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Wait Time Information System (WTIS) Complex ALC HL7 Specification

HL7 Interface		Revision Date
WTIS Supported Events		October 2014 (v3.3)
Trigger Event	HL7 Description	WTIS Description
ORM^O01	General Order Message	Open ALC Waitlist Entry
ORM^O01	General Order Message	Update ALC Waitlist Entry
ADT^A03	Discharge Message	Close ALC Waitlist Entry



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1. Document Purpose

The purpose of this document is to provide a detailed description of the interface messaging requirements to support Complex Alternate Level of Care (ALC) integration with the Wait Time Information System (WTIS). This document will identify the supported HL7 trigger events and outline how the WTIS will interpret and process data elements sent in each unique message.

2. Intended Audience

This document is intended for use by a technical audience. Please ensure IT staff involved in WTIS implementation and integration activities at your facility are provided with the most recent version of this document.

3. References and Related Documents

Several key documents are available on the ATC Information Site to provide additional guidance and information related to Complex ALC integration.

- WTIS Complex HL7 Summary Data Mapping Tool
- ALC Wait Time Data Elements and System Labels

4. Highlights of What's New in Version 3.0

The Complex ALC HL7 Specification has been modified to meet the requirements for the WTIS to capture new and updated data elements. Highlights of the modifications are as follows:

- 1. To allow sites to be able to perform Site to Site transfers, New Site Number, Transfer Date and New Visit Number fields have been added.
 - All three fields (New Site Number, Transfer Date and New Visit Number) must be provided when an ALC Waitlist Entry (WLE) is transferred to a new site within the same facility.
 - The New Site Number is submitted in the PV1 segment (PV1.37) of the ORM^O01 message type.
 - The Transfer Date is submitted in the PV1 segment (PV1.45) of the ORM^O01message type.
 - The New Visit Number is submitted in the PV1 segment (PV1.50) of the ORM^O01message type.

2. A Most Appropriate Discharge Destination Determination Date field has been added.

• The Most Appropriate Discharge Destination Date is submitted in the ZWA segment (ZWA.9) of the ORM^O01 message type.

3. Additional ALC Discharge Destination and Most Appropriate Discharge Destination validations have been added.

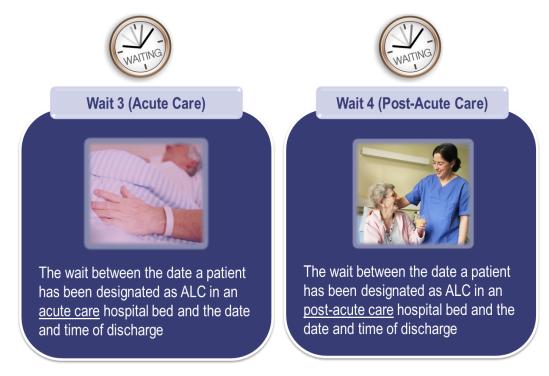
- Submission of the ALC Discharge Destination is now mandatory.
- Submission of ALC Most Appropriate Discharge Destination is now mandatory.
- Previously, entries submitted without an ALC Discharge Destination or Most Appropriate Discharge Destination were automatically assigned a destination of To Be Determined (TBD). To allow hospitals to explicitly indicate when the ALC Discharge Destination or Most Appropriate Discharge Destination is not known, a new value has been added to both the ALC Discharge Destination and Most Appropriate Discharge Destination fields:
 - Unknown
- 4. New Specialized Needs and Supports have been added.
 - Behavioural Requirements 1:1 Support
 - Behavioural Requirements Aggressive Behaviours
 - Behavioural Requirements Sexualized Behaviours
 - Infection Control/Isolation Requirements Out-break at Discharge Destination
 - Infection Control/Isolation Requirements Out-break at Facility
 - Mental Health Requirements Addictions

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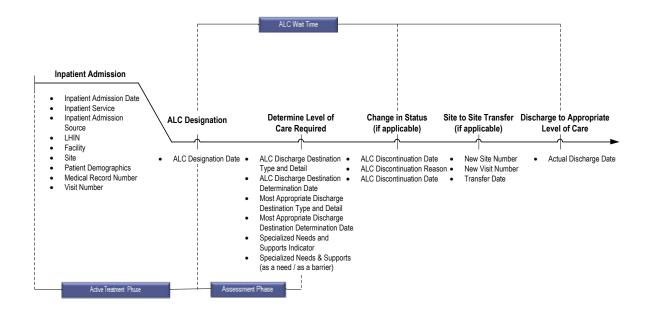
- Mental Health Requirements Concurrent Disorders
- Neurological Requirements Acquired Brain Injury
- Social Requirements Financial constraints
- Social Requirements Housing/Homelessness
- Social Requirements Lack of social support
- Social Requirements Legal concerns
- 5. Some **Specialized Needs and Supports** have had their names updated. Their coded values remain unchanged.
 - Behavioural Requirements changed to Behavioural Requirements Unspecified
 - Infection Control/Isolation Requirements changed to Infection Control/Isolation Requirements - Isolation
 - Mental Health Requirements changed to Mental Health Requirements Unspecified
 - Neurological Requirements changed to Neurological Requirements Unspecified
 - Social Requirements changed to Social Requirements Unspecified
- **6.** Additional **Inpatient Service** validation rules have been added when updating inpatient services. These rule align with existing guidance. An inpatient service can now only be updated from one acute inpatient service to another acute inpatient service. E.g. NS to SU.

5. WTIS Application Integration Overview

The WTIS captures Wait 3 and Wait 4 ALC wait times on ALC patients:



The following diagram outlines all of the ALC data elements captured in the WTIS:



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For ALC, there are two levels of integration: The integration level a facility utilizes is determined in partnership with ATC and each facility. The main criteria associated with determining a facility's integration level is based on the readiness of a facility to implement both the required technical and process changes associated with each level of integration.

Level of Integration	Waitlist entry is created	Waitlist entry is modified	Waitlist entry is closed
Basic	via manual input into the WTIS website (GUI)	via manual input into the WTIS website (GUI)	via manual input into the WTIS website (GUI)
Complex	via interface message directly from facility source system/interface	via interface message directly from facility source system/interface	via interface message directly from facility source system/interface

6. Minimum Facility Requirements

The following are the minimum technical requirements that must be met to determine if a facility is ready to implement Complex ALC integration.

- Facilities must be able to send the following HL7 messages for each ALC waitlist entry:
 - ORM^O01 Order message to open an ALC waitlist entry
 - ORM^O01 Order message to **update** an ALC waitlist entry
 - ADT^A03 Discharge message to close an ALC waitlist entry
- Facilities will utilize the HL7 ORM^O01 order message to open and update ALC waitlist entries.
- Facilities will utilize the HL7 ORM^O01 order message to discontinue an ALC waitlist entry due to the following discontinuation reasons:
 - Change in Destination Invalidates ALC Designation
 - Change in Medical Status
 - Data Entry Error
- Facilities will utilize the HL7 ADT^A03 discharge message to close an ALC waitlist entry due to the following discontinuation reasons:
 - Death
 - Discharge Against Medical Advice
 - Transfer to Acute Care
 - Unplanned Repatriation
- Facilities must be able to send unique Patient Identifiers (such as MRN) in their order and discharge messages.
- Facilities must be able to provide a unique patient Visit Number (e.g., an Encounter ID) for each individual ALC waitlist entry. This Visit Number will be used to identify the waitlist entry throughout its lifespan.
- Facilities will filter their source systems to only send HL7 messages associated with ALC patients to the WTIS.
- Facilities will be required to distinguish between a closed waitlist entry due to a patient discharge and a discontinuation/cancellation in a patient's wait. A discharge permanently closes a waitlist in the system. However, if a patient's wait is discontinued due to a Change in Medical Status, the ALC waitlist entry closes, but can be opened if redesignation occurs.
- Facilities should ensure that the following date rules are adhered to:
 - All dates must be less than or equal to the current date and greater than or equal to January 1, 1850
 - The Inpatient Admission Date must be greater than or equal to the patient's date of birth
 - ALC Designation Date must be greater than or equal to Inpatient Admission Date

