OntarioMD

ELECTRONIC MEDICAL RECORDS

CORE EMR SPECIFICATION

Section 2: Data Portability

Version 4.2

FINAL

Date: April 1, 2015

Ontario
eHealth Ontario

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GLOSSARY

TERM	MEANING
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.
CDS - XSD Schema	The xml data structure used to transport patient medical data for a single instance of an EMR that is used by one or more physicians in a primary care medical practice. The CDS - XSD Schema is composed of ontario_cds.xsd and ontario_cds_xsd.xsd
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.
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.
DP	Data Portability The import-export process by which the Core Data Set (CDS) is being transferred between two EMR Systems.
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	The lifetime identification number assigned to all eligible residents within a jurisdiction (province) for the purpose of receiving provincially funded insured health services
HRM Reports	The hospital reports that are downloaded from HRM system (sFTP server) in xml format compliant with HRM – XSD Schema
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 – XSD Schema	The xml data structure used to transport HRM reports from HRM system to EMR Offerings. The HRM - XSD Schema is composed of report_manager.xsd and report_manager_dt.xsd
ICD	International Statistical Classification of Diseases ICD standards: ICD-9, ICD9-CM, ICD10, ICD10-CM, ICD10-PCS, ICD10-CA / CCI

TERM	MEANING
ISO	International Standards Organization
ISO 3166-2	ISO 3166-2 Codes for the representation of names of countries and their subdivisions -- Part 1: Country codes
ISO 639-2	ISO 639-2 Codes for the representation of names of languages — Part 2: Alpha-3 code
M	Mandatory requirement. An EMR Offering must have this function or provide this service.
MRP	Most Responsible Provider The attending physician who is primarily responsible for the day-to-day care of patient. In absence, the covering healthcare provider 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
OntarioMD	OntarioMD Inc.
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 or an organization that facilitates such services
Sending Facility	The name of the health facility (e.g. clinic, hospital) where the medical reports originated. The "Sending Facility" is used interchangeably with "Source Facility"
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
W	Weighted requirement. The EMR Offering will receive a point value if the requirement is met.
W3C Standard	World Wide Web Consortium Standard
XML	Extensible Mark-up Language. A set of rules for encoding documents in machine-readable form.
XSD Schema	An XML-based language used to describe and control XML

1. INTRODUCTION

1.1 OVERVIEW - DATA PORTABILITY

The requirement for Data Portability originated from physicians using EMR in their medical practice with the need to ease their transition to a new EMR as many Primary Care physicians anticipate moving to new models of practice (e.g. Family Health Teams, Family Health Networks, etc.).

Including Data Portability as part of an EMR Offering will benefit physicians that need to transition to a new system in the following situations:

- the EMR application is no longer appropriate for the practice's needs
- the EMR vendor go out of business or merge with other EMR vendors
- physician leaving practice that use a certified EMR and join practice that also use a certified EMR
- the EMR vendor no longer maintaining their application certification
- transfer of individual patient record to a different physician

The objective of the Data Portability solution is the transfer of necessary and sufficient patient information in absence of the entire patient record that can be transferred from one physician office system to another to ensure continuity of patient of care. As such, the Core Data Set (CDS) has been defined to support the Data Portability objective.

In the context of Data Portability solution, the Core Data Set (CDS) is:

- a subset of the DDS (Discrete Data Elements) defined in Core EMR Specification – Section 1: Baseline Requirements
- includes structured data (e.g. Health Conditions, Medications, Allergies, etc.) and un-structured data (e.g. Clinical Note, Progress Notes, etc.)
- represents the data elements to be exported/imported at a certain point in time

To mitigate any discrepancies between various EMR implementations, achieve standardization and ensure flexibility to evolve, the CDS XSD Schema has been developed and data conversion rules have been established.

1.2 SCOPE OF DATA PORTABILITY

This specification defines requirements to be implemented into the EMR Offerings in order to ensure interoperability between different EMR solutions.

The Data Portability specification:

a) defines requirements to support management of patient medical data export
b) defines requirements to support of patient medical data import
c) defines the Core Data Set elements
d) defines the business rules / restrictions and data conversions that applies to CDS elements
e) defines the data type and the length of the xml data elements
f) includes CDS XSD Schema
   - ontario_cds.xsd
   - ontario_cds_dt.xsd

The scope of the Data Portability did not consider:

- transferring the entire patient record
- conversion of the entire patient record
- transferring patient non-medical records (e.g. billing)

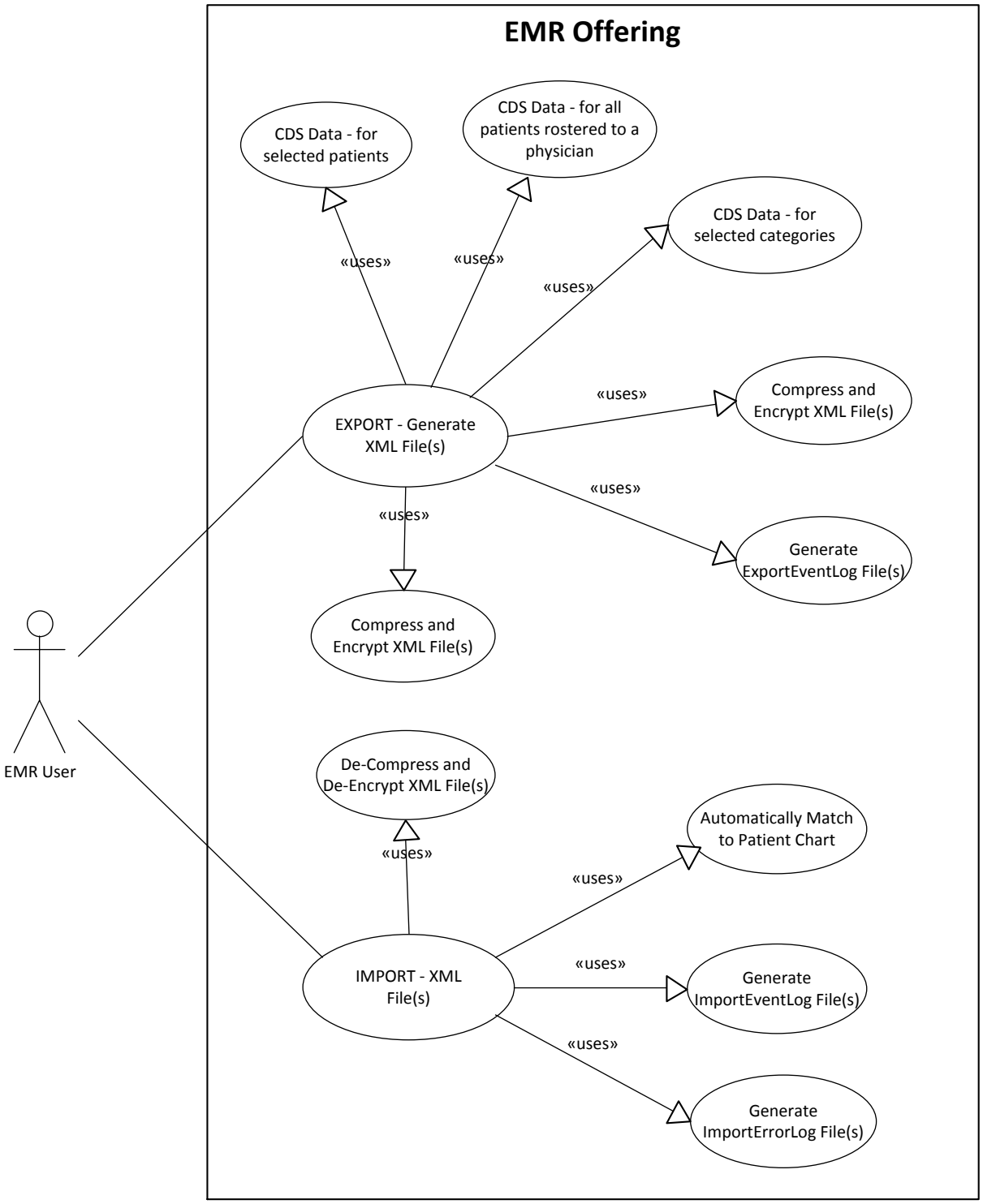
These requirements complement existing requirements defined in the Core EMR Specification – Section 1: Baseline Requirements.

1.3 ACTORS AND WORKFLOW DESCRIPTION FOR DATA PORTABILITY

The diagram that appears on the following page illustrates:

- How the EMR user interacts with the EMR Offering to generate the export files
- How the EMR user interacts with the EMR Offering, import the xml files and generate the import files
- Who are the actors
    - EMR Offering
    - EMR user

1.3.1 EMR DATA PORTABILITY - BUSINESS USE CASE



2. SPECIFICATION TRACEABILITY

2.1 HIGHLIGHTS OF CHANGES

Ontario EMR Specification v4.1 – Appendix B was used as the basis to create this Core EMR Specification - Section 2: Data Portability.

TYPE	# of Requirements Spec 4.1	# of Requirements 4.2
New Requirements	1	1
Updated Requirements	3	2
Previous Requirements	11	13
Total Number of Requirements	15	16

* **NOTE**: Due to splitting and/or merging requirements defined in the previous specification, the "Total Number of Requirements" in the most current 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 by Core EMR Specification – Section 2: Data Portability.

DOCUMENT NAME	VERSION	DATE	PUBLISHING ORGANIZATION	LINK
Core EMR Specification Section 1: Baseline Requirements	v4.2	1-Apr-2015	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/current_emr_specifications
Core EMR Specification CDS - XSD Schema	v1.1.2	1-Apr-2015	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/current_emr_specifications
Data Portability Change Log	v4.2	1-Apr-2015	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/current_emr_specifications
EMR CDM Specification	v4.2	1-Apr-2015	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/current_emr_specifications
Data Dictionary & Mapping	v4.2	1-Apr-2015	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/current_emr_specifications
EMR Code Tables	v4.2	1-Apr-2015	OntarioMD	https://www.ontariomd.ca/portal/server.pt/community/ontario_emr_specifications/current_emr_specifications

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

3. DATA PORTABILITY - FUNCTIONAL REQUIREMENTS

This section consists of the EMR functional requirements for Core EMR Specification – Section 2: Data Portability.

