Access to Care

Wait Time Information System (WTIS) Complex Surgery (OR) Specification

HL7 Interface		Revision Date	
WTIS Supported Events		April 30, 2014 (v7.0)	
Trigger Event	**HL7 Description**	**WTIS Description**	
SIU^S12	New Appointment Booking	Open Waitlist Entry	
SIU^S13	Appointment Rescheduling	Reschedule Procedure Date	
SIU^S14	Appointment Modification	Modify Procedure, Healthcare Professional, Priority Level or Site	
SIU^S15	Appointment Cancellation	Close (Cancel) Waitlist Entry	
ORU^R01	Observation Message	Close Waitlist Entry	

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Table of Contents

Access to Care

1. Document Purpose

The purpose of this document is to provide a detailed description of the interface messaging requirements to support Complex Surgery Integration for Surgical Wait Times. This document will also outline how the Wait Time Information System (WTIS) will interpret and process each unique message and the supported HL7 trigger events.

2. Intended Audience

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

3. Procedure Mapping Information

Procedure codes from a facility's Operating Room (OR) Application must be mapped to standardized WTIS surgery procedure codes within the facility's system. Only standardized WTIS surgery procedure codes may be submitted to WTIS. To assist in this activity, facilities should refer to the procedure mapping information available on the ATC Information Site. Please contact your WTIS Coordinator for details.

4. Highlights of What's New in Version 7

The Complex Surgery (OR) Specification has been modified to meet the requirements for the expansion of the WTIS to capture new data elements and updated business validation rules. Highlights of the modifications are as follows:

1. Addition of **Patient Type** field

    A new field has been added to the WTIS application that tracks the patient type (eg. Inpatient, Outpatient). **Patient Type** is submitted in the ZWT segment (ZWT.20). This change affects two HL7 message types – SIU^S12 and SIU^S14.

2. Addition of **Wait 1 Priority Level** field

   A new field has been added to the WTIS application that tracks the priority level of wait 1. **Wait 1 Priority Level** is submitted in the ZWT segment (ZWT.21). This change affects two HL7 message types – SIU^S12 and SIU^S14.

3. Introduced NEW business rules for Adult WTIS procedure codes

   - The difference between the Decision to Treat Date and Patient's Date of Birth must be greater than or equal to 18 years for the selected Procedure.

   - The difference between the Procedure Date and Patient's Date of Birth must be greater than or equal to 18 years for the selected Procedure.

   - Diagnostic Assessment Program/Unit (DAP) is now only applicable as a Referral Source with the Service Area of Surgical Oncology.

5. WTIS Application Integration Overview

For Wait 1, the WTIS calculates and tracks the wait time as the duration between:

Referral Date ➤ **Surgical Consult Date**

Wait 1
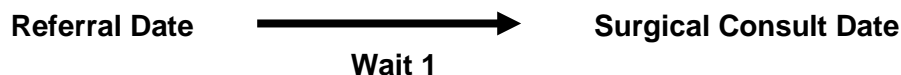
For Wait 2, the WTIS calculates and tracks the surgical wait time as the duration between:

Decision to Treat Date ➤ **Procedure Date**

Wait 2

The WTIS will be integrated with facility systems to varying degrees depending upon each facility's ability to meet the WTIS requirements. There are three levels of integration:

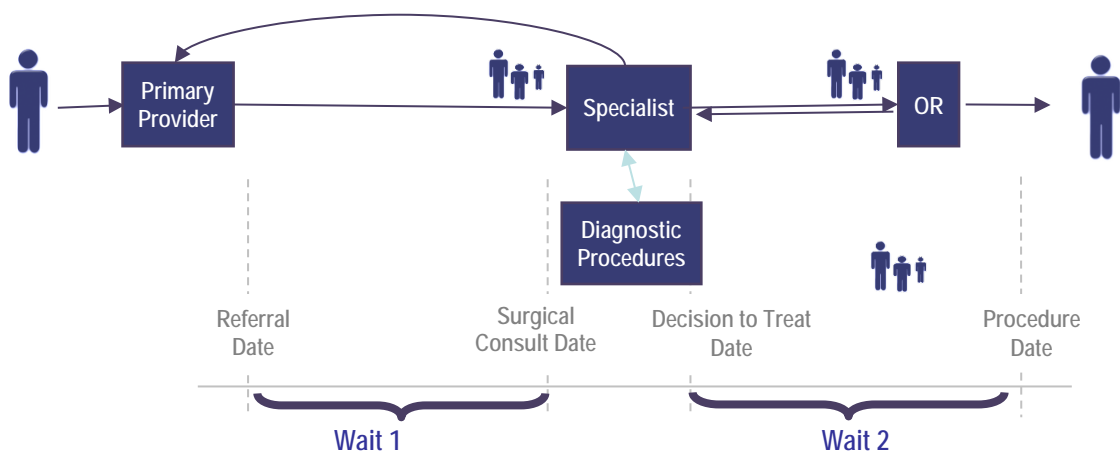| Level of Integration	Waitlist Entry is Opened. . .	Waitlist Entry is Modified. . .	Waitlist Entry is Closed. . .
Basic	via manual input into the WTIS GUI	via manual input into the WTIS GUI	via manual input into the WTIS GUI
Standard	via manual input into the WTIS	via manual input into the WTIS	via interface message directly from facility source system
Complex	via interface message directly from facility source system	via interface message directly from facility source system	via interface message directly from facility source system

6. Minimum Facility Requirements

The following are the minimum technical requirements to determine if a facility is ready to implement Complex surgery integration. See Section 3 for more information.

I　　　　**Important:** All requirements must be met.

- Facility must be able to send the following HL7 events for each waitlist entry:
    - SIU^S12 – Open Waitlist Entry
    - SIU^S13 – Reschedule Waitlist Entry Procedure Date
    - SIU^S14 – Modify one/more of the following elements for the Waitlist Entry:
        - Procedure
        - Treating Health Care Professional
        - Wait 2 Priority Level
        - Site (intra-facility)
        - Dates Affecting Readiness to Treat (DART)
        - Referral Date
        - Consult Date
        - Dates Affecting Readiness to Consult (DARC)
        - Responsibility for Payment
        - Referral Type
        - No Referral/Follow-Up Patient Reason
        - Referral Source
        - Wait 1 System Delay Indicator
        - Wait 1 System Delay Reasons
        - Wait 2 System Delay Indicator
        - Wait 2 System Delay Reasons
        - Patient Type
        - Wait 1 Priority Level
    - SIU^S15 – Close (Cancel) Waitlist Entry because procedure is no longer required
    - ORU^R01 – Close Waitlist Entry because procedure was completed
- Facilities must be able to send SIU^S12 messages within two (2) business days of the Decision to Treat date.
- Facilities integrating with the WTIS at a complex level must only transmit the set of standardized WTIS procedure codes. For complex integration the WTIS does not support the transmission of facility specific codes. Therefore facility systems must have the ability to map their list of internal

facility specific codes to the corresponding appropriate WITS procedure code. Submission of facility specific codes will result in business related interface errors.

- Common procedure codes must apply between scheduling and results messages.

- Facilities must be able send a unique Patient Identifier (MRN) for each patient within the SIU^S12 message. The MRN number used in the message MUST be the same as what is submitted to the EMPI.

- Facilities must be able to send a unique Case Number for each individual waitlist entry that is common to scheduling and results messages. The case number must be unique because it will be used to identify the waitlist entry during its lifespan. This implies that a Case Number for a cataract procedure cannot be repeated for a hip & knee or oncology procedure. Please refer to SCH-1, SCH-2, OBR-2, and OBR-3 for more information.

- Facility systems must be able to provide the Treating Healthcare Professional's registration number and the associated role type (i.e., "MD" for Treating Healthcare Professionals registered with the CPSO – College of Physicians and Surgeons of Ontario, or "DEN" for Treating Healthcare Professionals registered with the RCDSO – Royal College of Dental Surgeons of Ontario). No other identifiers, including the name of the Treating Healthcare Professional, are required by the WTIS for Complex surgery integration.

- Facilities must be able to provide the Priority Level for each waitlist entry except for procedures where it is not applicable (i.e., Oncology Palliative, Diagnostic and Reconstructive procedures).

- If patient address information (not a required field) is being sent in the SIU^S12 message facilities must ensure that all data elements of the address field are populated with values acceptable to the WTIS. Please refer to Section 11 specification details on PID.11 for more information.

- Facilities must be able to provide Wait 2 System Delays (i.e. indication whether Wait 2 System Delays are applicable and the reasons for the delays).

- Facilities must be able to provide the following Wait 1 information for new referral/re-referral patients:

    - Referral Type
    - Referral Source
    - Wait 1 System Delays (i.e. indication whether Wait 1 system delays are applicable and the reasons for the delays)
    - Referral Date
    - Consult Date
    - Dates Affecting Readiness to Consult (DARC)

- Facilities must be able to provide the following Wait 1 information for no referral/ follow-up patients:

    - Referral Type
    - No Referral/Follow-Up Patient Reason

6. 1 Date Constraints Summary

There are many constraints related to the entry of dates in the WTIS. Submitting dates in HL7 messages that do not meet the WTIS business rules will result in interface message errors. The following illustrates all constraints for dates that may be provided in surgery HL7 messages.

7. Detailed Description of WTIS Supported HL7 Trigger Events

The WTIS will act as an auxiliary application. It is considered an "interested third-party" application that is interested in any changes to a particular schedule, but neither exerts control over nor requests changes to a scheduling system.

There are five HL7 trigger events supported by the WTIS: four Scheduling Message trigger events (Reference HL7 version 2.4, Chapter 10 – Scheduling) and one Observation Message trigger event (Reference HL7 version 2.4, Chapter 7 – Observation).

The Scheduling Message trigger events are as follows:

- SIU^S12 New Appointment Booking

- SIU^S13 Appointment Rescheduling

- SIU^S14 Appointment Modification

- SIU^S15 Appointment Cancellation

The Observation Message trigger event is:

- ORU^R01 Observation Message

As an auxiliary application, the WTIS will passively collect information by receiving updates from a placer or filler application. The models below depict the possible relationships between facility systems and the WTIS. The difference between the two models occurs when an Enterprise Scheduling System is implemented at the facility. From a WTIS perspective, there is no preferred model. The dependency is based on the facility's operations and availability of its scheduling system.

