensing information. User is not required to have administrative permissions to view date of last update.	M	P	
EMR04.15	Provides updates to the EMR drug database at a minimum frequency of every two months.	It is acceptable for vendors to notify and provide access to updates for customers to update their on-site systems.	M	P	
EMR04.16	Provide the ability to capture a refill quantity and refill duration (days supply) which differs from the first dispensing.	Refer to discrete data elements Refill Quantity and Refill Duration in section 4.9 - Medications.	M	P	

3.5 LAB TEST MANAGEMENT

For the purposes of this section, the following terms are defined:

Test Report means a response from one laboratory at one date/time concerning one patient. A Lab Test Report may contain several Lab Test Results.

Test Result means a single result of a single laboratory test.

For Commercial Laboratory interface requirements, refer *to section 3.18 -"Interface Requirements".*

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR05.01	Provides the ability to maintain laboratory test results as separate data fields.	At a minimum, the mandatory data elements defined in discrete data requirements for Laboratory Tests must be supported. *Refer to section 4.10 - Laboratory Test Results.*	M	P	
EMR05.02	EMR must provide a visually distinct method of indicating new laboratory Test Reports through the provider work queue and the patient chart.	New test reports are considered to be those that the provider has received and has not yet opened and/or viewed. At a minimum, the functionality must be available to: - the ordering provider - copied to provider(s)	M	U	
EMR05.03	EMR must provide a visually distinct indication of abnormal laboratory Test Reports through a provider work queue and the patient chart.	At a minimum: - Test Reports must display an 'abnormal' flag without opening the actual result - Test Reports need to be "sortable" such that after being sorted, abnormal lab reports appear at the top of the list	M	P	
EMR05.04	EMR must provide a visually distinct indication of which laboratory Test Result(s) within a Test Report are abnormal.		M	P	
EMR05.05	Graphically presents laboratory Test Results and reference ranges over time for a user-selected Test Name.	Graph must show: - Test Name, - Test Result Value - Reference Ranges, and - Collection Date (if available) Scales must be appropriate to the data. Graph must be printable. The printed graph must include all data elements referenced in the requirement.	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR05.06	Displays, as data points, user-selected patient medications or other interventions directly on the graph identified in requirement #EMR05.05	The use of mouse hovering or tool tips does not meet the requirement. Printed graph must include all data elements referenced in the requirement.	W	P	
EMR05.07	In a table format, presents laboratory Test Results over time for a user-selected Test Name.	Table must show: - Test Name(s), - Test Results Values - Collection Date (if available) Table must be printable. The printed table must include all data elements referenced in the requirement.	W	P	
EMR05.08	Prints lab summaries and explanations for patients in lay terms, or in language that is easy for the patient to understand.	A lab summary is a printed summary of Test Results in tabular or graphical format, grouped by Test Name. An explanation can be provided via the provider appending notes through the system, or via templates that are specific to the Test Names on the lab summary.	W	P	
EMR05.09	Supports scanning of laboratory Test Reports into the EMR with the ability to indicate the Lab Reports with abnormal results.	EMR must provide a visually distinct indication of abnormal scanned laboratory reports through a provider work queue and the patient chart.	M	P	
EMR05.10	Supports adding annotations that are tied to each laboratory Test Report and Test Result by the provider.	These are free form text notes added by the physician at the overall Test Report level and Test Result level (refer to DE10.017 - Physician Notes).	M	P	
EMR05.11	Capable of reconciling laboratory Test Results with orders so that outstanding laboratory tests can be identified.	User must be able to simultaneously view and compare the ordered and received lists of laboratory tests. Reconciliation may be automatic, manual, or a combination of both. Some lab orders may exist without matched results (i.e. patient did not go to a lab). The system must provide the ability to remove an order from the reconciliation list, if desired.	M	P	
EMR05.12	Laboratory Test Reports/Results can be associated with a specific patient record.	Relates to any laboratory tests results received by the system: - through an interface, - scanned into the system, or - manually entered	M	P	
EMR05.13	Incorporates functionality that allows EMR users to cross-reference the EMR's proprietary Test Names to the Test Codes/Test Names from different laboratory proprietary standards.	Mapping of test codes to test names in the system may be provided by vendor, or the EMR must provide the ability for a user to perform this mapping manually.	M	P	Example: User has the ability to determine that HbA1C lab results from a commercial lab (using a commercial lab code) and from a hospital lab (using a LOINC code) are equivalent tests.

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR05.14	Incorporates functionality that allows EMR users to cross-reference the EMR's proprietary Test Names to the LOINC Codes as specified in the OLIS Nomenclature Standard.	*Refer to OLIS nomenclature standard documentation available at OHISC Standards Knowledge Management Tool (http://www.skmtportal.cred.ca/skmt.aspx).*	W	P	
EMR05.15	Provide the ability to complete the Ontario Lab Requisition Form electronically, prior to printing.	The system must support checking of appropriate boxes, as well as adding text entry within the appropriate sections of the standard form. Creation of the lab requisition from within the EMR does not require a preview of the completed form, but the requested tests and the date/time of the lab requisition order must be maintained in the EMR within the patient record. Clinician/Practitioner signature is still required on the completed (printed) form. Standard laboratory requisition form may be updated at MOHLTC discretion and EMR Offerings are required to conform to the most recent update. *Current form available at:* *http://www.forms.ssb.gov.on.ca/mbs/ssb/forms/ssbforms.nsf/FormDetail?OpenForm&ACT=RDR&TAB=PROFILE&ENV=WWE&NO=014-4422-84.*	W	P	
EMR05.16	Automatically populates and prints the demographic information for patient and provider in the appropriate fields on the Ontario Lab Requisition Form.	Standard laboratory requisition form may be updated at MOHLTC discretion and EMR Offerings are required to conform to the most recent update. *Current form available at:* *http://www.forms.ssb.gov.on.ca/mbs/ssb/forms/ssbforms.nsf/FormDetail?OpenForm&ACT=RDR&TAB=PROFILE&ENV=WWE&NO=014-4422-84.*	M	P	
EMR05.17	Allow laboratory Test Report(s) / Result(s) to be received and associated to a patient record without requiring the creation of a laboratory requisition.	The lab result needs to be received and associated with a patient record without the manual or automated creation of a lab requisition.	M	P	Example: - the lab was not ordered by the receiving physician such as when the family physician was CC'd on a lab ordered by a specialist, - recurring requisitions, - requisition made by a walk-in clinic provider
EMR05.18	The EMR Offering must be able to manage partial laboratory Test Reports in a manner that does not clutter the medical record.	The default view is the most recent report received in the patient chart. The user must be able to identify the annotations related to any Test Reports and Test Results (*refer to DE10.016 - Lab Notes),* both partials and final.	M	U	

3.6 EXTERNAL DOCUMENT MANAGEMENT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR06.01	Able to import external documents to become part of the EMR.'	At a minimum, the mandatory data elements defined in discrete data requirements for Reports Received must be supported. *Refer to section 4.14 - Reports Received.* Relates to any external document received by the system: - through an interface, - scanned into the system Copying and pasting the text from the original document into the EMR would not meet the requirement.	M	U	Example: - file format: TXT, DOC, JPEG, PDF - types of external documents: consult reports, discharge summaries, and other correspondence
EMR06.02	External documents imported or scanned into the EMR can be associated with a specific patient record.	Patient documents stored within the EMR must be viewable within the patient record, even if not yet viewed or signed-off by responsible provider.	M	P	

3.7 CUMULATIVE PATIENT PROFILE ("CPP") MANAGEMENT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR07.01	Displays Cumulative Patient Profile, clearly identifying the summary patient information.	At a minimum, the CPP displays the following categories: - Ongoing Health Conditions - Past Medical & Surgical History - Family History - Allergies & Adverse Reactions - Medication summary - Risk Factors - Medical Alerts & Special Needs *Refer to requirements EMR07.02 - EMR07.08 regarding CPP categories.* *Refer to the CPSO policy on Medical Records for information about the CPP*.	M	P	
EMR07.02	Displays Ongoing Health Conditions.	Referenced also as ongoing (current) Health Condition or Diagnosis List.	M	P	
EMR07.03	Displays Past Medical and Surgical History.		M	P	
EMR07.04	Displays Family Medical History.		M	P	
EMR07.05	Displays Allergies and Adverse Reactions.		M	P	
EMR07.06	Displays Medications summary.	Can display ongoing medication treatment plan as the default. Also can include current acute medications.	M	P	
EMR07.07	Displays Risk Factors.		M	P	
EMR07.08	Displays Medical Alerts and Special Needs.		M	P	Example: - needs interpreter, - mobility constraints

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR07.09	Provides a method of re-ordering/sorting the CPP items at the user's discretion.	The user must be able to order the list in any way they choose for each CPP category for a patient: - Ongoing Health Conditions - Past Medical and Surgical History - Family History - Allergies and Adverse Reactions - Medication summary - Risk Factors - Medical Alerts and Special Needs Allowing the user to only sort the items alphabetically will not satisfy the requirement. Re-ordered items should be maintained on the patient CPP in subsequent logins.	W	P	Example: User can re-order the Ongoing Health Conditions list by severity so that "breast cancer" appears above "allergic rhinitis" in the user interface.
EMR07.10	Provide the ability to manage and update the CPP summary from the encounter data.	At a minimum, Medications and Ongoing Health Conditions (problems, diagnoses) can be selected and managed from the encounter note to update the CPP.	M	U	Example: Provider can select which medications view displays in CPP. Provider can select which problems/diagnoses are added to the Ongoing Health Conditions list. Provider can choose which data from encounter notes display on the CPP.
EMR07.11	Must be able to customize the view to manage one or more sections of the CPP.	At a minimum, the user must be able to: - add and remove CPP categories for display - add and remove discrete data information to display within the CPP categories Customizations can be made at the user level. Customizations made must be maintained in subsequent logins by the EMR user.	M	U	This can assist in reducing CPP clutter.
EMR07.12	Must be able to support additional customizations of the CPP.	Accepted solutions include (but are not limited to): - resizing CPP categories to optimize data display and scrolling Any customizations must be maintained in subsequent logins by the EMR user.	W	U	
EMR07.13	CPP can be printed to a single document as a single operation.	Sections of the CPP must be clearly identifiable within the printed document. Printed document may exceed one page.	M	P	

3.8 ENCOUNTER DOCUMENTATION MANAGEMET

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR08.01	Provides forms or templates for common encounters that can be modified by user.	Examples: SOAP, Annual Physical, Ante-natal, etc.	W	P	
EMR08.02	The system automatically includes a user identifier in each part of the encounter note to support shared creation of encounter documentation.	The following would not meet the requirement: - manual entry of identification (e.g. initials) - comparing encounter note versions to identify what information was entered by a user - requiring user to access audit logs to view entry information Allowing users to toggle identifying information within the encounter note view is acceptable, as long as identifier information can be retrieved.	M	U	Example: Started by nurse, completed by physician.
EMR08.03	Supports free form text notes that are tied to each encounter.		M	P	Free form text notes allow a provider to add comments and thoughts to the encounter note.
EMR08.04	Provides the ability to view and print all encounter documentation in chronological order.	*Based on Ontario Regulation 114/94, Section 20 (4).*	M	P	
EMR08.05	Provides the ability to view and print all encounter documentation in chronological order by date range as selected by the user.	At a minimum, the user should be able to select both a start date (day, month, year), and an end date for the date range to satisfy this requirement.	W	P	
EMR08.06	Provides the ability to discretely capture more than one diagnosis for a single encounter.	Whether the EMR Offering supports free text, coding or other data discipline of entering and capturing multiple diagnoses within an encounter note, each method should discretely capture at the physicians discretion.	M	U	
EMR08.07	Provides the ability to compile the components of a multi-part visit to create an encounter note that represents a single office visit per patient.	Allow for a logical grouping of encounter documentation that clearly indicates multiple activities within a single office visit.	M	P	Examples: Vitals and reason for visit entered by an RN, urinalysis entered by a lab tech, physician conducts a history, physical, assessment and plan; all during a single office visit.