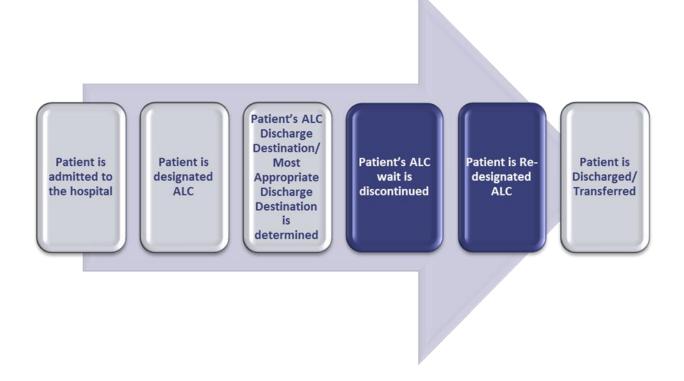
- ALC Discharge Destination Determination Date must be greater than or equal to ALC Designation Date or most recent ALC Re-designation Date (if applicable)
- ALC Discharge Destination Determination Date cannot be less than the previously submitted ALC Discharge Destination Determination Date (if applicable)
- When the ALC Discharge Destination Determination Date changes an update must be made to the Discharge Destination
- Most Appropriate Discharge Destination Determination Date must be greater than or equal to ALC Designation Date OR most recent ALC re-designation date (if applicable)
- Most Appropriate Discharge Destination Determination Date cannot be less than the previously submitted Most Appropriate Discharge Destination Determination Date (if applicable)
- When the Most Appropriate Discharge Destination Determination Date changes an update must be made to the Most Appropriate Discharge Destination
- ALC Discontinuation Date must be greater than or equal to ALC Designation Date
- ALC Discontinuation Date must be greater than or equal to ALC Discharge Destination Determination Date and the Most Appropriate Discharge Destination Determination Date
- ALC Re-designation Date must be greater than or equal to the associated ALC Discontinuation Date
- Actual Discharge Date must be greater than or equal to ALC Designation Date
- Actual Discharge Date must be greater than or equal to ALC Discharge Destination Determination Date and the Most Appropriate Discharge Destination Date
- Facilities must be able to send Specialized Needs and Supports Indicator (i.e., indication whether the patient requires specialized needs/supports at the ALC Discharge Destination).
- Facilities must be able to send Specialized Needs and Supports and indicate if they are a Need or a Barrier.
- Facilities must be able to send Most Appropriate Discharge Destination.
- Facilities must be able to send Most Appropriate Discharge Destination Date.
- Facilities must support the receipt and interpretation of HL7 positive and/or negative acknowledgment messages.
- Facilities must be able to differentiate between an ALC Create and an ALC Update waitlist ORM^O01 message by including the appropriate ORC segment code combination.
- Data element mapping is not supported by WTIS and must be performed (if applicable) by facilities prior to sending the information to the WTIS.
- Facilities must be able to send updates for:
 - Inpatient Admission Date

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- Inpatient Service
- Inpatient Admission Source
- ALC Discharge Destination Type & Detail
- ALC Discharge Destination Determination Date
- Most Appropriate Discharge Destination Type & Detail
- Most Appropriate Discharge Destination Determination Date
- Specialized Needs and Supports Indicator
- Specialized Needs and Supports (as a need/as a barrier)
- Facilities must be able to retransmit failed messages to the WTIS.
- Facilities must be able to send all ORM data fields within one message, if available.
- Multi-Site ALC Facilities as part of Site to Site transfer events;
 - Must be able to send New Site Number.
 - Must be able to send Transfer Date.
 - Must be able to send New Visit Number.

7. Clinical Event Overview

The diagram below is a visual representation depicting possible clinical events and the associated waitlist entry.



The following table lists the clinical events displayed above with the corresponding message type and message use case from a WTIS perspective:

Clinical event	Message	Message Use Case
Patient is admitted to the hospital	n/a	n/a
Patient is designated ALC	ORM^O01	Open ALC Waitlist Entry (New)
ALC Discharge Destination/Most Appropriate Discharge Destination is determined	ORM^O01	Update ALC Waitlist Entry
Change in ALC Discharge Destination/Most Appropriate Discharge Destination	ORM^O01	Update ALC Waitlist Entry

Patient ALC waitlist is discontinued due to: Change in Destination Invalidates ALC Designation Change in Medical Status Data Entry Error	ORM^O01	Update ALC Waitlist Entry
Patient is Re-designated ALC	ORM^O01	Open ALC Waitlist Entry (Re-Designate)
Patient ALC waitlist is discontinued due to: Discharge Against Medical Advice Death Transfer to Acute Care Unplanned Repatriation	ADT^A03	Close ALC Waitlist Entry
Patient is Discharged to appropriate ALC Discharge Destination	ADT^A03	Close ALC Waitlist Entry
Patient is transferred to another site within the same facility, moving from same bed type to same bed type	ORM^O01	Update ALC Waitlist Entry

The data elements required and the values of the data elements sent in each message type vary depending on the use case. The message definition by use case is provided in <u>Section 9</u>: <u>Message Use Case Details</u>.

Section	Message	Message Use Case
9.1	ORM^O01	Open ALC Waitlist Entry
9.2	ORM^O01	Update ALC Waitlist Entry
9.3	ADT^A03	Close ALC Waitlist Entry

For further details and scenarios demonstrating HL7 messages and the resulting state of the corresponding WTIS waitlist entry, please see <u>Appendix A – ALC Scenarios for the WTIS</u>.

8. WTIS HL7 Specification – WTIS Field and Component Requirements

8.1 HL7 Message Structure

The information in this section is provided for reference only. The HL7 Standard should be considered the authoritative reference.

8.2 Messages

A message is the atomic unit of data transferred between systems. Each message has a message type that defines its purpose.

8.3 Date/Time Data

A date/time field may contain a date, or a date and time, according to the level of precision specified in the message definition.

Dates are always represented as YYYYMMDD where:

- YYYY is the year,
- MM is the month, and
- DD is the day.

For example, December 20, 1951 is represented as 19511220.

Time is always represented as HHMMSS where:

- HH is hours in 24-hour format.
- MM is minutes, and
- SS is the seconds.

For example, 12:30 p.m. on December 20, 1951 would be represented as 19511220123000.

All ALC dates must be valid dates, not future-dated (they must be equal or less than the current date) and they must be after January 1, 1850.

8.4 Field Optionality

This specification defines the optionality of segments, fields, field components, and field subcomponents in the Message Specification Detail as described in the two tables below. The first table describes optionality as defined by the HL7 standard, while the second describes optionally as defined by the WTIS HL7 standard.

	HL7			
Value	Description	Definition		
R	Required	A sending application shall populate all "R" elements with a non-empty value. The receiving application shall process the information conveyed by required elements.		
		A receiving application must not raise an error due to the presence of a required element, but may raise an error due to the absence of a required element.		
0	Optional	This code indicates that the usage for this element has not yet been defined. A usage of 'Optional' may not be used in 'implementation' profiles (non-optionality profiles).		
		Conformance may not be tested on an Optional field. Narrower profiles may be defined based on this profile, and may assign any usage code to the element.		
С	Conditional	This usage has an associated condition predicate.		
		If the predicate is satisfied: A sending application must always send the element. A receiving application must process the element. It may raise an error if the element is not present.		
		If the predicate is not satisfied:		
		A sending application must not send the element. A receiving application must not raise an error if the condition predicate is false and the element is not present, though it may raise an error if the element is present.		

WTIS			
Value	Description	Definition	
M	Mandatory	A field that is indicated as Mandatory ("M") is required by the WTIS.	
MNU	Mandatory Not Used	A field that is indicated as Mandatory Not Used ("MNU") is required by the HL7 Standard but not by the WTIS. As such, while a value is required to be sent in your message, the WTIS will not use the value for waitlist entry creation. In most cases a recommended value is provided in the Message Specification Detail.	

Notes:

- Implementers are advised to review the notes associated with a given element to fully understand how and when the element must be populated.
- The optionality of a given element or segment may vary from one message, event, or Order Control Code to another. Implementers are encouraged to study the message definitions carefully. To improve readability and highlight significant information, this specification has been written so as to minimize redundant information in the message profiles.

8.5 Character Set Support

- The WTIS does not support the message delimiters identified in the HL7 Standard to switch to alternative character sets within a message.
- The WTIS does not support the message delimiters as part of the data value contained in the HL7 message.

8.6 Message Encoding Rules

The WTIS supports HL7 ER7 Vertical Bar (Pipe) Encoding.

Segments

A message is comprised of a group of segments in a defined sequence. Segments are logical groupings of data fields. Each segment has a name and a three-character identifier. A segment may be "mandatory," "optional," and some may be repeated in certain contexts. In message-level profiles, optional segments or groups of optional segments are indicated by square brackets. Repeatable segments, or groups of repeatable segments, are surrounded by curly braces. Each segment must be of a valid type and must appear in the expected sequence. Segments must also be contextually correct (e.g., a non-repeating segment must appear only once within a message) according to the message profile.

Fields

Fields for use within HL7 segments are defined by HL7. When fields are transmitted, they are sent as character strings. The allowable information that may be contained in each field is constrained in the message profile by specifying a data type, a maximum number of characters that a single instance of the field may occupy, and an optionality indicator. Some fields may be further constrained by specifying a table of allowed values that may appear in the field.

