OntarioMD

Electronic Medical Records

EMR as a Service
SPECIFICATION

Version 4.2

DRAFT APPROVED

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Version: 1.0

Ontario
eHealth Ontario

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GLOSSARY

TERM	MEANING
CDS	Core Data Set
Certificate	'Certificate' means the document issued by OntarioMD to Vendor respecting its Offering, following the successful completion of the Validation of the Offering under the Program, confirming that such Offering met or exceeded, as of the date of completion of the Validation process, the Baseline Requirements set out in the applicable Specification.
Client Agreement	A contract between the Vendor and its customer or client for the provision of the Vendor's EMR Offering.
EMR	Electronic Medical Record – May refer to the actual patient medical record, or the software used to manage medical records. Previous versions of the Specification referred to EMR as Clinical Management Systems (CMS).
EMR Funding Eligibility Agreement	The agreement between OntarioMD and the EMR Vendor with respect to their funding eligible EMR Offering. This agreement governs the on-going Funding Eligible status of an EMR Offering against the EMR Specification.
EMR Offering	The combination of EMR software, services, and support offered by a vendor.
Fix Release	A 'Fix Release' is defined as an upgrade to the Offering that is issued to bring the Offering into alignment with the current Ontario EMR Specification.
General Availability	'General Availability' occurs when the EMR Offering has completed the Vendor's quality assurance and beta testing processes and is deemed fit by the Vendor for general deployment to all customers; and the EMR Offering has completed the Validation Process as defined by OntarioMD. A Spec Release General Availability date is determined by OntarioMD when most or all EMR Offerings for a new EMR Specification have completed the Reference Site stage and are Funding Eligible. The Fix Release General Availability date is the date the Offering is generally available after the Vendor has remediated any deficiencies under the current EMR Specification, completed the required Validation Process and has been approved by OntarioMD for release.
Mandatory EMR Funding Eligibility Schedule	The schedule entitled Mandatory EMR Funding Eligibility Schedule that is required to be affixed to and become part of a Client Agreement.
OntarioMD, OMD	OntarioMD Inc., a wholly owned subsidiary of the Ontario Medical Association (OMA)
Other Definitions	As set out in the EMR Funding Eligibility Agreement.
Specification	The OntarioMD EMR Specification, as amended from time to time and developed by OntarioMD in partnership with eHealth Ontario.
Spec Release	A 'Spec Release' or 'Specification Release' is defined as a version of the Offering that is issued to meet a new/updated Ontario EMR Specification.
Technical Implementation Complete	'Technical Implementation Complete' occurs when the EMR Offering is fully configured and ready for use in the live production environment at the Customer's site, with all functionality as defined in the Customer Agreement. This includes the completion of agreed upon hardware and software installation, training and data migration.
Technical Implementation Completion Date	The date that the Technical Implementation Complete has been achieved.
Upgrade Implementation Date	Upgrade Implementation Date is the date when a Spec Release or Fix Release has been implemented at the Customer's site and is fully configured and ready for use in the live production environment, with all functionality as defined in the Customer Agreement. It includes the completion of any required and agreed upon hardware and software installation, training and data migration associated with the Release.

TERM	MEANING
Validation	The activities of OntarioMD, as carried out according to the EMR Funding Eligibility Agreement.
XML	Extensible Mark-up Language

1   INTRODUCTION

1.1   OVERVIEW OF THE EMR AS A SERVICE SPECIFICATION

This specification is part of a set of provincial specifications that define functional and non-functional requirements for EMR product offerings 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.

This document defines service-related requirements to be followed by the EMR Vendor in provision of each of its EMR Offerings to clinicians. These requirements improve service quality reflected in service level agreements and during EMR Vendors initial implementation and upgrade of its EMR Offerings under Ontario's EMR Funding Programs.

Where applicable, conformance to the requirements in this Specification will be monitored using monthly report submissions to OntarioMD by the Vendor.

1.2   SCOPE/PURPOSE OF THE EMR AS A SERVICE SPECIFICATION

The service-related requirements expressed within this document are applicable to the following:

- Vendor – Client agreement
- New Technical implementations
- Specification and Fix Release upgrades and implementations
- Monthly Vendor implementation statistics publication
- Monthly Vendor reporting submission
- Release Notifications
- Database field to CDS Mapping
- Provincial Electronic Health Record Asset support maintenance

2   SPECIFICATION TRACEABILITY

2.1   Highlights of Changes

Ontario EMR Specification v4.1 Appendix H was used as the basis to create this EMR as a Service Specification.

