Section 5c: HL7 Reference & Implementation Guide

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Introduction

This section of the VINAH MDS Manual specifies best practice for designing and implementing software to generate VINAH HL7 transmissions and maintain compliance with submission requirements over time.

How to Use

Intended Audience

This section of the manual is intended for use primarily by software designers and developers responsible for implementation of the VINAH MDS in the information systems used by agencies.

Use of this document

This document is a guide only. Compliance with all aspects of this implementation guide is not mandatory or measurable by the Department. Health care organisations may reference this standard when specifying requirements for their software.

Where this guide is inconsistent with other parts of the VINAH manual, those other parts will take precedence. If any errors or inconsistencies are found, please notify the HDSS Helpdesk.

Limitations

Applying principles outlined in this implementation guide either in part or in full may not guarantee compliance with the requirements of the data collection. This document is a guide for software developers to develop and understanding the mechanics of the VINAH data submission lifecycle.

This document provides guidance around the best practices for VINAH Submission Process. The usage of methods outlined within this document is does not imply acceptance of any product or process by the Department.

The Department is will on request (where possible and appropriate) review specifications by vendors designing software systems but such review does not constitute acceptance, sign off or certification of those specifications.

Referenced Documents

This document, along with the other sections that comprise the VINAH manual, should be read in conjunction with the following references:

- HL7 Messaging Standard Version 2.5, Health Level Seven Inc., 2003
- HL7 V2.x Message Profiling Specification V2.2, Health Level Seven Inc., 2000

For more information about HL7, see http://www.hl7.org/

HL7 Message Actions

Message actions are dictated by the message type itself (for example, an ADT_A04 is an insert; an ADT_A08 is an update). The message actions are further defined in the HL7 Message Set Profiles.

Insert Messages

An insert message will fail if a previous insert message has been sent and accepted.

Update Messages

An update message will fail if a previous insert message has not been sent and accepted.

An update message cannot be used to perform an insert where the sending system is unsure whether an original insert has been sent and accepted, see Keeping Track of Transmissions.

In all cases, an update message will overwrite data in all fields related to the message; the implication of this is that all fields in the message must be populated with the correct data values regardless of whether they have changed or not. For example, if a Patient/Client's locality changes and triggers an A08 message, all fields on the A08 must be populated with the Patient/Client's current details, not just the locality field. The data transmitted on the A08 will overwrite all data transmitted on the A04 or previous A08 messages.

Delete Messages

A delete message will fail if a previous insert message has not been sent and accepted.

In the case of delete messages, all data content is ignored except the Key fields (eg: The Episode Identifier, Identifier Type, and Local Identifier Assigning Authority on the PPPPCD). However if data other than the key values are submitted on these messages, it must be valid. Where records refer to parent records, the deletion of the higher-level entity will automatically delete all included lower-level entities. For example, when a PPP_PCD message is sent to delete an Episode, any contacts attached to the episode will be removed from the VINAH data store. If it was desired to keep the contacts but attach them to a different episode, the submitting organisation system should, in the previous example, either send ADT_A08 update messages to alter the Episode Identifier to refer to the new parent episode before sending the PPP_PCD, or resend the ADT_A03 contact messages with the new episode identifiers after sending the PPP_PCD.

It should be noted that where a submission that has performed deletes is rolled back (purged), the records deleted as a result of that submission will be reinstated; this includes any lower-level entities that were deleted automatically.

Merge Messages

Merge messages will merge two previously accepted messages into one. All records that refer to the Prior Identifier will be updated to refer to the New Identifier. The Prior Record is then deleted, although it can be re-created through an ADT_A04 messages after this point.

HL7 File Assembly

File Contents

VINAH system designers should create logic to send the correct codes and meet business rules for the VINAH version they are transmitting in. It is not acceptable to simply pass whatever code was stored in the PAS or activity system, as these codes change over time.

HL7 Conceptual Structure

With a wide variety of Health Care Administration Software implementing VINAH, there are some simple ways to extend existing software to support VINAH submissions.

File

A VINAH submission file is a group of batches that are compiled into a HL7 text file for submission to the department. A file contains one or more batches of messages which contain information covering a certain period of time, or certain data.

In HL7, the file header and footer are defined using the HL7 FHS and FTS segments, outlined in the HL7 Reference section of this document.

Batch

In HL7, batch transaction boundaries are defined using the HL7 BHS and BTS segments, outlined in the HL7 Reference section of this document. For more information on the behaviour and layout of batches, see Section 5b – Transaction Implementation Guide.

Message/Record

A VINAH record is a set of data that is generated as a result of an event occurring in a clinical or administrative setting. This set of data is defined by the data concepts outlined in Section 2 of the manual, and its data elements defined in Section 3.

In most cases, Health Care Administration Software can identify existing data structures that by themselves can be considered VINAH records. For example, a patient record in a Patient Administration System is analogous to a VINAH Patient Registration, albeit a subset of some of the richer data elements available in a PAS. It is likely that the VINAH record will be comprised of various tables or records within the system, and logic should be implemented to extract and combine these data for the purposes of VINAH reporting.

In HL7, a message is defined using the HL7 MSH segments, outlined in the HL7 Reference section of this document.

Packaging Methods

There are several different options available when it comes to assembling the required data elements into HL7 methods. This section explores are few possible solutions.

Message Templates

With this approach each entity/action combination (ie Patient/Insert, Episode/Update) has a predefined HL7 message template used as a base. For example, the Patient/Insert message, assigned to the ADT_A04 message could be assembled from a template as such:

```
MSH|^~\&||<OrgID>||AUSDHSV|<MessageDT>||ADT^A04^ADT_A01|<MessageControlID>|P|2.5|||NE|NE|AU|ASCII
EVN|A04|<MessageDT>
PID|1||<PatientIdentifer>^^^<LocalIDAssignAuth>^A||<PatientName>^^^^^^S||<DateOfBirth>|1||4|^^<Locality>^^<PostCode>||||||||||<Countr
yOfBirth>|||||||||<DateOfBirthAccuracy>
PD1||2
NK1|<CarerResidencyStatus>||1|||||||||||||||||2
PV1|1|O||||^^^^^1
```

(Note template is a sample only and may not be complete)

Using the above template, the placeholders marked between angled brackets can be replaced with data values from the record. There are some challenges to be met when generating HL7 fields that repeat.

Generating Data from Binding Table

The binding table that forms Appendix A of Section 5 can be used to bind data to a message, combined with the message segment grammar listed in the in the Message Set Profiles for each message, eg:

```
MSH [ EVN ] PID PD1 NK1 PV1
```

HL7 segments and fields are populated using the defined delimiters – (|^~) based on positions specified in the binding tables.

For example, the field Patient/Client Birth Country has a location of PID.32 (PID segment, field 32), which could be generated to have a value of 1110 (not withstanding other required fields in the PID segment) as:

```
PID|||||||||||||||||||||||||||||||1100
```

Message Template Binding

A hybrid of the two approaches described in this section can be used, where a template is generated from the binding tables, and substitutions made.

Processing Options

Some processing options can be included in the FileHeaderComment field (FHS.10) of the FHS segment to perform additional functions during the load process. It is suggested that VINAH Software suppliers allow these processing options configured by the user performing the extract. Where multiple operators are included, they may be separated by a semi colon (;) character.

Business Rule Processing Modes

Processing modes to override or relax business rules are no longer supporter in any version of VINAH.

PurgeAfterLoad

During testing periods this option can be included to allow immediate rollback of a submission from the DHS VINAH Repository. This is useful if an individual submission is to be tested against the business rules, but is not to be stored long term. Any updates/deletes to existing data will be performed but rolled back to their original state.

The operator is: PurgeAfterLoad=True;

eg: FHS|^~\&||ABCHS||AUSDHSV|20070101123401|||abchs2010401.hl7|PurgeAfterLoad=True;

Note that this option should be turned off during integrity testing and during full test/live submission, and should not be left on by default. Users should be warned during extract that the data will not be stored by the department, and this may affect compliance.

HTMLReport

When this operator is specified, the XML transmission report is transformed into HTML so that the report can be manually interrogated. This option is provided for software that does not have the ability to automatically process the XML Submission Report. The department strongly discourages any new VINAH implementations from using this option as it is not a sustainable option for users of VINAH extract software in the long term.

The operator is: HTMLReport=True;

About the A08

The ADT_A08 message is used to send updates to both the Patient/Client (created with add/insert A04 message) and the Contact (created with add/insert A03 message.) The difference between an A08 used to update an A04 and an A08 used to update an A03 is the presence of an NK1 Segment on the A04 update.

The NK1 Segment is used to transmit the information about the patient/client's carer, that is, Carer Availability, Carer Residency Status and Main Carer's Relationship to the Patient. Although these data elements are optional for some programs and until the date of the first Contact the NK1 segment must be included on A04 and A08 messages used to update the A04 even if the relevant HL7 fields are left null.

HL7 Reference

Global and Required Settings

Messaging Standard

The data to be supplied as the minimum data set will comply with the HL7 V2.5 standard format.

HL7 v2.5 was used for this interface to take advantage of the use of message conformance profiles. Where the specification uses components introduced new to version 2.5 this will be highlighted in the document. There are two instances where this occurs:

- The MSG Composite replaces the CM Composite documented in the MSH Segment prior to version 2.5, however the implementation is identical and is only a terminological change.
- The XON.10 field used to transmit the Contact Provider value is new to version 2.5.

Message Encoding Rules

Submission data will be encoded according to the HL7 standard message encoding rules to generate variable length delimited messages as the default. This sub-section provides specifications for constructing messages in this format. A single transmission cannot combine encoding formats.

Message Delimiters

The following delimiters shall be used for messages:

Delimiter	***Suggested Value***	***Encoding Character Position***	***Usage***
Segment Terminator	<cr>	-	Terminates a segment record. This value cannot be changed by implementers.
Field Separator	|	-	Separates two adjacent data fields within a segment. It also separates the segment ID from the first data field in each segment.
Component Separator	^	1	Separates adjacent components of data fields where allowed.
Subcomponent Separator	&	4	Separates adjacent subcomponents of data fields where allowed. If there are no subcomponents, this character may be omitted.
Repetition Separator	~	2	Separates multiple occurrences of a field where allowed.
Escape Character	\	3	Escape character for use with any field represented by an ST, TX or FT data type, or for use with the data (fourth) component of the ED data type. If no escape characters are used in a message, this character may be omitted. However, it must be present if subcomponents are used in the message.

Character Set

The file shall use 7 bit-ASCII character set encoding.

Validation Tables

Validation tables referenced in this section are listed in Section 9 of this manual.

Note that wherever possible HL7 user-defined tables have been used. However where the table is for a VINAH Minimum Data Set data item, the values listed in the validation table in Section 9 will be the set valid for the minimum data set (which are generally also listed in Section 3 of the manual, under the relevant data item). Note that these values may not be the HL7 suggested values nor the values used within a particular site for other HL7 implementations.

