IHI Pre-Implementation Project

HI Service Detailed IHI Functional Design

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1. Preface

1.1 Document Purpose

The purpose of the document is to define the initial functional design for the integration of the Individual Health Identifier into the Victorian Health*SMART* P&CMS solution, i.e. iSOFT iPM.

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 Simplified Functional Design
- Vic IHI Integration Business Requirements Specification
- 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 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 Health*SMART* 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.

The Requirements are documented to a high level and comprise the overarching drivers and principles upon which the other functional artefacts elaborate upon.

The Business Processes define an end-to-end process, 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.

The IHI integration design is based upon version 3.02 of the HI Service Specifications developed by Medicare Australia, and referenced above.

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

3. Use Cases

3.1 Use Case List

ID	Name	Page
UC15	Send IHI Request	9
UC16	Send Unverified IHI Request	22
UC14	Send IHI Update Request	35
UC43	Send Merge Request	49
UC44	Send Provisional IHI Request	54
UC45	Send Provisional IHI Update Request	61
UC49	Send Provisional to Unverified Resolution Request	68
UC48	Send Medicare Service Request	80
UC56	Send Duplicate or Replica IHI Notification	84

3.2 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	

3.3 UC15 : Send IHI Request

Actors	The PAS System
Overview	The System prepares and sends an IHI Search request for the HI Service, and awaits the response.
Pre Condition	Mandatory fields for at least one of the HI Service IHI searches (TDS excluding the IHI, basic demographic search, and full demographic search) are available.
Post Condition	A response is received from the HI Service for subsequent processing.
Circumstances of Use	This use case will be used frequently, up to 2000 times per day for a moderately sized health service of 600 beds, with the following being the most common categories: 1. To obtain an IHI for a patient for the first time (on referral or presentation) 2. To check an IHI subject to agreed business rules, including: • IHI received on referral • IHI received on other communication • Patient presentation • Preparation of a discharge summary, or generation of outputs • On a scheduled basis to update the status of the IHI, and check for retired or deceased records.
Included In (Other Use Cases)	UC7: Search for IHI
Business Processes	None – see "Included in" Use Case above.

IE 5: The HI Service does not respond within th...

The HI Service does not respond within the specified timeout period and subsequent retries have failed.

◉ Handle timeout

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."
2. The System records an IHI event.

Success End

Incl. 5.1: Generate IHI Exception

Exit

IE 1: The HI Service determines that the reque...

The HI Service determines that the request message is invalid.

◉ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk.".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

IE 2: The HI Service responds, indicating a data level b...

The HI Service responds, indicating a data level business error.

◉ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
2. The System records an error response.
3. The System records an IHI event.

Success End

Incl. 2.1: Generate IHI Exception

Exit

Pre Condition

Mandatory fields for at least one of the HI Service IHI searches (TDS excluding the IHI, basic demographic search, and full demographic search) are available.

Basic Flow

1. The System sends a request to the HI Service with the criteria set.
2. The HI Service determines that the request message is valid.
3. The HI Service responds with one matching record.
4. The HI Service returns the IHI status and record status.
5. The matching record has no exception conditions.

Success End

Post Condition

A response is received from the HI Service for subsequent processing.

IE 6: The HI Service responds, indicating no matchi...

The HI Service responds, indicating no matching Healthcare Individual records were found.

◉ Respond with information message.

1. The System records an information message response.

Success End

IE 7: The HI Service responds with an Unknown e...

The HI Service responds with an Unknown error.

◉ Respond with error.

1. The HI Service responds with an error message.
2. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".
3. The System records an error response.
4. The System records an IHI event.

Success End

Exit

IE 3: The HI Service responds, indicating that ...

The HI Service responds, indicating that additional fields were found in the request.

◉ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Incl. 4.1: Generate IHI Exception

IE 4: The HI Service responds, indicating it foun...

The HI Service responds, indicating it found more than one matching record.

◉ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Multiple Matches" and a message of "Multiple matches found."
2. The System records an error response.
3. The System records an IHI event.

Success End

Incl. 7.1: Generate IHI Exception

IE 8: The matching record is expired.

The matching record is expired.

◉ Raise exception

1. The System determines that this request is for a current patient.
2. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Current Patient IHI Anomaly".
3. The System records an error message response.

Success End

IE 8.1: The System determines tha...

The System determines that this request is not for a current patient.

◉ Skip raise of exception

Success End

IE 9: The matching record is retired.

The matching record is retired.

◉ Raise exception

1. The System determines that this request is for a current patient.
2. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Current Patient IHI Anomaly".
3. The System records an error message response.

Success End

Incl. 9.2: Generate IHI Exception

IE 10: The matching record has a date o...

The matching record has a date of death.

◉ Respond with information message.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Potential Deceased".
2. The System records an information message response.

Success End

Incl. 10.1: Generate IHI Exception

IE 9.1: The System determines tha...

The System determines that this request is not for a current patient.

◉ Skip raise of exception

Success End

#	Description	Requirement/ 🟢Include
1	The System sends a request to the HI Service with the criteria set.	RU136 RU137
2	The HI Service determines that the request message is valid.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determines that the request message is invalid.	IE 1	
The HI Service responds, indicating a data level business error.	IE 2	
The HI Service responds, indicating that additional fields were found in the request.	IE 3	

#	Description	Requirement/Include
3	The HI Service responds with one matching record.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service responds, indicating it found more than one matching record.	IE 4	
The HI Service does not respond within the specified timeout period and subsequent retries have failed.	IE 5	
The HI Service responds, indicating no matching Healthcare Individual records were found.	IE 6	
The HI Service responds with an Unknown error.	IE 7	
The matching record is expired.	IE 8	4
The matching record is retired.	IE 9	

#	Description	Requirement/Include
4	The HI Service returns the IHI status and record status.	RU223 RU224 RU225 RU226
5	The matching record has no exception conditions.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The matching record has a date of death.	IE 10	

Internal Extension (Alternate Flow)   IE 1

Condition:	The HI Service determines that the request message is invalid.
Goal:	Respond with error.
Requirements:	RU151 RU153 RU157 RU160 RU163 RU232 RU233 RU589 RU590 RU171 RU186 RU183 RU187 RU177 RU180 RU174 RU190 RU191 RU192 RU195 RU196 RU199 RU202 RU203 RU234 RU237 RU221 RU205 RU209 RU597 RU598 RU599 RU270 RU271 RU272 RU287 RU288 RU164 RU165 RU167 RU168 RU250 RU251 RU252 RU254 RU255 RU256 RU258 RU259

#	Description	Requirement/ 🟢Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".	EX644 🟢UC12: Generate IHI Exception

2	The System records an error response.	
3	The System records an IHI event.	AL694

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 2

Condition:	The HI Service responds, indicating a data level business error.
Goal:	Respond with error.
Requirements:	RU150 RU158 RU162 RU185 RU182 RU176 RU238 RU239 RU207 RU173 RU189 RU194 RU240 RU198 RU201 RU245 RU600 RU276 RU277 RU279 RU280 RU281 RU282 RU283 RU284 RU285 RU286 RU169 RU170 RU261 RU262 RU257 RU263 RU264 RU265 RU266 RU267

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")	EX648 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL695

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 3

Condition:	The HI Service responds, indicating that additional fields were found in the request.
Goal:	Respond with error.
Requirements:	

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure".	EX644 UC12: Generate IHI Exception
2	The System records an error response.	EM312
3	The System records an IHI event.	AL694

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 4

Condition:	The HI Service responds, indicating it found more than one matching record.
Goal:	Respond with error.
Requirements:	

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Multiple Matches" and a message of "Multiple matches found."	EX649 UC12: Generate IHI Exception
2	The System records an error response.	EM142
3	The System records an IHI event.	AL697

Next Step:	BF: Basic Flow	SUCCESS_END

Internal Extension (Alternate Flow)   IE 5

Condition:	The HI Service does not respond within the specified timeout period and subsequent retries have failed.
Goal:	Handle timeout
Requirements:	

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."	EX644 UC12: Generate IHI Exception
2	The System records an IHI event.	AL696

Next Step: BF: Basic Flow EXIT

Internal Extension (Alternate Flow) IE 6

Condition: The HI Service responds, indicating no matching Healthcare Individual records were found.
Goal: Respond with information message.
Requirements:

#	Description	Requirement/ Include
1	The System records an information message response.	IM140

Next Step: BF: Basic Flow SUCCESS_END

Internal Extension (Alternate Flow) IE 7

Condition: The HI Service responds with an Unknown error.
Goal: Respond with error.
Requirements:

#	Description	Requirement/ Include
1	The HI Service responds with an error message.	
2	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".	EX653 UC12: Generate IHI Exception
3	The System records an error response.	EM310
4	The System records an IHI event.	AL698

Next Step: BF: Basic Flow EXIT

Internal Extension (Alternate Flow) IE 8

Condition: The matching record is expired.
Goal: Raise exception
Requirements:

#	Description	Requirement/ Include
1	The System determines that this request is for a current patient.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The System determines that this request is not for a current patient.	IE 8.1	3

#	Description	Requirement/ Include
2	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Current Patient IHI Anomaly".	EX657 UC12: Generate IHI Exception
3	The System records an error message response.	EM143

Next Step:	BF: Basic Flow	4. The HI Service returns the IHI status and record status.

Internal Extension (Alternate Flow)   IE 8.1

Condition:	The System determines that this request is not for a current patient.	
Goal:	Skip raise of exception	
Requirements:		
Next Step:	IE 8: The matching record is expired.	3. The System records an error message response.

Internal Extension (Alternate Flow)   IE 9

Condition:	The matching record is retired.
Goal:	Raise exception
Requirements:	

#	Description	Requirement/ Include
1	The System determines that this request is for a current patient.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The System determines that this request is not for a current patient.	IE 9.1	3

2	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Current Patient IHI Anomaly".	EX657 ● UC12: Generate IHI Exception
3	The System records an error message response.	EM214

Next Step:	BF: Basic Flow	SUCCESS_END

Internal Extension (Alternate Flow)   IE 9.1

Condition:	The System determines that this request is not for a current patient.	
Goal:	Skip raise of exception	
Requirements:		
Next Step:	IE 9: The matching record is retired.	3. The System records an error message response.

Internal Extension (Alternate Flow)   IE 10

Condition:	The matching record has a date of death.
Goal:	Respond with information message.
Requirements:	

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Potential Deceased".	EX647 ● UC12: Generate IHI Exception
2	The System records an information message response.	IM219

Next Step:	BF: Basic Flow	SUCCESS_END

BUSINESS RULES:

ID	Business Rule	Error #	Error Type
RU136	The following details are included in a TDS Search:	badlyFormedMsg	ESB Error

ID	Business Rule	Error #	Error Type
	• Medicare Number or DVA File Number (one is Mandatory) • Family Name (Mandatory) • Given Name (Optional) • Sex (Mandatory) • Date of Birth (Mandatory) • Health Service Reference ID • IRN is optional (and only used with Medicare Number searches)		
RU137	The following details are included in a non-TDS Search: • Family Name (Mandatory) • Given Name (Optional) • Sex (Mandatory) • Date of Birth (Mandatory) • Address Fields (TBC: Suburb, Postcode, State, Country combination) • Health Service Reference ID	badlyFormedMsg	ESB Error
RU150	The Medicare Card Number must include a valid check digit.	00262	Error
RU151	The Medicare Card Number must be 10 digits.	badlyFormedMsg	ESB Error
RU153	The IRN must be an integer.	badlyFormedMsg	ESB Error
RU157	The DVA File Number must be between 2 and 9 digits in length.	badlyFormedMsg	ESB Error
RU158	The given name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01418	Error
RU160	The maximum field length for a given name is 40.	badlyFormedMsg	ESB Error
RU162	The family name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	00013	Error
RU163	The maximum field length for a family name is 40.	badlyFormedMsg	ESB Error
RU232	Name Suffix must be a valid value.	badlyFormedMsg	ESB Error
RU233	Usage must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error
RU589	Conditional Use must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error

ID	Business Rule	Error #	Error Type
RU590	Preferred must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error
RU171	Unit Type must be a valid value.	badlyFormedMsg	ESB Error
RU185	The address site name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01582	Error
RU186	The maximum field length for Address Site Name is 30.	badlyFormedMsg	ESB Error
RU182	The level number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01583	Error
RU183	The maximum field length for level number is 4.	badlyFormedMsg	ESB Error
RU187	Level Type must be a valid value.	badlyFormedMsg	ESB Error
RU176	The street number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01584	Error
RU177	The maximum field length for street number is 12.	badlyFormedMsg	ESB Error
RU238	Either Street Number of Lot Number are required for an Australian Address.	01669	Error
RU239	Only one of Lot Number and Street Number is permitted, not both.	01668	Error
RU180	The maximum field length for lot number is 15.	badlyFormedMsg	ESB Error
RU207	Suburb, State and Postcode must be valid combinations for an Australian Address.	00098	Error
RU173	The unit number may only contain the following character sets: • alpha • numeric • apostrophes	01581	Error

ID	Business Rule	Error #	Error Type
	• hyphens Spaces must not appear immediately before or after apostrophes and hyphens.		
RU174	The maximum field length for unit number is 6.	badlyFormedMsg	ESB Error
RU189	The Street Name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01586	Error
RU190	The maximum field length for street name is 30.	badlyFormedMsg	ESB Error
RU191	Street Type must be a valid value.	badlyFormedMsg	ESB Error
RU192	Street Suffix must be a valid value.	badlyFormedMsg	ESB Error
RU194	The Suburb may only contain the following character sets: • alpha • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	00081 & 01587	Error
RU195	The maximum field length for street name is 30.	badlyFormedMsg	ESB Error
RU196	Postal Delivery Type must be a valid value.	badlyFormedMsg	ESB Error
RU240	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 Suburb for an Australian Address.	01506	Error
RU198	The Postal Delivery number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01588	Error
RU199	The maximum field length for Postal Delivery number is 11.	badlyFormedMsg	ESB Error
RU201	The Postcode may only contain the numeric characters. For an Australian Address, there must be 4 numeric characters.	00083	Error
RU202	The maximum field length for postcode is 4.	badlyFormedMsg	ESB Error
RU203	State must be a valid value.	badlyFormedMsg	ESB Error
RU234	Address Purpose is required if an Address is present. Must be a valid code.	badlyFormedMsg	ESB Error
RU245	Address purpose can only be set to Residential for International Addresses.	01465	Error

ID	Business Rule	Error #	Error Type
RU237	Preferred Address Indicator is required if an Address is present. Must be a valid code.	badlyFormedMsg	ESB Error
RU221	Street Name, Suburb, Postcode and State are mandatory for an Australian Address.	badlyFormedMsg	ESB Error
RU600	If the country is Australia, the following fields should not be provided: International Address Line, International State/Province, and International Postcode.	01689	Error
RU205	Country must be a valid code.	badlyFormedMsg	ESB Error
RU209	All International Address fields are required for an International Address.	badlyFormedMsg	ESB Error
RU597	The maximum field length for International Address Line is 80.	badlyFormedMsg	ESB Error
RU598	The maximum field length for International Address State/Province is 40.	badlyFormedMsg	ESB Error
RU599	The maximum field length for International Address Postcode is 10.	badlyFormedMsg	ESB Error
RU270	Electronic Communication Medium must be a valid code.	badlyFormedMsg	ESB Error
RU271	Electronic Communication Code must be a valid code.	badlyFormedMsg	ESB Error
RU272	The maximum field length for Electronic Communication Detail is 250.	badlyFormedMsg	ESB Error
RU287	If an Electronic Communication Entity is present, Electronic Communication Medium, Electronic Communication Usage Code and Electronic Communication Details must be entered.	badlyFormedMsg	ESB Error
RU288	If one of Electronic Communication Medium, Electronic Communication Usage code or Electronic Communication Details are added then all fields must be entered.	badlyFormedMsg	ESB Error
RU276	Where medium is 'Telephone', the detail must be in valid format. No less than 8 digits.	01430	Error
RU277	Where medium is 'Telephone', the detail must be numeric.	01429	Error
RU279	Where medium is 'Fax', the detail must be in valid format. No less than 8 digits.	01593	Error
RU280	Where medium is 'Fax', the detail must be numeric.	01592	Error
RU281	Where medium is 'Mobile', the detail must be in valid format. No less than 10 digits.	01431	Error
RU282	When Medium is 'Mobile', only alpha and numeric characters are acceptable.	00086	Error
RU283	Where medium is 'Email', the email address must include the @ symbol.	00088	Error
RU284	Where medium is 'Email', the email address must have	00089	Error

ID	Business Rule	Error #	Error Type
	alpha/numeric characters immediately before or after the @ symbol. Spaces must not immediately precede or follow the @ symbol.		
RU285	Where medium is 'Email', there must be a "." after the @ symbol as part of the email address.	01577	Error
RU286	Where medium is 'Email', no spaces are allowed as part of a valid email address.	01578	Error
RU164	The valid values for sex are • M (Male) • F (Female) • I (Intersex or Indeterminate) • N (Not stated/inadequately described)	badlyFormedMsg	ESB Error
RU165	Date of Birth must be eight digits in length, in YYYYMMDD format.	badlyFormedMsg	ESB Error
RU167	Date of Birth must only contain numeric characters.	badlyFormedMsg	ESB Error
RU168	Date of Birth must be a valid calendar date.	badlyFormedMsg	ESB Error
RU169	Year of Birth must be greater or equal to 1800.	00018	Error
RU170	Date of Birth must not be in the future.	00019	Error
RU250	Birth Plurality must be a valid code. 9 to be used if not stated.	badlyFormedMsg	ESB Error
RU251	Birth Order must be a valid code. 9 to be used if not stated.	badlyFormedMsg	ESB Error
RU252	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU261	Birth Order is mandatory if Birth Plurality > 1.	01422	Error
RU262	Birth Plurality is mandatory if Birth Order has been provided.	01691	Error
RU254	Date of Death must be eight digits in length.	badlyFormedMsg	ESB Error
RU255	Date of Death must only contain numeric characters.	badlyFormedMsg	ESB Error
RU256	Date of Death must be a valid calendar date.	badlyFormedMsg	ESB Error
RU257	Date of Death must not be in the future.	00267	Error
RU258	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU259	Source of Death Notification must be a valid code. "H" = Health Care Provider.	badlyFormedMsg	ESB Error
RU263	Date of Death must not be before Date of Birth.	00275	Error
RU264	Date of Death is mandatory when a Death Notification Source has been provided.	00370	Error
RU265	Death Notification Source is mandatory when a Date of Death has been provided.	00371	Error