Model One

Hospital Environment

Placer Application	Filler Application	Auxiliary Application
Enterprise Scheduling System	Surgery Scheduling System	WTIS

Model Two

Hospital Environment

| Placer or Filler Application	Auxiliary Application
Surgery Scheduling System	WTIS
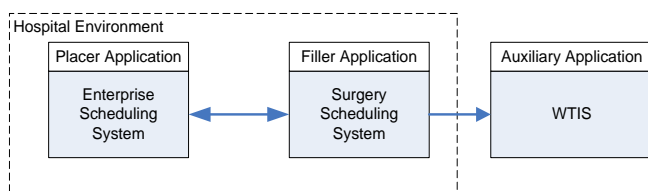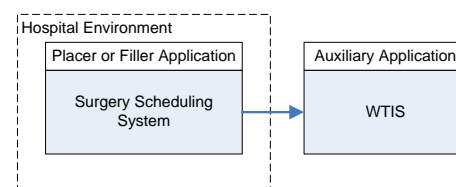
When a new waitlist entry is opened with an SIU^S12 message, any subsequent messages (SIU^S13, SIU^S14, SIU^S15 and ORU^R01) received by the WTIS will use the associated unique **Case Number** together with the **Site** to find the open entry within the WTIS.
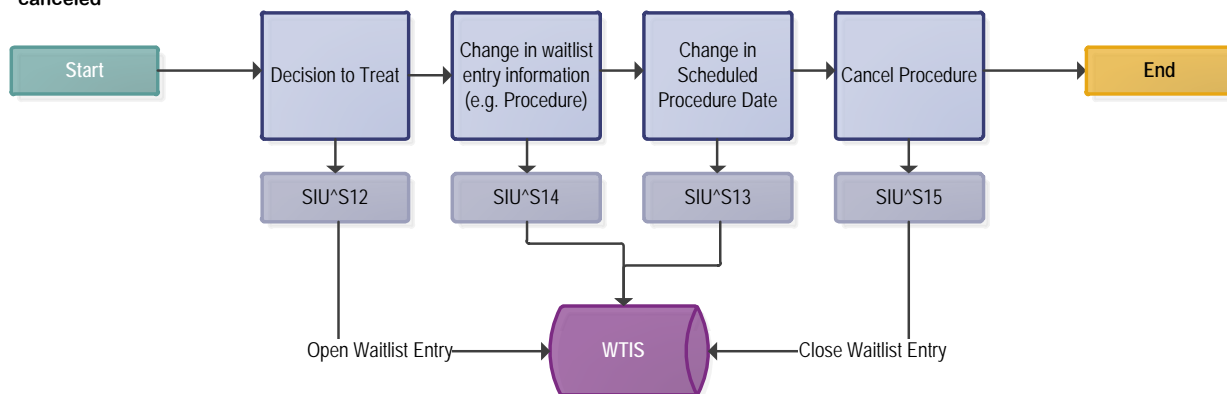
8. Clinical Event Overview

The diagrams below are visual representations depicting possible end-to-end clinical workflow for surgery waitlist entries.

Scenario 1. Waitlist Entry is opened, updates are provided and the Waitlist is then closed with Actual Procedure Date
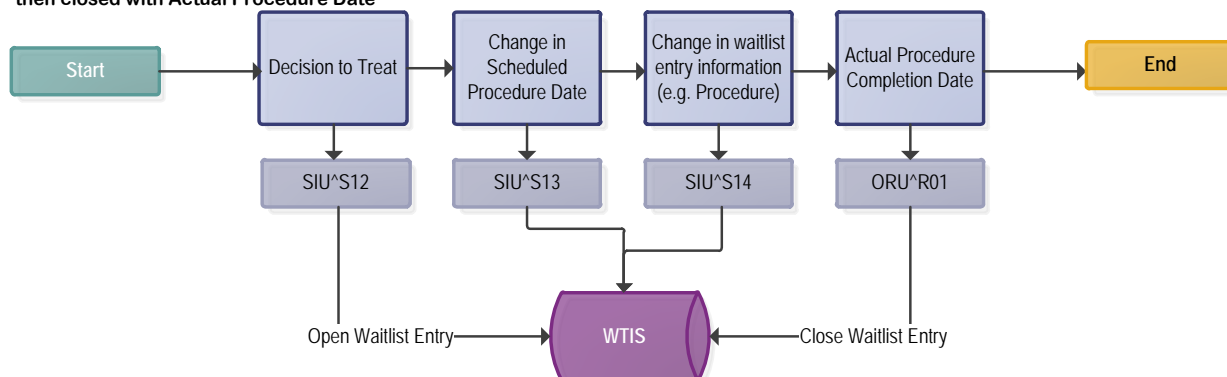
Scenario 2. Waitlist Entry is opened, updates are provided and the Waitlist is canceled

The following table lists the clinical events displayed previously with the corresponding message and message use case:

Clinical Event	Pre-requisite	HL7 Trigger Event (Message)	Message Use Case	Notes
Decision to Treat is made	N/A	SIU^S12 New Appointment Booking	Open Surgery Waitlist Entry	Only SIU^S12 can open an encounter in the WTIS. SIU^S12 is a pre-requisite to all other messages.
Change Scheduled Procedure Date	SIU^S12	SIU^S13 Appointment Rescheduling	Update Surgery Scheduled Procedure Date and Reason	SIU^S13 message must provide a defined reason for changing the scheduled procedure date based on the WTIS Rescheduled Procedure Date Reason Codes.
Modify Appointment Information	SIU^S12	SIU^S14 Appointment Modification	Appointment Modification	SIU^S14 will only change: ▪ Procedure ▪ Healthcare Professional ▪ Wait 2 Priority Level ▪ Site (intra-facility) ▪ Dates Affecting Readiness to Treat (DART) ▪ Referral Date ▪ Referral Type ▪ Consult Date ▪ Dates Affecting Readiness to Consult (DARC) ▪ Wait 1 System Delay Indicator ▪ Wait 1 System Delay Reasons ▪ Wait 2 System Delay Indicator ▪ Wait 2 System Delay Reasons ▪ No Referral/Follow-up Patient Reason ▪ Responsibility for Payment ▪ Referral Source ▪ Patient Type ▪ Wait 1 Priority Level SIU^S14 will only change site information if the site belongs to the same facility (i.e., intra-facility transfer).

| Procedure No Longer Required (Cancelled) | SIU^S12 | SIU^S15 Appointment Cancellation | Cancel Waitlist Entry | SIU^S15 message must provide a defined reason for closing an entry based on the WTIS Procedure No Longer Required Reason Codes. Once SIU^S15 is processed, any subsequent messages related to the waitlist entry will result in an error. |
| Procedure was performed | SIU^S12 | ORU^R01 Observation Message | Close Waitlist Entry | If ORU^R01 is processed after an SIU^S15 cancel message, then the ORU^R01 message will result in an error because an entry cannot be closed if it had already been cancelled. |

[N] **Note:** When the WTIS receives an SIU^S12 message from the sending application, it will process the information and open a waitlist entry for that patient and store the **Case Number**. If the WTIS receives an SIU^S13, SIU^S14, SIU^S15, or ORU^R01 message, it will search internally, by **Case Number**, for the open waitlist entry and modify or close the entry accordingly. However, if an open waitlist entry cannot be found (i.e., the **Case Number** cannot be found) then WTIS will generate an error.

The data elements required and the values of the data elements sent in each message type vary depending on the use case. This message definition by use case is provided in Section 10 Message Use Case Details:

Section	Message	Message Use Case
10.1	SIU^S12	Open Surgery Waitlist Entry
10.2	SIU^S13	Update Schedule Procedure Date for Waitlist Entry
10.3	SIU^S14	Update Surgery Waitlist Entry
10.4	SIU^S15	Cancel Surgery Waitlist Entry
10.5	ORU^R01	Close Surgery Waitlist Entry

9. WTIS HL7 Field and Component Requirements

9.1 HL7 Message Structure

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

9.2 Messages

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

9.3 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 profile definition.

Dates are always represented as YYYYMMDD where:

YYYY is the year, followed by

MM is the month, followed by

DD is the day.

For example, December 18, 1957, is represented as 19571218.

Time is always represented as HHMMSS where:

HH is hours in 24-hour format, followed by

MM is minutes, followed by

SS is the seconds.

For example, 2:36 p.m. on December 18, 1957, would be represented as 19571218143600.

9.4 Field Optionality

This specification defines the optionality of segments, fields, field components, and field subcomponents in each message profile using the values in the following table:

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.
RE	Required but may be empty	The element may be missing from the message, but must be sent by the sending application if there is relevant data. A sending application must be capable of providing all RE elements. If the sending application knows the required values for the element, then it must send the element. If the sending application does not know the required values, then the element will be omitted. A receiving application is expected to process data contained in the element, but must be able to successfully process the message if the element is omitted (no error message should be generated because the element is missing).
O	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. This designation is not used in the WTIS Complex Surgery Integration Specification.
C	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.
CE	Conditional but it may be empty	This usage has an associated conditional predicate. If the predicate is satisfied: ▪ If the sending application knows the required values for the element, then the application must send the element. If the sending application

		does not know the values required for this element, then the element shall be omitted. The sending application must be capable of knowing the element (when the predicate is true) for all CE elements.
		If the element is present, the receiving application shall process the values of the element. If the element is not present, the receiving application shall not raise an error due to the presence or absence of the element.
		If the predicate is not satisfied:
		- The sending application shall not populate the element. - The receiving application may raise an application error if the element is present.
X	Not supported	The sending application will not send the element.
		The receiving application will raise an application error.

N

Note: 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.

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Important: Even though some fields are marked as optional, all fields are mandatory to be configured, built and transmitted to the WTIS.

9.5 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. For example, the description of Specialized Needs and Supports cannot contain an ampersand (&) – "Medications & Labs & Therapies". The ampersand (&) will be treated as a delimiter and will alter the structure of the HL7 message, resulting in a message error.

9.6 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.

9.7 Standard Data Values

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

9.8 Data Format

The following is the HL7 message structure for each trigger event responsible for submitting wait time information to the WTIS.

SIU^S12	SIU^13 and SIU^S15	SIU^14	ORU^R01	
MSH SCH PID RGS AIS AIL AIP ZWT	MSH SCH RGS AIL	MSH SCH RGS [{AIS}] {AIL} [{AIP}] ZWT	MSH OBR	**Notes:** [ ] denotes an optional segment or group { } denotes a repeating segment or group

9.9 Message Delimiters

Level	Delimiter	Structure	Purpose
1	\r	Segment	The segment terminator is always a carriage return. (End of record)
2	|	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	^	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.

N

Note: 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.

9.10 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>	0d	Carriage Return Byte value (in hex) that you use for the carriage return (the second byte wrapper after the end byte).
<SB>	0b	Start-Block character Byte value that you use for the start byte (message header wrapper).
<EB>	1c	End-Block character Byte value that you use for the end byte (message trailer wrapper).

9.11 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	Chapter
MSH	Message Header	2
MSA	Message Acknowledgement	2
[ERR]	Error	2

Note: Messages with malformed MSH segments will not trigger an acknowledgement message back to the sending application
.

9.12 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.

9.13 Persistence of Information

When the WTIS receives a waitlist entry amendment to update an existing waitlist entry in the WTIS database, 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 WTIS will record the amended waitlist entry in the WTIS database. As a result, waitlist entry amendment messages need not specify the entire content of each waitlist entry; only the key identifiers must be specified (e.g., placer order number, filler order number).

9.14 Acknowledgement Mode

The WTIS supports the HL7 immediate, original acknowledgement mode.

9.15 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. The WTIS does not support the ability to receive a single file of waitlist entry message from an external system.

External systems however, may execute processes that extract and transmit individual messages on a scheduled basis.