Referenced Documents

This document should be read in conjunction with the following references:

- HL7 Messaging Standard Version 2.5, Health Level Seven Inc., 2003
- HL7 V2.x Message Profiling Specification V2.2, Health Level Seven Inc., 2000

For more information about HL7, see http://www.hl7.org/

Message Set Representation

Definition

Each of the specified message sets are defined in this section as HL7 V2.x Message Profiles. A message profile is defined as follows:

> *An HL7 V2.x Message Profile is a precise and unambiguous specification of a standard HL7 message that has been analysed for use within a particular set of requirements. It is a particular style or usage of a standard HL7 message, driven by use case analysis and interaction modelling. An HL7 V2.x Message Profile defines both the* ***static*** *structure and content of the message and the* ***dynamic*** *interaction, which involves the communication of the message from the sending application to one or more receiving applications.*
> *HL7 V2.x Message Profiles must consist of the following components:*
> ***Use Case Model -*** *this may be a use case diagram supported with text or just a textual description*
> ***Static Definition*** *– consisting of Message Level Profile, Segment Level Profile, and Field Level Profile*
> ***Dynamic Definition*** *– consisting of an Interaction Model and Dynamic Profile*
> *An HL7 V2.x Message Profile is compliant, in all aspects, with the HL7 defined message it profiles, although it may specify constraints on the standard HL7 message definition.*
>
> - *Health Level Seven, Message Profiling Specification, Version 2.2, 30 November 2000, pg4.*

Components

In this Section, these components of each message profile are detailed under the following headings:

Use Case Model

This sub-section details the functional requirements that form part of the requirements for the VINAH MDS.

The functional requirements are documented as a Use Case Model, Actor Definitions and detailed Use Cases.

Data Element Binding

A mapping of the VINAH MDS data elements defined in Section 3 to fields in a given HL7 message is detailed after the use cases for each message set. This data element binding is intended to provide traceability from the VINAH Data Element specified in Section 3 to its representation in the HL7 message structure.

Dynamic Definitions

This sub-section details the system interactions and the HL7 acknowledgment protocols that apply for each interaction.

Static Definitions

This sub-section details the static structures, format and contents of each of the applicable messages within the interaction model. The Message Segments that make up the Message Sets are defined once each in the Message Segment sub-section to avoid repetition.

Message Level Profile (Textual Description)

Each message is defined in special notation that lists the segment IDs in the order they would appear in the message.

Braces, { . . . }, indicate one or more repetitions of the enclosed group of segments. (Of course, the group may contain only a single segment.)

Brackets, [. . .], show that the enclosed group of segments is optional.

If a group of segments is optional and may repeat it will be enclosed in brackets and braces, [{ . . .}].

Whenever braces or brackets enclose more than one segment ID a special stylistic convention is used to help the reader understand the hierarchy of repetition. For example, the first segment ID appears on the same line as the brace, two columns to the right. The subsequent segment IDs appear under the first. The closing brace appears on a line of its own in the same column as the opening brace. This convention is an optional convenience to the user. If there is conflict between its use and the braces that appear in a message schematic, the braces define the actual grouping of segments that is permitted.

Segments and fields NOT required in this implementation are not included in this document.

Segment and Field Level Profiles

Each segment and field is described in static detail including the following parameters for elements:

Name: The HL7 element name.

Sequence: The sequence reference number for each element.

Data Type: The HL7 data type for this element. Where a data type is made up of sub-types (composite) the structure of the sub-type will be described immediately below and indented.

Usage: Describes the usage and optional nature of each element. Interpretations of the usage codes are listed below.

Length: The maximum length for each element, including components, sub-components and delimiters.

Cardinality: This expands on the usage code by describing the number of possible occurrences (cardinality) of each component. A full description of cardinality is listed below.

Fixed Value: Where the value for a field is fixed, the value is indicated in this column.

Table: Where an element uses values from a defined set, the HL7 table reference number will be listed here. Where an element uses a subset of values from a referenced table, a lower case letter indicating the subset referenced will follow the table number.

Dates and times

Note: The maximum precision of date/time formats is “YYYYMMDDHHSS.SSSS±ZZZZ” providing accuracy to milliseconds; however truncated values are allowed if the data source has less accuracy, i.e. "YYYYMM" to show the month or "YYYY" to show the year only.

Note, however, that certain validation edits may require a minimum level of date accuracy.

Some example date/time values are shown below:

Date	***Representation***
Year 2005	2005
March 2005	200503
3 March 2005	20050303
3 March 2005 1:53 PM AEST	200503031353+1000
3 March 2005 03:53:55 1528 milliseconds UTC	20050303015355.1528+0000

Usage

Usage refers to the circumstances under which an item (segment group, segment, data item) appears in a message. Some items must always be present, others may never be present, and others may only be present in certain circumstances. A set of codes has been defined to clearly identify the rules governing the presence of a particular item. The rules govern the expected behaviour of both the sending and receiving application with respect to the item.

The codes are:

Usage Code	***Description***	***Comments***
R	Required	The item must be present in the message. MANDATORY Messages missing data items that are mandatory due to HL7 or profile requirements may be rejected by the receiving software
O	This field is optional	The item may be missing from the message, but must be sent and understood by the sending/receiving application if there is relevant data. DESIRABLE All data items that are available to the sending system software must be sent in the message. All data items that have been entered and /or captured by the sending system software must be sent in the message.
C	Conditional	The item must be present if the specified condition predicate is true. Otherwise, the item must not be present
X	Not supported	For sending applications, the item will not be sent. For receiving applications, the item group will be ignored if sent

Note that the tables defined in the sub-sections below only include items that are required, optional or conditional. Omission of an item (ie. Segment, field, component) implies that the item is not supported ie. the receiving application will ignore the item if sent.

Cardinality

Cardinality identifies the minimum and maximum number of repetitions for a particular item (segment group, segment or data item). Cardinalities are expressed as a minimum-maximum pair of non-negative integers (such that the minimum is less than or equal to the maximum). A conformant application must always send at least the minimum number of repetitions, and may never send more than the maximum number of repetitions.

Cardinality may be defined as follows:

Cardinality	***Description***
[0..0]	Element never present
[0..1]	Element may be omitted and it can have at most one Occurrence
[1..1]	Element must have exactly one Occurrence
[0..n]	Element may be omitted or may repeat up to n times
[1..n]	Element must appear at least once, and may repeat up to n times
[0..*]	Element may be omitted or repeat for an unlimited number of times
[1..*]	Element must appear at least once, and may repeat unlimited number of times
[m..n]	Element must appear at least “m” and at most ”n” times

File and Batch Structures

VINAH MDS data is to be transmitted to DHS as a file containing one or more batches of one or more HL7 messages. For segment definitions, see the Message Segment Definitions sub-section below.

Please note, data acceptance and rejection is processed at the batch level, ie an entire Batch passes or fails validation based on validation rules applied to messages and the information they contain. Developers may wish to consider structuring transmissions such that one batch contains messages that relate to one client in order to isolate errors.

Message FILE

Item	*Description*
FHS	
{ (1 – n)	
BHS	
{ (0 - n)	
MSH... (Message Set Messages)	
}	
BTS	
}	
FTS	

Message BATCH

Item	*Description*
BHS	
{ (0 - n)	
MSH... (Message Set Messages)	
}	
BTS	

Data Element Binding

Message	*Data Element Name*	*HL7 Attribute Name*	*Location*	*Value Domain*
BATCH	Batch Control Identifier	BatchControlID	BHS.11	Identifier
BATCH	Message Date and Time	BatchCreationDate/Time (DateTime)	BHS.7\TS.1	Date/Time
BATCH	Organisation Identifier	BatchSendingFacility (NamespaceID)	BHS.4\HD.1	HL70362
FILE	Message Date and Time	FileCreationDate/Time (DateTime)	FHS.7\TS.1	Date/Time
FILE	Organisation Identifier	BatchSendingFacility (NamespaceID)	FHS.4\HD.1	HL70362
FILE	VINAH Version	FileReceivingApplication	FHS.5	990037

HL7 Message Composite Type Definitions

This sub-section defines the Message Data Types that comprise the HL7 messages used for transmission of VINAH data. This section should be read in conjunction with each Message Segment definition section. Message composites in the Message Segment definition override those listed here.

Composite CE

	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
1	Identifier	ST	Required	0. .20		
3	NameOfCodingSystem	ID	Conditional	0. .20		
4	AlternateIdentifier	ST	Conditional	0. .199		

Composite CWE

	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
1	Identifier	ST	Required	0. .20		HL70357
2	Text	ST	Optional	0. .199		
7	CodingSystemVersionID	ST	Conditional	0. .10		

Composite CX

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	IDNumber	ST	Required	0. .15		
4	AssigningAuthority	HD	Required	0. .227		HL70300 HL70362 HL70363
5	IdentifierTypeCode	ID	Required	0. .5		HL70203

CX.4 (AssigningAuthority)
AssigningAuthority takes its value from one of the listed reference tables based on the value of CX.5; see Identifier Type in Section 3, Part 2 for further information.

CX.5 (IdentifierTypeCode)
See Identifier Type in Section 3, Part 2 for further information about the use of IdentifierTypeCode.

Composite DTM

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Year	2 Byte Short	Required	4. .4		
2	Month	2 Byte Short	Required	2. .2		
3	Day	2 Byte Short	Required	2. .2		
4	Hours	2 Byte Short	Required	2. .2		
5	Minutes	2 Byte Short	Required	2. .2		
6	Seconds	2 Byte Short	Required	2. .2		

Composite EI

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	EntityIdentifier	ST	Required	0. .199		
2	NamespaceID	IS	Required	0. .20		HL70363

Composite FN

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Surname	ST	Required	0. .50		

Composite HD

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	NamespaceID		Required			

Composite MSG

The MSG composite is new to HL7 version 2.5. It replaces the discontinued CM data type documented in version 2.4 for the MSH message but is identical in implementation.

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	MessageType	ID	Required	0. .3		HL70076
2	TriggerEvent	ID	Required	0. .3		HL70003
3	MessageStructure	ID	Required	0. .8		HL70354

Composite PL

	Name	Data Type	Required	Length	Fixed Value	Validation Table
6	PatientLocationType	IS	Required	0. .1		

Composite PT

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	ProcessingID	ID	Required	0. .1		HL70103

Composite TS

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Time	DTM	Required	0. .24		

Composite VID

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	VersionID	ID	Optional	0. .5	2.5	HL70104

Composite XAD

	Name	Data Type	Required	Length	Fixed Value	Validation Table
3	City	ST	Required	0. .50		990025
5	ZipOrPostalCode	ST	Required	0. .12		990025

Composite XCN

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	IDNumber	ST	Required			990035
8	SourceTable	ST	Required		990035	

Composite XON

Note that XON.10 is new to HL7 v2.5.