Field Components and Subcomponents

Some data types are composed of component fields, which in turn may be composed of subcomponent fields. In the message profile, each component and subcomponent field is assigned a data type, a maximum number of characters that a single instance of the field may occupy, an optionality indicator and, when applicable, a table of allowed values that the field may contain.

8.7 Standard Data Values

The WTIS supports standard data values as defined in the HL7 Standard, version 2.4.

8.8 Message Delimiters

Level	Delimiter	Structure	Purpose
1	\r	Segment	The segment terminator is always a carriage return (end of record).
2	I	Field	Separates two adjacent data fields within a segment. It also separates the segment ID from the first data field in each segment.
3	~	Repetition	Separates multiple occurrences of a field, where allowed.
4	۸	Component	Separates adjacent components of data fields, where allowed.
5	&	Subcomponent	Separates adjacent subcomponents of data fields, where allowed.
6	\	Escape	Escape character for use with any field represented by an ST, TX, or FT data type to prevent the character that follows it from being recognized as a delimiter.

Notes:

- In order to prevent SQL Injection attacks, the sequence of two consecutive hyphens ("--") is illegal inside any HL7 field/component/subcomponent that corresponds to a WTIS field.
- WTIS uses the following HL7 delimiters: ([|],[^],[~],[\],[&]) and [%] and [--]. These characters should not be used except as HL7 delimiters.

8.9 MLLP

All outbound messages sent to the WTIS must be transported through MLLP.

Block Characters

These parameters are special characters that must enclose HL7 messages received or sent through MLLP adapters.

These characters form a block in the following format:

<SB>DDD<EB><CR>

Where:

- DDD stands for the message data,
- <SB> is the start-block character,
- <EB> is the end-block character, and
- <CR> is the carriage return.

Parameter	Value (Hex)	Use
<cr></cr>	0d	Carriage return byte value (in hex) used for the carriage return (the second byte wrapper after the end byte).
<sb></sb>	0b	Start-Block character byte value used for the start byte (message header wrapper).
<eb></eb>	1c	End-Block character byte value used for the end byte (message trailer wrapper).

8.10 Acknowledgement Messages

The WTIS will send HL7 acknowledgement messages (positive and/or negative) back to the sending application.

The acknowledgement message has the following structure:

Segment	Description	Section
MSH	Message Header	10
MSA	Message Acknowledgement	10
[ERR]	Error	10

Indication of the success or failure of the transaction is provided in the MSA segment. AA represents successful completion, AE represents an application error, and AR is set by the infrastructure for invalid transactions or transactions that cannot make it through to the receiving application.

The fields in the segments listed above are described in detail in Section 10: Message Specification Detail.

8.11 Network Model

The WTIS interface provides direct point-to-point communication between the external system and the WTIS. External systems always initiate business transactions with the WTIS. The WTIS does not send unsolicited messages to external systems.

8.12 Persistence of Information

When the WTIS receives a waitlist entry amendment to update an existing waitlist entry in the WTIS, it will merge the existing waitlist entry information with the information in the message. If all applicable business rules and data integrity checks succeed, the amended waitlist entry will be recorded in the WTIS.

8.13 Acknowledgement Mode

The WTIS supports the HL7 immediate, original acknowledgement mode.

8.14 Support for Special HL7 Protocols

This section identifies the WTIS support for a number of special protocols described in the HL7 Standard.

HL7 Batch Protocol

The WTIS does not support the HL7 Batch Protocol.

HL7 Sequence Protocol

The WTIS does not support the HL7 sequence protocol.

Message Continuation Protocol

The WTIS does not support the receipt of messages that have been split using the message continuation protocol.

Segment Continuation Protocol

The WTIS does not support the segment continuation protocol.

8.15 Format Rules for Entity Identifiers

Formatting rules for entity identifiers, as well as all ALC supported data elements, are included in Section 10: Message Specification Detail. Facilities must adhere to all formatting rules given in that section.

8.16 Event Flows

It is expected that ALC messages will be sent in the following sequence for any particular visit number:

- ORM^O01 Open ALC Waitlist Entry
- ORM^O01 Update ALC Waitlist Entry
- ADT^A03 Close ALC Waitlist Entry

Details for the clinical workflow and mandatory field requirements are provided in Section 7 Clinical Event Overview.

9. Message Use Case Details

- The details that follow are organized by message use case.
- Not all fields contained within the HL7 Standard are listed in this specification. You may choose to include fields not used by the WTIS in your interface, or you may choose to strip off any trailing delimiters. Please be aware that the existence of trailing field delimiters in the ZWA segment will cause message failure so these should be removed before sending the message to the WTIS.

9.1 Open ALC Waitlist Entry - Use Case

When a patient is designated as ALC, an ORM^O01 (Create/Open) order message is sent to create an ALC waitlist entry. The ORM^O01 structure is:

MSH | PID | PV1 | ORC | ZWA

Please note: the ORC segment determines the type (Create/Open or Update) of ORM^O01 message.

Upon receipt of an ORM^O01 create message, WTIS determines the action to perform; either to create a new ALC waitlist entry or to re-designate an existing ALC waitlist entry.

Open ALC Waitlist Entry – New

If an ALC waitlist entry, matching the criteria for re-designation is not found in the WTIS, a new ALC waitlist entry will be created for the patient

Open ALC Waitlist Entry - Re-Designate

An ALC waitlist entry is re-opened if the patient is re-designated ALC. The criteria to re-open the ALC waitlist entry due to re-designation are as follows:

- The existing waitlist entry must have an ALC Discontinuation Reason of Change in Medical Status
- The ALC Re-designation Date must fall within 40 business days following the ALC Discontinuation Date
- The Re-designate message must contain the same Visit Number as the discontinued waitlist entry

The data elements sent when re-designating a patient are identical to those sent in the creation of a new ALC waitlist entry. In the event a matching ALC waitlist entry is not found, a new ALC waitlist entry is created in the system.

Open ALC Waitlist Entry Sample Messages

<u>Example 1</u> - Open ALC waitlist entry ORM^O01 message for a patient being designated/redesignated ALC when the expected ALC Discharge Destination is Unknown. The Most Appropriate Discharge Destination and Most Appropriate Discharge Destination Date information are provided:

Example 2 - Open ALC waitlist entry ORM^O01 message for a patient designated with a known ALC Discharge Destination and a single Specialized Need and Support identified as a Need. The Most Appropriate Discharge Destination and Most Appropriate Discharge Destination Date are provided:

<u>Example 3</u> - Open ALC waitlist entry ORM^O01 message for a patient designated ALC, with a known ALC Discharge Destination and multiple Specialized Needs and Supports identified as Need and Barrier. The Most Appropriate Discharge Destination and Most Appropriate Discharge Destination Date information are provided:

9.2 Update ALC Waitlist Entry - Use Case

Once an ALC waitlist entry has been created in the system by an Open ALC waitlist entry ORM^O01 (Create/Open) message, changes to the status of that ALC waitlist entry are made via an ORM^O01 (Update) order message. The ORM^O01 structure is:

MSH | PID | PV1 | ORC | ZWA

Please note: the ORC segment determines the type (Create/Open or Update) of ORM^O01 message.

Implementation Notes:

- (a) When updating an ALC waitlist entry, values in the ZWA segment must be re-provided, even if they have not changed.
- (b) An ALC waitlist entry can be closed while performing an ALC Waitlist Entry Update; this involves a discontinuation of the ALC waitlist entry.

Update ALC Waitlist Entry Sample Messages

<u>Example 1</u> - Update ALC Waitlist Entry ORM^O01 message to update an ALC waitlist entry with an ALC Discharge Destination, Most Appropriate Discharge Destination and Most Appropriate Discharge Destination Date and a single Specialized Need and Support identified as Need:

Example 2 - Update ALC Waitlist Entry ORM^O01 message to update an ALC waitlist entry with an ALC Discharge Destination, Most Appropriate Discharge Destination and Most Appropriate Discharge Destination Date and additional Specialized Needs and Supports identified as Need or Barrier:

<u>Example 3</u> - Update ALC Waitlist Entry ORM^O01 message performing site to site transfer with New Site Number, New Visit Number and Transfer Date information and additional Specialized Needs and Supports identified as Need or Barrier:

 $MSH|^{\sim}\&|WTIS_REALTIME|9999|||201401150917||ORM^{O01}|83754|D^{T}|2.4$ $PID|||MRN100001^{\sim}9999^{P}I^{-4}135680001^{\sim}CANON^{H}C||Smith^{J}ohn||19800101|M$ $PV1||N|^{\sim}CC|||||||||||||||VN12345005|||||||||||||||9998|||||||20140105||||VN12345099||$ ORC|RO||||SC $ZWA|20140101|HME.CCAC|20140101|BA^{N}W^{B}WC^{B}||Y|HME.CCAC|20140101$