HL7 Sequence Protocol

The WTIS does not support 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 segment continuation protocol.

9.16 Format Rules for Entity Identifiers

Formatting rules for entity identifiers, as well as all SU-supported data elements, are included in Section 11: Message Specification Detail. Facilities must adhere to all formatting rules given in that section.

9.17 Event Flows

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

- SIU^S12 – Open Surgery Waitlist Entry
- SIU^S13 – Update Scheduled Procedure Date
- SIU^S14 – Update Surgery Waitlist Entry
- SIU^S15 – Close Surgery Waitlist Entry
- ORU^R01 – Cancel or Close Surgery Waitlist Entry

Details for the clinical workflow and mandatory field requirements are provided in Section 8 Clinical Event Overview.

10. Message Use Case Details

- The details that follow are organized by message use case.
- "Entry" in the specification document refers to a waitlist entry in the WTIS.
- 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 ZWT segment may cause message failure so these should be removed before sending the message to the WTIS.

10.1 Open Surgery Waitlist Entry

A waitlist entry must be opened using a SIU^S12 trigger event message.

Scenario 1

An agreement between the Treating Healthcare Professional and patient that the patient (with a health card number) requires surgery has been reached, and the procedure is scheduled. This is a new patient referral and Wait 1 information is required. Wait 1 Priority and Patient Type are provided. Dates Affecting Readiness to Treat and Dates Affecting Readiness to Consult are provided. A waitlist entry is opened.

Example HL7 message for **SIU^S12**

```
MSH|^~\&|WTIS_REALTIME|9999|||20110810||SIU^S12|001|D^T|2.4
SCH|1123421||||||IC|||||^^^20080701|||||^Rick^Filler||||^Joe^Enter
PID|||654243142^^^4406^PI~544211091^^^CANON^HC||Lawrence^Guadalupe||19660502|
M
RGS|1
AIS|1|A|W.ONC.BRST.P
AIL|1|A|^^^9999|SURGERY LOCATION
AIP|1|A|90410^^^^^^^^^^^MD| WAIT TIME
ZWT|3|20080619||20080825^20080830^PD||20080501|20080530|20080505^20080508^PD|
GO||CI|NR|Y|EC~LR|Y|SU||||OP|3
```

Scenario 2

An agreement between the Treating Healthcare Professional and patient that the patient (with a health card number) requires surgery has been reached, and the procedure is scheduled. This is a follow-up patient and Wait 1 information is <u>not</u> required. Patient Type is provided. A waitlist entry is opened.

Example HL7 message for **SIU^S12**

```
MSH|^~\&|WTIS_REALTIME^^|9999|||200806301020||SIU^S12|0001|D^T|2.4
SCH|1123422|||||||||||^^^20080701|||||^Rick^Filler||||^Joe^Enter
PID|||654243142^^^9999^PI~544211099^^^CANON^HC||Bauer^Jack||19660501|M
RGS|1|
AIS|1|A|W.ONC.BRST.P
AIL|1|A|^^^9999|SURGERY LOCATION
AIP|1|A|90410^^^^^^^^^^MD| WAIT TIME
ZWT|3|20080619||20080825^20080830^PD|||||||EN||NF|||N|||||IP|
```

Scenario 3

An agreement between the Treating Healthcare Professional and patient that the patient (with a health card number) requires surgery has been reached, and the procedure is scheduled. This is a follow-up patient and Wait 1 information is <u>not</u> required. Patient Type is provided. Wait 2 System Delays are applicable. Multiple Dates Affecting Readiness to Treat are provided. A waitlist entry is opened.

Example HL7 message for **SIU^S12**

```
MSH|^~\&|WTIS_REALTIME^^|9999|||200806301020||SIU^S12|0001|D^T|2.4
SCH|1123423|||||||||||^^^20080701|||||^Rick^Filler||||^Joe^Enter
PID|||654243142^^^9999^PI~544211099^^^CANON^HC||Bauer^Jack||19660501|M
RGS|1|
AIS|1|A|W.ONC.BRST.P
AIL|1|A|^^^9999|SURGERY LOCATION
AIP|1|A|90410^^^^^^^^^^MD|WAIT TIME
ZWT|3|20080619||20080825^20080826^PD~20080827^20080828^pl|||||GO|EN||NF|||Y|S
U||||IP|
```

Scenario 4

An agreement between the Treating Healthcare Professional and patient that the patient (with a health card number) requires surgery has been reached, and the procedure is scheduled. This is a new patient referral and Wait 1 information is available. Wait 1 System delays are applicable. Wait1 Priority Level and Patient Type information is available. A waitlist entry is opened.

Example HL7 message for **SIU^S12**

```
MSH|^~\&|WTIS_REALTIME|4406|||200806301020||SIU^S12|0001|D^T|2.4
SCH|1123424|||||IC|||||^^^20080701|||||^Rick^Filler||||^Joe^Enter
PID|||MRN796254SU^^^4406^PI~964042093467^^^CANON^HC||Lawrence^Guadalupe||1963
0108|F
RGS|1
AIS|1|A|W.ONC.BRST.P
AIL|1|A|^^^9999|SURGERY LOCATION
AIP|1|A|90410^^^^^^^^^^MD|WAIT TIME
ZWT|3|20080619||20080825^20080830^PD||20080501|20080530|20080505^20080508^DA|
OH||CI|NR|Y|EC~LR|N|||||OP|3
```

10.2 Update Scheduled Procedure Date for Surgery Waitlist Entry

A waitlist entry's scheduled procedure date must be updated using a SIU^S13 trigger event message.

Scenario 1

There was a conflict with the original scheduled procedure date and the surgery date was changed.

Example HL7 message for **SIU^S13**

```
MSH|^~\&|WTIS_REALTIME|9999|||20110810||SIU^S13|0002|D^T|2.4
SCH|1123423||||||LB|||||^^^20080801|||||^Rick^Filler||||^Joe^Enter
RGS|1|
AIL|1||^^^9999|SURGERY LOCATION
```

10.3 Update Surgery Waitlist Entry

Any data in the ZWT segment, with the exception of the Decision to Treat Date, must always be included in SIU^S14 messages even if the data is not changing. This data always overwrites existing data in the WTIS. The Decision to Treat Date, however, while a required field in the SIU^S14 message, is ignored.

Scenario 1

The Treating Healthcare Professional will not be available for the rescheduled date and recommends a different Treating Healthcare Professional within the same location. Wait 1 information is <u>not</u> available. Wait 2 System Delays are applicable. Multiple Dates Affecting Readiness to Treat are provided.

Example HL7 message for **SIU^S14**

```
MSH|^~\&|WTIS_REALTIME^^|9999|||200807251451||SIU^S14|0003|D^T|2.4
SCH|1123424||||||IC|||||^^^20080801|||||^Rick^Filler||||^Joe^Enter
RGS|1|
AIL|1||^^^9999|SURGERY LOCATION
AIP|1|D|90410^^^^^^^^^^^^MD|WAIT TIME
AIP|1|A|90412^^^^^^^^^^^MD|WAIT TIME
ZWT|3|20080619||20080825^20080826^PD~20080827^20080828^pl|||||||EN||NF|||Y|EC~
LR|N|||OP|
```

Scenario 2

The Treating Healthcare Professional will not be available for the scheduled procedure date and recommends a different Treating Healthcare Professional at a different hospital (within the same facility).

Example HL7 message for **SIU^S14**

```
MSH|^~\&|WTIS_REALTIME^^|9999|||200806201529||SIU^S14|0011|D^T|2.4
SCH|1123424||||||IC||||||^^^20080701||||||^Rick^Filler||||^Joe^Enter
RGS|1|
AIL|1|D|^^^9999|SURGERY LOCATION
AIL|1|A|^^^9999|NEW SURGERY LOCATION
AIP|1|D|90412^^^^^^^^^^^MD|WAIT TIME
AIP|1|A|90413^^^^^^^^^^^MD|WAIT TIME
ZWT|3|20080619||20080825^20080826^PD~20080827^20080828^PD||||||EN||NF|||Y|EC
~LR|N|||OP|
```

Scenario 3 (update message details)

The patient's surgical wait 2 priority has increased due a change in condition. In addition, multiple Wait 2 System Delays impact the patient's wait time for surgery.

Example HL7 message for **SIU^S14**

```
MSH|^~\&|WTIS_REALTIME^^|9999|||200807251451||SIU^S14|0003|D^T|2.4
SCH|1123424||||||IC||||||^^^20080801||||||^Rick^Filler||||^Joe^Enter
RGS|1|
AIL|1||^^^9999|WAIT TIME
ZWT|2|20080619||20080825^20080830^PD||20080501|20080530|20080505^20080508^DA
|OH||CI|NR|Y|EC|Y|RD~EC~LR~SU||||OP|2
```

10.4 Cancel Surgery Waitlist Entry

A waitlist entry can be cancelled using a SIU^S15 trigger event message.

Scenario 1

The surgery was cancelled because the patient no longer requires surgery.

Note: A waitlist entry can be cancelled only if it was opened.

Example HL7 message for **SIU^S15**

```
MSH|^~\&|WTIS_REALTIME|9999|||20110810||SIU^S15|0013|D^T|2.4
SCH|1123424||||||IC|||||^^^20140302||||||^WAIT^TIME||||^WAIT^TIME
RGS|1
AIL|1||^^^9999|WAIT TIME
```

10.5 Close Surgery Waitlist Entry

A waitlist entry can be closed with procedure date using an ORU^R01 trigger event message.

Scenario 1

The new Treating Healthcare Professional completes the procedure on the rescheduled date and the waitlist entry is closed.

Example HL7 message for **ORU^R01**

```
MSH|^~\&|WTIS_REALTIME^^|9999|||200808011451||ORU^R01|0004|D^T|2.4
OBR|1|1123423||W.ONC.BRST.P|||20080829
```

11. Message Specification Details

Attention

- 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. For more information on HL7 delimiters, please refer to Section 9 – Message Delimiters for more details.

- Please ensure that all populated segment fields/components/subcomponents follow requirements defined within HL7 tables.

- "Entry" in the specification document refers to a waitlist entry in the WTIS.

- 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 ZWT segment may cause message failure so these should be removed before sending the message to the WTIS.

- Any data in the ZWT segment, with the exception of the Decision to Treat Date, must always be included in SIU^S14 messages even if the data is not changing. This data always overwrites existing data in the WTIS. The Decision to Treat Date, while a required field in the SIU^S14 message, is ignored.

- Trailing carets for component fields are optional.

