# **Access** to Care

# Wait Time Information System (WTIS) Complex MRI/CT (DI) HL7 Specification

HL7 Interface		Revision Date	
WTIS Supported Events		June 12, 2019 v6.3	
Trigger Event	HL7 Description	WTIS Description	
SIU^S12	New Appointment Booking	Open Waitlist Entry	
SIU^S13	Appointment Rescheduling	Rescheduled Procedure Date	
SIU^S14	Appointment Modification	Update Waitlist Entry	
SIU^S15	Appointment Cancellation	Procedure No Longer Required (Cancel) and Close Waitlist Entry	
ORU^R01	Observation Message	Complete and Close Waitlist Entry	



# **Table of Contents**

1. Document Purpose	4
2. Intended Audience	4
3. Procedure Mapping Information	5
4. What's New?	5
5. WTIS Application Integration Overview	9
6. Technical Requirements.	9
6.1 HL7 Message Summary for Key Data Elements	10
6.2 Date Constraints Summary	
7. Description of WTIS Supported HL7 Trigger Events	16
8. Clinical Event Overview	18
9. WTIS HL7 Field and Component Requirements	23
9.1 HL7 Message Structure	23
9.2 Messages	23
9.3 Date/Time Data	23
9.4 Field Optionality	24
9.5 Character Set Support	25
9.6 Message Encoding Rules	25
9.7 Standard Data Values	26
9.8 Data Format	26
9.9 Message Delimiters	27
9.10 MLLP	27
9.11 Acknowledgement Messages	28
9.13 Persistence of Information.	29
9.14 Acknowledgement Mode	29
9.15 Support for Special HL7 Protocols	29
9.16 Format Rules for Entity Identifiers	30
9.17 Event Flows	30
10. Prospective Message Use Case Scenarios	31
10.1 Open a DI Waitlist Entry	31
10.2 Update Scheduled Procedure Date for a DI Waitlist Entry	32
10.3 Update a DI Waitlist Entry	33
10.3 Adding a Patient's MRN	34

# Access to Care

10.4 Cancel a DI Waitlist Entry	34
10.5 Complete a DI Waitlist Entry	35
10.6 Close a DI Waitlist Entry	35
11. Retrospective Message Use Case Scenarios	36
11.1 Create a DI Waitlist Entry for a Priority 1 procedure	36
12. Prospective Data Submission WTIS HL7 Message Specification Details	37
Attention	37
Message Segments	37
MSH (Message Header)	38
SCH (Scheduling Activity Information)	40
PID (Patient Identification)	46
RGS (Resource Group Segment)	58
AIS (Appointment Information)	58
AIG (Appointment Information – Personnel Resource Segment)	61
AIL (Appointment Information – Location Resource Segment)	65
OBR (Observation Request Segment)	68
ZWT (WTIS Custom Segment)	73
13. Retrospective Data Submission WTIS HL7 Message Specification Details	80
Attention	80
Message Segments	81
MSH (Message Header)	82
PID (Patient Identification)	84
OBR (Observation Request Segment)	95
ZWT (WTIS Custom Segment)	100
Appendix A – Tables of Values	106
WTIS MRI/CT Procedure Codes	106
Province/State Codes	107
Assigning Authority	109
Data Type	109
Annendix B - Revision Notes	112

# 1. Document Purpose

The purpose of this document is to provide a detailed description of the interface messaging requirements to support Complex MRI/CT Diagnostic Imaging (DI) Integration with the Wait Time Information System (WTIS). The WTIS supports two methods of data submission for DI, prospective and retrospective.

- Prospective data submission allows facilities to submit their data in near real-time. This is achieved through the transmission of multiple interface messages, each triggered by different events. For example, a message is triggered when an order is received, when the order is scheduled/rescheduled, when the procedure is completed and when the report is verified.
- Retrospective data submission allows facilities to submit a single ORU^R01 message for Priority 1 (P1) DI scans, once the report has been verified. This is similar to the method of data submission used in previous versions of the WTIS, but with the addition of data elements introduced in Release 18.

This document will also outline how the WTIS will interpret and process each unique message and the supported HL7 trigger events.



**Important**: It should be noted that retrospective data submission is only applicable to the submission of P1 procedures. A retrospective ORU^R01 message that is submitted for a priority 2, 3 or 4 procedure will result in an error.



**Note**: Where applicable, sections of this document that apply only to prospective or retrospective data submission will be explicitly labeled to draw attention to the differences. All other non-labeled sections apply to both methods of data submission.

# 2. Intended Audience

This document is intended for use by a technical audience. Please ensure IT staff (or vendor, where applicable) involved in the WTIS implementation and/or 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 MRI/CT information system must be mapped to standardized WTIS DI procedure codes within the WTIS Manage Procedure Map (MPM) environment. 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. What's New?

• ORU^R01 – A stand-alone ORU^R01 message allows facilities who cannot schedule their DI P1 or DI P2 procedures before they occur, to submit these entries when the report has been verified. This message behaves in a similar fashion to the current (R16) ORU^R01, in which the waitlist entry is both opened and closed in the same message. This ORU^R01 can only be used to submit P1 and P2 procedures.

The following new data elements have been added to enhance the data collected in current DI waitlist entries:

### Waitlist Entry Category

A new field has been added to the WTIS application which will be used to differentiate between Surgical and DI messages. In DI messages the field is expected to have a value of 'DI'. If the value in this field is anything other than 'DI', then the message will be considered to be surgical. Facilities must submit the new field in the SCH segment (SCH.22) within scheduling messages and in the OBR segment (OBR.19) for observation messages.

### Responsibility for Payment

A new field has been added to the WTIS application which captures the primary group responsible for payment of service(s) rendered. Complex DI facilities must submit the new data field, **Responsibility for Payment** in the ZWT segment (ZWT.9). This element is submitted in HL7 message types: SIU^S12, SIU^S14 and retrospective ORU^R01.

### Scanner ID

A new field has been added to the WTIS application which captures the unique identifier for the scanner or room assigned to the patient. This identifier is unique to a site and is used to identify the machine that was used to scan the patient. Complex DI facilities may choose to submit **Scanner ID** in the AIG segment (AIG.3) in SIU^S12 and SIU^S14 or in the OBR segment (OBR.18) within ORU^R01 message. The Scanner ID is optional in these messages but must be provided before a waitlist entry can be closed.

### Estimated Service Duration

A new field has been added to the WTIS application which captures the estimated length of time allotted for the appointment. Complex DI facilities must submit **Estimated Service Duration** in the

AIG segment (AIG.11). This element is submitted in HL7 message types: SIU^S12, SIU^S14 and retrospective ORU^R01.

### Appointment Created Date and Time

A new field has been added to the WTIS application which captures the date and time the scan appointment was created. Complex DI facilities must submit **Appointment Created Date and Time** in the ZWT segment (ZWT.19). This element is submitted in HL7 message types: SIU^S12 and SIU^S14. This data element is applicable only to prospective data submission.

#### Scheduled Procedure Date and Time

A new field has been added to the WTIS application which captures the date and time the procedure is scheduled to be performed. Complex DI facilities must submit **Scheduled Procedure Date and Time** in the SCH segment (SCH.11). This element is submitted in HL7 message types: SIU^S12, SIU^S13, SIU^S14, and SIU^S15. If the **Scheduled Procedure Date and Time** is unknown at time of SIU^S12, a default value of 99990101 must be used. To update the default value of 99990101, an SIU^S14 message must be submitted. This data element is applicable only to prospective data submission.

### Rescheduled Procedure Date and Time

A new field has been added to the WTIS application which captures, when applicable, the date and time of a rescheduled appointment. Complex DI facilities must submit **Rescheduled Procedure Date** and **Time** in the SCH segment (SCH.11). This element is submitted in HL7 message type SIU^S13. **Rescheduled Procedure Date and Time** can only be provided if a procedure was previously scheduled (i.e. the waitlist entry has an existing **Scheduled Procedure Date and Time**, and the value is not 99990101. Do not submit an SIU^S13 for a waitlist entry where the Scheduled Procedure Date is 99990101). This data element is applicable only to prospective data submission.

### Rescheduled Reason/Procedure No Longer Required Reason

A new field has been added to the WTIS application which captures, when applicable, the reason a procedure has been rescheduled or is no longer required (i.e. cancelled). Complex DI facilities must submit the **Rescheduled Reason/Procedure No Longer Required Reason** in the SCH segment (SCH.6). This element is submitted in HL7 message type SIU^S13. This data element is applicable only to prospective data submission.

#### Actual Service Start Date and Time

The existing Actual Service Date field has been renamed to **Actual Service Start Date and Time.** It captures the scan start date and time. Complex DI facilities must submit **Actual Service Start Date and Time** in the OBR segment (OBR.7). This element is submitted only in the ORU^R01.

### Actual Service Finish Date and Time

A new field has been added to the WTIS application which expands on the service date/time and captures the **Actual Service Finish Date and Time**. Complex DI facilities must submit **Actual Service Finish Date and Time** in the OBR segment (OBR.8). This element is submitted only in the ORU^R01.

#### Combination Scan Indicator

A new field has been added to the WTIS application to indicate if more than one body part is being scanned thus providing more context around the length of longer scans. Complex DI facilities must submit the **Combination Scan Indicator** in the ZWT segment (ZWT.18). This element is submitted in the HL7 message types: SIU^S12, SIU^S14 and retrospective ORU^R01.

### Patient Type

A new field has been added to the WTIS application which captures the type of patient (i.e. Inpatient, Outpatient, Emergency Patient or Research Patient). Complex Diagnostic Imaging facilities must submit the new data field, **Patient Type**, in the ZWT segment (ZWT.20). This element is submitted in the HL7 message types: SIU^S12, SIU^S14 and retrospective ORU^R01.

The following data elements have had new options added:

### Dates Affecting Readiness To Treat

Pre-Procedure Instructions Not Followed

### Wait 2 System Delay Reasons

General Anesthesia Required

### Rescheduled Reason and Procedure No Longer Required Reason

Missed Procedure/No Show

### **Access** to Care

The following data element has had some of its options removed:

### Dates Affecting Readiness To Treat

Neo-Adjuvant Chemotherapy

Neo-Adjuvant Radiation Therapy

The following data elements have had options renamed:

### Dates Affecting Readiness To Treat

Missed Surgery/Procedure has been renamed to Missed Procedure/No Show. The HL7 code value has not changed.

### System Delay

Lack of Hospital Resources has been renamed to Lack of Facility Resources. The HL7 code value has not changed.

# 5. WTIS Application Integration Overview

The WTIS can be integrated with facility systems to varying degrees depending upon each facility's ability to meet the WTIS technical requirements. There are two levels of DI 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
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. Technical Requirements

The following are the minimum technical requirements to determine if a facility is ready to implement Complex DI integration.



**Important:** All requirements must be met in order to integrate with the WTIS at a Complex level.

- Facility must be able to assign a unique **Order Number** to each individual waitlist entry. Each message related to that entry must contain the same unique **Order Number**. The **Order Number** must be unique across MRI and CT scan entries. That is, an **Order Number** for an MRI cannot be repeated for a CT scan, or vice versa. An **Order Number** cannot be repeated for open or previously closed entries at a site. Please refer to segment OBR.2 and OBR.3 for more information.
- Facility must be able to send the Waitlist Entry Category in each DI message. Value must be DI. If DI value is not provided, system will treat the message as surgical entry.
- Facility must be able to send the following HL7 messages and the required data elements therein, for each waitlist entry when applicable:

Message Type	Action
SIU^S12	Open DI Waitlist Entry
SIU^S13	Rescheduled Procedure Date for DI Waitlist Entry
SIU^S14	Modify/Update DI Waitlist Entry
SIU^S15	Procedure No Longer Required (Cancel) and Close DI Waitlist Entry
ORU^R01	Complete and Close DI Waitlist Entry



**Important:** An ORU^R01 message will close a waitlist entry **only** when a Report Verified Date and Time is provided. That is, an ORU^R01 complete message sent to indicate that a procedure has been completed (Actual Service Start Date and Time and Actual Service Finish Date and Time) does not close a waitlist entry. The entry will remain open until a second ORU^R01 close message is sent to provide the Report Verified Date and Time.

# 6.1 HL7 Message Summary for Key Data Elements

The following tables are a brief representation and high level summary of DI data elements. The content and requirements for each HL7 message are more comprehensive than what is presented in the tables below. Please refer to Section 9: Field and Component Requirements, Section 12. Prospective Data Submission WTIS HL7 Message Specification Details and Section 13. Retrospective Data Submission WTIS HL7 Message Specification Details for complete information.



**Important:** Even though some fields are marked as Optional, it is required that all fields be configured, built and transmittable to the WTIS. The optionality of a given element or segment may vary from one message or event to another, therefore optionality is not intended to indicate the data element in its entirety is optional.

# **Prospective Data Submission**

Facility must be able to send a **SIU^S12 – Open Waitlist Entry** message with the following information:

Sample of Data Elements Provided in SIU^S12	Mandatory/Optional	Previous WTIS Versions
Waitlist Entry Category	М	New
Site	М	Previously Captured
Unique Order Number	М	Previously Captured
Patient Demographics	М	Previously Captured
Medical Record Number (MRN)	0	Previously Captured
Procedure Code	М	Previously Captured
Scanner ID	0	New
Schedule Procedure Date	0	Previously Captured
Estimated Service Duration	М	New
Priority level	М	Previously Captured
Order Received Date and Time	М	Previously Captured
Dates Affecting Readiness to Treat (DART)	0	Previously Captured
Specified Date Procedure	0	Previously Captured
Responsibility for Payment	0	New
Wait 2 System Delay Indicator	М	Previously Captured
Wait 2 System Delay Reasons	С	Previously Captured
Clinical Indication for Scan	М	Previously Captured
Combination Scan Indicator	М	New
Appointment Created Date and Time	0	New
Patient Type	0	New

Facility must be able to send an  $SIU^{S13}$  – Rescheduled Waitlist Entry message (if required), with the following information:

Sample of Data Elements Provided in SIU^S13	Mandatory/Optional	Previous WTIS Versions
Waitlist Entry Category	М	New
Site	М	Previously Captured
Unique Order Number	М	Previously Captured
Rescheduled Procedure Date and Time	М	New
Rescheduled Reason	М	New

Facility must be able to send an **SIU^S14** – **Modify Waitlist Entry** message (if required) to update one or more of the following pieces of information:

Sample of Data Elements Provided in SIU^S14	Mandatory/Optional	Previous WTIS Versions
Waitlist Entry Category	M	New
Site	M	Previously Captured
Unique Order Number	M	Previously Captured
Patient Demographics	M	Previously Captured
Medical Record Number (MRN)	M	Previously Captured
Procedure Code	M	Previously Captured
Scanner ID	0	New
Scheduled Procedure Date and Time	0	Previously Captured
Estimated Service Duration	0	New
Priority level	M	Previously Captured
Dates Affecting Readiness to Treat (DART)	0	Previously Captured
Specified Date Procedure	0	Previously Captured
Responsibility for Payment	0	New
Wait 2 System Delay Indicator	M	Previously Captured
Wait 2 System Delay Reasons	С	Previously Captured
Clinical Indication for Scan	M	New
Combination Scan Indicator	M	New
Appointment Created Date and Time	0	New
Patient Type	0	New

Facility must be able to send an SIU^S15 – Cancel Waitlist Entry message when the procedure is no longer required, providing the following information:

Sample of Data Elements Provided in SIU^S15	Mandatory/Optional	Previous WTIS Versions
Waitlist Entry Category	М	New
Site	М	Previously Captured
Unique Order Number	М	Previously Captured
Procedure No Longer Required Reason	М	New

Facility must be able to send an  $ORU^{R01}$  – Complete Waitlist Entry message when the procedure is performed, providing the following information:

Sample of Data Elements Provided in ORU^R01	Mandatory/Optional	Previous WTIS Versions
Waitlist Entry Category	М	New
Site	М	Previously Captured
Unique Order Number	М	Previously Captured
Actual Service Start Date and Time	М	New
Actual Service Finish Date and Time	М	Previously Captured
Report Verified Date and Time	0	Previously Captured
Scanner ID	0	New

Facility must be able to send an **ORU^R01 – Close Waitlist Entry** message when the report is verified, providing the following information:

Sample of Data Elements Provided in ORU^R01	Mandatory/Optional	Previous WTIS Versions
Waitlist Entry Category	M	New
Site	М	Previously Captured
Unique Order Number	М	Previously Captured
Actual Service Start Date and Time	М	New
Actual Service Finish Date and Time	М	Previously Captured
Report Verified Date and Time	М	Previously Captured
Scanner ID	0	New



Note: If the Actual Service Start Date and Time, Actual Service Finish Date and Time and Report Verified Date and Time all occurred on the same day it is possible to send just the ORU^R01 – Close Waitlist Entry to provide all of these data elements with one message.