ID	Business Rule	Error #	Error Type
RU266	Date of Death is mandatory when a Death Accuracy Indicator has been provided.	01400	Error
RU267	Death Accuracy Indicator is mandatory when a Date of Death has been provided.	01401	Error
RU223	The Medicare Card IHI Search Response contains the following: • IHI Number • IHI Record Status • IHI Status • Medicare Card Number • IRN Number • Given Name 1 (Only when first name is included in search criteria) • Family Name • Sex • Date of Birth • Date of Birth Accuracy Indicator	N/A	N/A
RU224	The DVA Number IHI Search Response contains the following: • IHI Number • IHI Record Status • IHI Status • DVA File Number • Given Name 1 (Only when first name criteria) • Family Name • Sex • Date of Birth • Date of Birth Accuracy Indicator	N/A	N/A
RU225	The Non-TDS (Demographic) IHI Search Response contains the following: • IHI Number • IHI Record Status • IHI Status • Given Name 1 (Only when first name criteria) • Family Name • Sex • Date of Birth • Date of Birth Accuracy Indicator	N/A	N/A
RU226	Additionally, the following fields are included in a response where a date of death exists: • Date of Death • Date of Death Accuracy Indicator	N/A	N/A

INFORMATION MESSAGES:

ID	Message
IM140 /	No Healthcare Individual records have been found

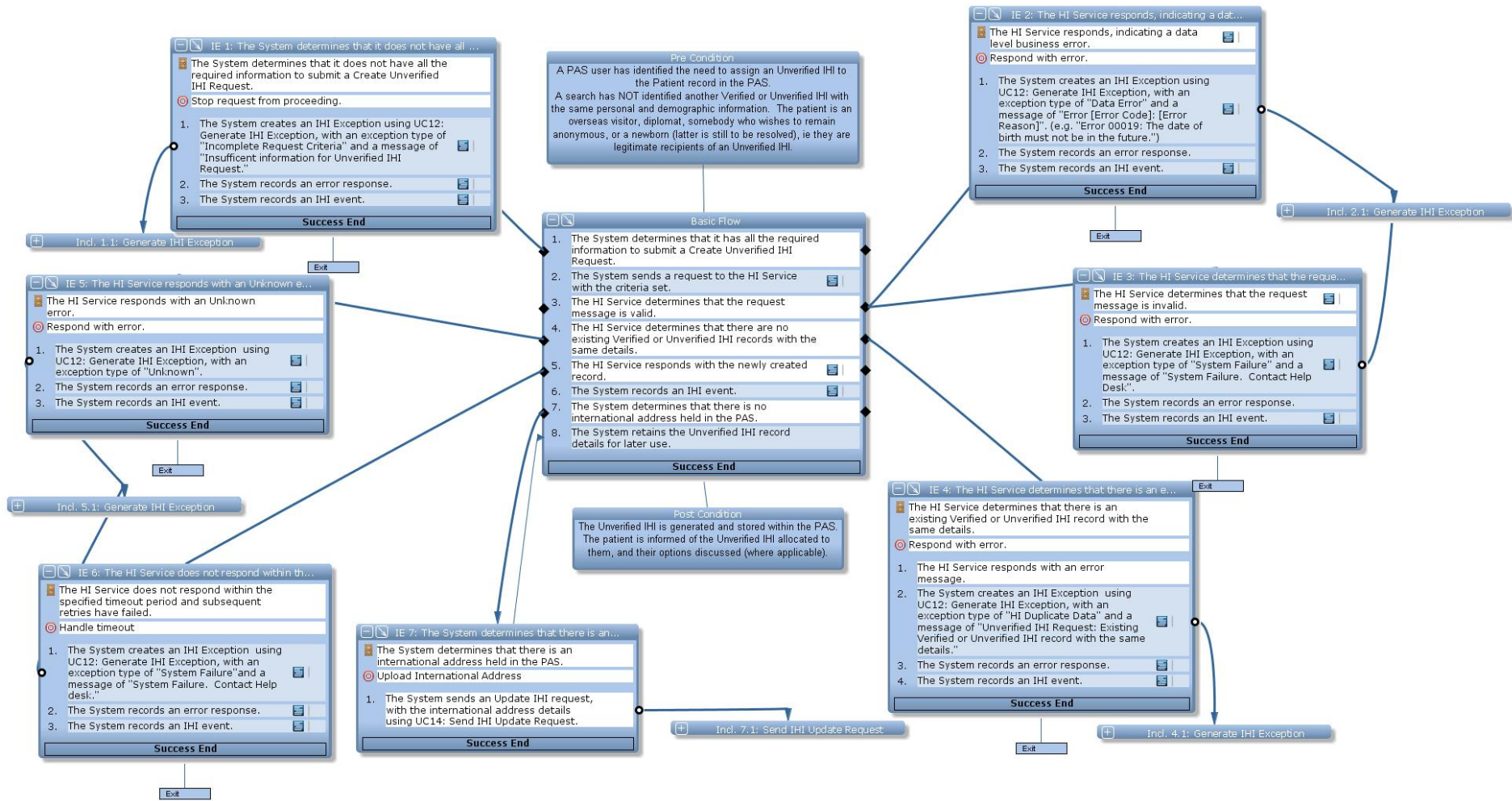| ID	Message
01439	
IM219 / 01531	The HI Service matched a record that has a date of death.

ERROR MESSAGES:

ID	Message
EM310 / 01474	Please contact Help Desk to resolve the unknown error.
EM142 / 01527	Multiple matches found. Please refine the search criteria.
EM312 / 01528	Multiple search criteria keyed. Please refine the search criteria.
EM143 / 01613	This IHI record has an 'Expired' IHI status and can not be retrieved via this channel.
EM214 / 01614	This IHI record has a 'Retired" IHI status and can not be retrieved via this channel.

AUDIT LOG:

ID	Name	Description
AL694	Send IHI Request Event - Invalid Request Message	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Send IHI Request" • Event Status = "Failed" • Event Message = "Invalid request message"
AL695	Send IHI Request Event - Data Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Send IHI Request" • Event Status = "Failed" • Event Message = "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
AL696	Send IHI Request Event - Timeout	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Send IHI Request" • Event Status = "Aborted" • Event Message = "The HI Service is offline."
AL697	Send IHI Request Event - Multiple Matches	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Send IHI Request" • Event Status = "Failed" • Event Message = "Multiple Matches found."
AL698	Send IHI Request Event - Unknown Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Send IHI Request" • Event Status = "Failed" • Event Message = "Unknown Error"

3.4 UC16 : Send Unverified IHI Request

Actors	The PAS System
Overview	Enables the creation of an Unverified IHI, with the supporting record in the HI Service, for a patient. It should be used sparingly and only in specific circumstances as defined below. Note that Victorian Health*SMART* health services cannot currently make use of this function as current systems do not support address data in the required format.
Pre Condition	A PAS user has identified the need to assign an Unverified IHI to the Patient record in the PAS. A search has NOT identified another Verified or Unverified IHI with the same personal and demographic information. The patient is an overseas visitor, diplomat, somebody who wishes to remain anonymous, or a newborn (latter is still to be resolved), ie they are legitimate recipients of an Unverified IHI.
Post Condition	The Unverified IHI is generated and stored within the PAS. The patient is informed of the Unverified IHI allocated to them, and their options discussed (where applicable).
Circumstances of Use	1. Creation of a record for a newborn, to support a transfer to another health service remains under discussion). 2. Allocation of an IHI to an ED record to support a transfer to another facility where a verified IHI has not been retrieved. 3. For patients who wish to remain anonymous or do not wish to register with Medicare. 4. For foreign tourists, diplomats, etc.
Included In (Other Use Cases)	UC36: Add Exception Resolution
Business Processes	None – see "Included in" Use Case above.

IE 1: The System determines that it does not have all …

The System determines that it does not have all the required information to submit a Create Unverified IHI Request.

◎ Stop request from proceeding.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Incomplete Request Criteria" and a message of "Insufficient information for Unverified IHI Request."
2. The System records an error response.
3. The System records an IHI event.

Success End

Incl. 1.1: Generate IHI Exception

Exit

Pre Condition

A PAS user has identified the need to assign an Unverified IHI to the Patient record in the PAS.
A search has NOT identified another Verified or Unverified IHI with the same personal and demographic information. The patient is an overseas visitor, diplomat, somebody who wishes to remain anonymous, or a newborn (latter is still to be resolved), ie they are legitimate recipients of an Unverified IHI.

IE 2: The HI Service responds, indicating a dat…

The HI Service responds, indicating a data level business error.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Incl. 2.1: Generate IHI Exception

Basic Flow

1. The System determines that it has all the required information to submit a Create Unverified IHI Request.
2. The System sends a request to the HI Service with the criteria set.
3. The HI Service determines that the request message is valid.
4. The HI Service determines that there are no existing Verified or Unverified IHI records with the same details.
5. The HI Service responds with the newly created record.
6. The System records an IHI event.
7. The System determines that there is no international address held in the PAS.
8. The System retains the Unverified IHI record details for later use.

Success End

IE 5: The HI Service responds with an Unknown e…

The HI Service responds with an Unknown error.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".
2. The System records an error response.
3. The System records an IHI event.

Success End

Incl. 5.1: Generate IHI Exception

Exit

IE 3: The HI Service determines that the reque…

The HI Service determines that the request message is invalid.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk.".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Post Condition

The Unverified IHI is generated and stored within the PAS. The patient is informed of the Unverified IHI allocated to them, and their options discussed (where applicable).

IE 4: The HI Service determines that there is an e…

The HI Service determines that there is an existing Verified or Unverified IHI record with the same details.

◎ Respond with error.

1. The HI Service responds with an error message.
2. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "HI Duplicate Data" and a message of "Unverified IHI Request: Existing Verified or Unverified IHI record with the same details."
3. The System records an error response.
4. The System records an IHI event.

Success End

Exit

Incl. 4.1: Generate IHI Exception

IE 6: The HI Service does not respond within th…

The HI Service does not respond within the specified timeout period and subsequent retries have failed.

◎ Handle timeout

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk.".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

IE 7: The System determines that there is an…

The System determines that there is an international address held in the PAS.

◎ Upload International Address

1. The System sends an Update IHI request, with the international address details using UC14: Send IHI Update Request.

Success End

Incl. 7.1: Send IHI Update Request

#	Description	Requirement/
		Include
1	The System determines that it has all the required information to submit a Create Unverified IHI Request.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The System determines that it does not have all the required information to submit a Create Unverified IHI Request.	IE 1	

#	Description	Requirement/Include
2	The System sends a request to the HI Service with the criteria set.	RU228
3	The HI Service determines that the request message is valid.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service responds, indicating a data level business error.	IE 2	
The HI Service determines that the request message is invalid.	IE 3	

#	Description	Requirement/Include
4	The HI Service determines that there are no existing Verified or Unverified IHI records with the same details.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determines that there is an existing Verified or Unverified IHI record with the same details.	IE 4	
The HI Service responds with an Unknown error.	IE 5	

#	Description	Requirement/Include
5	The HI Service responds with the newly created record.	RU268 IM346

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service does not respond within the specified timeout period and subsequent retries have failed.	IE 6	

#	Description	Requirement/Include
6	The System records an IHI event.	AL726
7	The System determines that there is no international address held in the PAS.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The System determines that there is an international address held in the PAS.	IE 7	8

#	Description	Requirement/Include
8	The System retains the Unverified IHI record details for later use.	

Internal Extension (Alternate Flow)   IE 1

	Condition:	The System determines that it does not have all the required information to submit a Create Unverified IHI Request.
	Goal:	Stop request from proceeding.
	Requirements:	

#	Description	Requirement/ 🔵 Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Incomplete Request Criteria" and a message of "Insufficient information for Unverified IHI Request."	EX641 🔵UC12: Generate IHI Exception
2	The System records an error response.	EM135
3	The System records an IHI event.	AL700

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 2

	Condition:	The HI Service responds, indicating a data level business error.
	Goal:	Respond with error.
	Requirements:	RU158 RU162 RU232 RU233 RU171 RU185 RU182 RU187 RU176 RU238 RU239 RU179 RU207 RU173 RU189 RU194 RU240 RU198 RU201 RU245 RU247 RU237 RU205 RU276 RU277 RU279 RU280 RU281 RU282 RU283 RU284 RU285 RU286 RU169 RU170 RU250 RU251 RU261 RU262 RU257 RU263 RU264 RU265 RU266 RU267

#	Description	Requirement/ 🔵 Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")	EX648 🔵UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL702

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 3

	Condition:	The HI Service determines that the request message is invalid.
	Goal:	Respond with error.
	Requirements:	RU160 RU163 RU232 RU233 RU589 RU590 RU171 RU186 RU183 RU187 RU177 RU180 RU174 RU190 RU191 RU192 RU195 RU196 RU199 RU202 RU203 RU234 RU221 RU205 RU597 RU598 RU599 RU270 RU271 RU272 RU287 RU288 RU164 RU165 RU167 RU168 RU250 RU251 RU252 RU254 RU255 RU256 RU258 RU259

#	Description	Requirement/ 🔵 Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".	EX644 🔵UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL701

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 4

	Condition:	The HI Service determines that there is an existing Verified or Unverified IHI record with the same details.
	Goal:	Respond with error.
	Requirements:	

#	Description	Requirement/ 🟢 Include
1	The HI Service responds with an error message.	
2	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "HI Duplicate Data" and a message of "Unverified IHI Request: Existing Verified or Unverified IHI record with the same details."	EX652 🟢 UC12: Generate IHI Exception
3	The System records an error response.	EM341
4	The System records an IHI event.	AL704

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 5

Condition: The HI Service responds with an Unknown error.
Goal: Respond with error.
Requirements:

#	Description	Requirement/ 🟢 Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".	EX653 🟢 UC12: Generate IHI Exception
2	The System records an error response.	EM310
3	The System records an IHI event.	AL705

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 6

Condition: The HI Service does not respond within the specified timeout period and
                     subsequent retries have failed.
Goal: Handle timeout
Requirements:

#	Description	Requirement/ 🟢 Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."	EX644 🟢 UC12: Generate IHI Exception
2	The System records an error response.	EM145
3	The System records an IHI event.	AL703

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 7

Condition: The System determines that there is an international address held in the PAS.
Goal: Upload International Address
Requirements:

#	Description	Requirement/ 🟢 Include
1	The System sends an Update IHI request, with the international address details using UC14: Send IHI Update Request.	🟢 UC14: Send IHI Update Request

Next Step: BF: Basic Flow   8. The System retains the Unverified IHI
                                                     record details for later use.

BUSINESS RULES:

ID	Business Rule	Error #	Error Type

RU228	The following details are included in an Unverified IHI Request:
	• Health Service Reference ID
	
	Individual Healthcare Identification Entity
	• Sex (Mandatory)
	• Date of Birth (Mandatory)
	• Date of Birth Accuracy Indicator (Mandatory)
	• Birth Plurality (Conditional)
	• Birth Order (Conditional)
	• Date of Death (Optional)
	• Date of Death Accuracy Indicator (Conditional)
	• Source of Death Notification (Conditional)
	
	Name Entity (more than one may be provided)
	• Name Title (Optional)
	• Family Name (Mandatory)
	• Given Name (Optional, 0 to 2 instances)
	• Name Suffix (Optional)
	• Usage (Mandatory)
	• Conditional Use (Optional)
	
	Address Entity, 0 to 2 instances:
	• Australian Street Address (Optional)
	  o State (conditional mandatory)
	  o Postcode (conditional mandatory)
	  o Suburb (conditional mandatory)
	  o Address Site Name (Optional)
	  o Unit Group (Optional)
	    ▪ Unit Type (conditional mandatory)
	    ▪ Unit Number (Optional)
	  o Level Group (Optional)
	    ▪ Level Type (conditional mandatory)
	    ▪ Level Number (Optional)
	  o Lot Number (Optional)
	  o Street Number (Optional)
	  o Street Name (conditional mandatory)
	  o Street Type (Optional)
	  o Street Suffix (Optional)
	• Australian Postal Address (Optional)
	  o State (conditional mandatory)
	  o Postcode (conditional mandatory)
	  o Suburb (conditional mandatory)
	  o Postal Delivery Group (conditional mandatory)
	    ▪ Postal Delivery Type
	    ▪ Postal Delivery Number (conditional
		badlyFormedMsg	ESB Error

ID	Business Rule	Error #	Error Type
	mandatory) - International Address (Optional) - International State/Province (conditional mandatory) - International Address Line (conditional mandatory) - International Postcode (conditional mandatory) - Country (conditional mandatory) - Purpose (conditional mandatory) - Preferred (conditional mandatory) Electronic Communications Entity (0 to many instances) - Electronic Communication Medium (conditional mandatory) - Electronic Communication Usage Code (conditional mandatory) - Electronic Communication Detail (conditional mandatory) - Preferred (optional)		
RU158	The given name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01418	Error
RU160	The maximum field length for a given name is 40.	badlyFormedMsg	ESB Error
RU162	The family name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	00013	Error
RU163	The maximum field length for a family name is 40.	badlyFormedMsg	ESB Error
RU232	Name Suffix must be a valid value.	badlyFormedMsg	ESB Error
RU233	Usage must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error
RU589	Conditional Use must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error
RU590	Preferred must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error
RU171	Unit Type must be a valid value.	badlyFormedMsg	ESB Error
RU185	The address site name may only contain the following character sets:	01582	Error

ID	Business Rule	Error #	Error Type
	• alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.		
RU186	The maximum field length for Address Site Name is 30.	badlyFormedMsg	ESB Error
RU182	The level number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01583	Error
RU183	The maximum field length for level number is 4.	badlyFormedMsg	ESB Error
RU187	Level Type must be a valid value.	badlyFormedMsg	ESB Error
RU176	The street number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01584	Error
RU177	The maximum field length for street number is 12.	badlyFormedMsg	ESB Error
RU238	Either Street Number of Lot Number are required for an Australian Address.	01669	Error
RU239	Only one of Lot Number and Street Number is permitted, not both.	01668	Error
RU179	The lot number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01585	Error
RU180	The maximum field length for lot number is 15.	badlyFormedMsg	ESB Error
RU207	Suburb, State and Postcode must be valid combinations for an Australian Address.	00098	Error
RU173	The unit number may only contain the following character sets: • alpha	01581	Error