<u>Example 4</u> - Update ALC Waitlist Entry ORM^O01 message discontinuing an ALC waitlist entry due to an ALC Discontinuation Reason of "Change in Medical Status":

9.3 Close ALC Waitlist Entry - Use Case

When a patient is discharged from the facility, an ADT^A03 discharge message is sent to close the ALC waitlist entry. The ADT^A03 structure is:

MSH | EVN | PID | PV1

Close ALC Waitlist Entry Sample Messages

<u>Example 1</u> - Close ALC Waitlist Entry ADT^A03 message due to an ALC Discontinuation Reason of "Patient Death":

 $MSH|^{\sim}\&|WTIS_REALTIME|9999|||201401150917||ADT^A03|00001|D^T|2.4\\ EVN||20140122|\\ PID|||MRN100001^{^9999}PI^4135680001^{^CANON^HC}||Smith^John||19800101|M\\ PV1||N|^{^CC}|||||||||||||||VN12345003||||||||||||||||||20140101||20140102|||||||$

Example 2 - Close ALC Waitlist Entry ADT^A03 message when a patient is discharged:

 $MSH|^{\sim} \& |WTIS_REALTIME|9999|||201401150917||ADT^A03|00001|D^T|2.4 \\ EVN||20140122|$

PID|||MRN100001^^^9999^PI~4135680001^^^CANON^HC||Smith^John||19800101|M PV1||N|^^^CC|||||||||||||VN12345003||||||||||||||||20140101|20140122||||||

10. Message Specification Detail

10.1 Important Information

The following is a comprehensive listing of all segments and fields in messages supported by the WTIS for Complex ALC integration. Please leave all other fields blank.

- All components highlighted in **Bold** and <u>Underlined</u> within each field are <u>required</u>.
- In order to prevent SQL Injection attacks, the sequence of two consecutive hyphens ("--") is illegal inside any HL7 field/component/subcomponent that corresponds to a WTIS field.
- WTIS uses the following HL7 delimiters: ([|],[^],[~],[\]). These characters should not be used except as delimiters. The following characters should not be used at all: [%] and [--]. For more information on HL7 delimiters, please refer to Section 8.8: Message Delimiters.
- Please ensure that all populated segment fields/components/subcomponents follow requirements defined within HL7 tables.
- Entry in the specification document refers to an ALC waitlist entry in the WTIS system.
- Not all fields contained within the HL7 Standard are listed in this specification. You may choose to include fields not used by the WTIS in your interface; as long as they conform to the HL7 Standard and have passed through Conformance Testing.
- Please ensure you strip off any trailing delimiters. Please be aware that the existence of trailing field delimiters in the ZWA segment (i.e. after ZWA.9) will cause message failure. These should be removed before sending the message to the WTIS.
- When updating an ALC waitlist entry, any data in the ZWA segment must always be included in ORM^O01 messages even if the data is not changing. This data always overwrites existing data in the WTIS.

10.2 Segment Translations

This section describes the fields in each segment. Any segment which is not detailed in a table in this document does not come across the interface.

For the WTIS column:

M Mandatory MNU Mandatory Not Used

O Optional C Conditional

Rep Repeatable

For the Data Type column:

AD	Address	PL	Person location
CD	Channel definition	PN	Person name
CE	Coded element	PPN	Performing person time stamp
CF	Coded element with formatted values	PT	Processing type
CK	Composite ID with check digit	QIP	Query input parameter list
CM	Composite	QSC	Query selection criteria
CN	Composite ID number and name	RCD	Row column definition
CNE	Coded with no exceptions	RI	Repeat interval
CP	Composite price	RP	Reference pointer
CQ	Composite quantity with units	SAD	Street Address
CWE	Coded with exceptions	SCV	Scheduling class value pair
CX	Extended composite ID with check digit	SI	Sequence ID
DLN	Driver's license number	SN	Structured numeric
DR	Date/time range	SRT	Sort order
DT	Date	ST	String
ED	Encapsulated data	TM	Time
EI	Entity identifier	TN	Telephone number
FC	Financial class	TQ	Timing/quantity
FN	Family name	TS	Time stamp
FT	Formatted text	TX	Text data
HD	Hierarchic designator	VH	Visiting hours
ID	Coded values for HL7 tables	VID	Version identifier
IS	Coded value for user-defined tables	XAD	Extended address
JCC	Job code/class	XCN	Extended composite ID number and name
MA	Multiplexed array	XON	Extended composite name & ID number for organizations
MO	Money	XPN	Extended person name
NA	Numeric array	XTN	Extended telecommunications number

10.3 MSH (Message Header)

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
0	Segment Name	3	R	М	ST	This is a mandatory field for ORM^O01 and ADT^A03. Value must be 'MSH'.
1	Field Separator	1	R	М	ST	This is a mandatory field for ORM^O01 and ADT^A03. Value must be ' '.
2	Encoding Characters	4	R	М	ST	This is a mandatory field for ORM^O01 and ADT^A03. Value must be '^~\&'
3	Sending Application	180	R	М	HD	This is a mandatory field for ORM^O01 and ADT^A03. Value must be: WTIS_REALTIME
4	Sending Facility	180	0	M	HD	This is a mandatory field for ORM^O01 and ADT^A03. Definition: This is the site identifier where the patient is designated ALC Components: <namespace (is)="" id=""> ^ <universal (st)="" id=""> ^ <universal (id)="" id="" type=""> Example: 4107^^</universal></universal></namespace>
7	Date/Time of Message	26	R	М	TS	This is a mandatory field for ORM^O01 and ADT^A03. Accepted Format: YYYYMMDDHHMM

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
9	Message Type	13	R	М	СМ	This is a mandatory field for ORM^O01 and ADT^A03.
						Accepted Values: - ORM^O01 - ADT^A03
						Components: Message Code">Message Code">Message Code">Message Code">Message Code">Message
						Example: 1. If sending an Open ALC Waitlist Entry or Update ALC Waitlist Entry order message the value in this field will be: ORM^O01. 2. If sending a Discharge ALC Patient message the value in this field will be: ADT^A03.
10	Message Control ID	20	R	MNU	ST	This is a mandatory field for ORM^O01 and ADT^A03
						Definition: This field contains a number or other identifier that uniquely identifies the message from the sending application according to HL7 requirements. WTIS does not use this number for managing messages.
						Note: This identifier is returned with the acknowledgment message and can be used to identify specific messages that were sent.
11	Processing ID	3	R	М	PT	This is a mandatory field for ORM^O01 and ADT^A03
						Components: <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
						Accepted Values: 1. For Testing, value must be D^T 2. For Production, value must be P^T

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
12	Version ID	60	R	М	VID	This is a mandatory field for ORM^O01 and ADT^A03.
						<pre>Components:</pre>
						Accepted Value: Value must be '2.4'

10.4 EVN (Event)

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
0	Segment Name	3	R	М	ST	This is a mandatory field for ADT^A03. Value must be 'EVN'
2	Recorded Date/Time	26	R	MNU	ID	This is a mandatory field for ADT^A03. Recorded Date/Time Accepted Format: YYYYMMDD

10.5 PID (Patient Identification)

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
0	Segment Name	3	R	M	ST	This is a mandatory field for ORM^O01 and ADT^A03. Value must be 'PID'.
3	Patient Identifier List	76	С	M	СХ	This is a mandatory field for ORM^O01 and ADT^A03 for the WTIS. A Patient Identifier is required. It is possible to send an HCN with no MRN. Two variables that are to be included in this field are: (1) MRN - Medical Record Number (2) HCN - Health Card Number

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						The patient identifier must be alphanumeric, must not contain any non-printable characters, and must not contain any of the following characters: asterisk, percent sign, comma, single quotation mark, double quotation mark or any of the HL7 delimiters.
						Sequence: MRN~HCN
						Components:

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						AUSDVA – Australia – Dept. of Veterans Affairs AUSHIC – Australia – Health Insurance Commission CANAB - Alberta CANBC - British Columbia CANMB - Manitoba CANNB - New Brunswick CANNF - Newfoundland CANNS - Nova Scotia CANNT - Northwest Territories CANNU- Nunavut CANON- Ontario CANPE - Prince Edward Island CANYT - Yukon Territories NLVWS – NL Ministerie van Volksgezondheid USCDC – US Center for Disease Control USHCFA – US Healthcare Finance Authority USSSA – US Social Security Administration Example of sample message: Both MRN and HCN are available: 123456^^^4107^PI ~999999999^^^CANON^HC Only MRN is available: 123456^^^4107^PI Note: 1. The field length for MRN must be between 0 and 60. 2. The field length for HCN must be between 8 and 15 characters. 3. Either MRN or HCN should not include any embedded spaces.
5	Patient Name	250	R	M	XPN	This is a mandatory field for ORM^O01 and ADT^A03 All components must be alphanumeric. Family
						name and Given name must have at least one character.

