

Technical HL7 Conformance Profile  
**ENTERPRISE IMAGING  
OUTBOUND ORU\_R01  
- FORMATTED TEXT**

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Message Profile

## Conformance parameters

### Message Profile

- HL7 Version: 2.4
- Profile Type: HL7

### Encoding Method

ER7

## Interaction 1

### Dynamic Definition

- Accept Acknowledgement: NE
- Application Acknowledgement: AL
- Acknowledgement Mode: Deferred

### Static Definition

- Message Type: ORU
- Trigger Event: R01
- Message Structure: ORU\_R01

### Message structure

MSH { [ PID [PD1] [PV1] ] { [ORC] OBR [NTE] [ZDS] {[DG1]} [{ Segment that repeats for every report and addenda OBX }] } }

### MSH - Message Header

- Usage: Required
- Cardinality:1..1

| Seq. | Name                  | Opt. | Card. | Type   | Table   | Contents                 |
|------|-----------------------|------|-------|--------|---------|--------------------------|
| 1    | Field Separator       | R    | 1..1  | ST     |         |                          |
| 2    | Encoding Characters   | R    | 1..1  | ST     |         |                          |
| 3    | Sending Application   | R    | 1..1  | HD     | HL70361 |                          |
| 3.1  | namespace ID          | R    | 1..1  | IS     | HL70363 |                          |
| 4    | Sending Facility      | R    | 1..1  | HD     | HL70362 |                          |
| 4.1  | namespace ID          | R    | 1..1  | IS     | HL70363 |                          |
| 5    | Receiving Application | R    | 1..1  | HD     | HL70361 |                          |
| 5.1  | namespace ID          | R    | 1..1  | IS     | HL70363 |                          |
| 6    | Receiving Facility    | R    | 1..1  | HD     | HL70362 |                          |
| 6.1  | namespace ID          | R    | 1..1  | IS     | HL70363 |                          |
| 7    | Date/Time Of Message  | R    | 1..1  | TS     |         |                          |
| 7.1  | Date/Time             | R    | 1..1  | NM     |         | e.g. 20040328134602+0600 |
| 8    | Security              | O    | 0..1  | ST     |         |                          |
| 9    | Message Type          | R    | 1..1  | CM_MSG | HL70076 |                          |
| 9.1  | message type          | R    | 1..1  | ID     | HL70076 |                          |
| 9.2  | trigger event         | R    | 1..1  | ID     | HL70003 |                          |
| 9.3  | message structure     | O    | 0..   | ID     | HL70354 |                          |
| 10   | Message Control ID    | R    | 1..1  | ST     |         |                          |
| 11   | Processing ID         | R    | 1..1  | PT     |         |                          |
| 11.1 | processing ID         | R    | 1..1  | ID     | HL70103 |                          |
| 12   | Version ID            | R    | 1..1  | VID    | HL70104 |                          |
| 12.1 | version ID            | R    | 1..1  | ID     | HL70104 |                          |

**1. Field Separator****2. Encoding Characters****3. Sending Application****3.1. namespace ID**

AGFA\_PACS

**4. Sending Facility****4.1. namespace ID**

AGFA

**5. Receiving Application****5.1. namespace ID**

Application defined in External device to which the message is being sent.

**6. Receiving Facility****6.1. namespace ID**

Facility defined in External device to which the message is being sent.

**7. Date/Time Of Message****7.1. Date/Time**

If Enterprise Imaging is configured to send timezone information, datetime format  
YYYYMMDD[HHHMM[SS]][+ZZZZ] is used else YYYYMMDD[HHHMM[SS]] is used

**8. Security****9. Message Type****9.1. message type**

ORU

**9.2. trigger event**

R01

**9.3. message structure**

ORU\_R01

## 10. Message Control ID

## 11. Processing ID

## 12. Version ID

### 12.1. version ID

Default: v2.4. supported versions (pipeline property, HL7 version): 2.3.1 - 2.4 - 2.5

