EMR Certification

Baseline Demonstration Guide

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Shared health Soins communs Manitoba

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1 Introduction

1.1 Document Purpose

This document contains details of the Applicant demonstration component of the assessment which are required in order for an EMR Product to be certified for Manitoba's Baseline EMR Specification.

1.2 Related Documents

Table 1: Related Documents

DOCUMENT
EMR Certification - Baseline EMR Requirements Specification
Applicant Assertions

2 EMR Product Demonstration

2.1 Preparing for Product Demonstration

Applicants are advised to thoroughly prepare for their demonstration to ensure that the demonstration goes smoothly and to ensure that it can be completed in the allocated time. Before a demonstration session, Applicants must:

1. Review each demonstration scenario to ensure understanding. If questions arise, please contact EMR@sharedhealthmb.ca and we will provide any required clarification.
2. Set-up the demonstration patients and providers as described in the section below.
3. Complete the pre-requisites related to each demonstration scenario.
4. Submit copies of all required documentation (e.g. reports, etc.) to EMR@sharedhealthmb.ca. When printing is required for demonstration, a printed document must be submitted prior to demonstration. An electronic PDF version is acceptable.
5. If completing the demonstrations through video, the videos must be submitted to EMR@sharedhealthmb.ca.

Applicants are encouraged to:

- Involve all members of their demonstration team in preparation activities, and ensure that all participants have a clear understanding of the demonstration scenarios and their role in the demonstration
- Conduct an end-to-end dry run with the demonstration team to ensure that any identified issues can be remedied prior to the session, and to confirm the time required to

complete the demonstration. If more time is required than initially allocated, Applicants should advise Shared Health at their earliest opportunity.

2.2 Demonstration Data

The following profiles outline the data that should be set-up within the Applicant's EMR Product prior to the Baseline Demonstration session. This core data set encompasses all data for all demonstration scenarios described in this guide. The following guidelines should be adhered to during set-up:

1. If your EMR Product requires additional data entry to create a patient record, Applicants should populate those fields as they see fit.
2. At the time of demonstration, patient records must reflect age and timeframe requirements identified in the specific demonstration scenarios outlined in section 2.3.
3. Applicants are required to create three providers with identifiers 1006, 1007, and 1008 (Identifier Type = Billing ID). All patient profiles created to support the Baseline Demonstration session must be assigned to one of these provider identifiers. This is to ensure that the demonstration data will not impact other assessment criteria.

2.3 Scenarios

This section describes all Application Demonstration scenarios required for the Baseline EMR Requirements.

PATIENT DEMOGRAPHICS

The following table articulates the demonstration scenario relevant to the Patient Demographics Baseline EMR requirements.

Table 2: Patient Demographics Scenarios

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
01-003	Supports merging of duplicate patient records.	Merging of patient records refers to the merging of the entire patient medical record (not only patient demographics). Merging of duplicate records must be initiated by the user. Automatic merging of duplicate records is not an acceptable solution. Must allow for user to specify which record should be maintained as the primary record. Prior to merging, the user must be notified of the permanence of the action, and given an opportunity to confirm the merging of duplicate patient records.	Two patient records with the same first name and a similar last name. The last name of the second patient record is spelled differently from the first patient record. At a minimum, the first patient record contains a lab result and the second patient record contains an encounter note.		
				Attempt to merge the second patient record with the first patient record. The first patient record should be identified as the primary record.	User notified of permanence of action. User provided with option to confirm the merge.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
				Confirm merging action.	Merged patient record contains: • last name of the first patient • the lab result • the encounter note

SCHEDULE MANAGEMENT

The following table articulates the demonstration scenario relevant to the Schedule Management Baseline EMR requirements.

Table 3: Schedule Management Scenarios

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
04-002	Provides ability to configure a provider's schedule.	At a minimum, options will include: • ability to set operating hours at the clinic and provider level • ability for users to define a default appointment length on an individual provider basis • ability to reserve periods of time on a schedule for specified types of appointments • ability to designate time within schedule as not available for patient appointments	Two providers, each displayed in the schedule view. <u>Default Appointment Length</u> • one provider set to 15 minutes • one provider set to 30 minutes Clinic operating hours globally set to 9am-5pm.		Schedule view displays clinic operating hours as 9am-5pm for both providers. One provider's default appointment length is displayed as 15 minutes and the other provider's default appointment length is displayed as 30 minutes.
				Change one provider's clinic operating hours to 9am-3pm and reserve a time for a specific appointment	Schedule view displays clinic operating hours as 9am-3pm for one provider and 9am-5pm for the other provider.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
				type (i.e. follow-up) in their schedule.	The reserved time for the specific type of appointment will be displayed on the applicable provider's schedule.
				Reserve a time period in one provider's schedule as unavailable for a patient appointment.	Provider's schedule displays the reserved time period that is unavailable for patient appointments.

