EMR eConsult 2.0

Overview

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1. INTRODUCTION

1.1 Document Overview

This document provides the information necessary to integrate the provincial eConsult service into an Electronic Medical Record (EMR) Offering to meet EMR functional and non-functional requirements. It is organized into the following sections:

- **Business View**: Describes the business context and benefits of connecting EMR Offerings to the provincial eConsult service and provides a high-level overview of the systems involved in helping EMR users access electronic health record (EHR) services from their EMR Offering.
- **System View**: Provides an overview of the systems involved in accessing EHR services.

1.2 Related Documents and References

The following table lists documents related to or referenced within this document.

DOCUMENT NAME	VERSION	DATE
eConsult Implementation Guide (Ontario Telemedicine Network, 2019) https://otn.ca/api-support/#econsult	2.0.1	2019-02-15

2. BUSINESS VIEW

2.1 Business Overview

The provincial eConsult service connects clinician practices through EMRs to the right specialist to inform clinical decisions. The referrer or respondent may also leverage a portal-based eConsult solution, called the OTNhub (Ontario Telemedicine Network, n.d.), to create or respond to the consult in situations where an EMR Offering is unavailable.[1] This enables timely care of patients, potentially avoiding unnecessary referrals and adverse events that can be experienced with long wait times for a patient to be seen by a specialist.

2.2 Key Benefits

This dialogue is enabled by the provincial eConsult service, which is integrated within EMR Offerings used by both referrers and respondents. The benefits of the provincial eConsult service include:

- faster response times for clinicians to receive specialist advice,
- reduced wait-times for treatment,
- access to an expansive list of medical specialists and specialties; and
- potentially reducing the number of unnecessary specialist referrals across the provincial health care system.

2.3 What is an eConsult?

An eConsult is a secure electronic communication initiated by a clinician (referrer) sent to a specialist (respondent). The goal is to inform clinical decisions by enabling the referrer to consult with a specialist for their professional advice or opinion regarding a patient's condition or treatment. An eConsult can involve a simple question (e.g., about a drug dosage) or a more complex question following an initial assessment by the clinician (e.g., asking for a dermatology assessment and providing images of the patient's condition).

2.4 eConsult Roles

Roles are assigned when an EMR user registers for access to the provincial eConsult service. The following table identifies the roles and functions within the provincial eConsult service. Note that these roles do not necessarily translate to roles or responsibilities defined within an EMR Offering.

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[1] For more information on the portal-based OTNhub eConsult solution, please refer to https://otnhub.ca/patient-care/#econsult.

ROLE	EXAMPLE	FUNCTION(S)
Referrer	Primary care provider (PCP), family physician, nurse practitioner (NP), allied health professional, medical specialist	Creates an eConsult to initiate dialogue with a specialist for advice about a patient's conditions, symptoms or diagnosis. Receives advice from a responding specialist to an eConsult.
Referrer Delegate	Nurse, clinician, or another physician in a primary care clinic	Is authorized by, and acts on behalf of, a referrer and uses the provincial eConsult service with similar functions as the referrer. From an EMR user perspective, can perform the same functions as a referrer.
Respondent**	Medical specialist (e.g., cardiologist, dermatologist, hematologist)	Responds to an eConsult request initiated by a referrer, providing medical advice relating to a patient's condition, symptoms or diagnosis.
Respondent Delegate	Nurse, clinician, or another specialist in a specialist clinic	Is authorized by, and acts on behalf of, the respondent and uses the eConsult service with similar functions as the respondent. From an EMR user perspective, can perform the same functions as a respondent.
Assigner*	eConsult service administrative staff	Where an eConsult is sent by a referrer, to a specialty or specialty group (as opposed to a particular specialist), the assigner manually assigns the eConsult to a specific specialist.
eConsult System Admin*	eConsult service administrative staff	Resolves eConsult workflow issues (e.g., idle/expired eConsults, system notifications, scheduling).
eConsult Business Admin*	eConsult service administrative staff	Resolves business issues with the eConsult system (e.g., specialist queue management, re-assignment of eConsults).

These roles are fulfilled by the provincial eConsult service administrative staff and are identified for contextual reference only – these roles are not assignable to EMR users.