## Segment group: PATIENT RESULT

- Usage: Required
- Cardinality:1..\*

## Segment group: PATIENT

- Usage: Optional
- Cardinality:0..1

## PID - Patient identification

- Usage: Required
- Cardinality:1..1

| Seq.  | Name                                               | Opt. | Card. | Type | Table   | Contents      |
|-------|----------------------------------------------------|------|-------|------|---------|---------------|
| 3     | Patient Identifier List                            | R    | 1..*  | CX   |         |               |
| 3.1   | ID                                                 | R    | 1..1  | ST   |         |               |
| 3.4   | assigning authority                                | R    | 1..1  | HD   |         |               |
| 3.4.1 | namespace ID                                       | R    | 1..1  | IS   | HL70363 |               |
| 3.4.2 | universal ID                                       | O    | 0..   | ST   |         |               |
| 3.4.3 | universal ID type                                  | O    | 0..   | ID   | HL70301 |               |
| 3.5   | identifier type code (ID)                          | R    | 1..1  | ID   | HL70203 |               |
| 5     | Patient Name                                       | R    | 1..*  | XP   |         |               |
| 5.1   | family name                                        | R    | 1..1  | FN   |         |               |
| 5.1.1 | surname                                            | R    | 1..1  | ST   |         |               |
| 5.1.2 | own surname prefix                                 | O    | 0..   | ST   |         |               |
| 5.2   | given name                                         | R    | 1..1  | ST   |         |               |
| 5.3   | second and further given names or initials thereof | O    | 0..   | ST   |         |               |
| 5.4   | suffix (e.g., JR or III)                           | O    | 0..   | ST   |         |               |
| 5.5   | prefix (e.g., DR)                                  | O    | 0..   | ST   |         |               |
| 5.7   | name type code                                     | O    | 0..   | ID   | HL70200 |               |
| 5.8   | Name Representation code                           | O    | 0..   | ID   | HL70465 |               |
| 7     | Date/Time Of Birth                                 | O    | 0..1  | TS   |         |               |
| 7.1   | Date/Time                                          | R    | 1..1  | NM   |         | e.g. 20040328 |

| Seq.    | Name                                  | Opt. | Card. | Type | Table   | Contents                      |
|---------|---------------------------------------|------|-------|------|---------|-------------------------------|
| 8       | Administrative Sex                    | R    | 1..1  | IS   | HL70001 |                               |
| 11      | Patient Address                       | O    | 0..*  | XAD  |         |                               |
| 11.1    | street address (SAD)                  | O    | 0..   | SAD  |         |                               |
| 11.1.1  | street or mailing address             | O    | 0..   | ST   |         |                               |
| 11.1.2  | street name                           | O    | 0..   | ST   |         |                               |
| 11.1.3  | dwelling number                       | O    | 0..   | ST   |         |                               |
| 11.2    | other designation                     | O    | 0..   | ST   |         |                               |
| 11.3    | city                                  | O    | 0..   | ST   |         |                               |
| 11.4    | state or province                     | O    | 0..   | ST   |         |                               |
| 11.5    | zip or postal code                    | O    | 0..   | ST   |         |                               |
| 11.6    | country                               | O    | 0..   | ID   |         |                               |
| 11.7    | address type                          | O    | 0..   | ID   | HL70190 |                               |
| 11.8    | other geographic designation          | O    | 0..   | ST   |         |                               |
| 11.9    | county/parish code                    | O    | 0..   | IS   |         |                               |
| 11.12   | address validity range                | O    | 0..   | DR   |         |                               |
| 11.12.1 | range start date/time                 | O    | 0..   | TS   |         |                               |
| 11.12.2 | range end date/time                   | O    | 0..   | TS   |         |                               |
| 13      | Phone Number - Home                   | O    | 0..*  | XTN  |         |                               |
| 13.1    | Telephone Number                      | C    | 0..   | TN   |         |                               |
| 13.2    | telecommunication use code            | R    | 1..1  | ID   | HL70201 |                               |
| 13.3    | telecommunication equipment type (ID) | R    | 1..1  | ID   | HL70202 |                               |
| 13.4    | Email address                         | O    | 0..   | ST   |         |                               |
| 14      | Phone Number - Business               | O    | 0..*  | XTN  |         |                               |
| 14.1    | Telephone Number                      | C    | 0..   | TN   |         |                               |
| 14.2    | telecommunication use code            | R    | 1..1  | ID   | HL70201 |                               |
| 14.3    | telecommunication equipment type (ID) | R    | 1..1  | ID   | HL70202 |                               |
| 14.4    | Email address                         | O    | 0..   | ST   |         |                               |
| 19      | SSN Number - Patient                  | O    | 0..1  | ST   |         |                               |
| 29      | Patient Death Date and Time           | O    | 0..1  | TS   |         |                               |
| 29.1    | Date/Time                             | O    | 0..   | NM   |         | e.g. 20040328134602.1234+0600 |
| 30      | Patient Death Indicator               | O    | 0..1  | ID   | HL70136 |                               |

### 3. Patient Identifier List

#### 3.1. ID

Identification number or code for the patient.

#### 3.4. assigning authority

The "Assigning authority" aka "Issuer of Patient ID" can consist of the following three parts:

- Namespace ID // Issuer of Patient ID
- Universal ID // Universal Entity ID
- Universal ID Type // Universal Entity ID Type

Namespace ID, or combination of Universal ID and Universal ID Type, unique define the issuer.  
When no Universal ID is available in EI, only the Namespace ID is sent in PID-3.4

#### **3.4.1. namespace ID**

Identifier, if present in EI, of the Assigning Authority that issued the patient id.

If only the internal assigning authority (\_NOAA or \_CON) is available in EI, then namespace is not sent out.

#### **3.4.2. universal ID**

Universal Identifier of the Assigning Authority that issued the patient id.