ID	Business Rule	Error #	Error Type
	• numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.		
RU174	The maximum field length for unit number is 6.	badlyFormedMsg	ESB Error
RU189	The Street Name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01586	Error
RU190	The maximum field length for street name is 30.	badlyFormedMsg	ESB Error
RU191	Street Type must be a valid value.	badlyFormedMsg	ESB Error
RU192	Street Suffix must be a valid value.	badlyFormedMsg	ESB Error
RU194	The Suburb may only contain the following character sets: • alpha • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	00081 & 01587	Error
RU195	The maximum field length for street name is 30.	badlyFormedMsg	ESB Error
RU196	Postal Delivery Type must be a valid value.	badlyFormedMsg	ESB Error
RU240	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 Suburb for an Australian Address.	01506	Error
RU198	The Postal Delivery number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01588	Error
RU199	The maximum field length for Postal Delivery number is 11.	badlyFormedMsg	ESB Error
RU201	The Postcode may only contain the numeric characters. For an Australian Address, there must be 4 numeric characters.	00083	Error
RU202	The maximum field length for postcode is 4.	badlyFormedMsg	ESB Error
RU203	State must be a valid value.	badlyFormedMsg	ESB Error

ID	Business Rule	Error #	Error Type
RU234	Address Purpose is required if an Address is present. Must be a valid code.	badlyFormedMsg	ESB Error
RU245	Address purpose can only be set to Residential for International Addresses.	01465	Error
RU247	Only one type (Mailing/Residential or international) of address allowed in the create unverified IHI process.	01692	Error
RU237	Preferred Address Indicator is required if an Address is present. Must be a valid code.	badlyFormedMsg	ESB Error
RU221	Street Name, Suburb, Postcode and State are mandatory for an Australian Address.	badlyFormedMsg	ESB Error
RU205	Country must be a valid code.	badlyFormedMsg	ESB Error
RU597	The maximum field length for International Address Line is 80.	badlyFormedMsg	ESB Error
RU598	The maximum field length for International Address State/Province is 40.	badlyFormedMsg	ESB Error
RU599	The maximum field length for International Address Postcode is 10.	badlyFormedMsg	ESB Error
RU270	Electronic Communication Medium must be a valid code.	badlyFormedMsg	ESB Error
RU271	Electronic Communication Code must be a valid code.	badlyFormedMsg	ESB Error
RU272	The maximum field length for Electronic Communication Detail is 250.	badlyFormedMsg	ESB Error
RU287	If an Electronic Communication Entity is present, Electronic Communication Medium, Electronic Communication Usage Code and Electronic Communication Details must be entered.	badlyFormedMsg	ESB Error
RU288	If one of Electronic Communication Medium, Electronic Communication Usage code or Electronic Communication Details are added then all fields must be entered.	badlyFormedMsg	ESB Error
RU276	Where medium is 'Telephone', the detail must be in valid format. No less than 8 digits.	01430	Error
RU277	Where medium is 'Telephone', the detail must be numeric.	01429	Error
RU279	Where medium is 'Fax', the detail must be in valid format. No less than 8 digits.	01593	Error
RU280	Where medium is 'Fax', the detail must be numeric.	01592	Error
RU281	Where medium is 'Mobile', the detail must be in valid format. No less than 10 digits.	01431	Error
RU282	When Medium is 'Mobile', only alpha and numeric characters are acceptable.	00086	Error
RU283	Where medium is 'Email', the email address must include the @ symbol.	00088	Error

ID	Business Rule	Error #	Error Type
RU284	Where medium is 'Email', the email address must have alpha/numeric characters immediately before or after the @ symbol. Spaces must not immediately precede or follow the @ symbol.	00089	Error
RU285	Where medium is 'Email', there must be a "." after the @ symbol as part of the email address.	01577	Error
RU286	Where medium is 'Email', no spaces are allowed as part of a valid email address.	01578	Error
RU164	The valid values for sex are • M (Male) • F (Female) • I (Intersex or Indeterminate) • N (Not stated/inadequately described)	badlyFormedMsg	ESB Error
RU165	Date of Birth must be eight digits in length, in YYYYMMDD format.	badlyFormedMsg	ESB Error
RU167	Date of Birth must only contain numeric characters.	badlyFormedMsg	ESB Error
RU168	Date of Birth must be a valid calendar date.	badlyFormedMsg	ESB Error
RU169	Year of Birth must be greater or equal to 1800.	00018	Error
RU170	Date of Birth must not be in the future.	00019	Error
RU250	Birth Plurality must be a valid code. 9 to be used if not stated.	badlyFormedMsg	ESB Error
RU251	Birth Order must be a valid code. 9 to be used if not stated.	badlyFormedMsg	ESB Error
RU252	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU261	Birth Order is mandatory if Birth Plurality > 1.	01422	Error
RU262	Birth Plurality is mandatory if Birth Order has been provided.	01691	Error
RU254	Date of Death must be eight digits in length.	badlyFormedMsg	ESB Error
RU255	Date of Death must only contain numeric characters.	badlyFormedMsg	ESB Error
RU256	Date of Death must be a valid calendar date.	badlyFormedMsg	ESB Error
RU257	Date of Death must not be in the future.	00267	Error
RU258	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU259	Source of Death Notification must be a valid code. "H" = Health Care Provider.	badlyFormedMsg	ESB Error
RU263	Date of Death must not be before Date of Birth.	00275	Error
RU264	Date of Death is mandatory when a Death Notification Source has been provided.	00370	Error
RU265	Death Notification Source is mandatory when a Date of Death	00371	Error

ID	Business Rule	Error #	Error Type
	has been provided.		
RU266	Date of Death is mandatory when a Death Accuracy Indicator has been provided.	01400	Error
RU267	Death Accuracy Indicator is mandatory when a Date of Death has been provided.	01401	Error
RU268	The Create Unverified IHI Response contains any of the following: • IHI Number • IHI Record Status (value = "Unverified") • IHI Status (value = "Active") • Successful creation message • Error message • Information message		N/A
RU292	An unverified IHI record cannot be created with exactly the same details as an existing unverified or verified IHI record.		N/A
RU294	The individual must consent to provide the mandatory demographic details as prescribed for the purpose of creating an Unverified IHI.		N/A
RU295	No evidence of identity (EOI) is required for the creation of an Unverified IHI record.		N/A

DEPENDENCIES:

ID	Description
DP584	Unverified IHI use - If a health service chooses to use Unverified IHIs.

INFORMATION MESSAGES:

ID	Message
IM346 / 01603	The IHI record has been successfully created.

ERROR MESSAGES:

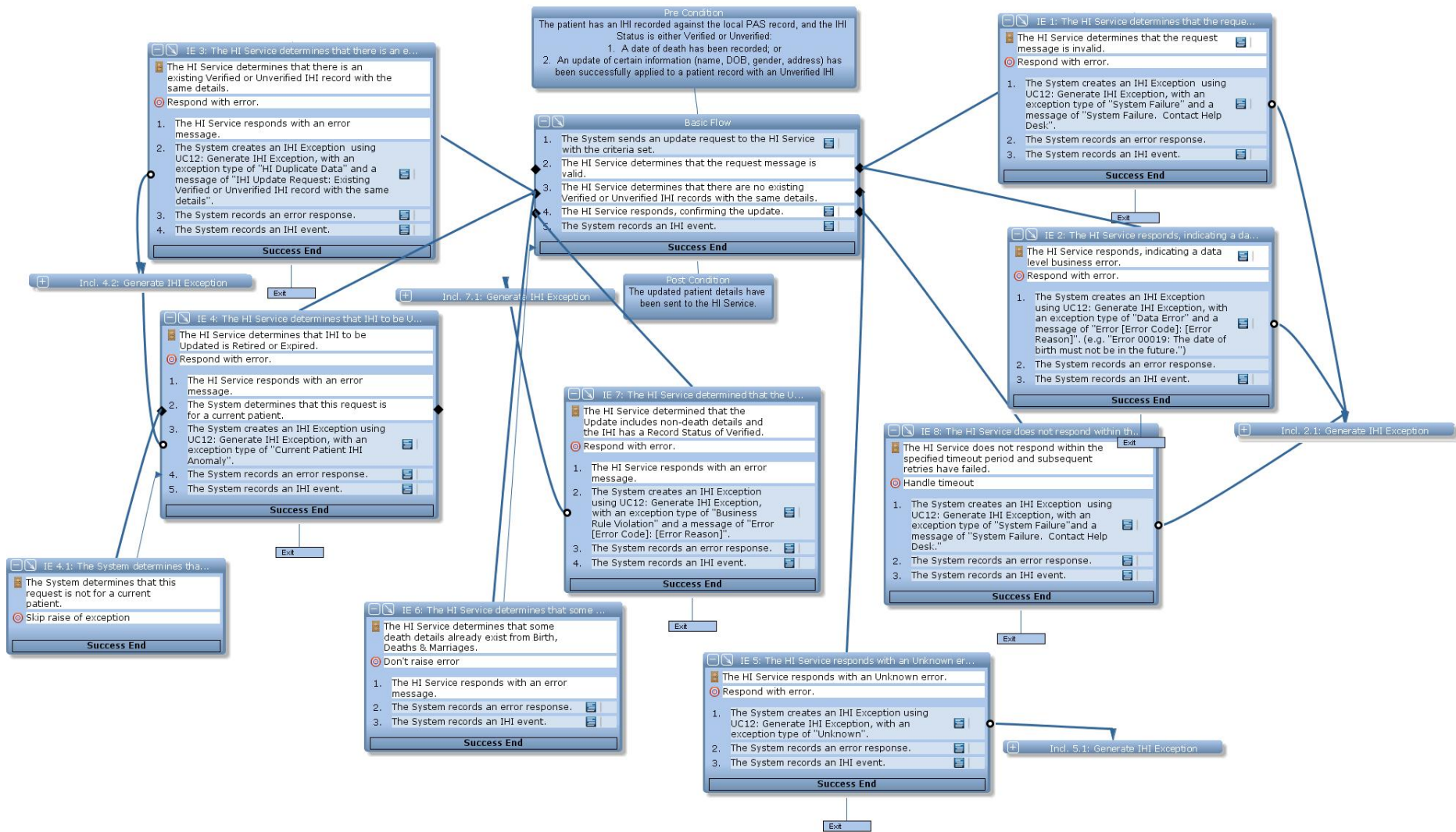| ID	Message
EM145 / E100	The HI Service is offline.
EM135 / E101	The patient record does not have sufficient information held on it to perform the IHI request.
EM310 / 01474	Please contact Help Desk to resolve the unknown error.
EM341 / 01458	Existing Unverified IHI record exists with these details. Change existing details or enter an address for this record.

AUDIT LOG:

ID	Name	Description

ID	Name	Description
AL700	Unverified IHI Request Event - Insufficient Information	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Unverified IHI Request" • Event Status = "Aborted" • Event Message = "The patient record does not have sufficient information held on it to perform the IHI request."
AL701	Unverified IHI Request Event - Invalid Request Message	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Unverified IHI Request" • Event Status = "Failed" • Event Message = "Invalid request message"
AL702	Unverified IHI Request Event - Data Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Unverified IHI Request" • Event Status = "Failed" • Event Message = "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
AL703	Unverified IHI Request Event - Timeout	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Unverified IHI Request" • Event Status = "Aborted" • Event Message = "The HI Service is offline."
AL705	Unverified IHI Request Event - Unknown Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Unverified IHI Request" • Event Status = "Failed" • Event Message = "Unknown Error"
AL704	Unverified IHI Request Event - Existing Unverified or Verified Record	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Unverified IHI Request" • Event Status = "Failed" • Event Message = "Existing Verified or Unverified IHI record with the same details."
AL726	Unverified IHI Request Event - Success	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Unverified IHI Request" • Event Status = "Success" • Event Message = "Unverified IHI Request Successful."

3.5 UC14 : Send IHI Update Request

Actors	The PAS System
Overview	This use case supports the updating of records in the HI Service, in accordance with the HI Service specifications, and includes the ability to: • update a record with an Unverified IHI, or • update a record with a Verified IHI with date of death information only. This is a system function that will automatically update the HI Service whenever the local patient record is updated. Note that the NEHTA CCA group has created a compliance item that requires health services to provide patient data updates to the HI Service. Provisional IHI records are updated using UC45: Send Provisional IHI Update Request.
Pre Condition	The patient has an IHI recorded against the local PAS record, and the IHI Status is either Verified or Unverified: 1. A date of death has been recorded; or 2. An update of certain information (name, DOB, gender, address) has been successfully applied to a patient record with an Unverified IHI
Post Condition	The updated patient details have been sent to the HI Service.
Circumstances of Use	This use case applies when: 1. a date of death is recorded against a local PAS record with certain IHI Record Statuses (Verified and Unverified) 2. a local patient record with an Unverified IHI has name, DOB, gender and/or address information updated.
Included In (Other Use Cases)	UC51: Process Patient Details Update UC16: Send Unverified IHI Request
Business Processes	BP4: Patient Death Registration

Pre Condition
The patient has an IHI recorded against the local PAS record, and the IHI Status is either Verified or Unverified:
1. A date of death has been recorded; or
2. An update of certain information (name, DOB, gender, address) has been successfully applied to a patient record with an Unverified IHI

Basic Flow
1. The System sends an update request to the HI Service with the criteria set.
2. The HI Service determines that the request message is valid.
3. The HI Service determines that there are no existing Verified or Unverified IHI records with the same details.
4. The HI Service responds, confirming the update.
5. The System records an IHI event.
Success End

Post Condition
The updated patient details have been sent to the HI Service.

IE 1: The HI Service determines that the reque...
The HI Service determines that the request message is invalid.
◉ Respond with error.
1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk.".
2. The System records an error response.
3. The System records an IHI event.
Success End

Exit

IE 2: The HI Service responds, indicating a da...
The HI Service responds, indicating a data level business error.
◉ Respond with error.
1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
2. The System records an error response.
3. The System records an IHI event.
Success End

Exit

Incl. 2.1: Generate IHI Exception

IE 3: The HI Service determines that there is an e...
The HI Service determines that there is an existing Verified or Unverified IHI record with the same details.
◉ Respond with error.
1. The HI Service responds with an error message.
2. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "HI Duplicate Data" and a message of "IHI Update Request: Existing Verified or Unverified IHI record with the same details".
3. The System records an error response.
4. The System records an IHI event.
Success End

Incl. 4.2: Generate IHI Exception

Exit

Incl. 7.1: Generate IHI Exception

IE 4: The HI Service determines that IHI to be U...
The HI Service determines that IHI to be Updated is Retired or Expired.
◉ Respond with error.
1. The HI Service responds with an error message.
2. The System determines that this request is for a current patient.
3. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Current Patient IHI Anomaly".
4. The System records an error response.
5. The System records an IHI event.
Success End

Exit

IE 4.1: The System determines tha...
The System determines that this request is not for a current patient.
◉ Skip raise of exception
Success End

IE 7: The HI Service determined that the U...
The HI Service determined that the Update includes non-death details and the IHI has a Record Status of Verified.
◉ Respond with error.
1. The HI Service responds with an error message.
2. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Business Rule Violation" and a message of "Error [Error Code]: [Error Reason]".
3. The System records an error response.
4. The System records an IHI event.
Success End

Exit

IE 8: The HI Service does not respond within th...
The HI Service does not respond within the specified timeout period and subsequent retries have failed.
◉ Handle timeout
1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk.".
2. The System records an error response.
3. The System records an IHI event.
Success End

Exit

IE 6: The HI Service determines that some ...
The HI Service determines that some death details already exist from Birth, Deaths & Marriages.
◉ Don't raise error
1. The HI Service responds with an error message.
2. The System records an error response.
3. The System records an IHI event.
Success End

IE 5: The HI Service responds with an Unknown er...
The HI Service responds with an Unknown error.
◉ Respond with error.
1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".
2. The System records an error response.
3. The System records an IHI event.
Success End

Incl. 5.1: Generate IHI Exception

Exit

BASIC FLOW:

#	Description	Requirement/ Include
1	The System sends an update request to the HI Service with the criteria set.	RU505
2	The HI Service determines that the request message is valid.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determines that the request message is invalid.	IE 1	
The HI Service responds, indicating a data level business error.	IE 2	

#	Description	Requirement/Include
3	The HI Service determines that there are no existing Verified or Unverified IHI records with the same details.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determines that there is an existing Verified or Unverified IHI record with the same details.	IE 3	
The HI Service determines that IHI to be Updated is Retired or Expired.	IE 4	
The HI Service responds with an Unknown error.	IE 5	
The HI Service determines that some death details already exist from Birth, Deaths & Marriages.	IE 6	

#	Description	Requirement/Include
4	The HI Service responds, confirming the update.	IM591

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determined that the Update includes non-death details and the IHI has a Record Status of Verified.	IE 7	
The HI Service does not respond within the specified timeout period and subsequent retries have failed.	IE 8	

#	Description	Requirement/Include
5	The System records an IHI event.	AL727

Internal Extension (Alternate Flow)   IE 1

Condition: The HI Service determines that the request message is invalid.
Goal: Respond with error.
Requirements: RU151 RU153 RU154 RU157 RU160 RU163 RU232 RU233 RU589 RU590 RU171 RU186 RU183 RU187 RU177 RU180 RU174 RU190 RU191 RU192 RU195 RU196 RU199 RU202 RU203 RU234 RU237 RU221 RU205 RU209 RU597 RU598 RU599 RU270 RU271 RU272 RU287 RU288 RU164 RU165 RU167 RU168 RU250 RU251 RU252 RU254 RU255 RU256 RU258 RU259

#	Description	Requirement/Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of	EX644

	"System Failure" and a message of "System Failure. Contact Help Desk".	🟢 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL707

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 2

Condition:	The HI Service responds, indicating a data level business error.
Goal:	Respond with error.
Requirements:	RU146 RU148 RU158 RU162 RU185 RU182 RU176 RU238 RU239 RU207 RU173 RU189 RU194 RU240 RU198 RU201 RU245 RU276 RU277 RU279 RU280 RU281 RU282 RU283 RU284 RU285 RU286 RU169 RU170 RU261 RU262 RU257 RU263 RU264 RU265 RU266 RU267

#	Description	Requirement/🟢 Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")	EX648 🟢 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL708

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 3

Condition:	The HI Service determines that there is an existing Verified or Unverified IHI record with the same details.
Goal:	Respond with error.
Requirements:	

#	Description	Requirement/🟢 Include
1	The HI Service responds with an error message.	
2	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "HI Duplicate Data" and a message of "IHI Update Request: Existing Verified or Unverified IHI record with the same details".	EX652 🟢 UC12: Generate IHI Exception
3	The System records an error response.	EM341
4	The System records an IHI event.	AL711

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 4

Condition:	The HI Service determines that IHI to be Updated is Retired or Expired.
Goal:	Respond with error.
Requirements:	

#	Description	Requirement/🟢 Include
1	The HI Service responds with an error message.	
2	The System determines that this request is for a current patient.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The System determines that this request is not for a	IE 4.1	4

current patient.