3.9 SCHEDULE MANAGEMENT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR09.01	Maintains appointment data.	At a minimum, the mandatory data elements defined in discrete data requirements for Appointments must be supported. *Refer to section 4.15 - Appointments.*	M	N	
EMR09.02	Provides ability to flag appointments as critical (visually distinct).		M	P	
EMR09.03	Integrates with billing component to avoid duplicate patient data entry. Must transfer at least two of the elements required to complete a billing.	At a minimum, the two elements that can be transferred from the scheduling must be: - the patient's Health Card Number (HCN) and - service date	M	P	
EMR09.04	Able to open a patient medical record directly from a scheduled appointment without having to perform another search for the patient.		M	P	
EMR09.05	Supports view of multi-doctor schedule.	Must display two or more providers per screen. Appointment dates and times are synchronized on screen when scrolling.	M	P	
EMR09.06	Supports searching for next available appointment by all of the following in a single function: - provider, - day of week, - time of day, and - appointment type	Must be an online function, not a report.	M	P	
EMR09.07	Schedule is printable as day-sheet sorted alphabetically by patient name.		M	P	
EMR09.08	Schedule is printable as day-sheet sorted chronologically.	Day-sheet should be in ascending order (i.e. earliest time should appear at the top of the sheet).	M	P	
EMR09.09	Schedule is printable as day-sheet sorted by chart number.		W	P	
EMR09.10	Supports pre-configuration of schedule slots or blocks by provider.		W	P	Examples: - larger blocks for full physicals, - block times for drop-ins, etc.

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR09.11	Supports planned periods of multiple appointments to a single start time.	Ad hoc double booking does not meet the requirement. Must be: - visually distinct; - preplanned and configured; and - able to search for next available slot or overbooking occurs only after the planned period is full	W	P	
EMR09.12	Supports ad hoc double booking that is: - visually distinct, and - shows on printed schedule	Ability to book an appointment that overlaps with another appointment(s), without needing to configure the schedule.	M	P	Examples: -provider has multiple appointments booked for the same time slot - provider books one appointment prior to the scheduled end of another appointment
EMR09.13	Supports schedule viewing both with and without personal patient data showing.	Showing only patient name on screen without patient data is acceptable. Displaying patient data when hovering over appointments is not acceptable. The user must be able to toggle between displaying and hiding patient data viewable in the schedule.	M	P	
EMR09.14	Supports drag and drop rescheduling.	Can be cut and paste or any other means of rescheduling without a delete and add process.	W	P	
EMR09.15	Supports display of the status of the patient in the clinic.	System may have pre-defined status definitions, or allow for user-defined status.	M	P	Examples: - in Waiting Room, - in a specific exam room, - waiting for nurse, etc.
EMR09.16	Provides the ability for a provider to view and modify their schedule.		M	P	
EMR09.17	Provides a view for appointment history for any given patient in the EMR.	The view includes both past and future appointments.	M	P	

3.10 REFERRAL MANAGEMENT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR10.01	Supports referral letter templates, specific to specialty.	The letter templates must: - integrate patient demographics (i.e. name, age, DOB, gender, OHCN, patient contact information) from the EMR - include provider's letterhead and contact information - referring provider's name and contact information - integrate clinical data from the patient record as selected by the provider including: - CPP data - Lab Test Reports / Test Results, - Progress notes (encounter notes), - Consultation notes (received), - External reports (e.g. diagnostic images), - be able to be edited to provide letter specific content Letters generated from the template must be: - saved in its original form - the date saved is the date the letter was generated - updates made to the patient medical data after letter generation must not affect and update the saved letter	M	U	
EMR10.02	EMR tracks referrals and provides a reminder if outstanding.	Reminders must: - be visually distinct, - be in patient record, - identify referral provider, and - be able to be turned off at user discretion	M	P	

3.11 REPORTING, QUERY AND COMMUNICATIONS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR11.01	All EMR data must be able to be produced in a hardcopy format.	In order for this requirement to be met this must be user-administered and does not require a EMR vendor to attend the process. Must be able to print information for a single patient record. *See CPSO Medical Records Policy, Appendix A, Section 20: http://www.cpso.on.ca/uploadedFiles/policies/policies/policyitems/medical_records.pdf.*	M	P	Individual patient records as well as practice management records must be filed as per the College of Physicians and Surgeons of Ontario.
EMR11.02	Allow user to set up preventive care parameters required for Recall List and Cumulative Bonus Report generation for each of the five (5) preventive care categories: - mammogram - pap smear - collorectal - immunization - influenza	User must be able to set up and maintain the following parameters for the target populations: - enrolment status - age - gender - procedure/vaccination timeline - exclusion codes The parameters applicable must be adjustable and saved: - on a fiscal year basis for Cumulative Bonus Reports - on a real-time basis for Recall List and Cumulative Bonus Report Hard-coding the parameters would not satisfy this requirement. Service Enhancement Codes are set by the MOHLTC for applicable Physician Group Agreements. *See the MOHLTC guidelines.*	M	N	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR11.03	Generates Recall List Report for preventive care activities/programs for patients enrolled to a physician.	Recall List must include/indicate: - target population - the physician to whom the patient is enrolled - patient information (name, OHCN, age, gender, phone number, address) - guardian information (name, phone number and address) for Childhood Immunizations - whether patient is entitled to receive a first letter, second letter or phone call - last procedure date - last date of communication (printed letters or phone call) The Recall List is a real-time report. Updates to patient data, report parameters and letter generation must be immediately reflected in the Recall List report. Requiring user to re-enter any information (e.g. Demographic and EMR information) already in the system would not satisfy the requirement. Service Enhancement Codes are set by the MOHLTC for applicable Physician Group Agreements. *See the MOHLTC guidelines.*	M	U	
EMR11.04	Creates patient letters directly from Recall List Report.	At a minimum, the system must be able to: - generate the letters in a batch, or individually - generate the letters without requiring the user to do another patient lookup - save records of all correspondence including dates of delivery of the written notices Letters must meet requirements listed in the MOHLTC Service Enhancement Codes Primary Care Agreements: - indicate whether it is the first or second written notice. - indicate the procedure type, benefits and the date of the last procedure - the name and address of the patient or guardian (for Childhood Immunizations) - physician letterhead and information (name, address, phone number)	M	U	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR11.05	Generates Cumulative Bonus reports for preventive care activities/programs for patients enrolled to a physician.	Cumulative Bonus report must include/indicate: - the target population - the physician to whom the patient is enrolled - patient information (name, OHCN, age, gender) - last procedure date - whether the eligible patients for the selected fiscal year have received the procedure or not - percentage of patients who have received the procedure from the target population The Cumulative Bonus Report is a real-time report. Updates to patient data, report parameters and letter generation must be automatically reflected in the Cumulative Bonus report. Reports can be generated for each fiscal year. Requiring the user to re-enter any information (e.g. Demographic and EMR information) already in the system would not satisfy the requirement. Service Enhancement Codes are set by the MOHLTC for applicable Physician Group Agreements. *See the MOHLTC guidelines.*	M	U	
EMR11.06	Provide a report writer which allows the user to develop Ad hoc queries and run reports.	The user must be able to create the query and run the report and does not require an EMR vendor to attend the process. Any discrete data field specification requirements satisfied by the EMR can be selected for report parameters. At a minimum, ad hoc reporting functionality should allow for selection of reported fields, and allow for filtering based on “AND”, “OR”, and “NOT” logic. Ad hoc query facility supports Boolean search capabilities. The tool must be user friendly.	M	P	Examples: Display first and last name for all patient records where sex is female AND age is greater than 50.
EMR11.07	Assists providers in consistent data entry to facilitate effective data discipline, coding and extraction.	Spell checker is not sufficient.	W	P	Examples: - coding schemas, - drop-down lists, etc.
EMR11.08	Able to search and report on ALL text fields in EMR.	Text fields include any free-form text or notes fields. Able to search within text fields for partial matches.	M	P	
EMR11.09	Able to search and report on ALL data fields in EMR.	Image data is not required.	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR11.10	Able to search and report on ALL data and text fields in EMR concurrently (i.e. in a single report).	Able to search within text fields for partial matches. Image data is not required.	M	P	
EMR11.11	Provides report templates for EMR data that may be modified by the user.		W	P	Examples: - list of patients with a given diagnosis - list of patients who are on a given medication, etc.
EMR11.12	System allows for the identification of static cohorts of patients for the purpose of chronic disease, or other tracking.	To satisfy this requirement the provider must be able to define the name and population of their own cohort(s). The provider must be able to add a population of patients individually or in bulk to the cohort. Each patient in the EMR can belong to more than one cohort, if desired by the provider.	M	P	Examples: A list of 100 selected patients for the purposes of tracking and surveillance.
EMR11.13	EMR Usage Metrics Report	Report indicates: ▪ provider for whom report is being generated ▪ date range of report ▪ practice profile information ▪ metrics for the patients rostered to provider - scheduled appointments - billing (OHIP, WSIB, private, uninsured) - encounter notes created - problems entered in Ongoing Health Condition list - stored documents (including scanned documents or external documents received from an interface) - new and renewed prescriptions - lab test results received electronically - alerts/reminders generated *Refer to section 5.1 - EMR USAGE METRICS REPORT (REQ # EMR11.13) - SAMPLE*	M	P	

3.12 WORKFLOW MANAGEMENT

To meet the requirements of this section, an EMR Offering must have one or more work queues.

