

## Wait Time Information System (WTIS) Standard Surgery (OR) Specification

HL7 Interface		Revision Date
WTIS Supported Events		July 31, 2013 (v005.0)
Trigger Event	HL7 Description	WTIS Description
ORU^R01	Observation Message	Close Waitlist Entry

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## 1. Document Purpose

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The purpose of this document is to provide a detailed description of the interface messaging requirements to support Standard Surgery Integration for Surgical Waitlists. This document will also outline how the WTIS will interpret and process each unique message and the supported HL7 trigger events.

Expanded Definitions for Surgical Waitlist entries:

- **Decision to Treat Date** is also referred to as open waitlist entry or Start Time
- **Procedure Date** is also referred to as close waitlist entry, Stop Time or End Time
- **Procedure No Longer Required Date** is also referred to as close waitlist entry, Stop Time or End Time

## 2. Intended Audience

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

## 3. Procedure Mapping Information

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Procedure codes from a facility's Operating Room (OR) Application must be mapped to standardized WTIS surgery procedure codes. This requires the creation of a Procedure Map, which the facility must submit and maintain as procedures are updated or discontinued at the facility. To assist in this activity, the facility should refer to the Procedure Mapping information available on Access to Care Information Site.

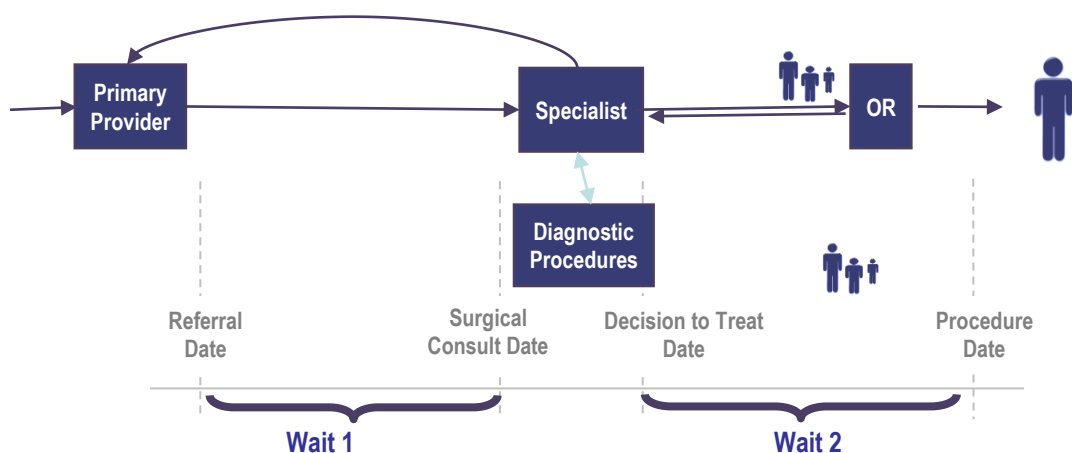
## 4. WTIS Integration Overview

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

**Referral Date**  $\longrightarrow$  **Surgical Consult Date**

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

**Decision to Treat Date**  $\longrightarrow$  **Procedure Date**



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

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

## 5. Minimum Facility Requirements for Standard Surgery Integration

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The following are the minimum technical requirements to determine if a facility is ready to implement Standard Surgery Integration. See Section 3 for more information.

***Note: All requirements must be met.***

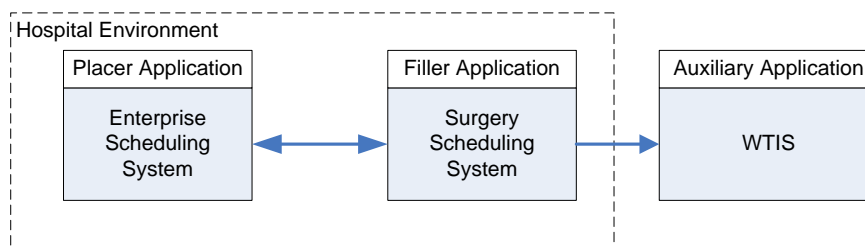
- Hospital must be able to send the HL7 message ORU^R01 to close each waitlist entry.
- Hospital must be able to send a unique Patient Identifier (MRN) for each patient within the ORU^R01 message. The MRN number used in the message **MUST** be the same as what is submitted to the EMPI.
- Hospital must be able to send a unique Case Number for each individual waitlist entry in the ORU^R01 message. Case Number must be unique across different service areas. This implies that a case number for Cataract cannot be repeated for Hip & Knee or Oncology. Please refer to segment OBR.2 and OBR.3 for more information.
- If patient address information (not a required field) is being sent in the ORU^R01 message then the facility must ensure that all data elements of the address field are populated with values which are acceptable to the WTIS. Please refer to PID.11 for more information.

