

Electronic Medical Records

EMR REQUIREMENTS SPECIFICATION FOR RHEUMATOLOGY

DRAFT APPROVED

Date: 2014-03
Version: 1.0



TABLE OF CONTENTS

TABLE OF CONTENTS	2
GLOSSARY	3
1. INTRODUCTION	5
1.1 Overview.....	5
2. SPECIFICATION TRACEABILITY	6
2.1 Highlights of Changes.....	6
2.2 Related Documents and References.....	6
3. FUNCTIONAL REQUIREMENTS	7
3.1 Patient Reported Outcome Forms.....	8
3.2 Disease Specific Smart Forms.....	10
3.3 OBRI Forms.....	12
3.4 Tools.....	13
3.5 EMR Vendor support	15
4. RETIRED REQUIREMENTS / DATA CATEGORIES / DATA ELEMENTS	16
4.1 Retired – Functional Requirements.....	16

GLOSSARY

TERM	MEANING
Allied health professionals and clinicians	Physiotherapists, Nurses, Nurse Practitioners, and Medical Doctor
EMR Offering	The combination of EMR software, services, and support offered by a vendor.
Disease Activity Calculators	Disease activity calculators provide a numerical score (index) that describes a level of disease activity (eg: low to high) based on patient reported outcomes, physician evaluation and/or laboratory data. There are different Disease Activity Calculators used for different diseases.
Disease Activity Form	A patient reported outcome form that collects patient symptoms. For example; pain, stiffness, sleep, fatigue.
Disease Specific Smart Forms	Clinicians track patient conditions through the use of disease specific smart forms.
Functional assessment form	A patient reported outcome form that collects patient physical abilities (e.g.: motor skills). Functional assessment forms are one type of patient reported outcome form
Homunculi	Two or more Homunculus
Homunculus	<p>The standard homunculus is an <i>interactive</i> diagram used to record and provide visual reference of joint activity, damage and/or replaced status. Multiple homunculus diagrams (Homunculi) are often used together to differentiate between the types of data represented. E.g.: one each to describe joint activity for tender, swollen, damaged and/or replaced joint status.</p> <p>Based on data recorded on the homunculus (e.g.: # of tender joints), a score is calculated.</p> <p>Homunculi and the resulting joint scores are embedded in disease specific forms to provide visual reference of joint status.</p>
Homunculus - Enhanced	<p>Enhanced inflammatory joint disease homunculi are used to record additional joint status (e.g. Tendonitis) on the standard <u>tender and swollen</u> homunculus.</p> <p>Homunculi and the resulting joint scores are embedded in disease specific forms to provide visual reference of joint status.</p>
Homunculus - Spinal	The Spinal Homunculus is an interactive visual diagram of the spine and pelvis used to record inflammatory spinal disease activity.
Interactive Diagram	An interactive diagram is a graphical representation of human anatomy in which a user can illustrate using an input device (such as a mouse) characteristics of the anatomy (e.g.: tender, swollen, damaged, replaced)
M	Mandatory requirement. An EMR Offering must have this function or provide this service.
MOHLTC	Ministry of Health and Long-Term Care

TERM	MEANING
N/A	Not Available
O	Optional Requirement is a non-mandatory highly desired requirement. An EMR Offering may have no, partial or full alignment to this requirement.
OBRI	Ontario Best Practices Research Initiative (OBRI): The OBRI (www.obri.ca) improves the treatment and outcomes of Ontarians living with Rheumatoid Arthritis through the cooperation of patients, researchers, rheumatologists and allied health care professionals.
OBRI Smart forms	Clinicians report rheumatology data to the OBRI through the use of OBRI smart forms.
Ontario EMR Requirements Repository	The collection of functional requirements and discrete data elements published by OntarioMD; includes new, existing and retired requirements.
ORA	Ontario Rheumatology Association
Patient Reported Outcome Form	Forms filled in by the patient to perform self-assessment of their conditions. See functional assessment form and disease activity form.
PHC	Primary Health Care
Provider	A person who provides healthcare services to patients.
Smart Form	<p>An electronic form with capabilities beyond straight data capture. A smart form has interactive and/or dynamic features such as interactive diagrams or calculators that react in real time to user input.</p> <p>A smart form may;</p> <ul style="list-style-type: none"> - Incorporate data from patient reported outcome forms; - Include one or more interactive homunculus tools to visually represent disease specific data; - Include disease activity calculators that update based on data captured on the active form.