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						Variables that are to be included in this field are: (1) Family Name (mandatory) (2) Given Name (mandatory) (3) Second or Further Given Name or Initials Thereof (optional) (4) Prefix (optional) Components:
						<pre><family (fn)="" name=""> ^ <given (st)="" name=""> ^ <second (st)="" and="" further="" given="" initials="" names="" or="" thereof=""> ^ <suffix (e.g.,="" (st)="" iii)="" jr="" or=""> ^ <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre></suffix></second></given></family></pre>
						Maximum Length: The maximum length for the Family Name is 75
						characters. The maximum length for the Given Name is 30
						characters.
						The maximum length for the Second or Further Given Name is 30 characters.
						The maximum length for the Prefix is 10 characters.
						Note:
						If the patient information is available in the EMPI, the WTIS will use the EMPI information as the source of truth over what is provided in the wait time interface. The reason is that the most recent patient demographic update in the EMPI will be from hospital's registration systems.
						If the patient information is not available from the EMPI, the name provided in the message will be used to create the patient in the WTIS.
7	Date/Time of Birth	26	R	М	TS	This is a mandatory field for ORM^O01 and ADT^A03.
						Accepted Format:
						YYYYMMDD (Note: Do not include time)
						Must be a valid dateCannot be future-datedMust be after 18500101

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						Maximum Length: The maximum length for this field is 19 characters. Note: This length was set to match the supported field length in EMPI. Note: 1. If the patient information is available in the EMPI, the WTIS will use the EMPI information as the source of truth over what is provided in the WTIS. The reason is that the most recent patient demographic update in the EMPI will be from hospital's registration systems. 2. If the patient information is not available from the EMPI, the name provided in the message will be used to create the patient in the WTIS.
8	Administrative Sex	1	R	М	IS	This is a mandatory field for ORM^O01 and ADT^A03. Accepted Values: F - Female M - Male U - Unknown Note: For other values that are not supported by WTIS (e.g., O - Other), please map to Unknown.
11	Patient Address	250	0	O / Rep	XAD	This is an optional field. However, if any address information is provided in the message, then all address fields underlined below are mandatory. The WTIS supports up to three different addresses, but only one each of a given type (H, M, C). Sequence: Address 1 ~ Address 2 ~ Address 3 Components:

Seq#	HL7 Name	Max	HL7	WTIS	Data	WTIS Usage Notes
064 #	TIL! Name	Length	Standard	******	Type	Wild Usage Holes
						<pre><street (st)="" address=""> ^ <other (st)="" designation=""></other></street></pre>
						^ <city (st)=""> ^ <state (st)="" or="" province=""> ^ <zip or<="" td=""></zip></state></city>
						postal code (ST)> ^ <country (id)=""> ^ < address</country>
						type (ID)> ^ <other (st)="" designation="" geographic=""></other>
						^ <county (is)="" code="" parish=""> ^ <census (is)="" tract=""> ^ <address (id)="" code="" representation=""> ^ <address< td=""></address<></address></census></county>
						validity range (DR)>
						Accepted Values:
						<state or="" province=""></state>
						The following are the accepted values for State or Province. (Note: HL7 does not define provincial abbreviations. Values are based on OHISC (ISO 3166-2) standards.)
						Note:
						For any values not found below, this field is to
						remain empty (i.e., to be treated as <blank>).</blank>
						CA-AB Alberta
						CA-BC British Columbia
						CA-MB Manitoba
						CA-NB New Brunswick
						CA-NL Newfoundland and Labrador
						CA-NS Nova Scotia CA-NT Northwest Territories
						CA-NU Nunavut
						CA-ON Ontario
						CA-PE Prince Edward Island
						CA-QC Quebec CA-SK Saskatchewan
						CA-YT Yukon Territory
						US-AK Alaska
						US-AL Alabama
						US-AR Arkansas
						US-AZ Arizona
						US-CA California
						US-CO Colorado
						US-CT Connecticut
						US-CZ Canal Zone
						US-DC District Of Columbia
						US-DE Delaware
						US-FL Florida

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						US-GA Georgia
						US-GU Guam
						US-HI Hawaii
						US-IA lowa
						US-ID Idaho
						US-IL Illinois
						US-IN Indiana
						US-KS Kansas
						US-KY Kentucky
						US-LA Louisiana
						US-MA Massachusetts
						US-MD Maryland
						US-ME Maine
						US-MI Michigan
						US-MN Minnesota
						US-MO Missouri
						US-MS Mississippi
						US-MT Montana
						US-NC North Carolina
						US-ND North Dakota
						US-NE Nebraska
						US-NH New Hampshire
						US-NJ New Jersey
						US-NM New Mexico
						US-NV Nevada
						US-NY New York
						US-OH Ohio
						US-OK Oklahoma
						US-OR Oregon
						US-PA Pennsylvania
						US-PR Puerto Rico
						US-RI Rhode Island
						US-SC South Carolina
						US-SD South Dakota
						US-TN Tennessee
						US-TX Texas
						US-UT Utah
						US-VA Virginia
						US-VI Virgin Island
						US-VT Vermont
						US-WA Washington

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						US-WI Wisconsin
						US-WV West Virginia
						US-WY Wyoming
						Accepted Format:
						<zip (st)="" code="" or="" postal=""></zip>
						For Canada (CAN): A9A9A9 (no spaces)
						For United States (USA): 99999 or 99999-9999 or 999999999
						Note:
						For any values not Canada or not the United States, this field is to remain empty (i.e., to be treated as <black>)</black>
						Accepted Values:
						<country (id)=""></country>
						For Canada (CAN): CAN
						For United States (USA): USA
						For any values not Canada or the United States, this field is to remain empty (i.e., to be treated as
						Accepted Values:
						<address type=""></address>
						The following are the accepted values for Address Type (as defined by HL7 Table 0190 – Address Type). (Note: Address Type is mandatory.)
						H – Home (Primary) M – Mailing C – Current or Temporary
						Maximum Field Lengths Supported in the EMPI Database:
						The maximum length for the Street Address (Address Line 1) is 75 characters.
						The maximum length for the Other Designation (Address Line 2) is 75 characters.
						The maximum length for the City is 30 characters.
						The maximum length for the State or Province is 15 characters.

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						The maximum length for the Zip or Postal Code is 10 characters.
						The maximum length for the Country is 3 characters.
						Notes: 1. Data will be processed in sequence, only if data is present in the repeating fields. For instance, for "Address1 ~ Address2 ~ Address3", if Address2 is blank, Address3 will not be processed. 2. If there is only one address value, then leave out the repeating fields (i.e., do not include blank, address2, address3 fields).
13	Phone Number - Home	250	0	O / Rep	XTN	This is an optional field. However, if any phone information is provided in the message, then all phone fields underlined below are mandatory. The WTIS supports three different telephone
						numbers in this field, as indicated by <telecommunication code="" use=""> values, but only one per type (PRN, EMR, ORN).</telecommunication>
						Sequence: Telephone 1 ~ Telephone 2 ~ Telephone 3
						Components:
						Note: Telephone Number (ST) – if the sending system cannot parse the telephone number into other components (i.e., Area Code, Phone Number, Extension), then the entire value is to be sent in this component.
						Accepted Values:
						<telecommunication code="" use=""></telecommunication>

Seq#	HL7 Name	Max	HL7	WTIS	Data	WTIS Usage Notes
·		Length	Standard		Туре	
						The following are the accepted values for Telecommunication Use Code. (Note: These codes are required even if only one telephone number is sent.) If an invalid value is sent to the
						WTIS, the messages will error.
						PRN Primary Residence Number
						EMR Emergency Number
						ORN Other Residence Number (including Cellular/Mobile Number)
						Accepted Values:
						<telecommunication (id)="" equipment="" type=""></telecommunication>
						The only current accepted value is 'PH' (Phone).
						Accepted Format:
						<area (nm)="" city="" code=""/>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if the area code is (416), send 416.
						Accepted Format:
						<local (nm)="" number=""></local>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if local number is 444-5555, send 4445555.
						Accepted Format:
						<extension(nm)></extension(nm)>
						The Extension Number is optional but must include numeric values only; do not send brackets '()', spaces, dash '-' separators or characters such as 'Ext' or 'x'.
						For example, if extension is 'ext 9999', send 9999.
						Example:
						Primary Residence Number: (444) 555-6666 ^PRN^PH^^^444^5556666^~
						Emergency Number: (777) 888-9999 ^EMR^PH^^^777^8889999^~
						Mobile Number: (111) 222-3333 ^ORN^PH^^^111^2223333^~