# **Retrospective Data Submission**

If a facility cannot schedule their DI P1 or DI P2 procedures, they must be able to send a retrospective **ORU^R01 – Close Waitlist Entry** message with the following information:

Sample of Data Elements Provided in ORU^R01	Mandatory/Optional	Previous WTIS Versions
Site	М	Previously Captured
Unique Order Number	М	Previously Captured
Patient Demographics	М	Previously Captured
Medical Record Number (MRN)	М	Previously Captured
Procedure Code	М	Previously Captured
Scanner ID	М	New
Message Type Identifier	М	New
Estimated Service Duration	М	New
Priority level	М	Previously Captured
Order Received Date and Time	М	Previously Captured
Dates Affecting Readiness to Treat (DART)	0	Previously Captured

Sample of Data Elements Provided in ORU^R01	Mandatory/Optional	Previous WTIS Versions
Responsibility for Payment	М	New
Wait 2 System Delay Indicator	М	Previously Captured
Wait 2 System Delay Reasons	С	Previously Captured
Clinical Indication for Scan	М	Previously Captured
Combination Scan Indicator	М	New
Patient Type	М	New
Actual Service Start Date and Time	М	New
Actual Service Finish Date and Time	М	Previously Captured
Report Verified Date and Time	М	Previously Captured



Note: Please refer to Section 9: Field and Component Requirements, Section 12. Prospective Data Submission WTIS HL7 Message Specification Details and Section 13. Retrospective Data Submission WTIS HL7 Message Specification Details for complete information.

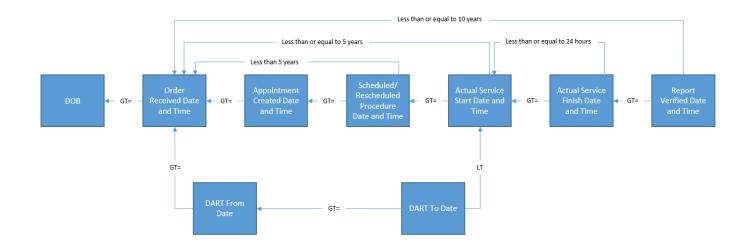
# **6.2 Date Constraints Summary**

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.

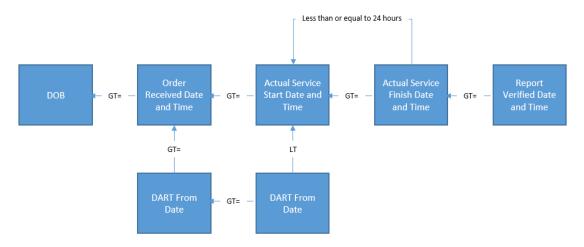
The following diagrams illustrate all the date constraints that are applied when validating DI messages.

Legen	d
GT	Greater than
GT =	Greater than or Equal to
LT	Less than
LT =	Less than or Equal to

### **Prospective Data Submission**



# **Retrospective Data Submission**





**Important:** Appointment Created Date and Time and Schedule Procedure Date and Time cannot be provided within a retrospective ORU^R01 message.

# 7. Description of WTIS Supported HL7 Trigger Events

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The WTIS acts as an auxiliary application, passively collecting information by receiving updates from a placer or filler 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
  - Please note that the WTIS supports two types of ORU^R01 Observation Message, one is used to submit entries retrospectively, while the other is used to submit entries prospectively.
     Retrospective data submission is used to submit DI P1 and DI P2 procedures after the report is verified while Prospective data submission is used to submit P1, P2, P3 and P4 entries in near real-time.

# 8. Clinical Event Overview

The diagrams below are visual representations depicting the possible end-to-end clinical workflow scenarios and related interface message types for DI waitlist entries.



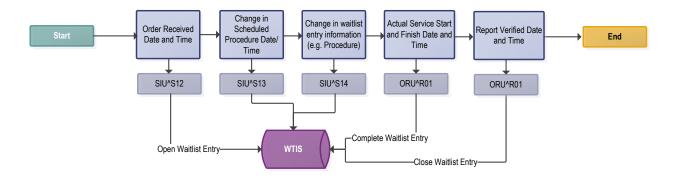
Note: Please refer to Section 9: Field and Component Requirements, Section 12. Prospective Data

Submission WTIS HL7 Message Specification Details and Section 13. Retrospective Data

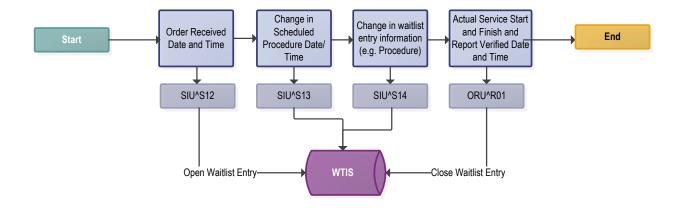
Submission WTIS HL7 Message Specification Details for complete information.

### **Prospective Data Submission**

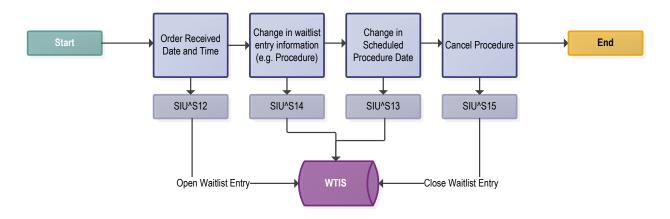
Scenario 1. A Waitlist Entry is Opened, Rescheduled, Updated, Completed and then Closed.



Scenario 2. A Waitlist Entry is Opened, Rescheduled, Updated and then Closed.

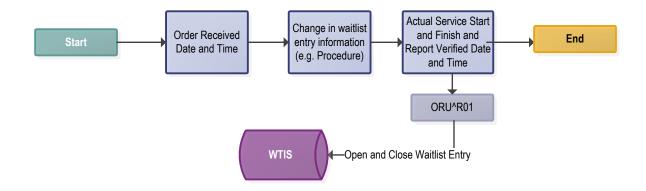


Scenario 3. A Waitlist Entry is Opened, Rescheduled, Updated and then Cancelled because the procedure is no longer required.



### **Retrospective Data Submission**

Scenario 4. A Priority 1 or Priority 2 Waitlist Entry is opened and closed.



The following lists the clinical event scenarios, diagrammed previously, in a tabular format with supplemental notes.

# **Prospective Data Submission**

Clinical Event	Pre- requisite	HL7 Trigger Event (Message Type)	Message Use Case	Notes
Order Received Date and Time	N/A	SIU^S12 New Appointment Booking	Open Diagnostic Imaging Waitlist Entry	<ul> <li>Only an SIU^S12 message can open a waitlist entry in the WTIS.</li> <li>An SIU^S12 is a prerequisite to all other message types.</li> </ul>
Change Scheduled Procedure Date	SIU^S12	SIU^S13 Appointment Rescheduling	Update Diagnostic Imaging Scheduled Procedure Date and Reason	<ul> <li>An SIU^S13 message must provide a defined reason for changing the scheduled procedure date. These are defined by the WTIS Rescheduled Procedure Date Reason Codes.</li> <li>An SIU^S13 message can only be used to reschedule a procedure when a Scheduled Procedure Date was previously provided (i.e. not the default date 99990101).</li> </ul>
Modify Appointment Information	SIU^S12	SIU^S14 Appointment Modification	Appointment Modification	An SIU^S14 can only be used to update the following data elements:  Medical Record Number (MRN)  Scheduled Procedure Date (Note: Updates Scheduled Procedure Date where it was previously unknown (i.e. 99990101)).  Appointment Created Date and Time (Note: Only updated if not provided in S12.)  Patient Type Procedure Priority Level Site (Note: SIU^S14 will only change site information if the site belongs to the same facility (i.e., intra-facility transfer)).  Scanner ID Estimated Service Duration Dates Affecting Readiness to Treat Specified Date Procedure Indicator Clinical Indication for Scan Combination Scan Indicator Wait 2 System Delay Indicator

Clinical Event	Pre- requisite	HL7 Trigger Event (Message Type)	Message Use Case	Notes
				<ul> <li>Wait 2 System Delay Reasons</li> <li>Responsibility for Payment</li> </ul>
Procedure No Longer Required (Cancelled)	SIU^S12	SIU^S15 Appointment Cancellation	Cancel and Close Waitlist Entry	<ul> <li>An SIU^S15 message must provide a defined reason for closing an entry. These are defined by the WTIS Procedure No Longer Required Reason Codes.</li> <li>Once an SIU^S15 message is processed, any subsequent messages related to that waitlist entry will result in an error.</li> </ul>
Procedure was performed	SIU^S12	ORU^R01 Observation Message	Complete Waitlist Entry	<ul> <li>A Complete ORU^R01 must contain an Actual Service Start Date and Time and Actual Service Finish Date and Time.</li> <li>If a Complete ORU^R01 message is processed after an SIU^S15 cancellation message, then the ORU^R01 message will result in an error because an entry cannot be updated if it had already been cancelled.</li> <li>If a second Complete ORU^R01 is sent and it contains a different Actual Service Start Date and Time and Actual Service Finish Date and Time than was previously sent, the entry will be updated with the new value.</li> </ul>
Procedure was performed	SIU^S12	ORU^R01 Observation Message	Close Waitlist Entry	<ul> <li>A Close ORU^R01 must contain an Actual Service Start Date and Time, Actual Service Finish Date and Time and Report Verified Date and Time.</li> <li>If the Actual Service Start Date and Time and Actual Service Finish Date and Time in the Close ORU^R01 is different than those provided in the Complete ORU^R01, the old values will be updated with the new ones.</li> <li>If a Close ORU^R01 message is processed after an SIU^S15 cancellation message, then the ORU^R01 message will result in an error because an entry cannot be closed if it had already been cancelled.</li> <li>If the Actual Service Start Date and Time, Actual Service Finish Date and Time and Report Verified Date and Time all occurred on the same day it is possible to send just the ORU^R01 –</li> </ul>

Clinical Event	Pre- requisite	HL7 Trigger Event (Message Type)	Message Use Case	Notes
				Close Waitlist Entry to enter all these data elements with one message.



**Note:** When the WTIS receives an SIU^S12 message from the sending application, it will process the information, open a waitlist entry for that patient and store the Order Number. When the WTIS receives an SIU^S13, SIU^S14, SIU^S15, or ORU^R01 message, it will search internally by the Order Number and the site specified in the message for an open waitlist entry. If an open entry is found, it will Reschedule, Update, Cancel, Complete or Close the entry accordingly. However, if an open waitlist entry cannot be found (i.e., the Order Number cannot be found) then the WTIS will generate an error.

### **Retrospective Data Submission**

Clinical	Pre-	HL7 Trigger	Message	Notes
Event	requisite	Event (Message)	Use Case	
Report Verified Date and Time is entered	N/A	ORU^ OR1 Observation Message	Create Closed DI Waitlist Entry for Procedure with Priority Level 1	<ul> <li>The retrospective ORU^R01 must contain all the information required to create and close a MRI/CT waitlist entry</li> <li>The message must have a unique Order Number for each individual waitlist entry. The Order Number is used to prevent duplicate reporting on the same MRI/CT result.</li> <li>The message is not sent for subsequent updates or supplemental to the MRI/CT procedure (e.g., changes to the Verified Report)</li> </ul>



**Note:** When the WTIS receives an ORU^R01 message for a P1 or P2 procedure from the sending application, it will process the information contained in the message to create a waitlist entry for that patient. The last step of the creation process is to close the entry. Once closed, the entry can no longer be updated via a message. If an ORU^R01 message is sent for procedures with other priorities, with the intention of creating a waitlist entry, then the WTIS will generate an error.

# 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.
0	Optional	This code indicates that the usage for this element has not yet been defined. A usage of Optional may not be used in 'implementation' profiles (non-optionality profiles).
		Conformance may not be tested on an Optional field. Narrower profiles may be defined based on this profile, and may assign any usage code to the element.
С	Conditional	This usage has an associated condition predicate.
		If the predicate is satisfied:
		<ul> <li>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.</li> </ul>
		If the predicate is not satisfied:
		<ul> <li>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.</li> </ul>
CE	Conditional but	This usage has an associated conditional predicate.
	it may be	If the predicate is satisfied:
	empty	<ul> <li>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.</li> <li>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.</li> </ul>
		If the predicate is not satisfied:
		<ul> <li>The sending application shall not populate the element.</li> <li>The receiving application may raise an application error if the element is present.</li> </ul>
Х	Not supported	The sending application will not send the element.
	·	The receiving application will raise an application error.
OBC	Optional before close	This data element is not required to be provided for the successful processing of a message, however, WTIS business validation rules will trigger an error if this data element is not provided before attempting to close the waitlist entry.
Rep	Repeating	Value may repeat.
-	-	•



**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 or event 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



**Important:** Even though some fields are marked as Optional, it is required that all fields be configured, built and transmittable 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 message delimiters as part of a data element's value in a WTIS HL7 message. For example, a procedure code cannot contain an ampersand (&), e.g. "Head & Neck". The ampersand (&) will be treated as a delimiter and will alter the structure of the HL7 message and result in an error message.

# 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 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.

### **Prospective Data Submission**

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

# **Retrospective Data Submission**

ORU^R01

MSH
PID
OBR
ZWT

# 9.9 Message Delimiters

Level	Delimiter	Structure	Purpose	
1	\r	Segment	The segment terminator is always a carriage return.  (End of record)	
2	I	Field	Separates two adjacent data fields within a segment. It also separates the segment ID from the first data field in each segment.	
3	~	Repetition	Separates multiple occurrences of a field where allowed.	
4	۸	Component	Separates adjacent components of data fields where allowed.	
5	&	Subcomponent	Separates adjacent subcomponents of data fields where allowed.	
6	1	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.	