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	OrganizationName	ST	Required	0. .50		

Composite XPN

	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
1	FamilyName	FN	Required	0. .194		
7	NameType	ID	Required	0. .5	S	HL70200

Message Segment Definitions

This sub-section defines the Message Segments that comprise the HL7 messages used for transmission of VINAH data and any composite data types used in those message segments. This section should be read in conjunction with each Message definition section.

Segment BHS

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	FieldSeparator	ST	Required	1. .1	1. .1	|	
2	EncodingCharacters	ST	Required	3. .3	1. .1	^~\&	
4	BatchSendingFacility	HD	Required	0. .227	1. .1		HL70362
6	BatchReceivingFacility	HD	Required	0. .227	1. .1	AUSDHSV	HL70362
7	BatchCreationDateTime	TS	Required	0. .26	1. .1		
10	BatchComment	ST	Optional	0. .80	1. .1		
11	BatchControlID	ST	Required	0. .20	1. .1		

BHS.6 (BatchReceivingFacility)

This field uses validation table HL770362, however the value for submitting to VINAH will be AUSDHSV.

BHS.11 (BatchControlID)

The batch control ID is required and should be an unique identifier for each batch sent by a Health Service for the life of the VINAH collection. The Health Service is responsible for supplying specific identifiers that meet these requirements and those specified in Section 3.

Segment BTS

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	BatchMessageCount	ST	Required	0. .10	1. .1		
2	BatchComment	ST	Optional	0. .80	1. .1		

BTS.1 (BatchMessageCount)

The batch message count should be equal to the total number of messages (or MSH Segments) in the file.

Segment ERR

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
3	HL7ErrorCode	CWE	Required	0. .705	. .		
4	Severity	ID	Required	0. .2	. .		HL70516
5	ApplicationErrorCode	CWE	Required	0. .705	. .		HL70357
6	ApplicationErrorParameter	ST	Conditional	0. .80	0. .10		HL70533

ERR.3.1 (Identifier)

Validation table for the composite is applied to field 1 (Identifier) of the composite type

Segment EVN

The HL7 standard specifies EVN segments as being required for several messages, however inclusion of the EVN segment in a VINAH message is optional. No data elements are currently bound to any fields in the EVN segment. Its inclusion or exclusion will not cause a VINAH message to reject. If included, it must comply with the HL7 standard to ensure it does not break validation.

Segment FHS

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	FieldSeparator	ST	Required	1. .1	1. .1	|	
2	EncodingCharacters	ST	Required	4. .4	1. .1	^~\&	
4	FileSendingFacility	HD	Required	0. .227	1. .1		HL70362
5	FileReceivingApplication	ST	Required	0. .15	1. .1		990037
6	FileReceivingFacility	HD	Required	0. .227	1. .1	AUSDHSV	HL70362
7	FileCreationDateTime	TS	Required	0. .26	1. .1		
9	FileNameID	ST	Required	0. .20	1. .1		
10	FileHeaderComment	ST	Optional	0. .80	1. .1		

FHS.5 (FileReceivingApplication)
This field is used from 2007-08 to assist transition processing and monitor compliance with annual changes to the VINAH version.

FHS.6 (FileReceivingFacility)
This field uses validation table HL770362, however the value for submitting to VINAH will be AUSDHSV.

Segment FTS

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	FileBatchCount	NM	Required	0. .10	1. .1		
2	FileTrailerComment	ST	Optional	0. .80	1. .1		

Segment MRG

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	PriorPatientIdentifierList	CX	Required	0. .250	1. .5		

Segment MSA

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	AcknowledgementCode	ID	Required	0. .2	. .		HL70008
2	MessageControlID	ST	Required	0. .20	. .		

Segment MSH

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	FieldSeparator	ST	Required	0. .1	1. .1	|	
2	EncodingCharacters	ST	Required	0. .4	1. .1	^~\&	
4	SendingFacility	HD	Required	0. .227	1. .1		HL70362
6	ReceivingFacility	HD	Required	0. .227	1. .1		HL70362
7	DateTimeOfMessage	TS	Required	0. .26	1. .1		
9	MessageType	MSG	Required	0. .15	1. .1		
10	MessageControlID	ST	Required	0. .20	1. .1		
11	ProcessingID	PT	Required	0. .3	1. .1		HL70103
12	VersionID	VID	Required	0. .60	1. .1	2.5	HL70104
15	AcceptAcknowledgementType	ID	Required	0. .2	1. .1	NE	HL70155
16	ApplicationAcknowledgementType	ID	Required	0. .2	1. .1	NE	HL70155
17	CountryCode	ID	Required	0. .3	1. .1	AU	
18	CharacterSet	ID	Required	0. .16	1. .1	ASCII	

MSH.1 (FieldSeparator)

This field contains the separator between the segment ID and the first 'data submission' field, MSH-2-encoding characters. As such it serves as the separator and defines the character to be used as a separator for the rest of the message. Recommended value is | (ASCII 124).

MSH.2 (EncodingCharacters)

This field contains the four characters in the following order: the component separator, repetition separator, escape character, and subcomponent separator. Recommended values are ^~\& (ASCII 94, 126, 92, and 38, respectively).

MSH.4 (SendingFacility)

This field contains the fixed value 'AUSDHSV' when the message is being sent by the Department (eg: ACK messages) in all other cases it should contain the appropriate value indicating the sending facility.

MSH.6 (ReceivingFacility)

This field must contain the fixed value 'AUSDHSV' when the message is being sent to the Department. In all other cases (eg: ACK messages sent by the Department) it will contain the appropriate value indicating the receiving facility.

Segment NK1

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	SetID	SI	Required	0. .4	1. .1	1	
3	Relationship	CE	Required	0. .250	1. .1		
7	ContactRole	CE	Conditional	0. .250	0. .1		
21	Living Arrangement	IS	Required	0. .2	1. .1		990014

NK1.3 (Relationship)
Composite CE

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Identifier	ST	Required	0. .20		HL70063

NK1.7 (ContactRole)
Composite CE

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Identifier	ST	Required	0. .20		HL70131

Segment OBX

Used in this implementation to code a health condition (ie. diagnosis code) associated with a given episode.

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	SetID	SI	Required	0. .4	1. .1		
2	ValueType	ID	Required	0. .3	1. .1	CE	HL70125
3	ObservationIdentifier	CE	Required	0. .250	1. .1		
11	ObservationResultStatus	ID	Required	0. .1	1. .1	F	HL70085

OBX.3 (ObservationIdentifier)
Composite CE

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Identifier	ST	Required	0. .20		990010 990033 990036
3	NameOfCodingSystem	ID	Required	0. .20		HL70396

Segment PD1

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
2	LivingArrangement	IS	Required	0. .2	1. .1		HL70220

Segment PDA

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
2	DeathLocation	PL	Required	0. .80	1. .1		

PDA.2 (DeathLocation)

Composite PL

	Name	Data Type	Required	Length	Fixed Value	Validation Table
6	PatientLocationType	IS	Required	0. .1		990034

Segment PID

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	SetID	SI	Required	0. .4	1. .1	1	
3	PatientIdentifierList	CX	Required	0. .250	1. .5		
5	PatientName	XPN	Conditional	0. .250	1. .5		
7	DateTimeOfBirth	TS	Required	0. .26	1. .1		
8	Sex	IS	Required	0. .1	1. .1		HL70001
10	Race	CE	Required	0. .250	1. .1		HL70005
11	PatientAddress	XAD	Required	0. .250	1. .1		
15	PrimaryLanguage	CE	Required	0. .250	1. .1		HL70296
23	BirthPlace	ST	Required	0. .250	1. .1		HL70399
29	PatientDeathDateAndTime	TS	Optional	0. .26	0. .1		
32	IdentityReliabilityCode	IS	Required	0. .20	0. .2		HL70445

PID.10 (Race)

Composite CE

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Identifier	ST	Required	0. .20		HL70005

PID.15 (PrimaryLanguage)

Composite CE

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Identifier	ST	Required	0. .20		HL70296

PID.32 (IdentityReliabilityCode)

The first repetition of this field contains the data element Date of Birth Accuracy Code.
The second repetition of this field contains the data element Date of Death Accuracy Code and is required only if Date of Death (PID.29) is provided.

Segment PR1

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	SetID	SI	Required	0. .4	1. .1		
3	ProcedureCode	CE	Required	0. .250	1. .1		
5	ProcedureDateTime	TS	Required	0. .26	1. .1		
6	ProcedureFunctionalType	IS	Required	0. .2	1. .1		HL70230

PROCEDURE.PR1.3 (ProcedureCode)
Composite CE

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Identifier	ST	Required	0. .20		HL70088

Segment PRB

This segment is a placeholder for the diagnoses and conditions associated with an episode, that is, it is required by the HL7 standard when the OBX is present but no VINAH data elements are bound to its fields.

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	ActionCode	ID	Required	0. .2	1. .1	AD	HL70287
2	ActionDateTime	TS	Required	0. .26	1. .1		
3	ProblemID	CE	Required	0. .250	1. .1		
4	ProblemInstanceID	EI	Required	0. .60	1. .1		

Segment PRD

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	ProviderRole	CE	Required	0. .250	1. .1		

PRD.ProviderRole.1 (ProviderRole)
Composite CE

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Identifier	ST	Required	0. .20	RP	HL70286
4	AlternateIdentifier	ST	Required	0. .199		990023

Segment PTH

The pathway segment contains the data necessary to add, update, correct, and delete from the record plans that are utilised to address an individual's health care. In the VINAH domain this segment contains details of the client's goal plan.

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	ActionCode	ID	Required	0. .2	1. .1	AD	HL70287
2	PathwayID	CE	Required	0. .250	1. .1		
3	PathwayInstanceID	EI	Required	0. .60	1. .1		
4	PathwayEstablishedDateTime	TS	Conditional	0. .26	1. .1		

Segment PV1

Segment PV1 is used in many VINAH message sets. See the Message Set specifications for specific configurations of the PV1 in each set. As noted under Message Set Representation - Usage fields not required will be ignored if sent providing they conform to HL7 rules and valid codes.