TYPE	# of Requirements v4.1	# of Requirements v4.2
New Requirements	1	N/A
Updated Requirements	N/A	1
Previous Requirements	6	6
Retired Requirements	N/A	N/A
Total Number of Requirements	7	7

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
Mandatory EMR Funding Eligibility Schedule – New Clients	Final	1-April-2012	OMD	Mandatory EMR Funding Eligibility Schedule - New Clients (read only) Mandatory EMR Funding Eligibility Schedule - New Clients (editable)
Mandatory EMR Funding Eligibility Schedule – Existing Clients	Final	1-April-2012	OMD	Mandatory EMR Funding Eligibility Schedule - Existing Clients (read only) Mandatory EMR Funding Eligibility Schedule - Existing Clients (editable)
Vendor Monthly Reporting Guide	Final	1-April-2012	OMD	By request to OntarioMD

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

3   TERMS AND CONDITIONS

3.1   VENDOR – CLIENT AGREEMENT REQUIREMENT

Each Client Agreement must have appended to it as a schedule the Mandatory EMR Funding Eligibility Schedule. Without limiting the provisions of the applicable Specification, the Mandatory EMR Funding Eligibility Schedule sets out the minimum requirements of every Client Agreement as to the matters set out in the Mandatory EMR Funding Eligibility Schedule, but the Vendor is free to provide additional benefits to the client or customer named in the Client Agreement if it wishes. The Mandatory EMR Funding Eligibility Schedule will be attached to every Client Agreement as a schedule forming part of the Client Agreement.

3.2   SUSPENSION OF FUNDING ELIGIBILITY

OntarioMD has the right, as set out in the EMR Funding Eligibility Agreement, to withdraw the Certificate for the Vendor's EMR Offering under certain circumstances. The result will be that the Offering will be ineligible for funding. OntarioMD has decided that withdrawal of the Certificate may, in some circumstances, not be beneficial to physicians and so it reserves the right, in its sole and unfettered discretion, to suspend funding eligibility for the EMR Offering until such time as any breach by the Vendor is cured to the satisfaction of OntarioMD. Such breaches may include persistent failures to observe and carry out Service Levels and Remedies and failure to observe and carry out Vendor's obligations in the Mandatory EMR Funding Eligibility Schedule forming a part of any Client Agreement.

3.3   RIGHT OF CLIENT/CUSTOMER TO CANCEL CLIENT AGREEMENT

Notwithstanding anything contained in a Client Agreement, if the EMR Offering's Funding Eligibility is suspended or revoked, a Vendor that has not yet achieved the Technical Implementation Completion Date under Ontario's EMR Adoption Program, or the Upgrade Implementation Date within the required time line under Ontario's EMR Upgrade Funding Program at a Client/Customer site, that Client/Customer shall have the right to terminate the Client Agreement. In such circumstances, the obligations of the Vendor regarding data portability will be observed and carried out for the benefit of the Client/Customer and the Vendor will refund to the Client/Customer any prepaid subscription, lease, rental or license fees.

3.4 INFORMATION TO BE PUBLISHED

OntarioMD will publish on the OntarioMD.ca web site the following information on a monthly basis:

1. For Technical Implementations:
    a. Number of 'Technical Implementations' to be completed.
    b. Number of 'Technical Implementations' that have been scheduled but are overdue.

2. For each Spec Release and Fix Release:
    a. General Availability date of the release.
    b. Date to complete the roll out of the release.
    c. Total number of funded physicians to be upgraded (not including refusals).
    d. Total number of funded physicians upgraded.
    e. Total number of funded physicians remaining to be upgraded.

3.5 EMR VENDOR MONTHLY REPORTING

All vendors will be required to submit on a monthly basis using the process and reports described in the '*Vendor Monthly Reporting Guide'* document. Reports are due on the 5th business day of each month for the prior month.

4   SERVICE ORIENTED REQUIREMENTS

This section consists of the EMR service-oriented requirements for the specification.