1. INTRODUCTION

1.1 OVERVIEW

This requirements specification is part of a family 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 EMR requirements specification for rheumatology defines mandatory and optional requirements based on the guidance and advisement of the Ontario Rheumatology Association (ORA) EMR Committee. These requirements do not replace requirements represented in other Ontario EMR Specifications, but rather complement them with additional specialty-specific requirements.

Requirements within this specification are Mandatory (M) or Optional (O). Funding Eligible EMR Offerings that meet all mandatory requirements as evaluated by physicians will receive a specialty-specific designation. Any optional requirements will also be rated as being fully, partial or not met.

2. SPECIFICATION TRACEABILITY

2.1 HIGHLIGHTS OF CHANGES

This is the first version of the EMR Requirements Specification for Rheumatology

TYPE	# of Requirements (Previous)	# of Requirements v 1.0
New Requirements	0	16
Updated Requirements	0	0
Previous Requirements	0	0
Retired Requirements	0	0
Total Number of Requirements	0	16

2.2 RELATED DOCUMENTS AND REFERENCES

The following table lists all documents related to, or referenced in the EMR Requirements Specification for Rheumatology

DOCUMENT NAME	VERSION	DATE	PUBLISHING ORGANIZATION	LINK
Rheumatology Toolbox	V1.2		ORA	Available on OntarioMD.ca

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

3. FUNCTIONAL REQUIREMENTS

This section consists of the EMR functional requirements for the EMR Requirements Specification for Rheumatology

Scoring: **M** = Mandatory criteria for the EMR Requirements Specification for Rheumatology
 O = Optional criteria for the EMR Requirements Specification for Rheumatology

Status: **N** = New requirement for this EMR Specification
 P = Previous requirement
 U = Updated requirement
 R = Retired requirement

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

3.1 PATIENT REPORTED OUTCOME FORMS

OMD Req #	Requirement	Guideline	M/O	Status
RHE1.01	The EMR offering must implement patient reported outcome forms.	<p>At a minimum, one of each of the following three forms must be installed and be able to be chosen on a per-patient basis by the user. Forms must have the functionality and features described in RHE 1.03:</p> <ul style="list-style-type: none"> • HAQ: Health Assessment Questionnaire • BASDAI: Bath Ankylosing Spondylitis Disease Activity Index • BASFI: Bath Ankylosing Spondylitis Functional Index <p>Please refer to the rheumatology specialist toolbox for patient reported outcome forms and documentation supporting any in-field calculations</p> <p>Forms in the toolbox are samples only. Other versions of the same forms can be used so long as the questions and the calculations are the same.</p>	M	N
RHE1.02	The EMR offering can provide additional patient reported outcome forms.	<p>Please refer to the rheumatology specialist toolbox for additional patient reported outcome forms and supporting documentation.</p> <p>Forms in the toolbox are samples only. Other versions of the same forms can be used so long as the questions and the calculations are the same</p>	O	N

OMD Req #	Requirement	Guideline	M/O	Status
RHE1.03	Clinicians must have the patient complete the applicable reported outcome forms.	<p>At a minimum, the following functionality must be present when using patient reported outcome forms:</p> <ul style="list-style-type: none"> • Clinicians and allied health professionals must be able to select one or more patient reported outcome forms (see RHE1.01 RHE1.02) to be completed by the <u>patient</u>; • The forms must be customized for the specialist to include at a minimum clinic logo and address when applicable; • The assigned forms must be able to be printed in paper format to be given to the patient; • The forms completed by the patient must be able to be scanned and attached to the patient record; • Clinicians and allied health professionals must be able to transcribe the information completed by patients on paper based patient reported outcome forms into their equivalent electronic versions within the patient record; • The data entered or calculated on all electronic versions of patient reported outcome forms must be able to be stored as discrete data within the patient record; • Data entered and calculated from the patient reported outcome forms must be available for use in one or more disease specific forms without having to manually re-enter the same data. (see RHE 2.01) 	M	N
RHE1.04	Patients must have the ability to complete the applicable patient reported outcome forms electronically.	<ul style="list-style-type: none"> • Clinicians and allied health professionals must be able to select one or more patient reported outcome forms (see RHE1.01 RHE1.02) to be completed electronically by the <u>patient</u> within the clinic or prior to the visit; (e.g.: through kiosk, tablet, mobile device, portal etc.); • Clinicians and allied health professionals must be able to review, modify and accept data provided electronically by patients prior to saving discrete data to the patient record. 	O	N