A work queue (also known as an in-basket, in-box or task list) supports the management of tasks.

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR12.01	Work queue items can be linked to a patient record.	EMR must provide the ability to open the patient record in a single action.	M	P	Examples: Can open patient record from work queue without having to perform another search for the patient
EMR12.02	Supports classification of task priority.	Priority can be indicated by urgent, low, etc., or a priority checkbox.	M	P	
EMR12.03	Supports free form text notes that are tied to each task.		M	P	
EMR12.04	Provides the ability to associate a task with a laboratory Test Report/Result.	Laboratory Test Report/Result can be opened from the task. Assigned user's access to lab information must follow appropriate security permissions for that user.	W	P	Purpose of requirement is to ensure a task is associated with the correct lab result or report.
EMR12.05	Provides the ability to associate a task with an external document.	Document record can be opened from the task. Assigned user's access to document must follow appropriate security permissions for that user.	W	P	Purpose of requirement is to ensure a task is associated with the correct documentation. Examples: Document assigned to a nurse practitioner for follow up.
EMR12.06	Supports creation of new ad hoc tasks and their assignment to other specified users.		M	P	
EMR12.07	Supports creation of new ad hoc tasks and their assignment to others by role.		M	P	Examples: - any nurse, - any receptionist, etc.
EMR12.08	Tasks can be created, accessed, and actionable anywhere in the application.		M	P	
EMR12.09	Can store selected work queue tasks and status as part of a patient's medical record.	Storing this information only in the audit log is not acceptable.	M	P	
EMR12.10	Work queue screens can be customized for different roles.	Work queues can be customized by roles such as Nursing, physicians, receptionists etc.	W	P	Example: Re-arranging column orders, adding or removing columns, for each of the above roles.

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR12.11	Supports automated generation of tasks and patient follow-up tasks to a work queue.	At a minimum, the following task must be automatically generated: -outstanding lab requests, and other tests (e.g. Diagnostic Imaging) - appointment reminders This requirement does not include preventive care (e.g. preventive care reminders). The requirement is not met if a user only accesses the patient chart in order to see the task. The system allows the ability to turn off this functionality for each type of task.	M	U	
EMR12.12	Automatically creates a task for past-due targeted health maintenance activities and assigns it to a pre-defined work queue. The tasks must be generated by the system, not created by a user.	Running a query to generate tasks on all applicable records is acceptable. User should be able to assign/redirect tasks to a particular user or role. User should be able to turn off this functionality. *See the MOHLTC guidelines.*	M	P	
EMR12.13	Unsigned patient information must be visible in the patient chart and identified as such.	This applies to all patient information (ie reports) that require sign-off such as: - Reports received through an interface - Reports scanned into the system, - Reports manually keyed A mandatory concurrent entry must be present in the physicians "inbox" for sign-off.	M	P	Examples: - lab reports, - hospital reports, - procedure results, - consult reports, etc
EMR12.14	The system supports a "sign off" function to indicate data that becomes part of the permanent patient medical record.	At a minimum, sign-off should be available for: - encounter documentation - reports > received through an interface > scanned into the system > manually keyed into the system Sign-off information (including sign-off date and identity of provider) must be: - visible in the patient's chart - captured in the audit log	M	P	Examples: - when a Lab Report has been reviewed, - when encounter documentation is complete

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR12.15	The system supports a “sign-off” function for approval of trainee actions.	Trainee is not necessarily a physician – could be nursing student, etc.	M	P	Examples: Resident could sign-off a record, but it remains open until reviewed and confirmed by supervising clinician.
EMR12.16	The system supports multiple provider “sign offs” on patient information and indicates sign-off date and provider identity.	This applies to all patient information that require provider sign-off such as: - encounter documentation - reports > received through an interface > scanned into the system, > manually keyed into the system Sign-off information (including sign-off date and identity of provider) must be: - visible in the patient's chart - captured in the audit log Only 1 copy of the report is posted to the patient’s chart.	M	U	Examples: Two physicians identified on reports (e.g. ordering and cc’d physicians) where both are required to sign-off on the report.
EMR12.17	Provide functionality from the “inbox” to allow user to re-display an item which has been signed-off.	This applies to all patient information signed off, such as: - reports received through an interface - reports scanned into the system, - reports manually keyed In addition, provide the ability to search and review items that were signed-off on a particular date or date range per user. This is not an undo function, but rather the ability to display (return to) previously viewed patient information without requiring the user to recall patient demographic details.	M	P	

3.13 BILLING MANAGEMENT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR13.01	Processes concurrent Ontario billings models of fee-for-service, shadow partial payment billings, and Physician Group bonus codes.	See the MOHLTC guidelines.	M	P	
EMR13.02	Provides basic error checking. Must alert user when error is detected.	At a minimum the basic error checking to be provided when: - registering patients - Ontario Health Card Number - check digit, - Health Card Number duplicate Edits for all mandatory billing fields: - service date, - provider number, - Health Card Number, - name, - DOB, - gender, - fee code and fee claimed - checks all dates are valid dates and in the past	M	P	
EMR13.03	Provides automated reconciliation and claim re-submission and prints reconciliation reports.	The reconciliation reports can be either the entire MRO data file or include the MOHLTC defined data fields, based on their MRO record type. Supports resubmission of rejected claims without the need to re-enter data. *See the MOHLTC guidelines.*	M	P	
EMR13.04	Supports reading a Health Card through a card reader device, and looking up the patient in EMR application database.	The EMR must: - notify of version code discrepancies, and - upon user request, automatically update patient record with demographic data associated with the OHCN: - name, - gender, - DOB	M	P	
EMR13.05	Supports WSIB billing through MRI files.		M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR13.06	Can create a claim directly from patient encounter information.	Must transfer all pertinent billing data that is present in the clinical record. Pertinent data includes, but is not limited to: - patient information - physician information - service date - procedure code - diagnosis code - location - clinic/hospital number	W	P	
EMR13.07	Can transfer and translate diagnostic codes for billing purposes from the EMR component.	Diagnosis code information comes from the patient's EMR data, and is not manually entered by the user.	W	U	
EMR13.08	Supports manual entry of non-OHIP billing transactions including: - Direct to patient - Reciprocal - 3rd Party		W	P	
EMR13.09	Provides aged receivables listing for all billing types (not just OHIP).	The list must indicate: - patient ID - service provided - service date - outstanding amount Any aging buckets acceptable. Can be any report to manage outstanding claims.	W	P	
EMR13.10	EMR system is pre-loaded with current OHIP fee schedule including preventive care codes.		M	P	
EMR13.11	System maintains and uses historical OHIP fee schedule for the prior year.	Prior fee schedule information may be required for resubmission purposes.	M	P	
EMR13.12	Provides lookup of services and diagnoses by their codes as well as their descriptions.		M	P	
EMR13.13	Forces reconcilable disposition of all scheduled appointments (i.e. provides a screen or report that lists patient appointments which have no billings).	User must take some action to remove unbilled appointments from the list. Deleting appointments does not meet the requirement.	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR13.14	Supports direct third party billings with invoices.	Able to be generated on demand. At a minimum the third party billings with invoices must include: - provider name, - patient name or ID, - payor address, - service date, - service, - itemized amount(s) and - total amount billed	W	P	
EMR13.15	Supports direct third party billings with statements.	Able to be generated on demand At a minimum the third party billings with statements must include: - provider name, - patient name or ID, - payor address, - service date, - service, - itemized amount(s) amount paid, and - balance Receipts are not sufficient.	W	P	
EMR13.16	Supports billing lookup by each of the following: - patient Health Card Number - patient name - OHIP claim # or Accounting #	OHIP claim # is assigned by the OHIP claims payment system. Accounting # is assigned by EMR or user to a claim.	M	P	
EMR13.17	Enable updating of billing codes through OHIP fee schedule master update file as provided by MOHLTC in the specified format.	*Refer to:* *http://www.health.gov.on.ca/english/providers/program/ohip/sob/schedule_master.html*	M	P	
EMR13.18	Notify users of changes to billing codes per the updates in the fee schedule master.	At a minimum, notifications must be provided for: - updated Fees - updated Effective Date - updated Expiration Date - new billing codes	W	U	
EMR13.19	Provide access to OMA suggested fees for uninsured services and 3rd Party services, including HST eligibility.	OMA Suggested fees for uninsured services and 3rd party services can be accessed from scheduling and billing modules, and the patient's medical record. For a list of suggested fees for uninsured services and 3rd party services, *refer to the document "Physician's Guide to Third-Party & Other Uninsured Services" published by the Ontario Medical Association*.	M	P	Examples: - copy of medical records, - uninsured clinical services, - insured forms, - reports (eg. sick note)

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR13.20	Provide the capability of correcting a billing entry error without classifying it as a write-off.	A ‘write-off’ implies an uncollectable amount. These amounts should be coded and treated as such. An ‘error’ is an honest error and should be treated as such. Write-offs and errors should be associated to a reason code/reason description. Report(s) that show write-offs and error corrections should clearly show each.	M	P	

3.14 SYSTEM ACCESS MANAGEMENT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR14.01	EMR users must enter a password in order to access system functions. EMR must store passwords in an encrypted format.	Encryption applies to password managed by EMR Offering. Passwords stored and managed by the operating system are already considered encrypted and secure.	M	P	
EMR14.02	EMR must support passwords that include: - mixed case passwords; - passwords of a minimum of 8 characters; - alphanumeric characters; and - special characters		M	P	
EMR14.03	EMR must have password management capabilities that can be deployed based on user discretion.	Password management capabilities include: - the ability to set parameters for number of failed login attempts within a certain time period; and - the ability to set time parameters for password expiry This applies to all passwords used by the EMR, including the operating system and all applications.	M	P	
EMR14.04	EMR must be able to share patient data among providers who access the same database.	Must maintain proper provider identification. Patient data must only be shared if permitted by practice rules.	M	P	
EMR14.05	Provide the capability to create roles.	Need to be able to create new roles, with customized permissions. If EMR provides only predefined roles, this requirement is not met. Changes applied to a role means that this change is applied to all members of that role. Multiple roles can be assigned to users. For the purposes of roles-based requirements, roles are akin to group permissions in Microsoft Windows.	M	P	A role is an abstract method for assigning and managing permissions for a group of one or more users independently of individual user security permissions.
EMR14.06	There are access controls to functions based on roles.	Members of a role have access/restrictions to certain screens and capabilities in the EMR based on the functions assigned to that particular role. The system must ensure the merge functionality can be assigned to a specific user(s), user role or group.	M	P	Examples: - persons assigned the “Receptionist” role can process billing but not run financial reports - persons assigned the “Nurses” role have read-only access to medications

