Health*SMART* Design Authority

health

IHI Pre-Implementation Project

Detailed IHI Functional Design (Summary & Business Processes)

State Government Victoria

nehta

Department of Health

Authorised by the Victoria Government, Melbourne.

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Table of Contents

1 Preface 4

1.1 Document Purpose 4
1.2 Intended Audience 4
1.3 References and Related Documents 4

2 Introduction 6

2.1 Background 6
2.2 Aims and Objectives 6
2.3 Approach to Functional Design 7

3 Business Processes 8

3.1 Business Process List 8
3.2 BP1:Patient Registration from a Referral 9
3.3 BP6:Patient Flow 11
3.4 BP2:Unreferred Patient Presentation 13
3.5 BP4:Patient Death Registration 15
3.6 BP7:Create Referral 16
3.7 BP8:Resolve Duplicate Patient Records 17
3.8 BP9:Perform Batch Process 18
3.9 BP10:Resolve IHI Exception 19
3.10 BP11:Attend Appointment/Treatment 20

4 Use Cases 22

4.1 Patient Use Case List 22
4.2 IHI Processing Use Case List 22
4.3 HI Service Use Case List 22
4.4 Care Co-ordination Use Case List 22
4.5 HIMs Use Case List 22
4.6 Actor(s): 23

5 Messages 24

5.1 Alerts 24
5.2 Error Messages 24
5.3 Information Messages 27

6 Glossary 28

7 Appendix A – Related Requirements 31

7.1 PAS Requirements 31

1. Preface

1.1 Document Purpose

The purpose of the document is to define the functional design for the integration of the Individual Health Identifier (IHI) into a typical patient administration system, such that it can be reviewed by stakeholders.

1.2 Intended Audience

The intended audience of this document includes:

- Victorian Department of Health Project Sponsor;
- Victorian Department of Health Project Staff;
- Victorian IHI Workshop attendees;
- Victorian health services;
- Other jurisdictional Health Departments;
- Health services in other States and Territories;
- Vendors of health IT systems; and
- NEHTA staff.

1.3 References and Related Documents

- NEHTA HI Service Concept of Operations v 1.0 FINAL Nov 2009
- NEHTA Individual Healthcare Identifiers Business Requirements v 1.0 FINAL Nov 2009
- NEHTA HI Security and Access framework v 1.0 FINAL Nov 2009
- NEHTA HI Business Use Case Catalogue v 1.0 FINAL Nov 2009
- NEHTA HI Service Catalogue v 1.0 Final Nov 2009
- NEHTA HI Service Glossary v 1.0 DRAFT Nov 2009
- Vic IHI Integration Business Requirements Specification
- Vic IHI Integration Best Practice Guide (DRAFT)
- Medicare Australia HI Service - Technical Services Catalogue R3A v3.0.2.doc
- Medicare Australia TECH.SIS.HI.01 - SIS - Common Document for SIS v3.0.2.doc
- Medicare Australia TECH.SIS.HI.02- SIS - Common field processing reference document for SIS v3.0.2.doc
- Medicare Australia TECH.SIS.HI.03 - Update Provisional IHI via B2B v3.0.2.doc
- Medicare Australia TECH.SIS.HI.04 - Search for HPI-I via B2B v3.0.2.doc
- Medicare Australia TECH.SIS.HI.05 - Update IHI via B2B v3.0.2.doc
- Medicare Australia TECH.SIS.HI.06 - IHI Inquiry Search via B2B v3.0.2.doc
- Medicare Australia TECH.SIS.HI.07 - Search for HPI-O via B2B v3.0.2.doc
- Medicare Australia TECH.SIS.HI.08 - Resolve Provisional IHI- Merge Records via B2B v3.0.2.doc
- Medicare Australia TECH.SIS.HI.09 - Resolve Provisional IHI- Create Unverified IHI via B2B v3.0.2.doc
- Medicare Australia TECH.SIS.HI.10 - Create Provisional IHI via B2B v3.0.2.doc

- Medicare Australia TECH.SIS.HI.11 - Create Unverified IHI via B2B v3.0.2.doc
- Medicare Australia TECH.SIS.HI.12 - IHI Batch Searching v3.0.2.doc
- Medicare Australia HI Service - IHI Searching Guide v0.3 Draft.doc
- FR.SVI.SPEC.01.232 Notify Duplicate Replica IHI via_B2B v3.25 (R3b).doc
- Healthcare Identifiers Act 2010

2. Introduction

2.1 Background

The Victorian IHI Pre-Implementation Project is responsible for identifying and documenting processes that will enable the rollout of IHIs to all Victorians with patient records in Health*SMART* health services, and all operational processes that support the use and maintenance of the IHI over time.

Victorian health services operate largely independently, due to the nature of the enabling legislation, with each health service owning and maintaining a dedicated patient register. Victorian Health*SMART* health services collectively store over 50 million individual patient records.

A key element of the IHI integration design for the IHI Pre Implementation Project is to understand each "problem" and requirement, so that effective and workable solutions can be defined. The deliverables for the IHI Pre-Implementation Project include a Best Practice Guide for health services capturing and utilising the IHI. For the initial load of IHI data, given the Victorian data volumes, a reasonably high match ratio is essential to overall success.

While the focus of the project is upon Health*SMART* health services, this deliverable is intended to be used by all health services, Health departments, and vendors looking to integrate the IHI into their systems and processes.

2.2 Aims and Objectives

The aim of the project is to produce artefacts that will support successful implementation of IHI, including a Solution Architecture Design, Business Requirements, Business practice Guides and a sample Business Case. See the Project Brief for more details.

It will achieve these aims through meeting the following objectives:

- Define and incorporate reference solution designs and principles for the integration of Individual Healthcare Identifiers into the Health*SMART* solution architecture.
- Defining an architecture, or architectures, that supports other models for patient administration, eg EMPI based.
- Use the reference solution design & principles to identify requirements and validate enhancements to Victorian Health IT environments and applications utilising NEHTA services (both Health*SMART* and non-Health*SMART*):
- Document requirements, functional specifications and technical specifications for IHI integration with a nominated and agreed PAS product.
- Based on this experience and knowledge gained recommend any proposed changes to the national IHI implementation approach in consultation with other jurisdictions and NEHTA reference groups.
- Leverage the NEHTA architecture and engagement teams capabilities to best use in the Victorian implementation/s, etc.

The aim of this deliverable is to present a simplified view of the functional design for integration of the IHI into health services' systems and processes. A more detailed deliverable is also available, though this will primarily be of interest to implementers (IT vendors).

The goal of the functional design is to ensure that it caters for all HI Service functions relating to the IHI, and associated exception handling, even though Victorian HealthSMART health services may not make active use of some functions.

2.3 Approach to Functional Design

This document comprises Business Processes and Use Cases. Requirements are documented separately, and should be read in conjunction with this document. The documented Business Processes define end-to-end processes, comprising automated steps that are defined further as Use Cases. Most of the Use Cases identified within the Business Processes are defined within this document. If they are not, they are typically PAS-specific use cases that will differ amongst the different PAS applications and not in scope for definition here.

Use Cases are documented according to the UML 2.0 standard, with the Use Case process, with alternate flows, below the description table.

The Functional Design is supported by Technical Design and Architecture deliverables.