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 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

MSH (Message Header)

Seq #	Element Name	Max Length	R/O/ C/Rep	Item #	Data Type	WTIS Usage Notes
0	Segment ID	3	R		ST	This is a mandatory field. **Description:** The MSH segment is mandatory for SIU^S12, SIU^S13, SIU^S14, SIU^S15 and ORU^R01 messages. **Accepted Values:** Value must be 'MSH'.
1	Field Separator	1	R	00001	ST	This is a mandatory field. **Accepted Values:** Value must be '|'.
2	Encoding Characters	4	R	00002	ST	This is a mandatory field. **Accepted Values:** Value must be '^~\&'.
3	Sending Application	180	R	00003	HD	This is a mandatory field. **Description:** WTIS requires that this field be populated by the sending application to ensure the message is intended for the WTIS. **Components:** <u>\<namespace ID (IS)\></u> ^ \<universal ID (ST)\> ^ \<universal ID type (ID)\> **Accepted Values:** Value must be 'WTIS_REALTIME^^'
4	Sending Facility	180	R	00004	HD	This is a mandatory field. **Description:** This is the site identifier where the procedure is to be, or was, performed. **Components:** <u>\<namespace ID (IS)\></u> ^ \<universal ID (ST)\> ^ \<universal ID type (ID)\> **Example:** 4107^^
5	Receiving Application	N/A	N/A	00005	N/A	Not supported. Please leave blank.
6	Receiving Facility	N/A	N/A	00006	N/A	Not supported. Please leave blank.

Seq #	Element Name	Max Length	R/O/ C/Rep	Item #	Data Type	WTIS Usage Notes
7	Date/Time of Message	26	R	00007	TS	This is a mandatory field. **Format:** The format is **YYYYMMDDHHMM**. **Example:** August 5th 2011 11:59pm should be sent as 201108052359. **Notes:** Hours, HH, is in 24hrs. format.
8	Security	N/A	N/A	00008	N/A	Not supported. Please leave blank.
9	Message Type	13	R	00009	CM	This is a mandatory field. **Description:** The required message types would be SIU^S12, SIU^S13, SIU^S14, SIU^S15 or ORU^R01. **Components:** <u>**Message Code (ID)**</u> ^ <u>**Trigger Event (ID)**</u> ^ < Message Structure (ID)> **Example:** If sending Create Encounter Message the value in this field will be: SIU^S12.
10	Message Control ID	20	R	00010	ST	This is a mandatory field. **Description:** 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. **Notes:** This identifier is returned with the ACK or NAK message and can be used to identify specific messages that were sent.

Seq #	Element Name	Max Length	R/O/ C/Rep	Item #	Data Type	WTIS Usage Notes
11	Processing ID	3	R	00011	PT	This is a mandatory field. **Description:** WTIS requires that this field be populated by the sending application to indicate the source of system environment, Test or Production. **Components:** <u><processing ID (ID)></u> ^ <processing mode (ID)> **Accepted Values:** For Testing, value must be **D^T**. For Production, value must be **P^T**.
12	Version ID	60	R	00012	VID	This is a mandatory field. **Description:** This field contains the version of HL7 supported by the WTIS. **Components:** <u><version ID (ID)></u> ^ <internationalization code (CE)> ^ <internal version ID (CE)> **Accepted Values:** Value must be '**2.4**'

SCH (Scheduling Activity Information)

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	WTIS Usage Notes
0	Segment Name	3	R		ST	This is a mandatory field. **Description:** The MSH segment is mandatory for SIU^S12, SIU^S13, SIU^S14 and SIU^S15 messages. **Accepted Values:** Value must be '**SCH**'
1	Placer Appointment ID	75	CE	00860	EI	The Placer Appointment ID field can only be empty (no value sent to WTIS) if the unique Case Number for the surgery is submitted in the Filler Appointment ID (SCH.2); otherwise this field is mandatory for

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	WTIS Usage Notes
						messages: SIU^S12, SIU^S13, SIU^S14, SIU^S15.
						Description:
						This field contains the placer application's permanent identifier for the appointment request.
						This field identifies the unique waitlist entry that is to be processed within WTIS. If this field is populated with a value then the value in SCH.2 (Filler Appointment ID) will be ignored.
						The sending system must consistently use SCH-1 field to identify the unique waitlist entry. This will be configured and set during implementation.
						If this field is used to send the unique waitlist entry Identifier then this field will be mandatory for SIU^S12, SIU^S13, SIU^S14 and SIU^S15. When the waitlist entry is created (SIU^S12), this unique identifier cannot be changed; it will be used as reference to find the encounter within WTIS for all other trigger event messages.
						Components:
						<u>\<Entity Identifier (ST)>^\<namespace ID(IS)></u>^\<Universal ID>
						Notes:
						There must be an unique Case Number for each individual waitlist entry.
2	Filler Appointment ID	75	CE	00861	EI	If the Placer Appointment ID (SCH.1) is not used to send the unique Case Number for the waitlist entry, then this field is mandatory for messages: SIU^S12, SIU^S13, SIU^S14 and SIU^S15.
						Description:
						This field contains the filler application's permanent identifier for the appointment request.
						This field identifies the unique waitlist entry that is to be processed within the WTIS. If Placer Appointment ID field is populated with a value then the number in this field will be ignored.
						The sending system must consistently use SCH-2 field to identify the unique waitlist entry. This will be configured and set during implementation.
						When the waitlist entry is created (SIU^S12), this unique identifier cannot be changed, it will be used as

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	WTIS Usage Notes
						reference to find the encounter within WTIS for all other trigger event messages. **Components:** <u>Entity Identifier (ST)></u>^<namespace ID(IS)>^<Universal ID>^ **Notes:** There must be an unique Case Number for each individual waitlist entry.
3	Occurrence Number	N/A	N/A	00862	N/A	Not supported. Please leave blank.
4	Placer Group Number	N/A	N/A	00218	N/A	Not supported. Please leave blank.
5	Schedule ID	N/A	N/A	00864	N/A	Not supported. Please leave blank.
6	Event Reason	250	R	00883	CE	This is a mandatory field. **Description:** This field is used to describe the reason for changing the Schedule Procedure Date (SIU^S13) or the reason for the waitlist entry cancellation (SIU^S15). **Accepted Values:** **Reason for Rescheduling Procedure Date** <u>Code</u> <u>Description</u> **LB** Lack of bed availability **LS** Lack of available staff **MC** Medical complications/reasons **ME** Medications **MT** Medical specialty consult or tests **OT** Other **RP** Rescheduled due to higher priority case **TD** Transfer delays **Reason for Waitlist Entry Cancellation** <u>Code</u> <u>Description</u> **CP** Cancelled by Patient **ER** Data Entry Error **IC** Patient has an improved Medical Condition **MS** Patient is no longer medically stable **PC** Patient procedure was completed elsewhere **PD** Patient Death **Components:**

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	WTIS Usage Notes
						<u>Identifier (ST)></u> ^ <text (ST)> ^ <name of coding system (IS)> ^ <alternate identifier (ST)> ^ <alternate text> ^ <name of alternate coding system (IS)> **Notes:** The maximum length for the Identifier is 3 characters. For SIU^S12 and SIU^S14, the event reason will not be stored in WTIS. However, according to HL7 Standard this field is mandatory. Therefore, the sending system must send a reason within the message to satisfy HL7 requirements. This reason can be set to a default value for the SIU^S12, and SIU^S14 messages.
7	Appointment Reason	N/A	N/A	00866	N/A	Not supported. Please leave blank.
8	Appointment Type	N/A	N/A	00867	N/A	Not supported. Please leave blank.
9	Appointment Duration	N/A	N/A	00868	N/A	Not supported. Please leave blank.
10	Appointment Duration Units	N/A	N/A	00869	N/A	Not supported. Please leave blank.
11	Appointment Timing Quantity	200	R	00884	TQ	This is a mandatory field. **Description:** This field is used to identify when the procedure is to be scheduled. This field is to submit the date the patient is scheduled/rescheduled to have the procedure. If at the time of creating a waitlist entry (SIU^S12), the sending system has the information of when the procedure is to be completed, the scheduled procedure date must be submitted. If at the time of creating a waitlist entry (SIU^S12), the sending system does not have the schedule procedure date then the system is to send the default date of 99990101. After creating a waitlist entry (SIU^S12), if the schedule procedure date is updated, it must be submitted using the SIU^S13 trigger event. ONLY the SIU^S13 trigger event will update the schedule procedure date. For the SIU^S14 and SIU^S15 trigger events, include the schedule procedure date in this field. The data submitted in these trigger events will not update in the WTIS. **Components:**

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	WTIS Usage Notes
						<quantity (CQ)> ^ <interval (CM)> ^ <duration (CM)> ^ <u>**<start date/time (TS)>**</u> ^ <end date/time (TS)> ^ <priority (ST)> ^ <condition (ID)> ^ <text (TX)> ^ <conjunction (ID)> ^ <order sequencing (CM)> ^ <occurrence duration (CE)> ^ <total occurrences (NM)> **Format:** Start Date/Time (TS): **YYYYMMDD** (Note: Do not include time) **Example:** ^^^20060310 **Notes:** Date must be greater than or equal to Decision to Treat Date. The difference between Referral Date and Scheduled/Rescheduled Procedure Date must be less than 15 years. For SIU^S13 messages, a reschedule reason must also be provided (see SCH.6)
12	Placer Contact Person	N/A	N/A	00874	N/A	Not supported. Please leave blank.
13	Placer Contact Phone Number	N/A	N/A	00875	N/A	Not supported. Please leave blank.
14	Placer Contact Address	N/A	N/A	00876	N/A	Not supported. Please leave blank.
15	Placer Contact Location	N/A	N/A	00877	N/A	Not supported. Please leave blank.
16	Filler Contact Person	250	R	00885	XCN	This is a mandatory field. **Description:** According to HL7 Standard, this field is mandatory. However, the information in this field will not be processed by the WTIS. To satisfy HL7 requirements, we suggest that you enter the name of the person responsible for scheduling the requested appointment in this field. If this information is not available, you may enter any other data (see example below). **Components:** <ID Number (ST)> ^ <family name (FN)> ^ <given name (ST)> ^ <second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	WTIS Usage Notes
						\<name type code (ID) > ^ \<name representation code (ID)> ^ \<name context (CE)> ^ \<name validity range (DR)> ^ \<name assembly order (ID)> **Example:** ^Wait^Time
17	Filler Contact Phone Number	N/A	N/A	00886	N/A	Not supported. Please leave blank.
18	Filler Contact Address	N/A	N/A	00887	N/A	Not supported. Please leave blank.
19	Filler Contact Location	N/A	N/A	00888	N/A	Not supported. Please leave blank.
20	Entered by Person	250	R	00878	XCN	According to HL7 Standard, this field is mandatory. However, the information in this field will not be processed by the WTIS. To satisfy HL7 requirements, we suggest that you enter the name of the person who entered the request into the sending system in this field. If this information is not available, you may enter any other data (see example below). **Components:** \<ID Number (ST)> ^ \<family name (FN)> ^ \<given name (ST)> ^ \<second and further given names or initials thereof (ST)> ^ \<suffix (e.g., JR or III) (ST)> ^ \<prefix (e.g., DR) (ST)> ^ \<degree (e.g., MD) (IS)> ^ \<name type code (ID) > ^ \<name representation code (ID)> ^ \<name context (CE)> ^ \<name validity range (DR)> ^ \<name assembly order (ID)> **Example:** ^Wait^Time

PID (Patient Identification)