Scoring Key: **M** = Mandatory criteria for funding eligibility
W = Weighted criteria

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

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

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	SLA Measurement, Reporting and Success Criteria
SER01.01	Implement the EMR Offering to a "Technical Implementation Complete" state according to the contracted terms, conditions and dates agreed to with the Customer in the Client Agreement.	The Vendor is free to agree to a phased approach with the Customer. For the purposes of this requirement, a phase is defined as the work required to achieve 'Technical Implementation Complete' for a single site or set of sites that makes up part of a larger multi-site group. In this case each phase must have a Technical Implementation Date for each site or set of sites. The Technical Implementation Date must be no later than the period allowed in the Customers' EMR Program Funding Terms and Conditions. Any changes to the date(s) must be mutually agreed upon between the Vendor and Customer and documented using the Vendor's official Change Request process. Changes in dates must be reported via the monthly reporting process as described in the *Vendor Monthly Reporting Guide*.	M	P	To be reported on a monthly basis within five (5) business days of the end of each month using the process described in the Vendor Monthly Reporting Guide. Where a Vendor is unable to attain Technical Implementation Date as agreed upon, the Vendor will have a period of one month to remedy the implementation or Funding Eligibility may be suspended.
SER01.02	Deployment of a Spec Release within eight	A Spec Release must be deployed to all Clients/Customers within eight (8) months of	M	P	To be reported on a monthly basis within five (5) business days of the end

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	SLA Measurement, Reporting and Success Criteria
	(8) months of General Availability.	General Availability. Customers participating in Ontario's EMR funding programs are obligated to upgrade when releases become Generally Available. All Customers must be notified in writing (email acceptable) that the release is Generally Available. Vendor must schedule the upgrade date in consultation with the Customer. If a Customer refuses the upgrade, the Vendor must notify OntarioMD via the monthly reporting process as described in the *Vendor Monthly Reporting Guide*. OntarioMD will verify all refusals and contact the Vendor if there is a dispute as to why the upgrade was refused. Any changes to the upgrade date must be agreed upon by Vendor and Customer and documented using the Vendor's official Change Request process. Changes in dates must be reported via the monthly reporting process as described in the *Vendor Monthly Reporting Guide*.			of each month using the process described in the *Vendor Monthly Reporting Guide.* Where a Vendor is unable to complete the upgrades within eight months as required, the Vendor will have a period of one month to remedy the situation by completing the upgrades or Funding Eligibility may be suspended.
SER01.03	Deployment of a Fix Release within four (4) months or sooner, as specified by OntarioMD, of General Availability.	A Fix Release must be deployed to all Clients/Customers within four (4) months or sooner, as specified by OntarioMD, of General Availability. Where the Fix Release corrects critical functionality, such as patient safety, privacy and/or security issues, OntarioMD may, at its discretion, require that a Fix Release be deployed to all Clients/Customers sooner than four months. Customers participating in Ontario's EMR	M	P	To be reported on a monthly basis within five (5) business days of the end of each month using the process described in the *Vendor Monthly Reporting Guide.* Where a Vendor is unable to complete the upgrades within four months or sooner as required, the Vendor will have a period of one month to remedy the situation by completing the upgrades or Funding Eligibility may be