3	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Current Patient IHI Anomaly".	EX657 ⊙UC12: Generate IHI Exception
4	The System records an error response.	EM592
5	The System records an IHI event.	AL712

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 4.1

Condition: The System determines that this request is not for a current patient.
Goal: Skip raise of exception
Requirements:
Next Step: IE 4: The HI Service determines that IHI to be Updated is Retired or Expired.   4. The System records an error response.

Internal Extension (Alternate Flow)   IE 5

Condition: The HI Service responds with an Unknown error.
Goal: Respond with error.
Requirements:

#	Description	Requirement/⊙Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".	EX653 ⊙UC12: Generate IHI Exception
2	The System records an error response.	EM310
3	The System records an IHI event.	AL710

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 6

Condition: The HI Service determines that some death details already exist from Birth, Deaths & Marriages.
Goal: Don't raise error
Requirements:

#	Description	Requirement/⊙Include
1	The HI Service responds with an error message.	
2	The System records an error response.	EM595 EM596 EM512
3	The System records an IHI event.	AL713

Next Step: BF: Basic Flow   SUCCESS_END

Internal Extension (Alternate Flow)   IE 7

Condition: The HI Service determined that the Update includes non-death details and the IHI has a Record Status of Verified.
Goal: Respond with error.
Requirements:

#	Description	Requirement/⊙Include
1	The HI Service responds with an error message.	
2	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Business Rule Violation" and a message of "Error [Error Code]: [Error Reason]".	EX654 ⊙UC12: Generate IHI Exception
3	The System records an error response.	EM509

4	The System records an IHI event.	AL714

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 8

Condition:	The HI Service does not respond within the specified timeout period and subsequent retries have failed.
Goal Requirements:	Handle timeout

#	Description	Requirement/➡️Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk."	EX644 🔵UC12: Generate IHI Exception
2	The System records an error response.	EM145
3	The System records an IHI event.	AL709

Next Step:	BF: Basic Flow	EXIT

BUSINESS RULES:

ID	Business Rule	Error #	Error Type

RU505	The following details are included in an Update IHI Request:
	• IHI
	• Health Service Reference ID
	
	Individual Healthcare Identification Entity
	
	• Sex (Mandatory)
	• Date of Birth (Optional)
	• Date of Birth Accuracy Indicator (Conditional)
	• Birth Plurality (Conditional)
	• Birth Order (Conditional)
	• Date of Death (Conditional)
	• Date of Death Accuracy Indicator (Conditional)
	• Source of Death Notification (Conditional)
	
	Name Entity (0 to many instances)
	
	• Name Title (optional)
	• Family Name (mandatory)
	• Given Name (optional, 0 to 2 instances)
	• Name Suffix (optional)
	• Usage (mandatory)
	• Preferred (mandatory)
	• Conditional Use (Optional)
	Address Entity, 0 to 2 instances:
	• Australian Street Address (Optional)
	   o State (conditional mandatory)
	   o Postcode (conditional mandatory)
	   o Suburb (conditional mandatory)
	   o Address Site Name (Optional)
		badlyFormedMsg	N/A

ID	Business Rule	Error #	Error Type

	o Unit Group (Optional)
	      ■ Unit Type (conditional mandatory)
	      ■ Unit Number (Optional)
	o Level Group (Optional)
	      ■ Level Type (conditional mandatory)
	      ■ Level Number (Optional)
	o Lot Number (Optional)
	o Street Number (Optional)
	o Street Name (conditional mandatory)
	o Street Type (Optional)
	o Street Suffix (Optional)
	
	• Australian Postal Address (Optional)
	o State (conditional mandatory)
	o Postcode (conditional mandatory)
	o Suburb (conditional mandatory)
	o Postal Delivery Group (conditional mandatory)
	      ■ Postal Delivery Type
	      ■ Postal Delivery Number (conditional mandatory)
	• International Address (Optional)
	o International State/Province (conditional mandatory)
	o International Address Line (conditional mandatory)
	o International Postcode (conditional mandatory)
	o Country (conditional mandatory)
	• Purpose (conditional mandatory)
	• Preferred (conditional mandatory)
	
	Electronic Communications Entity (0 to many instances)
	
	• Electronic Communication Medium (conditional mandatory)
	• Electronic Communication Usage Code (conditional mandatory)
	• Electronic Communication Detail (conditional mandatory)
	• Preferred (optional)		

RU504	The Update IHI Request can be used in the following circumstances. For an Unverified IHI, all fields can be updated using this request. For a Verified IHI, only the following fields can be updated: • Date of Death • Date of Death Accuracy Indicator • Source of Death Notification • Amendments cannot be made to IHI records with an IHI Status of Retired or Expired.	01597 & 01620	N/A
RU513	Date of Death details must not exist already for a Date of Death notification message.	01688 & 01690	N/A

ID	Business Rule	Error #	Error Type
RU146	The IHI Number must include a valid check digit.	01514	Error
RU148	The IHI Number must be 16 digits.	01675	Error
RU151	The Medicare Card Number must be 10 digits.	badlyFormedMsg	ESB Error
RU153	The IRN must be an integer.	badlyFormedMsg	ESB Error
RU154	The IRN must be a single digit, between 1 and 9.	badlyFormedMsg	ESB Error
RU157	The DVA File Number must be between 2 and 9 digits in length.	badlyFormedMsg	ESB Error
RU158	The given name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01418	Error
RU160	The maximum field length for a given name is 40.	badlyFormedMsg	ESB Error
RU162	The family name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	00013	Error
RU163	The maximum field length for a family name is 40.	badlyFormedMsg	ESB Error
RU232	Name Suffix must be a valid value.	badlyFormedMsg	ESB Error
RU233	Usage must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error
RU589	Conditional Use must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error
RU590	Preferred must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error
RU171	Unit Type must be a valid value.	badlyFormedMsg	ESB Error
RU185	The address site name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01582	Error
RU186	The maximum field length for Address Site Name is 30.	badlyFormedMsg	ESB Error

ID	Business Rule	Error #	Error Type
RU182	The level number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01583	Error
RU183	The maximum field length for level number is 4.	badlyFormedMsg	ESB Error
RU187	Level Type must be a valid value.	badlyFormedMsg	ESB Error
RU176	The street number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01584	Error
RU177	The maximum field length for street number is 12.	badlyFormedMsg	ESB Error
RU238	Either Street Number of Lot Number are required for an Australian Address.	01669	Error
RU239	Only one of Lot Number and Street Number is permitted, not both.	01668	Error
RU180	The maximum field length for lot number is 15.	badlyFormedMsg	ESB Error
RU207	Suburb, State and Postcode must be valid combinations for an Australian Address.	00098	Error
RU173	The unit number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01581	Error
RU174	The maximum field length for unit number is 6.	badlyFormedMsg	ESB Error
RU189	The Street Name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01586	Error

ID	Business Rule	Error #	Error Type
RU190	The maximum field length for street name is 30.	badlyFormedMsg	ESB Error
RU191	Street Type must be a valid value.	badlyFormedMsg	ESB Error
RU192	Street Suffix must be a valid value.	badlyFormedMsg	ESB Error
RU194	The Suburb may only contain the following character sets: • alpha • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	00081 & 01587	Error
RU195	The maximum field length for street name is 30.	badlyFormedMsg	ESB Error
RU196	Postal Delivery Type must be a valid value.	badlyFormedMsg	ESB Error
RU240	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 Suburb? for an Australian Address.	01506	Error
RU198	The Postal Delivery number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01588	Error
RU199	The maximum field length for Postal Delivery number is 11.	badlyFormedMsg	ESB Error
RU201	The Postcode may only contain the numeric characters. For an Australian Address, there must be 4 numeric characters.	00083	Error
RU202	The maximum field length for postcode is 4.	badlyFormedMsg	ESB Error
RU203	State must be a valid value.	badlyFormedMsg	ESB Error
RU234	Address Purpose is required if an Address is present. Must be a valid code.	badlyFormedMsg	ESB Error
RU245	Address purpose can only be set to Residential for International Addresses.	01465	Error
RU237	Preferred Address Indicator is required if an Address is present. Must be a valid code.	badlyFormedMsg	ESB Error
RU221	Street Name, Suburb, Postcode and State are mandatory for an Australian Address.	badlyFormedMsg	ESB Error
RU205	Country must be a valid code.	badlyFormedMsg	ESB Error
RU209	All International Address fields are required for an International Address.	badlyFormedMsg	ESB Error
RU597	The maximum field length for International Address Line is 80.	badlyFormedMsg	ESB Error

ID	Business Rule	Error #	Error Type
RU598	The maximum field length for International Address State/Province is 40.	badlyFormedMsg	ESB Error
RU599	The maximum field length for International Address Postcode is 10.	badlyFormedMsg	ESB Error
RU270	Electronic Communication Medium must be a valid code.	badlyFormedMsg	ESB Error
RU271	Electronic Communication Code must be a valid code.	badlyFormedMsg	ESB Error
RU272	The maximum field length for Electronic Communication Detail is 250.	badlyFormedMsg	ESB Error
RU287	If an Electronic Communication Entity is present, Electronic Communication Medium, Electronic Communication Usage Code and Electronic Communication Details must be entered.	badlyFormedMsg	ESB Error
RU288	If one of Electronic Communication Medium, Electronic Communication Usage code or Electronic Communication Details are added then all fields must be entered.	badlyFormedMsg	ESB Error
RU276	Where medium is 'Telephone', the detail must be in valid format. No less than 8 digits.	01430	Error
RU277	Where medium is 'Telephone', the detail must be numeric.	01429	Error
RU279	Where medium is 'Fax', the detail must be in valid format. No less than 8 digits.	01593	Error
RU280	Where medium is 'Fax', the detail must be numeric.	01592	Error
RU281	Where medium is 'Mobile', the detail must be in valid format. No less than 10 digits.	01431	Error
RU282	When Medium is 'Mobile', only alpha and numeric characters are acceptable.	00086	Error
RU283	Where medium is 'Email', the email address must include the @ symbol.	00088	Error
RU284	Where medium is 'Email', the email address must have alpha/numeric characters immediately before or after the @ symbol. Spaces must not immediately precede or follow the @ symbol.	00089	Error
RU285	Where medium is 'Email', there must be a "." after the @ symbol as part of the email address.	01577	Error
RU286	Where medium is 'Email', no spaces are allowed as part of a valid email address.	01578	Error
RU164	The valid values for sex are • M (Male) • F (Female) • I (Intersex or Indeterminate) • N (Not stated/inadequately described)	badlyFormedMsg	ESB Error
RU165	Date of Birth must be eight digits in length, in YYYYMMDD	badlyFormedMsg	ESB Error

ID	Business Rule	Error #	Error Type
	format.		
RU167	Date of Birth must only contain numeric characters.	badlyFormedMsg	ESB Error
RU168	Date of Birth must be a valid calendar date.	badlyFormedMsg	ESB Error
RU169	Year of Birth must be greater or equal to 1800.	00018	Error
RU170	Date of Birth must not be in the future.	00019	Error
RU250	Birth Plurality must be a valid code. 9 to be used if not stated.	badlyFormedMsg	ESB Error
RU251	Birth Order must be a valid code. 9 to be used if not stated.	badlyFormedMsg	ESB Error
RU252	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU261	Birth Order is mandatory if Birth Plurality > 1.	01422	Error
RU262	Birth Plurality is mandatory if Birth Order has been provided.	01691	Error
RU254	Date of Death must be eight digits in length.	badlyFormedMsg	ESB Error
RU255	Date of Death must only contain numeric characters.	badlyFormedMsg	ESB Error
RU256	Date of Death must be a valid calendar date.	badlyFormedMsg	ESB Error
RU257	Date of Death must not be in the future.	00267	Error
RU258	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU259	Source of Death Notification must be a valid code. "H" = Health Care Provider.	badlyFormedMsg	ESB Error
RU263	Date of Death must not be before Date of Birth.	00275	Error
RU264	Date of Death is mandatory when a Death Notification Source has been provided.	00370	Error
RU265	Death Notification Source is mandatory when a Date of Death has been provided.	00371	Error
RU266	Date of Death is mandatory when a Death Accuracy Indicator has been provided.	01400	Error
RU267	Death Accuracy Indicator is mandatory when a Date of Death has been provided.	01401	Error

INFORMATION MESSAGES:

ID	Message
IM591 / 01402	The Record has been successfully updated.

ERROR MESSAGES:

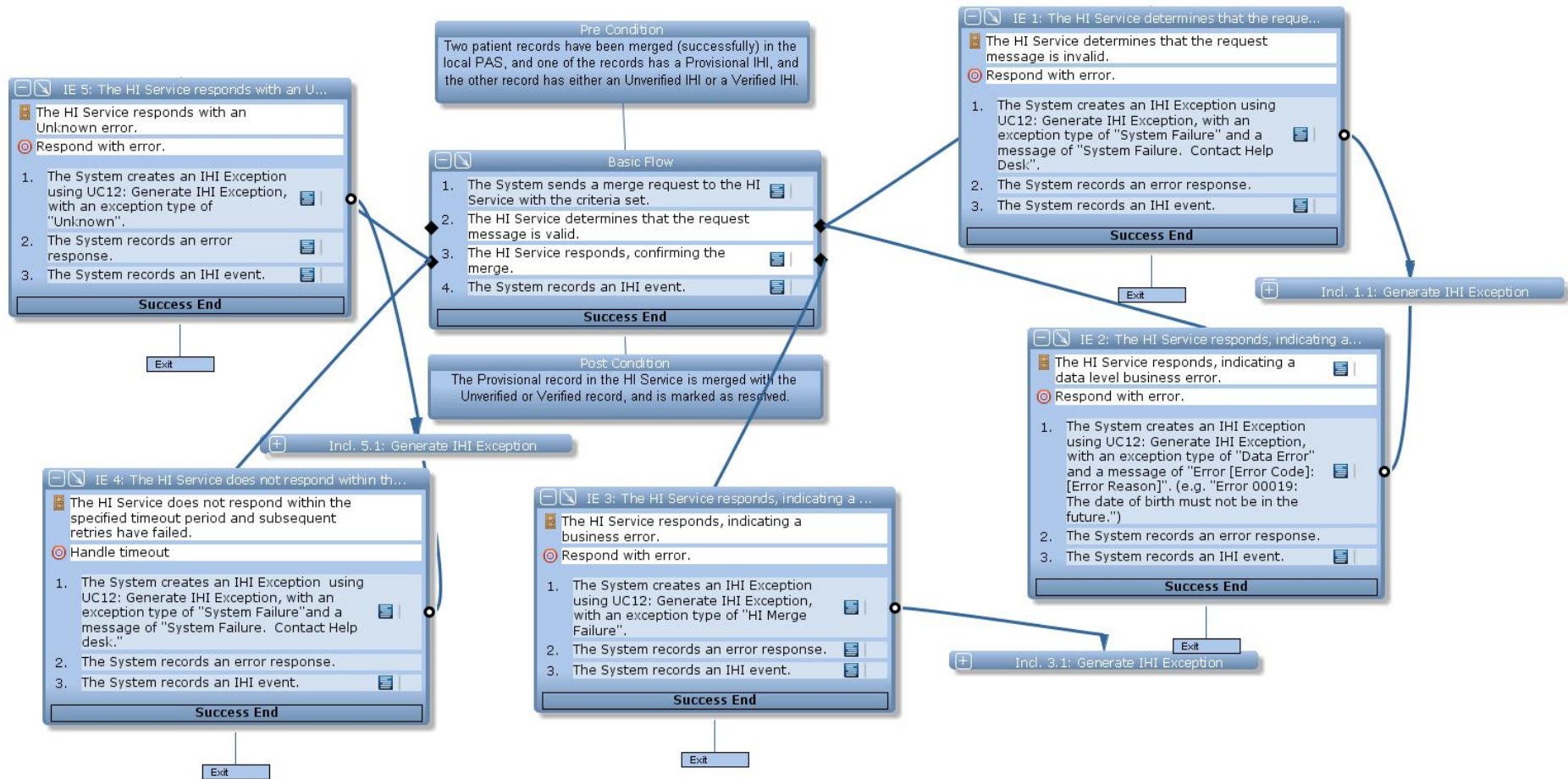| ID	Message
EM145 / E100	The HI Service is offline.
EM310 / 01474	Please contact Help Desk to resolve the unknown error.
EM341 / 01458	Existing Unverified IHI record exists with these details. Change existing details or enter an address for this record.
EM509 / 01620	This is an invalid amendment request 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	The Date of Death from Births, Deaths and Marriages already exists for the Record.
EM596 / 01428	The Date of Death Accuracy Indicator from Births, Deaths and Marriages already exists for the Record.
EM512 / 01690	The Source of Death Notification from Births, Deaths and Marriages already exists for the IHI Record.
EM592 / 01457	IHI records with an Expired or Retired Status cannot be updated via this channel.

AUDIT LOG:

ID	Name	Description
AL707	Update IHI Request Event - Invalid Request Message	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Update IHI Request" • Event Status = "Failed" • Event Message = "Invalid request message"
AL708	Update IHI Request Event - Data Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Update IHI Request" • Event Status = "Failed" • Event Message = "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
AL709	Update IHI Request Event - Timeout	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Update IHI Request" • Event Status = "Aborted" • Event Message = "The HI Service is offline."
AL710	Update IHI Request Event - Unknown Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Update IHI Request" • Event Status = "Failed" • Event Message = "Unknown Error"
AL711	Update IHI Request Event - Existing Unverified or Verified Record	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Update IHI Request" • Event Status = "Failed" • Event Message = "Existing Verified or Unverified IHI record with the same details."
AL712	Update IHI Request Event - Retired/Expired	Audit Log details captured are as follows:

ID	Name	Description
	Record	• Date/Time • User ID • Event Type = "Update IHI Request" • Event Status = "Failed" • Event Message = "Current Patient flagged as Retired/Expired in HI Service."
AL713	Update IHI Request Event - Existing Death Details	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Update IHI Request" • Event Status = "Failed" • Event Message = "Existing Death details."
AL714	Update IHI Request Event - Verified Non-Death Details	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Update IHI Request" • Event Status = "Failed" • Event Message = "Non-Death Details may not be updated for a Verified IHI."
AL727	Update IHI Request Event - Success	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Update IHI Request" • Event Status = "Success" • Event Message = "Update IHI Request Successful."