CLINICAL ENCOUNTERS

The following table articulates the demonstration scenario relevant to the Clinical Encounters Baseline EMR requirements.

Table 4: Clinical Encounters Scenarios

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
05-002	Provides ability to write compound clinical notes where multiple providers are able to update the note.	Must be able to identify each contributing author without: • manual entry of identification (e.g. initials) • requiring user to access audit logs to view entry information	An encounter note is created in a patient record by a provider.		
				A different provider adds content to the encounter note.	Encounter note displays: • added content • each provider as an author of the encounter note
05-003	Supports provider sign-off of clinical	At a minimum, ability for providers to sign-off:	An order is created in a patient record by a provider.		Order present in the patient's record.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS

	documents.	• encounter documentation
		• transcriptions
		• prescriptions
		• orders
		• attached documents
		• reports, lab results and diagnostic tests
		  ○ received through an interface
		  ○ manually keyed into the EMR
		At a minimum, ability to capture and make visible:
		• sign-off date/time
		• user identity
		Ability to capture sign-offs by multiple providers for:
		• reports, lab results and diagnostic tests
			A report exists in the patients record.		

				Sign-off on the order.	System displays: • date and time of sign-off • user identity for the provider
				The first provider signs-off on the report.	System displays: • date and time of each sign-off • user identity for the first provider
				A second provider signs-off on the report.	System displays: • date and time of each sign-off • user identity for the first provider

MEDICAL RECORD MANAGEMENT

The following table articulates the demonstration scenario relevant to the Medical Record Management Baseline EMR requirements.

Table 5: Medical Record Management Scenarios

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
06-010	Provides ability to create and update care	At a minimum, must provide the ability to:	At a minimum, a patient's record will contain a care plan that		

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
	plans for a patient.	• set objectives (goals) • generate a comprehensive view of the patient's care plan including all activities, plans, service events, treatment plans and clinical details pertaining to a specific patient • print the care plan	includes a health goal, a related activity and treatment plan.		
				Add a service event to the patient's care plan.	Patient's care plan displays the health goal, activity, treatment plan and service event.
				Print the patient's care plan.	A printout of the patient's care plan is generated. Printout must adhere to accepted formats as stated in section 2.1.

LAB AND DIAGNOSTIC TEST MANAGEMENT

The following table articulates the demonstration scenario relevant to the Lab and Diagnostic Test Management Baseline EMR requirements.

Table 6: Lab and Diagnostic Test Management Scenarios

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
07-005	Allows users to cross-reference the EMR's proprietary test names to the test codes/test names from different laboratory proprietary standards.	Grouping of similar test codes to test names in the EMR may be pre-configured or the EMR must provide the ability for a user to perform this manually.	At a minimum, the following will be present in a patient record: two equivalent tests such that one test uses the EMR's proprietary test name and the other test is from a different laboratory that uses a different test code/name.	Demonstrate how lab results are configured in the EMR so that similar results coming from different source systems are grouped.	The system groups both tests.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
			The two equivalent tests are configured to group together.		
07-007	Provides ability to reconcile test orders and results.	Outstanding requisitions must be identifiable when reconciling. Must provide the ability to remove a requisition from the outstanding requisition list.	At a minimum, the following will be present in a patient's record: Outstanding Requisitions Requisition A Requisition B Results Result A		The outstanding requisition list displays: • Requisition A • Requisition B
				Reconcile Requisition A with Result A	The outstanding requisition list displays: • Requisition B
				Remove Requisition B from the outstanding requisition list.	The outstanding requisition list does not display Requisition B.

MEDICATIONS MANAGEMENT

The following table articulates the demonstration scenario relevant to the Medications Management Baseline EMR requirements.