## 6. Detail Description of WTIS Supported HL7 Trigger Event

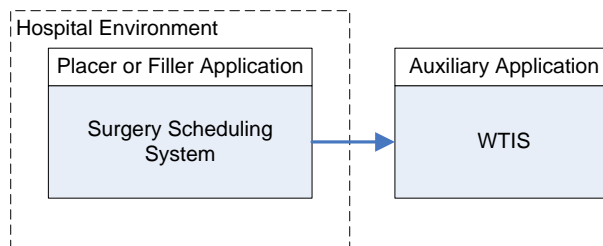
As an Auxiliary Application, WTIS will interpret the Observation HL7 trigger event to close an existing open waitlist entry. The supported trigger event is ORU^R01 Observation Message.

As an Auxiliary Application, the WTIS will passively collect information by receiving updates from a placer or filler application. The models below depict the possible relationships between facility systems and the WTIS. The difference between the two models is when an Enterprise Scheduling System is implemented at the facility site.

### MODEL ONE:



### MODEL TWO:



### WTIS Business Matching Algorithm

For Standard Surgery Integration, the waitlist entry is created or opened using the WTIS Graphical User Interface. The only interface message supported will be ORU^R01. When the WTIS receives the ORU^R01 message it will query the EMPI to identify the patient. Once the patient is identified, it will search internally and close the waitlist entry.

The unique Case number provided in the ORU^R01 message will be used to prevent the closing of other open entries.

## 7. Interpreting HL7 Trigger Events

As an Auxiliary Application, the WTIS will interpret the Observation HL7 Trigger Events as follows:

HL7 Trigger Event	WTIS Interpretation	Pre-requisite	Note
<b>ORU^R01</b> Observation Message	Close Wait List Entry	The waitlist entry is created or opened using the WTIS Graphical User Interface.	ORU^R01 will not create a surgical entry.

**Note:** If an open waitlist entry could not be found or a duplicate entry exists within the WTIS then the application would generate an error because it could not identify an open entry to close.

## 8. Event Flow and Required Fields

To understand the event process and field requirements, below are the event flow and mandatory field requirements:

### Open Waitlist Entry

For Standard Surgery Integration, the waitlist entry can only be opened using the WTIS Graphical User Interface. Only authorized users of the application are able to enter information into the WTIS.

### Changes to Wait List Entry

For Standard Surgery Integration, any changes to Wait List data are to be changed using the WTIS Graphical User Interface.

### Multi Code Matching

This functionality is specific to Standard Surgery Integration. As described above, the Wait List entry is created manually within the WTIS application. To close an entry, an ORU^R01 message will be sent from the facility surgery system to match the open entry in the WTIS. There is a possibility that one facility Surgery code could potentially map to one or more WTIS procedure codes. If this is the case, when the WTIS receives the procedure code in the ORU^R01 message, it will cycle through all the possible WTIS procedures to find the opened entry and close it. However, if more than one entry is found then the ORU^R01 message will error because the system will not be able to identify which of the open entries to close.

### Multi-Site Matching



For large facilities that have multiple sites (each with its own unique site ID), there is a multi-site matching feature available in the WTIS. This feature ensures that if a procedure is scheduled at one site but performed at another site (within the same facility) and the close entry HL7 message is sent from the second site, then the message will still be able to find the open entry and successfully close it.

When a close message is received from a site within a multi-site facility, the WTIS searches for the corresponding open entry for the site ID in the message header segment. If the entry is not found, then the WTIS will refer to the facility table to see if there are other related sites and if so, will search these other sites for the open entry. If the entry is found, it will be closed successfully by the WTIS.