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						Note: If the sending system cannot support the separation of area code and local number or cannot support the exclusion of text values, place the entire Phone Record in the <telephone (st)="" number=""> field (maximum length is 20 characters). Primary Residence Number: (444) 555-6666 (444)555-6666^PRN^PH^^^^^ Emergency Number: (777) 888-9999 (777)888-9999^PRN^PH^^^^^ Mobile Number: (111) 222-3333 (111)222-3333^PRN^PH^^^^^ Maximum Length: 1. The maximum length for the Telephone Number is 20 characters. 2. The maximum length for the Telecommunication Use Code is 3 characters. 3. The maximum length for the Telecommunication Equipment Type is 10 characters. 4. The maximum length for the Area/City Code is 5 characters. 5. The maximum length for the Local Number is 20 characters. 6. The maximum length for the Extension is 6 characters. Note: Data will be processed in sequence, only if data is present in the repeating fields. For instance, for "Telephone1 ~ Telephone2 ~ Telephone3", if</telephone>
						Telephone2 is blank, Telephone3 will not be processed.
14	Phone Number - Business	250	0	0	XTN	This is an optional field. However, if any phone information is provided in the messages, then ALL phone fields underlined below are mandatory.
						Components: <telephone (st)="" number=""> ^ <telecommunication code="" use=""> ^ <telecommunication (id)="" equipment="" type=""> ^ <e-mail (st)="" address=""> ^ <country< td=""></country<></e-mail></telecommunication></telecommunication></telephone>

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						code (NM)> ^ <area (nm)="" city="" code=""/> ^ <local (nm)="" number=""> ^ <extension (nm)=""> ^ <any (st)="" text=""> ^ <extension (st)="" prefix=""> ^ <speed (st)="" code="" dial=""> ^ <unformatted (st)="" number="" telephone=""></unformatted></speed></extension></any></extension></local>
						Note:
						Telephone Number (ST) – if the sending system cannot parse the telephone number into other components (i.e., Area Code, Phone Number, Extension), then the entire value is to be sent in this component.
						Accepted Values:
						<telecommunication code="" use=""></telecommunication>
						WPN Work Number (required value)
						Accepted Values:
						<telecommunication (id)="" equipment="" type=""></telecommunication>
						The only accepted value is 'PH' (Phone). In future WTIS releases, other equipment types could be supported (e.g., fax).
						Accepted Format:
						<area (nm)="" city="" code=""/>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if the area code is (416), send 416.
						Accepted Format:
						<local (nm)="" number=""></local>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if local number is 444-5555, send 4445555.
						Accepted Format:
						<extension(nm)></extension(nm)>
						The Extension Number is optional, but must include numeric values only; do not send brackets '()', spaces, dash '-' separators or characters such as 'Ext' or 'x'.

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						For example, if extension is 'ext 9999', send 9999. Example: Work Number: (444) 555-6666 ext 333 ^WPH^PH^^^444^5556666^333~ Note: If the sending system cannot support the separation of area code and local number or cannot support the exclusion of text values, place the entire Phone Record in the <telephone (st)="" number=""> field (maximum length is 20 characters). Work Number: (444) 555-6666 ext. 333 (444)555-</telephone>
						 Maximum Length: 1. The maximum length for the Telephone Number is 20 characters. 2. The maximum length for the Telecommunication Use Code is 3 characters. 3. The maximum length for the Telecommunication Equipment Type is 10 characters. 4. The maximum length for the Area/City Code is 5 characters. 5. The maximum length for the Local Number is 20 characters. 6. The maximum length for the Extension is 6 characters.

10.6 PV1 (Patient Visit)

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
0	Segment Name	3	R	M	ST	This is a mandatory field for ORM^O01 and ADT^A03. Value must be 'PV1'.
2	Patient Class	1	R	MNU	IS	This is a mandatory field for ORM^O01 and ADT^A03. Value must be 'N'.
3	Assigned Patient Location	9	0	M / O	PL	This is a mandatory field for ORM^O01 (Create). This is an optional field for ORM^ O01 (Update) and ADT^A03 messages.

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes	
						Accepted format: 3.1 Point of Care. Not supported. Ple blank. 3.2 Room. Not supported. Please lead 3.3 Bed. Not supported. Please leave 3.4 Facility. Defined WTIS data option. NS Acute Care (Non-Surgical). SU Acute Care (Surgical). CC Complex Continuing Care. IC Intensive/Critical Care. MH Mental Health. RB Rehabilitation. Note for ORM^ O01 (Update): An inpatient service can only be updated acute inpatient service to another. Exuppose will result in an error. Example: PV1-3-1 Point of Care. PV4-3-2 Reserve.	e blank. blank. ated from one g. NS to SU. batient
						PV1-3-2 Room PV1-3-3 Bed	Blank Blank
						PV1-3-4 Facility	NS
						PV1-3-5 Location Status	Blank
						PV1-3-6 Person Location Type	Blank
						PV1-3-7 Building	Blank
						PV1-3-8 Floor	Blank
						PV1-3-9 Location Description	Blank
						Example:	

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
14	Admit Source	1	0	M/O	IS	This is a mandatory field for ORM^O01 (Create). This is an optional field for ORM^ O01 (Update) and ADT^A03 messages.
						Accepted Format:
						Defined WTIS data options are:
						1 Direct Admission
						2 Emergency Room
						3 Planned Admission
						4 Transfer from Another Facility
19	Visit Number	200	0	М	CX	This is a mandatory field for ORM^O01 and ADT^A03.
						All messages <u>must</u> have a Visit Number.
						Visit number must be unique to a specific entry and cannot be reused for subsequent entries. The visit number must be persistent and is used to match subsequent ORM^O01 and ADT^A03 messages to the original entry.
						Special Note Site to Site Transfer:
						Only when initiating a site to site transfer can the visit number be modified utilizing the Alternate Visit ID PV1.50
						Should the Visit number be modified in this manner all subsequent ORM^O01 and ADT^A03 messages must reference the newly provided Visit ID sent in PV1.50
						Asserted Farmet
						Accepted Format: Send alphanumeric values only; do not send brackets and/or any of these characters:
						[]],[^],[~],[\],[&]) and [%] and []
36	Discharge Disposition	2	0	М	IS	This is a mandatory field for ADT^A03.
						Accepted Format:
						Defined WTIS data options are:
						- 01 Discharge
						- 05 Death
						- 06 Discharge Against Medical Advice
						- 07 Transfer to Acute Care
						- 08 Unplanned Repatriation
37	Discharged to Location	9	0	С	СМ	This is a conditional field for ORM^ O01.

Access to Care

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						This is the New Site Number for the location to which the patient is being transferred. Note: 1. Must be provided if Transfer Date and New
						Visit Number are provided. 2. Must be a site number associated with the facility. Example: 4107
44	Admit Date/Time	26	0	M/O	TS	This is a mandatory field for ORM^O01 (Create). This is an optional field for ORM^ O01 (Update) and ADT^A03 messages. Accepted Format: YYYYMMDDHHMM Please note only YYYYMMDD is required by the WTIS.

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
45	Discharge Date/Time			M/C		This is a mandatory field for ADT^A03. This is a conditional field for ORM^ O01. This field is used to capture either the date the patient is discharged or date the patient is transferred. Discharge In an ADT^A03 message, this field is used to capture the Discharge Date. Note: 1. If the Discharge Disposition (PV1.36) is 01 – PV1.45 is the Actual Discharge Date 2. If the Discharge Disposition (PV1.36) is 05,
						O6, 07, or 08 – PV1.45 is the ALC Discontinuation Date Patient Transfer In an ORM^O01 message this field is used to capture the Transfer Date. Note: In an ORM^O01 message, this must be provided if New Site Number and New Visit Number are provided. Accepted Format: YYYYMMDDHHMM Please note only YYYYMMDD is required by the WTIS.

Access to Care

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
50	Alternate Visit ID	200	0	С	СХ	This is a conditional field for ORM^ O01.
						This is the New Visit Number that will be utilized at the destination of the Patient Transfer.
						Once provided all subsequent ORM^O01 and ADT^A03 messages must reference this number as the Visit Number PV1.19
						Note:
						Must be provided if New Site Number and Transfer Date are provided.
						Visit number must be unique to a specific entry and cannot be reused for subsequent entries.
						Accepted Format:
						Send alphanumeric values only; do not send brackets and/or any of these characters:
						[],[^],[~],[\],[&]) and [%] and []

10.7 ORC (Common Order)

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
0	Segment Name	3	R	М	ST	This is a mandatory field for ORM^O01. Value must be 'ORC'.
1	ID	2	R	М	ID	This is a mandatory field for ORM^O01. Order Control ID
						Accepted Format:
						NW - New order/service (for ORM^O01 (Create))
						RO - Replacement Order (for ORM^O01 (Update))

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
5	Order Status	2	C	M	ID	This is a mandatory field for ORM^O01. Accepted Format: IP - In process, unspecified (for ORM^O01 (Create)) SC - In process, scheduled (for ORM^O01 (Update)) Note: 1. When opening an ALC waitlist entry, the ID is NW and the Order Status is IP)
						To update an ALC waitlist entry, ID is RO and Order Status is SC.