Table 7: Medications Management Scenarios

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
09-009	Provides ability to manage patient intolerances	At a minimum, will include creating, updating, and removing of intolerances and	A reaction to penicillin causing emesis (vomiting) will be present in a patient's		Patient's record displays an emesis (vomiting) reaction to penicillin.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
	and adverse reactions to medications.	adverse reactions.	record.		
				Modify reaction to penicillin to anaphylactic shock.	Patient's record displays an anaphylactic shock reaction to penicillin.
				Remove reaction to penicillin from patient's record.	Patient's record does not display a reaction to penicillin.

CLINICAL DECISION SUPPORT

The following table articulates the demonstration scenario relevant to the Clinical Decision Support requirements category.

Table 8: Clinical Decision Support Scenarios

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
10-003	Provides ability to illustrate the effects of treatment on patient health.	At a minimum, must: • display in graphical or tabular format • be printable At a minimum, informational elements include: • lab test data • general care data • medications data	At a minimum, a patient's record will contain the following: • a series of at least two results for the same lab test • capture of two different patient weights during the date range of the series of lab results • two of the same prescriptions that have different dosages and start dates during the date range of the series of lab results		

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
				Display the relationship between the patient's weight and the patient's lab results.	A graph or table displaying: • the series of results for the lab test • a reference of the patient's weights and dates captured
				Display the relationship between the prescription and the patient's lab results.	A graph or table displaying: • the series of results for the lab test • a reference of the prescriptions and the prescription start dates
				Print the relationship between the prescription and the patient's lab results.	A printout of the graph or table is generated and displays: • the series of results for the lab test • a reference of the prescriptions and the prescription start dates Printout must adhere to accepted formats as stated in section 2.1.

BILLING

The following table articulates the demonstration scenario relevant to the Billing requirements category.

Table 9: Billing Scenarios

ID	Requirement	Guidelines	Pre-requisites	Demonstration Step	Expected Results
14-008	Provides error checking and claim validity warnings.	At a minimum, the error checking will include: • mandatory billing fields (e.g. billing ID, service date, health card number, etc.) • validity of health registration number format, regardless of assigning authority • gender-specific claims • procedure claims relevant to diagnoses • patient exceeds allowable number of billings for a tariff within the time specified • eligibility for annual billing of tariff • when billing for patients insured by Canadian jurisdictions without reciprocal billing arrangements or patients insured in non-Canadian jurisdictions Error checking must occur prior to claim submission.	At a minimum, will contain preloaded claim data that contains error and validity warnings for the below scenarios: • mandatory billing fields (e.g. billing ID, service date, health card number, etc.) • validity of health registration number format, regardless of assigning authority • gender-specific claims • procedure claims relevant to diagnoses • allowable number of billings for a tariff within the time specified is exceeded • eligibility for annual billing of tariff • billing for patients insured by Canadian jurisdictions without reciprocal billing arrangements or patients insured in	Display section(s) of the EMR where claims are entered and validated, and demonstrate how error and warning messages are displayed.	The system displays error and validity warnings for the below scenarios: • mandatory billing fields (e.g. billing ID, service date, health card number, etc.) • validity of health registration number format, regardless of assigning authority • gender-specific claims • procedure claims relevant to diagnoses • allowable number of billings for a tariff within the time specified is exceeded • eligibility for annual billing of tariff • when billing for patients insured by Canadian jurisdictions without reciprocal billing arrangements or patients insured in non-Canadian jurisdictions

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
			non-Canadian jurisdictions		
14-010	Provides ability to create a claim/billing directly from the patient encounter information.	Must be able to bill without re-entry of patient, encounter, or clinical information including the ICD9 code. Must allow user to modify data populated from patient encounter.	At a minimum, the following information will be present in a patient's record: • clinical encounter note • scheduled appointment		
				Create a claim directly from patient's encounter information.	A claim with information pre-loaded from patient's encounter information is created.
				Alter information in the created claim so that it differs from patient's encounter information.	The altered information is reflected in the claim.
14-019	Supports re-submission of a rejected claim.		At a minimum, the EMR will contain a rejected claim.		
				Correct the claim based on the rejection reason.	The claim is updated with corrected information.
				Submit the previously rejected claim.	The system allows submission of the previously rejected claim.
14-023	Provides support for claims	A manual reconciliation process is not acceptable.	At a minimum, the EMR will contain a rejected and an approved claim.		Rejected and approved claims are displayed.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
	reconciliation.				
				Reconcile the rejected and approved claims with the submitted claims.	The rejected and approved claims are reconciled.