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
0	Segment Name	3	R		ST	This is a mandatory field. **Description:** The PID segment is mandatory for SIU^S12 messages. This segment is used in the SIU^S12 message for both finding the patient in the EMPI and registering the patient in the WTIS. It is not required for SIU^S13, SIU^S14, SIU^S15 and ORU^R01 messages, as those message rely on Case Number to find the waitlist entry to be updated (see SCH.1 and SCH.2). **Accepted Values:** Value must be 'PID'.
1	Set ID - PID	N/A	N/A	00104	N/A	Not supported. Please leave blank.
2	Patient ID	N/A	N/A	00105	N/A	Not supported. Please leave blank.
3	Patient Identifier List	250	R	00106	CX	This is a mandatory field. **Description:** This field is used to provide the identifiers used by the healthcare facility to uniquely identify the patient. This information is used in the SIU^S12 message for both finding the patient in the EMPI and registering the patient in the WTIS. Two variables that are to be included in this field are: MRN - Medical Record Number (mandatory) HCN - Health Card Number (required, if available) Mandatory Sequence: MRN ~ HCN **Components:** <u>ID (ST)> ^</u> <check digit (ST)> <u>^</u> <code identifying the check digit scheme employed (ID)> <u>^ < assigning authority (HD)> ^ <identifier type code (ID)></u> ^ < assigning facility (HD) ^ <effective date (DT)> ^ <expiration date (DT)> Note: Full Descriptions are provided below (1) MRN - Medical Record Number Example: 123456^^^4107^PI 'PI' stands for the Patient Institution. The WTIS will associate this PI code with the MRN Number. In this example, 4107 is the value used in MSH-4, indicating

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						that the assigning authority of the MRN identifier is the sending facility/site. Note: Inclusion of PI code is mandatory.
						(2) HCN - Health Card Number
						Example: 999999999^^^CANON^HC
						'HC' stands for the Health Card Number. The WTIS will associate this HC code with the Health Card Number. In this example, CANON is the provincial assigning authority of the Health Card Number. Note: Inclusion of HC code is mandatory when sending HCN.
						The following are the accepted values for Health Card Assigning Authority (Note: values based on HL7 v2.4):
						Accepted Values:
						<u><Assigning authority (HD)></u>
						Note: For any Assigning Authority values not found below, the Health Card Number is not to be submitted to WTIS.
						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
						CANQC Quebec
						CANSK Saskatchewan
						CANYT Yukon Territories
						NLVWS NL Ministerie van Volksgezondheid
						USCDC US Center for Disease Control
						USHCFA US Health Care Finance Authority
						USSSA US Social Security Administration
						Example:
						Both MRN and HCN are available: 123456^^^4107^PI~999999999^^^CANON^HC

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						Only MRN is available: 123456^^^4107^PI
						Notes:
						The WTIS will always attempt to match the patient in the EMPI on MRN first, if provided; if MRN is not provided or the search by MRN does not return a patient then HCN and patient demographics (see fields below) will be used to match the patient in the EMPI.
						The MRN or HCN must not include any embedded spaces.
						For facilities with existing EMPI interfaces, the data contained in this field should be the same as the data contained in the PID.3 field in the EMPI interface.
						The field length for MRN must be between 1 and 12 characters, according to EMPI specific configuration.
						The field length for HCN must be between 8 and 15 characters according to EMPI specific configuration.
4	Alternate Patient ID – PID	N/A	N/A	00107	N/A	Not supported. Please leave blank.
5	Patient Name	250	R	00108	XPN	This is a mandatory field.
						Description:
						This field is used to provide the patient's name.
						Variables that are to be included in this field are:
						Family Name (mandatory)
						Given Name (mandatory)
						Second or Further Given Name or Initials Thereof (optional)
						Prefix (optional)
						Components:
						<u>\<family name (FN)> ^ \<given name (ST)></u> ^ \<second and further given names or initials thereof (ST)> ^ \<suffix (e.g., JR or III) (ST)> ^ \<prefix (e.g., DR) (ST)> ^ \<degree (e.g., MD) (IS)> ^ \<name type code (ID) > ^ \<name representation code (ID)> ^ \<name context (CE)> ^ \<name validity range (DR)> ^ \<name assembly order (ID)>
						Notes:
						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.

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						The reason is that the most recent patient demographic update in the EMPI will be from the facility'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.
						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.
6	Mother's Maiden Name	N/A	N/A	00109	N/A	Not supported. Please leave blank.
7	Date/Time of Birth	26	R	00110	TS	This is a mandatory field. **Description:** This field is used to provide the patient's date of birth. This information is used in the SIU^S12 message for both finding the patient in the EMPI and registering the patient in the WTIS. **Format:** **YYYYMMDD** (Note: Do not include time) **Notes:** 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 the facility'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. The maximum length for this field is 19 characters. This length was set to match the supported field length in EMPI.
8	Administrative Sex	1	R	00111	IS	This is a mandatory field. **Description:** This field is used to provide the patient's sex.

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						This information is used in the SIU^S12 message for both finding the patient in the EMPI and registering the patient in the WTIS. **Accepted Values:** <u>Code</u> <u>Description</u> **F** Female **M** Male **U** Unkown **Notes:** For other values that are not supported by WTIS (e.g., O – Other), please map to Unknown.
9	Patient Alias	N/A	N/A	00112	N/A	Not supported. Please leave blank.
10	Race	N/A	N/A	00113	N/A	Not supported. Please leave blank.
11	Patient Address	250	O/Rep	00114	XAD	This is an optional field. However, if any address information is provided in the message then ALL address components underlined below are mandatory. **Description:** This field is used to provide the patient's home, mailing and/or current/temporary address. This information is used in the SIU^S12 message for both finding the patient in the EMPI and registering the patient in the WTIS. The WTIS can support up to three different addresses but only one of a given type (H, M, C). Address 1 ~ Address 2 ~ Address 3 **Components:** <u>\<street address (ST)> ^ \<other designation (ST)> ^ \<city (ST)> ^ \<state or province (ST)> ^ \<zip or postal code (ST)> ^ \<country (ID)> ^ \< address type (ID)></u> ^ \<other geographic designation (ST)> ^ \<county/parish code (IS)> ^ \<census tract (IS)> ^ \<address representation code (ID)> ^ \<address validity range (DR)> **Accepted Values:** \<<u>state or province</u>> 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.)

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						Note: For any values not found below, this field is to remain empty (i.e., to be treated as <blank>).

CA-AB	Alberta	US-MA	Massachusetts
CA-BC	British Columbia	US-MD	Maryland
CA-MB	Manitoba	US-ME	Maine
CA-NB	New Brunswick	US-MI	Michigan
CA-NL	Newfoundland and Labrador	US-MN	Minnesota
CA-NS	Nova Scotia	US-MO	Missouri
CA-NT	Northwest Territories	US-MS	Mississippi
CA-NU	Nunavut	US-MT	Montana
CA-ON	Ontario	US-NC	North Carolina
CA-PE	Prince Edward Island	US-ND	North Dakota
CA-QC	Quebec	US-NE	Nebraska
CA-SK	Saskatchewan	US-NH	New Hampshire
CA-YT	Yukon Territory	US-NJ	New Jersey
US-AK	Alaska	US-NM	New Mexico
US-AL	Alabama	US-NV	Nevada
US-AR	Arkansas	US-NY	New York
US-AZ	Arizona	US-OH	Ohio
US-CA	California	US-OK	Oklahoma
US-CO	Colorado	US-OR	Oregon
US-CT	Connecticut	US-PA	Pennsylvania
US-CZ	Canal Zone	US-PR	Puerto Rico
US-DC	District Of Columbia	US-RI	Rhode Island
US-DE	Delaware	US-SC	South Carolina
US-FL	Florida	US-SD	South Dakota
US-GA	Georgia	US-TN	Tennessee

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						US-GU Guam US-TX Texas US-HI Hawaii US-UT Utah US-IA Iowa US-VA Virginia US-ID Idaho US-VI Virgin Islands US-IL Illinois US-VT Vermont US-IN Indiana US-WA Washington US-KS Kansas US-WI Wisconsin US-KY Kentucky US-WV West Virginia US-LA Louisiana US-WY Wyoming **Accepted Format:** <u>\<zip or postal code (ST)\></u> 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 \<blank\>). **Accepted Values:** <u>\<country (ID)\></u> For Canada (CAN): CAN For United States (USA): USA Note: For any values not Canada or the United States, this field is to remain empty (i.e., to be treated as \<blank\>). **Accepted Values:** <u>\<Address type\></u> 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 **Notes:** 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.

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						The maximum length for the State or Province is 15 characters.
						The maximum length for the Zip or Postal Code is 10 characters.
						The maximum length for the Country is 3 characters.
						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.
						If there is only one address value, then leave out the repeating fields (i.e., do not include blank, address2, address3 fields).
12	County Code	N/A	N/A	00115	N/A	Not supported. Please leave blank.
13	Phone Number – Home	250	O/Rep	00116	XTN	This is an optional field. However, if any phone information is provided in the message then ALL phone components underlined below are mandatory.
						Description:
						The WTIS will support three different telephone numbers in this field, as indicated by <Telecommunication Use Code> values, but only one per type.
						Telephone 1 ~ Telephone 2 ~ Telephone 3
						Components:
						<u><Telephone Number (ST)> ^ <Telecommunication Use Code> ^ <Telecommunication Equipment type (ID)> ^</u> <e-mail address (ST)> <u>^ <country code (NM)> ^ <area/city code (NM)> ^ <Local number (NM)> ^ <extension (NM)></u> ^ <any text (ST)> ^ <Extension Prefix (ST) > ^ <Speed Dial Code (ST)> ^ <Unformatted Telephone number (ST)>
						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:
						<u><Telecommunication Use Code></u>
						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 message will error.
						PRN Primary Residence Number

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						EMR Emergency Number ORN Other Residence Number (including Cellular/Mobile Number) **Accepted Values:** **<u><Telecommunication Equipment type (ID)></u>** The only accepted value is 'PH' (Phone). In future WTIS releases, other equipment types could be supported (e.g., fax). **Accepted Format:** **<u><Area/City Code (NM)></u>** Send numeric values only; do not send brackets '( )', spaces, or dash '-' separators. For example, if the area code is (416), send 416. **Accepted Format:** **<u><Local Number (NM)></u>** Send numeric values only; do not send brackets '( )', spaces, or dash '-' separators. For example, if local number is 444-5555, send 4445555. **Accepted Format:** **<u><Extension(NM)></u>** 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^~ 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 Number (ST)> field (maximum length is 20 characters). Primary Residence Number: (444) 555-6666 (444)555-6666^PRN^PH^^^^^~