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	SetID	SI	Optional	0. .4	1. .1	1	
2	PatientClass	IS	Required	0. .1	1. .1		HL70004
3	AssignedPatientLocation	PL	Optional	0. .80	0. .1		HL70305
5	PreadmitNumber	CX	Optional	0. .250	0. .1		
6	PriorPatientLocation	PL	Optional	1. .80	0. .1		
7	AttendingDoctor	XCN	Optional	0. .250	0. .1		
10	HospitalService	IS	Optional	0. .3	0. .1		HL70069
15	AmbulatoryStatus	IS	Optional	0. .2	0. .1		HL70009
19	VisitNumber	CX	Optional	0. .250	0. .1		
20	FinancialClass	FC	Optional	0. .50	0. .1		HL70064
36	DischargeDisposition	IS	Optional	0. .3	0. .1		HL70112
44	AdmitDateTime	TS	Optional	0. .26	0. .1		
45	DischargeDateTime	TS	Optional	0. .26	0. .1		
51	VisitIndicator	IS	Optional	0. .1	0. .1		HL70326

PV1.3 (AssignedPatientLocation)

Composite PL

	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
6	PatientLocationType	IS	Required	0. .1		

PV1.6 (PriorPatientLocation)

Composite PL

	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
6	PatientLocationType	IS	Required	0. .1		990027

Segment PV2

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
7	VisitUserCode	IS	Required	1. .2	1. .1		HL70130
23	ClinicOrganizationName	XON	Required	0. .250	1. .1		990012
24	PatientStatusCode	IS	Optional	0. .2	0. .1		HL70216
40	AdmissionLevelOfCareCode	CE	Optional	0. .250	0. .1		HL70432

PV2.23 (ClinicOrganizationName)

Composite XON

	Name	Data Type	Required	Length	Fixed Value	Validation Table
10	OrganizationIdentifier	ST	Required	0. .20		990012

Segment RF1

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	ReferralOutcome	CE		0. .250	1. .1		HL70283
6	OriginatingReferralIdentifier	EI	Required	0. .30	1. .1		
7	EffectiveDate	DTM	Required	0. .24	1. .1		
9	Process Date	DTM	Required	0. .24	1. .1		
11	External Referral Identifier	EI	Required	0. .30	1. .1		

Segment ROL

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	RoleInstanceID	EI	Required	0. .60	1. .1		
2	ActionCode	ID	Required	0. .2	1. .1	AD	HL70287
3	Role	CE	Required	0. .250	1. .1		
4	RolePerson	XCN	Required	0. .250	1. .1		
9	ProviderType	CE	Required	0. .250	1. .1		990013
10	OrganizationUnitType	CE	Required	0. .250	1. .1		

ROL.3 (Role)

Composite CE

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Identifier	ST	Required	0. .20		HL70443

ROL.9 (ProviderType)

Composite CE

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Identifier	ST	Required	0. .20		990013

ROL.10 (OrganizationUnitType)

Composite CE

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Identifier	ST	Required	0. .20		HL70406

HL7 Message Set Profiles

Transaction Summary

For a given Health Service's client, data relating to the following HL7 events is to be transmitted.

Entity/Event	*Transaction*	*HL7 Event*	*VINAH MDS Summary*
Client	Insert	ADT_A04	Inserts a client record
	Update	ADT_A08	Updates client information previously sent
	Merge	ADT_A40	Merges two previously accepted clients
Referral In	Insert	RRI_I12	Inserts a referral
	Update	RRI_I13	Updates referral previously sent
	Delete	RRI_I14	Deletes a referral
Episode	Insert	PPP_PCB	Creates an episode
	Update	PPP_PCC	Updates an episode
	Delete	PPP_PCD	Deletes an episode
Contact	Insert	ADT_A03	Inserts an Contact
	Update	ADT_A08	Updates an episode
	Delete	ADT_A13	Deletes an episode
Referral Out	Insert	REF_I12	Inserts a referral
	Update	REF_I13	Updates a referral
	Delete	REF_I14	Deletes a referral

Each of these sets of messages is expanded in the sub-sections that follow. The behaviour and structure for each message in each set is defined in the format described in the “How to Use” information provided earlier in this Section. This format is a message profile as defined in Chapter 2 of the HL7 v2.5 Manual.

Data Element Binding

The following sub-sections outline the HL7 template structure and the layout of the segments with in each message. Data Elements listed in Section 3 are to be reported within these segments at specific locations. These locations can be found for each message in Section 5c – Data Element Binding.

Client Registration Message Set

Client – Insert

State Transition
Client Information is registered, created or inserted in the Patient Administration System

Transaction Data Criteria
- clients that meet the definitions in Section 2, where:
- clients who have activity (referrals, episodes and contacts) during the reference period of the data collection

Transaction Trigger
- the client record is created or changed, and
- the client record has not previously successfully accepted by the department

Implementation Notes
The A08 message is also used in the Update Contact transaction. See section 'About the A08' for more information.

Message ADT_A04

Item	*Description*
MSH	Message Header
[EVN]	Event Type
PID	Patient Identification
PD1	Additional Demographics
NK1	Next of Kin / Associated Parties
PV1	Patient Visit

Message Segment Definition Extensions

ADT_A04.PV1

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	SetID	SI	Optional	0. .4	1. .1	1	
2	PatientClass	IS	Required	0. .1	1. .1	O	HL70004
6	PriorPatientLocation	PL	Optional	1. .80	0. .1		

PV1.6 (PriorPatientLocation)
Composite PL

	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
6	PatientLocationType	IS	Required	0. .1		990027

Client – Update

State Transition

Client Information is changed, revised or updated in the Patient Administration System

Transaction Data Criteria

- clients that meet the definitions in Section 2, and
- clients who have activity (referrals, episodes and contacts) during the reference period of the data collection, and
- the client registration has been previously successfully accepted by the department

Transaction Trigger

- a change to the client's information has been made since the last date of acceptance of the client's information

Implementation Notes

The A08 message is also used in the Update Contact transaction. See section 'About the A08' for more information.

Message ADT_A08

Item	*Description*
MSH	Message Header
EVN	Event Type
PID	Patient Identification
PD1	Additional Demographics
NK1	Next of Kin / Associated Parties
PV1	Patient Visit

Message Segment Definition Extensions

ADT_A08.PV1

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	SetID	SI	Optional	0. .4	1. .1	1	
2	PatientClass	IS	Required	0. .1	1. .1	O	HL70004
6	PriorPatientLocation	PL	Optional	1. .80	0. .1		

PV1.6 (PriorPatientLocation)

Composite PL

	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
6	PatientLocationType	IS	Required	0. .1		990027

Client – Merge

Transaction Criteria

- clients that meet the definitions in Section 2, and
- clients who have activity (referrals, episodes and contacts) during the reference period of the data collection, and
- two client registrations have previously been successfully accepted by the department

Transaction Trigger

- two client records are identified as representing the same person

Implementation Notes

Upon receipt of a merge message all client, episode and Contact data associated with the Prior Patient Identifier will be re-linked to the Patient Identifier. The client referred to by the Prior Patient Identifier will be deleted. The merge message will fail and be rolled back should the batch containing it not be accepted.

Message ADT_A40

Item	***Description***
MSH	Message Header
[EVN]	Event Type
PID	Patient Identification
MRG	Merge Information

Episode Message Set

Episode – Insert

State Transition
Episodes registered, created or inserted in the Patient Administration System

Transaction Data Criteria
- episodes that meet the definitions in Section 2, where:
- episodes that occur during the reference period of the data collection

Transaction Trigger
- the episode record is created or changed, and
- the episode record has not previously successfully accepted by the department

Message PPP_PCB

Item	*Description*
MSH	Message Header
PID	Patient Identification
PV1	Patient Visit
PV2	Patient Visit - Additional Information
PTH	Pathway Detail
{ (1 - n)	PROBLEM Group
PRB	Detail Problem
{ (1 - n)	PROBLEM_OBSERVATION Group
OBX	Observation/Result
}	
}	

Message Segment Definition Extensions

PPP_PCB.PV1

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	SetID	SI	Optional	0. .4	1. .1	1	
2	PatientClass	IS	Required	0. .1	1. .1	O	HL70004
5	PreadmitNumber	CX	Required	0. .250	1. .1		
10	HospitalService	IS	Required	0. .3	1. .1		HL70069
19	VisitNumber	CX	Required	0. .250	1. .1		
44	AdmitDateTime	TS	Required	0. .26	1. .1		
51	VisitIndicator	IS	Required	0. .1	1. .1	E	HL70326

Episode – Update

State Transition

Episodes registered, created or inserted in the Patient Administration System.

Transaction Data Criteria

- episodes that meet the definitions in Section 2, where:
- episodes that occur during the reference period of the data collection

Transaction Trigger

- the episode record is created or changed, and
- the episode record has not previously successfully accepted by the department

Implementation Notes

Previous versions of this document have specified Close Episode as a stand alone state transition. The Close Episode is transactionally equivalent to the Episode – Update transaction and has been omitted. Any field requirements present when an episode is close are listed in the Data Element Timing table.

Message PPP_PCC

This message is used to capture details of an update or correction to Episode details. Note that updates to client demographics or Contact details should be triggered by an Update Client (A08) event.

Item	*Description*
MSH	Message Header
PID	Patient Identification
PV1	Patient Visit
PV2	Patient Visit - Additional Information
PTH	Pathway Detail
{ (1 - n)	PROBLEM Group
PRB	Detail Problem
{ (1 - n)	PROBLEM_OBSERVATION Group
OBX	Observation/Result
}	
}	

Message Segment Definition Extensions

PPP_PCC.PID.PatientIdentifierList.4 (AssigningAuthority)

Composite HD

	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
1	NamespaceID	IS	Required	0. .20		HL70300

PPP_PCC.PID.PatientIdentifierList.4 (AssigningAuthority)

Composite HD

	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
1	NamespaceID	IS	Required	0. .20		HL70300

PPP_PCC.PV1

	Name	Data Type	Required	Length	Cardinality	Fixed Value	Validation Table
1	SetID	SI	Optional	0. .4	1. .1	1	
2	PatientClass	IS	Required	0. .1	1. .1	O	HL70004
5	PreadmitNumber	CX	Required	0. .250	1. .1		
10	HospitalService	IS	Required	0. .3	0. .1		HL70069
19	VisitNumber	CX	Required	0. .250	0. .1		
36	DischargeDisposition	IS	Optional	0. .3	0. .1		HL70112
44	AdmitDateTime	TS	Required	0. .26	0. .1		
45	DischargeDateTime	TS	Optional	0. .26	0. .1		
51	VisitIndicator	IS	Required	0. .1	0. .1	E	HL70326

PPP_PCC.PATIENT_VISIT.PV1.DischargeDateTime.1 (Time)
Composite DTM

	Name	Data Type	Required	Length	Fixed Value	Validation Table
1	Year	2 Byte Short	Required	4. .4		
2	Month	2 Byte Short	Required	2. .2		

PPP_PCC.PATIENT_VISIT.PV2.13 (ReferralSourceCode)
Composite XCN

	Name	Data Type	Required	Length	Fixed Value	Validation Table
13	IdentifierTypeCode	IS	Optional	0. .5		HL70203

Episode – Delete

State Transition

Episodes registered, created or inserted in the Patient Administration System.

Transaction Data Criteria

- episodes that meet the definitions in Section 2, where:
- episodes that occur during the reference period of the data collection

Transaction Trigger

- the episode record is created or changed, and
- the episode record has not previously successfully accepted by the department

Implementation Notes

Please note in the case of delete messages, all data content is ignored except the Key fields - the Episode Identifier, Identifier Type, and Local Identifier Assigning Authority - however the message must still conform to all business rules in order to pass HL7 validation and be actioned.

Static Structure

Message PPP_PCD

This message is used to delete details of a Episode which has been previously been sent.