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 requirement from a previous EMR Specification v4.1
R = Retired requirement from previous EMR Specification v4.1

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

3.1 EXPORT – FUNCTIONAL REQUIREMENTS

OMD #	REQUIREMENT	GUIDELINES	W/M	Status
DP01.01	Generates files in XML format that comply with the CDS XSD Schema.	In order for this requirement to be met one file per patient must be generated. Refer to: - ontario_cds.xsd - ontario_cds_dt.xsd	M	P
DP01.02	Generates files that contain all available data elements as described in Section 4 / CDS XSD Schema.	In order for this requirement to be met, the extract must be user administered and does not require an EMR vendor to attend the process.	M	P
DP01.03	Provided the ability to export the provisioned CDS data for all patients of a physician.	At a minimum the export processes must: - function in a batch mode - generate files for all patients rostered to a provider regardless of the "Patient Status" (refer to #DE01.016) Requiring users to create cohorts and add patients to the cohort is not an accepted solution. In order for this requirement to be met, the extract must be user administered and does not require an EMR vendor to attend the process.	M	U
DP01.04	Provides the ability to export records for selected patients within the EMR.	User must be able to identify the patient(s) to be included in the data export. Requiring users to create cohorts and add patients to the cohort is an accepted solution. In order for this requirement to be met, the extract must be user administered and does not require an EMR vendor to attend the process.	M	P
DP01.05	Provides the ability to select specific CDS Data Categories to be exported.	The requirement applies to export of data for - all patients of a physician and - selected patient(s) CDS Data Categories are defined as per Section 4- CDS XSD Schema, below. In order for this requirement to be met, the extract must be user administered and does not require an EMR vendor to attend the process.	M	U
DP01.06	Creates a ReadMe file as described in Section 5.1 - ReadMe.	Creating one or multiple ReadMe file per export is acceptable as long as the name of the physician and the number of patient files extracted per each physician can be clearly identified. In order for this requirement to be met ReadMe must be output to a file.	M	P
DP01.07	Creates an ExportEventLog file as described in Section 5.2 - Export Event Log.	In order for this requirement to be met Export Event Log must be output to a file.	M	P

OMD #	REQUIREMENT	GUIDELINES	W/M	Status
DP01.08	Compresses and encrypts export files using the PGP software utility. Supports the ability to move the files to the media device.	The compression and encryption applies to: - CDS XML file(s) - ReadMe - ExportEventLog *For additional information, please refer to:* *- http://www.pgpi.org* *- http://www.pgp.com*	M	P
DP01.09	Documents user steps/instructions about how to: - generate the export files (CDS, ReadMe, ExportEventLog) - compress the files - encrypt the files - transfer files to media devices		M	P
DP01.10	Vendor must provide documents describing processes and/or tools for export support.	In order for this requirement to be met EMR vendor must provide documentation of the support services and their associated costs: - telephone support - on-site detailed application support - application tools to aid in the CDS import - etc.	M	N
DP01.11	The standard naming format for xml exported file must be: - PatientFN_PatientLN_PatientUniqueID_DOB	PatientFN – Patient First Name PatientLN – Patient Last Name PatientUniqueID - Unique Vendor ID Sequence DOB- date of birth DOB - format: ddmmyyyy	M	P

3.2 IMPORT – FUNCTIONAL REQUIREMENTS

OMD #	REQUIREMENTS	GUIDELINES	M/W	Status
DP02.01	Supports import of provisioned CDS data for a physician.	Data from import file(s): - must be imported into the EMR discrete data fields where applicable (as defined in Section 4) - data fields that do not map must be grouped together and accessible within patient record under the record they belong to (e.g. “Smoking Risk Factor”, “Amoxicillin Prescription”, “Patient Demographics”) - importing unmapped data into the Notes field is not an acceptable solution At a minimum the import processes must function in a batch mode. In order for this requirement to be met, the extract must be user administered and does not require an EMR vendor to attend the process.	M	P
DP02.02	Documents user steps/instructions about how to: - move export files (i.e. CDS Data, ReadMe.txt and the Export Event Log) from media type to importing system - de-compress the files - de-encrypt the files		M	P
DP02.03	Vendor must provide documents describing processes and/or tools for import support.	In order for this requirement to be met EMR vendor must provide documentation of the support services and their associated costs: - telephone support - on-site detailed application support - application tools to aid in the CDS import - etc.	M	P
DP02.04	Generates an ImportEventLog file as described in 5.3 - Import Event Log.	In order for this requirement to be met Import Event Log must be output to a file.	M	P
DP02.05	Generates Import Error Log file which includes each record that failed to upload for each patient.	Error log file must be output to a file.	M	P

4. CDS XSD SCHEMA – STRUCTURE & BUSINESS RULES

TERMINOLOGY:

For the purposes of the Data Export Requirements and Data Import Requirements, the following terms and abbreviations are defined and are applicable to all tables in this section.

Data Portability ("DP") - is the import-export process by which the Core Data Set (CDS) is being transferred between two Electronic Medical Record Systems

Core Data Set ("CDS") - is comprised of the following three groups to provide a longitudinal representation of a patient medical record:

(i) Practice Management ("PM")

(ii) Cumulative Patient Profile ("CPP")

(iii) Extended Patient Information

Practice Management ("PM") Categories consists of one of the three CDS Data Categories:

- Appointments and
- Patient Demographics

Cumulative Patient Profile ("CPP") consists of one of the following CDS Data Categories:

- Family History
- Past Health
- Problem List
- Risk Factors
- Allergies and Adverse Reactions
- Medications
- Immunizations
- Care Elements
- Alerts and Special Needs

Extended Patient Information Categories consists of one of the three CDS Data Categories:

- Laboratory Results
- Physician's "My Clinical Notes"
- Reports Received

    - images (may be scanned reports left in image form and other images)
    - scanned or transcribed documents (e.g. converted to text or codes)
    - received electronically
- Care Elements
    - Generic Care Elements
    - Non-Generic Care Elements

CDS XSD Schema is:

- the data structure used to transport patient medical data for a single instance of an EMR that is used by one or more physicians in a primary care medical practice
- comprised of CDS categories
- a single instance of a EMR has its own patient registration application. Example: If two different EMR products co-exist on the same system that would represent two separate EMR instances. In this case each EMR would export data to a separate CDS

CDS XSD Schema - Data Elements and Business Rules

CDS # - represent a unique identifier by which any data element will be identified within CDS XSD Schema. New data elements added to the CDS XSD Schema are identified by **'N'**.

Data Element:

- a unit of data as set out in the CDS XSD Schema
- **" * "** this symbol means that CDS Data Category, or a subsection within a CDS Data Category or a data element may be repeated.
    - Example of a category: Reports Received
    - Example of a subsection: (*) Accompanying Sub-Class /(*) Accompanying Mnemonic / (*) Accompanying Description / (*) Observation Date/Time.
    - Example of a data element: (*) Contact Purpose

Definition - the detailed description of the Data Element

Required Fields:

- Y - the data element is a minimum requirement for the construction of a valid CDS record (ontariomMD_cds.xsd). A Data Element that is required (i.e. marked as Y) must have a value in the XML file in order for the file to be valid.
- Y* - yes if 'Residual Data Element Name(*)' is provided. This is applicable just for Residual Data.
- Y** - yes if Diagnosis Code System Name is provided

Data Type - the characteristic of the data listed

- **DATE**: YYYY-MM-DD

  - YYYY = four-digit year , MM = two-digit month DD = two-digit day of month (01 through 31)
- **DATE/ TIME**: YYYY-MM-DDThh:mm:ss.sTZD
  - YYYY = four-digit year, MM = two-digit month, DD = two-digit day of month (01 through 31)
  - hh = two digits of hour (00 through 23), mm = two digits of minute (00 through 59)
  - ss = two digits of second (00 through 59), s = one or more digits representing a decimal fraction of a second
  - TZD = time zone designator (Z or +hh:mm or -hh:mm)
- **TIME:** hh:mm:ss.sTZD
- **NUM:** numeric
- **AN:** alphanumeric
- **AB:** alphabetic

LEN - maximum number of characters that is represented in a particular Data Element

- **NL -** No Limit
- **BOT** – Based On Type
- **TBP** – To Be Provided
- **TBF** – To Be Finalized

CODE SOURCE- the source of the coding system or specific codes that is valid for a given Data Element.

BUSINESS RULES – the set of business rules and restrictions that applies to a given data element that supersedes and/or complement the CDS XSD Schema

Category Summary Line:

- A text string, summarizing the content of the structured data elements within a category.
- The format and content of each Category Summary Line is recommended per category.
- For additional information see “Working with Category Summary Line” section in this document.

Residual Data:

- The data in a category that is not defined by structured fields and is important information for patient care.
- The information in the Residual Data will be structured as per the CDS XML Schema - Definition and CDS XML Schema.
- For additional information see “Working with Residual Data” section in this document.