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						Emergency Number: (777) 888-9999
						(777)888-9999^PRN^PH^^^^^~
						Mobile Number: (111) 222-3333
						(111)222-3333^PRN^PH^^^^^~
						Notes:
						The maximum length for the Telephone Number is 20 characters.
						The maximum length for the Telecommunication Use Code is 3 characters.
						The maximum length for the Telecommunication Equipment Type is 10 characters.
						The maximum length for the Area/City Code is 5 characters.
						The maximum length for the Local Number is 20 characters.
						The maximum length for the Extension is 6 characters.
						Data will be processed in sequence, only if data is present in the repeating fields. For instance, for "Telephone1 ~ Telephone2 ~ Telephone3″, if Telephone2 is blank, Telephone3 will not be processed.
14	Phone Number – Business	250	O	00117	XTN	This is an optional field. However, if any phone information is provided in the message then ALL phone components underlined below are mandatory.
						Description:
						The WTIS will support three different telephone numbers in this field, as indicated by <Telecommunication Use Code> values, but only one per type.
						Telephone 1 ~ Telephone 2 ~ Telephone 3
						Components:
						<u>Telephone Number (ST)> ^ <Telecommunication Use Code> ^ <Telecommunication Equipment type (ID)> ^</u> <e-mail address (ST)> <u>^</u> <country code (NM)> <u>^ <area/city code (NM)> ^ <Local number (NM)> ^ <extension (NM)></u> ^ <any text (ST)> ^ <Extension Prefix (ST) > ^ <Speed Dial Code (ST)> ^ <Unformatted Telephone number (ST)>
						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:

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						<u>\<Telecommunication Use Code></u> 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 message will error. WPN Work Number **Accepted Values:** <u>\<Telecommunication Equipment type (ID)></u> The only accepted value is 'PH' (Phone). In future WTIS releases, other equipment types could be supported (e.g., fax). **Accepted Format:** <u>\<Area/City Code (NM)></u> Send numeric values only; do not send brackets '( )', spaces, or dash '-' separators. For example, if the area code is (416), send 416. **Accepted Format:** <u>\<Local Number (NM)></u> Send numeric values only; do not send brackets '( )', spaces, or dash '-' separators. For example, if local number is 444-5555, send 4445555. **Accepted Format:** <u>\<Extension(NM)></u> 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:** 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 Number (ST)> field (maximum length is 20 characters). Work Number: (444) 555-6666 ext. 333 (444)555-6666 ext.333^WPN^^^^^^~ **Notes:**

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						The maximum length for the Telephone Number is 20 characters.
						The maximum length for the Telecommunication Use Code is 3 characters.
						The maximum length for the Telecommunication Equipment Type is 10 characters.
						The maximum length for the Area/City Code is 5 characters.
						The maximum length for the Local Number is 20 characters.
						The maximum length for the Extension is 6 characters.

RGS (Resource Group Segment)

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
0	Segment Name	3	R		ST	This is a mandatory field. **Description:** The RGS segment is mandatory for SIU^S12, SIU^S13, SIU^S14 and SIU^S15 messages. **Accepted Values:** Value must be '**RGS**'.
1	Set ID – RGS	4	R	01203	SI	This is a mandatory field. **Description:** This field contains a number that uniquely identifies the information represented by this segment in this transaction for the purposes of addition, change or deletion. **Example:** 1

AIS (Appointment Information)

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
0	Segment Name	3	R		ST	This is a mandatory field. **Description:** The AIS segment is mandatory for SIU^S12. AIS segment is only required for SIU^S14 if the procedure for the waitlist entry is changed. In this case two AIS segments are required, one to remove the previous procedure and the second to add the new procedure. **Accepted Values:** Value must be '**AIS**'.
1	Set ID - AIS	4	R	00890	SI	This is a mandatory field. **Description:** This field contains a number that uniquely identifies the information represented by this segment. **Example:** For SIU^S12, Set ID = 1. For SIU^S14, Set ID = 1 for 1st AIS segment and Set ID = 2 for 2nd AIS segment.
2	Segment Action Code	3	R	00763	ID	This is a mandatory field. **Description:** This field contains the information that identifies the action that the WTIS is to perform. This is a mandatory field for SIU^S12 message because creating a new waitlist will add a procedure. This is only required for SIU^S14 if the procedure for the waitlist entry is changed. In this case two AIS segments are required, one to remove the old procedure and the second to add the new procedure. **Accepted Value:** The value must be '**A** ' for (Add/Insert) or '**D**' for (Delete). **Notes:** For SIU^S14 messages, any changes to the procedure would require two AIS segments. The first segment must have a value of 'D' – Delete in this field. The second segment must have a value of 'A' – Add/Insert

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						to indicate the updated procedure.
						If there are no changes to the procedure, then you must not submit any AIS segments.
3	Universal Service Identifier	250	R	00238	CE	This is a mandatory field.
						Description:
						This field must contain the standardized WTIS procedure code. Internally, the facility must be able to map each facility procedure to ONE specific WTIS procedure. For surgery, this specifically means that the facility must support diagnosis specific codes. For example, procedures completed for oncology must have a unique code. A typical surgery system would have procedure codes that apply to multiple areas of care (e.g. bowel resection).
						This is a mandatory field for SIU^S12 message because to create a waitlist entry, procedure must be provided.
						This is only required for SIU^S14 if the procedure for the waitlist entry is changed. In this case two AIS segments are required, one to remove the previous procedure and the second to add the new procedure.
						Components:
						<u><identifier (ST)></u> ^ <text (ST)> ^ <name of coding system (IS)> ^ <alternate identifier (ST)> ^ <alternate text (ST)> ^ <name of alternate coding system (IS)>
						Example:
						W.ONC.PNS.T
						Notes:
						If there is a change to the procedure, then in the SIU^S14 message the sending system will send two AIS segments. The first segment will contain the old procedure code to be deleted. The second segment will contain the new procedure code to be added.
						While the WTIS does not act on the "old" data so the data does not have to be accurate (although accuracy is preferred, your system may not be able to provide this data). It does, however, have to be in the correct format for procedure codes. It is recommended that if you cannot provide the "old" information, that you include the "new" information in both the "old" and

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						"new" fields.
						If there are no changes to the procedure then do not send the AIS segment in the SIU^S14 message.

AIL (Appointment Information – Location Resource Segment)

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
0	Segment Name	3	R		ST	This is a mandatory field. **Description:** The AIL segment is mandatory for SIU^S12, SIU^S13, SIU^S14 and SIU^S15. **Accepted Values:** Value must be '**AIL**'.
1	Set ID - AIL	4	R	00890	SI	This is a mandatory field. **Description:** This field contains a number that uniquely identifies the information represented by this segment. **Example:** For SIU^S12, SIU^S13 and SIU^S15, Set ID = 1. For SIU^S14, when site has not changed, Set ID = 1. For SIU^S14, when site has changed, Set ID = 1 for 1st AIL segment and Set ID = 2 for 2nd AIL segment.
2	Segment Action Code	3	R	00763	ID	**Description:** This field contains the information that identifies the action that WTIS is to perform. This is a mandatory field for SIU^S12 message because a site must be provided for where the surgery is to occur. This field is only required for SIU^S14 if the site for the waitlist entry is changed. In this case, two AIL segments are required, one to remove the old site and the second to add the new site. This field should not be provided for SIU^S13 and SIU^S15 messages, or for SIU^S14 messages if there is no update for site.

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						Accepted Value:
						The value must be 'A ' for (Add/Insert), 'D' for (Delete), or \<blank\>
						Notes:
						If you are changing a site, you must submit two (2) segments: one with the "old" site and one with the "new" (or changed) site.
						For SIU^S12 messages, the value in this field must be 'A' because a new site is added to the waitlist entry.
						For SIU^S13 and SIU^S15 the value in this field should be \<blank\> because neither of these trigger events will change the site information.
						For SIU^S14 messages, any intra-facility changes to the site would require two AIL segments. The first segment must have a value of 'D' in this field to delete the old site. The second segment must have a value of 'A' in this field to add the new site.
						If an SIU^S14 message does not affect any changes to the site where the procedure is to be performed then the value in this field should be left \<blank\> because it does not change the existing site information for the open waitlist entry.
3	Location Resource ID	80	R	00238	CE	This is a mandatory field.
						Description:
						The information in this field represents the site where the procedure is performed.
						This is a mandatory field for SIU^S12, SIU^S13, SIU^S14 and SIU^S15 messages.
						Components:
						\<point of care (IS)\>^\<room (IS)\>^\<bed (IS)\>^<u>^\<facility (HD)\></u>
						Example:
						^^^4107
						Notes:
						In the SIU^S12 message the value in this field is the site code where the procedure is to be performed.
						In the SIU^S13 and SIU^S15 messages, the value in this field will be site code where the procedure is to be or was performed. The WTIS will use this site code,

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						plus the Case Number (see SCH-1 and SCH-2) to find the waitlist entry to be updated.
						If there is an intra-facility change to the site, then in the SIU^S14 message the sending system will send two AIL segments. The first segment must contain the old site code to be deleted. The second segment will contain the new site code to be added. WTIS will use the old site code, plus the Case Number to find the waitlist entry to be updated.
						The updated site number must have an intra-facility relationship with the previous site number. For example, UHN is a facility for 3 sites, TGH, TWH and PMH. If the patient moved from TWH to TGH, this would be accepted in WTIS. In the event of a change in site, the Case Number for the waitlist entry must not change.
						If there are no changes to the site, but other changes are included in the SIU^S14 message, the site code in this field will not change and should still be provided because it, plus the Case Number, will be used to find the waitlist entry to be updated.
4	Location Type	250	R	00904	CE	This is a mandatory field. Description: According to HL7 Standard, this field is mandatory. However, the information in this field will not be processed by the WTIS. To satisfy HL7 requirements, we suggest that you enter the Surgery Location in this field. If this information is not available, you may enter any other data (e.g., Wait Time).

AIP (Appointment Information – Personnel Resource Segment)

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
0	Segment Name	3	R		ST	This is a mandatory field. **Description:** The AIP segment is mandatory for SIU^S12. AIP segment is only required for SIU^S14 if the Treating Healthcare Professional for the waitlist entry is changed. In this case two AIP segments are required, one to remove the previous Treating Healthcare Professional and the second to add the new Treating Healthcare Professional. **Accepted Values:** Value must be '**AIP**'.
1	Set ID - AIP	4	R	00763	SI	This is a mandatory field. **Description:** This field contains a number that uniquely identifies the information represented by this segment. **Example:** For SIU^S12, Set ID = 1. For SIU^S14, Set ID = 1 for 1st AIP segment and Set ID = 2 for 2nd AIP segment.
2	Segment Action Code	4	R	00906	SI	This is a mandatory field. **Description:** This field contains the information that identifies the action that the WTIS is to perform. This is a mandatory field for SIU^S12 message because creating a new waitlist will add a Treating Healthcare Professional. This is only required for SIU^S14 if the Treating Healthcare Professional for the waitlist entry is changed. In this case two AIP segments are required, one to remove the old Treating Healthcare Professional and the second to add the new Treating Healthcare Professional. **Accepted Value:** The value must be '**A** ' for (Add/Insert) or '**D**' for (Delete).