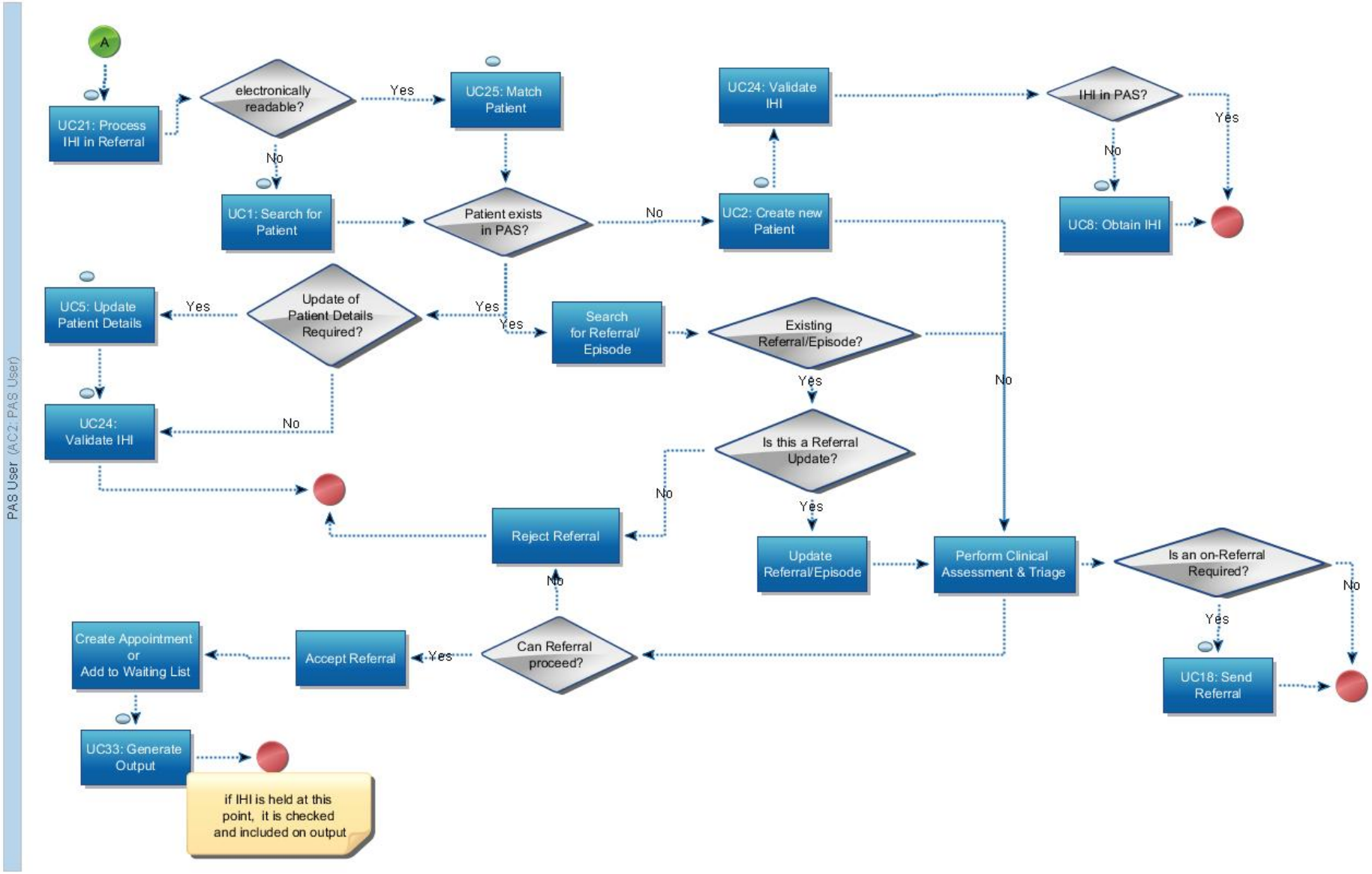
The remainder of this document has been automatically generated by the Blueprint Requirements Center 2010 tool.

3. Business Processes

3.1 Business Process List

ID	Name	Page
BP1	Patient Registration from a Referral	9
BP6	Patient Flow	11
BP2	Unreferred Patient Presentation	13
BP4	Patient Death Registration	15
BP7	Create Referral	16
BP8	Resolve Duplicate Patient Records	17
BP9	Perform Batch Process	18
BP10	Resolve IHI Exception	19
BP11	Attend Appointment/Treatment	20

3.2 BP1:Patient Registration from a Referral



3.2.1 Swimlane: PAS User

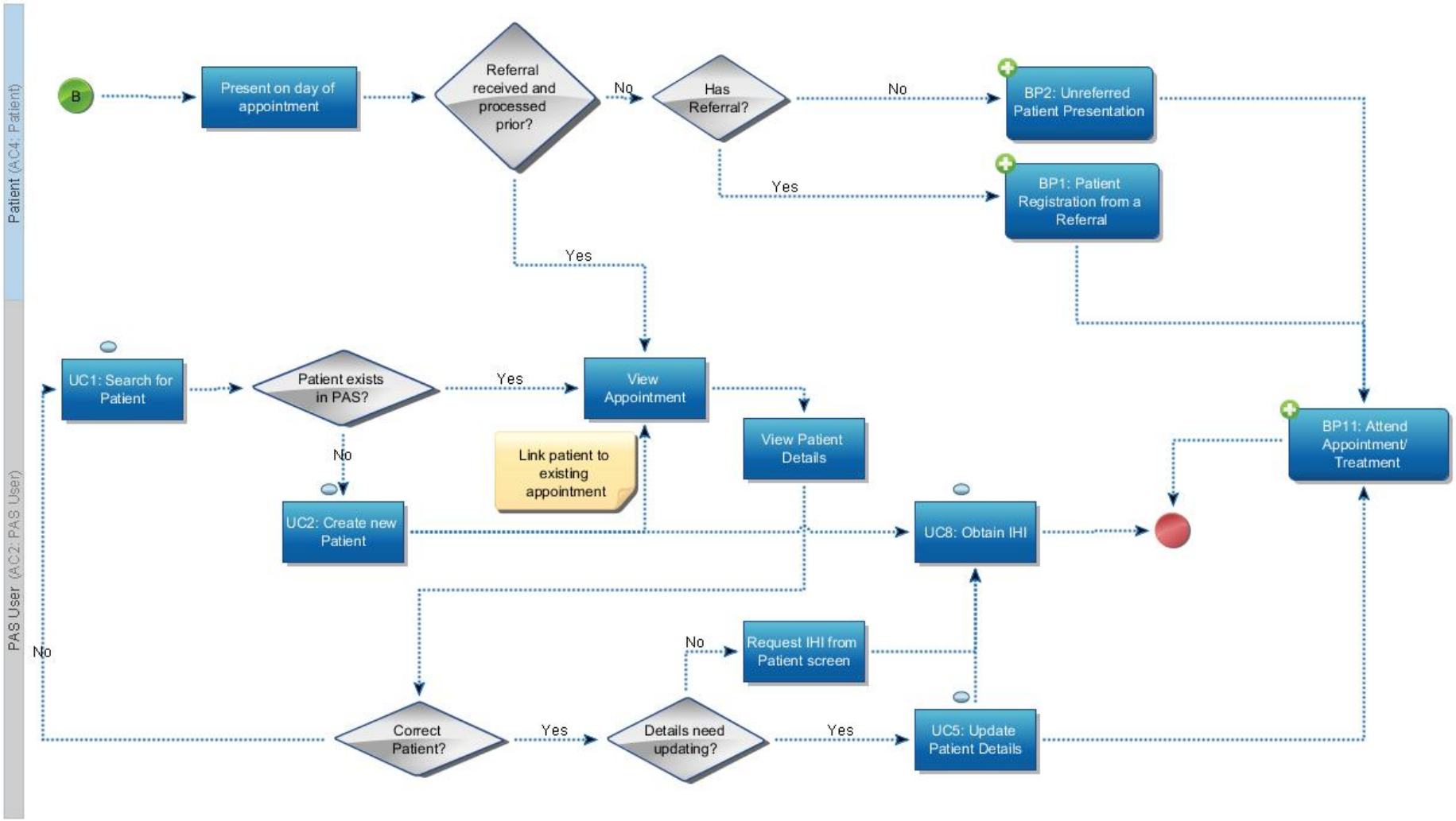
Artifacts Related to this Swimlane:

→ AC2: PAS User

3.2.2 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
UC1: Search for Patient	This is an automated process that attempts to locate a matching patient record for the incoming referral. See 8.1.3.3 Proceed the referral – Search Client PMI of P&CMS_e_Referral_Requirements_High_Level _1.1	→ UC1: Search for Patient
UC2: Create new Patient	When creating a new patient, a new step must be included to flag whether the patient requires an Unverified IHI.	→ UC2: Create new Patient
Create Appointment or Add to Waiting List	If an appointment can be made, it is created, otherwise the patient is added to the waiting list.	
UC21: Process IHI in Referral	This Use Case pre-processed the IHI in the referral, to determine wither it is consistent with what is held in the HI Service.	→ UC21: Process IHI in Referral
UC8: Obtain IHI	This Use Case obtains the IHI from the HI Service.	→ UC8: Obtain IHI
UC24: Validate IHI	This Use Case checks the incoming IHI from the referral against what is held in the PAS and determines what to do with discrepancies.	→ UC24: Validate IHI
UC33: Generate Output	This Use Cases produces required output for the patient.	→ UC33: Generate Output
UC25: Match Patient	This Use Case attempts to perform an automated match to the patient based on data included in the electronically readable referral.	→ UC25: Match Patient
Search for Referral/ Episode	The user attempts to find a referral or prior episode to match this referral to.	
Update Referral/Episode	Updates the Referral or Episode if this is an update.	
Reject Referral	Sends a rejection message back to the originator. If the IHI is known, it is included in the message.	
Perform Clinical Assessment & Triage	The health service performs clinical assessment and triage	
UC18: Send Referral	Sends a Referral if an on-referral is required.	→ UC18: Send Referral
UC5: Update Patient Details	This Use Case updates Patient Details into the PAS.	→ UC5: Update Patient Details
Accept Referral	Sends an acceptance message back to the originator. If the IHI is known, it is included in the message.	
UC24: Validate IHI	This Use Case validates the IHI received in the referral with what is held in the PAS for this patient.	

3.3 BP6:Patient Flow



3.3.1 Swimlane: Patient

Artifacts Related to this Swimlane:

→ AC4: Patient

3.3.2 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
Present on day of appointment	The patient presents on the day of their scheduled appointment.	
SP1: BP1: Patient Registration from a Referral	See BP1:Patient Registration from a Referral.	
SP2: BP2: Unreferred Patient Presentation	See BP2:Unreferred Patient Presentation	→ BP2: Unreferred Patient Presentation

3.3.3 Swimlane: PAS User

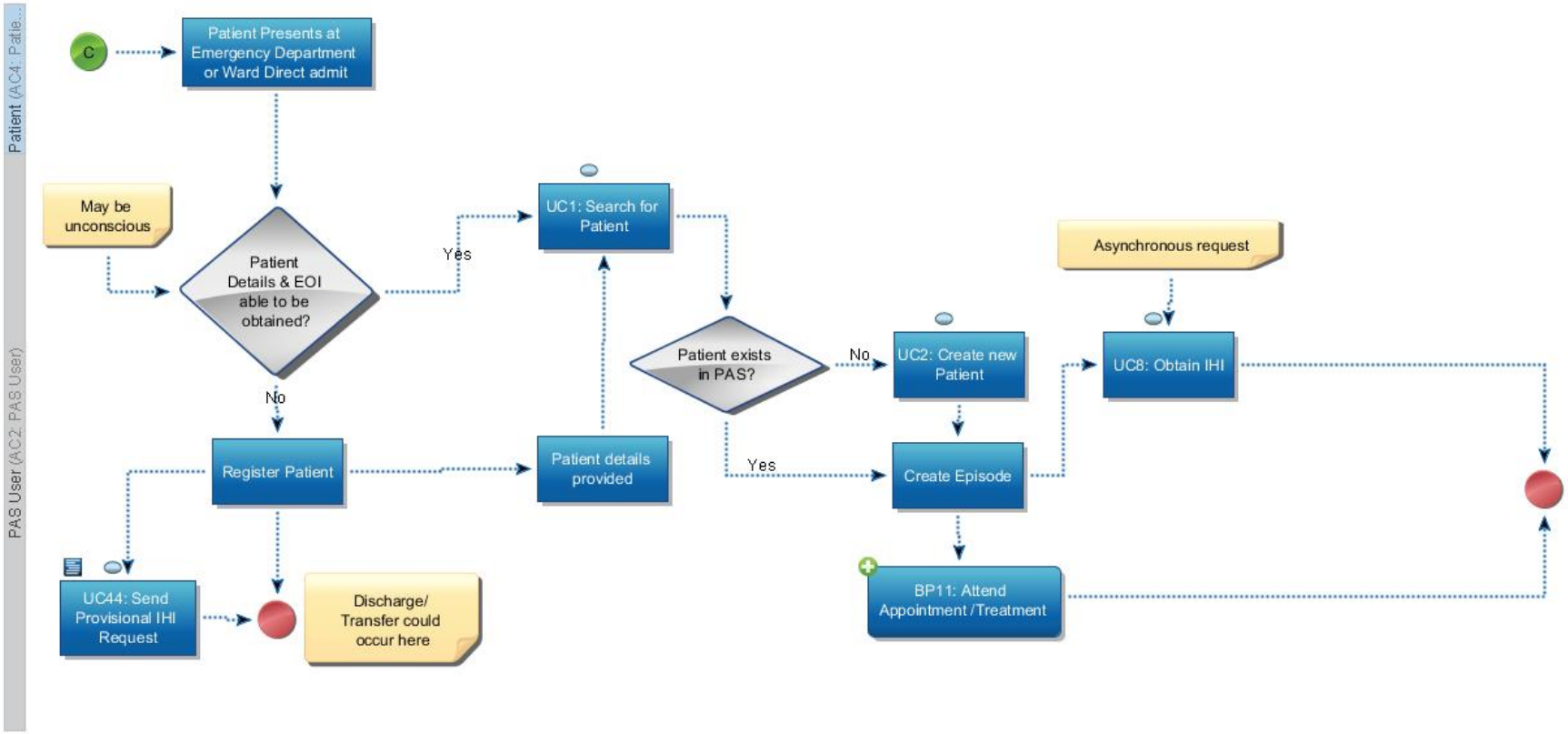
Artifacts Related to this Swimlane:

→ AC2: PAS User

3.3.4 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
UC2: Create new Patient	When creating a new patient, a new step must be included to flag whether the patient has requested an Unverified IHI.	→ UC2: Create new Patient
View Appointment	The user views the appointment for the patient.	
View Patient Details	The user views the patient's details.	
UC5: Update Patient Details	This Use Case updates Patient Details into the PAS	→ UC5: Update Patient Details
UC8: Obtain IHI	This Use Case obtains the IHI from the HI Service.	→ UC8: Obtain IHI
UC1: Search for Patient	This is an automated process that attempts to locate a matching patient record for the incoming referral. See 8.1.3.3 Proceed the referral – Search Client PMI of P&CMS_e_Referral_Requirements_High_Level_1.1	→ UC1: Search for Patient
Request IHI from Patient screen	There will be a point on the patient screen where a user can request an IHI to be retrieved for the current patient. This will trigger the Obtain IHI Use Case.	
SP3: BP11: Attend Appointment/ Treatment	See BP11:Attend Appointment/Treatment	→ BP11: Attend Appointment/Treatment

3.4 BP2:Unreferred Patient Presentation



3.4.1 Artefacts Related to the Business Process

← DP583: Provisional IHI use

← BP6: Patient Flow

3.4.2 Swimlane: Patient

Artifacts Related to this Swimlane:

→ AC4: Patient

3.4.3 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
Patient Presents at Emergency Department or Ward Direct admit	This occurs when a patient is admitted without a prior appointment. This would most likely be when they are transferred directly to a ward or they are admitted through the emergency department.	

3.4.4 Swimlane: PAS User

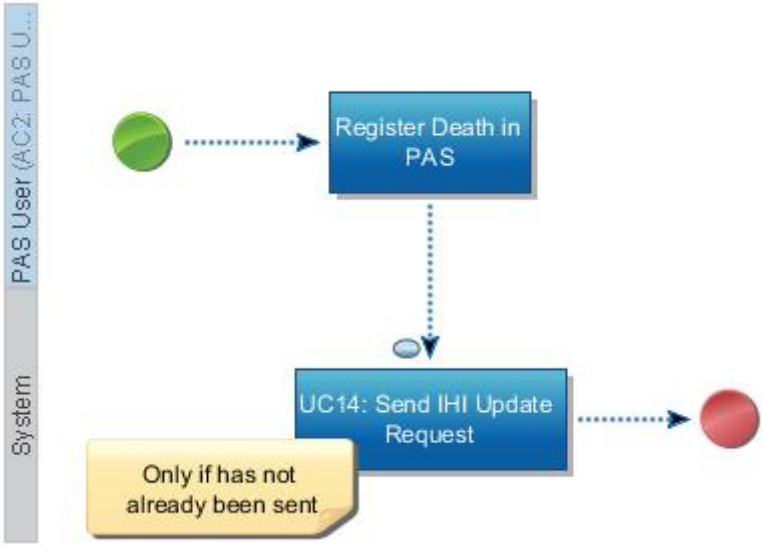
Artifacts Related to this Swimlane:

→ AC2: PAS User

3.4.5 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
UC1: Search for Patient	This is a manual process of searching for the patient in the PAS system.	→ UC1: Search for Patient
UC2: Create new Patient	This Use Case covers the existing process for creating a new patient in the PAS.	→ UC2: Create new Patient
Create Episode	The user creates an episode as they would normally do.	
Register Patient	The process of registering a patient for whom minimal personal details are known	
UC44: Send Provisional IHI Request	This Use Case sends a provisional IHI request to the HI Service	← DP583: Provisional IHI use → UC44: Send Provisional IHI Request
UC8: Obtain IHI	This Use Case obtains the IHI from the HI Service.	→ UC8: Obtain IHI
Patient details provided	May be a carer or a friend providing details	
SP1: BP11: Attend Appointment /Treatment		→ BP11: Attend Appointment/Treatment

3.5 BP4:Patient Death Registration



3.5.1 Swimlane: PAS User

Artifacts Related to this Swimlane:

→ AC2: PAS User

3.5.2 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
Register Death in PAS	The user registers the patient's death details into the PAS.	

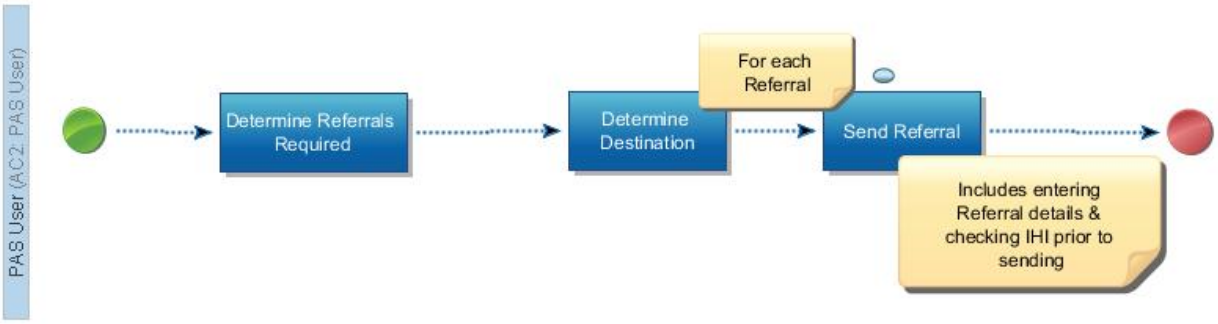
3.5.3 Swimlane: System

No related artefacts.

3.5.4 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
UC14: Send IHI Update Request	This Use Case sends updated details for an IHI to the HI Service. In this scenario, it is the death details that are sent.	→ UC14: Send IHI Update Request

3.6 BP7:Create Referral



3.6.1 Swimlane: PAS User

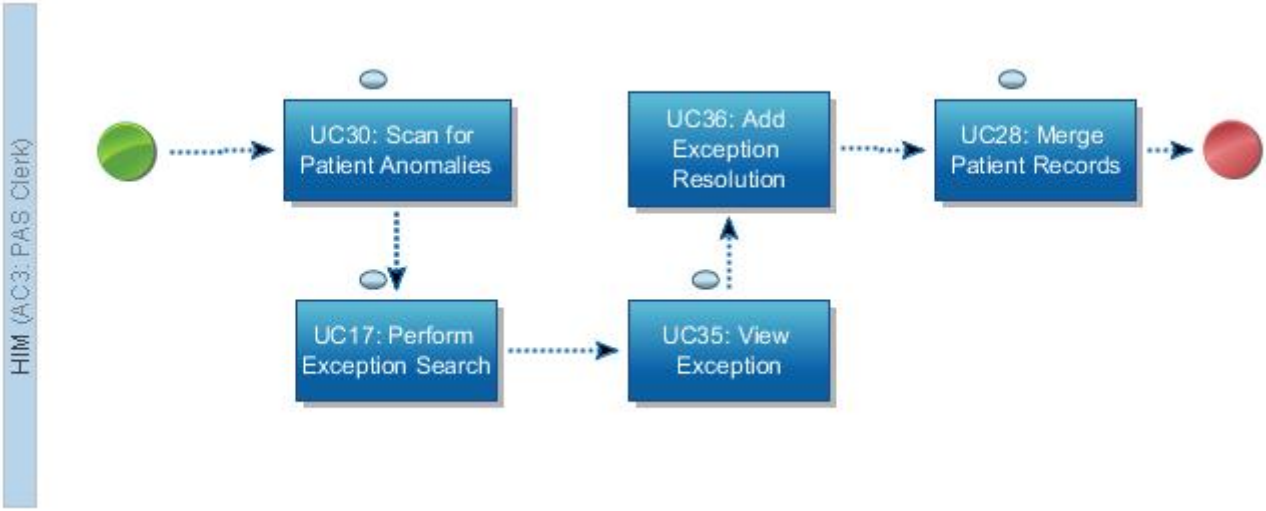
Artifacts Related to this Swimlane:

→ AC2: PAS User

3.6.2 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
Determine Referrals Required	The user determines what referrals are required.	
Determine Destination	The user determines the destination for each referral (Ie. Which Healthcare Provider Individual)	
Send Referral	This Use Case allows the user to send the referral.	→ UC18: Send Referral

3.7 BP8:Resolve Duplicate Patient Records



3.7.1 Swimlane: HIM

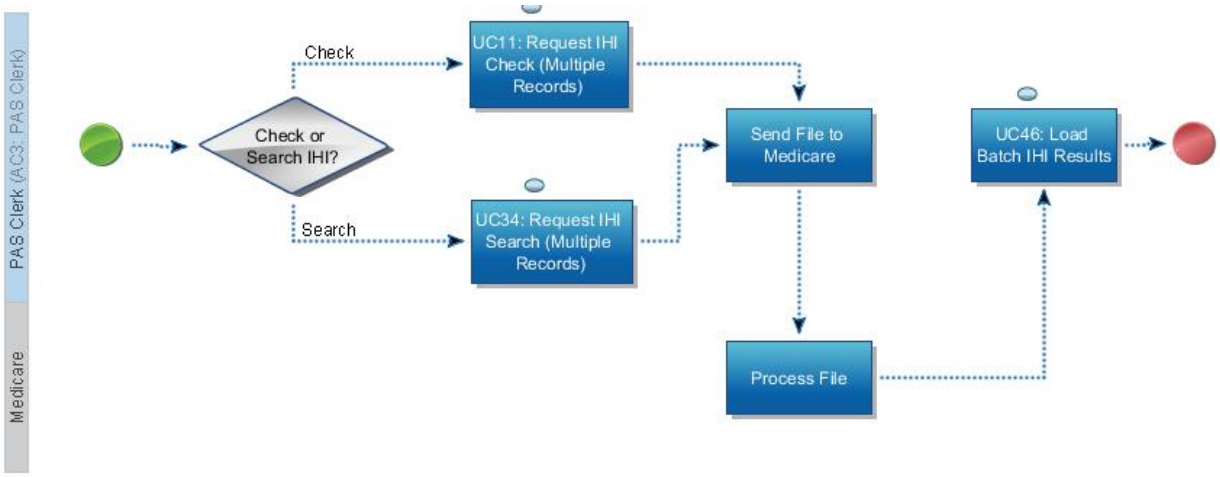
Artifacts Related to this Swimlane:

→ AC3: PAS Clerk

3.7.2 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
UC28: Merge Patient Records	This Use Case merges the patient records in the PAS and sends a merge request to the HI Service.	→ UC28: Merge Patient Records
UC30: Scan for Patient Anomalies	This Use Case scans the patient records in the PAS for certain situations	→ UC30: Scan for patient anomalies
UC17: Perform Exception Search	This Use Case allows the user to search for IHI Exceptions based on specific criteria.	→ UC17: Perform Exception Search
UC35: View Exception	This Use Case allows the user to view the details of a specific IHI Exception.	→ UC35: View Exception
UC36: Add Exception Resolution	This Use Case allows the user to add a resolution to a specific IHI Exception.	→UC36: Add Exception Resolution

3.8 BP9:Perform Batch Process



3.8.1 Swimlane: PAS Clerk

Artifacts Related to this Swimlane:

→ AC3: PAS Clerk

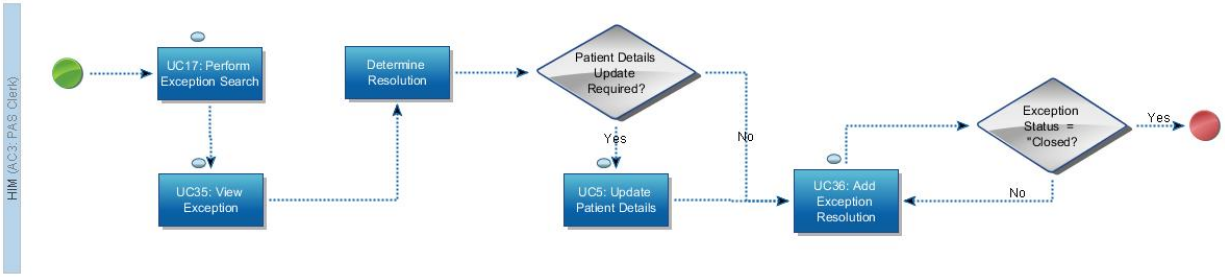
3.8.2 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
UC11: Request IHI Check (Multiple Records)	This Use Case allows the user to request IHI Checks on multiple patient records.	→ UC11: Request IHI Check (Multiple Records)
UC34: Request IHI Search (Multiple Records)	This Use Case allows the user to Obtain IHIs for multiple patient records.	→ UC34: Request IHI Search (Multiple Records)
Send File to Medicare	The process of sending the request file to Medicare. This will be done by encrypted USB.	
UC46: Load Batch IHI Results	This Use Case allows the user to load the result of a prior Bulk request.	→ UC46: Load Batch IHI Results

3.8.3 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
Process File	Medicare processes the request file.	