QUERIES

The following table articulates the demonstration scenario relevant to the Queries requirements category.

Table 10: Queries Scenarios

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
15-001	Provides ability to create and execute queries.	At a minimum, must be able to query data related to: • Patient demographics • Provider demographics • Patient-Provider relationship • Appointment • Labs • Medications • Health Concerns • Interventions • Allergies • Family History • Risk Factors • General Care At a minimum, must provide the ability to: • select specific fields • filter based on “AND”,	At a minimum, one patient's (patient 1) record will contain the following: • relationship to a provider • asthma health concern • active ACE inhibitor prescription • appointment in last six months At a minimum, a different patient's (patient 2) record: • will contain Congestive Heart Failure health concern • will not contain an		

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
		"OR", and "NOT" logic • filter based on time period Must allow user to select specific fields to display in query results. Query results must display graphically and/or in a tabular format.	appointment within the last 12 months		
				Create and execute query for patients with a relationship to the selected provider AND an asthma health concern.	Query results display: • patient 1 • graphically or in tabular format Patient 2 is not displayed in query results.
				Modify patient 2's record to include relationship to the selected provider. Modify query to include an asthma OR congestive health failure concern.	Query results display: • patient 1 • patient 2
				Add NOT on ACE inhibitor prescription to query. Modify query to display patient identifier (i.e. PHIN) only.	Query results display: • patient 2 • patient Identifier only Patient 1 is not displayed in query results.
				Remove NOT on ACE inhibitor prescription from the query. Add AND had appointment in the last 12 months	Query results display: • patient 1 • patient identifier only Patient 2 is not displayed in query results.

PRIVACY

The following table articulates the demonstration scenario relevant to the Privacy requirements category.

Table 11: Privacy Scenarios

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
16-003	Provides ability to document and manage a patient's privacy preferences.	Must be able to record details of and use a patient's disclosure directive.	A patient's medical record: • contains an encounter note • does not have a disclosure directive Providers Provider 1 Provider 2		Both providers can access the encounter note.
				Log in as one provider (Provider 1). Set the disclosure directive for the patient's medical record to allow access to only Provider 1.	Provider 1 can access the encounter note.
				Log in as the other provider (Provider 2) and confirm inability to access the patient's record.	Provider 2 cannot access the patient's record.
16-004	Provides ability to mask patient data.	At a minimum, masking options must include the entire patient record.Masking must not prevent access to fulfill statutory duty to report (e.g. communicable diseases	A patient's medical record contains: • diagnosis of West Nile Fever Providers Provider 1 Provider 2		Providers 1, 2 and 3 can access the patient's entire record.

ID	Requirement	Guidelines	Pre-requisites	Demonstration Step	Expected Results
		legislation).	Provider 3 Provider 4 Provider 4 does not have permissions to access masked data.		
				Log in as Provider 1 and mask the patient's encounter note.	Patient's record displays an indication that the encounter note is masked.
				Log in as Provider 4 and access the patient's masked encounter note.	Patient's record displays: • an indication that an encounter note is masked • West Nile Fever Diagnosis • masked encounter note
				Log in as Provider 2 and access the patient's record.	Patient's record displays: • an indication that an encounter note is masked • West Nile Fever Diagnosis • masked encounter note
				Log in as Provider 1 and mask the patient's entire record.	An indication that patient's entire record is masked.
				Log in as Provider 2 and access the patient's record.	Patient's entire record displays as masked.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
				Provider 2 generates a statutory duty report of all patients diagnosed with West Nile Fever.	Statutory Duty Report displays a record linked to the patient.
				Provider 2 accesses the masked patient record.	Provider 2 is prompted for a: • personal identification number, keyword or some other means to access masked patient data • reason for unmasking
				Provider 2 enters a: • personal identification number, keyword or some other means to access masked patient data • reason for unmasking	Patient's record is unmasked and displays: • an indication that an encounter note is masked • West Nile Fever Diagnosis • masked encounter note
				Log in as Provider 3 and access the patient's record.	Patient's record displays as masked.
				Log in as Provider 2 and unmask the patient's entire record and encounter note.	The system disallows unmasking action.
				Log in as Provider 1 and unmask the	Patient's entire record and encounter note are