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						Notes:
						For SIU^S14 messages, any changes to the Treating Healthcare Professional would require two AIP segments. The first segment must have a value of 'D' – Delete in this field. The second segment must have a value of 'A' – Add/Insert to indicate the updated Treating Healthcare Professional.
						If there are no changes to the Treating Healthcare Professional, then you must not submit any AIP segments.
3	Personnel Resource ID	250	R	00913	XCN	This field is only required when a Treating Healthcare Professional is added or updated.
						Description:
						The information in this field represents the Treating Healthcare Professional registration number and role type.
						If there is a change in the Treating Healthcare Professional then the sending application will send two AIP segments in the SIU^S14 message. The first segment would include the old registration number and role type that is to be deleted. The second segment would include the new or updated registration number and role type. The WTIS will respond to the value indicated in AIS.2. If 'A' is the value in AIS.2 then the value in this field will update the old registration number and role type.
						While the WTIS does not act on the "old" data so the data does not have to be accurate (although accuracy is preferred, your system may not be able to provide this data). It does, however, have to be in the correct format for registration numbers and role types. It is recommended that if you cannot provide the "old" information, that you include the "new" information in both the "old" and "new" fields.
						If there are no changes to the Treating Health Care Professional, then do not send the AIP segment in the SIU^S14 message.
						The person identified in this field is the clinician or Treating Health Care Professional. The value that is to be included in this field must be the clinician's

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						registration number (from either the College of Physicians and Surgeons of Ontario – www.cpso.on.ca or the Royal College of Dental Surgeons of Ontario – www.rcdso.org, and the type associated with the registration number (i.e., MD or DEN) . **Components:** <**ID number (ST)> ^** <family name (ST)> **^** <given name (ST)> **^** <middle initial or name (ST)> **^** <suffix (e.g., JR or III) (ST)> **^** <prefix (e.g., DR) (ST)> **^** <degree (e.g., MD) (ST)> **^** <source table (IS)> **^** <assigning authority (HD)> **^** <name type (ID)> **^** <identifier check digit (ST)> **^** <code identifying the check digit scheme employed (ID)> **^ <identifier type code (IS)**> ^ <assigning facility ID (HD)> **Accepted Values:** The Identifier Type Code value must be 'MD' for clinicians registered with the CPSO or 'DEN' for clinicians registered with the RCDSO. **Example:** 22527^^^^^^^^^^^^MD
4	Resource Role	250	R	00907	CE	According to HL7 Standard, this field is mandatory. However, the information in this field will not be processed by WTIS. To satisfy HL7 requirements, we suggest that you enter the resource role of the person identified in AIP.3 in this field. If this information is not available, you may enter any other data (e.g., Wait Time).

OBR (Observation Request Segment)

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
0	Segment Name	3	R		ST	This is a mandatory field. **Description:** The OBR segment is mandatory for ORU^R01 messages. **Accepted Values:** Value must be '**OBR**'.
1	Set ID – OBR	4	R	00237	SI	This is a mandatory field. **Description:** This field contains a number that uniquely identifies the information represented by this segment in this transaction for the purposes of addition, change or deletion. **Accepted Values:** Value must be '**1**'.
2	Placer Order Number	22	CE	00216	EI	The Placer Order Number field can only be empty (no value sent to WTIS) if the unique Case Number for the surgery is submitted in the Filler Order Number (OBR.3); otherwise this field is mandatory. **Description:** This field contains the placer application's permanent identifier. The value in this field must be unique for each individual waitlist entry (i.e., the unique Case Number) to be processed within WTIS. If this field is populated with a value, then the value in OBR.3 (Filler Order Number) will be ignored. The sending system must consistently use OBR.2 field to identify the unique waitlist entry. Case Numbers must be unique across service areas (e.g., a Case Number for Oncology cannot be repeated for Ophthalmology t or Orthopedic Procedures). **Accepted Values:** The value in this field must equal that of SCH.1 of SCH.2 for the same waitlist entry. **Condition:** The Placer Order Number field can only be empty (no value sent to WTIS) if the unique Case Number for the surgery is submitted in the Filler Order Number

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						(OBR.3); otherwise this message will fail. **Components:** <u>**<Entity Identifier (ST)>**</u>^<namespace ID(IS)>^<Universal ID>^
3	Filler Order Number	22	CE	00217	EI	If the Placer Order Number (OBR.2) field above is not used to send the unique Case Number for the waitlist entry, then this field becomes mandatory. **Description:** This field contains the filler application's permanent identifier. The value in this field must be unique for each individual waitlist entry (i.e., the unique Case Number) to be processed within WTIS. If the Placer Order Number field (OBR.2) is populated with a value, then the value in this field will be ignored. The sending system must consistently use OBR.3 field to identify the unique waitlist entry. This will be configured and set during implementation. Case Numbers must be unique across service areas (e.g., a Case Number for an Oncology procedure cannot be repeated for an Ophthalmic or Orthopedic procedure). **Components:** <u>**<Entity Identifier (ST)>**</u>^<namespace ID(IS)>^<Universal ID>^ **Notes:** If the Placer Order Number (OBR.3) is not used to send the unique waitlist entry then this field is mandatory. The value in this field must equal that of SCH.1 or SCH.2 for the same waitlist entry.
4	Universal Service Identifier	250	R	00238	CE	This is a mandatory field. **Description:** This fields contains WTIS procedure code from original S12 or S14, AIS.3 (or any valid procedure code). According to HL7 Standard, this field is mandatory. However, the information in this field will not be processed by the WTIS. Value in this field is required to satisfy HL7 requirements. A valid procedure code is required or the message will result in an error. **Accepted Value:** A valid WTIS procedure code. **Components:** <u>**<Entity Identifier (ST)>**</u> ^ <Namespace ID (IS)> ^

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						<Universal ID (ST)> ^ <Universal ID Type (ID)>
5	Priority - OBR	N/A	N/A	00239	N/A	Not supported. Please leave blank.
6	Requested Date/Time	N/A	N/A	00240	N/A	Not supported. Please leave blank.
7	Observation Date/Time #	26	R	00241	TS	This is a mandatory field for ORU^R01. **Definition:** This field identifies the procedure date when the surgery was completed → Stop Time. **Format:** **YYYYMMDD** (Note: Do not include time) **Notes:** The value must be greater than or equal to the Decision to Treat Date. DART date ranges must end prior Procedure Date. For adult WTIS procedure codes the difference between the Procedure Date and Patient's Date of Birth must be greater than or equal to 18 years.

ZWT (WTIS Custom Segment)

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
0	Segment Name	3	R		ST	This is a mandatory field. **Description:** The ZWT segment is mandatory for SIU^S12 and SIU^S14 **Accepted Values:** Value must be '**ZWT**'.
1	Wait 2 Priority Level	1	C		CE	**Description:** This field is used to submit the wait 2 priority information of the surgery procedure to WTIS. The only condition where the wait 2 priority is optional is for specific surgery procedures that do not have Priority Assessment assigned otherwise, the Priority Level must be sent for all other procedures.

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						Acceptable Values: **1**, **2**, **3** or **4** **Notes:** If the information in the SIU^S14 message is different than what was previously sent to the WTIS, the new information will replace the old one. If there are no changes to priority then the value in this field should be the same as what was previously submitted to the WTIS.
2	Decision To Treat Date	19	R		DT	This is a mandatory field for SIU^S12 and for SIU^S14 **Description:** This field is used to submit Decision to Treat Date information which is also referred to as Open waitlist Entry or Start Time. Value is required in order to open a new waitlist entry. For SIU^S14 it is recommended that the information in this field be the same as what was submitted in SIU^S12 message, although the data is ignored because the Decision to Treat date information is not editable after the waitlist entry is created. **Format:** YYYYMMDD (Note: Do not include time) **Notes:** Date must be greater than or equal to both the Referral Date and Consult Date. Date must be greater than or equal to Date of Birth. Difference between Decision to Treat Date and Referral Date must be less than 15 years. Difference between Decision to Treat Date and Consult Date must be less than 10 years. Difference between Decision to Treat Date and Scheduled/Rescheduled Procedure Date must be less than 10 years. DART date ranges must begin on or after Decision to Treat Date. For adult WTIS procedure codes the difference between the Decision to Treat Date and Patient's Date of Birth must be greater than or equal to 18 years

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
3	Order Received Date and Time	N/A	N/A		N/A	Not supported. Please leave blank.
4	Dates Affecting Readiness To Treat	45	O/Rep		CM	This is an optional field for SIU^S12 and SIU^S14.

Content for Seq # 4 Field Notes:

Description:

This field is used to capture patient Date Range(s) Affecting Readiness To Treat. These dates will impact the wait time calculation. The field captures the time interval when the patient is unavailable for treatment (e.g., due to personal reasons). If this time interval falls within the wait time, the patient wait time will be reduced by that many days.

While this field is optional, it is mandatory to submit DARTs if your patient has dates of unavailability.

Hospitals must support a minimum of three date ranges.

Date ranges provided in each message will add or delete existing date ranges. For example, if one date range was submitted in one message and in the following message it was removed, WTIS will treat the missing information as delete.

WTIS can support unlimited Dates Affecting Readiness to Treat. The sending system will need to continuously append ~ for each additional date range.

Sequence:

Unavailable Date Range 1 ~ Unavailable Date Range 2 ~ Unavailable Date Range 3

Components:

<u><DART From Date (TS)>^<DART To Date (TS)>^<DART Unavailable Reason Code (CE)></u>

Format:

DART From Date: YYYYMMDD (Note: Do not include time)

DART To Date: YYYYMMDD (Note: Do not include time)

Acceptable Values:

<DART Unavailable Reason Code (CE)>

<u>Code</u>   <u>Description</u>

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						DA Developmentally Appropriate Wait*
						*Applicable only to Paediatric procedures
						IC Inability to Contact the Patient
						MS Change in Medical Status
						MP Missed Surgery/Procedure
						CH Neo-Adjuvant Chemotherapy
						RT Neo-Adjuvant Radiation Therapy
						OP Other Surgical Procedure
						PD Patient Chooses to Defer
						PF Pre-Defined Follow-Up Interval
						Maximum Length:
						The maximum length for the DART Unavailable Reason Code is 2 characters.
						Notes:
						Dates affecting readiness to treat are dates when the patient is not available for surgery. These are sent to WTIS as 'ranges', and there may be one or more range associated with a single waitlist entry.
						Submission of a scheduled procedure date that falls within a range of dates affecting readiness to treat will result in an error.
						The DART To Date must be greater than or equal to the DART From Date.
						The DART To Date must be greater than the Decision to Treat Date (ZWT.2)
						All three components (DART From Date, DART To Date, DART Unavailable Reason Code) must be present for WTIS to process the information. If any information is missing, it will result in an error
						Date range provided in each message will add or delete existing date ranges. For example, if one date range was submitted in one message and in the following message it was removed, WTIS will treat the missing information as delete
5	Specified Date Procedure	N/A	N/A		N/A	Not supported. Please leave blank.