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR14.07	There are access controls to data based on roles.	Members of a role cannot access certain data, even though that role can access a function that uses the data. It gives control over what the role can access at the physical or logical record level.	M	P	Examples: - dieticians are not permitted to view psychiatric encounter notes for any patients
EMR14.08	There are access controls to functions based on user.	A user cannot use certain screens or capabilities of the EMR.	M	P	Examples: - a receptionist who can process billing but not run financial reports - a nurse who can browse encounter data but cannot update it
EMR14.09	There are access controls to data based on user.	A user cannot access certain data, even though that user can access a function that uses the data. It gives control over what the user can access at the physical or logical record level.	M	P	Examples: - A nurse who cannot see his ex-wife's medical records. - A provider who can only update her own patients.
EMR14.10	The EMR provides different views to data for roles.	Screen layout, organization, or contents can be customized for different roles.	W	P	Examples: - physician, - nurse practitioners, and - administrative assistants
EMR14.11	Clerical staff that has no permission to view patient medical data can enter notes into the EMR.	Notes entered against practice management data (e.g. patient demographics, appointments) would not meet the requirement.	W	P	Examples: - records of phone calls, - transcriptions, etc.
EMR14.12	EMR must ensure the encryption of: - Passwords transmitted over a WAN. - Data transported across private or public networks. - Data stored off-line (backups, archives, etc.		M	P	EMR vendor must substantiate how encryption is managed in each of the cases.
EMR14.13	Provides the ability for multiple users to access the EMR concurrently.	Single user systems not accepted.	M	P	
EMR14.14	Provides the ability for concurrent users to simultaneously view the same record.	Refers to practice management information, as well as clinical information.	M	P	
EMR14.15	Provides protection to maintain the integrity of clinical data during concurrent access.	To prevent users from simultaneously attempting to update a record with resultant loss of data.	M	P	Examples: - record is read-only if it is already opened by another user, - user cannot update a progress note already opened by another user

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR14.16	Provides a way to quickly “lock” a user workstation if left unattended.	Following rules must apply: -user must be required to enter a valid password in order to unlock workstation - must preserve context when unlocked. - must be quick; a screen saver after 30 minutes is not acceptable - EMR data must not be accessible. Acceptable solutions are: - user initiated lock (e.g. hot key); and - screen lock with a timeout period	M	P	
EMR14.17	Ensures security when one user is logged on at multiple workstations.	Must be able to log on to EMR through a second workstation with the same user credentials without logging out of the first workstation.	M	P	
EMR14.18	Ensures security when several users use the same workstation in quick succession to access: a) a single patient record or b) multiple patient records.	Must be able to log on to EMR with a second set of user credentials without logging out the first user. Second user cannot see first user’s data and vice versa. If an EMR Offering uses operating system features (e.g. Windows XP fast user switching) to meet this requirement, then a version of the OS that provides this feature must be included as part of the EMR.	W	P	
EMR14.19	Supports Remote Access through internet connections using VPN.	Must be able to use all EMR functions when connected remotely. A VPN must be supported to offer remote connections (e.g. access from home).	M	P	

3.15 DATA MANAGEMENT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR15.01	EMR must retain medical records information.	It is recommended to maintain records for a minimum of 15 years. *See CPSO Medical Records Policy: http://www.cpso.on.ca/uploadedFiles/policies/policies/policyitems/medical_records.pdf*	M	P	
EMR15.02	EMR must retain billing transaction details for at least 7 years.	This standard may be updated by MOHLTC.	M	P	
EMR15.03	EMR supports a minimum of 20,000 patient records for up to 10 years of data without the need to upgrade DBMS, OS or other software components.	Vendor must provide substantiation that databases with inherent limitations, such as MSDE or MS Access, are capable of meeting this requirement.	M	P	
EMR15.04	EMR provides a complete system (applications and data) backup and recovery process.	*Based on Ontario Regulation 114/94, Section 20 (7).* Backup can be full or incremental, etc. Recovery can be to last backup, point of failure, etc.	M	P	
EMR15.05	External documentation must be stored using a database solution.	Refer to the external documentation described in section 3.6 - External Document Management. A solution that stores documents in the file system (server or client) only does not satisfy the requirement.	W	P	Example: - a document management system, within the EMR database
EMR15.06	EMR encrypts patient data and clinical management data resident on server(s) to strength of at least 128-bits.	A solution that only encrypts data as it is transmitted over the network does not satisfy the requirement.	W	P	Purpose of the requirement is so that critical data cannot easily be accessed if EMR servers are stolen or compromised.
EMR15.07	Harden the EMR server in preparation for server level encryption.	Server hardening consists of creating a baseline for the security of the application server. Threats to Personal PHI breaches via external access are greatly reduced by eliminating entry points and minimizing system software. The physical security is elevated when all application data and information is encrypted. This guideline does not apply to ASP versions. *Refer to the Server Hardening Checklist on the OntarioMD.ca website.*	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR15.08	An anti-malware solution and EMR must be able to co-exist without conflicts.	Vendor must recommend to providers anti-malware solutions that do not negatively impact the EMR application and that both solutions can co-exist on the same server without creating any conflicts.	M	P	

3.16 AUDITING AND LOGGING

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR16.01	There will be a complete audit trail of medical records in accordance with the CPSO requirements. Each patient record in the system must have a distinct audit trail.	All activity (i.e. data viewed, updated, deleted) against medical records maintained by the EMR must be captured in the audit trail. The audit trail must capture: - the date and time of the activity - User who accessed the data - any changes in the recorded information; - preserves the original content of the recorded information when changed or updated; Data must not be altered, removed or deleted, just marked as altered, removed or deleted. Audit trail must be printable: - separately from the recorded information for each patient. - cannot contain system references that are meaningless outside of the system context. *Refer to CPSO Medical Records Policy audit requirements: http://www.cpso.on.ca/uploadedFiles/policies/policies/policyitems/medical_records.pdf*	M	U	Audit Trail functionality is mandatory per CPSO requirements.
EMR16.02	The EMR application must have audit trail for all add/change/delete operations on all EMR system (non-medical record) data, including permission metadata. Data must not be altered, removed or deleted, just marked as altered, removed or deleted.	Non-medical data includes practice management data (ie. appointments, billing) and EMR configuration data that deals specifically with customizable behavior of the system. Updated information must retain original data entry as well.	M	P	Example: - creation and submission of a claim, - creation of a new patient record, - creation of a new system user, - creation of a new role, - update of a user's permissions
EMR16.03	The EMR Offering must not allow for the capability to disable the audit trail. This applies to medical and non-medical records within the EMR Offering.	This functionality is mandatory per CPSO regulations (*see CPSO Medical Records Policy*).	M	P	
EMR16.04	Each record in the EMR will include a date/time stamp and user ID for the update of that record.	Can be visible either on the chart or through an audit trail.	M	P	
EMR16.05	Audits and logs all logins, successful and failed, at the EMR server.	The log must include: - timestamp - user ID/application ID - originating IP address - port accessed or computer name Both local and remote logins must be auditable.	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR16.06	Audits and logs traffic that indicates unauthorized activity encountered at the EMR server.	The log must include: - timestamp - user ID/application ID - originating IP address - port accessed or computer name Anonymous access for services installed and running on the server (e.g. FTP, Telnet, Web) is not allowed. If the EMR does not require any additional services, i.e. the services are disabled, this requirement is then met.	M	P	
EMR16.07	Audits and logs access to components of the medical record from outside the EMR.	Including: - external ODBC connections used to execute SQL queries; - EMR data stored external to the database such as attachments; and - all data files used to meet other EMR Local requirements (e.g. reporting requirements) The log must include: timestamp, user ID/application ID and database operation.	W	P	
EMR16.08	EMR must synchronize the system time with a NTP server	System time must be synchronized with a trusted source to maintain audit trail integrity.	M	P	

3.17 IMPLEMENTATION SUPPORT

This section consists of the implementation support requirements. EMR implementation support means that a representative of the vendor is available to assist customers with training and any questions about, or issues encountered with the vendor's EMR Offering within the defined availability.

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	Comments
EMR17.01	Provides EMR support from 8AM – 8PM Monday through Thursday, 8AM – 5PM Friday, and 9AM – 2PM Saturday (Eastern Time Zone).		M	P	
EMR17.02	Provides additional EMR support (e.g. 7 x 24 support).		W	P	
EMR17.03	EMR Vendor is able to troubleshoot common technical/user issues via electronic/remote support.	In order to satisfy this requirement, EMR vendor must be able to provide support by viewing EMR user interface without physically being at a site, provided appropriate consent has been given to the vendor to do so. Considerations must be made with respect to the privacy and security of Personal Health Information.	M	P	
EMR17.04	EMR Vendor is able to remotely provide simple upgrades and code corrections.	In order to satisfy this requirement, EMR vendor must be able to - push updates and administrator to download, accept and execute - schedule a time with user and make updates remotely	M	P	
EMR17.05	EMR User documentation is available in electronic format.	Documentation must be comprehensive of all available EMR functionality. To satisfy this requirement, documentation must either be distributed to, or made available for download by customers. Document must be searchable.	M	P	
EMR17.06	EMR provides context-sensitive help within the application.	Help must be invoked from within the EMR user interface and specific to the screen, function or function groups being used. The use of tool tips to provide a brief description of a function does not satisfy this requirement. Opening up the entire training document and doing a search does not satisfy this requirement.	W	P	Example: - clicking help while writing a prescription loads only help documentation related to medications and/or prescriptions
EMR17.07	Offers EMR training.	At a minimum, training must be offered on all functionalities described in this version of the EMR Specification.	M	P	

3.18 INTERFACE REQUIREMENTS

The vendor will be required to interface their EMR Offering to other related systems.

Technical details of interfaces (such as message structure, frequency of update, push or pull) are available from interface owners.

The following table summarizes the vendor requirements for interfaces.