*** A specialist can also be a referrer; in a specialist-to-specialist scenario, one specialist (as a referrer) can send an eConsult to another specialist (as a respondent).*

2.4.1 Delegate Roles

The provincial eConsult service supports a process for referrers and respondents to entrust their responsibilities to other clinicians, delegating their functions within the provincial eConsult service to one or more individuals. All eConsult functionality available within an EMR Offering that is applicable to a referrer is equally applicable to a referrer's delegate. Similarly, any eConsult functionality within an EMR that is applicable to a respondent is equally applicable to a respondent's delegate. A delegate cannot assign other delegates. The following business rules apply to delegate roles:

- A referrer or a respondent can assign one or more delegates.
- A delegate can also be working on behalf of one or more assigners (referrers or respondents).
- A delegate cannot act on behalf of both a referrer or respondent at the same time.

- A referrer and a respondent cannot act as a delegate to another clinician at the same time as they are assigned to be a referrer and a respondent.

2.5 eConsult Delivery Models

The provincial eConsult service supports two approaches for a referrer to assign an eConsult to a respondent. The referrer has the flexibility to choose either of the following two delivery models when assigning an eConsult:

1) **Specific Provider or Group Delivery Model**: The referrer assigns an eConsult to either a specific specialist or a group of specialists from an available list. Where a referrer chooses a group, an administrator of that group will determine which specialist within the group to assign as the respondent, depending on availability of the specialists within that group. This model allows the referrer to choose a specific specialist of their choice from the list of participating specialists.
2) **Managed Specialty Delivery Model**: The referrer assigns an eConsult to the relevant specialty and/or sub-specialty from an available list of specialties and sub-specialties. Once assigned, provincial eConsult service administrative staff will determine which specific specialist will be assigned as the respondent, based on proximity, availability and other criteria. This model ensures that all regions have equal access to specialty services.

3. SYSTEM VIEW

Communications between an EMR Offering and the provincial eConsult service is achieved using the eConsult Implementation Guide. (Refer to the Related Documents and References section within this document for reference.

3.1 eConsult Functionality Based on Users

The following table shows the mapping between the eConsult functionalities and the user roles that can perform them. User Roles consists of Referrers and Referrer Delegates and Respondents and Respondent Delegates.

ECONSULT FUNCTIONALITY PER USER ROLE	APPLICABLE TO	
	REFERRER, REFERRER DELEGATE	RESPONDENT, RESPONDENT DELEGATE
Manage eConsults		
From patient record	Y	Y
From a list view (list of all eConsults) associated with the eConsult user	Y	Y
Create Consult		
Draft eConsult	Y	N
Search respondent	Y	N
Attach patient information	Y	N
Attach file to eConsult	Y	N
Add note to eConsult	Y	N
Submit eConsult	Y	N
View eConsult		
View eConsult	Y	Y
Search eConsult(s)		
Search eConsult(s)	Y	Y
Print eConsult		
Print eConsult	Y	Y
Associate/Disassociate eConsult with patient record		
Associate/disassociate eConsult with a patient record	Y	Y
Update eConsult		
Attach file to eConsult	Y	Y
Add note to eConsult	Y	Y

ECONSULT FUNCTIONALITY PER USER ROLE	APPLICABLE TO	
	REFERRER, REFERRER DELEGATE	RESPONDENT, RESPONDENT DELEGATE
Provide more information	Y	N
Request clarification	Y	N
Complete eConsult	Y	N
Provide feedback	Y	N
Cancel Consult	Y	N
Change (re-assign) specialist	Y	N
Request more information	N	Y
Decline eConsult	N	Y
Provide eConsult	N	Y
Self-report time spent	N	Y
Reply to clarification request	N	Y

3.2   The Lifecycle of an eConsult

The table below defines the eConsult states, identifying permitted actions that can be performed by a referrer and respondent throughout the eConsult lifecycle. The table does not represent the complete list of all eConsult states – it only identifies the states relevant to the EMR Offering. Note that all actions available to a referrer are equally available to a referrer delegate, and similarly, all actions available to a respondent are equally available to a respondent delegate.