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
				patient's entire record and encounter note.	unmasked.
				Log in as Provider 3 and access the patient's record.	Patient's entire record is displayed.
				Log in as Provider 1 and mask the patient's entire record.	An indication that the patient's entire record is masked.
				Log in as Provider 3 and access the patient's record.	Patient's record displays as masked.
				Log in as an EMR Administrator and unmask patient's entire record.	Patient's entire record is unmasked.
				Log in as Provider 3 and access the patient's record.	Patient's entire record is displayed.
16-005	Provides ability to identify masked data within a patient record.	Must alert users at time of accessing a patient record that all or a portion of the patient data is masked. Must be clearly visible to users, when in the patient record, that certain data is masked.	Refer to 16-004		
16-006	Provides ability to access masked data.	Masked data must only be able to be accessed by users with appropriate	Refer to 16-004		

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
		access permissions or by the user who originally masked the data. Must require a method for a user to provide a user specific authentication to access masked data. Must require user to specify the reason for unmasking prior to unmasking data. Data is unmasked for the specific user only and remains masked for all other users.			
16-007	Provides ability to remove masking from previously masked patient data.	Function must be limited to the user who originally masked the data or a user with EMR Administrator privileges.	Refer to 16-004		
16-008	Provides ability to correct or annotate data.	Corrections and/or annotations are permanently retained with the original information, date and the user who made the change. This may be retained in the audit logs or in some other form. At a minimum, EMR must	Provider creates the below encounter note: "Testing of corrections one"		
				A second provider alters the encounter note to: *"The testing of annotations one two"*	Encounter note is updated.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
		enable display of the correction/annotation history for encounter notes.		View the history of corrections and annotations made to the encounter note.	The following is displayed: • time of change • author of change • corrections and/or annotations are permanently retained with the original information
16-010	Provides reports to support privacy compliance monitoring and reporting.	Scope of ready-to-use reports must include: • Active User Inventory - report of all active EMR users including user first and last name and the date and time of last login. • Off-hours User Activity - report of user activity between a configurable set of dates and times. Report to include user first and last name and the date(s) and time(s) of EMR activity within reported period. • Same Last Name - report of users who accessed patient records with the same last name as theirs. Report to include patient's first name, date of birth, gender, patient identifier, date and time	Preloaded user activity that will demonstrate records in each report.		
				Generate an Active User Inventory report.	Active User Inventory report is displayed and contains user first and last name and the date and time of last login.
				Generate an Off-hours User Activity report.	Off-hours User Activity report is displayed and contains user first and last name and the date(s) and time(s) of EMR activity within reported period.
				Generate a Same Last Name report.	Same Last Name report is displayed and contains patient's first name, date of birth, gender, patient identifier, date and time accessed, and first and last name of the accessing user.
				Generate an Access	Access Masked Data

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
		accessed, and first and last name of the accessing user. • Access Masked Data - report of users who accessed masked patient data. Report to include first and last name of the accessing user, patient identifier associated with the data accessed, date and time accessed, and the reason data was accessed, as stated by the accessing user.		Masked Data report.	report is displayed and contains first and last name of the accessing user, patient identifier associated with the data accessed, date and time accessed, and the reason data was accessed.
16-012	Creates and maintains a Record of User Activity.	At a minimum, the Record of User Activity must include: • the patient identifier associated with the record accesses • the identity of the user who accessed the record • when the access occurred • details regarding which personal health information was accesses, disclosed or exported • any access and viewing of the Record of User Activity	Preloaded user activity that will demonstrate records in the user activity report.	Generate a Record of User Activity.	Record of User Activity contains: • the patient identifier associated with the record accessed • the identity of the user who accessed the record • when the access occurred • details regarding which personal health information was accessed or disclosed • any access and viewing of the Record of User Activity

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
		It must not be possible to modify the Record of User Activity in any way. The Record of User Activity must in be in a format which can be provided to the patient or support audit processes. A Record of User Activity must be retained by the EMR for a minimum of three years. Must be able to save the record of user activity in Portable Document Format (pdf) and print the document.			
				Demonstrate that the Record of User Activity cannot be modified.	Modification of Records of User Activity is not allowed.
				Generate a PDF of a Record of User Activity.	Record of User Activity is displayed in PDF.
				Print a Record of User Activity.	A printout of the Record of User Activity is generated. Printout must adhere to accepted formats as stated in section 2.1.