**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. The WTIS uses the following HL7 delimiters: ([[],[ $^1$ ,[ $^2$ ],[ $^1$ ],[ $^2$ ], 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></cr>	0d	Carriage Return Byte value (in hex) is used for the carriage return (the second byte wrapper after the end byte).
<sb></sb>	0b	Start-Block character Byte value is used for the start byte (message header wrapper).
<eb></eb>	1c	End-Block character Byte value is used 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



**Important:** 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 message containing multiple individual waitlist entries 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 DI supported data elements, are included in <u>Section 12</u>. <u>Prospective Data Submission WTIS HL7 Message Specification Details</u> and <u>Section 13</u>. <u>Retrospective Data Submission WTIS HL7 Message Specification Details</u>. Facilities must adhere to all formatting rules given in these sections.

### 9.17 Event Flows

### **Prospective Data Submission**

It is expected that DI messages will be sent in the following sequence for a particular order number:

- SIU^S12 Open Diagnostic Imaging Waitlist Entry
- SIU^S13 Rescheduled Diagnostic Imaging Waitlist Entry
- SIU^S14 Modify/Update Diagnostic Imaging Waitlist Entry
- SIU^S15 Cancel (Close) Diagnostic Imaging Waitlist Entry
- ORU^R01 Complete Diagnostic Imaging Waitlist Entry
- ORU^R01 Close Diagnostic Imaging Waitlist Entry

### **Retrospective Data Submission**

It is expected that only one message will be sent for a retrospective DI P1 or DI P2 procedure and that message will only be sent after a Report Verified Date has been entered:

ORU^R01 – Close Diagnostic Imaging Waitlist Entry

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

# 10. Prospective Message Use Case Scenarios

- The details that follow are organized by message use case for Prospective Data Submission.
- "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. Please be aware that the existence of trailing field delimiters in the ZWT segment may cause message failure. Trailing field delimiters should be removed before sending the message to the WTIS.

# 10.1 Open a DI Waitlist Entry

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

### Case 1 - Open

A new order for a Diagnostic Imaging procedure was received (201401031200), and the appointment is created an hour later (201401031300). Scanner ID (MRC11025) and Estimated Service Duration (30 minutes) are provided. Scheduled Procedure Date and Time is provided (201402050930). Patient Type is provided (OP). The scan is not a Combination Scan (N). A waitlist entry is opened.

### Example HL7 message for SIU^S12

```
MSH|^~\&|WTIS_REALTIME^^|9999|||201206201448||SIU^S12|MsgID-DIL3CreateWLE|D^T|2.4 SCH|ONum123|||||OT|||||^^201402050930|||||^WAIT^TIME|||||^WAIT^TIME||DI PID|||MRN660536DI^^9999^PI~188976671575^^CANON^HC|| BAUER^JACK ||19900101|M RGS|1 AIS|1|A|W.MCT.CTS.ABDOMN AIG|1|A|MRC11025|WAITTIME||||||30 AIL|1|A|^^9999|WAITTIME ||||||30 AIL|1|A|^^9999|WAITTIME |||||||30 AIL|1|201401031200|||||GO||||||N||OT|N|201401031300|OP
```

### Case 2 - Open

A new order for a Diagnostic Imaging procedure for a patient was received (201401301100), the appointment is created (201401301400), but the Scheduled Procedure Date and Time (99990101) and Scanner ID are not known at the moment. Dates Affecting Readiness to Treat (20140201^20140206^PD) and multiple Wait 2 System Delays (Y, PP~RD~LR) are applicable. Estimated Service Duration is provided (185 minutes). Patient Type is provided (OP). This is a Combination Scan (Y) with a Priority of (2). A waitlist entry is opened.

### Example HL7 message for SIU^S12

```
MSH|^~\&|WTIS_REALTIME^\|9999|||201206201448||SIU^S12|MsgID-DIL3CreateWLE|D^T|2.4 SCH|ONum456|||||OT|||||^^^99990101||||||^WAIT^TIME||||^WAIT^TIME||DI PID|||MRN660536DI^^^9999^PI~188976671575^^CANON^HC||BAUER^JACK||19900101|M RGS|1 AIS|1|A|W.MCT.CTS.ABDOMN AIG|1|A||WAITTIME|||||185 AIL|1|A|^^9999|WAITTIME ||||||185 ZWT|2||201401301100|20140201^20140206^PD|||||GO|||||Y|PP~RD~LR|OT|Y|201401301400|OP
```

### Case 3 - Open

A new order for a Diagnostic Imaging procedure was received (201401031200), and the appointment is created an hour later (201401031300). No MRN is provided. Scanner ID (MRC11025) and Estimated Service Duration (30 minutes) are provided. Scheduled Procedure Date and Time is provided (201402050930). Patient Type is provided (OP). The scan is not a Combination Scan (N). A waitlist entry is opened.

### Example HL7 message for SIU^S12

MSH|^~\&|WTIS\_REALTIME^^|9999|||201206201448||SIU^S12|MsgID-DIL3CreateWLE|D^T|2.4 SCH|ONum123||||OT|||||^^201402050930|||||^WAIT^TIME||||^WAIT^TIME||DI PID|||~188976671575^^^CANON^HC|| BAUER^JACK ||19900101|M RGS|1 AIS|1|A|W.MCT.CTS.ABDOMN AIG|1|A|MRC11025|WAITTIME||||||30 AIL|1|A|^^9999|WAITTIME||||||30 AIL|1|A|^^9999|WAITTIME|||||||30 ZWT|2||201401031200||||||GO||||||N||OT|N|201401031300|OP

# 10.2 Update Scheduled Procedure Date for a DI Waitlist Entry

A waitlist entry's scheduled procedure date is to be updated if it either needs to be rescheduled or was not scheduled when the entry was opened.

#### Case 1 - Reschedule

The procedure is rescheduled (201402151230) and a Rescheduled Reason is provided (RP).

### Example HL7 message for SIU^S13

MSH|^~\&|WTIS\_REALTIME^^|9999|||200807201451||SIU^S13|| MsgID-DIL3UpdateWLE |D^T|2.4 SCH| ONum123|||||RP||||||^^201402151230|||||^WAIT^TIME||||^WAIT^TIME||DI RGS|1 AIL|1||^^9999|WAIT TIME

### Case 2 - Schedule

The Scheduled Procedure Date and Time (99990101) were unknown at the time the waitlist entry was created, and is now being updated with a known Scheduled Procedure Date and Time (201402201430).

This scenario uses an SIU^S14 message to enter a Scheduled Procedure Date and Time, where it was previously unknown. Any subsequent rescheduling to this waitlist entry needs to be done using an SIU^S13 message.

### Example HL7 message for SIU^S14

 $MSH|^{\sim}\&|WTIS\_REALTIME^{9999}||201402051448||SIU^S14|MsgID-DIL3UpdateWLE|D^T|2.4\\SCH|ONum456||||OT|||||^{\sim}201402201430|||||^{WAIT^TIME}|||^{WAIT^TIME}||DIRGS|1\\AIL|1||^{\sim}9999|WAITTIME\\ZWT|2||201401301100||20140201^{20140206^{PD}}||||GO||||||Y|PP\sim RD\sim LR|OT|Y|201401301400|OP$ 

# 10.3 Update a DI Waitlist Entry

Any data in the ZWT segment, must always be included in SIU^S14 messages even if the data is not changing. This data always overwrites existing data in the WTIS if the data element is updatable. Appointment Created Date and Time sent within SIU^S14 will be updated if it was not provided in an SIU^S12, otherwise it will be ignored.

### Case 1 - Update 1

The Scanner ID (from MRC11025 to PM3444) and Estimated Service Duration (from 185 minutes to 163 minutes) are changed within the same location. Existing Waitlist Entry in the WTIS will be matched using the unique Order Number sent in the SIU^S14.

### Example HL7 message for SIU^S14

```
MSH|^{\sim}\&|WTIS\_REALTIME^{9999}||201206201448||SIU^S14|MsgID-DIL3UpdateWLE|D^T|2.4\\ SCH|ONum123|||||OT|||||^{\sim}201402020815|||||^WAIT^TIME||||^WAIT^TIME||DIRGS|1\\ AIG|1|D|MRC11025|WAITTIME||||||185\\ AIG|2|A|PM3444|WAITTIME||||||163\\ AIL|1||^{\sim}9999|WAITTIME||||||163
```

ZWT|2||201401031200||||||GO||||||N||OT|N|201401031300|OP

### Case 1 – Update 2

The site (within the same facility) where the procedure is to be performed has changed (from 9999 to 1111), and a new value for Scanner ID (from PM3444 to MR1111) is provided.

### Example HL7 message for SIU^S14

```
MSH|^~\&|WTIS_REALTIME^^|9999|||201206201448||SIU^S14|MsgID-DIL3UpdateWLE|D^T|2.4 SCH| ONum123|||||OT|||||^^^201402020815|||||^WAIT^TIME||||^WAIT^TIME||DI RGS|1 AIG|1|D|PM3444|WAITTIME||||||163 AIG|2|A|MR1111|WAITTIME||||||163 AIL|1|D|^^9999|WAITTIME AIL|2|A|^^1111|WAITTIME||||||163 AIL|2|A|^^1111|WAITTIME||||||163 AIL|2|2|101401031200|||||GO||||||N||OT|N|201401031300|OP
```

### Case 2 - Update

The patient's procedure priority has changed (from 2 to 3). In addition, a new range of Dates Affecting Readiness to Treat are added (20140208^20140210^IC) to the already existing range.

### Example HL7 message for SIU^S14

```
MSH|^{\sim}\&|WTIS\_REALTIME^{\circ}|9999||201206201448||SIU^{\circ}S14|MsgID-DIL3UpdateWLE|D^{\circ}T|2.4\\ SCH|ONum456|||||OT|||||^{\wedge}201402201430|||||^{\circ}WAIT^{\circ}TIME||||^{\circ}WAIT^{\circ}TIME||DI\\ RGS|1\\ AIL|1||^{\wedge}9999|WAIT~TIME\\ ZWT|3||201401301100|20140201^{\circ}20140206^{\circ}PD^{\circ}20140208^{\circ}20140210^{\circ}IC|||||GO||||||Y|PP^{\circ}RD^{\circ}LR|OT|Y|2\\ 01401301400|OP
```

# 10.3 Adding a Patient's MRN

There may be occasions when a patient's MRN is not available at the time the SIU^S12 message is submitted. Since the MRN is required to be submitted before an entry can be closed successfully, SIU^S14 will need to be sent to update the entry with a MRN.

### Case 1 – Adding a MRN

A patients MRN (MRN660536DI) which had not previously been provided in an SIU^S12 message is now being provided. Please note the example below shows an entry that has not been scheduled. If the entry you are updating has been scheduled, the message below would also need to contain the scheduled procedure date and time and the appointment created date and time.

### Example HL7 message for SIU^S14

```
MSH|^~\&|WTIS_REALTIME^^|9999|||201206201448||SIU^S14|MsgID-DIL3UpdateWLE|D^T|2.4 SCH| ONum123||||OT||||||^^99990101||||||^WAIT^TIME|||||^WAIT^TIME||DI PID|||MRN660536DI^^9999^PI|| BAUER^JACK ||19900101|M RGS|1 AIL|1||^^9999|WAIT TIME ZWT|2||||||||GO|||||N||OT|N||OP
```

# 10.4 Cancel a DI Waitlist Entry

A waitlist entry can be cancelled using an SIU^S15 trigger event message if it is no longer going to be performed. Please note, a waitlist entry can be cancelled only if it was opened.

### Case 1 - Cancel

The procedure was cancelled because the patient no longer requires procedure (Procedure No Longer Required Reason of MR).

### Example HL7 message for SIU^S15

MSH|^~\&|WTIS\_REALTIME^^|9999|||201402011448||SIU^S15|MsgID-DIL3Cancel|D^T|2.4 SCH| ONum123|||||MR||||||^^201402020815|||||^WAIT^TIME||||^WAIT^TIME||DI RGS|1AIL|1||^^9999|WAIT TIME

# 10.5 Complete a DI Waitlist Entry

A waitlist entry can be completed once it has been performed. That is, an Actual Service Start Date and Time and Actual Finish Date and Time are now available. The entry will be complete when an ORU^R01 trigger event message is sent with these values.

### Case 1 - Complete

The procedure was performed (201402201430 to 201402201730). Previously unknown Scanner ID is provided at close (PM3444). The waitlist entry is completed.

Example HL7 message for **ORU^R01** 

 $MSH|^{\sim} \& |WTIS\_REALTIME^{\wedge}|9999|||201206201448||ORU^{\wedge}R01| \\ MsgID-DIL3Close|D^{\wedge}T|2.4OBR|1|ONum456||W.MCT.CTS.ABDOMN|||201402201430||201402201730|||||||||PM3444|DI|||$ 

# 10.6 Close a DI Waitlist Entry

A waitlist entry can be closed when a Report Verified Date and Time is available using an ORU^R01 trigger event message. Please note that when a Close **ORU^R01** is sent, if the Actual Service Start Date and Time and Actual Finish Date and Time are different than what was provided in the Complete **ORU^R01** the old values will be update with the new. If the exact values that were previously provided are not provided in the Close message then an error will result.

#### Case 1 - Close

The report was verified (201403011400). Previously unknown Scanner ID is provided at close (PM3444). The procedure was originally performed (201402201430 to 201402201730). The waitlist entry is closed.

### Example HL7 message for **ORU^R01**

 $MSH|^{\sim}\&|WTIS\_REALTIME^{\wedge}|9999|||201206201448||ORU^{R}01|MsgID-DIL3Close|D^{T}|2.4\\OBR|1|ONum456||W.MCT.CTS.ABDOMN|||201402201430||201402201730||||||||||PM3444|DI|||2014030114\\00$ 



**Note:** If the Actual Service Start Date and Time, Actual Service Finish Date and Time and Report Verified Date and Time all occurred on the same day it is possible to send just the **ORU^R01** – **Close Waitlist Entry** to enter all these data elements with one message.

# 11. Retrospective Message Use Case Scenarios

- The details that follow are organized by message use case for Retrospective Data Submission.
- "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. Please be aware that the existence of trailing field delimiters in the ZWT segment may cause message failure. Trailing field delimiters should be removed before sending the message to the WTIS.
- The scenarios below are <u>only</u> applicable to procedures that are Priority Level 1 and for which scheduling information (Appointment Created Date and Time and Schedule Procedure Date and Time) are not available before the procedure occurs.

# 11.1 Create a DI Waitlist Entry for a Priority 1 procedure

### Case 1 - Create DI Waitlist Entry

A new order for a Diagnostic Imaging procedure was received on (201401031200) for Procedure with Priority Level 1 or Priority Level 2. The Scanner ID (PM3444) and Estimated Service Duration (30 minutes) are provided. Patient Type is provided (OP). The scan is not a Combination Scan (N). The procedure was performed (201402201430 to 201402201730) and the report was verified (201402201800). The waitlist entry is closed.

### Example HL7 message for **ORU^R01**

 $MSH|^{\sim}\&|WTIS_REALTIME^{\circ}|9999||201206201448||\ ORU^{\circ}R01|MsgID-DIL3CreateWLE|D^{\circ}T|2.4$   $PID|||MRN660536DI^{\circ}9999^{\circ}PI^{\sim}188976671575^{\circ}CANON^{\circ}HC||\ BAUER^{\circ}JACK\ ||19900101|M$  OBR|1|ONum456||W.MCT.CTS.ABDOMN|||201402201430||201402201730|||||||||PM3444|DI|||2014022018 00

ZWT|1||201402201200||||||GO|||||N||OT|N||OP||30

### Case 2 - Create DI Waitlist Entry with DARTs and System Delays

A new order for a Diagnostic Imaging procedure for a patient was received (201401301100), with Priority Level 2. The Scanner ID (PM3444) and Estimated Service Duration (185 minutes) are provided. Dates Affecting Readiness to Treat (20140130^20140131^PD) and multiple Wait 2 System Delays (Y, PP~RD~LR) are applicable. Patient Type is provided (OP). This is a Combination Scan (Y). The procedure was performed (201402011430 to 201402011730) and the report was verified (201402011800). The waitlist entry is closed.