OMD #	Requirement	Guidelines	M/W	Status	Comments
EMR18.01	Claims and Incentive Payments through the MOHLTC Billing system.	*Refer to:* http://www.health.gov.on.ca/en/pro/publications/ohip/	M	P	
EMR18.02	Commercial Laboratories – must support one of the following: - Canadian Medical Laboratories - Gamma-Dynacare Laboratories - LifeLabs (formerly MDS)	For this requirement to be met the vendor must obtain a letter certifying the successful interface. The letter must be dated within the previous twelve (12) months.	M	P	
EMR18.03	Commercial Laboratories –supports more than one of the following: - Canadian Medical Laboratories - Gamma-Dynacare Laboratories - LifeLabs (formerly MDS)	For this requirement to be met the vendor must obtain a letter certifying the successful interface. The letter must be dated within the previous twelve (12) months.	W	P	
EMR18.04	Commercial Laboratories –supports more than one of the following: - Canadian Medical Laboratories - Gamma-Dynacare Laboratories - LifeLabs (formerly MDS)	For this requirement to be met the vendor must obtain a letter certifying the successful interface. The letter must be dated within the previous twelve (12) months.	W		
EMR18.05	Health Card Validation – EMR supports one or more of the following: - OBEC (Overnight Batch Eligibility Checking) - HCV (Health Card Validation)	*Refer to MOHLTC Health Card Validation Manual.*	M	P	

3.18.1 CLAIMS AND INCENTIVE PAYMENTS

The MOHLTC Claims system processes provider claims, creates payments and provides error reports and remittance advice back to providers. Vendors are required to implement the current interface specification and to remain current with this specification and any changes thereto.

Detailed specifications for both submitting claims and receiving error reports and remittance advice, as well as contact information for testing the interface, can be found at the following link: http://www.health.gov.on.ca/en/pro/publications/ohip/

3.18.2 COMMERCIAL LABORATORIES

An EMR Offering's ability to receive laboratory results from major commercial labs will be verified as a part of the validation process. Compliance is subject to the following pre-conditions:

- the laboratory has made their interface specification publicly available; and
- the potential electronic transactions for the laboratory represent at least 5% of the overall Ontario volume of electronic laboratory transactions.

The specifications for electronic interfaces for three commercial laboratories meeting the above conditions can be obtained directly from the laboratories themselves.

- CML Healthcare Inc. – www.cmlhealthcare.com
- Gamma-Dynacare Medical Laboratories – www.gamma-dynacare.com
- LifeLabs (Formerly MDS Inc.) – www.lifelabs.com

3.18.3 HEALTH CARD VALIDATION

The MOHLTC Health Card Validation (HCV) system allows health care providers to validate the eligibility of the cardholder and the status of his or her health card and version code.

The Health Card Validation Reference Manual, containing detailed specifications for current health card validation access options, as well as contact information for testing the interface, can be found at the following link:
http://www.health.gov.on.ca/english/providers/pub/ohip/ohipvalid_manual/ohipvalid_manual_mn.html

Please note that the Ministry of Health and Long-Term Care is currently developing the new Health Card Validation web service. The production web service will be delivered in the near future.

3.19 LICENSING REQUIREMENTS

This section consists of the requirements for the licensing of EMRs to be eligible for sale in Canada/Ontario.

OMD #	Requirement	Guidelines	M/W	Status	Comments
EMR19.01	Vendor to be **ISO 13485:2003** certified and maintain the certification of the EMR Offering.		M	P	

3.20 PRIVACY REQUIREMENTS

The EMR Offering must comply with all applicable laws and regulations now or hereafter in force relating to privacy and the protection of personal information, including personal health information and enable health information custodians to comply with the requirements set out therein.

4. CORE EMR: DISCRETE DATA ELEMENTS

This section details the minimum data requirements.

Each discrete data element listed below is a separate data element included in the EMR Offering for **storing** the specified data. In other words, these elements do not necessarily need to appear in the User Interface when not clinically informative.

- An EMR Offering that can derive the data element upon export would meet the requirement.
- A general-purpose notes field does not fulfill the requirement.

The following terms and abbreviations are defined and shall be applied to all tables in this section:

Scoring: **M** = Mandatory criteria for
W = Weighted criteria

Status: **N** = New requirement for this EMR Specification
P = Previous requirement from EMR-Specification v4.1
U = Updated from a previous EMR Specification v4.1 requirement
R = Retired from previous EMR Specification v4.1

OMD #: unique identifier that identifies each requirement within *Ontario EMR Requirements Repository*

4.1 PATIENT DEMOGRAPHICS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE01.001	Name Prefix	An honorific title used when addressing a person by name. For suggested values, refer to: - *Table CT-001: Name Prefix*	M	P
DE01.002	Last Name		M	P
DE01.003	First Name		M	P
DE01.004	Middle Name		W	P
DE01.005	Name Suffix	An additional term placed after a person's name. For suggested values, refer to: - *Table CT-005: Name Suffix*	W	P

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE01.006	Gender	The reported sexual identity of a person for administrative purposes. For suggested values, refer to: - *Table CT-006: Gender*	M	P
DE01.007	Date of Birth	The date on which the patient was born.	M	P
DE01.008	Health Card Number	The lifetime identification number assigned to all eligible residents within a jurisdiction (province) for the purpose of receiving provincially funded insured health services.	M	P
DE01.009	Health Card Version Code	The two digit code associated with Ontario HCN that uniquely identifies the status of that health card.	M	P
DE01.010	Health Card Province	The legal entity (province) responsible for assigning the HCN.	M	P
DE01.011	Health Card Expiry Date	The expiration date for the HCN.	M	P
DE01.012	Chart Number	Number used by the medical practice to identify the associated hardcopy chart.	M	P
DE01.013	Preferred Official Language	Official languages are English and French.	W	P
DE01.014	Preferred Spoken Language	Indicates in which language a person prefers to communicate. The EMR Offering must support ISO 639-2. The EMR Offering must display the full name rather than the 3 digits code.	M	U
DE01.015	Primary Physician	Refers to the most responsible provider to whom the patient record is assigned to. By assigning a patient to a 'Primary Physician' the patient is becoming part of his/her "roster" list. A 'Primary Physician' might have patients that are on his/her 'roster' but not on the 'enrolment roster' (refer to 'Enrolled To' data element). Combining 'Primary Physician' and 'Enrolled to Physician' in a single field is not an accepted solution.	M	U
DE01.016	Patient Status	Refers to whether the 'Primary Physician' considers the patient to be 'active', 'inactive', 'deceased' or other values as supported by the practice. Combining Patient Status and Enrolment Status in a single field is not an accepted solution. For the minimum values, refer to: - *Table CT-008: Patient Status*	M	U
DE01.017	Patient Status Date	Date associated with 'Patient Status'. Refers to the date the patient becomes 'active' or the date the status has been changed.	M	P

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE01.018	Enrolled To Physician	Refers to the physician to whom the patient is enrolled to as per MOHLTC enrollment process. By enrolling a patient to a physician, the patient is becoming part of his/her "enrollment roster" list. Combining 'Enrolled to Physician' and 'Primary Physician' in a single field is not an accepted solution.	M	N
DE01.019	Enrolment Status	Refers to whether the patient: - is enrolled, - enrolment has been terminated or - has never been enrolled Additional statuses that are related to the 'enrolment' are accepted (eg.'enrolment in progress', etc.). Statuses that are unrelated to the 'enrolment' are not accepted in this field. Combining Enrolment Status and Patient Status in a single field is not an accepted solution. For the minimum accepted values, refer to: - *Table CT-008: Enrolment Status*	M	U
DE01.020	Enrolment Date	Date the patient has been enrolled with a particular physician.	M	P
DE01.021	Enrolment Termination Date	Date the patient enrolment has been terminated with a particular physician. Enrolment Termination Date assumes the existence of a prior Enrolment Date.	M	P
DE01.022	Enrolment Termination Reason	Reason for terminating patient enrolment with a particular physician as provided and defined by the MOHLTC. For accepted values, refer to: - *Table CT-010: Enrolment Termination Codes* For additional information refer to: - *MOHLTC Fact Sheet Fall 2005, Enrolment Report Patient Details Termination Reasons: Enrolment Termination Codes*	W	P
DE01.023	Patient Note	Additional notes about the patient.	W	P
DE01.024	SIN	Social Insurance Number	W	P

4.2 PATIENT ADDRESS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE02.001	Address Type	At a minimum the EMR Offering must support: - residence address - mailing address	W	U
DE02.002	Street Address	The street address.	M	P
DE02.003	City	A city, town or village associated with the Address Type.	M	P
DE02.004	Province/State	The province/state associated with the Address Type.	M	P
DE02.005	Country	The country associated with the Address Type.	W	P
DE02.006	Postal/Zip Code	The Postal Code or the Zip Code associated with the Address Type.	M	P
DE02.007	Residence Phone	The phone number where the patient lives.	M	P
DE02.008	Cell Phone	The cell phone number for contacting the patient.	M	P
DE02.009	Work Phone	The organization work phone number where the patient can be reached during working hours.	M	P
DE02.010	Work Phone Extension	The number used to access the patient's work phone number within an organization.	M	P
DE02.011	Patient E-Mail Address	The e-mail address preferred by the patient.	M	P

4.3 PATIENT ALTERNATIVE CONTACT

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE03.001	Contact First Name		M	P
DE03.002	Contact Last Name		M	P
DE03.003	Contact Purpose	The type of a contact person. There must be no restrictions on the number of 'purposes/roles' a contact is associated to. At a minimum, the 'Substitute Decision Maker' and 'Emergency Contact' must be among the predefined values. For suggested values, refer to: - *Table CT-014: Contact Purpose* Any other "contact purpose" values are accepted.	M	U
DE03.004	Contact Residence Phone	The phone number where the contact person lives.	M	P
DE03.005	Contact Cell Phone	The cell phone number of the contact person.	M	P
DE03.006	Contact Work Phone	The organization work phone number where the contact person can be reached during working hours.	M	P
DE03.007	Contact Work Phone Extension	The number used to access the contact person's work phone number within an organization.	M	P
DE03.008	Contact E-Mail Address	The e-mail address preferred by the contact person.	M	P
DE03.009	Contact Note	Additional notes about the contact person.	M	P

4.4 PROVIDER INFORMATION

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE04.001	Provider First Name		M	P
DE04.002	Provider Last Name		M	P
DE04.003	Provider Role	The medical discipline the provider belongs to. For accepted values, refer to: - *Table CT-015: Healthcare Practitioner Type*	W	P
DE04.004	OHIP Billing Number	The unique number assigned to a physician by MOHLTC that allow the Ministry to calculate and direct payment for claims submitted under the number.	M	P
DE04.005	CPSO Number	The 5 or 6 digit unique identifier assigned by CPSO to physicians, allowing them to practice medicine in Ontario.	M	P
DE04.006	CNO Number	The 7 or 8 alphanumeric unique identifier assigned by CNO to registered nurses (RNs), nurse practitioners (NPs) and registered practical nurses (RPNs) in Ontario.	M	N