ECONSULT STATE	DESCRIPTION	ACTIONS AVAILABLE TO REFERRER	ACTIONS AVAILABLE TO RESPONDENT	
			FROM SPECIFIC PROVIDER OR GROUP MODEL	FROM MANAGED SPECIALTY MODEL
Draft	This state is triggered when a referrer saves an eConsult as a draft for later submission. **Note**: An eConsult in this state exists only within the EMR Offering and is not (yet) submitted to the provincial eConsult service.	• Save draft • Delete draft • Add note • Submit eConsult	N/A	N/A
Submitted	This state is triggered when a referrer submits an eConsult to the respondent.	• Add note • Cancel eConsult • Change specialist	• Provide eConsult • Request more info • Decline eConsult	N/A
Assigned	This state is triggered when an eConsult is assigned to a respondent by an assigner.	• Add note • Cancel eConsult	• Provide eConsult • Request more info • Decline eConsult	• Provide eConsult • Request more info • Decline eConsult
Un-assigned	This state is triggered when an eConsult is unassigned from a respondent by an	• Cancel eConsult • Change specialist	N/A	N/A

ECONSULT STATE	DESCRIPTION	ACTIONS AVAILABLE TO REFERRER	ACTIONS AVAILABLE TO RESPONDENT	
			FROM SPECIFIC PROVIDER OR GROUP MODEL	FROM MANAGED SPECIALTY MODEL
	assigner or when a respondent declines an eConsult.			
Declined	This state is triggered when a respondent declines an eConsult.	• Cancel eConsult • Change specialist	N/A	N/A
Cancelled	This state is triggered when a referrer cancels an eConsult.	• View eConsult	• View eConsult	• View eConsult
Returned	This state is triggered when an eConsult has not been assigned, or the specialist can return the case if it has not been acted on yet.	• Cancel eConsult • Change specialist	• Change specialist	• View eConsult
More Info Requested	This state is triggered when a respondent requests more information from a referrer.	• Provide more info • Cancel eConsult	• Provide eConsult • Add note • Decline eConsult	• Provide eConsult • Add note • Decline eConsult
More Info Provided	This state is triggered when a referrer provides additional information to a respondent.	• Add note • Cancel eConsult	• Provide eConsult • Request more info • Decline eConsult	• Provide eConsult • Request more info • Decline eConsult
Consult Provided	This state is triggered when a respondent provides an eConsult response.	• Request clarification • Complete eConsult	N/A	N/A
Clarification Requested	This state is triggered when a referrer asks for clarification after an eConsult is provided.	• Add note	• Reply	• Reply
Replied	This state is triggered when a respondent replies to a referrer's request for clarification after an eConsult is provided.	• Request clarification • Complete eConsult	• View eConsult	• View eConsult
Complete	This state is triggered with a referrer indicates that an eConsult case is completed.	• Complete eConsult	N/A	N/A

3.3   eConsult States

The relationships between eConsult states are summarized in the following diagram.
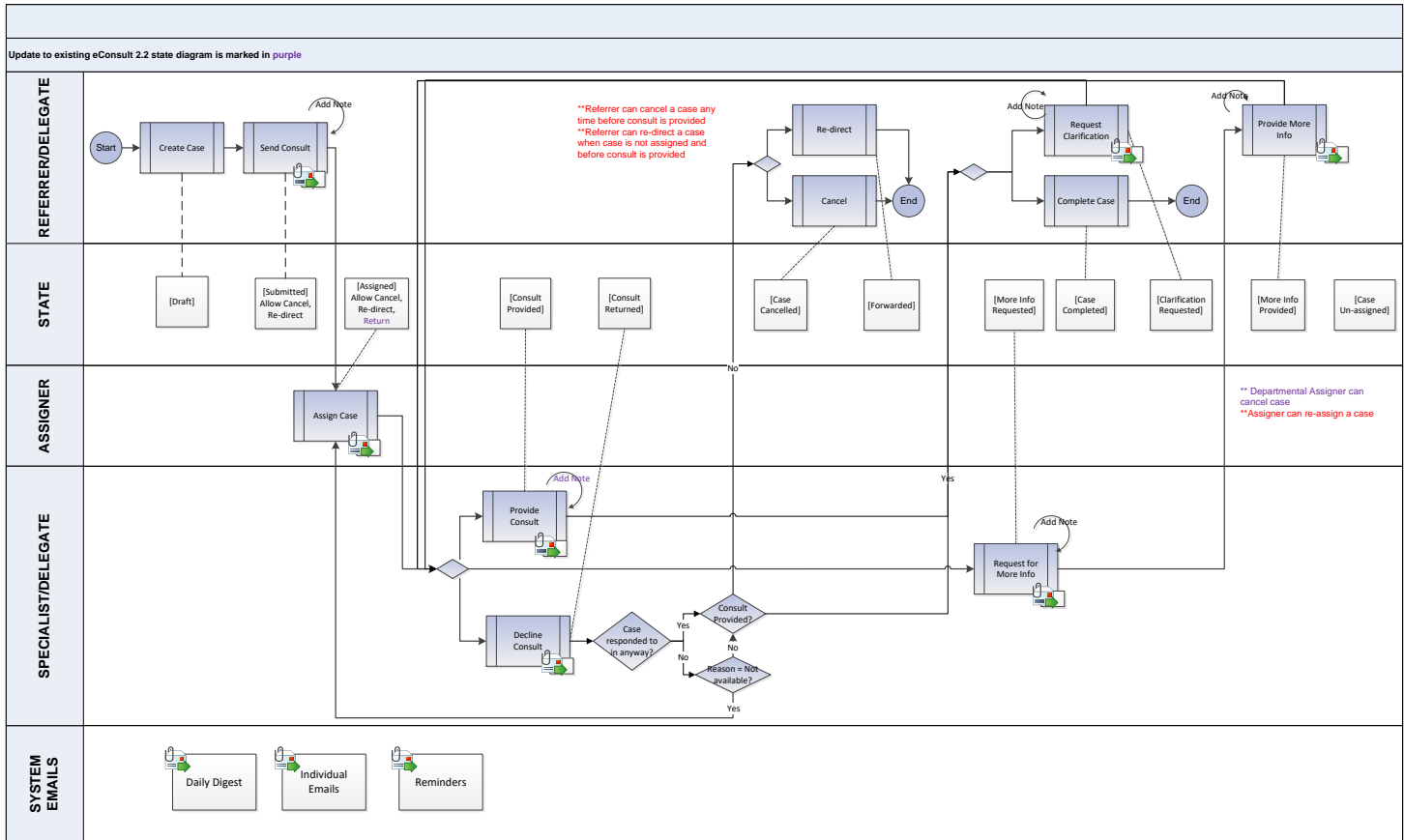