3.6 UC43 : Send Merge Request

Actors	The PAS System
Overview	This use case automates the merge processing of patient records with Provisional IHIs with patient records with Unverified or Verified IHIs.
	This will only occur as a result of a patient merge in the local PAS.
	This use case relies upon the HI Service function "Resolve Provisional IHI - Merge Records via B2B".
Pre Condition	Two patient records have been merged (successfully) in the local PAS, and one of the records has a Provisional IHI, and the other record has either an Unverified IHI or a Verified IHI.
Post Condition	The Provisional record in the HI Service is merged with the Unverified or Verified record, and is marked as resolved.
Circumstances of Use	This use case applies when a patient has presented, perhaps to ED, and they are not able to be identified so a Quick Registration has been used and (based on health service policy) a Provisional IHI requested and assigned.
	Subsequently, the patient's details are obtained, and an existing record is located within the PAS. The user then uses the PAS' merge function to combine the records, with the anonymous record becoming the secondary.
	On successful completion of the PAS merge, and subject to the primary record having an IHI, the merge request will be sent to the HI Service.
Included In (Other Use Cases)	UC51: Process Patient Details Update
	UC55: Reset Merge
	UC28: Merge Patient Records
Business Processes	None – see "Included in" Use Cases above.

Pre Condition

Two patient records have been merged (successfully) in the local PAS, and one of the records has a Provisional IHI, and the other record has either an Unverified IHI or a Verified IHI.

IE 1: The HI Service determines that the reque...

The HI Service determines that the request message is invalid.

◉ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Incl. 1.1: Generate IHI Exception

IE 5: The HI Service responds with an U...

The HI Service responds with an Unknown error.

◉ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Basic Flow

1. The System sends a merge request to the HI Service with the criteria set.
2. The HI Service determines that the request message is valid.
3. The HI Service responds, confirming the merge.
4. The System records an IHI event.

Success End

Post Condition

The Provisional record in the HI Service is merged with the Unverified or Verified record, and is marked as resolved.

Incl. 5.1: Generate IHI Exception

IE 2: The HI Service responds, indicating a...

The HI Service responds, indicating a data level business error.

◉ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
2. The System records an error response.
3. The System records an IHI event.

Success End

IE 4: The HI Service does not respond within th...

The HI Service does not respond within the specified timeout period and subsequent retries have failed.

◉ Handle timeout

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

IE 3: The HI Service responds, indicating a ...

The HI Service responds, indicating a business error.

◉ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "HI Merge Failure".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Exit

Incl. 3.1: Generate IHI Exception

#	Description	Requirement/ Include
1	The System sends a merge request to the HI Service with the criteria set.	RU607
2	The HI Service determines that the request message is valid.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determines that the request message is invalid.	IE 1	
The HI Service responds, indicating a data level business error.	IE 2	

#	Description	Requirement/Include
3	The HI Service responds, confirming the merge.	IM601

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service responds, indicating a business error.	IE 3	
The HI Service does not respond within the specified timeout period and subsequent retries have failed.	IE 4	
The HI Service responds with an Unknown error.	IE 5	

#	Description	Requirement/Include
4	The System records an IHI event.	AL728

Internal Extension (Alternate Flow)   IE 1

Condition: The HI Service determines that the request message is invalid.
Goal: Respond with error.
Requirements:

#	Description	Requirement/Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".	EX644 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL716

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 2

Condition: The HI Service responds, indicating a data level business error.
Goal: Respond with error.
Requirements: RU146 RU148 RU594

#	Description	Requirement/Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")	EX648 UC12: Generate IHI Exception
2	The System records an error response.	

3	The System records an IHI event.	AL717

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 3

Condition:	The HI Service responds, indicating a business error.
Goal:	Respond with error.
Requirements:	

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "HI Merge Failure".	EX655 UC12: Generate IHI Exception
2	The System records an error response.	EM603 EM604 EM605 EM606
3	The System records an IHI event.	AL720

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 4

Condition:	The HI Service does not respond within the specified timeout period and subsequent retries have failed.
Goal:	Handle timeout
Requirements:	

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."	EX644 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL718

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 5

Condition:	The HI Service responds with an Unknown error.
Goal:	Respond with error.
Requirements:	

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".	EX653 UC12: Generate IHI Exception
2	The System records an error response.	EM310
3	The System records an IHI event.	AL719

Next Step:	BF: Basic Flow	EXIT

BUSINESS RULES:

ID	Business Rule	Error #	Error Type
RU607	The following details are included in a Merge Request: • Provisional IHI (Mandatory) • Existing (Unverified or Verified) IHI (Mandatory)	N/A	N/A

ID	Business Rule	Error #	Error Type
RU146	The IHI Number must include a valid check digit.	01514	Error
RU148	The IHI Number must be 16 digits.	01675	Error
RU594	The value should be as follows: http://ns.electronichealth.net.au/id/hi/ihi/1.0/nnnnnnnnnnnnnnnn where nnnnnnnnnnnnnnnn is the 16 digit number allocated to the record.	badlyFormedMsg	ESB Error

INFORMATION MESSAGES:

ID	Message
IM601 / 01443	The provisional record has been successfully resolved.

ERROR MESSAGES:

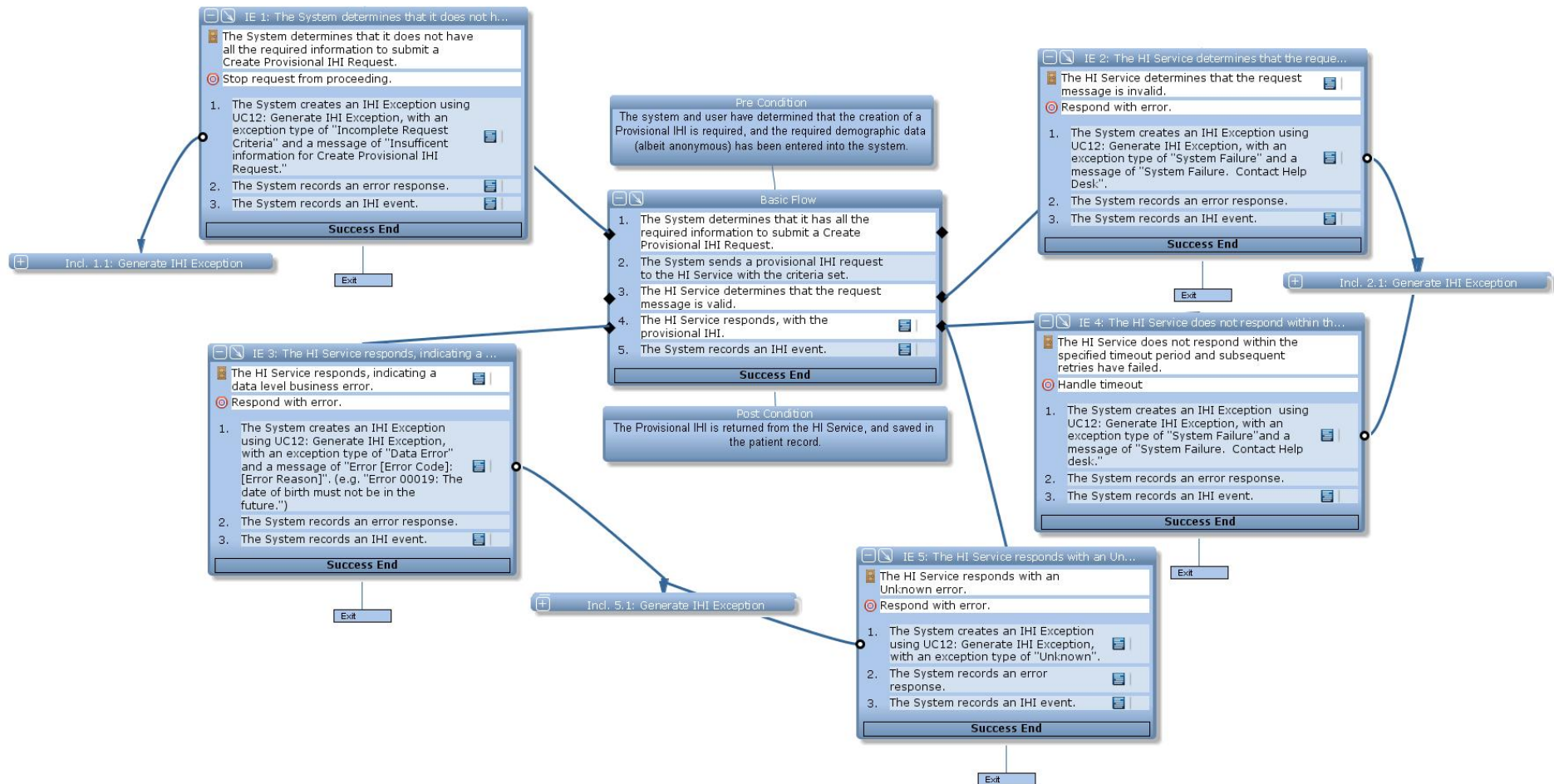| ID	Message
EM603 / 01500	No match has been found.
EM310 / 01474	Please contact Help Desk to resolve the unknown error.
EM604 / 01601	The Provisional Record Status does not match the Record Status found.
EM605 / 01687	The Unverified/Verified Record Status does not match the Record Status found.
EM606 / 01688	The record to be processed does not have active or deceased Status.

AUDIT LOG:

ID	Name	Description
AL716	Merge Request Event - Invalid Request Message	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Merge Request" • Event Status = "Failed" • Event Message = "Invalid request message"
AL717	Merge Request Event - Data Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Merge Request" • Event Status = "Failed" • Event Message = "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
AL718	Merge Request Event - Timeout	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Merge Request" • Event Status = "Aborted" • Event Message = "The HI Service is offline."
AL719	Merge Request Event - Unknown Error	Audit Log details captured are as follows: • Date/Time • User ID

ID	Name	Description
		• Event Type = "Merge Request" • Event Status = "Failed" • Event Message = "Unknown Error"
AL720	Merge Request Event - Business Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Merge Request" • Event Status = "Failed" • Event Message = "Business Error"
AL728	Merge Request Event - Success	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Merge Request" • Event Status = "Success" • Event Message = "Merge Request Successful."

3.7   UC44 : Send Provisional IHI Request

Actors	The PAS System
Overview	This use case can only occur in circumstances where the health service has established a policy to enable the use of Provisional IHIs. The use case will send anonymous data to the HI Service and request the creation of a Provisional IHI. The HI Service will return the created IHI. Note that there is no uniqueness check in the HI Service for Provisional IHI creation requests (based on Name, DOB and gender data), and that Provisional IHIs expire after 90 days of no activity.
Pre Condition	The system and user have determined that the creation of a Provisional IHI is required, and the required demographic data (albeit anonymous) has been entered into the system.
Post Condition	The Provisional IHI is returned from the HI Service, and saved in the patient record.
Circumstances of Use	This use case will apply when the health service has established a policy of requesting Provisional IHIs when patients present and cannot be identified, ie they may be unconscious.
Included In (Other Use Cases)	None
Business Processes	BP2: Unreferred Patient Presentation

IE 1: The System determines that it does not h...

The System determines that it does not have all the required information to submit a Create Provisional IHI Request.

◎ Stop request from proceeding.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Incomplete Request Criteria" and a message of "Insufficent information for Create Provisional IHI Request."
2. The System records an error response.
3. The System records an IHI event.

Success End

Incl. 1.1: Generate IHI Exception

Exit

Pre Condition

The system and user have determined that the creation of a Provisional IHI is required, and the required demographic data (albeit anonymous) has been entered into the system.

Basic Flow

1. The System determines that it has all the required information to submit a Create Provisional IHI Request.
2. The System sends a provisional IHI request to the HI Service with the criteria set.
3. The HI Service determines that the request message is valid.
4. The HI Service responds, with the provisional IHI.
5. The System records an IHI event.

Success End

Post Condition

The Provisional IHI is returned from the HI Service, and saved in the patient record.

IE 2: The HI Service determines that the reque...

The HI Service determines that the request message is invalid.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Incl. 2.1: Generate IHI Exception

IE 3: The HI Service responds, indicating a ...

The HI Service responds, indicating a data level business error.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Incl. 5.1: Generate IHI Exception

IE 4: The HI Service does not respond within th...

The HI Service does not respond within the specified timeout period and subsequent retries have failed.

◎ Handle timeout

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure"and a message of "System Failure. Contact Help desk."
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

IE 5: The HI Service responds with an Un...

The HI Service responds with an Unknown error.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

BASIC FLOW:

#	Description	Requirement/ 🟢Include
1	The System determines that it has all the required information to submit a Create Provisional IHI Request.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The System determines that it does not have all the required information to submit a Create Provisional IHI Request.	IE 1	

#	Description	Requirement/ 🟢Include
2	The System sends a provisional IHI request to the HI Service with the criteria set.	
3	The HI Service determines that the request message is valid.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determines that the request message is invalid.	IE 2	

#	Description	Requirement/ 🟢Include
4	The HI Service responds, with the provisional IHI.	RU344 IM345

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service responds, indicating a data level business error.	IE 3	
The HI Service does not respond within the specified timeout period and subsequent retries have failed.	IE 4	
The HI Service responds with an Unknown error.	IE 5	

#	Description	Requirement/ 🟢Include
5	The System records an IHI event.	AL729

Internal Extension (Alternate Flow)   IE 1

Condition:	The System determines that it does not have all the required information to submit a Create Provisional IHI Request.
Goal:	Stop request from proceeding.
Requirements:	

#	Description	Requirement/🟢Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Incomplete Request Criteria" and a message of "Insufficient information for Create Provisional IHI Request."	EX641 🟢UC12: Generate IHI Exception
2	The System records an error response.	EM135
3	The System records an IHI event.	AL722

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 2

Condition:	The HI Service determines that the request message is invalid.

Goal:	Respond with error.	
Requirements:	RU160 RU163 RU165 RU167 RU168 RU254 RU255 RU256 RU258 RU259	

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".	EX644 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL723

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 3

Condition:	The HI Service responds, indicating a data level business error.
Goal:	Respond with error.
Requirements:	RU158 RU162 RU169 RU170 RU257 RU263 RU264 RU265 RU266 RU267

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")	EX648 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL724

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 4

Condition:	The HI Service does not respond within the specified timeout period and subsequent retries have failed.
Goal:	Handle timeout
Requirements:	

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."	EX644 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL725

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 5

Condition:	The HI Service responds with an Unknown error.
Goal:	Respond with error.
Requirements:	

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".	EX653 UC12: Generate IHI Exception
2	The System records an error response.	EM310
3	The System records an IHI event.	AL730

Next Step:	BF: Basic Flow	EXIT

BUSINESS RULES:

ID	Business Rule	Error #	Error Type
RU343	The following details are included in a Create Provisional HI Request: • Family Name (mandatory) • Given Name 1 (optional) • Sex (mandatory) • Date of Birth (mandatory) • Date of Birth Accuracy Indicator (Mandatory) • Date of Death (optional) • Date of Death Accuracy Indicator (optional) • Source of Death Notification (optional)	badlyFormedMsg	N/A
RU158	The given name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01418	Error
RU160	The maximum field length for a given name is 40.	badlyFormedMsg	ESB Error
RU162	The family name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	00013	Error
RU163	The maximum field length for a family name is 40.	badlyFormedMsg	ESB Error
RU165	Date of Birth must be eight digits in length, in YYYYMMDD format.	badlyFormedMsg	ESB Error
RU167	Date of Birth must only contain numeric characters.	badlyFormedMsg	ESB Error
RU168	Date of Birth must be a valid calendar date.	badlyFormedMsg	ESB Error
RU169	Year of Birth must be greater or equal to 1800.	00018	Error
RU170	Date of Birth must not be in the future.	00019	Error
RU254	Date of Death must be eight digits in length.	badlyFormedMsg	ESB Error
RU255	Date of Death must only contain numeric characters.	badlyFormedMsg	ESB Error
RU256	Date of Death must be a valid calendar date.	badlyFormedMsg	ESB Error
RU257	Date of Death must not be in the future.	00267	Error

ID	Business Rule	Error #	Error Type
RU258	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU259	Source of Death Notification must be a valid code. "H" = Health Care Provider.	badlyFormedMsg	ESB Error
RU263	Date of Death must not be before Date of Birth.	00275	Error
RU264	Date of Death is mandatory when a Death Notification Source has been provided.	00370	Error
RU265	Death Notification Source is mandatory when a Date of Death has been provided.	00371	Error
RU266	Date of Death is mandatory when a Death Accuracy Indicator has been provided.	01400	Error
RU267	Death Accuracy Indicator is mandatory when a Date of Death has been provided.	01401	Error
RU344	The Create Provisional IHI Response contains any of the following: • IHI Number • IHI Record Status (value = "Provisional") • IHI Status (value = "Active") • Successful creation message • Error message • Information message	01466	N/A
RU334	No evidence of identity (EOI) is required for the creation of a Provisional IHI record.		N/A
RU335	A Provisional IHI record will be expired by the Service Operator after a parameter set period of inactivity on the record (currently set to 90 days). Activity is classed as any update to the Provisional IHI record. After this time the IHI Record status will remain as Provisional and the IHI status will be set to Expired.		N/A

DEPENDENCIES:

ID	Description
DP583	Provisional IHI use - If a health service chooses to use Provisional IHIs.

INFORMATION MESSAGES:

ID	Message
IM345 / 01466	The Provisional IHI has been successfully created.