4.5 FAMILY HISTORY

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE05.001	Start Date	The date when the family member: - has been diagnosed or had symptoms of a disease or a problem - has undergone a procedure The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	W	P
DE05.002	Age at Onset	The age of the family member at the onset of the condition.	W	P
DE05.003	Life Stage	The stage of life the family member is in at the onset of the condition. For accepted values, refer to: - *Table CT-016: Life Stage*	M	P
DE05.004	Problem / Diagnosis / Procedure	A description that identifies the family member's history of a problem, diagnosis or procedure.	M	P
DE05.005	Treatment	Type or nature of the treatment delivered to the family member.	M	P
DE05.006	Relationship	Relationship of the family member that is blood related to the patient.	M	P
DE05.007	Notes	Additional notes about family member history of a problem, diagnosis or procedure.	M	P

4.6 ONGOING HEALTH CONDITIONS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE06.001	Date of Onset	The date when the patient had been diagnosed or had symptoms of a problem. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	M	P
DE06.002	Life Stage	The stage of life the patient is in at the onset of the condition (problem or diagnosed disease). For accepted values refer to: - *Table CT-016: Life Stage*	M	P
DE06.003	Resolution Date	The date when the problem or the diagnosed disease has been resolved or controlled. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	M	P
DE06.004	Diagnosis/Problem	A description that identifies the patient's problem or diagnosed disease.	M	P
DE06.005	Problem Description	A description of the problem reported	M	P
DE06.006	Problem Status	The status of the problem or the diagnosed disease.	M	P
DE06.007	Notes	Additional notes about the problem or the diagnosed disease.	M	P

4.7 PAST MEDICAL & SURGICAL HISTORY

OMD#	REQUIREMENT	GUIDELINES	M/W	Status
DE07.001	Date of Onset	The date the patient had been diagnosed or had the symptoms of a problem. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	M	P
DE07.002	Life Stage	The life stage the patient is at the onset of the condition. "Life Stage" applies to Problems, Diagnosis and Procedure medical records. For accepted values, refer to: - *Table CT-016: Life Stage*	M	P
DE07.003	Resolution Date	The date the problem or the diagnosed disease has been resolved or controlled. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	M	P
DE07.004	Diagnosis / Problem	A description that identifies the patient's problem or diagnosed disease.	M	P
DE07.005	Procedure Date	The date the patient has undergone a procedure or intervention. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	M	P
DE07.006	Procedure	A description that identifies the patient's procedure or intervention.	M	P
DE07.007	Notes	Additional notes about the "Past Medical and Surgical" medical records. "Notes" apply to Problems, Diagnosis and Procedure medical records.	M	P
DE07.008	Problem Status	The status of the problem or the diagnosed disease.	M	N

4.8 IMMUNIZATIONS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE08.001	Immunization Name	The brand name under which the administered vaccine is marketed in Canada (provided by EMR's drug database) or the name of the vaccine as typed in by the provider.	M	P
DE08.002	Immunization Code	The DIN extracted from the EMR's Drug Database for the selected vaccine and/or as typed in by the user. This is not a representative DIN but rather the real DIN of the vaccine that has been administered to the patient.	M	N
DE08.003	Immunization Type	The immunogen component of the "Vaccine Type" as described in the 'Canadian Immunization Guide'. Systems using a drug database to record an administered immunization must be able to automatically fill in the Immunization Type based on the selected Immunization Name and/or the Drug Code. For suggested values, refer to - *Table CT-020 Immunization Type*	M	U
DE08.004	Manufacturer	The manufacturer of the administered immunization.	M	P
DE08.005	Lot #	The product lot number corresponding to the administered immunization.	M	P
DE08.006	Route	The route or method the immunization has been administered. For suggested values, refer to - *Table CT-020 Medication and Immunization Route*	M	P
DE08.007	Site	The anatomical site location of the administered immunization. For suggested values, refer to - *Table CT-021 Immunization Site*	M	P
DE08.008	Dose	Dose amount and unit of measure corresponding to the administered immunization.	M	P
DE08.009	Immunization Date	The date the immunization has been administered to the patient. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	M	P
DE08.010	Immunization Refused Date	The date the immunization has been refused. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	M	U

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE08.011	Refused Indicator	A flag to indicate whether the immunization has been administered or refused.	M	U
DE08.012	Instructions		W	P
DE08.013	Notes	Additional information about patient immunization.	M	P

4.9 MEDICATIONS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE09.001	Prescription Written Date	The written date of the prescription. This is not the date the prescription has been added/inserted into the EMR. The EMR Offering must allow inserting past dates. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	M	P
DE09.001	Start Date	The start date of the prescription. The EMR Offering must allow inserting past dates. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	M	P
DE09.003	Medication Name	The brand name under which the prescribed medicine is marketed in Canada (provided by EMR's drug database) or the name of the medicine as typed in by the provider.	M	P
DE09.004	Drug Description	The free form text for the purpose of prescribing custom compounds or complex prescriptions that are not supported by the medication discreet data elements.	M	P
DE09.005	Drug Code	The DIN extracted from the EMR's Drug Database for the medication selected by the provider. This is the "representative DIN" since this is not necessarily the real DIN for the medication dispensed by the pharmacy.	M	P
DE09.006	Drug Strength	The quantity (amount) of the active (medicinal) ingredient in a drug and the associated unit of measure as extracted from the EMR`s Drug Database or typed in by the provider. Examples: 6 mg, 7%, etc. For unit of measure suggested values, refer to*:* - *Table CT-025: Medication – Strength Unit of Measure*	M	P
DE09.007	Dosage	Dose amount and unit of measure of the medication intended to be consumed during a single administration as prescribed by the provider. The dosage is characterized by a numeric value and an associated unit of measure. Examples: 1 tsp, 2 tabs etc. For unit of measure suggested values, refer to*:* - *Table CT-026: Medication – Dosage Unit of Measure*	M	P

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE09.008	Drug Form	The form in which the drug product is to be administered to the patient. Can be the form in which the drug product has been manufactured and provided by the EMR's Drug Database or as typed in by the provider. For suggested values, refer to*:* - *Table CT-023: Medication Form*	M	P
DE09.009	Route	The means by which the dispensed drug is to be administered to the patient. Can be the route of the administration as suggested by the manufacturer and provided by the EMR`s Drug Database or as typed in by the provider. For suggested values refer to - Table CT-022 Medication and Immunization Route	M	P
DE09.010	Frequency	The frequency by which the prescribed medication is to be consumed. For suggested values refer to - Table CT-024 Medication Frequency	M	P
DE09.011	Duration	The duration of medication to be dispensed for the first administration of the prescription (initial dispense).	M	P
DE09.012	Refill Duration	The duration of medication to be dispensed for the refills of the prescription. Supports the use cases when refill duration differs from initial dispense.	M	P
DE09.013	Quantity	The quantity of medication to be dispensed for the first administration of the prescription (initial dispense).	M	P
DE09.014	Refill Quantity	The quantity of medication to be dispensed for the refills of the prescription. Supports the use cases when refill quantity differs from initial dispense.	M	P
DE09.015	Number of Refills/Repeats	The subsequent fills that follow the initial dispense of the prescription.	M	P
DE09.016	Long-Term Medication	Indicator for Long-Term Medication. Default values are not accepted.	M	U
DE09.017	Past Medication Indicator	Indicator for discontinuation of medication from the treatment plan.	M	P
DE09.018	Patient Compliance	Indicate whether the patient is compliant with the medication as prescribed. Default values are not accepted.	M	U
DE09.019	Notes	Notes the provider adds to the prescription that are not visible on the printed prescription.	M	P
DE09.020	Prescription Instructions	Notes the provider adds to the prescription to communicate with the pharmacist.	M	P
DE09.021	Prescribed By Name	The First Name and the Last Name of the prescriber.	M	P

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE09.022	Prescribed By Identifier	The "OHIP Billing Number" number of the prescriber.	M	P
DE09.023	Prescription Identifier	A unique ID to identify a prescription within the EMR.	M	P
DE09.024	Prior Prescription Reference	A reference to a previous prescription which the current prescription replaces.	M	P
DE09.025	Treatment Type	Describes the categorization of the treatment type required by the MR2009 message. The EMR Offering needs to support prescription status in future e-Prescribing messages. Valid values are: - CHRON – Continuous/chronic - ACU – Acute - ONET – One Time - PRN Long-term – As needed - PRN Short-term – As needed	M	P
DE09.026	Prescription Status	Describes the lifecycle of the prescription as required by the MR2009 message. Valid statuses are: - New - Active - Suspended - Aborted - Completed - Obsolete - Nullified The EMR Offering needs to support prescription status in future e-Prescribing messages.	M	P
DE09.027	Non Authoritative Indicator	If true, indicates that the electronically stored (and retrieved) prescription is non-authoritative. I.e. A paper copy must be viewed before the prescription can be dispensed. Valid values: - Yes (Y) or - No (N) Whether or not an electronically retrieved prescription is authoritative all by itself is a notion that must be explicitly stated. Thus, this field cannot be 'Null'.	M	P
DE09.028	Dispense Interval	Indicates a minimum amount of time that must occur between dispenses. EMR to populate this field either as entered by the prescriber or calculated by the system. Though specified as 'AN', the number (e.g. 23) and the unit of time (e.g. d=days) are interpreted separately.	M	P

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE09.029	Substitution Not Allowed	A prescriber's instruction that a specific prescribed product be dispensed as is, or not. Valid Values: - Yes (Y) – substitution not allowed or - No (N) - substitution allowed Whether or not substitution is allowed is a notion that must be explicitly stated. Thus, this field cannot be 'Null'.	M	P
DE09.030	Targeted Dispensing Facility - Service Location Address	Identifies the physical location of a dispensing service location and also allows for the location to be contacted.	M	P
DE09.031	Targeted Dispensing Facility - Service Location Name	The name assigned to the dispensing service location. Used for human communication, and for cross-checking of location Id	M	P
DE09.032	Targeted Dispensing Facility - Service Location Identifier	Unique identifier for a dispensing location. Allows for lookup and retrieval of detailed information about a specific service location. Also ensures unique identification of service location.	M	P
DE09.033	To Be Picked Up When	The earliest date and time on which the dispense is expected to be picked up. Specified as DateTime (Date + Time)	M	P
DE09.034	Problem Code	A coded form of the problem that is the reason for the current prescription required by the MR2009 message Allows cross-checking the use of a therapy against its indication. Also allows analysis of best practices, etc. The EMR Offering needs to support problem code in the future for e-Prescribing messages.	M	P
DE09.035	Protocol Identifier	A unique identifier for a specific protocol or guideline which the prescription has been written in accordance with. Enables the communication of a reference to a protocol, study or guideline id, specific to the jurisdiction.	M	P