3.2 DISEASE SPECIFIC SMART FORMS

OMD Req #	Requirement	Guideline	M/O	Status
RHE2.01	The EMR offering must implement disease specific smart forms	<p>At a minimum, one of each of the following three forms must be installed and be able to be chosen on a per-patient basis by the user. Forms must have the functionality and features described in RHE 2.03:</p> <ul style="list-style-type: none"> • RA: Rheumatoid Arthritis • AS/PsA: Ankylosing Spondylitis/Psoriatic Arthritis • General Rheumatology Assessment Form <p>Please refer to the rheumatology specialist toolbox for disease specific smart forms.</p> <p>Forms in the toolbox are recommended samples. Other versions of the same forms can be used so long as the criteria within this specification are met.</p>	M	N
RHE2.02	The EMR offering can provide additional disease specific smart forms.	Additional disease specific smart forms can be used so long as the criteria within this specification are met. Additional disease specific smart forms must have the functionality and features described in RHE 2.03:	O	N

OMD Req #	Requirement	Guideline	M/O	Status
RHE2.03	Clinicians must be able to track patient conditions through the use of disease specific smart forms.	<ul style="list-style-type: none"> • Clinicians and allied health professionals must be able to select one or more disease specific smart forms through which to track patient conditions (see RHE 2.01 RHE 2.02); • The forms must be customized for the specialist to include at a minimum clinic logo and address; <ul style="list-style-type: none"> • Data elements represented on the form should at minimum include: <ul style="list-style-type: none"> ○ Lab values ○ cumulative patient profile related data ○ patient reported outcomes (See RHE1.03) ○ information collected from the tools (See RHE4.01) • Users must be able to customize which data elements are displayed on the form; • Data entered on disease specific smart forms must be stored as discrete fields within the patients record; • Data entered or calculated from patient reported outcomes (see RHE1.03) must be able to be represented within the applicable disease specific smart forms; • Data collected or calculated through disease specific tools (See RHE4.01) must be able to be displayed within the applicable disease specific smart form; • Multiple instances (up to four) of the homunculus tool (RHE4.03) must be implemented on applicable disease specific smart form; <u>one each</u> to represent tender, swollen, damaged and replaced joints. 	M	N

3.3 OBRI FORMS

OMD Req #	Requirement	Guideline	M/O	Status
RHE3.01	The EMR offering must implement OBRI smart forms	<p>At a minimum, the following forms must be installed and selectable by the user:</p> <ul style="list-style-type: none"> • Patient Office Consent Form • Enrolment form • Assessment form • Medication form <p>Please refer to the rheumatology specialist toolbox for OBRI forms and documentation supporting any in-field calculations.</p>	M	N
RHE3.02	The EMR offering must be able to provide data to the OBRI through the use of OBRI smart forms.	<ul style="list-style-type: none"> • The forms must be customized for the specialist to include at a minimum clinic logo and address; • Clinicians and allied health professionals must be able to: <ul style="list-style-type: none"> • Identify patients who have consented to participate in the OBRI program; • Alert clinicians at the point of encounter that the patient is enrolled in OBRI and the above OBRI forms require completion; • Prepopulate the OBRI form with at a minimum: <ul style="list-style-type: none"> ○ Patient demographics • Completed OBRI forms must be able to be printed and faxed manually or electronically to OBRI head office. 	M	N
RHE3.03	Additional patient level data can be prepopulated into OBRI smart forms to minimize the transposition of data.	<p>Additional patient level data to be prepopulated into OBRI smart forms includes:</p> <ul style="list-style-type: none"> • Lab values • Medications • Applicable patient/clinician reported outcomes values • Applicable homunculus 	O	N