### **Example HL7 Message for ORU^R01:**

#### **Patient with HCN**

```
MSH|^~\&|WTIS_REALTIME^^|9999|||200806201521||ORU^R01|2341|D^T|2.4  
PID|||654243142^^^4266^PI~544211099^^^CANON^HC||Bauer^Jack||19660501|M  
OBR|1|3000||HIPPROC|||20080704
```

#### **Patient with no HCN**

```
MSH|^~\&|WTIS_REALTIME^^|9999|||200806201521||ORU^R01|2341|D^T|2.4  
PID|||654243142^^^4266^PI~||Bauer^Jack||19660501|M  
OBR|1|3000||HIPPROC|||20080704
```

## 9. WTIS HL7 Specification – WTIS Field and Component Requirements

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### 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 that 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 20, 1951 is represented as 19511220.

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

## 9.4. Standard Data Values

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

## 9.5. Character Set Support

- The WTIS does not support the message delimiters identifier in the HL7 Standard to switch to alternative character sets within a message.
- The WTIS does not support the message delimiters as part of the data value contained in the HL7 message. For example, the description of a procedure cannot contain an ampersand (&) – “Hip & Knee”. The ampersand (&) will be treated as a delimiter and will alter the structure of the HL7 message and result in a message error.

## 9.6. Data Format

The following is the HL7 message structure for submitting observation messages to the WTIS:

<b>ORU^R01</b>
MSH PID OBR

## 9.7. 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 surrounded by square brackets. Repeatable segments, or groups of repeatable segments, are surrounded by curly braces. Each segment must be of a valid

type, and must appear in the expected sequence. Segments must also be contextually correct (e.g., a non-repeating segment must appear only once within a message) according to the message profile.

### Fields

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

## 9.8. Message Delimiters

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

## 9.9. MLLP

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

### Block Characters

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

These characters form a block in the following format:

**<SB>DDD<EB><CR>**

Where:

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

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

## 9.10. Acknowledgement Messages

The WTIS will send HL7 Acknowledgement Messages (positive and/or negative) back to the Sending Application

The Acknowledgement message has the following structure:

Segment	Description	Chapter
MSH	Message Header	2
MSA	Message Acknowledgement	2
[ ERR ]	Error	2

## 9.11. Network Model

The WTIS interface provides direct point-to-point communication between the External System and the WTIS. External Systems always initiate business transactions within the WTIS. The WTIS does not send unsolicited messages to External Systems.

## 9.12. Persistence of Information

When the WTIS receives a Wait List entry amendment to update an existing Wait List entry in the WTIS database, it will merge the existing Wait List entry information with the information in the message. If all applicable business rules and data integrity checks succeed, the WTIS will record the amended Wait List entry in the WTIS database. As a result, Wait List entry amendment messages need not specify the entire content of each Wait List entry; only the key identifiers must be specified (e.g., placer order number, filler order number).

## 9.13. Acknowledgement Mode

The WTIS supports the HL7 immediate, original acknowledgement mode.

## 9.14. Support for Special HL7 Protocols

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

### **HL7 Batch Protocol**

The WTIS supports HL7 Batch Protocol. External Systems may execute batch processes that extract and transmit WTIS information on a periodic basis. The WTIS supports the ability to receive a file of Wait List entry messages from an External System.

### **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.

## **9.15. Format Rules for Entity Identifiers**

### **Patient Identifier**

- Must be alphanumeric
- Must not contain any non-printable characters
- Must not contain any of the following characters: asterisk, percent sign, comma, single quotation mark, double quotation mark, or any of the HL7 delimiters as outlined in section 9.8

### **Patient Name**

- Patient last name must be provided, be alphanumeric, and have more than one character
- Patient first name must be provided, be alphanumeric, and be at least one character in length
- If a middle name is provided, it must be alphanumeric