Figure 1.1 - eConsult State Transition diagram

The relationships between eConsult states for cases submitted to specific providers are summarized in the following diagram.
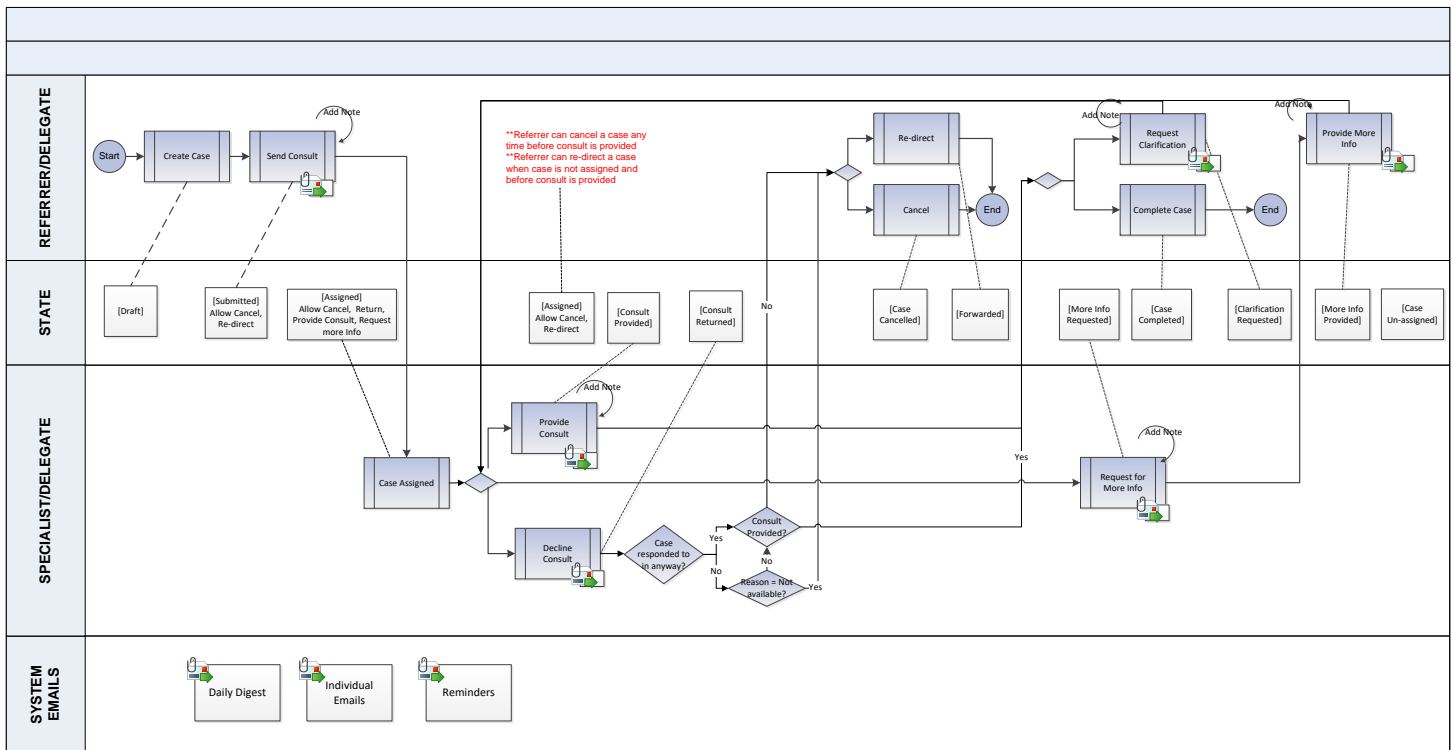