SECURITY

The following table articulates the demonstration scenario relevant to the Security requirements category.

Table 12: Security Scenarios

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
17-001	Provides the ability to create and manage roles for user access.	Function must be limited to user with EMR Administrative privileges. Must be able to create new roles, with customized permissions. If EMR provides only predefined roles, this requirement is not met. Role-based security scope must include read/write controls for functions/features and data. Changes applied to a role must apply to all users assigned that role.	Create and assign the following access to Role 1: • EMR administrative privileges Create and assign the following access to Role 2: • no EMR administrative privileges • ability to view patient encounter notes • no access to scheduling Assign the following: User 1 - Role 1 User 2 - Role 2 User 3 - ready to have a role assigned User 4 - Role 2		
				Log in as User 4 and confirm Role 2 access.	User 4: • cannot create a new role • cannot access scheduling • can view patient encounter notes
				Log in as User 1. Create and assign the	Role 3 is created. User 3 is assigned Role 3.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
				following access to Role 3: • no EMR administrative privileges • ability to access scheduling • no access to patient encounter notes Assign User 3 to Role 3. Assign User 4 to Role 3 in addition to current assigned role.	User 4 is assigned to roles 2 and 3.
				Log in as User 2 and confirm Role 2 access.	User 2: • cannot create a new role • cannot access scheduling • can view patient encounter notes
				Log in as User 3 and confirm Role 3 access.	User 3: • cannot create a new role • can access scheduling • cannot access patient encounter notes
				Log in as User 1. Enhance Role 3 to include ability to access patient	Role 3 is updated.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
				encounter notes.	
				Log in as User 3 and confirm Role 3 access.	User 3: • cannot create a new role • can access scheduling • can access patient encounter notes
				Log in as User 4 and confirm the access for a combination of Roles 2 and 3.	User 4: • cannot create a new role • can access scheduling • can access patient encounter notes
				Generate a report of users' access rights.	A users' access report is generated. At minimum, the report displays the following: User 1 - Role 1 User 2 - Role 2 User 3 - Role 3 User 4 - Role 2 & 3
				Print a report of users' access rights.	A printout of the users' access report is generated. At minimum, the report that displays the following: User 1 - Role 1 User 2 - Role 2 User 3 - Role 3 User 4 - Role 2 & 3

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
					Printout must adhere to accepted formats as stated in section 2.1.
17-002	Provides ability to assign access roles to users.	Function must be limited to user with EMR Administrative privileges. Must be able to assign users to multiple access roles. Delegation of a user's role (i.e. permissions) to another user must not be allowed.	Refer to 17-001		
17-004	Provides report of users' access rights.	Report must be ready-to-use. Requiring the user to create a query for this purpose would not be acceptable. Must be able to print report.	Refer to 17-001		
17-008	Provides ability to log all EMR access.	Log must include all failed login attempts. User must be able to generate access log. At a minimum, log must include: • timestamp • user ID/application ID • originating IP address	At a minimum, the following access actions must have occurred in the EMR: • Invalid Account (Local Login Failure) • Invalid Account (Remote Login Failure) • Valid Account (Local Login		

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
		• port accessed or computer name Both local and remote access must be auditable.	Success) • Valid Account (Remote Login Success)		
				Generate an EMR access log.	A log of access actions listed in the prerequisites column is displayed. At minimum, the log includes the following: • timestamp • user ID/application ID • originating IP address • port accessed or computer name
17-011	Maintains a complete audit trail of medical record data.	Each patient record in the EMR must have a distinct audit trail. Audit trail scope must include all activity (e.g. record viewed, updated, deleted, masked, unmasked) against medical records. Audit trail must capture: • the date and time of the activity; • user who accessed the data; • access point (location/workstation); • any changes in the	At minimum, the following actions must have taken place in a patient's medical record: • Day 1, User 1: viewed medical record • Day 1, User 1: created a document • Day 1, User 1: masked encounter note • Day 1, User 2: created an encounter note • Day 1, User 2: updated an encounter note		