ERROR MESSAGES:

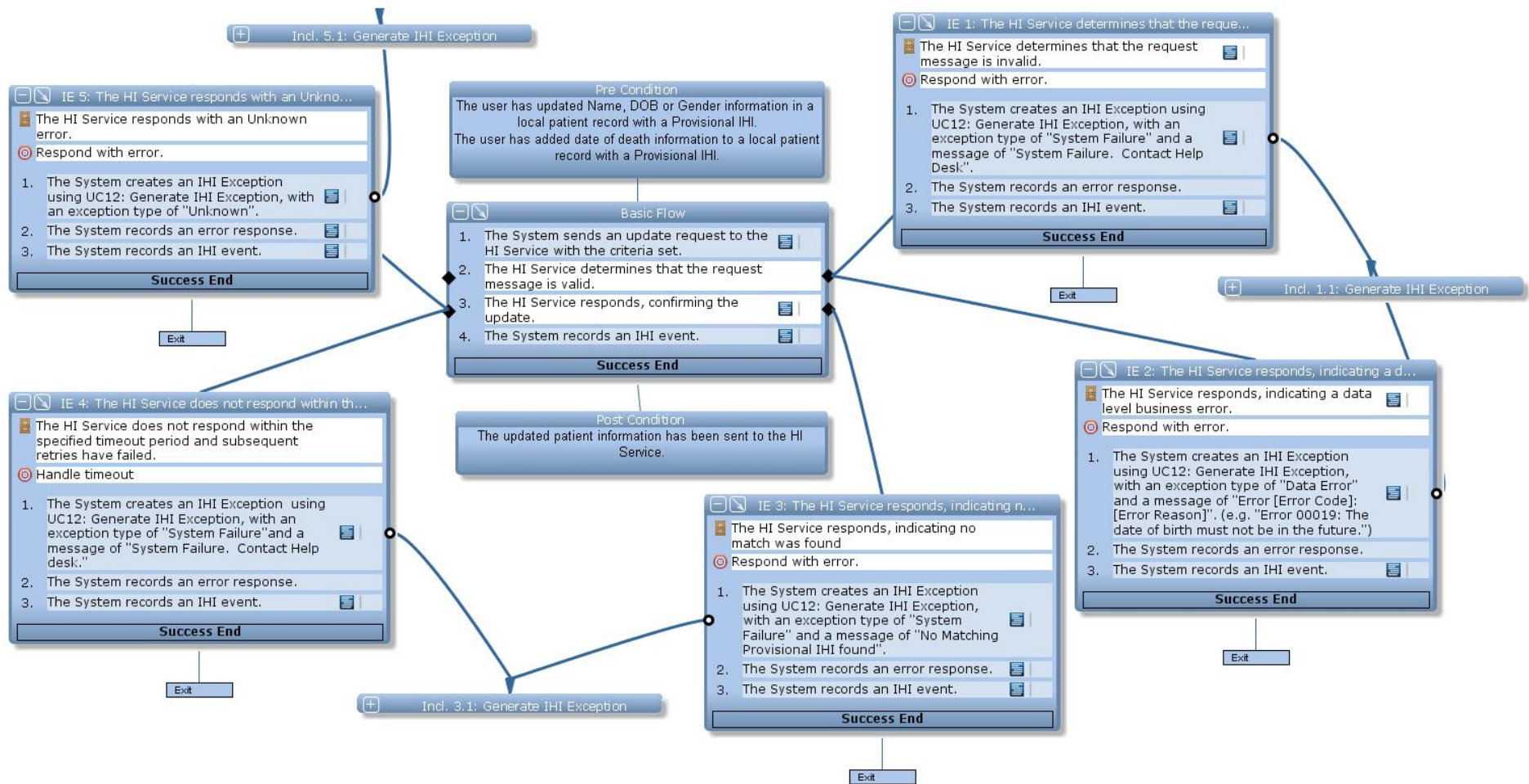| ID	Message
EM135 /	The patient record does not have sufficient information held on it to perform the IHI request.

ID	Message
E101	
EM310 / 01474	Please contact Help Desk to resolve the unknown error.

AUDIT LOG:

ID	Name	Description
AL722	Provisional IHI Request Event - Insufficient Information	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Aborted" • Event Message = "The patient record does not have sufficient information held on it to perform the IHI request."
AL723	Provisional IHI Request Event - Invalid Request Message	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Failed" • Event Message = "Invalid request message"
AL724	Provisional IHI Request Event - Data Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Failed" • Event Message = "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
AL725	Provisional IHI Request Event - Timeout	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Aborted" • Event Message = "The HI Service is offline."
AL729	Provisional IHI Request Event - Success	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Success" • Event Message = "Provisional IHI Request Successful."
AL730	Provisional IHI Request Event - Unknown Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Failed" • Event Message = "Unknown Error"

3.8 UC45 : Send Provisional IHI Update Request

Actors	The PAS System
Overview	This use case enables the updating of data in the HI Service, when name, DOB or gender information is updated in a local (PAS) patient record with a Provisional IHI.
Pre Condition	The user has updated Name, DOB or Gender information in a local patient record with a Provisional IHI.
	The user has added date of death information to a local patient record with a Provisional IHI.
Post Condition	The updated patient information has been sent to the HI Service.
Circumstances of Use	This use case will apply when an anonymous record has been created in the PAS, and a Provisional IHI allocated, and subsequently selected patient details are updated by the user.
	The use of this function will be driven by State/territory or health service policy, given the inherent risks in updating the details of a Provisional IHI (no health service who has received the Provisional IHI will be able to check it if the demographic details are changed without notification).
Included In (Other Use Cases)	UC51: Process Patient Details Update
Business Processes	None – see "Included in" Use Case above.

Incl. 5.1: Generate IHI Exception

IE 1: The HI Service determines that the reque...

The HI Service determines that the request message is invalid.

⊚ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

IE 5: The HI Service responds with an Unkno...

The HI Service responds with an Unknown error.

⊚ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Pre Condition

The user has updated Name, DOB or Gender information in a local patient record with a Provisional IHI.

The user has added date of death information to a local patient record with a Provisional IHI.

Basic Flow

1. The System sends an update request to the HI Service with the criteria set.
2. The HI Service determines that the request message is valid.
3. The HI Service responds, confirming the update.
4. The System records an IHI event.

Success End

Post Condition

The updated patient information has been sent to the HI Service.

Incl. 1.1: Generate IHI Exception

IE 2: The HI Service responds, indicating a d...

The HI Service responds, indicating a data level business error.

⊚ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

IE 4: The HI Service does not respond within th...

The HI Service does not respond within the specified timeout period and subsequent retries have failed.

⊚ Handle timeout

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

IE 3: The HI Service responds, indicating n...

The HI Service responds, indicating no match was found

⊚ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "No Matching Provisional IHI found".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Incl. 3.1: Generate IHI Exception

BASIC FLOW:

#	Description	Requirement/ Include
1	The System sends an update request to the HI Service with the criteria set.	RU610
2	The HI Service determines that the request message is valid.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determines that the request message is invalid.	IE 1	
The HI Service responds, indicating a data level business error.	IE 2	

#	Description	Requirement/ Include
3	The HI Service responds, confirming the update.	IM591

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service responds, indicating no match was found.	IE 3	
The HI Service does not respond within the specified timeout period and subsequent retries have failed.	IE 4	
The HI Service responds with an Unknown error.	IE 5	

#	Description	Requirement/ Include
4	The System records an IHI event.	AL735

Internal Extension (Alternate Flow)   IE 1

Condition: The HI Service determines that the request message is invalid.
Goal: Respond with error.
Requirements: RU160 RU163 RU164 RU165 RU167 RU168 RU252 RU254 RU255 RU256 RU258 RU259

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".	EX644 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL732

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 2

Condition: The HI Service responds, indicating a data level business error.
Goal: Respond with error.
Requirements: RU146 RU148 RU594 RU158 RU162 RU169 RU170 RU257 RU263 RU264 RU265 RU266 RU267

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]:	EX648 UC12: Generate IHI Exception

	[Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")	
2	The System records an error response.	
3	The System records an IHI event.	AL733

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 3

Condition: The HI Service responds, indicating no match was found
Goal: Respond with error.
Requirements:

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "No Matching Provisional IHI found".	EX644 UC12: Generate IHI Exception
2	The System records an error response.	EM603
3	The System records an IHI event.	AL737

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 4

Condition: The HI Service does not respond within the specified timeout period and subsequent retries have failed.
Goal: Handle timeout
Requirements:

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."	EX644 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL734

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 5

Condition: The HI Service responds with an Unknown error.
Goal: Respond with error.
Requirements:

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".	EX653 UC12: Generate IHI Exception
2	The System records an error response.	EM310
3	The System records an IHI event.	AL736

Next Step: BF: Basic Flow   EXIT

BUSINESS RULES:

ID	Business Rule	Error #	Error Type
RU610	The following details are included in an Update Provisional HI	N/A	N/A

ID	Business Rule	Error #	Error Type
	Request: • IHI (Mandatory) • Family Name (Mandatory) • Given Name (Optional) • Sex (Mandatory) • Date of Birth (Mandatory) • Date of Birth Accuracy Indicator (Mandatory) • Date of Death (Optional) • Date of Death Accuracy Indicator (Conditional) • Source of Death Notification (Conditional)		
RU146	The IHI Number must include a valid check digit.	01514	Error
RU148	The IHI Number must be 16 digits.	01675	Error
RU594	The value should be as follows: http://ns.electronichealth.net.au/id/hi/ihi/1.0/nnnnnnnnnnnnnnnn where nnnnnnnnnnnnnnnn is the 16 digit number allocated to the record.	badlyFormedMsg	ESB Error
RU158	The given name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01418	Error
RU160	The maximum field length for a given name is 40.	badlyFormedMsg	ESB Error
RU162	The family name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	00013	Error
RU163	The maximum field length for a family name is 40.	badlyFormedMsg	ESB Error
RU164	The valid values for sex are • M (Male) • F (Female) • I (Intersex or Indeterminate) • N (Not stated/inadequately described)	badlyFormedMsg	ESB Error
RU165	Date of Birth must be eight digits in length, in YYYYMMDD format.	badlyFormedMsg	ESB Error
RU167	Date of Birth must only contain numeric characters.	badlyFormedMsg	ESB Error
RU168	Date of Birth must be a valid calendar date.	badlyFormedMsg	ESB Error
RU169	Year of Birth must be greater or equal to 1800.	00018	Error

ID	Business Rule	Error #	Error Type
RU170	Date of Birth must not be in the future.	00019	Error
RU252	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU254	Date of Death must be eight digits in length.	badlyFormedMsg	ESB Error
RU255	Date of Death must only contain numeric characters.	badlyFormedMsg	ESB Error
RU256	Date of Death must be a valid calendar date.	badlyFormedMsg	ESB Error
RU257	Date of Death must not be in the future.	00267	Error
RU258	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU259	Source of Death Notification must be a valid code. "H" = Health Care Provider.	badlyFormedMsg	ESB Error
RU263	Date of Death must not be before Date of Birth.	00275	Error
RU264	Date of Death is mandatory when a Death Notification Source has been provided.	00370	Error
RU265	Death Notification Source is mandatory when a Date of Death has been provided.	00371	Error
RU266	Date of Death is mandatory when a Death Accuracy Indicator has been provided.	01400	Error
RU267	Death Accuracy Indicator is mandatory when a Date of Death has been provided.	01401	Error

DEPENDENCIES:

ID	Description
DP583	Provisional IHI use - If a health service chooses to use Provisional IHIs.

INFORMATION MESSAGES:

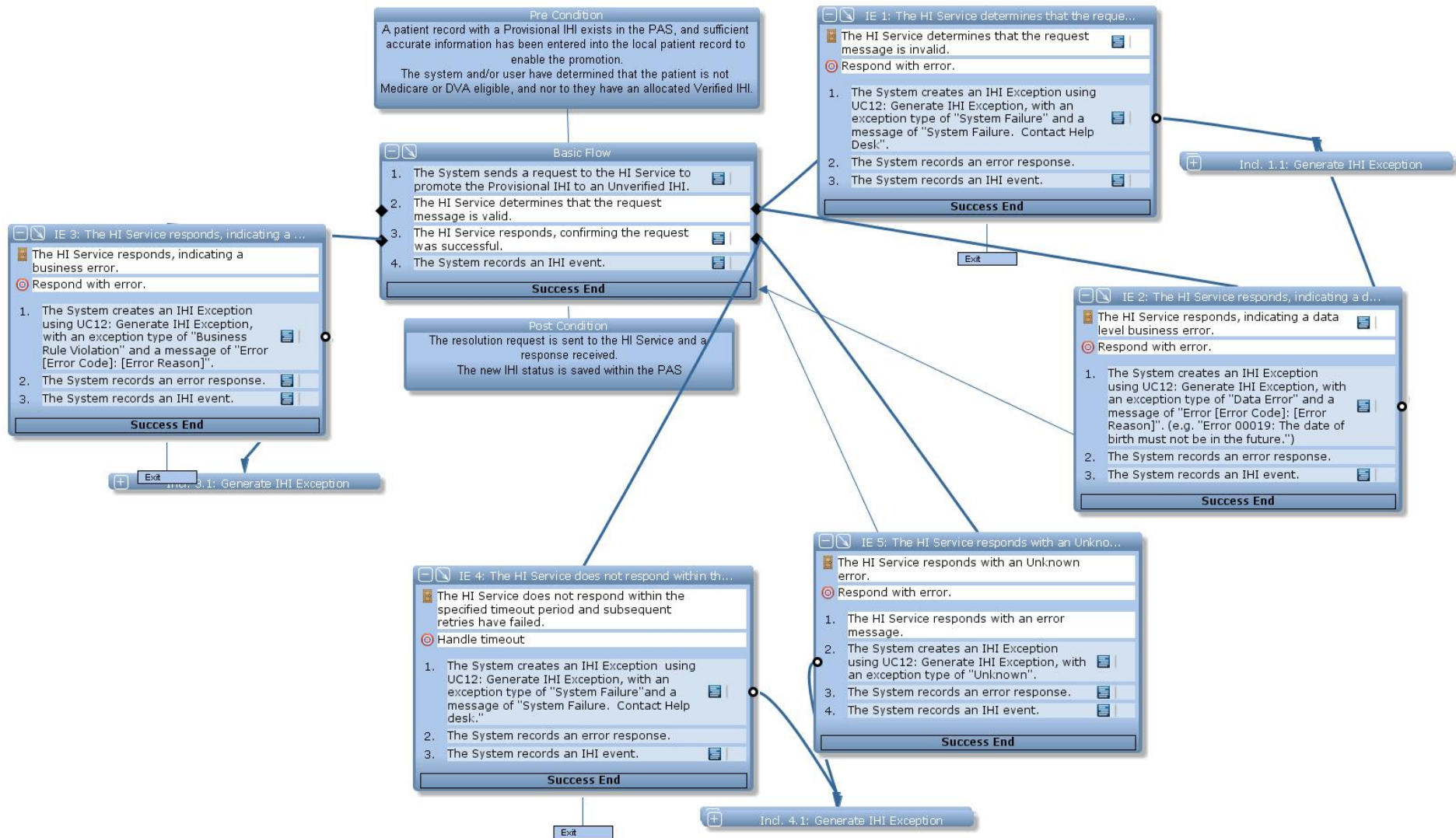| ID	Message
IM591 / 01402	The Record has been successfully updated.

ERROR MESSAGES:

ID	Message
EM603 / 01500	No match has been found.
EM310 / 01474	Please contact Help Desk to resolve the unknown error.

ID	Name	Description
AL732	Provisional IHI Update Request Event - Invalid Request Message	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Update Request" • Event Status = "Failed" • Event Message = "Invalid request message"
AL733	Provisional IHI Update Request Event - Data Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Update Request" • Event Status = "Failed" • Event Message = "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
AL734	Provisional IHI Update Request Event - Timeout	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Update Request" • Event Status = "Aborted" • Event Message = "The HI Service is offline."
AL735	Provisional IHI Update Request Event - Success	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Update Request" • Event Status = "Success" • Event Message = "Provisional IHI Request Successful."
AL736	Provisional IHI Update Request Event - Unknown Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Update Request" • Event Status = "Failed" • Event Message = "Unknown Error"
AL737	Provisional IHI Update Request Event - No Match Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Update Request" • Event Status = "Failed" • Event Message = "No Match Found"

3.9 UC49 : Send Provisional to Unverified Resolution Request

Actors	The PAS System
Overview	This use case supports the "promotion" of a Provisional IHI to an Unverified IHI, with the same IHI number being preserved.
Pre Condition	A patient record with a Provisional IHI exists in the PAS, and sufficient accurate information has been entered into the local patient record to enable the promotion. The system and/or user have determined that the patient is not Medicare or DVA eligible, and nor to they have an allocated Verified IHI.
Post Condition	The resolution request is sent to the HI Service and a response received. The new IHI status is saved within the PAS
Circumstances of Use	A patient record with a Provisional IHI exists in the PAS, and sufficient accurate information has been entered into the local patient record to enable the promotion (name, DOB, gender, address).
Included In (Other Use Cases)	UC36: Add Exception Resolution
Business Processes	None – see "Included in" Use Case above.

Pre Condition

A patient record with a Provisional IHI exists in the PAS, and sufficient accurate information has been entered into the local patient record to enable the promotion.
The system and/or user have determined that the patient is not Medicare or DVA eligible, and nor to they have an allocated Verified IHI.

IE 1: The HI Service determines that the reque...

The HI Service determines that the request message is invalid.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".
2. The System records an error response.
3. The System records an IHI event.

Success End

Incl. 1.1: Generate IHI Exception

Basic Flow

1. The System sends a request to the HI Service to promote the Provisional IHI to an Unverified IHI.
2. The HI Service determines that the request message is valid.
3. The HI Service responds, confirming the request was successful.
4. The System records an IHI event.

Success End

IE 3: The HI Service responds, indicating a ...

The HI Service responds, indicating a business error.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Business Rule Violation" and a message of "Error [Error Code]: [Error Reason]".
2. The System records an error response.
3. The System records an IHI event.

Success End

Incl. 3.1: Generate IHI Exception

Exit

Post Condition

The resolution request is sent to the HI Service and a response received.
The new IHI status is saved within the PAS

IE 2: The HI Service responds, indicating a d...

The HI Service responds, indicating a data level business error.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
2. The System records an error response.
3. The System records an IHI event.

Success End

IE 5: The HI Service responds with an Unkno...

The HI Service responds with an Unknown error.

◎ Respond with error.

1. The HI Service responds with an error message.
2. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".
3. The System records an error response.
4. The System records an IHI event.

Success End

IE 4: The HI Service does not respond within th...

The HI Service does not respond within the specified timeout period and subsequent retries have failed.