### **Date of Birth**

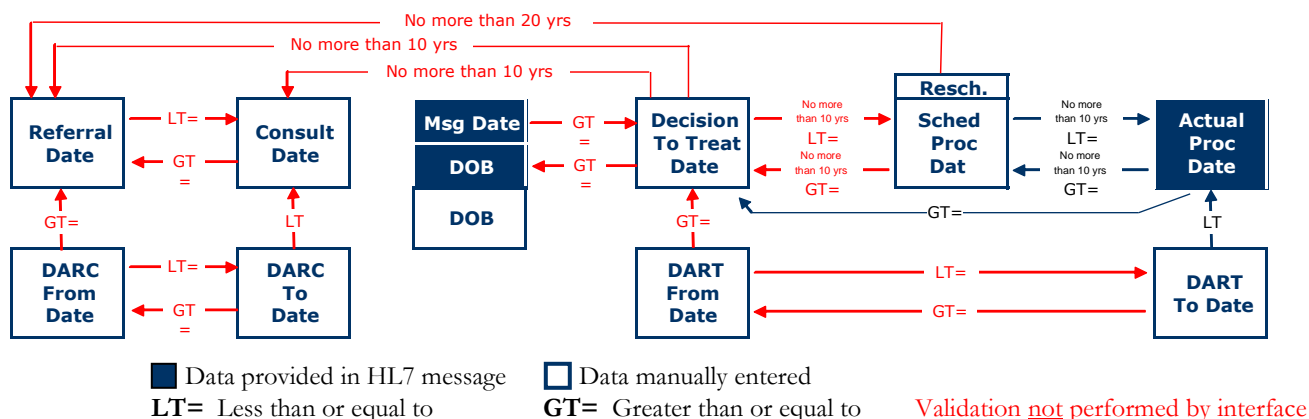
- Must be a valid date
- Cannot be future-dated
- Must be after 18500101

### **Facility Site Numbers**

In most cases, the WTIS uses the Ambulatory Care Number assigned by the MOHLTC. For sites where this number is not applicable, the WTIS uses another MOHLTC number (e.g., Critical Care Number, Acute Care Number). If you are unsure what site number to use, please contact us at [ATC@cancercare.on.ca](mailto:ATC@cancercare.on.ca).

## 9.16. 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 Message Failure Management (MFM) errors. Where possible, it is recommended that you configure your facility system(s) to comply with these business rules.



## 9.17. Attention

- All components highlighted in **Bold** and Underlined within each field are required.
- 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 9.8 – Message Delimiters for more details.
- Please ensure that all populated segment fields/components/subcomponents follow requirements defined within HL7 tables.
- “Entry” in the specification document refers to a waitlist entry in the WTIS system.
- Not all fields contained within the HL7 standard are listed in this specification. You may choose to include fields not used by the WTIS in your interface, or you may choose to strip off any trailing delimiters.



## 9.18. Segment Translations

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

For the R/O/C/Rep column, R denotes a required field, O denotes an optional field, C denotes a conditional field, and Rep denotes a repeating field.

For the Data Type column,

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

## 9.19. MSH (Message Header Segment)

Seq #	HL7 Name	Max Length	R/O/C/Rep	Item #	Date Type	WTIS Usage Notes
0	<u>Segment Name</u>	3	R		ST	Value must be 'MSH'.
1	<u>Field Separator</u>	1	R	00001	ST	Value must be ' '.
2	<u>Encoding Characters</u>	4	R	00002	ST	Value must be '^~\&'.
3	<u>Sending Application</u>	180	R	00003	HD	This is a <b>mandatory</b> field Value must be: <b>WTIS_REALTIME^^</b>
4	<u>Sending Facility</u>	180	R	00004	HD	This is a <b>mandatory</b> field. <b>Definition:</b> This is the site identifier where the procedure was performed. <b>Components:</b> <b>&lt;namespace ID (IS)&gt; ^ &lt;universal ID (ST)&gt; ^ &lt;universal ID type (ID)&gt;</b> <b>Example:</b> 4107^^
5	Receiving Application	180	O	00005	HD	Not supported. Please leave blank.
6	Receiving Facility	180	O	00006	HD	Not supported. Please leave blank.
7	<u>Date/Time Of Message</u>	26	R	00007	TS	This is a <b>mandatory</b> field. <b>Format:</b> <b>YYYYMMDDHHMM</b>
8	Security	40	O	00008	ST	Not supported. Please leave blank.

