Introduction

Now that OntarioMD has a production environment established at eHealth Ontario for Hospital Report Manager (HRM) and have begun testing, and have expanded our HRM user base to include Nurse Practitioners; there are revised EMR interface requirements that have been identified that need to be implemented in order for HRM to be deployed successfully.

These changes include:

1. Support the delivery of binary based reports
2. Support distribution of reports to nurse practitioners
3. Accommodate a change in Message Unique ID length and sub-components
4. Updates to the schema definition files
5. Provision of Security Key and Certificate Maintenance Management

Based on the results of the EMR technical survey vendors completed, the majority indicated these changes could be accommodated with minor development.

The remainder of this document describes the changes outlined above.

The amended EMR Specification 4.1A draft documents and additional information are published to the EMR Specification 4.1 page of ontariomd.ca.

If you have any comments and questions, please forward them to emr@ontariomd.com.

Change Overview:

1. BINARY REPORTS

Lessons Learned:
In preparation for provincial expansion, multiple LHINs have indicated the need to support PDFs and other binary content via HRM. Currently HRM only supports narrative text-based reports. To deploy a solution that meets the needs of the province, HRM will expand scope to include the delivery and receipt of binary reports.

What has Changed:
To support the delivery of binary reports, the OntarioMD EMR Specification 4.1 has been modified to include the requirements to facilitate the receipt of binary reports in the EMR. Specifically the EMR Offering will be required to extract and convert the base64 encoded text before rendering the content to the user.

Additional Information: For detailed requirements please refer to the updated Appendix F.

The specific sections that have changed as a result of the new enhancement are outlined below:

- Appendix F Section 3.6 Requirement a
- Appendix F Section 3.7 Requirement a
- Appendix F Section 3.7 Requirement b
- Appendix F Section 5.2 HRM #57
- Appendix F Section 5.2 HRM #58
- Appendix F Section 5.2 HRM #59
- Appendix F Section 6.1 XML Element Name “reportFormat”

2. Nurse Practitioners (CNO Update)

Lessons Learned:
Today HRM reports are only distributed to Physicians. As HRM expands, a need for reports to be sent directly to Nurse Practitioners (NP) has been identified.

What has Changed:
To include Nurse Practitioners as HRM report recipients the OntarioMD EMR Specification 4.1 has been modified to ensure EMR Offerings are able to receive a 7 digit CNO # in the XML feed and match these inbound reports appropriately.

Additional Information: For detailed requirements please refer to the updated Appendix F.

The specific sections that have changed as a result of the new enhancement are outlined below:

- Appendix F Section 3.2 Requirement d
- Appendix F Section 3.2 Requirement e
- Appendix F Section 3.2 Requirement f
- Appendix F Section 5.2 HRM #76
- Appendix F Section 6.1 XML Element Name ”Physician”

3. *Message Unique ID*

Lessons Learned:
Each report delivered through HRM is assigned a "Message Unique ID" which is a combination of multiple fields including sending facility, process date, message date and others. It is used internally by the HRM Operations team and vendors to uniquely identify the message without revealing any PHI. Through supporting the HRM pilot, OntarioMD's Operations team has identified additional data components that would further improve supportability.

What has Changed:
To improve supportability the OntarioMD EMR Specification 4.1 has been modified to increase the maximum length of the Message Unique ID field to 250 characters, allowing for the addition of data components.

Additional Information: For detailed requirements please refer to the updated Appendix F, Appendix B and accompanying CDS XML Schema Definition.

The specific sections that have changed as a result of the new enhancement are outlined below:

- Appendix F Section 5.2 HRM #75
- Appendix F Section 6.1 XML Element Name "MessageUniqueID"
- Appendix B Section 5.2 CDS XML Element Name "MessageUniqueID"

4. *HRM XSD and DTD Updates*

Lessons Learned:
As OntarioMD engages new sending facilities for HRM provincial expansion revisions to the schema definition file have been identified. These changes relax some of the format restrictions included in previous specifications.

What has Changed:
Select format restrictions have been relaxed in the amended Specification 4.1A. These changes involve the removal of select tokens and optionality of the residential address line 1.

Additional Information: For detailed requirements please refer to the updated Appendix F, Appendix B and accompanying CDS XML Schema Definition.

The specific sections that have changed as a result of the new enhancement are outlined below:

- Appendix F Section 6.1 XML Element Name "address.structured.line"
- Appendix F Section 6.1 XML Element Name "City"
- Appendix F Section 6.1 XML Element Name "Number"
- Appendix F Section 6.1 XML Element Name "Version"
- Appendix F Section 6.1 XML Element Name "personNamePart"
- Appendix F Section 6.1 XML Element Name "phoneNumber"
- Appendix F Section 6.1 XML Element Name "postalCode"
- Appendix F Section 6.1 XML Element Name "reportSubClass"
- Appendix F Section 6.1 XML Element Name "blank"
- Appendix B Section 5.2 CDS XML Element Name "reportSubClass"

5. Security Key and Certificate Maintenance

Security keys and certificates are required on EMR Offerings to enable access to some provincial assets including OLIS and HRM. Security keys and certificates can expire or require maintenance from time to time. Failure to manage these important security elements for the provider could result in sudden service outages.

EMR Vendors already have an agreement with eHealth Ontario to install and maintain security keys and certificates. However, some EMR Vendors may not have management of security controls in their client agreements.

What has Changed:

EMR Vendors will need to ensure their client support and maintenance agreements (or equivalent) include the provision to manage these service requirements for Funded clients. For some vendors this may mean amending existing client agreements.

Additional Information: Appendix H has been updated to ensure that EMR Vendors provision within their client agreements for the installation and management of security keys and certificates agreements unless otherwise declined by the client.

The specific section that has changed is below:

- Appendix H Section 7.1 Requirement g