4.1 PATIENT DEMOGRAPHICS

Export of Patient Demographics information represents a snapshot of the patient data within the medical record at the time of export.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
1	Name Prefix	An honorific title used when addressing a person by name.		AN	6	See *Table CT-001: Name Prefix*	Name Prefix must be valid code.
2	(*) Name Part	A part of a name. Typical name parts for person names are first/given names and last/family names.	Y	AN	50		At a minimum First/Given Name and Last/Family Name must be provided. See Section: Working with Name Part Elements
3	(*) Name Part Type	Indicates whether the name part is a first/given name or last/family name.	Y	AN	4	See *Table CT-002: Name Part Type*	Name Part Type must be valid code: See Section: Working with Name Part Elements
4	(*) Name Part Qualifier	Indicator to distinguish the person's name for any of the name parts.		AN	2	See *Table CT-003: Name Part Qualifier*	Name Part Qualifier must be valid code. See Section: Working with Name Part Elements
5	(*) Name Purpose	If more than one name is recorded, a Name may have a code advising a system or user which name in a set of names to select for a given purpose.	Y	AN	2	See *Table CT-004: Name Purpose*	Name Purpose must be valid code . See Section: Working with Name Part Elements
6	Last Name Suffix	An additional term placed after a person's name.		AN	3	See *Table CT-005 - Name Suffix*	Last Name Suffix must be valid code.
7	Date of Birth	The date on which the patient was born.	Y	DATE	10	W3C Date Standard	
8	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.		AN	20		
9	Health Card Version Code	The two digits code associated with Ontario HCN that uniquely identifies the status of that health card.		AB	2		
10	Health Card Expiry Date	The expiration date for the HCN.		DATE	10	W3C Date Standard	
11	Health Card Province	The legal entity (province) responsible for assigning the HCN.		AB	5	See *Table CT-013 – Province/State/Territory*	Health Card Province must be valid code.
12	Chart Number	Number used by the medical practice to identify the associated hardcopy chart.		AN	15		
13	Gender	The reported sexual identity of a person for administrative purposes.	Y	AN	1	See *Table CT-006: Gender*	Gender must be valid code.
14	Unique Vendor ID Sequence	System-specific internal unique key (has no contextual meaning) to uniquely identify the	Y	AN	20		The purpose of this field is to allow for tracking an imported patient record back to the ID within the

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
		patient within the exporting system.					exporting system. Import: - the value must be stored and accessible within the patient record
15	Address Type	At a minimum the EMR Offering must support: - residence address - mailing address		AN	1	See *Table CT-011: Address Type*	The Address Type must be valid code.
16	Mailing Street Address line 1	The unit and street address for the purpose of postal delivery as declared by the patient.		AN	50		Export: **If** the mailing address (number & street address, city, country & province, postal/zip code) is not saved discretely in the EMR Offering **then** use *<xs:element name="Formatted" type="cdst:address.formatted"/>* tag **els**e use *<xs:element name="Structured" type="cdst:address.structured"/>* tag
17	Mailing Street Address line 2	The unit and street address for the purpose of postal delivery as declared by the patient.		AN	50		Export: Refer to CDS#16 for the business rules
18	Mailing City	The city assigned for postal delivery purposes as declared by the patient.		AN	80		Export: Refer to CDS#16 for the business rules
19	Mailing Country & Province/State	The country & province/state for the purpose of postal delivery as declared by the patient.		AN	7	ISO 3166-2	Province/State Country must be valid code. Export: Refer to CDS#16 for the business rules
20	Mailing Postal/Zip Code	The postal/zip code for the purpose of postal delivery as declared by the patient.		AN	10		Postal/Zip code must not contain spaces. Export: Refer to CDS#16 for the business rules
21	Residence Street Address line 1	The street address where the patient lives.		AN	50		Export: **If** the residence address (number & street address, city, country & province, postal/zip code) is not saved discretely in the EMR Offering **then** use *<xs:element name="Formatted" type="cdst:address.formatted"/>* tag **els**e use *<xs:element name="Structured" type="cdst:address.structured"/>* tag
22	Residence Street Address line 2	The street address where the patient lives.		AN	50		Export: Refer to CDS#21 for the business rules
23	Residence City	City where the patient lives.		AN	80		Export: Refer to CDS#21 for the business rules

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
24	Residence Country & Province/State	The country & province/state where the patient lives.		AB	7	ISO 3166-2	Province/State Country must be valid code. Export: Refer to CDS#21 for the business rules
25	Residence Postal/Zip Code	The residence postal/zip code as declared by the patient.		AN	10		Postal/Zip code must not contain spaces. Export: Refer to CDS#21 for the business rules
26	Phone Number Type			AN	1	See *Table CT-012: Phone Number Type*	Phone Number Type must be valid code.
27	Residence Phone	The phone number where the patient lives.		NUM	25		
28	Cell Phone	The cell phone number for contacting the patient.		NUM	25		
29	Work Phone	The organization work phone number where the patient can be reached during working hours.		NUM	25		
30	Work Phone Extension	The number used to access the patient's work phone number within an organization.		NUM	5		
31	Preferred Official Language	Official languages are English and French.		AN	3	See CT-007: *Official Language* One of: ENG - English FRE - French	Preferred Official Language must be valid code.
32	Preferred Spoken Language	Indicates in which language a person prefers to communicate.		AN	25	ISO 639-2	Preferred Spoken Language must be valid code.
33	(*) Contact Purpose	The type of a contact person.		AN	2 & 50	Available options in CDS Schema: a) Coded values: - see *Table CT-014: Contact Purpose* b) Non-coded values: free-text	Contact Purpose can be a valid code or free text. EMR Offering must support multiple 'Contact Purpose' per each individual contact. Export: If the exporting system is not able to map to the coded value then export the Contact Purpose as free-text. Import: The importing system must be able to map the coded values and import the non-coded value (free text) in the contact's record. Note: SDM and EC are mandatory contact types in both, exporting and importing EMR system.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
34	(*) Contact First Name			AN	50		
35	(*) Contact Middle Name			AN	50		Import: - the value must be stored within the contact's record.
36	(*) Contact Last Name			AN	50		
37	Phone Number Type			AN	1	See *Table CT-012: Phone Number Type*	Phone Number Type must be valid code.
38	(*) Contact Residence Phone	The phone number where the contact person lives.		AN	25		
39	(*) Contact Cell Phone	The cell phone number for the contact person.		AN	25		
40	(*) Contact Work Phone	The organization work phone number where the contact person can be reached during working hours.		AN	25		
41	(*) Contact Work Phone Extension	The number used to access the contact's work phone number within an organization.		NUM	5		
42	(*) Contact E-Mail Address	The email address preferred by the contact person.		AN	50		
43	(*) Contact Note	Additional notes about the contact person.		AN	200		
44	Patient Note	Additional notes about the patient.		AN	64k		
45 N	(*) Enrolled to Physician - First Name	The First Name of the physician to whom the patient is enrolled to as per MOHLTC enrolment process.		AN	50		
46 N	(*) Enrolled to Physician - Last Name	The Last Name of the physician to whom the patient is enrolled to as per MOHLTC enrolment process.		AM	50		
47 N	(*) Enrolled to Physician - OHIP Billing Number	The OHIP Billing Number of the physician to whom the patient is enrolled to as per MOHLTC enrolment process.		AN	TBP		
48	(*) Enrolment Status	Refers to whether the patient is enrolled, his enrolment was terminated or never has been enrolled with a particular physician at a given point in time.		NUM	1	See *Table CT-009: Enrolment Status*	Enrolment Status must be valid code. Export: - exporting EnrolmentStatus=0 for patient that have never been enrolled is not accepted
49	(*) Enrolment Date	Date the patient was enrolled with a particular physician.		DATE	10	W3C Date Standard	Mandatory if Enrolment Status is set to "1".
50	(*) Enrolment Termination Date	Date the patient enrolment was terminated with a particular physician.		DATE	10	W3C Date Standard	Mandatory if the Enrolment Status is set to "0".

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
51	(*) Enrolment Termination Reason	Reason for terminating patient enrolment with a particular physician as provided and defined by the MOHLTC.		NUM	2	See *Table CT-010: Enrolment Termination Codes*	Termination Reason must be valid code.
52	Primary Physician - First Name	The First Name of the most responsible provider to whom the patient record is assigned to.		AN	50		
53	Primary Physician - Last Name	The Last Name of the most responsible provider to whom the patient record is assigned to		AN	50		
54	Primary Physician - OHIP Billing Number	The "OHIP Billing Number" of the most responsible provider to whom the patient record is assigned to.		NUM	6		
55	Primary Physician - CPSO Number	The "CPSO" number of the most responsible provider to whom the patient record is assigned to.		AN	6		
56	Patient E-Mail Address	The email address preferred by the patient.		AN	50		
57	Patient Status	Refers to whether the 'Primary Physician' consider the patient to be 'active', 'inactive', 'deceased' or other values as supported by the practice.	Y	AN	1 & 50	Available options in CDS Schema: a) Coded Values: - see *Table CT-008: Patient Status* b) Non-coded value: free text	Person Status can be a coded value or non-coded value (free text). Export: If the exporting system is not able to map to the coded value (A / I / D) then export the Person Status as free-text. Import: The importing system must be able to map the coded values (A / I / D) and /or import the non-coded value (free text) in the patient demographic area. Note: A / I / D are mandatory options in both, exporting and importing EMR system.
58	Patient Status Date	Date associated with 'Patient Status'. Refers to the date the patient becomes 'active' or the date the status has been changed.		DATE	10	W3C Date Standard	
59	SIN	Social Insurance Number		NUM	9		

4.2 PERSONAL HISTORY

May contain multiple records to represent personal history items.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
60	Category Summary Line	A text string, summarizing the content of the following more structured fields and information contained about Family History	Y	AN	64k		Export: Each exported Personal History item must have its own Category Summary Line. Category Summary Line must comply with standard format (refer to Working with Category Summary Line) Import: Category Summary Line must be imported.
61	(*) Residual Data Element Name	Name of the data field within the source EMR.		AN	NL		
62	(*) Residual Data Element Type	Name of the data type.	Y*	AN	NL	Primitive XML data type: http://www.w3.org/TR/xmlschema-2/) See *Table CT-024 – XML Primitive Data Types*	Residual Data Element Type must be valid code.
63	(*) Residual Content	The content of the residual data element.	Y*	BOT	NL		