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	SLA Measurement, Reporting and Success Criteria
		funding programs are obligated to upgrade when releases become Generally Available.			suspended.
		All Customers must be notified in writing (email acceptable) that the release is Generally Available.			
		Vendor must schedule the upgrade date in consultation with the Customer.			
		If a Customer refuses the upgrade, the Vendor must notify OntarioMD via the monthly reporting process as described in the *Vendor Monthly Reporting Guide*.			
		OntarioMD will verify all refusals and contact the Vendor if there is a dispute as to why the upgrade was refused.			
		Any changes to the upgrade date must be agreed upon by Vendor and Customer and documented using the Vendor's official Change Request process.			
		Changes in dates must be reported via the monthly reporting process as described in the *Vendor Monthly Reporting Guide*.			
SER01.04	Issue a Release Notification with every Release to all funded Customers and to OntarioMD.	A Release Notification must contain, at a minimum, the following information: 1. Release note identifier (name, date, Vendor's version #) 2. What's new (overview of new features, enhancements, main reason of the release) 3. How to obtain the complete Release Notes (e.g., a link to Vendor's web site) All releases must be accompanied by written (email acceptable) Release Notification to the Customer. The Release Notification must indicate that the	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	SLA Measurement, Reporting and Success Criteria
		release is required for Ontario EMR Funding Eligibility. The Release Notification must be communicated to funded Customers and sent to OntarioMD (emr@ontariomd.com) as soon as the release is Generally Available.			
SER01.05	Make Release Notes for each Release available to all Customers and OntarioMD.	The Release Notes must contain, at a minimum, the following information: 1. Features and changes (new features, defects corrected, caveats etc.) 2. Outstanding issues (unresolved defects, if any, workarounds, installation issues etc.) 3. System Requirements (hardware, resources, software/third-party platforms/modules/etc. e.g. fax servers, scanners, printers, with Vendor's version numbers/dates) 4. Installation instructions/notes/guide (how to install, how to obtain guide) 5. Upgrade instructions/notes/guide (how to upgrade, how to obtain guide) 6. Known issues or limitations of the release, e.g., a known bug, etc. 7. Contact information for support 8. Other Resources and Links The following information is also helpful to include: 1. Troubleshooting 2. Frequently Asked Questions (FAQ) 3. Disclaimer Release Notes must be available for all releases. Release Notes must be sent to OntarioMD at	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	SLA Measurement, Reporting and Success Criteria
		emr@ontariomd.com.			
SER01.06	Submit to OntarioMD the EMR Offering's database field mapping to Core Data Set data elements (Data Portability and CDS XML schema).	Submit field mapping of Database to Core Data Set (CDS) elements including: 1. References to source database table and data element, e.g. table name and column name 2. Illustration of any conversion logic that would be needed between source and destination elements, e.g. concatenate database elements A and B to get CDS element C Any updates to the EMR Offering's database field mapping to Core Data Set data elements must be submitted to OntarioMD. OntarioMD will hold the field mapping in confidence until one or more of the following conditions is met: 1. Vendor's breach of Section 5 of the EMR Funding Eligibility Agreement; or 2. Without limiting (1), Vendor's inability to deliver a data export as per Section 5 of the EMR Funding Eligibility Agreement in the time agreed to with the Client; or 3. Vendor's loss of ownership or control of the Funding Eligible Offering; or 4. Vendor's breach of clause 2.10(b) of the EMR Funding Eligibility Agreement; or 5. Vendor's Certificate is withdrawn or suspended for any reason as outlined in Section 2.8 of the EMR Funding Eligibility	M	U	Updates (if any) must be submitted to OntarioMD with the Release Notes of the respective version/build.

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	SLA Measurement, Reporting and Success Criteria
		Agreement or otherwise; or,			
		6. Vendor is generally unable or unwilling to provide data migration services under their agreements with their Clients or the EMR Funding Eligibility Agreement.			
		When one or more of the previous conditions have been met, the mapping will be released to the affected physicians or their agent to facilitate their data migration. Should the conditions be broad based, OntarioMD may elect to use the mapping to provide migration tools to all the affected physicians.			
		At the discretion and cost of the Vendor, the Vendor may choose to deposit and keep current the field mapping document in escrow so long as the release conditions are equivalent to the above conditions.			
SER01.07	Vendor will install and maintain security keys, certificates and other related software to support functionality and access to an operating Provincial Electronic Health Record Asset.	A Provincial Electronic Health Record Asset (PEHRA) is a provincial class solution for which there is a corresponding Ontario EMR Requirement Specification. For example, OLIS and HRM are Provincial EHR Assets. Because of the privacy and confidentiality aspects of key installation and maintenance, and because of concerns about the legality of unauthorized installation of files on a third party computer, if Vendor is to install and maintain security keys, certificates and other related software to support functionality and access to a PEHRA, Vendor must have the written consent of Client/Customer as a condition of doing so. In some cases, Client/Customer may be able to install and maintain security keys, certificates and other related software without the	M	P	

OMD #	REQUIREMENT	GUIDELINES	M/W	Status	SLA Measurement, Reporting and Success Criteria
		assistance of Vendor. In this case, Vendor is not obligated to provide this level of support; however, Vendor must ensure that Client/Customer understands their responsibility. Client/Customer must decline in writing to Vendor. Installation and on-going maintenance may include acquisition and installation of updated security keys, certificates and other related software, and associated testing and verification. In some cases, security keys, certificates and other related software are property of the Client/Customer. To the extent that Vendor comes into possession of security keys, certificates and other related software, Vendor shall keep such information confidential and will take reasonable and secure steps to prevent any loss, disclosure, or unauthorized use or compromise of same. Vendor agrees to install technical and administrative controls over the use of security keys, certificates and other related software.			