Item	*Description*
MSH	Message Header
PID	Patient Identification
PV1	Patient Visit
PV2	Patient Visit - Additional Information
PTH	Pathway Detail
{ (1 - n)	PROBLEM Group
PRB	Detail Problem
{ (1 - n)	PROBLEM_OBSERVATION Group
OBX	Observation/Result
}	
}	
Z1	AUSDHSV Specific

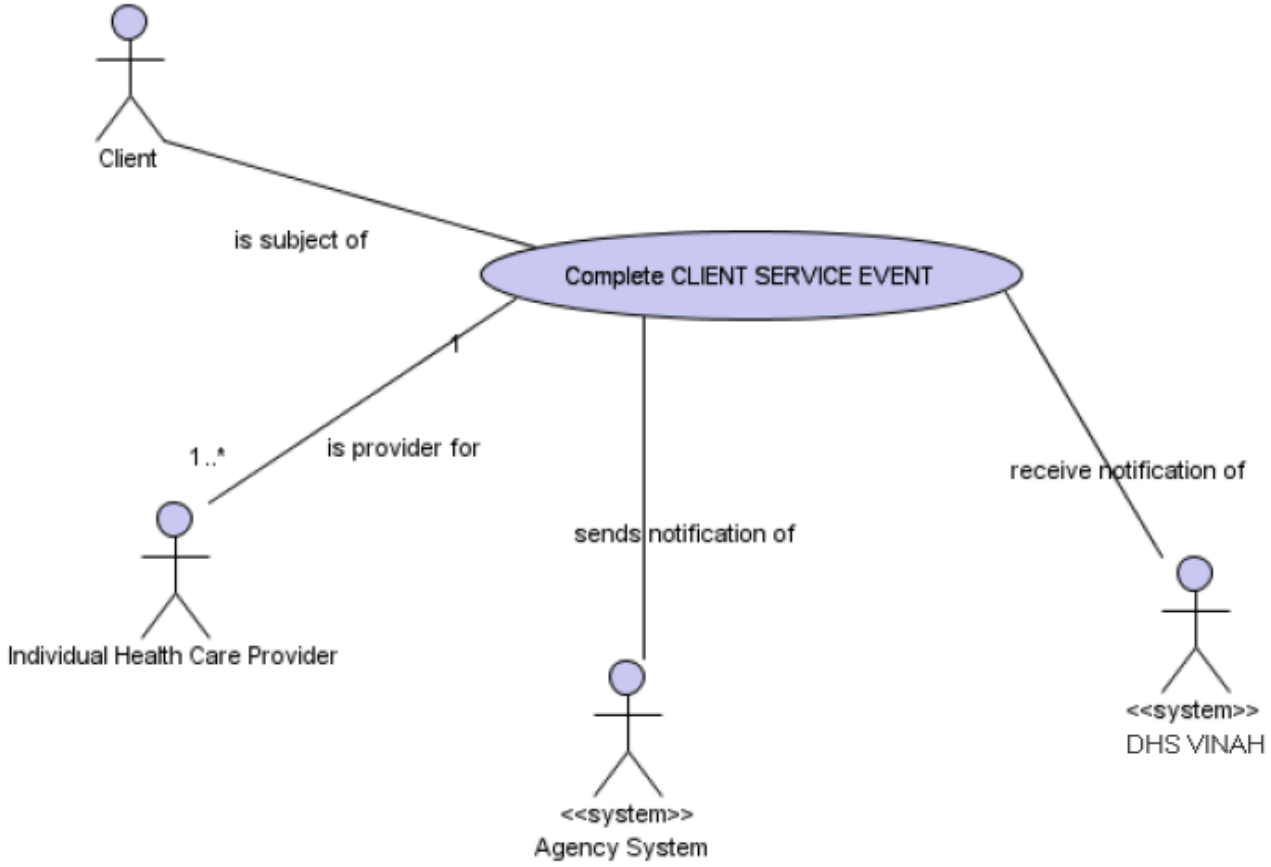
Message ACK_PCD

Item	*Description*
MSH	Message Header
MSA	Software Segment
[{ ERR }] (0 - 99)	Error

Contact Message Set

Complete Contact

Use Case Model

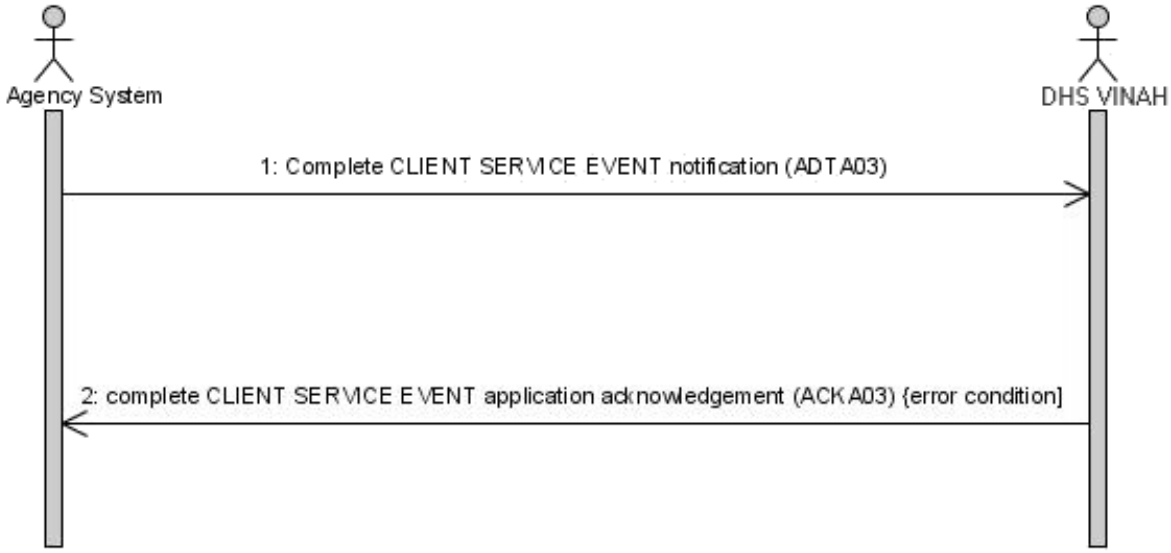


Further detail in relation to this system use case is included in Appendix A.

Data Element Binding

Message	*Data Element Name*	*HL7 Attribute Name*	*Location*	*Value Domain*
ADTA03	***[Refer to Section 5 Appendix A- Data Element Binding Table]***			

Dynamic Interaction Model



The following are the derived events involved in this interaction.

Static Structure

Message ADT_A03

Item	*Description*
MSH	Message Header
EVN	Event Type
PID	Patient Identification
PV1	Patient Visit
PV2	Patient Visit - Additional Info.
{ ROL } (1 - 5)	Role
{ (1 - 5)	Procedure Group
PR1	
}	

ADT_A03.PV1

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	SetID	SI	Optional	0. .4	1. .1	1	
2	PatientClass	IS	Required	0. .1	1. .1		HL70004
3	AssignedPatientLocation	PL	Required	0. .80	1. .1		HL70305
5	PreadmitNumber	CX	Required	0. .250	1. .1		
7	AttendingDoctor	XCN	Required	0. .250	1. .1		
15	AmbulatoryStatus	IS	Required	0. .2	1. .1		HL70009
19	VisitNumber	CX	Required	0. .250	1. .1		
20	FinancialClass	FC	Required	0. .50	1. .1		HL70064
45	DischargeDateTime	TS	Required	0. .26	1. .1		
51	VisitIndicator	IS	Required	0. .1	1. .1		HL70326

PV1.3 (AssignedPatientLocation)

Composite PL

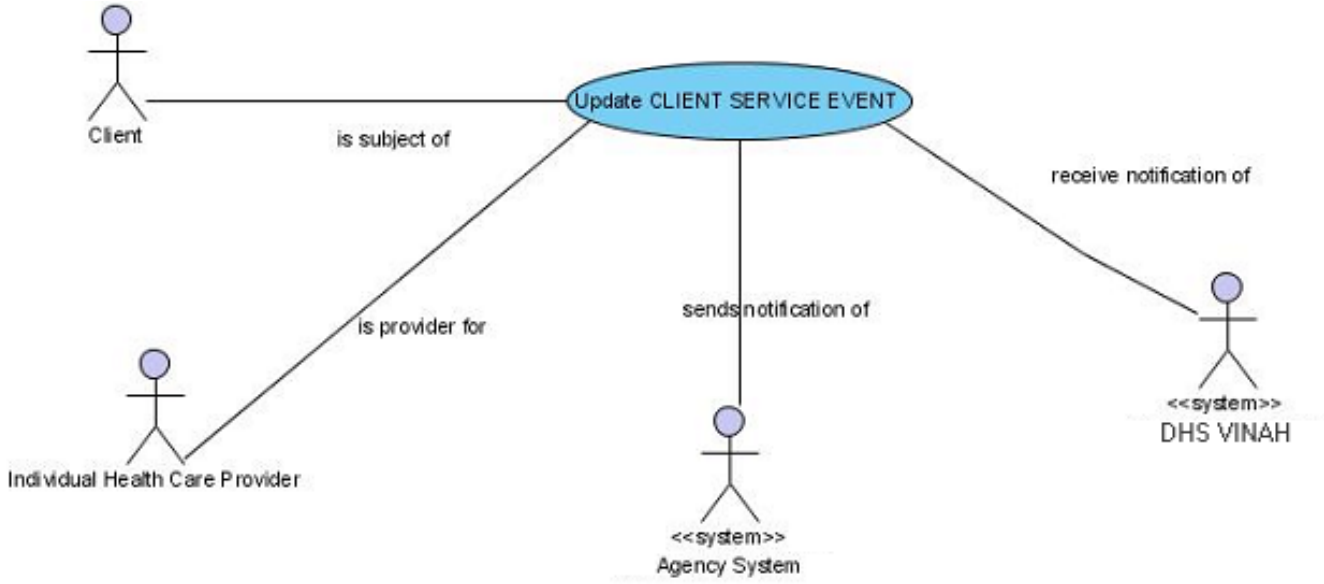
	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
6	PatientLocationType	IS	Required	0. .1		

Message ACK_A03

Item	*Description*
MSH	Message Header
MSA	Software Segment
[{ ERR }] (0 - 99)	Error

Update Contact

Use Case Model

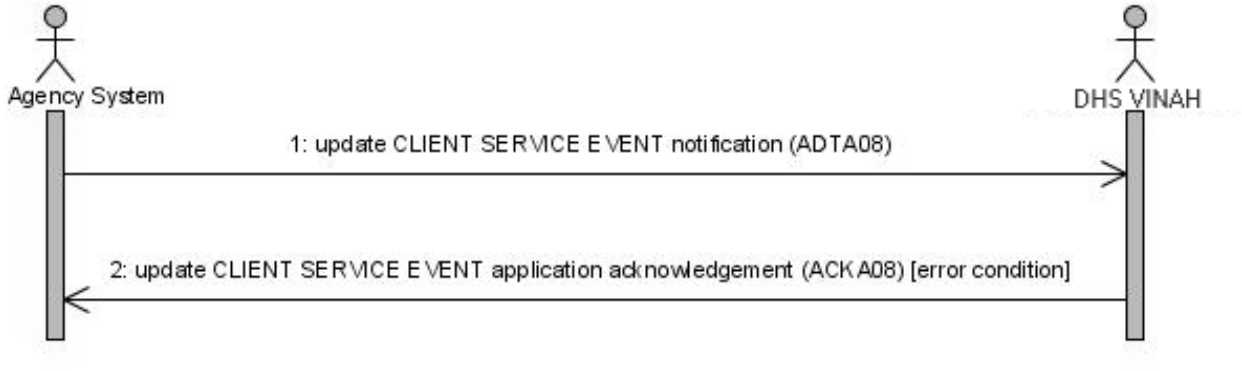


Further detail in relation to this system use case is included in Appendix A.