4.3 FAMILY HISTORY

May contain multiple records to represent family history items.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
64	Category Summary Line	A text string, summarizing the content of the following more structured fields and information contained about Family History	Y	AN	64k		Export: Each exported Family History item must have its own Category Summary Line. At minimum the Category Summary Line must include following data elements: - Diagnosis Problem Description - Start Date Category Summary Line must comply with standard format (refer to Working with Category Summary Line) Import: Category Summary Line can be imported at vendor discretion.
65	(*) Residual Data Element Name	Name of the data field within the source EMR.		AN	NL		
66	(*) Residual Data Element Type	Name of the data type.	Y*	AN	NL	Primitive XML data type: http://www.w3.org/TR/xmlschema-2/) See *Table CT-024 – XML Primitive Data Types*	Residual Data Element Type must be valid code.
67	(*) Residual Content	The content of the residual data element.	Y*	BOT	NL		
68	Start Date	The date when the family member: - has been diagnosed or first time encountered the symptoms of a disease or a problem - he/she undergone a procedure		DATE	10	W3C Date Standard	The Start Date may be "Full Date" or "Partial Date".
69	Age at Onset	The age of the family member at the onset of the condition.		NUM	3		
70	Life Stage	The stage of life the patient is in at the onset of the condition.		AN	1	See *Table CT-016 – Life Stage*	Life Stage must be valid code.
71	Problem / Diagnosis/ Procedure Description	A description that identifies the family history problem, diagnosis or procedure.		AN	250		Data element to be populated regardless the exporting system does or does not support a Standard Coding System. Export: - if no Standard Coding System has been used to fill in the field then xml data element must be

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
							populated with the value typed in by the provider - if a Standard Coding System has been used to fill in the field then xml data element must be populated with the concatenated descriptor starting with base description plus sub-qualifying descriptors (Format : aaa^bbb^ccc). Import: - regardless the importing system support or not the Standard Coding System the xml data element must be imported discretely
72	Diagnosis/Procedure - Code System Name	The name of the Standard Coding System used to code a health condition or procedure.		AN	250		Export: - Vendor's proprietary coding systems are not accepted - Accepted "Standard Coding Systems": > ENCODE-FM, SNOMED-CT, ICD9, ICD10-CA, ICPC-2 - The" Standard Coding Systems" must follow the format mentioned above Import: - if the importing system does not support a Standard Coding System then #68 / #69 / #70 are not required to be imported discretely - if the importing system supports the Standard Coding System and all 3 xml data elements (#68, #69, #70) can be mapped then all 3 xml elements must be imported discretely - if the importing system supports the Standard Coding System but the 3 xml data elements(#68, #69, #70) cannot be mapped then the 3 xml elements are not required to be imported discretely Note: The list of accepted "Standard Coding Systems" will be improved upon vendor request.
73	Diagnosis/Procedure - Code	The code associated with Diagnosis/Procedure as relates to a particular Standard Coding System (item#68).		AN	20		Export: - vendor's proprietary diagnosis codes are not accepted - mandatory if the Code System Name (#68) is provided Import: - for business rules refer to #67
74	Diagnosis/Procedure - Code Description	The Description of a Diagnosis/Procedure as relates to a particular Diagnosis/Procedure		AN	250		Export: - vendor's proprietary diagnosis descriptions are

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
		Code (item #69)					not accepted - mandatory if the Diagnosis Code System Name (#68) is provided - may be the same or different than #67 data element Import: - for business rules refer to #67
75	Treatment	Type or nature of the treatment delivered to the family member.		AN	250		
76	Relationship	Relationship of the family member that is blood related to the patient.		AN	50		
77	Notes	Additional notes about family member history of a problem, diagnosis or procedure.		AN	32k		

4.4 PAST HEALTH

May contain multiple records to represent each past health situation.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
78	Category Summary Line	A text string, summarizing the content of the following more structured fields and information contained about patient's past medical and surgical history.	Y	AN	64k		Export: Each exported Past Health item must have its own Category Summary Line. At minimum the Category Summary Line must include following data elements and format: - Past Health Problem Description or Procedures - Start Date Category Summary Line must comply with standard format (refer to Working with Category Summary Line) Import: Category Summary Line can be imported at vendor discretion.
79	(*) Residual Data Element Name	Name of the data field within the source EMR.		AN	NL		
80	(*) Residual Data Element Type	Name of the data type.	Y*	AN	NL	Primitive XML data type: http://www.w3.org/TR/xmlschema-2/) See *Table CT-024: XML Primitive Data Types*	Residual Data Element Type must be valid code.
81	(*) Residual Content	The content of the residual data element.	Y*	BOT	NL		
82	Past Health Problem/Diagnosis or Procedure Description	A description that identifies: - patient's past problems, health conditions or diagnosed disease - patient's procedure or intervention		AN	250		Data element to be populated regardless the exporting system does or does not support a Standard Coding System. Export: - if no Standard Coding System has been used to fill in the field then xml data element must be populated with the value typed in by the provider - if a Standard Coding System has been used to fill in the field then xml data element must be populated with the concatenated descriptor starting with base description plus sub-qualifying descriptors (Format : aaa^bbb^ccc). Import: - regardless the importing system support or not the Standard Coding System the xml data element must be imported discretely

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
83	Diagnosis / Procedure - Coding System Name	The name of the Standard Coding System used to code a health condition or procedure.		AN	250		Export: - vendor's proprietary coding systems are not accepted - accepted "Standard Coding Systems": > ENCODE-FM, SNOMED-CT, ICD9, ICD10-CA, ICPC-2 - the" Standard Coding Systems" must follow the format mentioned above Import: - if the importing system does not support the Standard Coding System then #79 / #80 / #81 are not required to be imported discretely - if the importing system supports the Standard Coding System and all 3 xml data elements (#79, #80, #81) can be mapped then all 3 xml elements must be imported discretely - if the importing system supports the Standard Coding System but the 3 xml data elements(#79, #80, #81) cannot be mapped then the 3 xml elements are not required to be imported discretely Note: The list of accepted "Standard Coding Systems" will be improved upon vendor request.
84	Diagnosis/Procedure - Code	The code associated with Diagnosis/Procedure as relates to a particular Standard Coding System (item#79).		AN	20		Export: - vendor's proprietary diagnosis/procedure codes are not accepted - mandatory if the Code System Name (#79) is provided Import: - for business rules refer to #79
85	Diagnosis / Procedure - Code Description	The Description of a diagnosis/procedure as relates to a particular Standard Coding System (item #80).		AN	250		Export: - vendor's proprietary diagnosis / procedure descriptions are not accepted - mandatory if the Code System Name (#79) is provided. - may be the same or different than #78 data element Import: - for business rules refer to #79
86	Date of Onset Note: if diagnosis or health problem	The date the patient had been diagnosed or encountered the symptoms of a problem.		DATE	10	W3C Date Standard	The Date of Onset may be "Full Date" or "Partial Date".
87	Life Stage	The life stage the family member is at the onset of the condition.		AN	1	See *Table CT-016: Life Stage*	Life Stage must be valid code.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
88	Resolved Date Note: if diagnosis or health problem	The date the problem or the diagnosed disease has been resolved or controlled.		DATE	10	W3C Date Standard	The Resolution Date may be "Full Date" or "Partial Date".
89	Procedure Date Note: if Procedure	The date the patient has undergone a procedure or intervention.		DATE	10		The Procedure Date may be "Full Date" or "Partial Date"
90	Notes	Additional notes about the "Past Medical and Surgical" medical records.		AN	64k		
91 N	Problem Status	The status of the problem or the diagnosed disease.		AN	50		

4.5 PROBLEM LIST

May contain multiple records to represent each health problem, sign or symptom.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
92	Category Summary Line	A text string, summarizing the content of the following more structured fields and information contained about patient's ongoing health conditions (problems and diagnoses).	Y	AN	64k		Export: Each exported Problem Health item must have its own Category Summary Line. At minimum the Category Summary Line must include following data elements and format: - Diagnosis Problem Description - Start Date Category Summary Line must comply with standard format (refer to Working with Category Summary Line) Import: Category Summary Line can be imported at vendor discretion
93	(*) Residual Data Element Name	Name of the data field within the source EMR.		AN	NL		
94	(*) Residual Data Element Type	Name of the data type.	Y*	AN	NL	Primitive XML data type: http://www.w3.org/TR/xmlschema-2/) See *Table CT-024: XML Primitive Data Types*	Residual Data Element Type must be valid code.
95	(*) Residual Content	The content of the residual data element.	Y*	BOT	NL		
96	Problem/Diagnosis Description	A description that identifies the patient's problem or diagnosed disease.		AN	250		Data element to be populated regardless the exporting system does or does not support a Standard Coding System. Export: - if no Standard Coding System has been used to fill in the field then xml data element must be populated with the value typed in by the provider - if a Standard Coding System has been used to fill in the field then xml data element must be populated with the concatenated descriptor starting with base description plus sub-qualifying descriptors (Format : aaa^bbb^ccc). Import: - regardless the importing system support or not the Standard Coding System the xml data element must

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
							be imported discretely
97	Diagnosis - Code System Name	The name of the Standard Coding System used to code a health condition or procedure.		AN	250		Export: - vendor's proprietary coding systems are not accepted - accepted "Standard Coding Systems": > ENCODE-FM, SNOMED-CT, ICD9, ICD10-CA, ICPC-2 - the" Standard Coding Systems" must follow the format mentioned above Import: - if the importing system does not support the Standard Coding System then #93 / #94 / #95 are not required to be imported discretely - if the importing system supports the Standard Coding System and all 3 xml data elements (#93, #94, #95) can be mapped then all 3 xml elements must be imported discretely - if the importing system supports the Standard Coding System but the 3 xml data elements(#93, #94, #95) cannot be mapped then the 3 xml elements are not required to be imported discretely Note: The list of accepted "Standard Coding Systems" will be improved upon vendor request.
98	Diagnosis - Code	The code associated with Diagnosis as relates to a particular Standard Coding System (item#93).		AN	20		Export: - vendor's proprietary diagnosis/procedure codes are not accepted - mandatory if the Code System Name (#93) is provided Import: - for business rules refer to #93
99	Diagnosis - Code Description	The Description of a diagnosis as relates to a particular Standard Coding System (item #94)		AN	250		Export: - vendor's proprietary diagnosis / procedure descriptions are not accepted - mandatory if the Code System Name (#93) is provided. - may be the same or different than #92 data element: Import - for business rules refer to #93
100	Problem Description	A description of the problem reported.		AN	50		