Seq #	HL7 Name	Max Length	R/O/C/ Rep	Item #	Date Type	WTIS Usage Notes
9	<u>Message Type</u>	13	R	00009	CM	<p>This is a <b>mandatory</b> field.</p> <p><b>Components:</b>  <u>&lt;Message Code (ID)&gt; ^ &lt;Trigger Event (ID)&gt; ^</u> &lt; Message Structure (ID)&gt;</p> <p><b>Note:</b>  The only trigger event accepted is ORU^R01</p>
10	<u>Message Control ID</u>	20	R	00010	ST	<p>This is a <b>mandatory</b> field.</p> <p><b>Definition:</b>  This field contains a number or other identifier that uniquely identifies the message. However, the WTIS uses another unique identifier in OBR.2/OBR.3 (Placer/Filler Appointment ID) to uniquely identify and process HL7 messages. A unique identifier is required in this field to satisfy HL7 requirements.</p> <p><b>Note:</b>  This identifier is returned with the ACK or NAK message and can be used to identify specific messages that were sent.</p>
11	<u>Processing ID</u>	3	R	00011	PT	<p>This is a <b>mandatory</b> field.</p> <p><b>Components:</b>  <u>&lt;processing ID (ID)&gt; ^ &lt;processing mode (ID)&gt;</u></p> <p><b>Accepted Values:</b>  For Testing, value must be <b>D^T</b>  For Production, value must be <b>P^T</b></p>
12	<u>Version ID</u>	60	R	00012	VID	<p>This is a <b>mandatory</b> field.</p> <p><b>Components:</b>  <u>&lt;version ID (ID)&gt; ^</u> &lt;internationalization code (CE)&gt; ^ &lt;internal version ID (CE)&gt;</p> <p><b>Accepted Value:</b>  Value must be <b>2.4</b></p>

## 9.20. PID (Patient Identification Segment)

Seq #	HL7 Name	Max Length	R/O/C/Rep	Item #	Date Type	WTIS Usage Notes
0	<u>Segment Name</u>	3	R		ST	Value must be 'PID'.
1	Set ID - PID	4	O	00104	SI	Not supported. Please leave blank.
2	Patient ID	20	O	00105	CX	Not supported. Please leave blank.
3	<u>Patient Identifier List</u>	250	R	00106	CX	<p>This is a <b>mandatory</b> field for SIU^S12 message.</p> <p>Two variables that are to be included in this field are:</p> <p>(1) MRN - Medical Record Number (<b>mandatory</b>)</p> <p>(2) HCN - Health Card Number (required, if available)</p> <p><b>Mandatory Sequence:</b></p> <p><b>MRN ~ HCN</b></p> <p><b>Components:</b></p> <p><u>&lt;ID (ST)&gt;</u> ^ &lt;check digit (ST)&gt; ^ &lt;code identifying the check digit scheme employed (ID)&gt; ^ &lt; assigning authority (HD)&gt; ^ <u>&lt;identifier type code (ID)&gt;</u> ^ &lt; assigning facility (HD) ^ &lt;effective date (DT)&gt; ^ &lt;expiration date (DT)&gt;</p> <p>Note: Full Descriptions are provided below</p> <p><b>(1) MRN - Medical Record Number</b></p> <p>Example: 123456^^4107^PI</p> <p>'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 facility/site. <b>Note: Inclusion of PI code is mandatory.</b></p> <p><b>(2) HCN - Health Card Number</b></p> <p>Example: 99999999^^CANON^HC</p> <p>'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. <b>Note: Inclusion of HC code is</b></p>