### Example HL7 message for **ORU^R01**

 $MSH|^{\sim}\&|WTIS_REALTIME^{\wedge}|9999|||201206201448||\ ORU^{R}01|MsgID-DIL3CreateWLE|D^{T}|2.4\ PID|||MRN660536DI^{\wedge}9999^{P}I^{1}88976671575^{\wedge}CANON^{H}C||\ BAUER^{J}ACK\ ||19900101|M\ OBR|1|ONum456||W.MCT.CTS.ABDOMN|||201402201430||201402201730||||||||||PM3444|DI|||2014020118\ 00$ 

ZWT|2||201401301100|201402130^201402131^PD|||||GO||||||Y|PP~RD~LR|OT|Y||OP||185

#### 12. Prospective Data Submission WTIS HL7 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.
- The 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: Field and Component Requirements for more details.
- Please ensure that all populated segment fields/components/subcomponents follow the 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. 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, must always be included in SIU^S14 messages even if the data is not changing. This data always overwrites existing data in the WTIS if the data element is updatable. Appointment Created Date and Time, provided in an SIU^S14 will be ignored if a value was previously submitted via an SIU^S12 message.
- Trailing carets for component fields are optional.
- Even though some fields are marked as Optional, all fields are mandatory to be configured, built and transmittable to the WTIS.

#### **Message Segments**

For each message type supported by the WTIS, the tables below describes the fields that are allowed within each segment and the values that are expected/allowed within those fields.

The columns that are included in the tables are as follows:

- SEQ Contains the field sequence value which shows the order of the field in the segment.
- Element Name The name of the table as defined by the HL7 Version 2.4 specifications.
- Max Length The maximum number of characters in data element.
- Usage This refers to whether the field is required, optional or conditional in the segment. Please see 9.4 Field Optionality for definitions.
- Item # The number that uniquely identifies the field in the HL7 standard.
- Data Type The HL7 data type that must be used for the values submitted in the field. A list of the supported Data Types can be found in the appendix.
- WTIS Usage Notes This column details how the field is to be used within each segment, along with the name of the data element within the WTIS.

## MSH (Message Header)

Seq#	Element Name	Max Length	Usage	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:
						The WTIS requires that this field be populated by the sending application to ensure the message is intended for the WTIS.
						Components:
						<pre><namespace (is)="" id=""> ^ <universal (st)="" id=""> ^ <universal (id)="" id="" type=""></universal></universal></namespace></pre>
						Accepted Values:
						Value must be 'WTIS_REALTIME^^'
4	Sending Facility	180	R	00004	HD	This is a mandatory field.
						Description:
						This is the identifier for the site where the procedure is to be, or was, performed. The site number used in the WTIS is typically, though not always the case, the four digit ambulatory care number assigned by the Ontario Ministry of Health and Long-Term Care.

Seq#	Element Name	Max Length	Usage	Item #	Data Type	WTIS Usage Notes
						Components: <a href="mailto:square;"><namespace (is)="" id=""> ^ <universal (st)="" id=""> ^ <universal (id)="" id="" type=""> Example: 4107^^</universal></universal></namespace></a>
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.
7	Date/Time of Message	26	R	00007	TS	This is a mandatory field.
						Format: The format is YYYYMMDDHHMM.  Example: February 5th, 2014 11:59pm should be sent as 201402052359.  Notes: Hours, HH, is in 24hrs. format.
8	Security	N/A	N/A	80000	N/A	Not supported. Please leave blank.
9	Message Type	13	R	00009	СМ	This is a mandatory field.  Description: The required message types would be SIU^S12, SIU^S13, SIU^S14, SIU^S15 or ORU^R01.  Components: <a href="Message Code">Message Code (ID)&gt; ^ &lt; Trigger Event (ID)&gt; ^ &lt; Message Structure (ID)&gt; Example: If sending Create Encounter Message the value in this field would be: SIU^S12.</a>
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:

Seq#	Element Name	Max Length	Usage	Item #	Data Type	WTIS Usage Notes
						This identifier is returned with the ACK or NAK message and can be used to identify specific messages that were sent.
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: <pre> <pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
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: <a href="mailto:separation-left: 2.4"></a>

# **SCH (Scheduling Activity Information)**

Seq#	HL7 Name	Max Length	Usage	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'

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	WTIS Usage Notes
1	Placer Appointment ID	75	CE	00860	El	This field is conditional on SCH.2.  The Placer Appointment ID field can only be empty (no value sent to WTIS) if the unique <b>Order Number</b> for the
						MRI/CT is submitted in the Filler Appointment ID (SCH.2); otherwise this field is mandatory for messages: SIU^S12, SIU^S13, SIU^S14, SIU^S15.  Description:
						<ul> <li>This field contains the placer application's permanent identifier for the appointment request.</li> <li>This field identifies the unique waitlist entry that is to be processed within WTIS. If this field is</li> </ul>
						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:
						<entity (st)="" identifier="">^<namespace< td=""></namespace<></entity>
						ID(IS)>^ <universal id=""> Notes:</universal>
						There must be an unique Order Number for each individual waitlist entry.
2	Filler Appointment ID	75	CE	00861	El	This field is conditional on SCH.1.
						If the Placer Appointment ID (SCH.1) is not used to send the unique <b>Order Number</b> 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

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	WTIS Usage Notes
						<ul> <li>permanent identifier for the appointment request.</li> <li>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.</li> <li>The sending system must consistently use SCH-2 field to identify the unique waitlist entry. This will be configured and set during implementation.</li> <li>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.</li> <li>Components:</li> <li></li></ul>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	WTIS Usage Notes
						CD Patient Chooses to Defer
						EC Emergency Closures
						MP Missed Procedure/No Show
						Reason for Waitlist Entry Cancellation (Procedure No Longer Required Reasons)  Code Description  CP Cancelled by Patient  ER Data Entry Error  PC Procedure Completed Elsewhere  PD Patient Death  CI Contraindications  MR Due to Medical Reasons  MP Missed Procedure/No Show  Components: <a href="mailto:sldentifier"><a href="mailto:sldentifier"></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	WTIS Usage Notes
						a procedure has been rescheduled.
						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) with an unknown scheduled procedure date (99990101), if the scheduled procedure date is updated, it must be submitted using an SIU^S14 message. Only an SIU^S14 message is capable of updating the Scheduled Procedure Date when a procedure is initially scheduled using 99990101.
						<ul> <li>An SIU^S13 to reschedule a waitlist entry can only be provided if the waitlist entry has been scheduled (i.e. the scheduled date is not 99990101) first using an SIU^S12 or SIU^S14</li> </ul>
						On subsequent SIU^S14 and SIU^S15 messages (after a known date is provided), include the scheduled procedure date in this field. The data submitted in these messages will not update in the WTIS but as a required field a value must be present.
						Components:
						<pre><quantity (cq)=""> ^ <interval (cm)=""> ^ <duration (cm)=""> ^ <start (ts)="" date="" time=""> ^ <end (ts)="" date="" time=""> ^ <priority (st)=""> ^ <condition (id)=""> ^ <text (tx)=""> ^ <conjunction (id)=""> ^ <order (cm)="" sequencing=""> ^ <occurrence (ce)="" duration=""> ^ <total (nm)="" occurrences=""></total></occurrence></order></conjunction></text></condition></priority></end></start></duration></interval></quantity></pre>
						Format:
						Start Date/Time (TS): YYYYMMDDHHMM
						Example:
						^^201403100815
						Notes:
						For SIU^S13 messages, a rescheduled reason must also be provided (see SCH.6)

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	WTIS Usage Notes
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	Description:  According to the HL7 Standard, this field is mandatory. However, the information in this field will not be processed by the WTIS. To satisfy the 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 (st)="" number=""> ^ <family (fn)="" name=""> ^ <given (st)="" name=""> ^ <second (st)="" and="" further="" given="" initials="" names="" or="" thereof=""> ^ <suffix (e.g.,="" (st)="" iii)="" jr="" or=""> ^ <pre> <pre> regix (e.g., DR) (ST)&gt; ^ <degree (e.g.,="" (is)="" md)=""> ^ <name (id)="" code="" type=""> ^ <name (id)="" code="" representation=""> ^ <name (id)="" assembly="" order=""> Example:</name></name></name></degree></pre></pre></suffix></second></given></family></id>
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	This is a mandatory field.
						Description:  According to the HL7 Standard, this field is mandatory.  However, the information in this field will not be processed by the WTIS. To satisfy the HL7

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	WTIS Usage Notes
						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 (st)="" number=""> ^ <family (fn)="" name=""> ^ <given (st)="" name=""> ^ <second (st)="" and="" further="" given="" initials="" names="" or="" thereof=""> ^ <suffix (e.g.,="" (st)="" iii)="" jr="" or=""> ^ <pre> <pre></pre></pre></suffix></second></given></family></id>
21	Entered by Phone Number	N/A	N/A	00879	N/A	Not supported. Please leave blank.
22	Entered By Location	75	R	00880	PL	This is a mandatory field.
						Description: The information in this field represents the Waitlist Entry Category. WTIS will use information within this field in SIU^S12, SIU^S13, SIU^S14 and SIU^S15 to differentiate between Surgery and DI scheduling messages. For DI messages the DI value must be provided. A message with any other value in this field will be treated as a Surgery Scheduling messages. Accepted Values: DI

## **PID (Patient Identification)**

Seq#	HL7 Name	Max Length	Usage	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

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						message for both finding the patient in the EMPI (PCR) and registering the patient in the WTIS. It is not required for SIU^S13, SIU^S15 and ORU^R01 messages, as those message rely on the Order Number to find the waitlist entry to be updated (see SCH.1 and SCH.2).  The PID segment is optional for SIU^S14 messages. It would be included in the SIU^S14 message to add a patient's MRN if it was not previously provided in an SIU^S12 message. A patient's MRN must be provided prior to an ORU^R01 message being sent to close a waitlist entry. If a MRN is not present at time of close, the close ORU^R01 will result in an error.  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	СХ	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 (PCR) and registering the patient in the WTIS.  Components:  ⟨ID (ST)> ^ ⟨check digit (ST)> ^ ⟨code identifying the check digit scheme employed (ID)> ^ ⟨ assigning authority (HD)> ^ ⟨identifier type code (ID)> ^ ⟨expiration date (DT)>⟩  The two identifiers that can be included in this field are:  MRN - Medical Record Number (mandatory before close)  HCN - Health Card Number (required, if available)

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						These identifiers should follow the sequence:  MRN ^ <check (st)="" digit=""> ^ <code (id)="" check="" digit="" employed="" identifying="" scheme="" the=""> ^ &lt; assigning authority (HD)&gt; ^ <identifier (id)="" code="" type=""> ~ HCN ^ <check (st)="" digit=""> ^ <code (id)="" check="" digit="" employed="" identifying="" scheme="" the=""> ^ &lt; assigning authority (HD)&gt; ^ <identifier (id)="" code="" type=""></identifier></code></check></identifier></code></check>
						■ 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 that the assigning authority of the MRN identifier is the sending site.  Note: Inclusion of PI code is mandatory when a MRN is being sent.  ○ Though a MRN is not required on opening of a waitlist entry (SIU^S12), it must be provided prior to an ORU^R01 message being sent to close the waitlist entry. If a MRN is not present at time of close, the close ORU^R01 will result in an error.
						<ul> <li>HCN - Health Card Number</li> <li>Example: 999999999999999999999999999999999999</li></ul>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
		Length			Туре	Assigning Authority not found in the Assigning Authority Table, the Health Card Number is not to be submitted to WTIS.  Examples: Both MRN and HCN are available:  123456^^^4107^PI~9999999999^^CANON^HC Only MRN is available:  123456^^^4107^PI Only HCN is available:  2999999999^^CANON^HC No MRN or HCN is available:  7999999999^^CANON^HC No MRN or HCN is available:  7000 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 of the message sent to the EMPI interface.  The field length for MRN must be between 0 and 60 characters, according to EMPI specific configuration.  The field length for HCN must be between 8 and 15 characters according to EMPI specific configuration.  If no MRN is submitted at the time of opening the waitlist entry, it must be submitted in an update message (SIU^S14) prior to closing the waitlist
4	Altomorto D-4t ID	N1/A	NI/A	00407	N1/A	entry.
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.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Description: This field is used to provide the patient's name. The values 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: <a href="#"><family (fn)="" name=""> ^ &lt; given name (ST)&gt; ^ &lt; second and further given names or initials thereof (ST)&gt; ^ &lt; suffix (e.g., JR or III) (ST)&gt; ^ &lt; prefix (e.g., DR) (ST)&gt; ^ &lt; degree (e.g., MD) (IS)&gt; ^ &lt; name type code (ID) &gt; ^ &lt; name representation code (ID)&gt; ^ &lt; name context (CE)&gt; ^ &lt; name validity range (DR)&gt; ^ &lt; name assembly order (ID)&gt;</family></a>
						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. The reason is that the most recent patient demographic update in the EMPI will be from the facility's patient registration systems.  If the patient information is not available from the EMPI, the name provided in the message will be
						<ul> <li>EMPI, the name provided in the message will be used to create the patient in the WTIS.</li> <li>The maximum length for the Family Name is 75 characters.</li> <li>The maximum length for the Given Name is 30 characters.</li> <li>The maximum length for the Second or Further Given Name is 30 characters.</li> <li>The maximum length for the Prefix is 10</li> </ul>
6	Mother's Maiden Name	N/A	N/A	00109	N/A	characters.  Not supported. Please leave blank.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
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: Date cannot occur after the date of the procedure. Date cannot be before January 1, 1850. 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. 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: F - Female M - Male U - Unknown  Notes: For other values that are not supported by WTIS (e.g.,

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						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.
						addresses but only one of a given type (H, M, C).  Address 1 ~ Address 2 ~ Address 3  Components: <street (st)="" address=""> ^ <other (st)="" designation=""> ^ <city (st)=""> ^ <state (st)="" or="" province=""> ^ <zip (st)="" code="" or="" postal=""> ^ <country (id)=""> ^ &lt; address type (ID)&gt; ^ <other (st)="" designation="" geographic=""> ^</other></country></zip></state></city></other></street>
						<pre><county (is)="" code="" parish=""> ^ <census (is)="" tract=""> ^ <address (id)="" code="" representation=""> ^ <address (dr)="" range="" validity=""> Accepted Values:</address></address></census></county></pre>
						<state or="" province=""> The accepted values for State or Province can be found in the Province/State Code Table in the appendix. (Note: HL7 does not define provincial abbreviations. Values are based on OHISC (ISO 3166-2) standards.) Note: For any values not found in the Province/State Code Table, this field is to remain empty (i.e., to be treated as <black>).</black></state>
						Accepted Format:
						<zip (st)="" code="" or="" postal=""></zip>
						For Canada (CAN):
						<ul><li>A9A9A9 (no spaces)</li></ul>
						For United States (USA):
						• 99999 or 99999-9999 or 999999999
						Note: For any values not related to Canada or the United States, this field is to remain empty (i.e., to be