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
101	Problem Status	The status of the problem or the diagnosed disease.		AN	50		Status as defined by the sending EMR.
102	Onset Date	The date the patient had been diagnosed or encountered the symptoms of a problem.		DATE	10	W3C Date Standard	The Onset Date may be "Full Date" or "Partial Date".
103	Life Stage	The stage of life the patient is in at the onset of the condition (problem or diagnosed disease)		AN	1	See *Table CT-016: Life Stage*	Life Stage must be valid code.
104	Resolution Date	The date the problem or the diagnosed disease has been resolved or controlled.		DATE	10	W3C Date Standard	The Resolution Date may be "Full Date" or "Partial Date".
105	Notes	Additional notes about the "Past Medical and Surgical" medical records. "Notes" apply to, "Problems / Diagnosis" and "Procedures" medical records.		AN	64k		

4.6 RISK FACTORS

May contain multiple records to represent each risk factor.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
106	Category Summary Line	A text string, summarizing the content of the following more structured fields and information contained about patient's risk factors.	Y	AN	64k		Export: Each exported Risk Factor item must have its own Category Summary Line. At minimum the Category Summary Line must include following data elements: - Risk Factor - Start Date Category Summary Line must comply with standard format (refer to Working with Category Summary Line) Import: Category Summary Line can be imported at vendor discretion.
107	(*) Residual Data Element Name	Name of the data field within the source EMR.		AN	NL		
108	(*) Residual Data Element Type	Name of the data type.	Y*	AN	NL	Primitive XML data type: http://www.w3.org/TR/xmlschema-2/) See *Table CT-024: XML Primitive Data Types*	Residual Data Element Type must be valid code.
109	(*) Residual Content	The content of the residual data element.	Y*	BOT	NL		
110	Risk Factor	The factors that might place the patient at health risk.		AN	120		
111	Exposure Details	Specific agent details of the exposure.		AN	1k		
112	Age of Onset	The age of the patient at the onset of the condition.		NUM	3		
113	Start Date	Date the patient was first exposed to the risk factor.		DATE	10	W3C Date Standard	The Start Date may be "Full Date" or "Partial Date".
114	End Date	Date the patient was last exposed to the risk factor		DATE	10	W3C Date Standard	The End Date may be a partial date if known.
115	Life Stage	The life stage of the patient when he/she has first time been exposed to the risk factor.		AN	1	See *Table CT-016: Life Stage*	Life Stage must be valid code.
116	Notes	Additional notes about the risk factor.		AN	64k		

4.7 ALLERGIES & ADVERSE REACTIONS

May contain multiple records to represent each allergy & adverse reaction.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
117	Category Summary Line	A text string, summarizing the content of the following more structured fields and information contained about patient's allergies and adverse reactions.	Y	AN	64k		Export: Each exported Allergy & Adverse Reaction item must have its own Category Summary Line. At minimum the Category Summary Line must include following data elements and format: - Property of Offending Agent - Start Date Category Summary Line must comply with standard format (refer to Working with Category Summary Line) Import: Category Summary Line can be imported at vendor discretion.
118	(*) Residual Data Element Name	Name of the data field within the source EMR.		AN	NL		
119	(*) Residual Data Element Type	Name of the data type.	Y*	AN	NL	Primitive XML data type: http://www.w3.org/TR/xmlschema-2/) See *Table CT-024: XML Primitive Data Types*	Residual Data Element Type must be valid code.
120	(*) Residual Content	The content of the residual data element.	Y*	BOT	NL		
121	Offending Agent Description	The name of the offending agent.		AN	120		
122	Property of Offending Agent	Agent that caused the related allergy or adverse reaction		AN	2	See *Table CT-019: Property of Allergy/Adverse Reaction Offending Agent*	Property of Offending Agent must be valid code.
123	Code Type	The code type representing the offending agent (if drug).		AN	3		DIN is the only code type supported currently. Mandatory if Code Value is populated.
124	Code Value	Representative DIN of the offending agent (if drug).		AN	20		Code Value: - mandatory if Code Type is populated - populated only when the Allergy/Adverse Reaction is due to a drug
125	Reaction Type	Identifies whether it is an allergy or adverse		AB	2	See T*able CT-018:*	Reaction Type must be valid code.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
		reaction (includes intolerance and side effects).				*Allergy/Adverse Reaction Type*	
126	Start Date	The date the patient reported or has been identified as being allergic or having an adverse reaction to drug or non-drug.		DATE	10	W3C Date Standard	The Start Date may be "Full Date" or "Partial Date".
127	Life Stage	The life stage of the patient when he/she has been identified as being allergic or having an adverse reaction to drug or non-drug.		AN	1	See *Table CT-016: Life Stage*	Reaction Type must be valid code.
128	Severity	The severity of the allergy or adverse reaction as identified by the provider.		AB	2	See *Table CT-019: Allergy/Adverse Reaction Severity*	Severity must be valid code. Vendor must map the severity levels in their system to the provided levels (refer to the Code Table).
129	Reaction	The patient reaction to a drug or a non-drug.		AN	120		
130	Recorded Date	The date the allergy or adverse reaction has been recorded in the EMR.		DATE	10	W3C Date Standard	The Recorded Date must be a "Full Date".
131	Notes	Additional notes about Allergies or Adverse Reactions		AN	32k		

4.8 MEDICATIONS

All medications and treatments current and past that are recorded need to be exported and imported.
May contain multiple records to represent each medication.
In the case of the same medication being prescribed multiple times then there will be one such record for each prescription.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
132	Category Summary Line	A text string, summarizing the content of the following more structured fields and information contained about patient's prescribed medications.	Y	AN	64k		Export: Each exported Medication item must have its own Category Summary Line. At minimum the Category Summary Line must include following data elements: - Medication Name or Drug Description (for compound) - Start Date Category Summary Line must comply with standard format (refer to Working with Category Summary Line) Import: Category Summary Line can be imported at vendor discretion.
133	(*) Residual Data Element Name	Name of the data field within the source EMR.		AN	NL		
134	(*) Residual Data Element Type	Name of the data type.	Y*	AN	NL	Primitive XML data type: http://www.w3.org/TR/xmlschema-2/) See *Table CT-024: XML Primitive Data Types*	Residual Data Element Type must be valid code.
135	(*) Residual Content	The content of the residual data element.	Y*	BOT	NL		
136	Prescription Written Date	The written date of the prescription. This is not the date the prescription has been added/inserted into the EMR.		DATE	10	W3C Date Standard	The Prescription Written Date may be "Full Date" or "Partial Date".
137	Start Date	The start date of the prescription.		DATE	10	W3C Date Standard	The Start Date may be "Full Date" or "Partial Date".
138	Drug Identification Number	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 the real DIN for the medication dispensed by the pharmacy.		AN	20		Mandatory if the prescribed medication has been extracted/selected from EMR's Drug Data Base.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
139	Medication Name	The brand name under which the medicine is marketed in Canada (provided by EMR's drug database) ***or*** the name of the medicine as typed in by the provider.		AN	120		
140	Drug Strength - Amount	The quantity of the active (medicinal) ingredient in a drug as extracted from the EMR`s Drug Database or typed in by the provider.		AN	10		Upon export, just the strength of the first ingredient is expected to be exported for the case the drug has a representative DIN else the strength as entered by provider.
141	Drug Strength - Unit of Measure	The unit of measure associated with the quantity of active ingredient in a drug as extracted from EMR`s Drug Database or typed in by the provider.		AN	20	For suggested values refer to: *- Table CT-025: Medication Strength Unit of Measure*	
142	Number of Refills/Repeats	The subsequent fills that follow the initial dispense.		NUM	100		
143	Dosage - Amount	Dose amount of medication intended to be consumed during a single administration as prescribed by the provider.		AN	120		
144	Dosage - Unit of Measure	The unit of measure associated the dose amount as prescribed by the provider.		AN	50	For suggested values refer to: *- Table CT-026: Medication Dosage Unit of Measure*	
145	Drug Form	The form in which the drug product is to be administered to the patient.		AN	120	For suggested values refer to: *- Table CT-023: Medication Form*	
146	Route	The means by which the dispensed drug is to be administered to the patient.		AN	120	For suggested values refer to: *- Table CT-022: Medication and Immunization Route*	
147	Frequency	The frequency with which the prescribed medication is to be consumed.		AN	120	See *Table CT-024: Medication Frequency*	Exporting source system must map medication frequency to the values catalogued.
148	Duration	*Number of days* of medication to be dispensed for the first administration of the prescription (initial dispense).		NUM	1k		The source systems that support durations that are other than day (i.e. weeks, mths, year) then upon export the duration must be calculated in 'days'.
149	Refill Duration	*Number of days* of medication to be dispensed for the refills of the prescription.		NUM	1k		The source systems that support durations that are other than day (i.e. weeks, mths, year) then upon export the duration must be calculated in