◎ Handle timeout

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Incl. 4.1: Generate IHI Exception

BASIC FLOW:

#	Description	Requirement/ 🟢Include
1	The System sends a request to the HI Service to promote the Provisional IHI to an Unverified IHI.	RU608
2	The HI Service determines that the request message is valid.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determines that the request message is invalid.	IE 1	
The HI Service responds, indicating a data level business error.	IE 2	

#	Description	Requirement/ Include
3	The HI Service responds, confirming the request was successful.	IM609

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service responds, indicating a business error.	IE 3	
The HI Service does not respond within the specified timeout period and subsequent retries have failed.	IE 4	
The HI Service responds with an Unknown error.	IE 5	

#	Description	Requirement/ Include
4	The System records an IHI event.	AL742

Internal Extension (Alternate Flow)   IE 1

Condition:	The HI Service determines that the request message is invalid.
Goal:	Respond with error.
Requirements:	RU160 RU163 RU232 RU233 RU589 RU590 RU171 RU186 RU183 RU187 RU177 RU180 RU174 RU190 RU191 RU192 RU195 RU196 RU199 RU202 RU203 RU234 RU237 RU221 RU205 RU209 RU597 RU598 RU599 RU270 RU271 RU272 RU287 RU288 RU164 RU165 RU167 RU168 RU250 RU251 RU252 RU254 RU255 RU256 RU258 RU259

#	Description	Requirement/🟢Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".	EX644 🟢UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL739

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 2

Condition:	The HI Service responds, indicating a data level business error.
Goal:	Respond with error.
Requirements:	RU146 RU148 RU594 RU158 RU162 RU185 RU182 RU176 RU238 RU239 RU207 RU173 RU189 RU194 RU240 RU198 RU201 RU245 RU247 RU600 RU276 RU277 RU279 RU280 RU281 RU282 RU283 RU284 RU285 RU286 RU169 RU170 RU261 RU262 RU257 RU263 RU264 RU265 RU266 RU267

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")	EX648 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL740

Next Step:	BF: Basic Flow	SUCCESS_END

Internal Extension (Alternate Flow)   IE 3

Condition: The HI Service responds, indicating a business error.
Goal: Respond with error.
Requirements:

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Business Rule Violation" and a message of "Error [Error Code]: [Error Reason]".	EX654 UC12: Generate IHI Exception
2	The System records an error response.	EM341 EM604
3	The System records an IHI event.	AL744

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 4

Condition: The HI Service does not respond within the specified timeout period and
                    subsequent retries have failed.
Goal: Handle timeout
Requirements:

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."	EX644 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL741

Next Step:	BF: Basic Flow	EXIT

Internal Extension (Alternate Flow)   IE 5

Condition: The HI Service responds with an Unknown error.
Goal: Respond with error.
Requirements:

#	Description	Requirement/ Include
1	The HI Service responds with an error message.	
2	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".	EX653 UC12: Generate IHI Exception
3	The System records an error response.	EM310
4	The System records an IHI event.	AL743

Next Step:	BF: Basic Flow	SUCCESS_END

ID	Business Rule	Error #	Error Type

RU608	The following details are included in an Unverified IHI Request:
	• IHI (Mandatory)
	• Health Service Reference ID
	
	Individual Healthcare Identification Entity
	• Sex (Mandatory)
	• Date of Birth (Mandatory)
	• Date of Birth Accuracy Indicator (Mandatory)
	• Birth Plurality (Conditional)
	• Birth Order (Conditional)
	• Date of Death (Optional)
	• Date of Death Accuracy Indicator (Conditional)
	• Source of Death Notification (Conditional)
	
	Name Entity (more than one may be provided)
	• Name Title (Optional)
	• Family Name (Mandatory)
	• Given Name (Optional, 0 to 2 instances)
	• Name Suffix (Optional)
	• Usage (Mandatory)
	• Conditional Use (Optional)
	
	Address Entity, 0 to 1 instances:
	• Australian Street Address (Optional)
	  o State (conditional mandatory)
	  o Postcode (conditional mandatory)
	  o Suburb (conditional mandatory)
	  o Address Site Name (Optional)
	  o Unit Group (Optional)
	    ▪ Unit Type (conditional mandatory)
	    ▪ Unit Number (Optional)
	  o Level Group (Optional)
	    ▪ Level Type (conditional mandatory)
	    ▪ Level Number (Optional)
	  o Lot Number (Optional)
	  o Street Number (Optional)
	  o Street Name (conditional mandatory)
	  o Street Type (Optional)
	  o Street Suffix (Optional)
	
	• Australian Postal Address (Optional)
	  o State (conditional mandatory)
	  o Postcode (conditional mandatory)
	  o Suburb (conditional mandatory)
	  o Postal Delivery Group (conditional mandatory)
	    ▪ Postal Delivery Type
		badlyFormedMsg	ESB Error

ID	Business Rule	Error #	Error Type

	▪ Postal Delivery Number (conditional mandatory)
	  • International Address (Optional)
	     ○ International State/Province (conditional mandatory)
	     ○ International Address Line (conditional mandatory)
	     ○ International Postcode (conditional mandatory)
	     ○ Country (conditional mandatory)
	  • Purpose (conditional mandatory)
	  • Preferred (conditional mandatory)
	
	Electronic Communications Entity (0 to many instances)
	  • Electronic Communication Medium (conditional mandatory)
	  • Electronic Communication Usage Code (conditional mandatory)
	  • Electronic Communication Detail (conditional mandatory)
	  • Preferred (optional)		

RU146	The IHI Number must include a valid check digit.	01514	Error
RU148	The IHI Number must be 16 digits.	01675	Error
RU594	The value should be as follows: http://ns.electronichealth.net.au/id/hi/ihi/1.0/nnnnnnnnnnnnnnnn where nnnnnnnnnnnnnnnn is the 16 digit number allocated to the record.	badlyFormedMsg	ESB Error

RU158	The given name may only contain the following character sets:
	
	  • alpha
	  • numeric
	  • apostrophes
	  • hyphens
	Spaces must not appear immediately before or after apostrophes and hyphens.
		01418	Error

RU160	The maximum field length for a given name is 40.	badlyFormedMsg	ESB Error

RU162	The family name may only contain the following character sets:
	
	  • alpha
	  • numeric
	  • apostrophes
	  • hyphens
	Spaces must not appear immediately before or after apostrophes and hyphens.
		00013	Error

RU163	The maximum field length for a family name is 40.	badlyFormedMsg	ESB Error
RU232	Name Suffix must be a valid value.	badlyFormedMsg	ESB Error
RU233	Usage must be a single character. Must be a valid value.	badlyFormedMsg	ESB

ID	Business Rule	Error #	Error Type
			Error
RU589	Conditional Use must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error
RU590	Preferred must be a single character. Must be a valid value.	badlyFormedMsg	ESB Error
RU171	Unit Type must be a valid value.	badlyFormedMsg	ESB Error
RU185	The address site name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01582	Error
RU186	The maximum field length for Address Site Name is 30.	badlyFormedMsg	ESB Error
RU182	The level number may only contain the following character sets: • alpha • numeric • apostrophes hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01583	Error
RU183	The maximum field length for level number is 4.	badlyFormedMsg	ESB Error
RU187	Level Type must be a valid value.	badlyFormedMsg	ESB Error
RU176	The street number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01584	Error
RU177	The maximum field length for street number is 12.	badlyFormedMsg	ESB Error
RU238	Either Street Number of Lot Number are required for an Australian Address.	01669	Error
RU239	Only one of Lot Number and Street Number is permitted, not both.	01668	Error
RU180	The maximum field length for lot number is 15.	badlyFormedMsg	ESB Error
RU207	Suburb, State and Postcode must be valid combinations for an Australian Address.	00098	Error
RU173	The unit number may only contain the following character sets: • alpha	01581	Error

ID	Business Rule	Error #	Error Type
	• numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.		
RU174	The maximum field length for unit number is 6.	badlyFormedMsg	ESB Error
RU189	The Street Name may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01586	Error
RU190	The maximum field length for street name is 30.	badlyFormedMsg	ESB Error
RU191	Street Type must be a valid value.	badlyFormedMsg	ESB Error
RU192	Street Suffix must be a valid value.	badlyFormedMsg	ESB Error
RU194	The Suburb may only contain the following character sets: • alpha • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	00081 & 01587	Error
RU195	The maximum field length for street name is 30.	badlyFormedMsg	ESB Error
RU196	Postal Delivery Type must be a valid value.	badlyFormedMsg	ESB Error
RU240	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 Suburb for an Australian Address.	01506	Error
RU198	The Postal Delivery number may only contain the following character sets: • alpha • numeric • apostrophes • hyphens Spaces must not appear immediately before or after apostrophes and hyphens.	01588	Error
RU199	The maximum field length for Postal Delivery number is 11.	badlyFormedMsg	ESB Error
RU201	The Postcode may only contain the numeric characters. For an Australian Address, there must be 4 numeric characters.	00083	Error
RU202	The maximum field length for postcode is 4.	badlyFormedMsg	ESB Error
RU203	State must be a valid value.	badlyFormedMsg	ESB

ID	Business Rule	Error #	Error Type
			Error
RU234	Address Purpose is required if an Address is present. Must be a valid code.	badlyFormedMsg	ESB Error
RU245	Address purpose can only be set to Residential for International Addresses.	01465	Error
RU247	Only one type (Mailing/Residential or international) of address allowed in the create unverified IHI process.	01692	Error
RU237	Preferred Address Indicator is required if an Address is present. Must be a valid code.	badlyFormedMsg	ESB Error
RU221	Street Name, Suburb, Postcode and State are mandatory for an Australian Address.	badlyFormedMsg	ESB Error
RU600	If the country is Australia, the following fields should not be provided: International Address Line, International State/Province, and International Postcode.	01689	Error
RU205	Country must be a valid code.	badlyFormedMsg	ESB Error
RU209	All International Address fields are required for an International Address.	badlyFormedMsg	ESB Error
RU597	The maximum field length for International Address Line is 80.	badlyFormedMsg	ESB Error
RU598	The maximum field length for International Address State/Province is 40.	badlyFormedMsg	ESB Error
RU599	The maximum field length for International Address Postcode is 10.	badlyFormedMsg	ESB Error
RU270	Electronic Communication Medium must be a valid code.	badlyFormedMsg	ESB Error
RU271	Electronic Communication Code must be a valid code.	badlyFormedMsg	ESB Error
RU272	The maximum field length for Electronic Communication Detail is 250.	badlyFormedMsg	ESB Error
RU287	If an Electronic Communication Entity is present, Electronic Communication Medium, Electronic Communication Usage Code and Electronic Communication Details must be entered.	badlyFormedMsg	ESB Error
RU288	If one of Electronic Communication Medium, Electronic Communication Usage code or Electronic Communication Details are added then all fields must be entered.	badlyFormedMsg	ESB Error
RU276	Where medium is 'Telephone', the detail must be in valid format. No less than 8 digits.	01430	Error
RU277	Where medium is 'Telephone', the detail must be numeric.	01429	Error
RU279	Where medium is 'Fax', the detail must be in valid format. No less than 8 digits.	01593	Error
RU280	Where medium is 'Fax', the detail must be numeric.	01592	Error
RU281	Where medium is 'Mobile', the detail must be in valid format. No less than 10 digits.	01431	Error

ID	Business Rule	Error #	Error Type
RU282	When Medium is 'Mobile', only alpha and numeric characters are acceptable.	00086	Error
RU283	Where medium is 'Email', the email address must include the @ symbol.	00088	Error
RU284	Where medium is 'Email', the email address must have alpha/numeric characters immediately before or after the @ symbol. Spaces must not immediately precede or follow the @ symbol.	00089	Error
RU285	Where medium is 'Email', there must be a "." after the @ symbol as part of the email address.	01577	Error
RU286	Where medium is 'Email', no spaces are allowed as part of a valid email address.	01578	Error
RU164	The valid values for sex are • M (Male) • F (Female) • I (Intersex or Indeterminate) • N (Not stated/inadequately described)	badlyFormedMsg	ESB Error
RU165	Date of Birth must be eight digits in length, in YYYYMMDD format.	badlyFormedMsg	ESB Error
RU167	Date of Birth must only contain numeric characters.	badlyFormedMsg	ESB Error
RU168	Date of Birth must be a valid calendar date.	badlyFormedMsg	ESB Error
RU169	Year of Birth must be greater or equal to 1800.	00018	Error
RU170	Date of Birth must not be in the future.	00019	Error
RU250	Birth Plurality must be a valid code. 9 to be used if not stated.	badlyFormedMsg	ESB Error
RU251	Birth Order must be a valid code. 9 to be used if not stated.	badlyFormedMsg	ESB Error
RU252	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU261	Birth Order is mandatory if Birth Plurality > 1.	01422	Error
RU262	Birth Plurality is mandatory if Birth Order has been provided.	01691	Error
RU254	Date of Death must be eight digits in length.	badlyFormedMsg	ESB Error
RU255	Date of Death must only contain numeric characters.	badlyFormedMsg	ESB Error
RU256	Date of Death must be a valid calendar date.	badlyFormedMsg	ESB Error
RU257	Date of Death must not be in the future.	00267	Error
RU258	Date of Birth Accuracy Indicator must be a valid code.	badlyFormedMsg	ESB Error
RU259	Source of Death Notification must be a valid code. "H" = Health Care Provider.	badlyFormedMsg	ESB Error

ID	Business Rule	Error #	Error Type
RU263	Date of Death must not be before Date of Birth.	00275	Error
RU264	Date of Death is mandatory when a Death Notification Source has been provided.	00370	Error
RU265	Death Notification Source is mandatory when a Date of Death has been provided.	00371	Error
RU266	Date of Death is mandatory when a Death Accuracy Indicator has been provided.	01400	Error
RU267	Death Accuracy Indicator is mandatory when a Date of Death has been provided.	01401	Error

DEPENDENCIES:

ID	Description
DP584	Unverified IHI use - If a health service chooses to use Unverified IHIs.

INFORMATION MESSAGES:

ID	Message
IM609 / 01605	The Provisional IHI record has been successfully resolved and IHI status amended to Unverified.

ERROR MESSAGES:

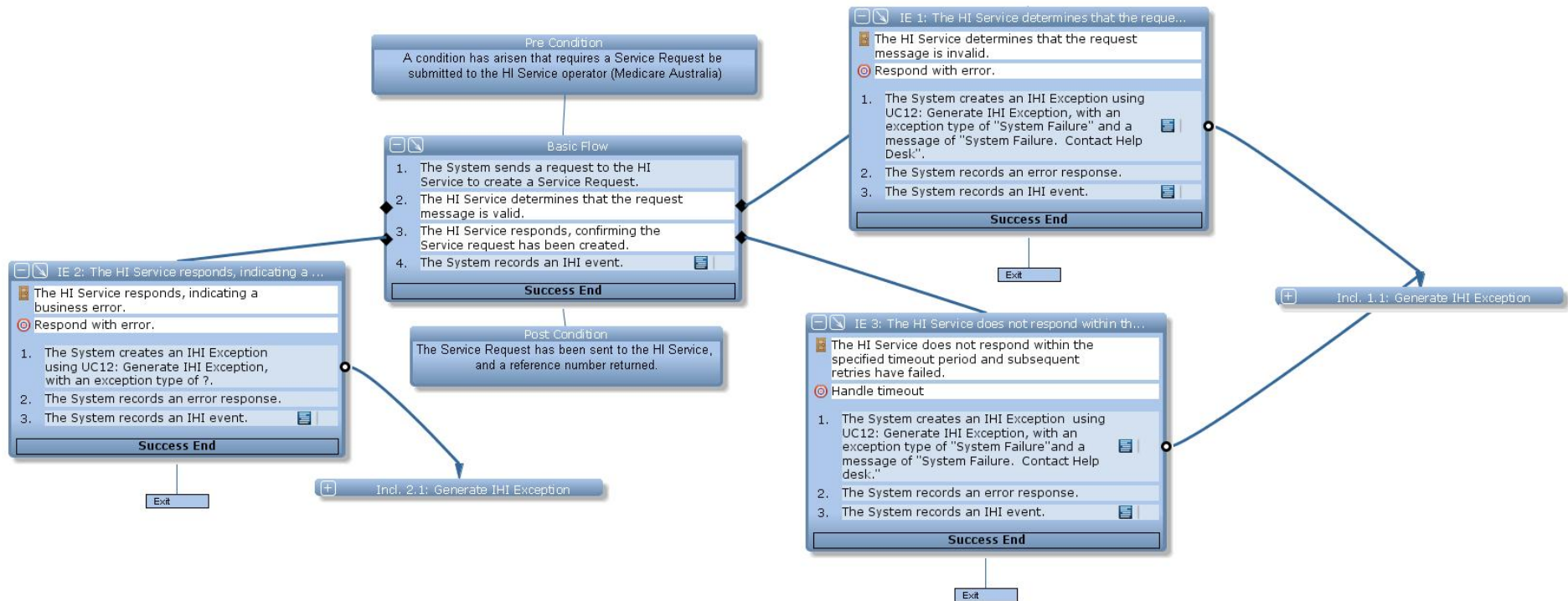| ID	Message
EM310 / 01474	Please contact Help Desk to resolve the unknown error.
EM341 / 01458	Existing Unverified IHI record exists with these details. Change existing details or enter an address for this record.
EM604 / 01601	The Provisional Record Status does not match the Record Status found.