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						treated as <blank>).</blank>
						Accepted Values:
						<country (id)=""></country>
						For Canada (CAN): CAN
						For United States (USA): USA
						Note: For any values not related to Canada or the United States, this field is to remain empty (i.e., to be treated as <blank>).</blank>
						Accepted Values:
						<address type=""></address>
						The following are the accepted values for Address Type (as defined by HL7 Table 0190 – Address Type). (Note: Address Type is mandatory.)
						H – Home (Primary)
						M – Mailing
						C – Current or Temporary
						Notes:
						<ul> <li>The maximum length for the Street Address         (Address Line 1) is 75 characters.     </li> </ul>
						<ul> <li>The maximum length for the Other Designation (Address Line 2) is 75 characters.</li> </ul>
						The maximum length for the City is 30 characters.
						<ul> <li>The maximum length for the State or Province is 15 characters.</li> </ul>
						<ul> <li>The maximum length for the Zip or Postal Code is 10 characters.</li> </ul>
						The maximum length for the Country is 3 characters.  The maximum length for the Country is 3 characters.
						<ul> <li>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.</li> </ul>
						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:

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						The WTIS supports three different telephone numbers in this field, as indicated by <telecommunication code="" use=""> values, but only one per type.</telecommunication>
						Telephone 1 ~ Telephone 2 ~ Telephone 3
						Components:
						<telephone (st)="" number=""> ^ <telecommunication< p=""> Use Code&gt; ^ <telecommunication equipment="" p="" type<=""> (ID)&gt; ^ <e-mail (st)="" address=""> ^ <country (nm)="" code=""> ^ <area (nm)="" city="" code=""/> ^ <local (nm)="" number=""> ^ <extension (nm)=""> ^ <any (st)="" text=""> ^ <extension< p=""> Prefix (ST) &gt; ^ <speed (st)="" code="" dial=""> ^ <unformatted< p=""> Telephone number (ST)&gt;</unformatted<></speed></extension<></any></extension></local></country></e-mail></telecommunication></telecommunication<></telephone>
						Note: Telephone Number (ST) – if the sending system cannot parse the telephone number into other components (i.e., Area Code, Phone Number, Extension), then the entire value is to be sent in this component.
						Accepted Values:
						<telecommunication code="" use=""></telecommunication>
						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
						EMR Emergency Number
						ORN Other Residence Number (including Cellular/Mobile Number)
						Accepted Values:
						<telecommunication (id)="" equipment="" type=""></telecommunication>
						The only accepted value is 'PH' (Phone).
						Accepted Format:
						<area (nm)="" city="" code=""/>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if the area code is (416), send 416.
						Accepted Format:
						<local (nm)="" number=""></local>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if local number is 444-5555, send

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						4445555.
						Accepted Format:
						<extension(nm)></extension(nm)>
						The Extension Number is optional but must include numeric values only; do not send brackets '()', spaces, dash '-' separators or characters such as 'Ext' or 'x'.
						For example, if extension is 'ext. 9999', send 9999.
						Example:
						Primary Residence Number: (444) 555-6666 ^PRN^PH^^^444^5556666^~
						Emergency Number: (777) 888-9999 ^EMR^PH^^^777^8889999^~
						Mobile Number: (111) 222-3333 ^ORN^PH^^^111^2223333^~
						Note: If the sending system cannot support the separation of area code and local number or cannot support the exclusion of text values, place the entire Phone Record in the <telephone (st)="" number=""> field (maximum length is 20 characters).  Primary Residence Number: (444) 555-6666 (444)555-6666^PRN^PH^^^^^~  Emergency Number: (777) 888-9999 (777)888-9999^PRN^PH^^^^^~  Mobile Number: (111) 222-3333 (111)222-3333^PRN^PH^^^^^~</telephone>
						Notes:
						The maximum length for the Telephone Number is 20 characters.
						The maximum length for the Telecommunication Use Code is 3 characters.
						<ul> <li>The maximum length for the Telecommunication Equipment Type is 10 characters.</li> </ul>
						The maximum length for the Area/City Code is 5 characters.
						<ul> <li>The maximum length for the Local Number is 20 characters.</li> </ul>
						The maximum length for the Extension is 6 characters.
						<ul> <li>Data will be processed in sequence, only if data is present in the repeating fields. For instance, for "Telephone1 ~ Telephone2 ~ Telephone3", if</li> </ul>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Telephone2 is blank, Telephone3 will not be processed.
14	Phone Number – Business	250	0	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 code="" use=""> values, but only one per type.</telecommunication>
						Telephone 1 ~ Telephone 2 ~ Telephone 3
						Components:
						<telephone (st)="" number=""> ^ <telecommunication code="" use=""  =""> ^ <telecommunication equipment="" td="" type=""  =""  <=""></telecommunication></telecommunication></telephone>
						Note: Telephone Number (ST) – if the sending system cannot parse the telephone number into other components (i.e., Area Code, Phone Number, Extension), then the entire value is to be sent in this component.
						Accepted Values:
						<telecommunication code="" use=""></telecommunication>
						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:
						<telecommunication (id)="" equipment="" type=""> The arrive accepted value in (BLV (Dhara))</telecommunication>
						The only accepted value is 'PH' (Phone).  Accepted Format:
						<a href="#">Accepted Format.</a> <a href="#">Area/City Code (NM)&gt;</a>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if the area code is (416), send 416.
						Accepted Format:

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						<pre><local (nm)="" number=""></local></pre>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if local number is 444-5555, send 4445555.
						Accepted Format:
						<extension(nm)></extension(nm)>
						The Extension Number is optional but must include numeric values only; do not send brackets '()', spaces, dash '-' separators or characters such as 'Ext' or 'x'.
						For example, if extension is 'ext. 9999', send 9999.
						Example:
						Work Number: (444) 555-6666 ext. 333
						^WPH^PH^^^444^5556666^333~
						Note: If the sending system cannot support the separation of area code and local number or cannot support the exclusion of text values, place the entire Phone Record in the <telephone (st)="" number=""> field (maximum length is 20 characters).  Work Number: (444) 555-6666 ext. 333 (444)555-6666 ext.333^WPN^^^^^~  Notes:</telephone>
						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	Usage	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	Usage	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 which case two AIS segments are required, one to remove the previous procedure and then a second to add the new procedure.  Accepted Values: Value must be 'AIS'.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
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	<ul> <li>This is a mandatory field.</li> <li>Description: <ul> <li>This field contains the information that identifies the action that the WTIS is to perform.</li> <li>This is a mandatory field for SIU^S12 message because creating a new Diagnostic Imaging Waitlist Entry will add a procedure.</li> <li>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.</li> </ul> </li> <li>Accepted Values: <ul> <li>The value must be 'A' for (Add/Insert) or 'D' for (Delete).</li> </ul> </li> <li>Notes: <ul> <li>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 to indicate the updated procedure.</li> <li>If there are no changes to the procedure, then you must not submit any AIS segments.</li> </ul> </li> </ul>
3	Universal Service Identifier	250	R	00238	CE	This is a mandatory field.
						Description: This is a mandatory field for an SIU^S12

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						message because in order to create a waitlist entry, a procedure must be provided.  This is only required for an 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:
						<pre>system (IS)&gt; ^ <alternate (st)="" identifier=""> ^ <alternate< pre=""></alternate<></alternate></pre>
						text (ST)> ^ <name (is)="" alternate="" coding="" of="" system=""> Example: W.MCT.CTS.ABDOMN</name>
						<ul> <li>Notes:</li> <li>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.</li> <li>While the WTIS does not act on the old procedure code, a value must be provided. The value does not have to be accurate (although accuracy is preferred) but does have to be in the correct format for procedure codes.</li> <li>If your system is not able to provide the old procedure code, it is recommended that you include the new procedure code in both the old procedure code and new procedure code fields.</li> <li>If there are no changes to the procedure then do not send the AIS segment in the SIU^S14 message.</li> </ul>

## **AIG (Appointment Information – Personnel Resource Segment)**

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
0	Segment Name	3	R		ST	This is a mandatory field.  Description: The AIG segment is mandatory for an SIU^S12. The AIG segment is optional for an SIU^S14. This segment would only be sent in an SIU^S14 if the Scanner ID or Estimated Service Duration for a waitlist entry are changed. In this case two AIG segments are required, one to remove (AIG.2 = D) the previous Scanner ID or Estimated Service Duration and one to add (AIG.2 = A) the new Scanner ID or Estimated Service Duration  Accepted Values:
1	Set ID - AIG	4	R	00896	SI	Value must be 'AIG'.  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 AIG segment and Set ID = 2 for 2nd AIG 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 Scanner ID and Estimated Service Duration  This field is only required for an SIU^S14 if the Scanner ID or Estimated Service Duration for the waitlist entry is changed. In this case two AIG

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						segments are required, one to remove the old Scanner ID or Estimated Service Duration and the second to add the new Scanner ID or Estimated Service Duration.
						Accepted Value:
						The value must be ' <b>A</b> ' for (Add/Insert) or ' <b>D</b> ' for (Delete).
						Notes:
						For SIU^S14 messages, any changes to the Scanner ID or Estimated Service Duration would require two AIG 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 Scanner ID and/or Estimated Service Duration.
						If there are no changes to the Scanner ID and/or     Estimated Service Duration, then you must not     submit any AIG segments.
3	Resource ID	250	OBC	00897	CE	This field is only required when a Scanner ID is added or updated. A Scanner ID must be provided before attempting to close a waitlist entry.
						Descriptions
						Description:     The information in this field represents the Scanner ID
						If there is a change for the Scanner ID then the sending application will send two AIG segments in the SIU^S14 message. The first segment would include the old Scanner ID to be deleted. The second segment would include the new or updated Scanner ID. The WTIS will respond to the value indicated in AIG.2. If 'A' is the value in AIG.2 then the value in this field will update Scanner ID.
						<ul> <li>While the WTIS does not act on the old Scanner ID, a value must be provided. The value does not have to be accurate (although accuracy is preferred) but does have to be a valid Scanner ID data type.</li> <li>If your system is not able to provide the old</li> </ul>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Scanner ID, it is recommended that you include the new Scanner ID in both the old Scanner ID and new Scanner ID fields.
						If there are no changes to Scanner ID, then do not send the AIG segment in the SIU^S14 message.
						The Scanner ID identified in this field should be associated with the Site Number.
						Components:
						<pre><id (st)="" number=""> ^ <family (st)="" name=""> ^ <given (st)="" name=""> ^ <middle (st)="" initial="" name="" or=""> ^ <suffix (e.g.,="" (st)="" iii)="" jr="" or=""> ^ <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre></suffix></middle></given></family></id></pre>
						Accepted Values:
						The Scanner ID must be associated with the Site and the association must exist in WTIS. Therefore only scanner IDs that have been previously provided to ATC will be accepted values.
						Example: MR3045
4	Resource Type	250	R	00898	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 any default character string (e.g., Wait Time).
5	Resource Group	N/A	N/A	00889	N/A	Not supported. Please leave blank.
6	Resource Quantity	N/A	N/A	00900	N/A	Not supported. Please leave blank.
7	Resource Quantity Units	N/A	N/A	00901	N/A	Not supported. Please leave blank.
8	Start Date/Time	N/A	N/A	01202	N/A	Not supported. Please leave blank.
9	Start Date/Time Offset	N/A	N/A	00891	N/A	Not supported. Please leave blank.
10	Start Date/Time Offset Units	N/A	N/A	00892	N/A	Not supported. Please leave blank.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
11	Duration	20	M	00893	NM	<ul> <li>This is a mandatory field.</li> <li>Description: <ul> <li>The information in this field is used to represent the Estimated Service Duration value and must be provided in minutes.</li> <li>Information in this field is required by WTIS for SIU^S12 and SIU^S14.</li> <li>If there is a change for the Estimated Service Duration then the sending application will send two AIG segments in the SIU^S14 message. The first segment would include the old Estimated Service Duration to be deleted. The second segment would include the new or updated Estimated Service Duration. The WTIS will respond to the value indicated in AIG.2. If 'A' is the value in AIG.2 then the value in this field will update the Estimated Service Duration.</li> <li>While the WTIS does not act on the old Estimated Service Duration, a value must be provided. The value does not have to be accurate (although accuracy is preferred).</li> <li>If your system is not able to provide the old Estimated Service Duration, it is recommended that you include the new Estimated Service Duration in both the old Estimated Service Duration and new Estimated Service Duration fields.</li> <li>If there are no changes to Estimated Service Duration, then do not send the AIG segment in the SIU^S14 message.</li> </ul> </li> <li>Example: <ul> <li>60</li> </ul> </li> </ul>
						00

## AIL (Appointment Information – Location Resource Segment)

Seq#	HL7 Name	Max Length	Usage	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	<ul> <li>This is a mandatory field.</li> <li>Description:         <ul> <li>This field contains the information that identifies the action that WTIS is to perform.</li> <li>This is a mandatory field for SIU^S12 message because a site must be provided for where the procedure is to occur.</li> <li>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.</li> <li>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.</li> </ul> </li> <li>Accepted Value:</li> </ul>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						The value must be 'A' for (Add/Insert), 'D' for (Delete), or 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 because neither of these messages 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 (is)="" care="" of="">^ <a href="mailto:room">room</a> (IS)&gt;^ Lexample: ^^4107 Notes: In the SIU^S12 message the value in this field is the site code where the procedure is to be</point>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						<ul> <li>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, plus the Order Number (see SCH-1 and SCH-2) to find the waitlist entry to be updated.</li> <li>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. The WTIS will use the old site code, plus the Order Number to find the waitlist entry to be updated.</li> <li>The updated site number must have an intrafacility relationship with the previous site number. For example, UHN is a facility with 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 Order Number for the waitlist entry must not change.</li> <li>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 Order Number, will be used to find the waitlist entry to be updated.</li> </ul>
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 MRI/CT Location 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	Usage	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	This field is conditional on OBR.3  The Placer Order Number field can only be empty (no value sent to WTIS) if the unique Order Number for the MRI/CT procedure 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 Order 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. Order Numbers must be unique across all service areas and can't be repeated

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						The value in this field must equal that of SCH.1 or 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 Order Number for the MRI/CT procedure is submitted in the Filler Order Number (OBR.3); otherwise this message will fail.
						Components:
						<a href="#"><entity (st)="" identifier="">^<namespace< a=""> ID(IS)&gt;^<universal id="">^</universal></namespace<></entity></a>
3	Filler Order Number	22	CE	00217	El	This field is conditional on OBR.2
						If the Placer Order Number (OBR.2) field above is not used to send the unique Order 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 Order 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. Order Numbers must be unique across service areas and can't be repeated Components:
						<pre><entity (st)="" identifier="">^<namespace id(is)="">^<universal id="">^ Notes:</universal></namespace></entity></pre>
						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.  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).