Data Element Binding

Message	*Data Element Name*	*HL7 Attribute Name*	*Location*	*Value Domain*
ADTA08	***[Refer to Section 5 Appendix A- Data Element Binding Table]***			

Dynamic Interaction Model



The following are the derived events involved in this interaction.

Static Structure

Message ADT_A08

Item	*Description*
MSH	Message Header
EVN	Event Type
PID	Patient Identification
PV1	Patient Visit
PV2	Patient Visit - Additional Info.
{ ROL } (1 - 5)	Role
{ (1 - 5)	Procedure Group
PR1	
}	

ADT_A08.PV1

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	SetID	SI	Optional	0. .4	1. .1	1	
2	PatientClass	IS	Required	0. .1	1. .1		HL70004
3	AssignedPatientLocation	PL	Required	0. .80	1. .1		HL70305
5	PreadmitNumber	CX	Required	0. .250	1. .1		
7	AttendingDoctor	XCN	Required	0. .250	1. .1		
15	AmbulatoryStatus	IS	Required	0. .2	1. .1		HL70009
19	VisitNumber	CX	Required	0. .250	1. .1		
20	FinancialClass	FC	Required	0. .50	1. .1		HL70064
45	DischargeDateTime	TS	Required	0. .26	1. .1		
51	VisitIndicator	IS	Required	0. .1	1. .1		HL70326

PV1.3 (AssignedPatientLocation)

Composite PL

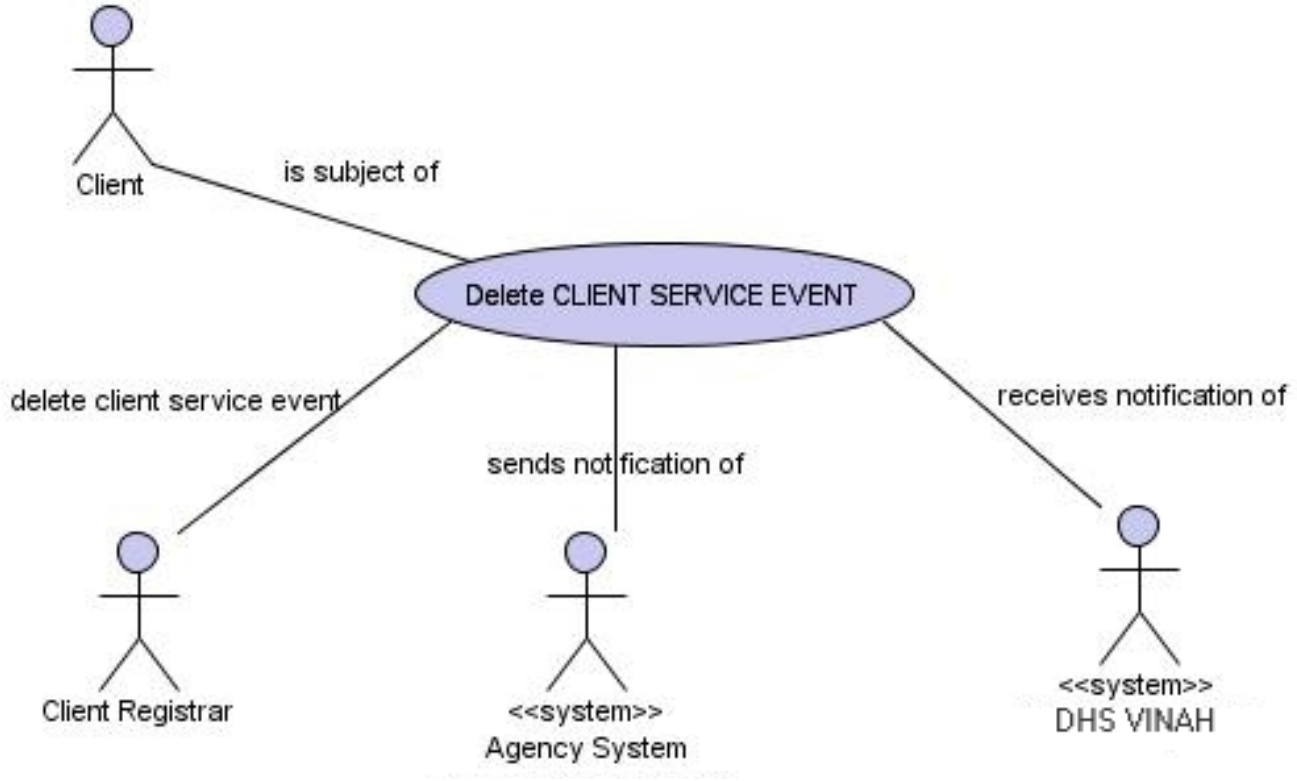
	Name	*Data Type*	*Required*	*Length*	*Fixed Value*	*Validation Table*
6	PatientLocationType	IS	Required	0. .1		

Message ACK_A08

Item	*Description*
MSH	Message Header
MSA	Software Segment
[{ ERR }] (0 - 99)	Error

Delete Contact

Use Case Model



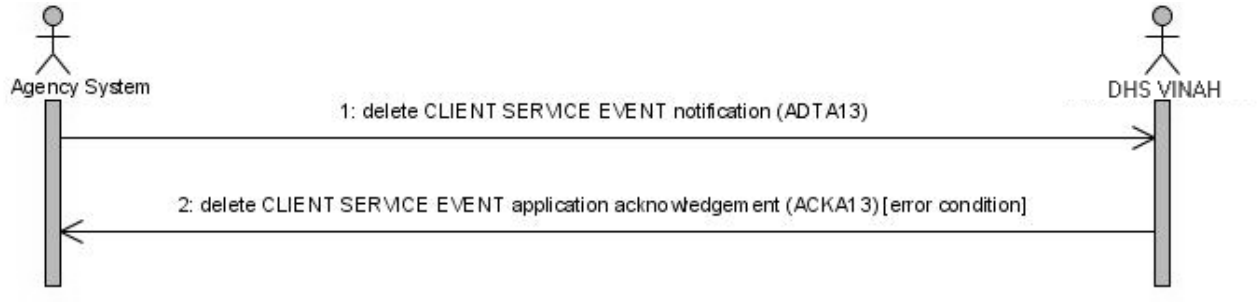
Further detail in relation to this system use case is included in Appendix A.

Data Element Binding

Message	*Data Element Name*	*HL7 Attribute Name*	*Location*	*Value Domain*
ADTA13	***[Refer to Section 5 Appendix A- Data Element Binding Table]***			

Please note in the case of delete messages, all data content is ignored except the Key fields - the Person Identifier, Identifier Type, and Local Identifier Assigning Authority - however the message must still conform to all business rules in order to pass HL7 validation and be actioned.

Dynamic Interaction Model



The following are the derived events involved in this interaction.

Static Structure

Message ADT_A13

Item	*Description*
MSH	Message Header
EVN	Event Type
PID	Patient Identification
PV1	Patient Visit
PV2	Patient Visit - Additional Info.
{ ROL } (1 - 5)	Role
{ (1 - 5)	Procedure Group
PR1	
}	

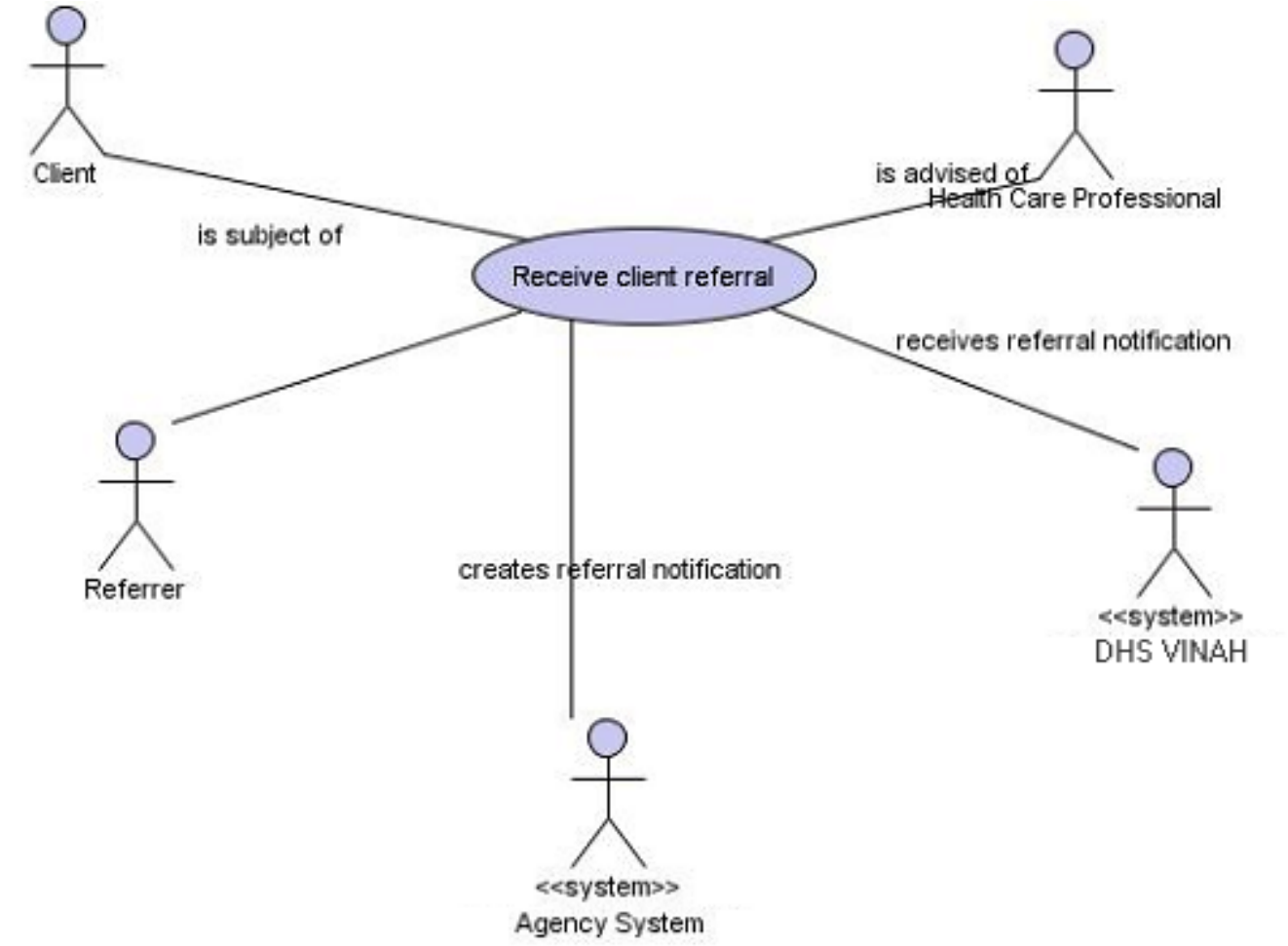
Message ACK_A13

Item	*Description*
MSH	Message Header
MSA	Software Segment
[{ ERR }] (0 - 99)	Error

Client Referral Message Set

Receive Client Referral

Use Case Model



Note, in the VINAH context, the following characteristics of the receive client referral use case:

- the VINAH MDS is only intended to capture data regarding the acknowledgment of receipt of a referral; and
- referral instances may or may not lead to an instance of a Episode for a given client.