Seq #	HL7 Name	Max Length	R/O/C/ Rep	Item #	Date Type	WTIS Usage Notes																																								
						<p><b>mandatory</b> when sending HCN.</p> <p>The following are the accepted values for Health Card Assigning Authority (note: values based on HL7 v2.4):</p> <p><b>Note: For any Assigning Authority values not found below, the Health Card number is not to be submitted to WTIS</b></p> <table><tr><td><b>AUSDVA</b></td><td>Australia – Dept. of Veterans Affairs</td><td><b>CANON</b></td><td>Ontario</td></tr><tr><td><b>AUSHIC</b></td><td>Australia – Health Insurance Commission</td><td><b>CANPE</b></td><td>Prince Edward Island</td></tr><tr><td><b>CANAB</b></td><td>Alberta</td><td><b>CANQC</b></td><td>Quebec</td></tr><tr><td><b>CANBC</b></td><td>British Columbia</td><td><b>CANSK</b></td><td>Saskatchewan</td></tr><tr><td><b>CANMB</b></td><td>Manitoba</td><td><b>CANYT</b></td><td>Yukon Territories</td></tr><tr><td><b>CANNB</b></td><td>New Brunswick</td><td><b>NLVWS</b></td><td>NL Ministerie van Volksgezondheid</td></tr><tr><td><b>CANNF</b></td><td>Newfoundland</td><td><b>USCDC</b></td><td>US Center for Disease Control</td></tr><tr><td><b>CANNS</b></td><td>Nova Scotia</td><td><b>USHCFA</b></td><td>US Health Care Finance Authority</td></tr><tr><td><b>CANNT</b></td><td>Northwest Territories</td><td><b>USSSA</b></td><td>US Social Security Administration</td></tr><tr><td><b>CANNU</b></td><td>Nunavut</td><td></td><td></td></tr></table> <p><b>Example:</b></p> <p>Both MRN and HCN are available:</p> <p>123456^^^4107^PI~999999999^^^CANON^HC</p> <p>Only MRN is available:</p> <p>123456^^^4107^PI~</p> <p><b>Maximum Length:</b></p> <p>The field length for MRN must be between 1 and 12 characters, according to EMPI specific configuration.</p> <p>The field length for HCN must be between 8 and 15 characters according to EMPI specific configuration.</p> <p><b>Notes:</b></p> <p>The MRN or HCN must not include any embedded spaces.</p> <p>For facilities with existing EMPI interfaces, the data contained in this field should be the same as the data contained in the PID.3 field in the EMPI interface.</p>	<b>AUSDVA</b>	Australia – Dept. of Veterans Affairs	<b>CANON</b>	Ontario	<b>AUSHIC</b>	Australia – Health Insurance Commission	<b>CANPE</b>	Prince Edward Island	<b>CANAB</b>	Alberta	<b>CANQC</b>	Quebec	<b>CANBC</b>	British Columbia	<b>CANSK</b>	Saskatchewan	<b>CANMB</b>	Manitoba	<b>CANYT</b>	Yukon Territories	<b>CANNB</b>	New Brunswick	<b>NLVWS</b>	NL Ministerie van Volksgezondheid	<b>CANNF</b>	Newfoundland	<b>USCDC</b>	US Center for Disease Control	<b>CANNS</b>	Nova Scotia	<b>USHCFA</b>	US Health Care Finance Authority	<b>CANNT</b>	Northwest Territories	<b>USSSA</b>	US Social Security Administration	<b>CANNU</b>	Nunavut		
<b>AUSDVA</b>	Australia – Dept. of Veterans Affairs	<b>CANON</b>	Ontario																																											
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<b>CANNT</b>	Northwest Territories	<b>USSSA</b>	US Social Security Administration																																											
<b>CANNU</b>	Nunavut																																													
4	Alternate Patient ID - PID	20	O	00107	CX	Not supported. Please leave blank.																																								
5	<u>Patient Name</u>	250	R	00108	XP	<p>This is a <b>mandatory</b> field according to HL7.</p> <p>Variables that are to be included in this field are:</p>																																								

Seq #	HL7 Name	Max Length	R/O/C/ Rep	Item #	Date Type	WTIS Usage Notes
						<p>(1) Family Name (<b>mandatory</b>)</p> <p>(2) Given Name (<b>mandatory</b>)</p> <p>(3) Second or Further Given Name or Initials Thereof (optional)</p> <p>(4) Prefix (optional)</p> <p><b>Components:</b></p> <p><u>&lt;family name (FN)&gt;</u> ^ <u>&lt;given name (ST)&gt;</u> ^ &lt;second and further given names or initials thereof (ST)&gt; ^ <u>&lt;suffix (e.g., JR or III) (ST)&gt;</u> ^ <u>&lt;prefix (e.g., DR) (ST)&gt;</u> ^ <u>&lt;degree (e.g., MD) (IS)&gt;</u> ^ <u>&lt;name type code (ID) &gt;</u> ^ <u>&lt;name representation code (ID)&gt;</u> ^ <u>&lt;name context (CE)&gt;</u> ^ <u>&lt;name validity range (DR)&gt;</u> ^ <u>&lt;name assembly order (ID)&gt;</u></p> <p><b>Maximum Length:</b></p> <p>The maximum length for the Family Name is 75 characters.</p> <p>The maximum length for the Given Name is 30 characters.</p> <p>The maximum length for the Second or Further Given Name is 30 characters.</p> <p>The maximum length for the Prefix is 10 characters.</p> <p><b>Note:</b></p> <p>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 facility's registration system.</p> <p>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.</p>
6	Mother's Maiden Name	250	O/Rep	00109	XPN	Not supported. Please leave blank.
7	<b><u>Date/Time of Birth</u></b>	26	R	00110	TS	<p>This is a <b>mandatory</b> field according to HL7.</p> <p><b>Format:</b></p> <p><b><u>YYYYMMDD</u></b> (Note: Do not include time)</p> <ul style="list-style-type: none"> <li>Cannot be future-dated</li> <li>Must be after 18500101.</li> </ul> <p><b>Maximum Length:</b></p> <p>The maximum length for this field is 19 characters. Note: This length was set to</p>