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						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: <entity (st)="" identifier=""> ^ <namespace (is)="" id=""> ^ <universal (st)="" id=""> ^ <universal (id)="" id="" type=""></universal></universal></namespace></entity>
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.
						<ul> <li>Description:         <ul> <li>This field identifies the Actual Service Start Date and Time.</li> <li>This is date and time when the patient entered the exam room (or "feet in" time).</li> <li>This field must be provided in both the Complete and Close ORU^R01.</li> <li>Can be updated by sending another Complete ORU^R01.</li> <li>Value in Close ORU^R01 updates that which was previously sent in Complete ORU^R01.</li> </ul> </li> <li>Format:         <ul> <li>YYYYMMDDHHMM</li> </ul> </li> <li>Notes:         <ul> <li>The value must be greater than or equal to the Scheduled/Rescheduled Procedure Date (not validating against Scheduled/Rescheduled time).</li> <li>DART date ranges must end prior to Actual Service Start Date</li> </ul> </li> </ul>
8	Observation End Date/Time #	26	R	00242	TS	This is a mandatory field for ORU^R01.  Description: This field identifies the Actual Service Finish Date and Time. This is date and time when the patient exited the

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						<ul> <li>exam room (or "feet out" time).</li> <li>This field must be provided in both the Complete and Close ORU^R01.</li> <li>Can be updated by sending another Complete ORU^R01.</li> <li>Value in Close ORU^R01 updates that which was previously sent in Complete ORU^R01.</li> <li>Format:  YYYYMMDDHHMM  Notes:  The value must be greater than or equal to the Actual Service Start Date and Time</li> </ul>
9	Collection Volume *	N/A	N/A	00243	N/A	Not supported. Please leave blank.
10	Collector Identifier	N/A	N/A	00244	N/A	Not supported. Please leave blank.
11	Specimen Action Code	N/A	N/A	00245	N/A	Not supported. Please leave blank.
12	Danger Code *	N/A	N/A	00246	N/A	Not supported. Please leave blank.
13	Relevant Clinical Information	N/A	N/A	00247	N/A	Not supported. Please leave blank.
14	Specimen Received Date/Time *	N/A	N/A	00248	N/A	Not supported. Please leave blank.
15	Specimen Source	N/A	N/A	00249	N/A	Not supported. Please leave blank.
16	Ordering Provider	N/A	N/A	00226	N/A	Not supported. Please leave blank.
17	Order Callback Phone Number	N/A	N/A	00250	N/A	Not supported. Please leave blank.
18	Placer Field 1	60	OBC	00251	ST	This field is optional. A Scanner ID must, however, be provided before attempting to close a waitlist entry.  Description: The information in this field represents the Scanner ID. In order for a waitlist entry to be closed, a Scanner ID must be present. A facility may choose to provide a different or previously specified Scanner ID within ORU message. The value provided in this field will overwrite the existing Scanner ID value within Waitlist Entry. Scanner ID must be

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						associated with the Site within WTIS.  Scanner ID is optional in OBR if previously provided in S12 or S14.  Accepted Values: Scanner ID associated with the Site
19	Placer Field 2	2	M	00252	EI	This is Mandatory field  Description: The information in this field represents the Waitlist Entry Category. The WTIS will use the information within this field to differentiate between Surgery and DI close messages. For DI messages, a value of DI must be provided. Messages with any other value in this field will be treated as Surgery close message.  Expected Values: DI
20	Filler Field 1 +	N/A	N/A	0053	N/A	Not supported. Please leave blank.
21	Filler Field 2 +	N/A	N/A	00254	N/A	Not supported. Please leave blank.
22	Result Rpt Date/Time	26	OBC	00255	TS	This is an optional field for Complete ORU^R01.  This is a mandatory field for Close ORU^R01.  Description:  This field identifies the date and time when Report were verified  Providing Actual Service Start Date and Time, Actual Service Finish Date and Time and Report Verified Date and Time will close a waitlist entry. A closed entry can no longer be edited.  Format:  YYYYMMDDHHMM  Notes:  The value must be greater than or equal to the Actual Service Finish Date/Time

# **ZWT (WTIS Custom Segment)**

Seq#	HL7 Name	Max Length	Usage	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 ' <b>ZWT</b> '.
1	Wait 2 Priority Level	1	R		CE	This is a mandatory field for all procedures
						Description:
						This field is used to submit the priority information of the MRI/CT procedure to the WTIS.
						Acceptable Value:
						1, 2, 3 or 4
						Note:  A priority level 1 patient cannot have a Specified Date Procedure (ZWT.5). This will result in an interface error.
						<ul> <li>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.</li> <li>For Priority 1 and Priority 2 DI procedures, acceptable values are 1, 2</li> </ul>
						acceptable values are 1, 2
2	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
3	Order Received Date and Time	19	R		DT	This is a mandatory field for SIU^S12
						Description:
						This field is used to submit Order Received Date and Time information.
						Format:
						YYYYMMDDHHMM (Note: HH is 24-hour format) Notes:

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						<ul> <li>Date must be greater than or equal to the Date of Birth.</li> <li>Date and Time must be less than Actual Service</li> </ul>
						Date and Time, Actual Service Date and Time and Report Verified Date and Time.
						<ul> <li>DART date ranges must occur on or after Order Received Date.</li> </ul>
						New value overwrites previously submitted value.
4	Dates Affecting	45	O/Rep		CM	This is an optional field for SIU^S12 and SIU^S14.
	Readiness To Treat					While this field is optional, it is mandatory to submit Dates Affecting Readiness To Treat (DARTs) if your patient has dates of unavailability.
						Description:
						This field is used to capture patient Dates Affecting Readiness To Treat (DART). A DART is defined as the period of time between the Order Received Date and the Actual Procedure Date when the patient is unavailable for the procedure due to patient-related reasons. This period of time will be subtracted from the overall patient wait.
						IMPORTANT: A facility system must support the ability to send a minimum of 3 DART ranges in a single message. Up to 100 DART ranges can be accepted in a single message.
						Sequence:
						Unavailable Date Range 1 ~ Unavailable Date Range 2 ~ Unavailable Date Range 3
						Components:
						<pre><dart (ts)="" date="" from="">^<dart (ts)="" date="" to="">^<dart (ce)="" code="" reason="" unavailable=""> Format:</dart></dart></dart></pre>
						DART From Date: YYYYMMDD (Note: Do not include time)
						DART To Date: YYYYMMDD (Note: Do not include time)
						Components:
						<pre><dart (ts)="" date="" from="">^<dart (ts)="" date="" to="">^<dart (ce)="" code="" reason="" unavailable=""></dart></dart></dart></pre>
						Format:

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						DART From Date: YYYYMMDD (Note: Do not include time)
						DART To Date: <b>YYYYMMDD</b> (Note: Do not include time)
						Acceptable Values:
						<dart (ce)="" code="" reason="" unavailable=""></dart>
						Code Description
						IC Inability to Contact the Patient
						MS Change in Medical Status
						MP Missed Procedure/No Show
						PD Patient Chooses to Defer
						NF Pre-Procedure Instructions Not Followed
						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 the procedure. These are sent to the WTIS as 'ranges', and there may be one or more ranges associated with a single waitlist entry.
						The DART From Date must be greater than or equal to the Order Received Date.
						The DART To Date must be greater than or equal to the DART From Date.
						The DART To Date must be less than the Actual Service Start Date
						All three components (DART From Date, DART To Date, DART Unavailable Reason Code) must be present for the WTIS to process the information. If any information is missing, it will result in an error.
						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, the WTIS will treat the missing information as delete and remove the DART from the waitlist entry.
5	Specified Date Procedure	1	0		N/A	This field is optional.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Description: This field should only be used if the procedure was purposely scheduled for a future date. Specified Date Procedures are procedures requested to be completed once a defined time period has elapsed (e.g., a 6 month follow-up procedure).  Acceptable value: T Notes: New value overwrites previously submitted value.
6	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
7	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
8	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
9	Responsibility for Payment	2	OBC		СМ	This field is optional. A Responsibility for Payment value must, however, be provided before attempting to close a waitlist entry.  Description: This data element identifies the primary group responsible for payment of service(s) rendered (i.e. out of pocket, OHIP, other province or territory etc.). Value can be provided in S12 or S14. The value is optional on opening a waitlist entry but is required to be provided before close.  Acceptable Values: Code Description PC Private Coverage GO Provincial Government (OHIP) OT Other  Notes: New value in SIU^S14 overwrites previously submitted value.
10	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
11	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
12	<u>N/A</u>	N/A	N/A		N/A	Not supported. Please leave blank.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
13	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
14	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
15	Wait 2 System Delay Indicator	1	R			This is a mandatory field for SIU^S12 and SIU^S14
						Description:
						Indicates whether Wait 2 System Delays are applicable.
						Acceptable Values:
						Code Description
						N No
						Y Yes
						Notes:
						New value overwrites previously submitted value.
						Must be provided in conjunction with ZWT.16
16	Wait 2 System Delay Reasons	2	C/Rep			This field is conditional on ZWT.15.
						Description:
						<ul> <li>This field captures healthcare system delays that are non-patient-related and impact the patient's wait time for a procedure.</li> </ul>
						<ul> <li>Value must be provided when Wait 2 System</li> <li>Delay Reasons are applicable, i.e. ZWT.15</li> <li>contains a value of "Y".</li> </ul>
						Acceptable values:
						Code Description
						EC Emergency Closures
						LR Lack of Facility Resources
						PC Prerequisites Not Completed
						PP Patient Preference
						RD Rescheduled Due to Higher Priority Case
						GR General Anaesthesia Required
						Example:
						EC~LR~PC

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Notes:
						<ul> <li>Multiple Wait 2 System Delay Reasons may be provided. New value overwrites previously submitted value.</li> </ul>
						Must be provided in conjunction with ZWT.15
17	Clinical Indication for Scan	2	R		ST	This is a mandatory field for S12 and S14 messages.
						Description:
						This field identifies the medical reason the scan is being performed.
						Acceptable values:
						Code Description
						BC Breast Cancer Screening
						OT Other
						SD Cancer Staging and/or Diagnosis
						Notes:
						For Breast Cancer Screening the following must be true or an error will occur.
						<ul> <li>Service Area = MRI and CT</li> </ul>
						<ul><li>Service Detail 1 = MRI</li></ul>
						<ul> <li>Service Detail 2 = Breast</li> </ul>
						<ul> <li>Patient's age must be between 29 and 70 years old as of the Actual Service Start Date and Time.</li> </ul>
						New value overwrites previously submitted value.
18	Combination Scan Indicator	1	R			This is a mandatory field for SIU^S12 and SIU^S14
						Description:
						This field indicates whether more than one body part was scanned during a single appointment.
						Acceptable Values:
						Code Description
						N No
						Y Yes
						. 100
						Notes:

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						New value overwrites previously submitted value.
19	Appointment Created Date and Time	19	OBC		DT	This is an optional field for SIU^S12 and SIU^14. An Appointment Created Date and Time must, however, be provided before attempting to close a waitlist entry.
						Description:
						This field is used to submit Appointment Created Date and Time information.
						Format:
						YYYYMMDDHHMM (Note: HH is 24-hour format)
						Notes:
						<ul> <li>Appointment Created Date and Time can be less than the Scheduled Procedure Date and Time or can be up to 1 day after.</li> </ul>
						<ul> <li>Appointment Created Date and Time Date must be greater than or equal to the Order Received Date and Time.</li> </ul>
						Appointment Created Date and Time can be less than Actual Service Start Date and Time, Actual Service Finish Date and Time and Report Verified Date and Time or it can be up to 1 day after the Actual Service Start Date and Time, Actual Service Finish Date and Time and Report Verified Date and Time.
						Example 1:
						Appointment Created Date = January 13
						Scheduled Procedure Date and Time = January 12
						Validation will be successful.
						Example 2:
						Appointment Created Date = January 13
						Scheduled Procedure Date and Time = January 14
						Validation will be successful.
						Example 3:
						Appointment Created Date = January 16
						Scheduled Procedure Date and Time = January 14
						Validation will be completed with an error: Scheduled Procedure Date must be greater than or equal to the day before the Appointment Created Date.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Cannot be updated, once submitted.
20	Patient Type	2	R			This is a mandatory field for SIU^S12 and SIU^S14
						Description:
						This field indicates the type of patient receiving the procedure.
						Acceptable Values:
						Code Description
						IP Inpatient
						<b>OP</b> Outpatient
						<b>EP</b> Emergency
						RP Research
						Notes:
						New value overwrites previously submitted value.
						Do not include a field delimiter (' ') after this value. WTIS BizTalk does not recognize ' ' after the last field and will cause an error

# 13. Retrospective Data Submission WTIS HL7 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: Field and Component Requirements 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. 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.

- Trailing carets for component fields are optional.
- Even though some fields are marked as Optional, all fields are mandatory to be configured, built and transmitted to the WTIS.

#### **Message Segments**

For each message type supported by the WTIS, the tables below describes the fields that are allowed within each segment and the values that are expected/allowed within those fields.

The columns that are included in the tables are as follows:

- SEQ Contains the field sequence value which shows the order of the field in the segment.
- Element Name The name of the table as defined by the HL7 Version 2.4 specifications.
- Max Length The maximum number of characters in data element.
- Usage This refers to whether the field is required, optional or conditional in the segment. Please see 9.4 Field Optionality for definitions.
- Item # The number that uniquely identifies the field in the HL7 standard.
- Data Type The HL7 data type that must be used for the values submitted in the field. A list of the supported <u>Data Types</u> can be found in the appendix.
- WTIS Usage Notes This column details how the field is to be used within each segment, along with the name of the data element within the WTIS.

## MSH (Message Header)

Seq#	Element Name	Max Length	Usage	Item #	Data Type	WTIS Usage Notes
0	Segment ID	3	R		ST	This is a mandatory field.
						Description:
						The MSH segment is mandatory.
						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:
						<pre><namespace (is)="" id=""> ^ <universal (st)="" id=""> ^ <universal (id)="" id="" type=""></universal></universal></namespace></pre>
						Accepted Values:
						Value must be 'WTIS_REALTIME^^'
4	Sending Facility	180	R	00004	HD	This is a mandatory field.
						Description:
						This is the identifier for the site where the procedure was performed. The site number used in the WTIS is typically, though not always the case, the four digit ambulatory care number assigned by the Ontario
						Ministry of Health and Long-Term Care.
						Components:
						<a a="" href="mailto:&lt;/a&gt; &lt;a href=" mailto:<=""> <a <="" href="mailto:&lt;/a&gt; &lt;a href=" td=""></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a>
						Example:

Seq#	Element Name	Max Length	Usage	Item #	Data Type	WTIS Usage Notes
						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.
7	Date/Time of Message	26	R	00007	TS	This is a mandatory field.
						Format: The format is YYYYMMDDHHMM.  Example: February 5th, 2014 11:59pm should be sent as 201402052359.  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	СМ	This is a mandatory field.
						Description: The required message types would be ORU^R01. Components: <a href="Message Code">Message Code"&gt;Message Code"</a> (ID)> ^ <a href="Message Code">Message Code"&gt;Message Code"&gt;Message Code"&gt;Message Code"&gt;Message Code"&gt;Message Code"</a> (ID)> ^ <a href="Message Code">Message Code"&gt;Message Code"</a> (ID)> <a href="Message Code">Message Code"&gt;Message Code"</a> (ID)> ^ <a href="Message Code">Message Code"&gt;Message Code"&gt;Message Code"&gt;M</a>
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.
11	Processing ID	3	R	00011	PT	This is a mandatory field.  Description:

Seq#	Element Name	Max Length	Usage	Item #	Data Type	WTIS Usage Notes
						WTIS requires that this field be populated by the sending application to indicate the source of system environment, Test or Production.
						Components:
						<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
						For Testing, value must be <b>D^T</b> .
						For Production, value must be <b>P^T</b> .
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:
						<pre><version (id)="" id=""> ^ <internationalization (ce)="" code=""> ^ <internal (ce)="" id="" version=""></internal></internationalization></version></pre>
						Accepted Values:
						Value must be '2.4'