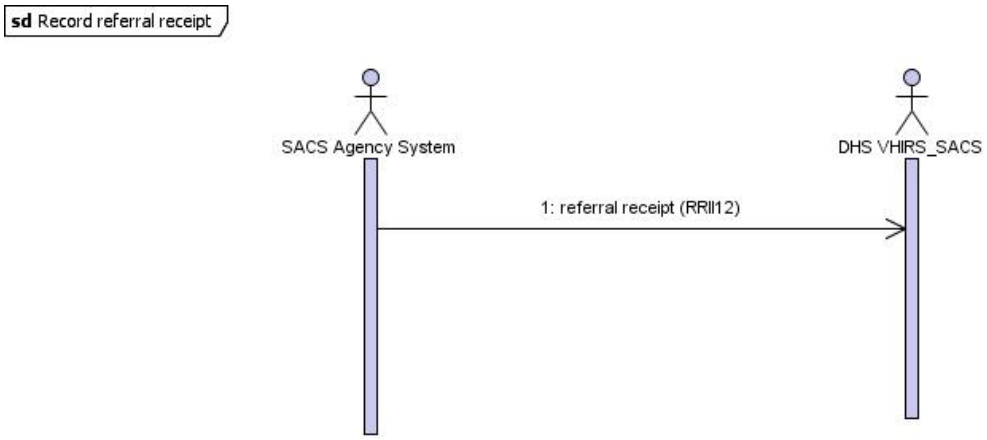
Further detail in relation to this system use case is included in Appendix A of this manual.

Data Element Binding

Message	*Data Element Name*	*HL7 Attribute Name*	*Location*	*Value Domain*
RRII12	***[Refer to Section 5 Appendix A- Data Element Binding Table]***			

Dynamic Interaction Model

Note that this implementation only requires that the DHS-VHIRS_VINAH system receive the RRI referral receipt acknowledgment (RRI) not the initiating referral (REF).



Static Structure

Message RRI_I12

Item	*Description*
MSH	Message Header
RF1	Referral Information
PRD	Provider Data
PID	Patient Identification
[PV1]	Patient Visit

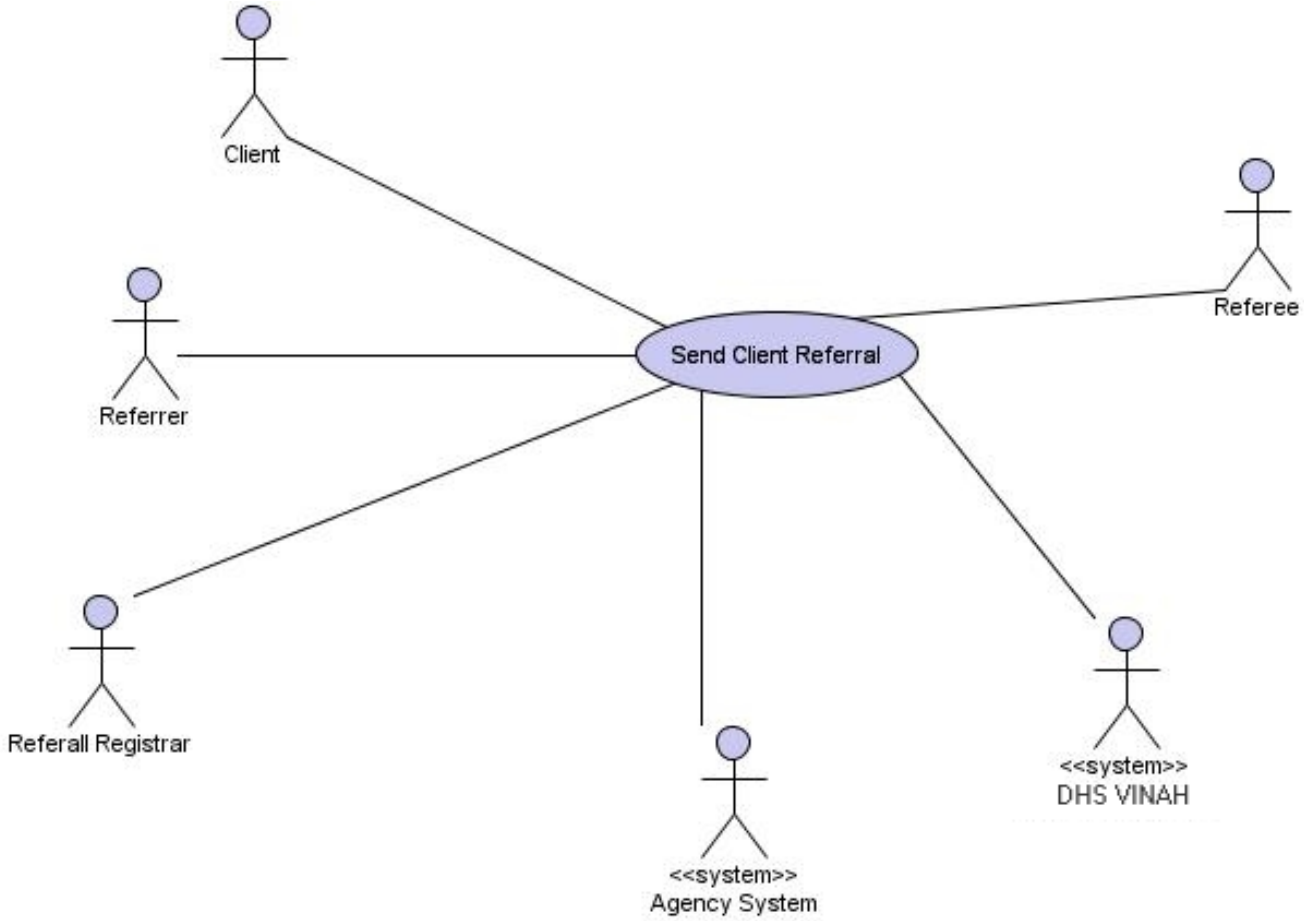
RRI_I12.PV1

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	SetID	SI	Optional	0. .4	1. .1	1	
2	PatientClass	IS	Required	0. .1	1. .1	O	HL70004
10	HospitalService	IS	Required	0. .3	1. .1		HL70069
51	VisitIndicator	IS	Required	0. .1	1. .1	E	HL70326

Send Client Referral

Use Case Model

Note that this implementation only requires that the DHS-VHIRS_VINAH system receive the initiating referral (REF) not the referral receipt acknowledgment (RRI).

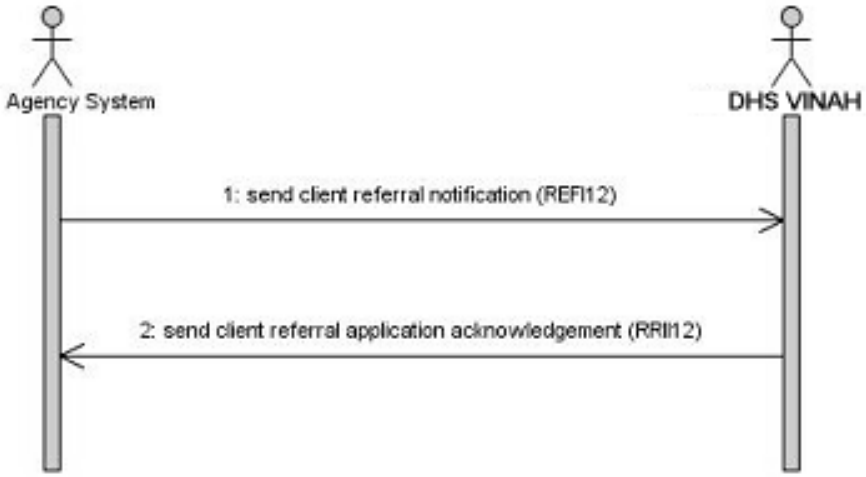


Further detail in relation to this system use case is included in Appendix A of this manual.