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
							'days'. The 'Refill Duration' applies just to one refill.
150	Quantity	The quantity of medication to be dispensed for the first administration of the prescription (initial dispense).		NUM	1k		
151	Refill Quantity	The quantity of medication to be dispensed for the refills of the prescription.		NUM	1k		
152	Long Term Medication	Indicator for Long-Term Medication.		AN	1	One of: Y - the prescribed medication is long-term N - the prescribed medication is not long-term	The Long-Term Medication must be valid code.
153	Past Medication	Indicator for discontinuation of medication from the treatment plan.		AN	1	One of: Y – discontinued medication N - current medication	The Past Medication Indicator must be valid code.
154	Prescribed By Last Name	Last name of the prescriber.		AN	50		
155	Prescribed By First Name	First name of prescriber.		AN	50		
156	Prescribed By Identifier	The "OHIP Billing Number" number of the prescriber.		NUM	6		
157	Notes	Notes the provider adds to the prescription that are not visible on the printed prescription.		AN	32k		
158	Prescription Instructions	Notes the provider adds to the prescription to communicate with the pharmacist.		AN	32k		
159	Patient compliance	Indicate whether the patient is compliant with the medication as prescribed.		AN	1	One of: Y - patient compliant N - patient not compliant	The Past Compliance must be valid code. Exported when patient`s compliance has been recorded in the EMR.
160	Treatment Type	Describes the categorization of the treatment type required by the MR2009 message.		AN	50	Valid values are: ▪ CHRON – Continuous/chronic ▪ ACU – Acute ▪ ONET – One Time ▪ PRN Long-term – As needed ▪ PRN Short-term – As needed	
161	Prescription Status	Describes the lifecycle of the prescription as		AN	10	Valid statuses are:	

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
		required by the MR2009 message.				▪New, ▪ Active, ▪ Suspended, ▪ Aborted, ▪ Completed, ▪ Obsolete ▪ Nullified	
162	Non-Authoritative Indicator	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).		AN	1	Yes (Y) – paper copy required before dispense No (N) – no paper copy required before dispense	
163	Prescription Identifier	Unique ID to identify a prescription.		AN	50		
164	Prior Prescription Reference Identifier	A reference to a previous prescription which the current prescription replaces.		AN	20		
165	Dispense Interval	Indicates a minimum amount of time that must occur between dispenses.		AN	10		
166	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.		AN	2000		
167	Substitution Not Allowed	A prescriber's instruction that a specific prescribed product be dispensed as is, or not.		AN	1	Yes (Y) – substitution not allowed No (N) – substitution allowed	
168	Problem Code	A coded form of the problem that is the reason for the current prescription required by the MR2009 message		AN	10		
169	Protocol Identifier	A unique identifier for a specific protocol or guideline which the prescription has been written in accordance with.		AN	20		

4.9 IMMUNIZATIONS

May contain multiple records to represent each immunization.
In the case of the same immunization, vaccine and or booster administered multiple times then there will be one such record for each occurrence.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
170	Category Summary Line	A text string, summarizing the content of the following more structured fields and information contained about patient's administered immunizations.		AN	64k		Export: Each exported Immunization item must have its own Category Summary Line. At minimum the Category Summary Line must include following data elements and format: - Immunization Name or Immunization Type - Date Category Summary Line must comply with standard format (refer to Working with Category Summary Line) Import: Category Summary Line can be imported at vendor discretion.
171	Residual Data Element Name(*)	Name of the data field within the source EMR.		AN	NL		
172	Residual Data Element Type(*)	Name of the data type.		AN	NL	Primitive XML data type: http://www.w3.org/TR/xmlschema-2/) See *Table CT-024: XML Primitive Data Types*	Residual Data Element Type must be valid code.
173	Residual Content(*)	The content of the residual data element.		BOT	NL		
174	Immunization Name	The brand name under which the vaccine is marketed in Canada **or** the name of the vaccine as typed in by the provider.	Y	AN	120		Export historical data: - if DIN number is extractable then export the Brand Name - if DIN number is not extractable then export the available name/type Export starting with EMR v4.0: -if DIN number is extractable then export the Immunization's Brand Name (#170) and the associated Immunization Type (#175) - if DIN number is not extractable then export the available Immunization Name With different data extracts (i.e. Diabetes Registry), EMR Offering must be able to identify the Immunization Name / DIN as belonging to an

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
							Immunization Type as defined in 'Canadian Immunization Guide'.
175	Immunization Type	The immunogen component of the "Vaccine Type" as described in the 'Canadian Immunization Guide'.		AN	20	See *Table CT-020: Immunization Type.*	Export historical data: - if DIN number is extractable then export the type if available -if DIN number is not extractable then this field must be empty Export starting with EMR v4.0 Spec: - if DIN number is extractable then export the predefined Immunization Type - if DIN number is not extractable then export the selected predefined Immunization Type. Refer to: http://www.phac-aspc.gc.ca/publicat/cig-gci/app-ann-eng.php
176	Manufacturer	The manufacturer of the administered immunization.		AN	120		
177	Lot #	The product lot number corresponding to the administered immunization.		AN	120		
178	Route	The route or method the immunization has been administered.		AN	120	See *Table CT-022: Medication and Immunization Route*	
179	Site	The anatomical site location of the administered immunization.		AN	120	See *Table CT-021: Immunization Site*	
180	Dose	Dose amount and unit of measure corresponding to the administered immunization.		AN	120		
181	Immunization - Coding System	The name of the Coding System representing the Immunization Code for the administered immunization.		AN	3		Valid value: 'DIN'
182	Immunization - Code Value	The coded identifier for the administered immunization.		AN	20		
183	Date	The date when the immunization was administered or refused.		DATE	10	W3C Date Standard	The Immunization Date may be "Full Date" or "Partial Date". The Refused Date may be "Full Date" or "Partial Date".
184	Refused Indicator	A flag to indicate whether the immunization has been has administered or refused.		AB	1	One of: - Yes (Y) – immunization refused	The "Immunization Refused Indicator" must be valid code.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
						- No (N) – immunization administered	
185	Instructions			AN	250		
186	Notes	Additional information about patient immunization.		AN	32k		

4.10 LABORATORY RESULTS

May contain multiple records to represent each of the electronically received or manually entered Laboratory Test Results.
It is mandatory to export all available Laboratory Test Results electronically received or manually entered into the EMR

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
187	Laboratory Name	The laboratory (source) responsible for sending the Test Results to the EMR.	Y	AN	120		
188	Laboratory Test Name	The proprietary name assigned to "Laboratory Test Code" as provided by the source.		AN	120		
189	Laboratory Test Code	The proprietary code that uniquely identifies a test within a laboratory as provided by the source.		AN	50		
180	EMR Test Name	The EMR's proprietary name of a laboratory test for the purpose of uniquely representing and cross-referencing same test received from different laboratory sources.		AN	120		
191	Accession Number	The unique number assigned by the laboratory to one test or a group of tests to be performed.		AN	120		
192	Result Value	The numeric or qualitative results of a test as provided by the source.		AN	120		Required where there is a numeric test result. Include decimal places.
193	Result Unit of Measure	Unit of measure associated with the Test Result Value as provided by the laboratory.		AN	120		Includes unit quantity and unit of measure numeric and alpha numeric. Required where a test result value is provided.
194	Reference Range Low Limit	The lower range limit associated with a test as provided by the laboratory.		NUM	1k		Required where there is a numeric test result. Include decimal places
195	Reference Range High Limit	The upper range limit associated with a test as provided by the laboratory.		NUM	1k		Required where there is a numeric test result. Include decimal places
196	Reference Range Text	The reference range that cannot be depicted numerically or cannot be parsed as high and low reference range provided by the source.		AN	1k		
197	Lab Requisition Date/Time	Date & Time the lab test was ordered within EMR.		DATE/ TIME	30	W3C Date Standard	Format: YYYY-MM-DDThh:mm:ss.sTZD
198	Collection Date/Time	The date and time that the specimen was collected.	Y	DATE/ TIME	30	W3C Date Standard	Date followed by Time as recorded by the Testing Lab. Format: YYYY-MM-DDThh:mm:ss.sTZD
199	(*) Date/Time Result Reviewed	Date & Time the report has been signed-off (reviewed) by the authorized provider.		DATE/ TIME	30	W3C Date Standard	Format: YYYY-MM-DDThh:mm:ss.sTZD

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
200	(*)Result Reviewer First Name	The First Name of the authorized provider that reviewed result.		AN	50		
201	(*) Result Reviewer Last Name	The Last Name of the authorized provider that reviewed result.		AN	50		
202	(*) Result Reviewer OHIP Physician Number	The OHIP Billing Number of the authorized provider that reviewed result.		AN	6		
203	Abnormal Indicator	The flag set by the lab to indicate a test result is deemed normal, abnormal, unknown or as indicated by the source.		AN	1	Available options in CDS Schema: a) Coded Values: - see *Table CT-029: Laboratory Abnormal Flag* b) Non-coded value: free text	Export: If there is no data available in this field the EMR must translate the value of this data field to Unknown (U).
204	Text – Test Results Information reported by the Laboratory	Results Information reported by the Laboratory that must be left unstructured (e.g. microbiology results, cytology, etc.)		AN	32k		
205	Lab Notes	Notes associated with an individual test result as provided by the source.		AN	32k		
206	Physician Notes	Notes associated with an individual test result as typed in by an EMR provider.		AN	32k		
207	Test Result Status	The status of the Test Result as provided by source.		AN	1		
208 N	Blocked Result	Indicate whether the test result is considered sensitive information.		AN	1		Blocked Test Result must be valid code. Accepted value : "Y"

4.11 APPOINTMENTS

May contain multiple records each of which describes patient's appointments.