## PID (Patient Identification)

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
0	Segment Name	3	R		ST	This is a mandatory field.
						Description:
						The PID segment is mandatory.
						Accepted Values:
						Value must be ' <b>PID</b> '.
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.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Description:
						<ul> <li>This field is used to provide the identifiers used by the healthcare facility to uniquely identify the patient.</li> <li>This information is used in the ORU^R01 message for both finding the patient in the EMPI and registering the patient in the WTIS.</li> </ul>
						Components: <id (st)=""> ^ <check (st)="" digit=""> ^_<code (id)="" check="" digit="" employed="" identifying="" scheme="" the=""> ^ &lt; assigning authority (HD)&gt; ^ <identifier (id)="" code="" type=""> ^ &lt; assigning facility (HD) ^ <effective (dt)="" date=""> ^ <expiration (dt)="" date=""></expiration></effective></identifier></code></check></id>
						The two identifiers that can be included in this field are:  MRN - Medical Record Number (mandatory)  HCN - Health Card Number (required, if available)
						These identifiers should follow the sequence:  MRN ^ < check digit (ST)> ^ < code identifying the check digit scheme employed (ID)> ^ < assigning authority (HD)> ^ < identifier type code (ID)> ~ HCN ^ < check digit (ST)> ^ < code identifying the check digit scheme employed (ID)> ^ < assigning authority (HD)> ^ < identifier type code (ID)>
						Identifier descriptions are provided below:  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 that the assigning authority of the MRN identifier is the sending site. Note: Inclusion of PI code is mandatory when a MRN is being sent.  Though a MRN is not required on

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						opening of a waitlist entry (SIU^S12), it must be provided prior to an ORU^R01 message being sent to close the waitlist entry. If a MRN is not present at time of close, the close ORU^R01 will result in an error.
						HCN - Health Card Number
						o Example: 999999999^^^CANON^HC
						<ul> <li>'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.     </li> </ul>
						The accepted values for Health Card Number Assigning Authorities can be found in the Assigning Authority Table in the Appendix (Note: values based on HL7 v2.4). Please note, for any Assigning Authority not found in the Assigning Authority Table, the Health Card Number is not to be submitted to WTIS.
						Examples:
						Both MRN and HCN are available:
						= 123456^^^4107^PI~999999999^^^CANON^HC
						Only MRN is available:
						= 123456^^^4107^PI
						Notes:
						<ul> <li>The WTIS will always attempt to match the patient in the EMPI on MRN first, if provided; if 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.</li> <li>The MRN or HCN must not include any embedded spaces.</li> </ul>
						For facilities with existing EMPI interfaces, the data contained in this field should be the same as

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						the data contained in the PID.3 field of the message sent to 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. The values 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: <a href="family name">family name</a> (FN)> ^ <given a="" name<=""> (ST)&gt; ^ <second (st)="" and="" further="" given="" initials="" names="" or="" thereof=""> ^ <suffix (e.g.,="" (st)="" iii)="" jr="" or=""> ^ <pre></pre></suffix></second></given>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						<ul> <li>EMPI, the name provided in the message will be used to create the patient in the WTIS.</li> <li>The maximum length for the Family Name is 75 characters.</li> <li>The maximum length for the Given Name is 30 characters.</li> <li>The maximum length for the Second or Further Given Name is 30 characters.</li> <li>The maximum length for the Prefix is 10 characters.</li> </ul>
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	<ul> <li>This is a mandatory field.</li> <li>Description: <ul> <li>This field is used to provide the patient's date of birth.</li> <li>This information is used in the ORU^R01 message for both finding the patient in the EMPI and registering the patient in the WTIS.</li> </ul> </li> <li>Format:  YYYYMMDD (Note: Do not include time)  Notes: <ul> <li>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 patient registration systems.</li> <li>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.</li> <li>The maximum length for this field is 19 characters. This length was set to match the supported field length in EMPI.</li> </ul> </li> </ul>
8	Administrative Sex	1	R	00111	IS	This is a mandatory field.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						<ul> <li>Description:</li> <li>This field is used to provide the patient's sex.</li> <li>This information is used in the ORU^R01 message for both finding the patient in the EMPI and registering the patient in the WTIS.</li> <li>Accepted Values:</li> <li>F - Female</li> <li>M - Male</li> <li>U - Unknown</li> <li>Notes:</li> <li>For other values that are not supported by WTIS (e.g., O - Other), please map to Unknown.</li> </ul>
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 ORU^R01 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: <street (st)="" address=""> ^ <other (st)="" designation=""> ^ <city (st)=""> ^ <state (st)="" or="" province=""> ^ &lt; zip or postal code (ST)&gt; ^ <country (id)=""> ^ &lt; address type (ID)&gt; ^ <other (st)="" designation=""> ^ <country (is)="" code="" parish=""> ^ <census (is)="" tract=""> ^ <address (id)="" code="" representation=""> ^ <address (dr)="" range="" validity=""> Accepted Values:  <state or="" province=""> The accepted values for State or Province can be found in the Province/State Code Table in the appendix. (Note: HL7 does not define provincial abbreviations.</state></address></address></census></country></other></country></state></city></other></street>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Values are based on OHISC (ISO 3166-2) standards.)
						Note: For any values not found in the Province/State Code Table, this field is to remain empty (i.e., to be treated as <black>).</black>
						Accepted Format:
						<zip (st)="" code="" or="" postal=""></zip>
						For Canada (CAN):
						<ul> <li>A9A9A9 (no spaces)</li> </ul>
						For United States (USA):
						99999 or 99999-9999 or 999999999
						Note: For any values not related to Canada or the United States, this field is to remain empty (i.e., to be treated as <blank>).</blank>
						Accepted Values:
						<country (id)=""></country>
						For Canada (CAN): CAN
						For United States (USA): USA
						Note: For any values not related to Canada or the United States, this field is to remain empty (i.e., to be treated as <blank>).</blank>
						Accepted Values:
						<address type=""></address>
						The following are the accepted values for Address Type (as defined by HL7 Table 0190 – Address Type). (Note: Address Type is mandatory.)
						H – Home (Primary)
						M – Mailing
						C – Current or Temporary
						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.
						The maximum length for the State or Province is     State or Province is     State or Province is
						The maximum length for the Zip or Postal Code is 10 characters.
						The maximum length for the Country is 3 characters.  The maximum length for the Country is 3 characters.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						<ul> <li>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.</li> <li>If there is only one address value, then leave out the repeating fields (i.e., do not include blank, address2, address3 fields).</li> </ul>
12	County Code	N/A	N/A	00115	N/A	Not supported. Please leave blank.
12	County Code  Phone Number – Home	N/A 250	N/A O/Rep	00115	N/A 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 code="" use=""> values, but only one per type.  Telephone 1 ~ Telephone 2 ~ Telephone 3  Components:  <telephone (st)="" number=""> ^ <telecommunication code="" use=""> ^ <telecommunication (id)="" equipment="" type=""> ^ <e-mail (st)="" address=""> ^ <country (nm)="" code=""> ^ <area (nm)="" city="" code=""/> ^ <area (nm)="" city="" code=""/> ^ <extension (nm)=""> ^ <extension (nm)=""> ^ <country (st)="" code=""> ^ <extension (st)="" prefix=""> ^ <speed (st)="" code="" dial=""> ^ <unformatted (st)="" number="" telephone=""> Note: Telephone Number (ST) - if the sending system cannot parse the telephone number into other components (i.e., Area Code, Phone Number, Extension), then the entire value is to be sent in this component.  Accepted Values:  <telecommunication code="" use=""> 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</telecommunication></unformatted></speed></extension></country></extension></extension></country></e-mail></telecommunication></telecommunication></telephone></telecommunication>
						EMR Emergency Number ORN Other Residence Number (including Cellular/Mobile Number)

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Accepted Values:
						<telecommunication (id)="" equipment="" type=""></telecommunication>
						The only accepted value is 'PH' (Phone). In future WTIS releases, other equipment types could be supported (e.g., fax).  Accepted Format:
						'
						<a href="#"><area (nm)="" city="" code=""/></a> Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if the area code is (416), send 416.
						Accepted Format:
						<local (nm)="" number=""></local>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if local number is 444-5555, send 4445555.
						Accepted Format:
						< <u>Extension(NM)&gt;</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 (st)="" number=""> field (maximum length is 20 characters).  Primary Residence Number: (444) 555-6666 (444)555-6666^PRN^PH^^^^^~  Emergency Number: (777) 888-9999 (777)888-9999^PRN^PH^^^^^~</telephone>
						Mobile Number: (111) 222-3333 (111)222-3333^PRN^PH^^^^~

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
14	Phone Number – Business	250	0	00117	XTN	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.  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.  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   Telephone 1 ~ Telephone 2 ~ Telephone 3  Components:  Telephone Number (ST)> ^ <telecommunication code="" use=""> ^ <telecommunication (id)="" equipment="" type=""> ^ <e-mail (st)="" address=""> ^ <country (nm)="" code=""> ^ <area (nm)="" city="" code=""/> ^ <area c<="" td=""/></country></e-mail></telecommunication></telecommunication>
						<telecommunication code="" use=""></telecommunication>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						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:
						<telecommunication (id)="" equipment="" type=""> The only accepted value is 'PH' (Phone).</telecommunication>
						Accepted Format:
						<pre><area (nm)="" city="" code=""/></pre>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if the area code is (416), send 416.
						Accepted Format:
						<local (nm)="" number=""></local>
						Send numeric values only; do not send brackets '()', spaces, or dash '-' separators.
						For example, if local number is 444-5555, send 4445555.
						Accepted Format:
						<extension(nm)></extension(nm)>
						The Extension Number is optional but must include numeric values only; do not send brackets '()', spaces, dash '-' separators or characters such as 'Ext' or 'x'.
						For example, if extension is 'ext. 9999', send 9999.
						Example:
						Work Number: (444) 555-6666 ext. 333
						^WPH^PH^^^444^5556666^333~
						Note: If the sending system cannot support the separation of area code and local number or cannot support the exclusion of text values, place the entire Phone Record in the <telephone (st)="" number=""> field (maximum length is 20 characters).</telephone>
						Work Number: (444) 555-6666 ext. 333
						(444)555-6666 ext.333^WPN^^^^~
						Notes:
						<ul> <li>The maximum length for the Telephone Number is 20 characters.</li> </ul>
						The maximum length for the Telecommunication

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Use Code is 3 characters.
						<ul> <li>The maximum length for the Telecommunication Equipment Type is 10 characters.</li> </ul>
						<ul> <li>The maximum length for the Area/City Code is 5 characters.</li> </ul>
						<ul> <li>The maximum length for the Local Number is 20 characters.</li> </ul>
						<ul> <li>The maximum length for the Extension is 6 characters.</li> </ul>

# **OBR (Observation Request Segment)**

Seq#	HL7 Name	Max Length	Usage	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	El	This field is conditional on OBR.3
						The Placer Order Number field can only be empty (no value sent to WTIS) if the unique Order Number for the MRI/CT procedure is submitted in the Filler Order Number (OBR.3); otherwise this field is mandatory.

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						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 Order 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. Order Numbers must be unique across all service areas and can't be repeated
						Accepted Values:
						The value in this field must equal that of SCH.1 or 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 Order Number for the MRI/CT procedure is submitted in the Filler Order Number (OBR.3); otherwise this message will fail.
						Components:
						<u><entity (st)="" identifier=""></entity></u> ^ <namespace< p=""> ID(IS)&gt;^<universal id="">^</universal></namespace<>
3	Filler Order Number	22	CE	00217	El	This field is conditional on OBR.2
						If the Placer Order Number (OBR.2) field above is not used to send the unique Order 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 Order 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. Order Numbers must be unique across service areas and can't be repeated
						Components:

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						<entity (st)≥^<namespace<="" identifier="" p=""> ID(IS)&gt;^<universal id="">^ Notes:</universal></entity>
						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.
						<ul> <li>A valid procedure code is required or the message will result in an error.</li> </ul>
						Accepted Value:
						A valid WTIS procedure code.
						Components:
						<entity (st)="" identifier=""> ^ <namespace (is)="" id=""> ^ <universal (st)="" id=""> ^ <universal (id)="" id="" type=""></universal></universal></namespace></entity>
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.
						Description:
						This field identifies the Actual Service Start Date and Time.
						This is the date and time when the patient entered
						the exam room. Format:
						YYYYMMDDHHMM
						Notes:
						The value must be greater than or equal to the Order Received Date and Time
8	Observation End Date/Time #	26	R	00242	TS	This is a mandatory field for ORU^R01.
						Description:
						This field identifies the Actual Service Finish Date

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						and Time.  This is the date and time when the patient exited the exam room.  Format:  YYYYMMDDHHMM  Notes:  The value must be greater than or equal to the Actual Service Start Date and Time
9	Collection Volume *	N/A	N/A	00243	N/A	Not supported. Please leave blank.
10	Collector Identifier	N/A	N/A	00244	N/A	Not supported. Please leave blank.
11	Specimen Action Code	N/A	N/A	00245	N/A	Not supported. Please leave blank.
12	Danger Code *	N/A	N/A	00246	N/A	Not supported. Please leave blank.
13	Relevant Clinical Information	N/A	N/A	00247	N/A	Not supported. Please leave blank.
14	Specimen Received Date/Time *	N/A	N/A	00248	N/A	Not supported. Please leave blank.
15	Specimen Source	N/A	N/A	00249	N/A	Not supported. Please leave blank.
16	Ordering Provider	N/A	N/A	00226	N/A	Not supported. Please leave blank.
17	Order Callback Phone Number	N/A	N/A	00250	N/A	Not supported. Please leave blank.
18	Scanner ID	60	R	00251	ST	This is a mandatory field for ORU^R01.
						Description: The information in this field represents the Scanner ID. Scanner ID must be associated with the Site within WTIS. Accepted Values: Scanner ID associated with the Site
19	Placer Field 2	2	R	00252	EI	This is Mandatory field  Description: The information in this field represents the Waitlist

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Entry Category. The WTIS will use the information within this field to differentiate between Surgery and DI close messages. For DI messages, a value of DI must be provided. Messages with any other value in this field will be treated as Surgery close message.  Expected Values:  DI
20	Filler Field 1 +	N/A	N/A	0053	N/A	Not supported. Please leave blank.
21	Filler Field 2 +	N/A	N/A	00254	N/A	Not supported. Please leave blank.
22	Result Rpt Date/Time	26	R	00255	TS	This is a mandatory field for ORU^R01.
						Description:
						This field identifies the date and time when Report were verified
						Format:
						YYYYMMDDHHMM
						Notes:
						The value must be greater than or equal to the Actual Service Finish Date/Time