10.8 ZWA (WTIS ALC Custom Z-Segment)

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
0	Segment Name	3	R	М	ST	This is a mandatory field for ORM^O01. Value must be ' ZWA '.
1	ALC Designation Date / ALC Redesignation Date	19	0	M	DT	This is a mandatory field for ORM^O01 (Create). Accepted Format: YYYYMMDD
2	ALC Discharge Destination	22	0	M	ST	Note: 1. If unknown use code UNK. Value cannot be UNK on discharge. Accepted Format: Defined WTIS data options are: - UNK Unknown - CCC.LTLD Complex Continuing Care Bed - Low Tolerance Long Duration - CCC.NTLD Complex Continuing Care Bed - Non Low Tolerance Long Duration - CVC Convalescent Care Bed - HME.CCAC Home - Home with CCAC Services - HME.COMM Home - Home with Community Services

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						- HME.WOUT Home - Home without Services - LTC Long-Term Care Bed - MNH.DTOX Mental Health Bed - Inpatient Detoxification Services - MNH.IDTS Mental Health Bed - Inpatient Dependency Treatment Services - MNH.PSYC Mental Health Bed - Inpatient Psychiatric Services - PAL.PAHP Palliative Care Bed - Palliative Hospital Placement - PAL.RESI Palliative Care Bed - Residential Hospice Care - RHB.CARD Rehabilitation Bed - Cardiac - RHB.GERI Rehabilitation Bed - Geriatric - RHB.LTLD Rehabilitation Bed - Low Tolerance Long Duration Rehabilitation - RHB.MUSK Rehabilitation Bed - Musculoskeletal - RHB.NEUR Rehabilitation Bed - Neurological - RHB.OTHR Rehabilitation Bed - Other Rehabilitation - SAL.RETH Supervised or Assisted Living - Retirement Home - SAL.SHELT Supervised or Assisted Living - Shelters - SAL.SUBH Supervised or Assisted Living - Subsidized Housing - SAL.SHAL Supervised or Assisted Living - Subsidized Housing - SAL.SHAL Supervised or Assisted Living - Supportive Housing/Group Homes/Assisted Living
3	ALC Discharge Destination Determination Date	19	0	M	DT	This is a mandatory field for ORM^O01. Note: If an update is made to the Discharge Destination Determination Date an update must also be provided for the Discharge Destination. I.e. if the Discharge Destination Date is changed from the previously submitted value to a new value the Discharge Destination must also change from the previously submitted value to a new value. Accepted Format: YYYYMMDD
4	Specialized Needs and Supports	45	0	C / Rep	СМ	Specialized Needs and Supports (SNS) must be included, when applicable, based on the Specialized Needs and Supports Indicator (ZWA.7).

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						Facilities must be able to support submission of <u>all</u> Specialized Needs and Supports in <u>one</u> message. Each SNS is to be identified as a Need or Barrier.
						If ZWA.7 = Y, SNS must be provided.
						If ZWA.7= N, leave field blank.
						Accepted Format:
						Defined WTIS data options are:
						- BA Bariatric Requirements
						- BE Behavioural Requirements - Unspecified
						- BS Behavioural Requirements – 1:1 Support
						- BG Behaviour Requirements – Aggressive Behaviours
						- BX Behavioural Requirements – Sexualized Behaviours
						- DR Developmental Requirements
						- DL Dialysis Requirements
						- ES Equipment/Structural Requirements (no bariatrics)
						- FD Feeding Requirements
						- IC Infection Control/Isolation Requirements - Isolation
						- OF Infection Control/Isolation Requirements - Out-break at Facility
						- OD Infection Control/Isolation Requirements - Out-break at Discharge Destination
						- MV Mechanical Ventilation Requirements
						- ML Medications/Labs/Therapy Requirements
						- MH Mental Health Requirements - Unspecified
						- MA Mental Health Requirements – Addictions
						- MD Mental Health Requirements – Concurrent Disorders
						- NE Neurological Requirements - Unspecified
						- NA Neurological Requirements – Acquired Brain Injury
						- RE Respiratory Requirements (excludes ventilation)
						- SR Social Requirements - Unspecified
						- SF Social Requirements – Financial constraints
						- SH Social Requirements – Housing/Homelessness

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						- SS Social Requirements – Lack of social support - SL Social Requirements – Legal concerns - WC Wound Care Requirements
						Example: BA^N~BE^B
						Note: 1. Both components (SNS, Barrier/Need) must be present for WTIS to process the information. If either value is missing, it will result in an error.
						SNS provided in each message will add or delete existing SNS. For example, if one SNS was submitted in one message and in the following message it was removed, WTIS will treat the missing information as a delete.
						3. If multiple Specialized Needs and Supports are to be sent in the message, send all specialized service codes in this field, separated by the repeat separator "~". Example: BE^N~FD^B~WC^N sends 3 codes representing 3 different Specialized Needs and Supports.
5	ALC Discontinuation Date	19	0	С	DT	This is a conditional field for ORM^O01.
						Note: If sent, must also send ZWA.6 - ALC Discontinuation Reason
						Accepted Format: YYYYMMDD
6	ALC Discontinuation Reason	2	0	С	ST	This is a conditional field for ORM^O01.
						If sent, must also send ZWA.5 - ALC Discontinuation Date.
						Accepted Format:
						Defined WTIS data options are:
						-02 Change in Destination Invalidates ALC Designation
						-03 Change in Medical Status
						-04 Data Entry Error

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
7	Specialized Needs and Supports Indicator	1	0	М	ST	This is a mandatory field for ORM^O01. Note: If Yes, Specialized Needs and Supports must also be provided (ZWA.4) Accepted Format: - Y for Yes - N for No
8	Most Appropriate Discharge Destination	22	0	M	ST	This is a mandatory field for an ORM^O01. Note: 1. If unknown use code UNK. Value cannot be UNK on discharge. Accepted Format: Defined WTIS data options are: - UNK Unknown - CCC.LTLD Complex Continuing Care Bed - Low Tolerance Long Duration - CCC.NTLD Complex Continuing Care Bed - Non Low Tolerance Long Duration - CVC Convalescent Care Bed - HME.CCAC Home - Home with CCAC Services - HME.COMM Home - Home with Community Services - HME.WOUT Home - Home without Services - LTC Long-Term Care Bed - MNH.DTOX Mental Health Bed - Inpatient Detoxification Services - MNH.IDTS Mental Health Bed - Inpatient Dependency Treatment Services - MNH.PSYC Mental Health Bed - Inpatient Psychiatric Services - PAL.PAHP Palliative Care Bed - Palliative Hospital Placement - PAL.RESI Palliative Care Bed - Residential Hospice Care - RHB.CARD Rehabilitation Bed - Cardiac - RHB.GERI Rehabilitation Bed - Geriatric - RHB.LTLD Rehabilitation Bed - Low Tolerance Long Duration Rehabilitation Bed - Musculoskeletal

Seq#	HL7 Name	Max Length	HL7 Standard	WTIS	Data Type	WTIS Usage Notes
						- RHB.NEUR Rehabilitation Bed – Neurological - RHB.OTHR Rehabilitation Bed - Other Rehabilitation - SAL.RETH Supervised or Assisted Living - Retirement Home - SAL.SHELT Supervised or Assisted Living - Shelters - SAL.SUBH Supervised or Assisted Living - Subsidized Housing - SAL.SHAL Supervised or Assisted Living -
9	Most Appropriate Discharge Destination Determination Date	19	0	M	DT	Supportive Housing/Group Homes/Assisted Living This is a mandatory field for ORM^O01. Note: If an update is made to the Most Appropriate Discharge Destination Determination Date an update must also be provided for the Most Appropriate Discharge Destination. I.e. if the Most Appropriate Discharge Destination Determination Date is changed from the previously submitted value to a new value the Most Appropriate Discharge Destination must also change from the previously submitted value to a new value. Accepted Format: YYYYMMDD

10.9 MSA (Message Acknowledgement Segment)

Seq#	HL7 Name	Max Length	HL7 Standard	Data Type	WTIS Usage Notes
0	Segment Name	3	R	ST	Value must be 'MSA'.
1	Acknowledgem ent Code	2	R	ID	Indication of success/failure of transaction (2) – valid values are "AA", "AE", "AR", receiving applications will set "AA" for successful completion and "AE" for application errors, "AR" is set by the infrastructure for invalid transactions or transactions that cannot make it through to the receiving application.
2	Message Control ID	20	R	ST	Message Control ID
3	Text Message	80	R	ST	Error Code (8) + English message text (72) – Format of error code is AMMMnnnZ where A is an application identifier, MMM is a module or sub-system identifier, nnn is a sequential number and Z is either "E" = error, "W" = warning, "I" = information