Export Appointments:

(1) export past and future appointments and

(2) export all appointments belonging to a patient, regardless the practitioner is or is not part of the new EMR Implementation

Import Appointments: All appointments related to a patient must be imported, whether the practitioner is or is not part of the new EMR implementation.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
209	Appointment Time	The time of the appointment as scheduled in the EMR.	Y	TIME	20	W3C Date Standard	Format: hh:mm:ss.sTZD
210	Duration	Length of the appointment in minutes as scheduled in the EMR.		NUM	1k		
211	Appointment Status	Status of the appointment.		AN	250		
212	Appointment Date	The date of the appointment as scheduled in the EMR.	Y	DATE	10	W3C Date Standard	Format: YYYY-MM-DD
213	Provider Last Name	Last Name of the provider with who the patient is scheduled to have or have had a visit with.		AN	50		
214	Provider First Name	First Name of the provider with who the patient is scheduled to have or have had a visit with.		AN	50		
215	Provider OHIP Billing Number	The "OHIP Billing Number" of the provider with who the patient is scheduled to have or have had a visit with.		AN	6		
216	Appointment Purpose	The purpose or reason for the patient visit. Examples: Diabetes, Pre-natal, Annual check-up, etc		AN	250		
217	Appointment Notes	Summary detailing the patient appointment.		AN	32k		

4.12 PHYSICIAN'S MY CLINICAL NOTES

This section may contain one or more types of clinical notes that the physician and staff record and the physician signs-off.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
218	Note Type	Heading to identify the type of clinical note as per EMR's business rules.		AN	50		Physician Progress Note, Referral Note and other.
219	My Clinical Notes Content	Text content of the clinical note.		AN	NL		Format the clinical note according to the order that the information was entered. Any SOAP / Progress Note must be a single text note. Each Subjective, Objective, Assessment and Plan component of a note needs to be concatenated into one(1) note if it is stored/processed separately. Additional annotation /updates to a clinical note performed by different authorized providers must be grouped together and exported as a whole.
220	Event Occurred Date/Time	Date & Time of the appointment when the patient presents.		DATE/ TIME	20		This is the appointment date/time when patient presents. Format: YYYY-MM-DDThh:mm:ss.sTZD
221	(*)Note Date and Time Entered	Date & Time the clinical note was entered in the EMR.		DATE/ TIME	30		This is the date when the Progress Note /SOAP were first created. Format: YYYY-MM-DDThh:mm:ss.sTZD
222	(*) Participating Provider First Name	First Name of the participating provider.		AN	50		
223	(*) Participating Provider Last Name	Last Name of the participating provider.		AN	50		
224	(*)Participating Provider OHIP ID	OHIP Billing Number of the participating provider.		NUM	6		Provide OHIP Billing Number of the participating provider, if available.
225	(*) Note Date and Time Signed	Date & Time the clinical note has been signed-off (reviewed) by the authorized provider.		DATE/ TIME	30		Format: YYYY-MM-DDThh:mm:ss.sTZD
226	(*) Note Provider First Name	First Name of the authorized provider that signed-off (reviewed) the clinical note.		AN	50		
227	(*) Note Provider Last Name	Last Name of the authorized provider that signed-off (reviewed) the clinical note.		AN	50		
228	(*) Note Signatory OHIP ID	OHIP Billing Number of the authorized provider that signed-off (reviewed) the clinical note.		NUM	6		

4.13 REPORTS RECEIVED

This section may contain one or more Reports Received as text, audio and image files.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
229	Report Media	The media used for the report.		AN	20	One of: - Email - Download - Portable Media - Hardcopy	
230	Report Format	The format of the report.	Y	AN	50	Text Binary	If Report Format equals: - Text: Report Content data element contains the embedded text of the report - Binary: Report Content data element contains a base64 encoded binary file, defined by the Report File Extension
231	Report Type File Extension	The extension of the exported file and/or encounter plain text. Examples: pdf, .html, .txt, .doc, jpeg	Y***	AN	50		Vendor to consistently specify the format and/or the extension of the file. Required any time the Report Content is not plain text.
232	Report Content	The content of the external report as received by the practice.		AN	NL		May be text or an encoded binary file. Report content to be organized according to the way it was entered by the user or received electronically. If report content is a binary file, this should be encoded into base64 and placed in this field.
233	Report Class	Classification of the external reports received by the clinic.		AN	50	See Table CT-027: Report Class	The Report Class must be valid code.
234	Report Sub-class	Sub-classification of the external reports.		AN	50		
235	Event Occurred Date/Time	Date & Time the medical and non-medical report was created by the external source provider (author) or source facility.		DATE/ TIME	30	W3C Date Standard	Date Format: YYYY-MM-DDThh:mm:ss.sTZD
236	Report Received Date/Time	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.		DATE/ TIME	30	W3C Date Standard	Date Format YYYY-MM-DDThh:mm:ss.sTZD
237	Source Author - First Name	First Name of the external provider who authored the report.		AN	50		

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
238	Source Author - Last Name	Last Name of the external provider who authored the report.		AN	50		
239	Source Facility	The name of the external facility (clinic, hospital) where the report has been originated. Example: Trillium Hospital, Sick Kids Hospital, etc.		AN	120		Note: The name of the Sending facility from HRM to be mapped to this field.
240	(*) Reviewed by First Name	First Name of the authorized provider who signed-off (reviewed) the report.		AN	50		
241	(*) Reviewed by Last Name	Last Name of the authorized provider who signed-off (reviewed) the report.		AN	50		
242	(*) Report Reviewed By	OHIP Billing Number of the authorized who signed-off (reviewed) the report.		AN	6		
243	(*) Report Date and Time Reviewed	Date & Time the report has been signed-off (reviewed) by the authorized provider.		DATE/ TIME	30	W3C Date Standard	Format: YYYY-MM-DDThh:mm:ss. sTZD
244	Source Facility ID	Unique ID of the facility that sends HRM reports. This discrete data element is specific to reports downloaded from "HRM System".		AN	4		Note: The Sending Facility ID from HRM to be mapped here.
245	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".		AN	75		Ref Hospital Report Manager
246	(*) 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".		AN	60		Ref Hospital Report Manager
247	(*) 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".		AN	200		Ref. Hospital Report Manager.
248	(*) Accompanying Description	The description of a procedure/study		AN	200		Ref. Hospital Report Manager

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
		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".					
249	(*) Observation Date/Time	Date and Time that the observation / service have been 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".		DATE/ TIME	30		Ref. Hospital Report Manager Date Format: YYYY-MM-DDThh:mm:ss.sTZD
250	Report Status	The Status of the external report as received from the source. This discrete data element is specific to the status of the reports downloaded from "HRM System".		AN	1	One of: - S – Signed - C – Cancelled	Ref. Hospital Report Manager.
251	Message Unique ID	Unique identifier for each HRM message received from "HRM System".		AN	250		Ref. Hospital Report Manager
252	Notes	Additional notes/annotations about the report (attached file) as typed in by the provider.		AN	32K		

4.14 CARE ELEMENTS

Care elements refer to clinical data captured as a part of the clinical encounter (as described in CDM EMR Specification)

May contain multiple records, each of which represents a patient health-related characteristic documented within the EMR.

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
253	Smoking Status	Records whether the patient is currently smoking or not.		AN	1	One of: Y – patient is smoking N – patient is not smoking	Smoking Status must be valid code.
254	Date - Smoking Status	Date the "smoking status" has been reported by the patient.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
255	Smoking Packs/Day	The number of packs per day smoked as reported by the patient. It is assumed that 1 pack=20 cigarettes.		NUM	2		
256	Date - Smoking Packs/Day	Date the patient reported the number of packs/day is smoking.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
257	Weight	The weight as measured by the provider.		NUM	1k		Patient weight must be expressed in "kg".
258	Weight - Unit of Measure	Unit of measure		AN	10		Value: kg
259	Date - Weight	Date the weight has been measured by the provider.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
260	Height	The height as measured by the provider.		NUM	1k		Patient height must be expressed in "cm".
261	Height - Unit of Measure	Unit of measure		AN	10		Value: cm
262	Date - Height	Date "height" has been measured by the provider.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
263	Waist Circumference	The waist circumference as measured by the provider.		NUM	1k		Patient waist circumference must be expressed in "cm".
264	Waist Circumference - Unit of Measure	Unit of measure		AN	10		Value: cm
265	Date - Waist Circumference	Date "waist circumference" has been measured by the provider.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
266	Systolic Blood Pressure	The systolic blood pressure as measured by the provider.		NUM	1k		Systolic blood pressure must be expressed in "mmHg".
267	Diastolic Blood Pressure	The diastolic blood pressure as measured by the provider.		NUM	1k		Diastolic blood pressure must be expressed in "mmHg".
268	BP - Unit of Measure	Unit of measure		AN	10		Value: mmHg

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
269	Date - Blood Pressure	Date the blood pressure has been measured by the provider.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
270	Diabetes Complication Screening	Code of the "diabetes complication screening" that has been performed.		AN	1k	One of: 32468-1 (Retinal Exam) 11397-7 (Foot Exam) Neurological Exam (No Code)	Diabetes Complication Screening must be valid code.
271	Date- Diabetes Complication Screening	Date the "diabetes complication screening" has been performed.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
272	Diabetes Motivational Counselling	Records whether the "Diabetes-Motivational Counselling" has been completed by the provider.		AN	1k	One of: - Nutrition - Exercise - Smoking Cessation - Other	
273	Date - Diabetes Motivational Counselling	Date the "Diabetes Motivational Counselling" has been completed by the provider.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
274	Diabetes – Collaborative Self-Management Goals	Code representing self-management or collaborative goal setting.		AN	1k	LOINC	Value: 44943-9
275	Documented Goals	Records diabetes related collaborative or self-management goals as recorded by the provider.		AN	NL		
276	Date - Diabetes Collaborative Self-Management Goals	Date the "Diabetes - Collaborative Self-Management Goals" has been recorded by the provider.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
277	Diabetes - Self Management Challenges	Code representing barriers to self-management challenges.		AN	7	LOINC	Value: 44941-3
278	Challenges Identified	Reports whether the patient has identified any challenges or barriers to self-management of diabetes.		AN	1	One of: -Y – challenges identified - N - challenges not identified	
279	Diabetes - Self Management Challenges	Date challenges identified		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
280	Diabetes Educational Self-Management	Reports whether the patient has had any diabetes-related education.		AN	1		
281	Date - Diabetes Education	Date diabeted-related education been completed.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
282	# of Hypoglycemic Episodes	Patient self-reported frequency of episodes since last appointment.		NUM	8		
283	Date - # Of Hypoglycemic Episodes	Date the patient reported the "# of hypoglycemic episodes".		DATE	10	W3C Date Standard	Format: YYYY-MM-DD
284	Self-Monitoring Blood Glucose	Patient report of whether they perform self-monitoring of blood glucose.		AN	1	One of: - Y - patient is monitoring BG - N - patient is not monitoring BG	
285	Date - Self Monitoring BG	Date the "Self-Monitoring BG" has been reported by the patient.		DATE	10	W3C Date Standard	Format: YYYY-MM-DD