3.9 BP10:Resolve IHI Exception



3.9.1 Swimlane: HIM

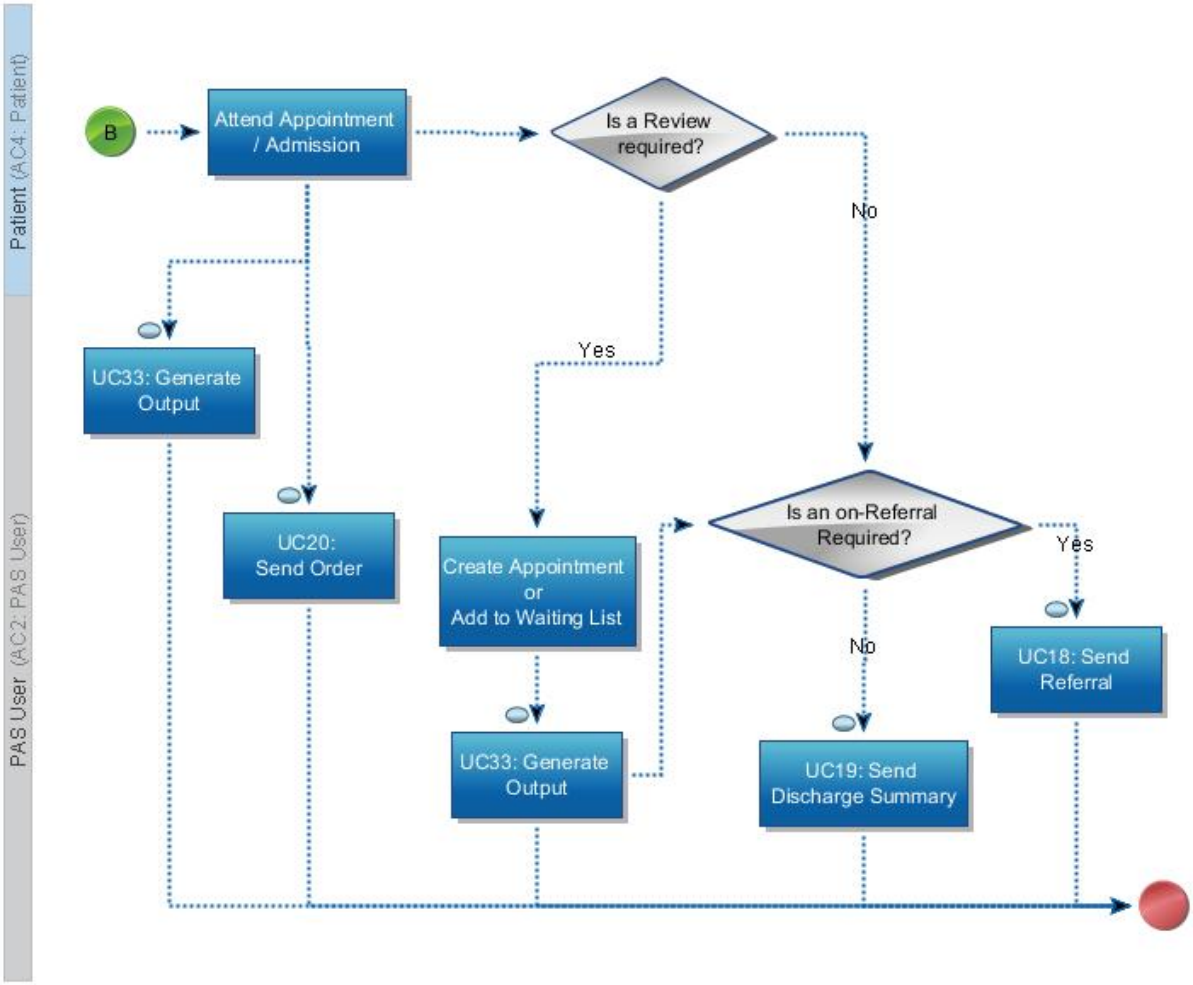
Artifacts Related to this Swimlane:

→ AC3: PAS Clerk

3.9.2 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
UC17: Perform Exception Search	This Use Case allows the user to search for IHI Exceptions based on specific criteria.	→ UC17: Perform Exception Search
UC35: View Exception	This Use Case allows the user to view the details of a specific IHI Exception.	→ UC35: View Exception
Determine Resolution	The user determines what resolution is required.	
UC5: Update Patient Details	This Use Case updates Patient Details into the PAS.	→ UC5: Update Patient Details
UC36: Add Exception Resolution	This Use Case allows the user to add a resolution to a specific IHI Exception.	→ UC36: Add Exception Resolution

3.10 BP11:Attend Appointment/Treatment



3.10.1 Artefacts Related to the Business Process

← BP6: Patient Flow

← BP2: Unreferred Patient Presentation

3.10.2 Swimlane: Patient

Artifacts Related to this Swimlane:

→ AC4: Patient

3.10.3 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
Attend Appointment / Admission	The patient attends to appointment or is admitted for treatment.	

3.10.4 Swimlane: PAS User

Artifacts Related to this Swimlane:

→ AC2: PAS User

3.10.5 Business Process Elements within this Swimlane:

Element	Description	Related Artifacts
Create Appointment or Add to Waiting List	If an appointment can be made, it is created, otherwise the patient is added to the waiting list.	
UC19: Send Discharge Summary	This Use Case sends the discharge summary to interested parties (typically the referrer)	→ UC19: Send Discharge Summary
UC33: Generate Output	This Use Cases produces required output for the patient.	→ UC33: Generate Output
UC18: Send Referral	This Use Case allows the user to send the referral.	→ UC18: Send Referral
UC20: Send Order	This Use Case sends various types of Orders to their recipients.	→ UC20: Send Order
UC33: Generate Output	This Use Cases produces required output for the patient.	→ UC33: Generate Output

4. Use Cases

4.1 Patient Use Case List

ID	Name
UC1	Search for Patient
UC25	Match Patient
UC2	Create new Patient
UC5	Update Patient Details
UC38	Display Alert(s)
UC33	Generate Output

4.2 IHI Processing Use Case List

ID	Name
UC8	Obtain IHI
UC7	Search for IHI
UC10	Update IHI
UC9	Check IHI
UC12	Generate IHI Exception
UC11	Request IHI Check (Multiple Records)
UC34	Request IHI Search (Multiple Records)
UC24	Validate IHI
UC46	Load Batch IHI Results
UC51	Process Patient Details Update
UC54	Refresh IHI
UC55	Reset Merge

4.3 HI Service Use Case List

ID	Name
UC15	Send IHI Request
UC16	Send Unverified IHI Request
UC14	Send IHI Update Request
UC43	Send Merge Request
UC44	Send Provisional IHI Request
UC45	Send Provisional IHI Update Request
UC49	Send Provisional to Unverified Resolution Request
UC48	Send Medicare Service Request
UC56	Send Duplicate or Replica IHI Notification

4.4 Care Co-ordination Use Case List

ID	Name
UC18	Send Referral
UC19	Send Discharge Summary
UC20	Send Order
UC21	Process IHI in Referral
UC22	Send Referral Update
UC23	Send Referral Cancellation

4.5 HIMs Use Case List

ID	Name
UC17	Perform Exception Search
UC35	View Exception

ID	Name
UC36	Add Exception Resolution
UC28	Merge Patient Records
UC40	Perform Merge Analysis
UC29	Unmerge Patient Records
UC30	Scan for patient anomalies
UC37	Manage Exception Type
UC50	Close Exception
UC31	View Patient IHI Report
UC52	View IHI Summary Report

4.6 Actor(s):

The following table identifies the relevant Actors for the System. System implementers should consider the mapping between Actors and Use Cases as a guideline for role based access at an agency level.

ID	Name	Aliases
AC2	PAS User	PAS Clerk, Clinician, Nurse, Ancillary Workers, Interpreters, ED User, Intake Manager
AC3	PAS Clerk	Registration Clerk, Admissions Clerk, Ward Clerk, HIM
AC4	Patient	Client
AC5	Clinical System User	Administrative User, Clinician
AC6	The PAS System	The PAS System
AC7	PAS Administrator	
AC8	System Administrator	

5. Messages

5.1 Alerts

Alerts are created on individual patient records to alert the Actor to a certain condition that applies to that record. See the Best Practice Guide for procedures for each alert.