# **ZWT (WTIS Custom Segment)**

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
0	Segment Name	3	R		ST	This is a mandatory field.
						Description:
						The ZWT segment is mandatory for OUR^R01 for Priority level 1 Procedure
						Accepted Values:
						Value must be ' <b>ZWT</b> '.
1	Wait 2 Priority Level	1	R		CE	This is a mandatory field for all procedures
						Description:
						This field is used to submit the priority information of the MRI/CT procedure to WTIS.
						Acceptable Value:
						1 Note:
						<ul> <li>A priority level 1 patient cannot have a Specified Date Procedure (ZWT.5). This will result in an interface error.</li> </ul>
						<ul> <li>Priority Level value must be 1. Any other priority value provided will result in an interface error.</li> </ul>
2	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
3	Order Received Date and Time	19	R		DT	This is a mandatory field
						Description:
						This field is used to submit Order Received Date and Time information.
						Format:
						YYYYMMDDHHMM (Note: HH is 24-hour format)
						Notes:
						Date must be greater than or equal to the Date of Birth.
						<ul> <li>Date and Time must be less than Actual Service Start Date and Time, Actual Service Finish Date and Time and Report Verified Date and Time.</li> </ul>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						DART date ranges must occur on or after Order Received Date.
4	Dates Affecting Readiness To Treat	45	O/Rep		СМ	This is an optional field for ORU^R01, but should be provided where applicable.
						While this field is optional, it is mandatory to submit Dates Affecting Readiness To Treat (DARTs) if your patient has dates of unavailability.
						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 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.
						IMPORTANT: A facility system must support the ability to send a minimum of 3 DART ranges in a single message. Up to 100 DART ranges can be accepted in a single message.
						Sequence:
						Unavailable Date Range 1 ~ Unavailable Date Range 2 ~ Unavailable Date Range 3
						Components:
						<dart (ts)="" date="" from="">^<dart date<="" p="" to=""> (TS)&gt;^<dart (ce)="" code="" reason="" unavailable=""></dart></dart></dart>
						Format:
						DART From Date: YYYYMMDD (Note: Do not include time)
						DART To Date: <b>YYYYMMDD</b> (Note: Do not include time)
						Components:
						<dart (ts)="" date="" from="">^<dart date<br="" to="">(TS)&gt;^<dart (ce)="" code="" reason="" unavailable=""></dart></dart></dart>
						Format:
						DART From Date: YYYYMMDD (Note: Do not include time)
						DART To Date: <b>YYYYMMDD</b> (Note: Do not include time)

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Acceptable Values: <dart (ce)="" code="" reason="" unavailable=""> Code Description IC Inability to Contact the Patient MS Change in Medical Status MP Missed Procedure/No Show PD Patient Chooses to Defer NF Pre-Procedure Instructions Not Followed  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 the procedure. These are sent to the WTIS as 'ranges', and there may be one or more ranges associated with a single waitlist entry.  The DART From Date must be greater than or equal to the Order Received Date.  The DART To Date must be greater than or equal to the DART From Date.  The DART To Date must be less than the Actual Service Start Date  All three components (DART From Date, DART To Date, DART Unavailable Reason Code) must be present for the WTIS to process the information. If any information is missing, it will result in an error.</dart>
5	N/A	N/A	N/A		N/A	Not supported. Please leave blank
6	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
7	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
8	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
9	Responsibility for Payment	2	R		СМ	This is a mandatory field  Description:  This data element identifies the primary group responsible for payment of service(s) rendered (i.e. out of pocket, OHIP, other province or territory etc.).

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						Acceptable Values: Code Description PC Private Coverage GO Provincial Government (OHIP) OT Other
10	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
11	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
12	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
13	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
14	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
15	Wait 2 System Delay Indicator	1	R			This is a mandatory field  Description: Indicates whether Wait 2 System Delays are applicable.  Acceptable Values: Code Description N No Y Yes  Notes: Must be provided in conjunction with ZWT.16
16	Wait 2 System Delay Reasons	2	C/Rep			<ul> <li>This field is conditional on ZWT.15.</li> <li>Description: <ul> <li>This field captures healthcare system delays that are non-patient-related and impact the patient's wait time for a procedure.</li> <li>Value must be provided when Wait 2 System Delay Reasons are applicable, i.e. ZWT.15 contains a value of "Y".</li> </ul> </li> <li>Acceptable values:</li> <li>Code Description</li> </ul>

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						EC Emergency Closures
						LR Lack of Facility Resources
						PC Prerequisites Not Completed
						PP Patient Preference
						RD Rescheduled Due to Higher Priority Case
						GR General Anaesthesia Required
						Example:
						EC~LR~PC
						Notes:
						Multiple Wait 2 System Delay Reasons may be provided.
						Must be provided in conjunction with ZWT.15
17	Clinical Indication for	2	R		ST	This is a mandatory field.
''	Scan		'\		01	This is a manuatory field.
						Description:
						This field identifies the medical reason the scan is being performed.
						Acceptable values:
						Code Description
						BC Breast Cancer Screening
						OT Other
						SD Cancer Staging and/or Diagnosis
						Notes:
						For Breast Cancer Screening the following must
						be true or an error will occur.
						Service Area = MRI and CT     Service Retail A MRI
						<ul><li>Service Detail 1 = MRI</li><li>Service Detail 2 = Breast</li></ul>
						<ul> <li>Service Detail 2 = Breast</li> <li>Patient's age must be between 29 and</li> </ul>
						70 years old as of the Actual Service Start Date and Time.
18	Combination Scan Indicator	1	R			This is a mandatory field.
						Description:
						This field indicates whether more than one body part

Seq#	HL7 Name	Max Length	Usage	Item #	Date Type	Field Notes
						was scanned during a single appointment.  Acceptable Values: Code Description N No Y Yes
19	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
20	Patient Type	2	R			This is a mandatory field  Description: This field indicates the type of patient receiving the procedure.  Acceptable Values: Code Description IP Inpatient OP Outpatient EP Emergency RP Research
21	N/A	N/A	N/A		N/A	Not supported. Please leave blank.
22	Duration	20	R		NM	This is a mandatory field  Description: Information in this field is required by WTIS. It is used to provide the Estimated Service Duration value. Value must be provided in minutes.  Example: 60  Notes: Do not include a field delimiter (' ') after this value. WTIS BizTalk does not recognize ' ' after the last field and will cause an error

# Appendix A – Tables of Values

#### **WTIS MRI/CT Procedure Codes**

Procedure Code	Description
W.MCT.CTS.ABDOMN	MRI and CT – CT Scan, Abdomen
W.MCT.CTS.BIOP	MRI and CT – CT Scan, CT Guidance of Biopsy
W.MCT.CTS.CARD	MRI and CT – CT Scan, Cardiac
W.MCT.CTS.EXT	MRI and CT – CT Scan, Extremities
W.MCT.CTS.HEAD	MRI and CT - CT Scan, Head (Brain)
W.MCT.CTS.HNK	MRI and CT - CT Scan, Head and Neck
W.MCT.CTS.PELVIS	MRI and CT – CT Scan, Pelvis
W.MCT.CTS.PVASCU	MRI and CT – CT Scan, Peripheral Vascular
W.MCT.CTS.SPINE	MRI and CT – CT Scan, Spine
W.MCT.CTS.THORAX	MRI and CT – CT Scan, Thorax
W.MCT.MRI.ABDOMN	MRI and CT – MRI, Abdomen
W.MCT.MRI.BRST	MRI and CT – MRI, Breast
W.MCT.MRI.CARD	MRI and CT – MRI, Cardiac
W.MCT.MRI.EXT	MRI and CT – MRI, Extremities
W.MCT.MRI.HEAD	MRI and CT – MRI, Head (Brain)
W.MCT.MRI.HNK	MRI and CT – MRI, Head and Neck
W.MCT.MRI.PELVIS	MRI and CT – MRI, Pelvis
W.MCT.MRI.PVASCU	MRI and CT – MRI, Peripheral Vascular
W.MCT.MRI.SPINE	MRI and CT – MRI, Spine
W.MCT.MRI.THORAX	MRI and CT – MRI, Thorax

#### **Province/State Codes**

Code	Description
CA-AB	Alberta
CA-BC	British Columbia
CA-MB	Manitoba
CA-NB	New Brunswick
CA-NL	Newfoundland and Labrador
CA-NS	Nova Scotia
CA-NT	Northwest Territories
CA-NU	Nunavut
CA-ON	Ontario
CA-PE	Prince Edward Island
CA-QC	Quebec
CA-SK	Saskatchewan
CA-YT	Yukon Territory
US-AK	Alaska
US-AL	Alabama
US-AR	Arkansas
US-AZ	Arizona
US-CA	California
US-CO	Colorado
US-CT	Connecticut
US-CZ	Canal Zone
US-DC	District Of Columbia
US-DE	Delaware
US-FL	Florida
US-GA	Georgia
US-GU	Guam
US-HI	Hawaii
US-IA	lowa
US-ID	Idaho
US-IL	Illinois
US-IN	Indiana
US-KS	Kansas

US-KY	Kentucky
US-LA	Louisiana
US-MA	Massachusetts
US-MD	Maryland
US-ME	Maine
US-MI	Michigan
US-MN	Minnesota
US-MO	Missouri
US-MS	Mississippi
US-MT	Montana
US-NC	North Carolina
US-ND	North Dakota
US-NE	Nebraska
US-NH	New Hampshire
US-NJ	New Jersey
US-NM	New Mexico
US-NV	Nevada
US-NY	New York
US-OH	Ohio
US-OK	Oklahoma
US-OR	Oregon
US-PA	Pennsylvania
US-PR	Puerto Rico
US-RI	Rhode Island
US-SC	South Carolina
US-SD	South Dakota
US-TN	Tennessee
US-TX	Texas
US-UT	Utah
US-VA	Virginia
US-VI	Virgin Islands
US-VT	Vermont
US-WA	Washington
US-WI	Wisconsin
US-WV	West Virginia
US-WY	Wyoming

## **Assigning Authority**

Code	Description
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

## **Data Type**

Code	Description
AD	Address
CD	Channel definition
CE	Coded element
CF	Coded element with formatted values
CK	Composite ID with check digit
CM	Composite
CN	Composite ID number and name
CNE	Coded with no exceptions

СР	Composite price	
CQ	Composite quantity with units	
CWE	Coded with exceptions	
CX	Extended composite ID with check digit	
DLN	Driver's license number	
DR	Date/time range	
DT	Date	
ED	Encapsulated data	
El	Entity identifier	
FC	Financial class	
FN	Family name	
FT	Formatted text	
HD	Hierarchic designator	
ID	Coded values for HL7 tables	
IS	Coded value for user-defined tables	
JCC	Job code/class	
MA	Multiplexed array	
MO	Money	
NA	Numeric array	
PL	Person location	
PN	Person name	
PPN	Performing person time stamp	
PT	Processing type	
QIP	Query input parameter list	
QSC	Query selection criteria	
RCD	Row column definition	
RI	Repeat interval	
RP	Reference pointer	
SAD	Street Address	
SCV	Scheduling class value pair	
SI	Sequence ID	
SN	Structured numeric	
SRT	Sort order	
ST	String	
TM	Time	
TN	Telephone number	
TQ	Timing/quantity	
TS	Time stamp	
TX	Text data	

VH	Visiting hours	
VID	Version identifier	
XAD	Extended address	
XCN	Extended composite ID number and name	
XON	Extended composite name & ID number for organizations	
XPN	Extended person name	
XTN	Extended telecommunications number	

# **Appendix B - Revision Notes**

Date of Revision	Version	Revision Description
03/31/2014	5.1	Updated for WTIS Release 17
04/18/2014	5.2	Pre-release version for Release 18, minor edits.
10/30/2014	5.3	<ul> <li>Updated What's New with new data elements which were omitted</li> <li>Corrected label for field SCH.22.</li> </ul>
11/24/2014	5.4	<ul> <li>Corrected segment ordering in Data Format table.</li> <li>Clarified optionality for the AIG segment.</li> <li>Corrected optionality of AIG.11.</li> <li>Clarified PID segment optionality.</li> <li>Added example showing update message used to add MRN</li> </ul>
12/03/2014	6.0	<ul> <li>Specifications updated to allow for DI Priority 1 submission in single ORU message.</li> <li>General clean-up.</li> <li>Prospective Data Submission date constraint diagram updated.</li> <li>Appointment Created Date and Time optionality updated to OBC.</li> <li>Updated the notes for OBR.4.</li> <li>Prospective ORU broken into two ORU messages. ORU complete and ORU Close.</li> </ul>
03/11/2015	6.1	<ul> <li>Corrected data type for ZWT.17.</li> <li>Moved RGS segment to its own line for S13 scenario Case 1 – Rescheduled.</li> <li>Corrected Retrospective Message Use Case Scenario sample message type to ORU^R01.</li> <li>Renamed DART Missed Surgery/Procedure to Missed Procedure/No Show. No change to HL7 code value.</li> <li>Added Rescheduled Reason and Procedure No Longer Required Reason, Missed Procedure/No Show.</li> <li>Renamed DART Pre-surgery/Procedure Instructions Not Followed to Pre-Procedure Instructions Not Followed. No change to HL7 code value.</li> <li>Renamed System Delay Reason and Procedure No Longer Required Reason of Lack of Hospital Resources to Lack of Facility Resources. No change to HL7 code value.</li> <li>Minor updated System Delay Reason and Procedure No Longer Required Reason of Pre-requisites Not Completed to Prerequisites Not Completed. No change to HL7 code value</li> <li>Minor updated Responsibility for Payment option of Provincial Government/OHIP to Provincial Government (OHIP)</li> <li>Added note v6.0 revision notes to correct omission of prospective ORU split into two messages.</li> <li>Updated Prospective Data Submission clinical scenarios table to indicate that the Actual</li> </ul>

		via ORU complete or close.
		· ·
		<ul> <li>Updated "10.3 Update a DI Waitlist Entry" to remove reference to Order Received not being editable.</li> </ul>
		Updated "10.6 Close a DI Waitlist Entry" to add note that Actual Service Start Date and Time and Actual Service Finish Date and Time are updatable
		<ul> <li>Updated "12. Prospective Data Submission WTIS HL7 Message Specification Details" to remove reference to Order Received not being editable.</li> </ul>
		<ul> <li>Updated data element definition OBR.7 and OBR.8 for both prospective and retrospective messages, to comply with clinical definition</li> </ul>
		<ul> <li>Updated OBR.7 and OBR.8 usage notes to indicate that Actual Service Start Date and Time and Actual Service Finish Date and Time are editable, as well as clarification on validation.</li> </ul>
		Updated prospective message ZWT.3 to indicate that Order Received can be updated.
		<ul> <li>Updated "13. Retrospective Data Submission WTIS HL7 Message Specification Details" to remove a point that referenced S12 and S14 messages.</li> </ul>
		Updated general use of Cancellation term to Procedure No Longer Required.
06/08/2015	6.2	Corrected optionality of estimated service duration in the S12 table in the 6.1 HL7     Message Summary for Key Data Elements section.
		<ul> <li>Retrospective ORU message field usage notes for OBR.4 corrected to not conflict with the cardinality of the field.</li> </ul>
02/18/2019		Updated Page 80 – Data Element Business logic change Appointment Created Date and Time. Change allows this field to be before or up to 1 day after the Scheduled Procedure date and time.
		<ul> <li>Updated Page 11 – Table identified MRN as a Mandatory element in S12 when it can be sent in S14.</li> </ul>
06/05/2019		Update specification to indicate that retrospective ORU^R01 message that currently can be used for DI P1 procedures, now can be used for DI P1 and DI P2 procedures
		Updated Prospective Data Submission date constraints diagram
		<ul> <li>Removed 'equal to' from difference between Scheduled/Rescheduled Procedure Date and Time and Order Received Date and Time</li> </ul>
		<ul> <li>Removed 'equal to' from difference between Actual Service Start Date and Time and Actual Service Finish Date and Time</li> </ul>
		Updated Retrospective Data Submission date constraints diagram to match the new format
		Updated the MRN field length from 12 to 60 characters
		- Spaced the Wild folight from 12 to 00 ordinations