Seq#	HL7 Name	Max Length	HL7 Standard	Data Type	WTIS Usage Notes
4	Expected Sequence Number	15	0	NM	Expected Sequence Number
5	Delayed Acknowledgem ent Type	0	0	ID	Delayed Acknowledgement Type
6	Error Condition	250	0	CE	Error Condition

10.10 ERR (Error Segment)

Seq#	HL7 Name	Max Length	HL7 Standard	Data Type	WTIS Usage Notes
0	Segment Name	3	R	ST	Value must be 'ERR'. Optional, Repeats – minimum 0, maximum 10²
1	Error Code and Location	493	R	CM1	 Segment Id (3) – optional; segment where error occurred. Sequence (4) – optional; occurrence of segment in transaction where error occurred. Field Position (4) – optional; field in segment where error occurred. Identifier of Code Identifying Error (8) – Message Number; required; reference table HNET:9000 for valid values; ERR segments are returned in "E", "W", "I" order. Text of Code Identifying Error (72) – Message Text; required. Alternate Identifier of Code identifying Error (15) – Alternate Message Number; optional; must be logged if present in transaction. Alternate Text of Code Identifying Error (256) – Alternate Message Text; optional; must be logged if present in transaction. Name of Alternate Coding System of Code Identifying Error (8) – optional; name of system that generated Alternate Identifier of Code Identifying Error.

Appendix A – ALC Scenarios for the WTIS

The following are detailed scenarios illustrating HL7 messages that are triggered based on ALC clinical events, including the resulting status of the ALC waitlist entry. These scenarios are only applicable to Complex ALC integration.

Consider the following scenario for an ALC waitlist entry:

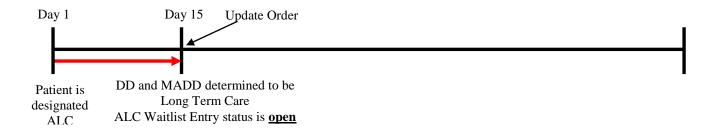
On day 1, a patient is designated ALC and an ORM^O01 Open ALC Waitlist Entry message is sent.

ALC waitlist entry status is <u>open.</u>



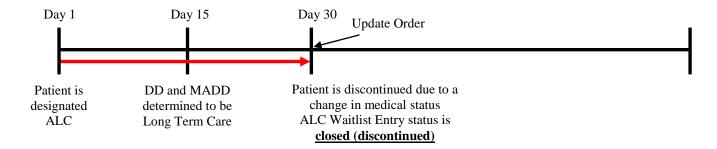
On day 15, the patient's ALC Discharge Destination (DD) and Most Appropriate Discharge Destination (MADD) are determined to be Long Term Care (LTC). An ORM^O01 Update ALC Waitlist Entry message is sent.

• ALC waitlist entry status is **open.**



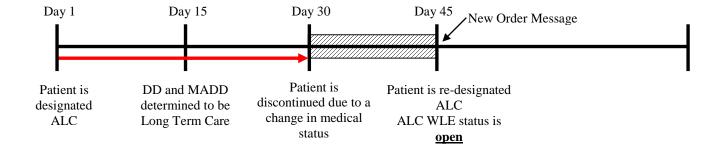
On day 30, the patient experiences a Change in Medical Status. An ORM^O01 Update ALC Waitlist Entry message is sent to discontinue the ALC waitlist entry.

ALC waitlist entry status is closed (discontinued due to a change in medical status).



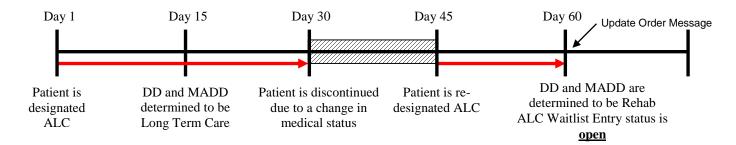
On day 45, the patient is re-designated ALC. An ORM^O01 Open ALC Waitlist Entry message is sent to re-designate the patient ALC, which re-opens the ALC waitlist entry.

- The time the patient was no longer ALC is referred to as an Acute Care Episode (ACE). The ACE is defined as the time between the ALC Discontinuation Date (Day 30) and the ALC Re-designation date (Day 45).
- ALC waitlist entry status is <u>open</u> and the DD and MADD are once again provided as Unknown



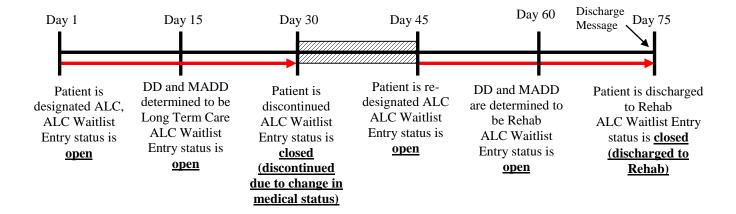
On day 60, the patient's DD and MADD are determined to be Rehab. An ORM^O01 Update ALC Waitlist Entry message is sent to update the ALC waitlist entry.

ALC waitlist entry status is <u>open.</u>

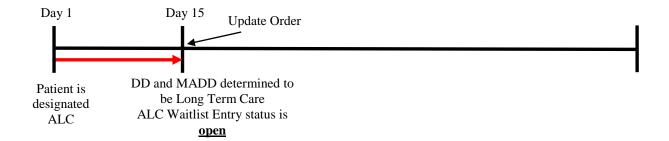


On day 75, the patient is sent to Rehab. An ADT^A03 Close ALC Waitlist Entry message is sent to close the ALC waitlist entry.

ALC waitlist entry status is <u>closed (discharged to Rehab).</u>

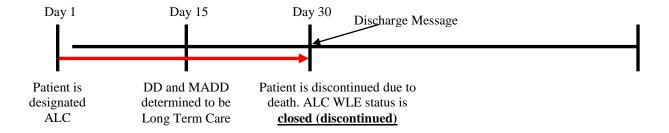


Alternate path for the previous scenario starting from day 15 (ALC waitlist entry status is open)



On day 30, the patient dies. An ADT^A03 Close ALC Waitlist Entry message is sent to close the ALC waitlist entry

• ALC waitlist entry status is **closed (discontinued due to patient death)**.



Appendix B – Revision Notes

Date	Version	Revision Description
Date 09/30/2014	Version 3.0	Specifications updated with new and updated data elements for the 2014-15 expansion. To allow site to site transfers, the following fields were added New Site (PV1.37) Transfer Date (PV1.45) New Visit Number (PV1.50) A Most Appropriate Discharge Destination Determination Date (ZWA.9) has been added Both ALC Discharge Destination and Most Appropriate Discharge Destination have been made mandatory. A new code (UNK – Unknown) has been added to ALC Discharge Destination and Most Appropriate Discharge Destination. New Specialized Needs and Supports also added. Behavioural Requirements - 1:1 Support Behavioural Requirements - Aggressive Behaviours Behavioural Requirements - Sexualized Behaviours Infection Control/Isolation Requirements - Out-break at Discharge Destination Infection Control/Isolation Requirements - Out-break at Facility Mental Health Requirements - Addictions Mental Health Requirements - Dual Diagnosis Neurological Requirements - Dual Diagnosis Neurological Requirements - Housing/Homelessness Social Requirements - Housing/Homelessness Social Requirements - Lack of social support Behavioural Requirements - Lack of social support Social Requirements - Lack of social support Behavioural Requirements - Lack of social support Social Requirements - Lack of social support Social Requirements - Lack of social support Behavioural Requirements - Lack of social support Social Requirements - Lack of social support
		 Neurological Requirements changed to Neurological Requirements -
10/01/2014	3.1	Additional detail added associated to the interaction between the following data elements Most Appropriate Discharge Destination Determination Date and Most Appropriate Discharge Destination Discharge Destination Date and Discharge Destination

Access to Care

Date	Version	Revision Description
10/10/2014	3.2	 Mental Health Requirements - Dual Diagnosis renamed to Mental Health Requirements - Concurrent Disorder to more accurately match the definition for this data element. Coded value remains unchanged.
		Changed the labeling for Infection Control/Isolation Requirements - Infection Control Isolation to Infection Control/Isolation Requirements - Isolation
		Note added clarify inpatient service validation.
10/21/2014	3.3	Mental Health Requirements - Concurrent Disorder renamed to Mental Health Requirements - Concurrent Disorders