AUDIT LOG:

ID	Name	Description
AL739	Provisional to Unverified Resolution Request Event - Invalid Request Message	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional to Unverified Resolution Request" • Event Status = "Failed" • Event Message = "Invalid request message"
AL740	Provisional to Unverified Resolution Request Event - Data Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional to Unverified Resolution Request" • Event Status = "Failed"

ID	Name	Description
		• Event Message = "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
AL741	Provisional to Unverified Resolution Request Event - Timeout	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional to Unverified Resolution Request" • Event Status = "Aborted" • Event Message = "The HI Service is offline."
AL742	Provisional to Unverified Resolution Request Event - Success	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional to Unverified Resolution Request" • Event Status = "Success" • Event Message = "Provisional IHI Request Successful."
AL743	Provisional to Unverified Resolution Request Event - Unknown Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional to Unverified Resolution Request" • Event Status = "Failed" • Event Message = "Unknown Error"
AL744	Provisional to Unverified Resolution Request Event - Business Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional to Unverified Resolution Request" • Event Status = "Failed" • Event Message = "Business Error"

3.10 UC48 : Send Medicare Service Request

Actors	The PAS System
Overview	This use case enables the automated creation and transmission of a Service Request to the HI Service Operator (Medicare). This replaces the current process of lodging a request with Medicare over the telephone, or potentially through the HI Service user portal (the functional profile of the portal is unclear).
	This use case supports a broad range of service requests and notifications to Medicare, and enables streamlining of the request process.
	This is a use case not currently supported by the HI Service, though it has become an essential element of this design.
	A group of management practices support the reporting on and monitoring of service requests. These are not documented in this functional design.
	This is unconfirmed functionality, as is not yet supported by HI Service and Medicare.
Pre Condition	A condition has arisen that requires a Service Request be submitted to the HI Service operator (Medicare Australia)
Post Condition	The Service Request has been sent to the HI Service, and a reference number returned.
Circumstances of Use	The uses of this function are many and varied, but include requests for the HI Service operator to:
	1. Assist with resolving a failed IHI Search where the patient has a Medicare/DVA card and all details appear correct.
	2. Assist with resolving a failed IHI check where the information held locally appears correct.
	3. Exception notifications where these exceptions are deemed to be related to the functioning of the HI Service (e.g. an outage).
	4. Lodge notifications (based on information gathered from the patient), that HI Service stored patient information may be incorrect.
	5. Lodge record unmerge requests.
	6. Lodge incorrect date of death notification (e.g. for an HI Service record with deceased status, but the patient has presented at the health service).
	7. Lodge incorrect retired notification (e.g. for an HI Service record with retired status, but the patient has presented at the health service).
Included In (Other Use Cases)	UC55: Reset Merge
	UC56: Send Duplicate or Replica IHI Notification
	UC36: Add Exception Resolution
	UC29: Unmerge Patient Records
Business Processes	None – see "Included in" Use Cases above.

Pre Condition

A condition has arisen that requires a Service Request be submitted to the HI Service operator (Medicare Australia)

Basic Flow

1. The System sends a request to the HI Service to create a Service Request.
2. The HI Service determines that the request message is valid.
3. The HI Service responds, confirming the Service request has been created.
4. The System records an IHI event.

Success End

Post Condition

The Service Request has been sent to the HI Service, and a reference number returned.

IE 1: The HI Service determines that the reque...

The HI Service determines that the request message is invalid.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk.".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

IE 2: The HI Service responds, indicating a ...

The HI Service responds, indicating a business error.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of ?.
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Incl. 2.1: Generate IHI Exception

IE 3: The HI Service does not respond within th...

The HI Service does not respond within the specified timeout period and subsequent retries have failed.

◎ Handle timeout

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure"and a message of "System Failure. Contact Help desk."
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

Incl. 1.1: Generate IHI Exception

BASIC FLOW:

#	Description	Requirement/ 🟢Include
1	The System sends a request to the HI Service to create a Service Request.	
2	The HI Service determines that the request message is valid.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determines that the request message is invalid.	IE 1	

#	Description	Requirement/ 🟢Include
3	The HI Service responds, confirming the Service request has been created.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service responds, indicating a business error.	IE 2	
The HI Service does not respond within the specified timeout period and subsequent retries have failed.	IE 3	

#	Description	Requirement/Include
4	The System records an IHI event.	AL749

Internal Extension (Alternate Flow)   IE 1

Condition: The HI Service determines that the request message is invalid.
Goal: Respond with error.
Requirements:

#	Description	Requirement/🟢Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".	EX644 🟢UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL746

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 2

Condition: The HI Service responds, indicating a business error.
Goal: Respond with error.
Requirements:

#	Description	Requirement/🟢Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of ?.	🟢UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL751

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 3

| **Condition:** | The HI Service does not respond within the specified timeout period and subsequent retries have failed. |
| **Goal:** | Handle timeout |

Requirements:

#	Description	Requirement/⬤Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."	EX644 ⬤UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL748

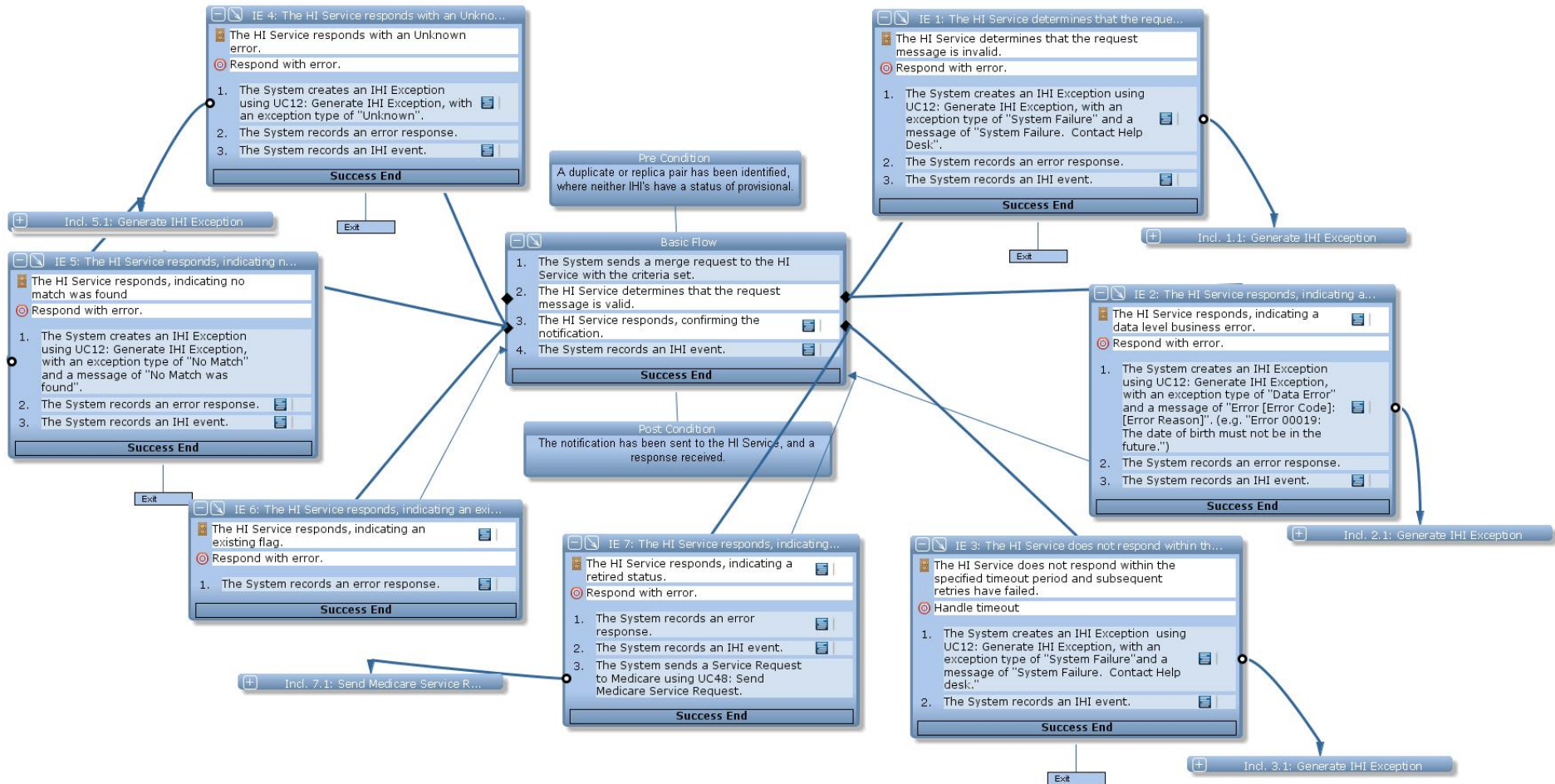| **Next Step:** | BF: Basic Flow | EXIT |

DEPENDENCIES:

ID	Description
DP520	Automated Service Requests should be able to be lodged with Medicare, bypassing the need for a phone call to the Medicare Service Desk.

AUDIT LOG:

ID	Name	Description
AL746	Medicare Service Request Event - Invalid Request Message	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Medicare Service Request" • Event Status = "Failed" • Event Message = "Invalid request message"
AL748	Medicare Service Request Event - Timeout	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Medicare Service Request" • Event Status = "Aborted" • Event Message = "The HI Service is offline."
AL749	Medicare Service Request Event - Success	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Medicare Service Request" • Event Status = "Success" • Event Message = "Provisional IHI Request Successful."
AL751	Medicare Service Request Event - Business Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Medicare Service Request" • Event Status = "Failed" • Event Message = "Business Error"

3.11 UC56 : Send Duplicate or Replica IHI Notification

Actors	The PAS System
Overview	This use case automates the merge processing of patient records with patient records with Unverified or Verified IHIs. This will only occur as a result of a patient merge in the local PAS.
Pre Condition	A duplicate or replica pair has been identified, where neither IHIs have a status of provisional.
Post Condition	The notification has been sent to the HI Service, and a response received.
Circumstances of Use	This use case applies when a local (PAS) patient record merges involving any combination of records with Unverified and Verified IHIs (neither are Provisional).
Included In (Other Use Cases)	UC36: Add Exception Resolution UC28: Merge Patient Records
Business Processes	None – see "Included in" Use Cases above.

IE 4: The HI Service responds with an Unkno...

The HI Service responds with an Unknown error.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".
2. The System records an error response.
3. The System records an IHI event.

Success End

IE 1: The HI Service determines that the reque...

The HI Service determines that the request message is invalid.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".
2. The System records an error response.
3. The System records an IHI event.

Success End

Incl. 5.1: Generate IHI Exception

Exit

Incl. 1.1: Generate IHI Exception

Exit

Pre Condition

A duplicate or replica pair has been identified, where neither IHI's have a status of provisional.

Basic Flow

1. The System sends a merge request to the HI Service with the criteria set.
2. The HI Service determines that the request message is valid.
3. The HI Service responds, confirming the notification.
4. The System records an IHI event.

Success End

IE 5: The HI Service responds, indicating n...

The HI Service responds, indicating no match was found

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "No Match" and a message of "No Match was found".
2. The System records an error response.
3. The System records an IHI event.

Success End

Exit

IE 2: The HI Service responds, indicating a...

The HI Service responds, indicating a data level business error.

◎ Respond with error.

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
2. The System records an error response.
3. The System records an IHI event.

Success End

Incl. 2.1: Generate IHI Exception

Post Condition

The notification has been sent to the HI Service, and a response received.

IE 6: The HI Service responds, indicating an exi...

The HI Service responds, indicating an existing flag.

◎ Respond with error.

1. The System records an error response.

Success End

IE 7: The HI Service responds, indicating...

The HI Service responds, indicating a retired status.

◎ Respond with error.

1. The System records an error response.
2. The System records an IHI event.
3. The System sends a Service Request to Medicare using UC48: Send Medicare Service Request.

Success End

IE 3: The HI Service does not respond within th...

The HI Service does not respond within the specified timeout period and subsequent retries have failed.

◎ Handle timeout

1. The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk.."
2. The System records an IHI event.

Success End

Exit

Incl. 7.1: Send Medicare Service R...

Incl. 3.1: Generate IHI Exception

BASIC FLOW:

#	Description	Requirement/ Include
1	The System sends a merge request to the HI Service with the criteria set.	
2	The HI Service determines that the request message is valid.	

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service determines that the request message is invalid.	IE 1	
The HI Service responds, indicating a data level business error.	IE 2	

#	Description	Requirement/ Include
3	The HI Service responds, confirming the notification.	IM635 IM636

ALTERNATE FLOW(S):

Condition	Link	Return Step
The HI Service does not respond within the specified timeout period and subsequent retries have failed.	IE 3	
The HI Service responds with an Unknown error.	IE 4	
The HI Service responds, indicating no match was found.	IE 5	
The HI Service responds, indicating an existing flag.	IE 6	4
The HI Service responds, indicating a retired status.	IE 7	

#	Description	Requirement/ Include
4	The System records an IHI event.	AL757

Internal Extension (Alternate Flow)   IE 1

Condition: The HI Service determines that the request message is invalid.
Goal: Respond with error.
Requirements:

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help Desk".	EX644 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL754

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 2

Condition: The HI Service responds, indicating a data level business error.
Goal: Respond with error.
Requirements: RU146 RU148

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of	EX648

	"Data Error" and a message of "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")	UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL755

Next Step: BF: Basic Flow   SUCCESS_END

Internal Extension (Alternate Flow)   IE 3

Condition: The HI Service does not respond within the specified timeout period and subsequent retries have failed.
Goal: Handle timeout
Requirements:

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "System Failure" and a message of "System Failure. Contact Help desk."	EX644 UC12: Generate IHI Exception
2	The System records an IHI event.	AL756 EM145

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 4

Condition: The HI Service responds with an Unknown error.
Goal: Respond with error.
Requirements:

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "Unknown".	EX653 UC12: Generate IHI Exception
2	The System records an error response.	
3	The System records an IHI event.	AL758

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 5

Condition: The HI Service responds, indicating no match was found
Goal: Respond with error.
Requirements:

#	Description	Requirement/ Include
1	The System creates an IHI Exception using UC12: Generate IHI Exception, with an exception type of "No Match" and a message of "No Match was found".	UC12: Generate IHI Exception
2	The System records an error response.	EM603
3	The System records an IHI event.	AL759

Next Step: BF: Basic Flow   EXIT

Internal Extension (Alternate Flow)   IE 6

Condition: The HI Service responds, indicating an existing flag.
Goal: Respond with error.
Requirements: RU638

#	Description	Requirement/ Include
1	The System records an error response.	EM633 EM634

| **Next Step:** | BF: Basic Flow | 4. The System records an IHI event. |

Internal Extension (Alternate Flow)   IE 7

Condition:	The HI Service responds, indicating a retired status.
Goal:	Respond with error.
Requirements:	RU630

#	Description	Requirement/ Include
1	The System records an error response.	EM632
2	The System records an IHI event.	AL761
3	The System sends a Service Request to Medicare using UC48: Send Medicare Service Request.	UC48: Send Medicare Service Request

| **Next Step:** | BF: Basic Flow | SUCCESS_END |

BUSINESS RULES:

ID	Business Rule	Error #	Error Type
RU628	The following details are included in an Duplicate/Replica Notification: • IHI (Mandatory) (First IHI in Duplicate Pair) • IHI (Mandatory) (Second IHI in Duplicate Pair) • Comments (Mandatory) - populated from Resolution Comments	N/A	N/A
RU659	The following details are included in an Duplicate/Replica Notification: • IHI (Mandatory) • Comments (Mandatory) - populated from Resolution Comments		N/A
RU146	The IHI Number must include a valid check digit.	01514	Error
RU148	The IHI Number must be 16 digits.	01675	Error
RU630	**Records with a "Retired" status cannot be flagged as a potential Duplicate or Replica via the B2B channel.**	01610	N/A
RU638	Existing Flags on Notified IHIs are not allowed? **More detail is required on this rule from the HI Service Operator.	01502 & 01507	N/A

INFORMATION MESSAGES:

ID	Message
IM635 / 01449	The records selected have been successfully flagged as potential duplicates.
IM636 / 01496	The records selected have been successfully flagged as potential replicas.

ERROR MESSAGES:

ID	Message
EM145 / E100	The HI Service is offline.
EM603 / 01500	No match has been found.
EM632 / 01610	This can not be flagged as a potential duplicate or replica as it has a "retired" status.
EM633 / 01502	The following record(s) contain a potential duplicate flag: < Number>
EM634 / 01507	The following record(s) contain a potential replica flag: < Number>

AUDIT LOG:

ID	Name	Description
AL754	Duplicate or Replica Notification Event - Invalid Request Message	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Failed" • Event Message = "Invalid request message"
AL755	Duplicate or Replica Notification Event - Data Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Failed" • Event Message = "Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
AL756	Duplicate or Replica Notification Event - Timeout	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Aborted" • Event Message = "The HI Service is offline."
AL757	Duplicate or Replica Notification Event - Success	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Success" • Event Message = "Provisional IHI Request Successful."
AL758	Duplicate or Replica Notification Event - Unknown Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Provisional IHI Request" • Event Status = "Failed" • Event Message = "Unknown Error"
AL759	Duplicate or Replica Notification Event - No Match Error	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = "Duplicate or Replica Notification" • Event Status = "Failed" • Event Message = "No Match Found"
AL761	Duplicate or Replica Notification Event - Retired	Audit Log details captured are as follows: • Date/Time • User ID • Event Type = " Duplicate or Replica

ID	Name	Description
		Notification"
		• Event Status = "Failed"
		• Event Message = "Record Retired"

4. Messages

4.1 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].

4.2 Error Messages

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.
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 / 00262	Medicare check digit	Medicare card fails check digit routine.
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 /	Date of Death/ Death	You must key a date of death when a death notification source

ID	Name	Message
00370	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 / 01614	Retired Record Matched	This IHI record has a 'Retired" IHI status and can not be 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.

ID	Name	Message
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.
EM606 / 01688	Not Active or Deceased	The record to be processed does not have active or deceased Status.
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.
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>

ID	Name	Message
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.

4.3   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.

4.4   IHI Exceptions

ID	Name	Message
EX639	No Match (All Criteria Sets)	No unique match found. All demographic information was exhausted.
EX662	No Match (Single Criteria)	No match found and no criteria refinement available.
EX663	No Match (After Merge)	No match found after merge and updated details.
EX664	No Match	No match was found in the HI Service.
EX640	No Match on Check IHI	No Match found.
EX641	Incomplete Request Criteria	[Message text varies for each Use Case it occurs in.]
EX642	PAS Duplicate	Request for IHI aborted. Duplicate PAS records found on non-TDS Search.
EX643	Status Integrity	Status Hierarchy Mismatch. Held: [Status in PAS], Received [Status to Update]"
EX644	System Failure	System Failure. Contact Help Desk.
EX645	Provisional IHI	Provisional IHI
EX646	Returned IHI PAS Duplicate	Another record in the PAS has this same IHI, [with the Secondary URN field populated with the URN of the duplicate].

ID	Name	Message
EX647	Potential Deceased	Date of Death: [Date of Death].
EX648	Data Error	Error [Error Code]: [Error Reason]". (e.g. "Error 00019: The date of birth must not be in the future.")
EX649	Multiple Matches	Multiple matches found.
EX650	Multiple Matches on Check IHI	Multiple matches found.
EX652	HI Duplicate Data	"Existing Verified or Unverified IHI record with the same details." or blank
EX653	Unknown	Unknown
EX654	Business Rule Violation	Error [Error Code]: [Error Reason]
EX655	HI Merge Failure	HI Merge Failure
EX656	Inconsistent Referral IHI	Inconsistent Referral IHI
EX657	Current Patient IHI Anomaly	Current Patient IHI Anomaly
EX658	HI Service Processing	HI Service Processing