Figure 1.2 - eConsult State Transition for case submitted to Specific Provider

3.4 eConsult Workflow

The eConsult Workflow figure below depicts the full eConsult lifecycle, from "Draft Case" to "Case Complete." The assigner's actions highlighted in yellow are not applicable to EMR requirements.
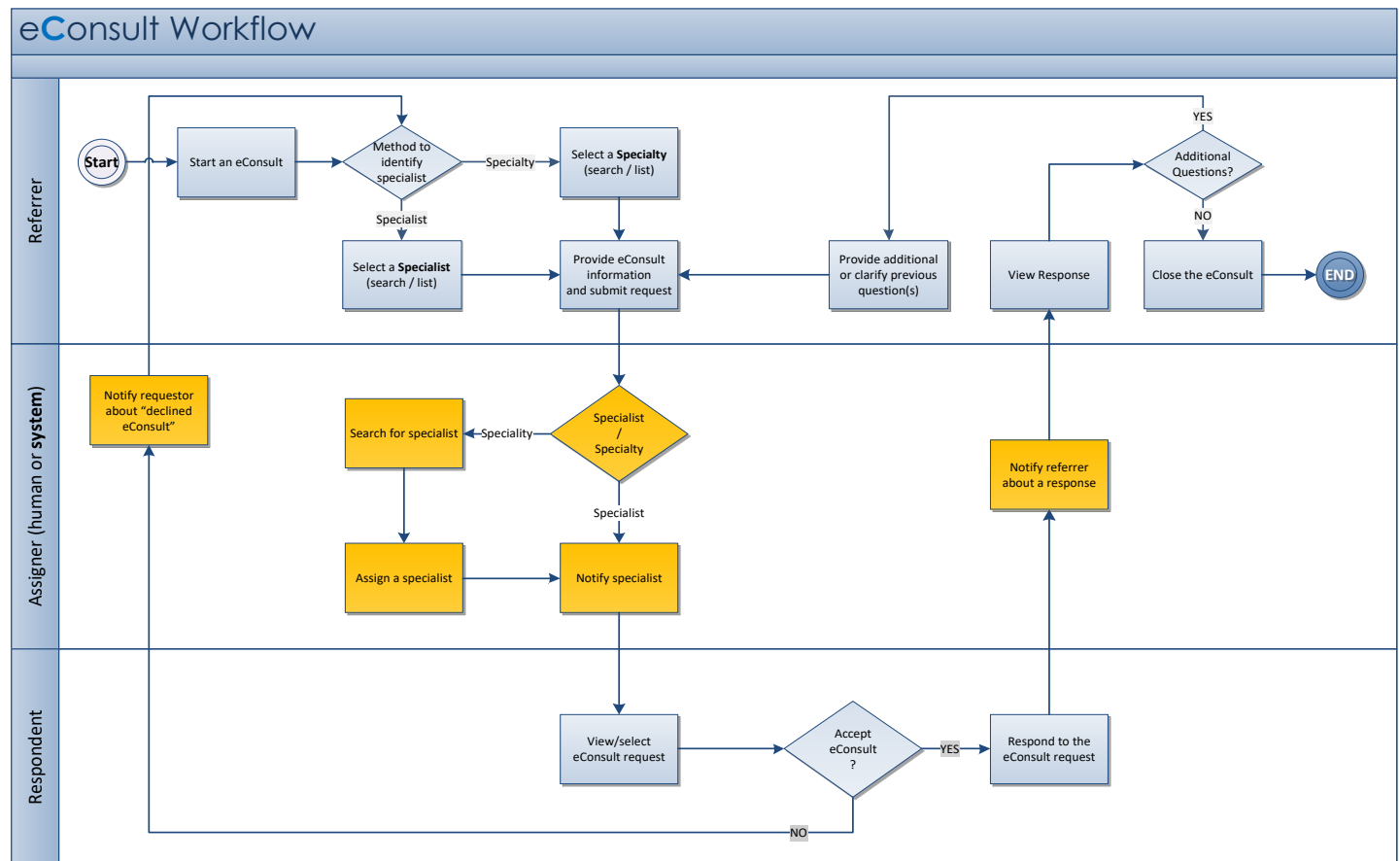