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
		recorded information; and • preserves the original content of the recorded information when changed or updated. Data must not be altered, removed or deleted, just marked as altered, removed or deleted. Audit trail must be printable: • separately from the recorded information for each patient • cannot contain system references that are meaningless outside of the system context	• Day 1, User 2: unmasked encounter note • Day 2, User 2: updated a document In addition, another patient's medical record must contain user activity.		
				Generate a complete audit trail for the first patient's medical record.	The complete audit trail of the patient's medical record actions listed in the prerequisites column are displayed and include the following details: • date and time of the activity • user who accessed the data • access point (location/workstation) • any changes in the recorded information • original content of the modified encounter note preserved
				Demonstrate that a user cannot alter, remove or delete activities from an audit trail.	The system does not allow the ability to alter, remove or delete activities from the audit trail.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
				Print the complete audit trail report for the first patient's medical record.	A printout of the complete audit trail for the patient's medical record is generated. Printout must adhere to accepted formats as stated in Preparing for Product Demonstration section above.
				Query the audit trail report for all User 2 actions on Day 2.	A filtered audit trail report on all of User 2 actions for Day 2 listed in the prerequisites column.
17-012	Maintains a complete audit trail for all non-medical record data, including permission metadata.	Non-medical record data must include practice management data (i.e. appointments, billing) and EMR configuration data that deals specifically with customizable behavior of the system. Scope must include the following operations: • create • modify • delete Data must not be altered, removed or deleted, just marked as altered, removed or deleted.	Preloaded system actions relating to the following auditing events: • user creation • role modification • role deletion		
				Generate an audit trail of non-medical record data actions.	The audit trail of non-medical record activities includes the following details: • user creation • role modification
				Demonstrate the inability to alter, remove or delete actions from the non-medical record data	The system does not allow actions to be altered, removed or deleted.

ID	REQUIREMENT	GUIDELINES	PRE-REQUISITES	DEMONSTRATION STEP	EXPECTED RESULTS
				audit log.	
17-013	Maintain an audit trail for documents associated with a medical record.	Audit trail must capture: • the date and time of the document access or deletion • user who performed the action • access point (location/workstation)	Refer to 17-011		
17-014b	Prevents modification of audit logs.	Must prevent any user, including EMR Administrators, from modifying audit log information.	Refer to 17-011 and 17-012		
17-015	Provides a query/report function of data stored in audit logs.	Function must allow user to define query parameters. At a minimum, parameters must include options to filter based on: • time period • user ID Must be able to print query results or report.	Refer to 17-011		

3 Release Notes

Version 1.1 February 1, 2016

- Change to Section 2.2, guideline 3. Provider identifier numbers changed from “1004, 1005, and 1006” to “1006, 1007, and 1008”. Replaced guideline stating “All patients below are to be assigned to Provider 1004” with “All patient profiles created to support the Baseline Demonstration session must be assigned to one of these provider identifiers.” Added an explanation for guideline.

Version 1.2 October 31, 2016

- Removed version references in the “Related Documents” section. A document name is sufficient in identifying a related document.
- 05-003 – Updated guideline, demonstration steps and expected results
- 06-010 – Updated status
- 15-001 – Updated requirement and status
- 16-003 – Updated status
- 16-004 – Updated guideline, demonstration steps and expected results
- 16-006 – Updated guideline and status
- 16-007 – Updated status
- 16-010 – Updated status
- 17-011 – Updated status
- 17-012 – Updated expected results

Version 1.8 March 5, 2019

- Skipped Versions 1.3-1.7 to align version number with Specification
- Section 2.3 - Removed Status column from each of the scenario tables. Requirement status is reflected in the Baseline Specification document.

Version 1.9 September 13, 2019

- Updated document theme to new organizational visual identity
- Updated Manitoba eHealth to Shared Health to align with new organizational structure including changes to the EMR Certification contact email address

Version 1.92 June 14, 2023

- Updated 16-004 to focus the minimum masking requirement to the entire patient record.
- Updated 16-006 to remove a redundant sentence in the Guidelines related to the unacceptability of unmasking data for all users.
- Updated 16-007 to remove the Guideline sentence relating to the retention of individual masked record components.

- Updated 16-008 to focus the minimum correction/annotation capabilities to the encounter notes.
- Updated 17-012 to indicate that the requirement applies to non-medical “record” data.