4.10 LABORATORY TEST RESULTS

OMD#	DATA ELEMENT	GUIDELINES	M/W	Status
DE10.001	Laboratory Name	The laboratory (source) responsible for sending the Test Result s to the EMR: - the laboratory with whom the EMR Offering has a direct interface - OLIS interface	M	U
DE10.002	Laboratory Test Code	The proprietary code that uniquely identifies a test within a laboratory as provided by the source: - the laboratory with whom the EMR Offering has a direct interface (if applicable)\ - the test results received via OLIS interface	M	P
DE10.003	Laboratory Test Name	The proprietary name assigned to "Laboratory Test Code" as provided by the source: - the laboratory with whom the EMR Offering has a direct interface (if applicable) - the test results received via OLIS interface	M	P
DE10.004	EMR Test Name	The EMR's proprietary name of a laboratory test for the purpose of uniquely representing and cross-referencing the same test received from different laboratory sources.	M	P
DE10.005	Accession Number	The unique number assigned by the source to one test or a group of tests to be performed.	M	P
DE10.006	Collection Date/Time	Date & Time the specimen has been collected.	M	P
DE10.007	Test Result Value	The numeric or qualitative results of a test as provided by the source.	M	P
DE10.008	Result Unit of Measure	Unit of measure associated with the Test Result Value as provided by the source.	M	P
DE10.009	Reference Range Low	The lower range limit associated with a test as provided by the source.	M	P
DE10.010	Reference Range High	The upper range limit associated with a test as provided by the laboratory.	M	P
DE10.011	Reference Range (Text-based)	The reference range that cannot be depicted numerically or cannot be parsed as high and low reference range provided by the source. Example: >2, <7, 2-7	M	P
DE10.012	Abnormal Indicator	Flag to indicate a test result is deemed normal, abnormal, unknown or as provided by the source. For suggested values refer to: - *Table CT-029: Laboratory Abnormal Flag*	M	P
DE10.013	Test Result Status	The status of the Test Result as provided by the source.	M	U
DE10.014	Ordering Practitioner	The provider who ordered a lab test as provided by the source.	M	P
DE10.015	Result Copied To	The provider(s) who is (are) copied on a lab result as provided by the source.	M	P
DE10.016	Lab Notes	Notes associated with an individual test result as provided by the source.	M	P
DE10.017	Physician Notes	Notes associated with an individual test result as typed in by an EMR provider.	M	P
DE10.018	Lab Requisition Date/Time	Date & Time the lab test has been ordered within the EMR.	M	P
DE10.019	Date/Time results entered in EMR	Date & Time the individual test result value has been recorded in the EMR.	W	P
DE10.020	Reviewer Identity	The identity of the authorized provider who signs-off (reviewed) the lab result(s).	M	P

OMD#	DATA ELEMENT	GUIDELINES	M/W	Status
DE10.021	Review Date/Time	Date & Time the report has been signed-off (reviewed) by the authorized provider.	M	P
DE10.022	Blocked Test Result	Indicates whether the test result is considered sensitive information.	M	N

4.11 ALLERGIES & ADVERSE REACTIONS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE11.001	Offending Agent	The name of the offending agent, whether drug or non-drug.	M	P
DE11.002	Offending Agent Drug Code	Representative DIN of the offending agent (if drug).	M	P
DE11.003	Reaction Type	Identifies whether the reaction is an allergy or an adverse reaction (includes intolerance and side effects).	W	P
DE11.004	Start Date	The date the patient reported or has been identified as being allergic or having an adverse reaction to a drug or a non-drug. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	M	P
DE11.005	Life stage	The life stage of the patient when he/she has been identified as being allergic or having an adverse reaction to a drug or a non-drug. For accepted values refer to: - *Table CT-016: Life Stage*	M	P
DE11.006	Severity	The severity of the allergy or adverse reaction as identified by the provider.	M	P
DE11.007	Reaction Description	The description of the patient`s reaction to a drug or a non-drug Examples: rash, lip swelling	M	P
DE11.008	Recorded Date	The date the allergy or adverse reaction has been recorded in the EMR.	W	P
DE11.009	Notes	Additional notes about an allergy or adverse reaction.	M	P

4.12 RISK FACTORS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE12.001	Risk Factor	The factors that might place the patient at health risk. Examples: drinking, smoking, obesity, exposure to asbestos, premature birth, etc.	M	P
DE12.002	Exposure Details	Specific agent details of the exposure. Examples: 2 packs per day; 10 bottles of wine per week, etc.	M	P
DE12.003	Age at Onset	The age of the patient at the onset of the condition.	W	P
DE12.004	Start Date	Date the patient was first exposed to the risk factor. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	W	P
DE12.005	End Date	Date the patient was last exposed to the risk factor. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	W	P
DE12.006	Life Stage	The life stage of the patient when he/she has first been exposed to the risk factor. For accepted values refer to: - *Table CT-016: Life Stage*	M	P
DE12.007	Notes	Additional notes about the risk factor.	M	P

4.13 ALERTS & SPECIAL NEEDS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE13.001	Alert Description	Description of the Alert or Special Need.	M	P
DE13.002	Notes	Additional notes about an Alert or Special Need.	M	P
DE13.003	Date Active	Date the Alert or Special Need has been identified as first time active. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	W	P
DE13.004	End Date	Date the Alert or Special Need has been identified as no longer active. The EMR Offering must allow for: - Full Date (dd/mm/yyyy) - Partial Date (mm/yyyy or yyyy)	W	P

4.14 REPORTS RECEIVED

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE14.001	Source Facility	The name of the facility (clinic, hospital) where the report originated.	M	P
DE14.002	Source Facility ID	Unique ID of the facility that sends HRM reports. This discrete data element is specific to reports downloaded from "HRM system".	M	P
DE14.003	Source Author	First Name and Last Name of the provider who authored the report.	M	P
DE14.004	Creation Date	Date & Time the medical and non-medical report was created by the source provider (author) or source facility.	M	P
DE14.005	Receive Date	Date & Time the medical and non-medical reports have been received by the medical practice. This is not the date the report was recorded in the EMR. The EMR Offering must allow backdating.	M	P
DE14.006	Report Content	The content of the export report as received by the practice.	M	P
DE14.007	Source Facility Report Number	Unique ID for a report as provided by the sending facility. This discrete data element is specific to reports downloaded from "HRM system".	M	P
DE14.008	Notes	Additional notes/annotations about the report (attached file) as typed in by the provider.	M	P
DE14.009	Report Class	Classification of the external reports received by the practice.	M	P
DE14.010	Report Sub-Class	Sub-classification of the external reports.	M	P
DE14.011	Accompanying Sub-Class	The sub-classification of the DI and CRT reports as provided by the sending facility (source facility). This discrete data element is specific to DI and CRT reports downloaded from "HRM system".	M	P
DE14.012	Accompanying Mnemonic	The abbreviated term used by the sending facility to describe procedures/studies as provided by the sending facility This discrete data element is specific to DI and CRT reports downloaded from "HRM system".	M	P
DE14.013	Accompanying Description	The description of a procedure/study corresponding to the Accompanying Mnemonic data element as provided by sending facility. This discrete data element is specific to DI and CRT reports downloaded from "HRM system".	M	P
DE14.014	Observation Date/Time	Date and Time that the observation/service was performed for each DI and CRT reports as provided by the sending facility (source facility). This discrete data element is specific to DI and CRT reports downloaded from "HRM system".	M	P

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE14.015	Report Status	The Status of the report as typed as received from the source. This discrete data element is specific to the reports downloaded from "HRM system".	M	P
DE14.016	Responsible Provider	The EMR user that is responsible for reviewing the report.	W	P
DE14.017	Reviewer Identity	The authorized provider who signs off (reviews) the report.	M	P
DE14.018	Review Date/Time	Date & Time the report has been signed-off (reviewed) by the authorized provider.	M	P

4.15 APPOINTMENTS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE15.001	Appointment Date/Time	The date and time of the scheduled appointment.	M	P
DE15.002	Appointment Duration	Length of the appointment in minutes.	M	P
DE15.003	Appointment Status	Status of the appointment. Example: Confirmed, Cancelled, No-Show etc.	M	P
DE15.004	Appointment Purpose	The purpose or reason for the patient visit. Examples: Diabetes, Pre-natal, Annual checkup, etc.	M	P
DE15.005	Appointment Notes	Summary detailing the patient visit.	M	P
DE15.006	Appointment - Provider Identity	The identity of the provider with whom the patient is scheduled to have or has had a visit with.	M	P

4.16 CARE ELEMENTS

GENERIC CARE ELEMENTS

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE16.001	Blood Pressure	The blood pressure as measured by the provider. Blood pressure is out of target if either systolic or diastolic BP is out of target.	M	P
DE16.002	Date - Blood Pressure	Date the blood pressure has been measured by the provider.	M	N
DE16.003	Heart Rate	The heart rate as measured by the provider.	M	P
DE16.004	Date - Heart Rate	Date the heart rate has been measured by the provider.	M	N
DE16.005	Height	The height as measured by the provider.	M	P
DE16.006	Date - Height	Date the height has been measured by the provider.	M	N
DE16.007	Weight	The weight as measured by the provider.	M	P
DE16.008	Date - Weight	Date weight has been measured by the provider.	M	N
DE16.009	BMI	The Body Mass Index automatically calculated by the EMR system, based on the Height and Weight recorded by the provider.	M	U
DE16.010	Date - BMI	Date the BMI has been recorded by the provider.	M	N
DE16.011	Waist Circumference	The waist circumference as measured by the provider.	M	P
DE16.012	Date - Waist Circumference	Date the waist circumference has been measured by the provider.	M	N
DE16.013	Smoking Status (Yes/No)	Records whether the patient is currently smoking or not. Default values are not accepted. Smoking Status recorded in the Risk Factor must flow in all the flowsheet where the data element is used, based on the recorded date.	M	U
DE16.014	Date - Smoking Status	Date the "smoking status" has been reported by the patient.	M	N
DE16.015	Smoking Packs/Day	The number of packs per day smoked as reported by the patient. It is assumed that 1 pack = 20 cigarettes.	M	U
DE16.016	Date - Smoking Packs/Day	Date the patient reported the number of packs/day he/she is smoking.	M	N
DE16.017	Alcohol Use *(# drinks/week)*	The number of drinks equivalents per week as reported by the patient.	M	P
DE16.018	Date - Alcohol Use	Date the patient reported the number of drinks/week.	M	N
DE16.019	Erectile Function (Normal/Abnormal)	Records whether the "Erectile Function" is normal or abnormal. Default values are not accepted.	M	U