3.4 TOOLS

OMD Req #	Requirement	Guideline	M/O	Status
RHE4.01	The EMR offering must implement disease activity calculators	<ul style="list-style-type: none"> • The following disease activity calculators must be installed and available for use in the applicable forms: <ul style="list-style-type: none"> ○ DAS28 Disease Activity Score (28 Joint) ○ CDAI Clinical Disease Activity Index ○ SDAI Simplified Disease Activity Index • Appropriate values (e.g.: Lab values, Disease Activity Scores, joint counts) must be linked to the tools. • Tools, data and resulting calculations from the tools must be displayed in the respective smart forms. (See RHE2.03) <p>Please refer to the rheumatology specialist toolbox for disease activity calculators, calculations and reference documentation.</p>	M	N
RHE4.02	The EMR offering can provide additional disease activity calculators for use in additional disease specific smart forms.	<ul style="list-style-type: none"> • Additional disease activity calculators must be installed and available for use in their applicable forms. • Appropriate values (e.g.: Lab values, Disease Activity Scores, joint counts) must be linked to the tools. • Tools, data and resulting calculations from the tools must be displayed in the respective smart forms. <p>Please refer to the rheumatology specialist toolbox for additional disease activity calculations and reference documentation.</p>	O	N

OMD Req #	Requirement	Guideline	M/O	Status
RHE4.03	The EMR offering must implement the homunculus tool for use in disease specific forms	<ul style="list-style-type: none"> • Up to four (4) instances of the homunculus tool must be installed and available for use on applicable disease specific smart form; <u>one each</u> to represent tender, swollen, damaged, replaced joints • Must be able to visually differentiate between the homunculus: <ul style="list-style-type: none"> ○ Tender and swollen joints must be represented as follows: <ul style="list-style-type: none"> ○ Tender joints must be denoted with 'x' on the tender homunculus ○ Swollen joints must be marked with a "filled in circle" on the swollen homunculus ○ Both damaged and replaced joints must also be able to be differentiated, however the symbols used may vary. For example: <ul style="list-style-type: none"> ○ Damaged joints could be marked with "diamond" on the damaged homunculus ○ Replaced joints marked with "check mark" on the replaced homunculus • Calculations from data represented on the homunculus must support calculations for 28, 44, 66 and 68 joint counts; <p>Please refer to the rheumatology specialist toolbox for reference material on the homunculus and its use.</p>	M	N
RHE4.04	The EMR offering can implement additional homunculus functionality for use in disease specific smart forms.	<p>Additional homunculus functionality includes:</p> <ul style="list-style-type: none"> • Enhanced homunculus <ul style="list-style-type: none"> ○ Tender and swollen homunculus should also include the ability to represent tendonitis, dactylitis and enthesitis for each joint. • Spinal homunculus <ul style="list-style-type: none"> ○ Must be able to be represented in one or more clinician forms as a visual reference of spinal disease activity. <p>Please refer to the rheumatology specialist toolbox for reference material on the homunculus and its use.</p>	O	N

3.5 EMR VENDOR SUPPORT

OMD Req #	Requirement	Guideline	M/O	Status
RHE5.01	Disclosure to client of costs and timelines to deliver the mandatory specification items.	<ul style="list-style-type: none"> The costs and timelines to deliver the mandatory items represented within this specification must be clearly stated and agreed to between the EMR vendor and the client. 	M	N
RHE5.02	Training must be available on use of the EMR Offering in the rheumatology setting.	<p>The following specialty specific training expectations must be met:</p> <ul style="list-style-type: none"> Training is available on how to use the minimum forms and tools described within this EMR Requirements Specification for Rheumatology; Training is available on the customizable features of the minimum forms and tools described within this EMR Requirements Specification for Rheumatology; Documentation must be available in electronic format. 	M	N

4. RETIRED REQUIREMENTS / DATA CATEGORIES / 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 for the EMR Requirements Specification for Rheumatology
O = Optional criteria for the EMR Requirements Specification for Rheumatology

Status: **N** = New requirement for the EMR Requirements Specification for Rheumatology
P = Previous requirement
U = Updated requirement
R = Retired requirement

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

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*

4.1 RETIRED – FUNCTIONAL REQUIREMENTS

Following functional requirements have been retired from the EMR Requirements Specification for Rheumatology

OMD Req #	Requirement	Guideline	M/O	Status	YEAR	YEAR Retired	Reason for Retirement
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A