4.15 ALERTS & SPECIAL NEEDS

May contain multiple records, each of which represents a Medical Alert or Special Needs information documented within the EMR

CDS #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	SOURCE CODE	BUSINESS RULES
286	Category Summary Line	A text string, summarizing the content of the following more structured fields and information contained about Family History	Y	AN	NL		Export: Each exported Alerts & Special Needs item must have its own Category Summary Line. At minimum the Category Summary Line must include following data elements and format: - Alert Description - Date Active Category Summary Line must comply with standard format (refer to Working with Category Summary Line) Import: Category Summary Line can be imported at vendor discretion.
287	(*) Residual Data Element Name	Name of the data field within the source EMR.		AN	NL		
288	(*) Residual Data Element Type	Name of the data type.	Y*	AN	NL	Primitive XML data type: http://www.w3.org/TR/xmlschema-2/) *See Table CT-024: XML Primitive Data Types*	Residual Data Element Type must be valid code
289	(*) Residual Content	The content of the residual data element.	Y*	BOT	NL		
290	Alert Description	Description of the Alert or Special Need.		AN	1k		
291	Notes	Additional notes about an alert or special need.		AN	1k		
292	Date Active	Date the Alert or Special Need has been identified as first time active.		DATE	10	W3C Date Standard	The Date Active may be "Full Date" or "Partial Date".
293	End Date	Date the Alert or Special Need has been identified as no longer active.		DATE	10	W3C Date Standard	The End Date may be "Full Date" or "Partial Date".

5. SUPPORTING INFORMATION

5.1 README FILE

The **ReadMe** file will, at a minimum, include the following information:

- Contact information of the Physician Group the data is being exported from
- Name of EMR vendor, Offering and version number (if used) the data is being exported from
- Date and Time stamp at time of export
- Name of the physician
- Total patients files exported per individual physician

Example: ReadMe file

Physician Group	“Fairlaine FHN”
EMR Vendor, Product & Version	“Sparrow”, “Sparrow Hawk, version 1.3.4”
Date and Time stamp	“January 1, 2007, 12:00am
dr Simon Samson (total patients exported)	“5,238”
dr. Neil Armstrong (total patients exported)	“25”

5.2 EXPORT EVENT LOG

The Export Event Log will at a minimum include the following information:

- Patient ID
- CDS Categories and their respective number of occurrences within the category

Example: "Export Event Log" file

Patient ID	Family History	Past Health	Problem List	Risk Factor	Allergy & Adverse Reaction	Medication	Immunization	Labs	App	My Clinical Notes	Reports Received		Care Elements	Alerts & Special Needs
											Text	Binary		
ID0000001	2	7	8	2	1	1253	7	7	7	7	123	234	289	25
ID0000002	5	9	9	3	0	167	8	8	8	8	23	34	0	10
ID0000003	1	3	11	2	1	237	9	9	9	9	0	0	0	15

Note:

Patient ID - refer to CDS#14 / Unique Vendor ID Sequence

5.3 IMPORT EVENT LOG

The **Import Event Log** will at a minimum include the following information:

- Patient ID
- CDS Categories and their respective number of occurrences within the category that were imported

Example: "Import Event Log" file

Patient ID	Family History	Past Health	Problem List	Risk Factor	Allergy & Adverse Reaction	Medication	Immunization	Labs	Appointments	My Clinical Notes	Reports:		Care Elements	Alerts & Special Needs
											Text	Binary		
ID0000001	2	7	8	2	1	1253	7	7	7	7	123	234	289	25
ID0000002	5	9	9	3	0	167	8	8	8	8	23	34	0	10
ID0000003	1	3	11	2	1	237	9	9	9	9	0	0	0	15

Note:

Patient ID - refer to CDS#14 / Unique Vendor ID Sequence

5.4 WORKING WITH NAME AND PART ELEMENTS

As a guide for using the Name Part the following applies: when sharing clients' given name parts, the distinction between first, second, and third given name parts is inferred from the natural order in which they would be displayed and exported [in Canada, that means first given name part first, second given name part second third given name part third, (followed by family name part).]. Canadians may have numerous middle names, which need to be represented in the CDS export. As a result, it is important to consider the 2nd, 3rd and 4th names as 'given names'.

Example:
Name (text): Jane Smith Doe, Brown will be translated into following and provided by export in this order:

Name Part: ***Jane***
Name Part Type: 'Given'
Name Part Qualifier: 'Birth'
Name Purpose: 'Legal'

Name Part: ***Smith*** this is how the *middle name* is communicated / represented
Name Part Type: 'Given'
Name Part Qualifier: 'Birth'
Name Purpose: 'Legal'

Name Part: ***Doe***
Name Part Type: 'Family'
Name Part Qualifier: 'Spouse'
Name Purpose: 'Legal'

Name Part: ***Brown***
Name Part Type: 'Family'
Name Part Qualifier: 'Birth'
Name Purpose: Legal

5.5 WORKING WITH CATEGORY SUMMARY LINE

Following standard format applies to Category Summary Line:

<CategorySummaryLine>[DataElementName**1**]:DataElementValue**1;**[DataElementName**2**]:DataElementValue**2;**,…….

……,[DataElementName**N**]:DataElementValue**N**</CategorySummaryLine>

5.6 WORKING WITH RESIDUAL DATA

Within each respective section of the Core Data Set, residual data will be captured within three fields.
This structure will allow exporting EMR vendors a flexible method to represent existing data that does not fit into any other defined field and allow importing EMR vendors to quickly identify what the residual data represents and its corresponding data type.
All three fields must be grouped in a set and can be repeated multiple times, as a group, within each section as required.

Field Name	Field Description	XML	Notes
Name	The name of the data field	<name> … </name>	
Type	The primitive XML datatype of the data field	<datatype> … </datatype>	Mandatory if a Residual Data Element Name is provided Note: if DataType = Date then date format must follow W3C Date Standard
Content	The content of the data element	<content> … </content>	Mandatory if a Residual Data Element Name is provided

To illustrate an example of how the residual data fields are to be used, assume that a patient has the following Personal History information that needs to be exported (NOTE: This is only an example and not the expected format for validation):

Dislocated Shoulder, May 3, 2000
Using the residual data fields, this data can be represented:

```
<ResidualInfo>
        <cdsd:DataElement>
                <cdsd:Name>Incident</ cdsd:Name >
                <cdsd:DataType>text</cdsd:DataType>
                <cdsd:Content>Dislocated Shoulder</cdsd:Content>
        </cdsd:DataElement>
        <cdsd:DataElement>
                <cdsd:Name >Incident Date</cdsd:Name>
                <cdsd:DataType>date</cdsd:DataType>
                <cdsd:Content>20000503</cdsd:Content>
        </cdsd:DataElement>
</ResidualInfo>
```


6. CDS XSD SCHEMA – CHANGES

6.1 XML ELEMENTS – NEW, REMOVE, UPDATE AND AMEND

This section consists of the xml data elements within ontario_cds.xsd or ontario_cds_dt.xsd that have been added (new), removed, updated or amended, however there might be changes to CDS - XSD Schema that might occur after the publication of this document.

For the complete list of changes to the ontario_cds.xsd or ontario_cds_dt.xsd, please refer to Data Dictionary & Mapping / XSD_ChangeLog tab. It is essential that implementers keep current regarding any changes to the CDS-XSD Schema.

7. RETIRED REQUIREMENTS / CDS CATEGORIES / CDS DATA ELEMENTS

For the purposes of this section, 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 EMR Specification
P = Previous requirement from EMR-Specification v4.1
U = Updated requirement 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*

CDS Category # unique identifier assigned to each CDS Category within CDS XSD Schema

YEAR: the year the requirement became part of the *Ontario EMR Requirements Repository*

YEAR Retired: the year the requirement was retired from the *Ontario EMR Requirements Repository*

7.1 RETIRED DATA PORTABILITY REQUIREMENTS

Following functional requirements have been retired from the Core EMR Specification – Section2: Data Portability.

Refer to Ontario EMR Specification v4.1 - Appendix B for complete information about the following retired requirements.

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	YEAR	YEAR Retired	COMMENTS
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7.2 RETIRED CDS DATA CATEGORIES

Following Data Categories have been retired from Core EMR Specification – Section2: Data Portability.

Refer to Ontario EMR Specification v4.1 - Appendix B for complete information about the following retired CDS Data Categories.

CDS #	Retired FROM	CDS CATEGORY	YEAR	YEAR Retired	COMMENTS
N/A	N/A	N/A	N/A	N/A	N/A

7.3 RETIRED CDS DATA ELEMENTS

Following Data Elements have been retired from Core EMR Specification – Section2: Data Portability.

Refer to Ontario EMR Specification v4.1 - Appendix B for complete information about the following retired CDS Data Elements.

DP #	DATA ELEMENT	DEFINITION	REQ FIELD	DATA TYPE	LEN	CODE SOURCE	BUSINESS RULES
N/A							
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

8. AMENDED REQUIREMENTS / CDS CATEGORIES / CDS DATA ELEMENTS

8.1 DATE AMENDED: N/A