Seq #	HL7 Name	Max Length	R/O/C/ Rep	Item #	Date Type	WTIS Usage Notes
						<p>match the supported field length in EMPI.</p> <p><b>Note:</b></p> <p>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 facility's registration system.</p> <p>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.</p>

## 9.21. OBR (Observation Request Segment)

Seq #	HL7 Name	Max Length	R/O/C/ Rep	Item #	Date Type	WTIS Usage Notes
0	<u>Segment Name</u>	3	R		ST	Value must be 'OBR'.
1	Set ID - OBR	4	O	00237	SI	<p><b>Definition:</b></p> <p>For the first order transmitted, the sequence number shall be <b>1</b>; for the second order it shall be <b>2</b>; and so on.</p>

Seq #	HL7 Name	Max Length	R/O/C/ Rep	Item #	Date Type	WTIS Usage Notes
2	<u>Placer Order Number</u>	22	C	00216	EI	<p><b>Definition:</b> This field contains the placer application's permanent identifier. The value in this field must be unique for each individual Wait List entry (i.e., the unique Case Number).</p> <p><b>Condition:</b> If the Filler Order Number (OBR^3) is not used to send the Unique Wait List Entry then this field is <b>mandatory</b>.</p> <p><b>Description:</b> This field identifies the unique Wait List Entry that is 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 Wait List Entry. This will be configured and set during implementation. The value provided in this field will be used for validation and control purposes; to prevent the same ORU^R01 from closing other similar entries. Case Numbers must be unique across service areas (e.g., a Case Number for Oncology cannot be repeated for Cataract or Hip &amp; Knee).</p> <p><b>Components:</b> <u>&lt;Entity Identifier (ST)&gt;</u>^&lt;namespace ID(IS)&gt;^&lt;Universal ID&gt;^</p>
3	Filler Order Number	22	C	00217	EI	<p><b>Definition:</b> This field contains the filler application's permanent identifier. The value in this field must be unique for each individual Wait List entry (i.e., the unique Case Number).</p> <p><b>Condition:</b> If the Placer Order Number (OBR^3) is not used to send the Unique Wait List Entry then this field is <b>mandatory</b>.</p> <p><b>Description:</b> This field identifies the unique Wait List Entry that is to be processed within the WTIS. If the Placer Order Number field 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 Wait List Entry. This will be configured and set during implementation.</p>



Seq #	HL7 Name	Max Length	R/O/C/ Rep	Item #	Date Type	WTIS Usage Notes
						<p>The value provided in this field will be used for validation and control purposes; to prevent the same ORU^R01 from closing other similar entries.</p> <p>Case Numbers must be unique across service areas (e.g., a Case Number for Oncology cannot be repeated for Cataract or Hip &amp; Knee).</p> <p><b>Components:</b>  <u>&lt;Entity Identifier (ST)&gt;</u> ^ &lt;namespace ID (IS)&gt; ^ &lt;Universal ID&gt; ^</p>
4	<u>Universal Service Identifier</u>	250	R	00238	CE	<p>According to HL7 standard, this field is <b>mandatory</b>. The procedure code provided in this field is the facility's procedure code and, using the facility's procedure map, it will be used to match against the open Wait List entry in the WTIS. If an open entry cannot be found in the WTIS (because the facility procedure code cannot be found on the procedure map) then the message will generate an error.</p> <p><b>Components:</b>  <u>&lt;Entity Identifier (ST)&gt;</u> ^ &lt;Namespace ID (IS)&gt; ^ &lt;Universal ID (ST)&gt; ^ &lt;Universal ID Type (ID)&gt;</p>
5	Priority - OBR	2	O	00239	ID	Not supported. Please leave blank.
6	Requested Date/Time	26	O	00240	TS	Not supported. Please leave blank.
7	<u>Observation Date/Time</u>	26	R	00241	TS	<p>This is a <b>mandatory</b> field for ORU^R01.</p> <p><b>Definition:</b>  This field identifies the procedure date when the surgery was completed → Stop Time</p> <p><b>Format:</b>  <u>YYYYMMDD</u> (Note: Do not include time)</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>The value in this field must be greater than the minimum date (18500101)</li> <li>The value must be greater than or equal to the Decision to Treat Date.</li> </ul>