ID	Name	Message
AT574	Unstable IHI	The IHI is currently undergoing exception processing.
AT575	Deceased	The patient may be deceased.
AT576	Potential Duplicate	Duplicate record may exist: [Other URN].
AT616	Ineligible for Verified IHI	Ineligible for Verified IHI as at [date].

5.2 Error Messages

The errors listed below are raised by the System.

ID	Name	Message
EM145 / E100	HI Service Timeout	The HI Service is offline.
EM135 / E101	Insufficient Information	The patient record does not have sufficient information held on it to perform the IHI request.
EM138 / E102	Duplicate PAS Criteria	The PAS system has duplicate records based on the IHI search criteria.
EM141 / E103	Duplicate IHIs within PAS	The IHI that was returned already exists on another record within the PAS.
EM420 / E105	Referral IHI and returned IHI mismatch	There was an IHI in the Referral and not in the PAS. An IHI Search was conducted. The returned IHI does not match the IHI in the referral.
EM421 / E106	Non-Active Patient	Validate of IHI was attempted on a non-Active patient record.
EM424 / E107	Different People	The two compared top-level numbers do not match and may belong to two different people.

The errors listed below are raised by the HI Service.

ID	Name	Message
EM370 / E104	No Match found	No IHI match was found.
EM603 / 01500	No Match	No match has been found.
EM302 / 00013	Family Name	The family name contains invalid characters. Only alpha and numeric characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM303 / 00018	Birth Year	The birth year must not be less than 1800, i.e. it must be equal to or greater than 1800.
EM304 / 00019	Future DoB	The date of birth must not be in the future.
EM305 / 00081	Locality	The locality contains invalid characters. Only alpha characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM306 / 00083	Postcode	The postcode contains invalid characters. Only numeric characters are acceptable. The postcode must contain four numeric characters for an Australian address.
EM307 / 00098	Locality Combination	The locality, postcode and state is not a valid combination.
EM308 /	Medicare check digit	Medicare card fails check digit routine.

ID	Name	Message
00262		
EM322 / 00086	Mobile Number	The mobile number contains invalid characters. Only alpha and numeric characters are acceptable.
EM324 / 00088	@	You must key the @ symbol as part of the email address.
EM325 / 00089	email	The email address must have alpha/numeric characters immediately before or after the @ symbol. Spaces must not immediately precede or follow the @ symbol.
EM326 / 00267	Future date of death	The date of death must not be in the future.
EM327 / 00275	Date of Death / Date of Birth	The date of death must not be earlier than the date of birth.
EM328 / 00370	Date of Death/ Death notification Source	You must key a date of death when a death notification source has been selected.
EM329 / 00371	Death Notification Source / Date of Death	You must select a death notification source when a date of death has been keyed.
EM310 / 01474	Unknown error	Please contact Help Desk to resolve the unknown error.
EM311 / 01514	IHI check digit	IHI Number fails the check digit routine.
EM142 / 01527	Multiple Matches Found	Multiple matches found. Please refine the search criteria.
EM312 / 01528	Multiple search criteria	Multiple search criteria keyed. Please refine the search criteria.
EM313 / 01544	Invalid DVA	The DVA file number entered is invalid.
EM314 / 01581	Unit Number	The Unit Number contains invalid characters. Only alpha and numeric characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM315 / 01582	Address Site Name	The Address Site Name contains invalid characters. Only alpha and numeric characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM316 / 01583	Level Number	The Level Number contains invalid characters. Only alpha and numeric characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM317 / 01584	Street Number	The Street Number contains invalid characters. Only alpha and numeric characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM318 / 01585	Lot Number	The Lot Number contains invalid characters. Only alpha and numeric characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM319 / 01586	Street Name	The Street Name contains invalid characters. Only alpha and numeric characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM506 / 01587	Suburb	The Suburb of the Address contains invalid characters. Only alpha characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM320 / 01588	Postal Delivery Number	The Postal Delivery Number contains invalid characters. Only alpha and numeric characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM143 / 01613	Expired Record Matched	This IHI record has an 'Expired' IHI status and can not be retrieved via this channel.
EM214 /	Retired Record Matched	This IHI record has a 'Retired" IHI status and can not be

ID	Name	Message
01614		retrieved via this channel.
EM321 / 01675	IHI Number	IHI Number must be 16 digits.
EM330 / 01400	Date of Death/ Accuracy Ind	No date of death has been recorded and a selection has been made for Date of Death Accuracy Indicator.
EM331 / 01401	Accuracy Ind/ Date of Death	The date of death accuracy indicator is required when a date of death is entered.
EM332 / 01418	Given Name	The given name contains invalid characters. Only alpha and numeric characters, apostrophes and hyphens are acceptable. Spaces must not appear immediately before or after apostrophes and hyphens.
EM337 / 01422	Birth Order	Birth Order must be selected if Birth Plurality is selected.
EM338 / 01429	Telephone Number invalid	Telephone number contains invalid characters. Only numeric characters are acceptable.
EM339 / 01430	Telephone Number too short	Telephone number contains less than 8 digits.
EM340 / 01431	Mobile Number	Mobile Number contains less than 10 digits.
EM341 / 01458	Existing Unverified IHI record exists	Existing Unverified IHI record exists with these details. Change existing details or enter an address for this record.
EM349 / 01465	Address Purpose	Address purpose can only be set to Residential for International Addresses.
EM351 / 01506	Postal Delivery Type Code	If Postal Delivery Type Code is Care PO (Care-of-Post Office) or Care PO (Poste Restante), a Postal Delivery Number is not required and vice versa.
EM352 / 01577	. after @	You must key a "." after the @ symbol as part of the email address.
EM353 / 01578	no spaces	No Spaces are allowed as part of a valid email address.
EM354 / 01592	Fax number characters	Fax number contains invalid characters. Only numeric characters are acceptable.
EM355 / 01593	Fax number min	Fax number contains less than 8 digits.
EM356 / 01668	Street Number/Lot Number	Either street number or lot number required for an Australian address.
EM357 / 01669	Not both Street Number & Lot Number	Only one of lot number or street number required for an Australian address not both.
EM358 / 01689	Country is Australia	If the country is Australia, you cannot enter International Address Line, International State/Province, and International Postcode.
EM359 / 01691	Birth Plurality	Birth Plurality must be entered if Birth Order has been entered
EM360 / 01692	One Address Type for Unverified	Only one type (Mailing/Residential or international) of address allowed in the create unverified IHI process.
EM509 / 01620	Verified Update	This is an invalid amendment request via this channel for a verified IHI record. Only date of death, date or death accuracy indicator and source of death notification can be updated for a verified IHI record via the B2B channel.
EM595 / 01427	Date of Death exists	The Date of Death from Births, Deaths and Marriages already exists for the Record.
EM596 / 01428	Date of Death Accuracy Indicator exists	The Date of Death Accuracy Indicator from Births, Deaths and Marriages already exists for the Record.
EM512 / 01690	Source of Death already held	The Source of Death Notification from Births, Deaths and Marriages already exists for the IHI Record.
EM592 / 01457	Expired/Retired Update disallowed	IHI records with an Expired or Retired Status cannot be updated via this channel.
EM604 / 01601	Not Provisional	The Provisional Record Status does not match the Record Status found.
EM605 / 01687	No Status Match	The Unverified/Verified Record Status does not match the Record Status found.