Figure 2 - eConsult Workflow

3.5 Use Case Model

The Use Case Model in Figure 3 below depicts a high-level overview of the system features. Each feature is described in more detail with the relevant EMR requirements.
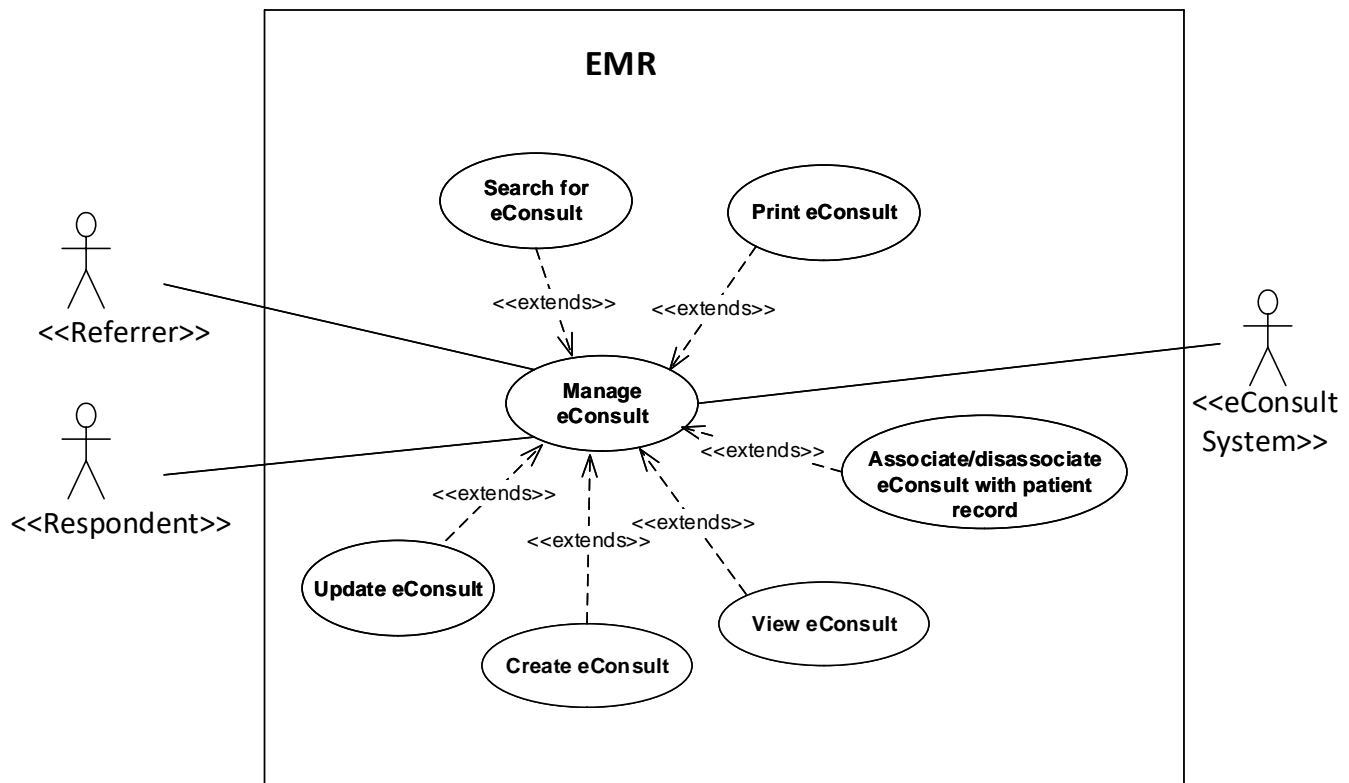

Figure 3 - eConsult Use Case Model