Data Element Binding

Message	*Data Element Name*	*HL7 Attribute Name*	*Location*	*Value Domain*
REFI12	***[Refer to Section 5 Appendix A- Data Element Binding Table]***			

Dynamic Interaction Model



Static Structure

Message REF_I12

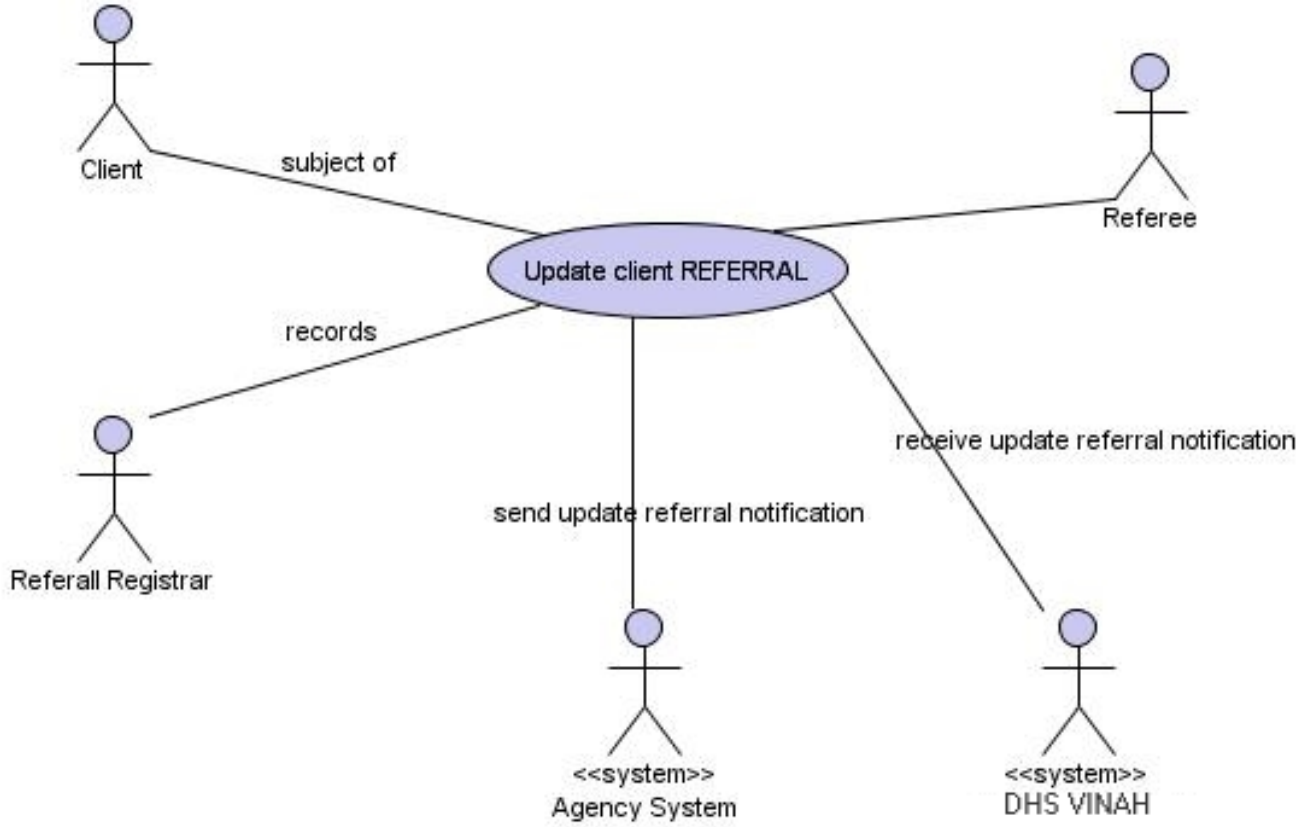
Item	*Description*
MSH	Message Header
RF1	Referral Information
PRD	Provider Data
PID	Patient Identification

Message RRI_I12

Item	*Description*
MSH	Message Header
MSA	Message Acknowledgement
PRD	Provider Data
PID	Patient Identification

Update Client Referral

Use Case Model

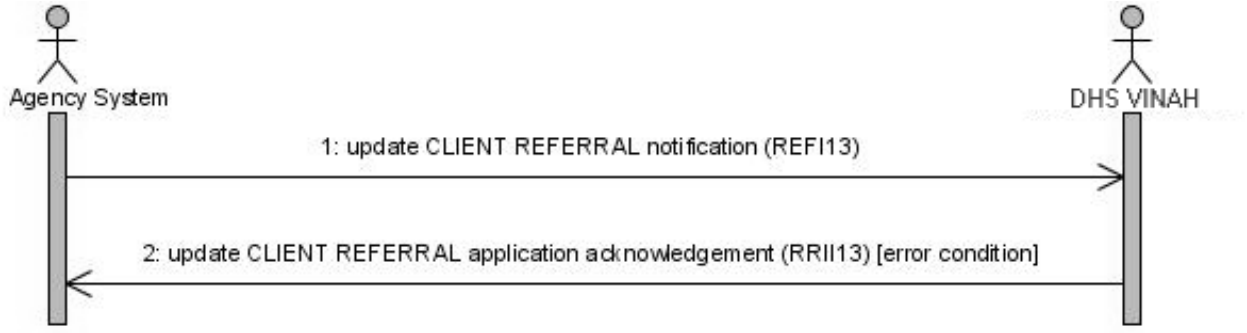


Further detail in relation to this system use case is included in Appendix A of this manual.

Data Element Binding

Message	*Data Element Name*	*HL7 Attribute Name*	*Location*	*Value Domain*
REFI13	***[Refer to Section 5 Appendix A- Data Element Binding Table]***			

Dynamic Interaction Model



Static Structure

Message REF_I13

Item	*Description*
MSH	Message Header
RF1	Referral Information
PRD	Provider Data
PID	Patient Identification

Data Element Binding

Message	*Data Element Name*	*HL7 Attribute Name*	*Location*	*Value Domain*
RRII13	***[Refer to Section 5 Appendix A- Data Element Binding Table]***			

Message RRI_I13

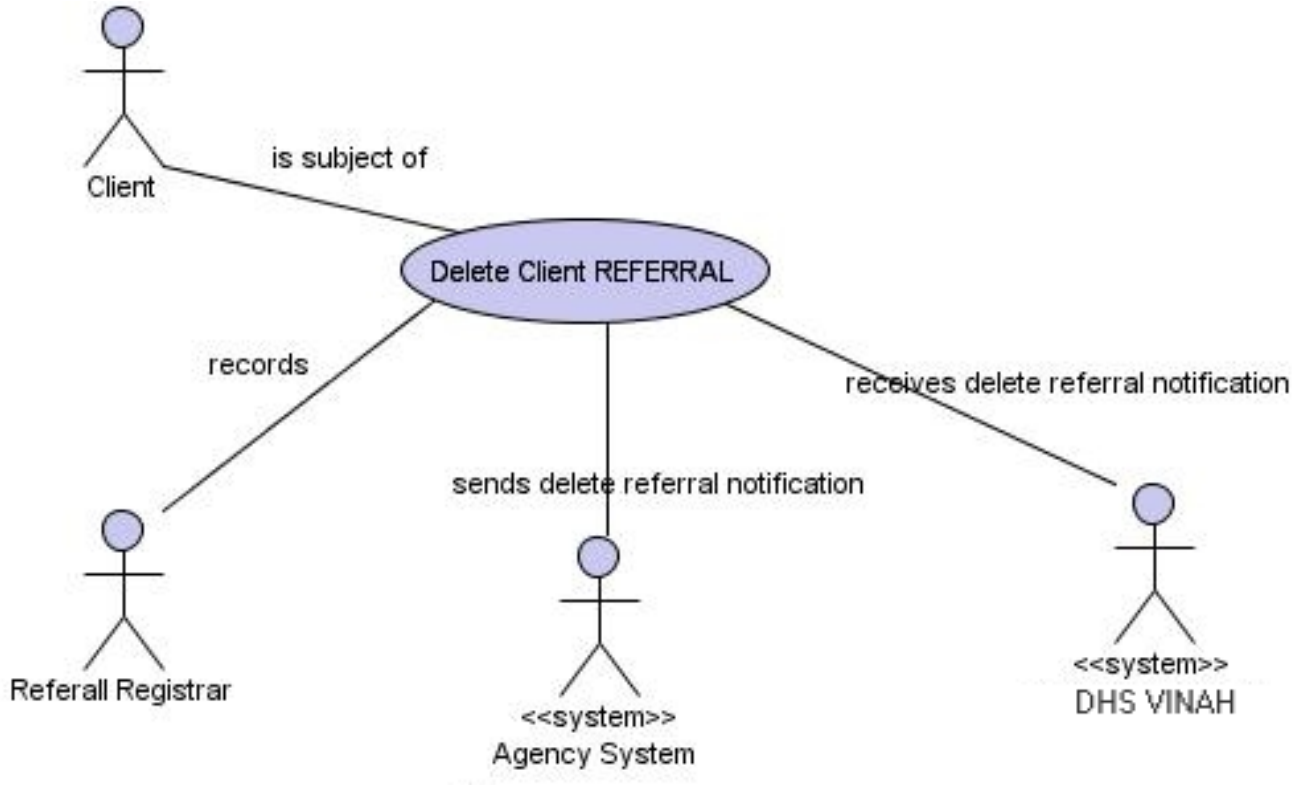
Item	*Description*
MSH	Message Header
MSA	Message Acknowledgement
PRD	Provider Data
PID	Patient Identification

Segment RRI_I13.MSA

	Name	*Data Type*	*Required*	*Length*	*Cardinality*	*Fixed Value*	*Validation Table*
1	AcknowledgementCode	ID	Required	0. .2	. .		HL70008
2	MessageControlID	ST	Required	0. .20	. .		

Delete Client Referral

Use Case Model



Note that this implementation only requires that the DHS-VHIRS_VINAH system receive the initiating referral (REF) not the referral receipt acknowledgment (RRI).

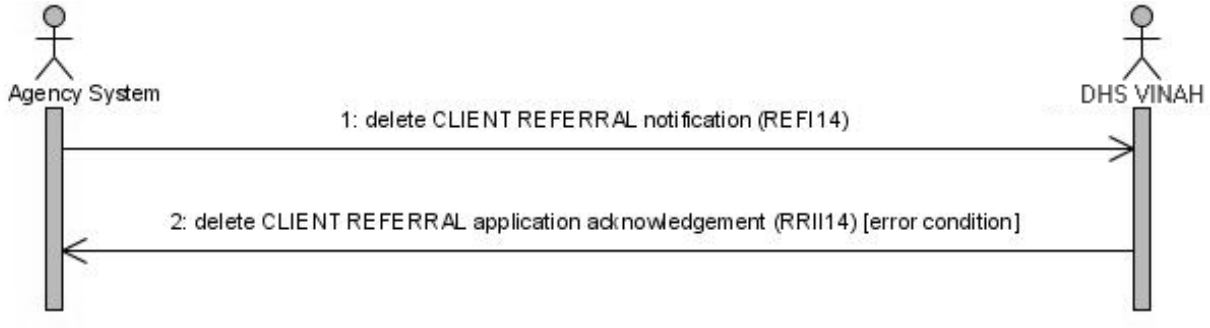
Further detail in relation to this system use case is included in Appendix A of this manual.

Data Element Binding

Message	*Data Element Name*	*HL7 Attribute Name*	*Location*	*Value Domain*
REFI14	***[Refer to Section 5 Appendix A- Data Element Binding Table]***			

Please note in the case of delete messages, all data content is ignored except the Key fields - the Referral Identifier, Identifier Type, and Local Identifier Assigning Authority - however the message must still conform to all business rules in order to pass HL7 validation and be actioned.

Dynamic Interaction Model



Static Structure

Message REF_I14

Item	*Description*
MSH	Message Header
RF1	Referral Information
PRD	Provider Data
PID	Patient Identification

Data Element Binding

Message	*Data Element Name*	*HL7 Attribute Name*	*Location*	*Value Domain*
RRII14	***[Refer to Section 5 Appendix A- Data Element Binding Table]***			

Please note in the case of delete messages, all data content is ignored except the Key field - the Referral Identifier - however the message must still conform to all business rules in order to pass HL7 validation and be actioned.

Message RRI_I14

Item	*Description*
MSH	Message Header
MSA	Message Acknowledgement
PRD	Provider Data
PID	Patient Identification