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE16.020	Date - Erectile Function	Date the patient reported that the "erectile function" is normal or abnormal.	M	N
DE16.021	FEV1 (before puff) - (personal best of 3)	Forced Expiratory Volume -the volume of air that has been exhaled by the patient at the end of the first second of forced expiration.	M	U
DE16.022	Date - FEV1 (before puff)	Date the "FEV1 (before puff)" has been measured.	M	N
DE16.023	FVC (before puff)	Forced Vital Capacity - the volume of air that has been forcibly and maximally exhaled out by the patient until no more can be expired.	M	N
DE16.024	Date - FVC (before puff)	Date the "FVC (before puff)" has been measured.	M	N
DE16.025	FEV1% (before puff)	The ratio of FEV1 to FVC calculated for the patient. Alternate Name: FEV1 / FVC ratio	M	N
DE16.026	Date - FEV1% (before puff)	Date the "FEV1% (before puff)" has been measured.	M	N
DE16.027	FEV1 predicted	The FEV1 calculated in the population with similar characteristics (e.g. height, age, sex, race, weight, etc.).	M	U
DE16.028	Date - FEV1 predicted	Date the "FEV1" predicted has been measured.	M	N
DE16.029	FVC predicted	Forced Vital Capacity predicted - calculated in the population with similar characteristics (height, age, sex, and sometimes race and weight).	M	N
DE16.030	Date - FVC predicted (before puff)	Date the "FVC" predicted has been measured.	M	N
DE16.031	FEV1% predicted	The ratio of FEV1 predicted to FVC predicted, calculated in the population with similar characteristics (height, age, sex, and sometimes race and weight). Alternate Name: FEV1 / FVC predicted ratio	M	N
DE16.032	Date - FEV1% predicted	Date the "FEV1% predicted" has been measured.	M	N
DE16.033	FEV1% of predicted (before puff)	FEV1% (before puff) of the patient divided by the average FEV1% predicted in the population with similar characteristics (e.g. height, age, sex, race, weight, etc.). Alternate Name: FEV1 ratio (before puff)	M	U
DE16.034	Date - FEV1% of predicted (before puff)	Date the "FEV1% of predicted (before puff)" has been measured.	M	N
DE16.035	FVC ratio (before puff)	FVC actual (before puff) / FVC predicted	M	N
DE16.036	Date - FVC ratio (before puff)	Date the "FVC ratio (before puff)" has been measured.	M	N
DE16.037	FEV1 / FVC ratio (before puff)	FEV1 / FVC (before puff) actual divided by FEV1 / FVC predicted	M	N
DE16.038	Date - FEV1/FVC ratio (before puff)	Date the "FEV1/FVC ratio (before puff)" has been measured.	M	N

OMD #	REQUIREMENT	GUIDELINES	M/W	Status
DE16.039	PEF personal (before puff) - (best of 3)	Peak Expiratory Flow (or PEFR)- the maximal flow (or speed) achieved during the maximally forced expiration initiated at full inspiration. UM: litres/min	M	U
DE16.040	Date - PEF personal (before puff)	Date the "PEF personal (before puff)" has been measured.	M	N
DE16.041	FEV1 (after puff) -(personal best of 3)	Forced Expiratory Volume -the volume of air that has been exhaled by the patient at the end of the first second of forced expiration.	M	N
DE16.042	Date - FEV1 (after puff)	Date the "FEV1 (after puff)" has been measured.	M	N
DE16.043	FVC (after puff)	Forced Vital Capacity - the volume of air that has been forcibly and maximally exhaled out by the patient until no more can be expired.	M	N
DE16.044	Date - FVC (after puff)	Date the "FVC (after puff)" has been measured.	M	N
DE16.045	FEV1% (after puff)	The ratio of FEV1 to FVC calculated for the patient. Alternate Name: FEV1 / FVC ratio	M	N
DE16.046	Date - FEV1% (after puff)	Date the "FEV1% (after puff)" has been measured.	M	N
DE16.047	FEV1% of predicted (after puff)	FEV1% (after puff) of the patient divided by the average FEV1% predicted in the population with similar characteristics (e.g. height, age, sex, race, weight, etc.). Alternate Name: FEV1 ratio (before puff)	M	N
DE16.048	Date - FEV1% of predicted (after puff)	Date the "FEV1% of predicted (after puff)" has been measured.	M	N
DE16.049	FVC ratio (after puff)	FVC actual (after puff) / FVC predicted	M	N
DE16.050	Date - FVC ratio (after puff)	Date the "FVC ratio (after puff)" has been measured.	M	N
DE16.051	FEV1 / FVC ratio (after puff)	FEV1 / FVC (after puff) actual divided by FEV1 / FVC predicted	M	N
DE16.052	Date - FEV1/FVC ratio (after puff)	Date the "FEV1/FVC ratio (after puff)" has been measured.	M	N
DE16.053	PEF personal (after puff) - (best of 3)	Peak Expiratory Flow (or PEFR)- the maximal flow (or speed) achieved during the maximally forced expiration initiated at full inspiration.	M	N
DE16.054	Date - PEF personal (after puff)	Date the "PEF personal (after puff)" has been measured.	M	N
DE16.055	O_2 Saturation	Records the "O_2 Saturation" as measured by the provider or received from laboratory.	M	P
DE16.056	Date - O2 Saturation	Date the O2 Saturation has been measured.	M	N

5. SUPPORTING INFORMATION

5.1 EMR USAGE METRICS REPORT (REQ # EMR11.13) - SAMPLE

Vendor can produce reports related to EMR use metrics (sample below).

EMR Usage Report

Provider: Dr. J. Doe
Date Range: 01/01/10 – 01/03/10

Practice Profile
Practice Size: _____

Age and Gender Distribution:

Age Group - Years	Percentage	Male	Female
0 - 19	30%	65%	45%
20 - 44	20%	20%	80%
45 - 64	30%	45%	55%
65 - 84	25%	40%	60%
85+	5 %	25%	75%

Number of unique patient visits (kept) which demonstrate use of the following EMR functionality in the identified time frame:

Scheduled Appointments	Billing[1]	Encounter Note[2]	Ongoing Health Conditions[3]	Stored documents[4]	Prescriptions new/renewals	Use of reminders / alerts[5]	Labs[6]
100	98	100	75	50	46	100	25

Note:
1. Bill for services – includes OHIP, WSIB, other Provincial plans, private insurance and uninsured (self-pay, third parties) invoicing
2. Encounter notes (SOAP, Progress Notes, etc.) for patients seen; progress note entry associated with a kept patient office visit
3. Ongoing health conditions, problems, diagnoses from CPP.
4. Store documents not originated from by the practice; includes any scanned documents or external documents delivered through an electronic interface (e.g. through Hospital Report Manager).
5. Generate automated alerts / reminders to support care delivery– includes medication alerts (drug-drug, drug-allergy, drug-condition); preventive care and chronic disease management reminders
6. Received lab results electronically, directly into the EMR from private labs or hospital labs.

6. RETIRED CORE REQUIREMENTS & DISCRETE DATA ELEMENTS

6.1 RETIRED CORE – BASELINE REQUIREMENTS

The following terms and abbreviations are defined and shall be applied to all tables in this section:

Scoring: **M** = Mandatory criteria for
W = Weighted criteria

Status: **N** = New requirement for EMR Specification v4.1
P = Previous requirement from EMR-Specification v4.1
U = Updated from a previous EMR Specification v4.1 requirement
R = Retired from previous EMR Specification v4.1

OMD #: unique identifier that identifies each requirement within *OMD Requirement Repository*

YEAR Retired: the year the requirement was retired from the *OMD Requirement Repository*

The following functional requirements have been retired from the Core EMR Specification - Section 1: EMR Baseline Requirements.

Refer to Appendix A – EMR Baseline Requirements v4.1 for complete information about the retired requirements.

OMD #	Requirement	Guidelines	M/W	Status	YEAR Retired	Reason for Retirement
2.1.2 d)	Maintains adverse reaction (intolerance) data (at least mandatory data elements described in section 2.2.1.2.6 – Allergies and Adverse Reactions).	Documented patient allergies.	M	P	2015	Merged with requirement EMR02.03
2.1.6 c)	Able to import external documents (e.g. consult reports, discharge summaries, and other correspondence) in scanned format to become part of the EMR. To satisfy this requirement, external documents must have data associated, as identified in section 2.2.1.2.10 – Attached Files.	Example: file format is JPEG, PDF	M	P	2015	Merged with requirement EMR06.01
2.1.10 c)	Allows reason for visit to be recorded on appointment.	Examples: Diabetes visit. Pre-natal, Annual checkup.	M	P	2015	Replaced by overarching requirement EMR09.01
2.1.10 o)	Supports free form text notes that are tied to each appointment. Must be separate from the “reason” field.		M	P	2015	Replaced by overarching requirement EMR09.01

OMD #	Requirement	Guidelines	M/W	Status	YEAR Retired	Reason for Retirement
EMR02.13	Support Single Sign-On from EMR Application to OntarioMD website.	Single sign-on should occur without requiring user to re-enter stored website user credentials, if desired. Refer to the “The OntarioMD.ca – Automated Authentication Developer’s Guide” on the OntarioMD.ca website.	M	P	2015	Requirement Retired. Drug Search functionality on OntarioMD website discontinued.
EMR02.14	Initiate a Drug Search on OntarioMD website from EMR.	Search can be: - context sensitive search (e.g. user has prescribed a drug and wants to search for results for that specific drug); or - general search (e.g. user enters a search term for a drug for which they are interested, from the EMR interface) Refer to the “The OntarioMD.ca – Automated Authentication Developer’s Guide” on the OntarioMD.ca website.	M	P	2015	Requirement Retired. Drug Search functionality on OntarioMD website discontinued.

6.2 RETIRED CORE – DISCRETE DATA ELEMENTS

The following discrete data elements have been retired from Core EMR Specification – Section 1: EMR Baseline Requirements.

Refer to Appendix A – EMR Baseline Requirements v4.1 for complete information about the retired requirements.

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	YEAR Retired	Reason for Retirement
2.2.1.2.10 e)	File type		W	P	2015	Data element in “Attached Files”