## 10. Revision Notes

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Date of Revision	Revision Description
13-Jun-2006	Updated on WTIS version 6.0 <ul style="list-style-type: none"> <li>clarification on message structure and patient mandatory fields</li> </ul>
30-Nov-2006	Updated on WTIS version 6.2 <ul style="list-style-type: none"> <li>minor formatting changes</li> <li>clarification on segment elements based on feedback from Phase II hospitals</li> </ul>
17-Aug-2007	Updated on WTIS version 10.0 <ul style="list-style-type: none"> <li>minor formatting changes</li> </ul>
14-July-2008	Updated on WTIS version 11.3 <ul style="list-style-type: none"> <li>minor formatting changes</li> <li>clarification on segment elements based on feedback from recent hospital integration migrations</li> <li>corrected maximum field lengths for various fields (to align with HL7 Standard, version 2.4)</li> <li>added date constraints summary</li> </ul>
10-March-2009	Revised Document Structure* <ul style="list-style-type: none"> <li>added Document Purpose Section</li> <li>added Intended Audience Section</li> </ul> <i>* The specifications have not changed since the last version</i>
4-Jun-2010	Revised Document Structure* <i>* The specifications have not changed since the last version</i>
31-Jul-2013	Revised Document Structure* <ul style="list-style-type: none"> <li>removed references to WebEx and replaced with Access to Care Information Site</li> <li>added Wait 1 details for WTIS Integration Overview</li> <li>minor formatting changes</li> <li>added Procedure Mapping information Section</li> </ul> <i>* The specifications have not changed since the last version</i>

## Appendix B – HL7 Summary

The following table provides a brief summary of the segments and fields required in the WTIS Standard Surgery (OR) interface (ORU^R01 message), and is a helpful guide when developing your interface or troubleshooting messages during testing.

<b>R</b> = Required <b>O</b> = Optional <b>C</b> = Conditional		<b>M</b> = Mandatory <b>MNU</b> = Mandatory but not used		<b>ORU</b> = MSH, PID, OBR <b>PID</b> = MRN, HCN, Patient Name, DOB <b>OBR</b> = Case #, Hospital Procedure Code, Procedure Date	
				Expected Content	Comments
MSH	0	Segment ID	R M	MSH	
	1	Field Separator	R M		
	2	Encoding Characters	R M	^~\&	
	3	Sending Application	R M	WTIS_REALTIME	
	4	Sending Facility	R M	<b>SITE #</b>	Must be site where surgery was performed
	7	Date/Time of Message	R M		
	9	Message Type	R M	ORU^R01	
	10	Message Control ID	R MNU		
PID	11	Processing ID	R M		<b>D^T</b> (for Testing) . . . OR . . . <b>P^T</b> (for Production)
	12	Version ID	R M	2.4	
	0	Segment Name	R M	PID	
	3	Patient Identifier List	R M	<b>MRN + HCN</b>	<b>HCN</b> (Required if available)
OBR	5	Patient Name	R M	<b>PATIENT NAME</b>	Family Name + Given Name
	7	Date/Time of Birth	R M	<b>DOB</b>	Not future dated; after 18500101
	0	Segment Name	R M	OBR	
	1	Set ID - OBR	O M	1	
	2	Placer Order Number	C M	<b>CASE # . . . OR</b>	Either OBR.2 or OBR.3 must include the Case #, not both. This must not vary for messages from the same system.
	3	Filler Order Number	C M	<b>CASE #</b>	
	4	Universal Service Identifier	R MNU	<b>HOSP PROCEDURE CODE</b>	Enter Hospital Procedure Code; used to match against open entry in WTIS.
	7	Observation Date/Time #	R M	<b>PROCEDURE DATE</b>	Enter actual procedure date