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
6	Referral Date	19	C		DT	**Description:** This field is used to submit the Referral date (i.e., The date (YYYYMMDD) when a request for a clinician consultation is received.). Value provided in each message will add or delete existing data. For example, if one date was submitted in a message and in the following message it was removed, the WTIS will treat the missing information as delete. **Format:** Referral Date: **YYYYMMDD** (Note: Do not include time) **Notes:** The value in this field must be: Less than or equal to Consult Date (ZWT.7) Greater than or equal to Date of Birth Required when Referral Type is a value other than No Referral/Follow-Up Patient. New value overwrites previously submitted value. If Patient Date Ranges Affecting Readiness To Consult (ZWT.8) exists, then Referral Date is mandatory.
7	Consult Date	19	C		DT	**Description:** This field is used to submit the Consult date (i.e., the date the patient was first consulted with a surgeon). Unlike procedure, site and CPSO numbers, where there are action codes that WTIS can act on, the Consult Date does not have action codes, and information will be treated on an 'as-is' basis. This means that what is provided in each message will add or delete existing data. For example, if one date was submitted in a message and in the following message it was removed, WTIS will treat the missing information as delete. If Patient Dates Affecting Readiness To Consult (ZWT.8) exists, then Consult Date is mandatory **Format:** Consult Date: **YYYYMMDD** (Note: Do not include time)

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						Notes:
						The value in this field must be:
						Greater than or Equal to Referral Date (ZWT.6)
						Less than or Equal to the Decision to Treat date (ZWT.2) greater than or equal to Date of Birth
						Required when Referral Type is a value other than No Referral/Follow-Up Patient. New value overwrites previously submitted value.
8	Dates Affecting Readiness To Consult	45	O/Rep		CM	This is an optional field for SIU^S12 and SIU^S14.
						While this field is optional, it is mandatory to submit DARCs if your patient has dates of unavailability.
						Hospitals must support a minimum of three date ranges.
						Description:
						This field is used to capture patient Date Range(s) Affecting Readiness To Consult. These dates will not impact the Wait 2 time calculation because these are only required for a data extraction. The field captures the time interval when patient is unavailable for consult (e.g., due to personal reasons).
						WTIS can support unlimited Dates Affecting Readiness to Consult. The sending system will need to continuously append '~' for each additional date range.
						Sequence:
						Unavailable Date Range 1 ~ Unavailable Date Range 2 ~ Unavailable Date Range 3
						Components:
						<u><DARC From Date (TS)>^<DARC To Date (TS)>^<DARC Unavailable Reason Code (CE)></u>
						Format:
						DARC From Date: **YYYYMMDD** (Note: Do not include time)
						DARC To Date: **YYYYMMDD** (Note: Do not include time)
						Acceptable Values:
						<u>Code</u> <u>Description</u>
						DA Developmentally Appropriate Wait*

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						*Applicable only to Paediatric procedures **IC** Inability to Contact the Patient **MC** Missed Consultation **MS** Change in Medical Status **PD** Patient Chooses to Defer **PF** Pre-defined Follow-up Interval **Notes:** Dates affecting readiness to consult are dates when the patient is not available for consult. These are sent to WTIS as 'ranges', and there may be one or more ranges associated with a single waitlist entry. The DARC From Date must be greater than the Referral Date (ZWT.6) The DARC To Date must be greater than or equal to the DARC From Date The DARC To Date must be less than the Consult Date (ZWT.7) All three components (DARC From Date, DARC To Date, DARC Unavailable Reason Code) must be present for the WTIS to process the information. If any information is missing, it will result in an error. DARCs provided in each message will add or delete existing date ranges. For example, if one date range was submitted in one message and in the following message it was removed, the WTIS will treat the missing information as delete.
9	Responsibility for Payment	2	O		CM	This is an optional field. **Description:** This element is intended to capture how a procedure is paid for (i.e. by OHIP, patient's pocket, etc.), the primary group accountable for payment of service(s) rendered. **Acceptable Values:** <u>Code</u> <u>Description</u> **PC** Private Coverage

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						GO Provincial Government/OHIP **OT** Other
10	No Referral/Follow-Up Patient Reason	2	C		CM	**Description:** The value in this field indicates the reason why Wait 1 information cannot be provided. There are few reasons when Patient Referral is not required. Examples: A patient who returns to see the clinician with a new condition, but has no new referral. A patient who returns for ongoing care for a recurring condition. A new patient who sees the clinician as a self-referral. **Acceptable Values:** Code Description **EN** Existing Patient – New Condition **ER** Existing Patient – Recurring Condition **NN** New Patient – No Referral **Notes:** If the No Referral/Follow-Up Patient option is chosen under Referral Type, No Referral/Follow-Up Patient Reason must be provided. New value overwrites previously submitted value.
11	Referral Source	2	C		CM	**Definition:** Value in this field represents the origin of a patient referral. This is field required when Referral Type is a value other than No Referral/Follow-Up Patient. **Acceptable Values:** Code Description **DA** Diagnostic Assessment Program/Unit* **CI** Central Intake **OT** Other **Notes:** Required when Referral Type is a value other than No Referral/Follow-Up Patient. New value overwrites previously submitted value. * This source is only applicable to Surgical Oncology

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
12	Referral Type	2	R		CM	This is a **mandatory** field. **Description:** The field allows to capture the type of consult/referral (e.g. new referral, referral from another surgeon, follow-up patient). It Identifies the type of transfer of care for a patient from one clinician to another clinician for a first surgical consultation. **Acceptable Values:** Code Description **NR** New Referral **RR** Re-Referral **NF** No Referral/Follow-Up **Notes:** New value overwrites previously submitted value.
13	Wait 1 System Delay Indicator	1	C		CM	**Description:** Indicates if Wait 1 System Delays are applicable. Required when Referral Type is NR or RR. **Acceptable Values:** Code Description **N** No **Y** Yes **Notes:** New value overwrites previously submitted value.
14	Wait 1 System Delay Reasons	1	C/Rep			**Description:** Healthcare system delays that are non-patient-related and impact the patient's wait time for a first consultation. The delays may include clinician unavailability, limited clinic time, or lack of referral information. The delays will not be subtracted from the overall Wait 1. **Acceptable values:** Code Description **EC** Emergency Closers **LR** Lack of Hospital/Clinic Resources **PP** Patient Preference **PC** Prerequisites Not Completed

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
						RD Rescheduled Due to Higher Priority Case **SU** Surgeon Unavailability **Example:** EC~RD~SU **Notes:** Required when System Delay Indicator is Yes. New value overwrites previously submitted value.
15	Wait 2 System Delay Indicator	2	R			This is a **mandatory** field. **Description:** **Indicates whether Wait 2 System Delays are applicable.** **Acceptable Values:** <u>Code</u> <u>Description</u> **N** No **Y** Yes **Notes:** New value overwrites previously submitted value.
16	Wait 2 System Delay Reasons	2	C/Rep			**Description:** Healthcare system delays that are non-patient-related and impact the patient's wait time for a procedure. Value must be provided when Wait 2 System Delay Reasons are applicable, i.e. ZWT.15 contains a value of "Y". **Acceptable values:** <u>Code</u> <u>Description</u> **EC** Emergency Closures **LR** Lack of Hospital Resources **PC** Prerequisites Not Completed **PP** Patient Preference **RD** Rescheduled Due to Higher Priority Case **SU** Surgeon Unavailability **Example:** EC~LR~SU **Notes:** Multiple Wait 2 System Delay Reasons may be provided. New value overwrites previously submitted value.

Seq #	HL7 Name	Max Length	R/O/ C/Rep	Item #	Date Type	Field Notes
17	Clinical Indication for Scan	N/A	N/A		N/A	Not supported. Please leave blank.
18	Combination Scan	N/A	N/A		N/A	Not supported. Please leave blank.
19	Appointment Created Date and Time	N/A	N/A		N/A	Not supported. Please leave blank.
20	Patient Type	2	R		CM	This is a **mandatory** field. This field is intended to capture patient type information. New value overwrites previously submitted value. Code Description **OP** Outpatient **IP** Inpatient
21	Wait 1 Priority Level	1			CE	**Description:** This field is used to submit the Wait 1 priority information of the surgery procedure to WTIS. Must be provided if Wait 1 is applicable and Wait 1 Priority Assessment exists for a specified procedure. The only condition where Wait 1 priority is optional is for specific surgery procedures that do not have a Priority Assessment assigned otherwise, the Wait 1 Priority Level must be provided if Wait 1 is applicable. **Acceptable Values:** **1**, **2**, **3** or **4** **Notes:** If the information in the SIU^S14 message is different than what was previously sent to the WTIS, the new information will replace the old one. If there are no changes to priority then the value in this field should be the same as what was previously submitted to the WTIS. Procedures where Wait 1 is not applicable can leave this field blank.

12. Revision Notes

Date of Revision	Revision Description
20-Feb-2007	Updated on WTIS version 5.0.5 ▪ Provided clarity on each mandatory field ▪ Provided HL7 message samples
22-Aug-2007	Updated on WTIS version 10.0 ▪ Added Reschedule Reason field ▪ Introduced optionality for the Priority Level field ▪ Added Referral Date field ▪ Added Consult Date field ▪ Added Dates Affecting Readiness to Consult field
14-Jul-2008	Updated on WTIS version 12.0 ▪ Added clinician role type ▪ Added Dates Affecting Readiness to Treat Reason code for Paediatric procedure ▪ Corrected maximum field lengths for various fields (to align with HL7 Standard, version 2.4) ▪ Added date constraints summary
10-Mar-2009	▪ Revised Document Structure* ▪ Added Document Purpose Section ▪ Added Intended Audience Section * The specifications have not changed since the last version
4-Jun-2010	▪ Revised Document Structure* * The specifications have not changed since the last version
12-Aug-2011	▪ Updated all sections to account for the following new fields added to the ZWT segment: 　▪ Responsibility for Payment 　▪ No Referral/Follow-Up Patient Reason 　▪ Referral Source 　▪ Referral Type 　▪ Wait 1 System Delay Indicator 　▪ Wait 1 System Delay Reasons 　▪ Wait 2 System Delay Indication 　▪ Wait 2 System Delay Reasons ▪ Updated all sections to account for new business rules for Referral Date and Consult Date ▪ Added What's New section ▪ Renamed "Interpreting HL7 Trigger Events" as "Clinical Event Overview" ▪ Moved "WTIS HL7 Specification – WTIS Field and Component Requirements" ahead of "Event Flow and Required Fields" ▪ Renamed "Event Flow and Required Fields" to "Message Use Case Details" and restructured section into use case format ▪ Grouped all message segments under heading "Message Specification Details" ▪ Remove Appendix A – Wait 1 Retrospective Reporting
31-Oct-2011	▪ V6.1 DARC Reasons Updated
21-Mar-2014	▪ V7.0 R17 Changes Incorporated. ▪ Updated section 4, 6, 8, 10 and 11. ▪ Section 6 – created date constraints diagrams to include new validations highlighted in red.

	▪ Sections 10.1 to 10.5 - included new HL7 message samples to all scenarios.
	▪ Updated section 11 to include revised message specifications.
	▪ Updated all sections to account for the following new fields added to the ZWT segment:
	    ▪ Patient Type
	    ▪ Wait 1 Priority