ID	Name	Message
EM606 / 01688	Not Active or Deceased	The record to be processed does not have active or deceased Status.
EM632 / 01610	Retired Not Allowed	This can not be flagged as a potential duplicate or replica as it has a "retired' status.
EM633 / 01502	Already Duplicate	The following record(s) contain a potential duplicate flag: < Number>
EM634 / 01507	Already Replica	The following record(s) contain a potential replica flag: < Number>
EM637 / 01433	Invalid IHI	The Individual Healthcare Identifier qualifier <individualHealthcareIdentifier> is invalid.

5.3 Information Messages

ID	Name	Message
IM140 / 01439	No Match Found	No Healthcare Individual records have been found
IM144 / 01611	Matched record flagged as duplicate	This IHI record is a duplicate IHI record that has been resolved to IHI number [IHI Number].
IM215 / 01612	Matched record flagged as provisional resolved to a primary IHI	This IHI record is a provisional IHI record that has been resolved to IHI number [IHI Number].
IM219 / 01531	Matched record has a date of death	The HI Service matched a record that has a date of death.
IM323 / 00070	No Postal Match	The address details cannot be matched to an address in the Postal Address File.
IM345 / 01466	Successful Provisional IHI Creation	The Provisional IHI has been successfully created.
IM346 / 01603	Successful IHI Creation	The IHI record has been successfully created.
IM591 / 01402	Successful IHI Update	The Record has been successfully updated.
IM601 / 01443	Successful Provisional IHI merged	The provisional record has been successfully resolved.
IM609 / 01605	Successful resolve to Unverified IHI	The Provisional IHI record has been successfully resolved and IHI status amended to Unverified.
IM348 / 01463	DoB >100	The date of birth is 100 years or more in the past.
IM347 / 01464	DoB > 80	The date of birth is 80 years or more in the past.
IM635 / 01449	Successful Flag - Duplicates	The records selected have been successfully flagged as potential duplicates.
IM636 / 01496	Successful Flag - Replicas	The records selected have been successfully flagged as potential replicas.

6. Glossary

Term	Description
After Presentation	A term used to describe when the patient is present in the health service, ie on or after presentation. This enables health staff to validate Medicare and demographic details directly with the patient.
AS	Australian Standard
B2B	Business to business, a term used to describe the web service based functions implemented in the HI Service.
BDM	Birth, Deaths & Marriages
Before Presentation	A term to describe the period prior to a patient presenting at the health service, in which a referral may be received, an entry created on a waiting list, and an appointment made, with the appropriate notifications. The patient is not readily available to confirm their Medicare number or demographic details, though this can be done via telephone, email, letter, etc.
CCA	A NEHTA group responsible for Compliance, Conformance and Accreditation.
CMS	Community Management System
DOB	Date of Birth
DoH	Victorian Department of Health
DVA	Commonwealth Department of Veterans' Affairs
ED	Emergency Department
EOI	Evidence of Identity
Episode	A single admission to a health service for a particular condition or conditions, or A period of care for a particular condition, often covered by a single referral (supporting multiple admissions or attendances).
FoI	Freedom of Information
HI	Healthcare Identifier Service
HIM	Health Information Manager, a specialist in the management of health information, including patient records.
HPI-I	Healthcare Provider Identifier – Individual. A unique number to be assigned to every person involved in healthcare service delivery.
HPI-O	Healthcare Provider Identifier – Organisation, a unique number that will be assigned to all organisations involved in healthcare service delivery
HPOS	Health Professional Online Services, a portal provided by Medicare Australia.
HSD	The Victorian Human Services Directory
Health*SMART*	The Victorian Department of Health Health*SMART* program is responsible for managing processes to select, configure and implement applications to reflect state wide requirements (state wide footprint) into participating healthcare agencies. Additionally, the Health*SMART* program is responsible for establishing and managing the shared ICT infrastructure that is required to support these applications and agencies use of them.
ICT	Information and Communications Technology
ID	Identity or identifier
IEC	International Electrotechnical Commission, an international standards body which focuses on electrical, electronic and related technologies.

Term	Description
IHI	The Individual Healthcare Identifier, which Medicare Australia allocated to every active Medicare enrolee, on the 1st July 2010.
IHI Record Status	There are three record statuses of IHIs: • Verified • Unverified • Provisional
IHI Status	There are five IHI Statuses of IHIs: • Active • Deceased • Retired • Expired • Resolved
IP	Inpatient
IRN	Individual Reference Number, used on the Medicare card to identify each individual whose name appears on the card.
ISO	International Standards Organisation
MSO	Medicare Service Operator
NASH	The National Authentication Service for Health (NASH) project being delivered through NEHTA will deliver the first nationwide security service to enable healthcare organisations and individuals to exchange e-health information.
NEHTA	National EHealth Transition Authority
NOK	Next of Kin
OP	Outpatient
OPD	Outpatient Department
P&CMS	Patient and Client Management System, also abbreviated to PCMS.
PAS	Patient Administration System – a system used for the recording of patient and provider information to support management and coordination of service provision. Within Health*SMART* this functionality is provided by either a consolidated Patient and Client Management System (P&CMS) through the iSOFT iPM application or Community Management System through the Trak application for stand-alone metropolitan community health centres.
PKI	Public Key Infrastructure
Referral	A referral is defined within the Australian standard as “the communication with the intention of initiating patient/client care transfer, from the provider making the referral (the originator) to the provider expected to act on the referral (the destination)." In the context of this document a referral is used as a representative health service request or report, and the reader should consider Orders (pathology, diagnostic imaging, etc), discharge summaries, etc.
SLA	Service Level Agreement, a contractual agreement that defines the required levels of services required from a vendor/supplier. For example, a common SLA may define that the system be available 98% of the time, and 100% of the time during working hours.
TDS	Trusted Data Source, which refers to Medicare and the Commonwealth Department of Veterans’ Affairs in the initial allocation of IHIs within the HI Service.

Term	Description
	In the context of the IHI Pre-Implementation project, an organisation participating in e-health messaging, who has met the compliance/accreditation criteria, is also referred to as a trusted data source.
UC	Use case, part of the UML standard used to document tasks or business process steps.
UML	Unified Modelling Language. An international standard for documenting the design of an application.
URN	Unit Record Number

7. Appendix A – Related Requirements

7.1 PAS Requirements

ID	Requirement	Description
PR437	Search on IHI Status and IHI Record Status	All IHIs within the PAS must be able to be searched by IHI Status and IHI Record Status and include these fields in the search results.
PR588	IHI Report	The IHI report must include IHI in its search criteria, and be able to match on IHIs in the patient record as well as IHIs in the Primary IHI and Secondary IHI of an IHI Exception.
PR438	IHI Display Requirements	Whenever an IHI is displayed the following fields must accompany it: • IHI Status • IHI Record Status • Last Update/Checked Date
PR617	Trigger Obtain	The System must provide the ability to initiate the Obtain IHI Use Case from a Patient screen.
PR627	Trigger Unverified	The System must provide the ability to initiate the Send Unverified IHI Request Use Case from a Patient screen