Only send out if available in EI.

#### **3.4.3. universal ID type**

Universal Identifier type, always ISO, of the Universal Identifier if present in EI

Only send out if Universal Identifier is available in EI.

#### **3.5. identifier type code (ID)**

Supported values:

- PI = Patient Identifier,
- SS = Social Security number

### **5. Patient Name**

#### **5.1.1. surname**

Patient

#### **5.2. given name**

Patient

#### **5.3. second and further given names or initials thereof**

Patient

#### **5.4. suffix (e.g., JR or III)**

Patient

#### **5.5. prefix (e.g., DR)**

Patient

#### **5.7. name type code**

Values used:

- Empty when fields specify patient name.
- M when fields specify patient maiden name

**5.8. Name Representation code**

Values used:

- A = Alphabetic name specified
- I = Ideographic name specified
- P = Phonetic name specified

**7. Date/Time Of Birth****7.1. Date/Time**

YYYYMMDD

**8. Administrative Sex**

Values used:

- M = Male
- F = Female
- U = Unknown

**11. Patient Address****11.1.1. street or mailing address**

communication\_channel.Street (if communication\_channel.Streetnr is empty)

**11.1.2. street name**

communication\_channel.Street (if communication\_channel.Streetnr is not empty)

**11.1.3. dwelling number**

communication\_channel.Streetnr

**11.2. other designation**

communication\_channel.Address\_Line1

**11.3. city**

municipality.name

**11.4. state or province**

communication\_channel.Address\_Line3

**11.5. zip or postal code**

municipality.zip

**11.6. country**

communication\_channel.country

**11.7. address type**

communication\_channel.communication\_type (H - for home address / O - for office address)

**11.8. other geographic designation**

communication\_channel.Address\_Line2

### **11.9. county/parish code**

communication\_channel.Address\_Line4

#### **11.12.1. range start date/time**

Effective date from which address is valid.

#### **11.12.2. range end date/time**

Expiration date of validity off the address.

### **13. Phone Number - Home**

#### **13.1. Telephone Number**

Filled in case of telephone number/fax number/cellular number.

#### **13.2. telecommunication use code**

Values used:

- PRN = Primary Residence Number
- WPN = Work Number
- NET = Network (email) Address

#### **13.3. telecommunication equipment type (ID)**

Values used:

- PH = Telephone
- FX = Fax
- CP = Cellular Phone
- Internet = Internet Address

#### **13.4. Email address**

Filled in case of Network Email Address.

### **14. Phone Number - Business**

#### **14.1. Telephone Number**

Filled in case of telephone number/fax number/cellular number.

#### **14.2. telecommunication use code**

Values used:

- PRN = Primary Residence Number
- WPN = Work Number
- NET = Network (email) Address

#### **14.3. telecommunication equipment type (ID)**

Values used:

- PH = Telephone

- FX =Fax
- CP = Cellular Phone
- Internet = Internet Address

#### 14.4. Email address

Filled in case of Network Email Address.

#### 19. SSN Number - Patient

Social security number of the patient.

#### 29. Patient Death Date and Time

##### 29.1. Date/Time

YYYYMMDD[HHMM[SS[.SSSS]]][+-ZZZZ]

#### 30. Patient Death Indicator

Values used:

- 1 patient deceased
- 0 patient still alive

### PD1 - Patient Additional Demographic

- Usage: Optional
- Cardinality:0..1

| Seq.  | Name                                        | Opt. | Card. | Type | Table   | Contents |
|-------|---------------------------------------------|------|-------|------|---------|----------|
| 4     | Patient Primary Care Provider Name & ID No. | O    | 0..1  | XCN  |         |          |
| 4.1   | ID number (ST)                              | O    | 0..   | ST   |         |          |
| 4.2   | family name                                 | O    | 0..   | FN   |         |          |
| 4.2.1 | surname                                     | O    | 0..   | ST   |         |          |
| 4.3   | given name                                  | O    | 0..   | ST   |         |          |
| 4.9   | assigning authority                         | O    | 0..   | HD   |         |          |
| 4.9.1 | namespace ID                                | O    | 0..   | IS   | HL70363 |          |

#### 4. Patient Primary Care Provider Name & ID No.

##### 4.1. ID number (ST)

Primary Care Physician code.

##### 4.2. family name

Physician Family Name

##### 4.3. given name

Physician Given Name

#### 4.9. assigning authority

Assigning authority that issued the physicians code.

### **Segment group: VISIT**

- Usage: Required
- Cardinality:1..1

#### **PV1 - Patient visit**

- Usage: Optional
- Cardinality:0..1

| Seq.  | Name                                               | Opt. | Card. | Type | Table   | Contents |
|-------|----------------------------------------------------|------|-------|------|---------|----------|
| 1     | Set ID - PV1                                       | O    | 0..1  | SI   |         |          |
| 2     | Patient Class                                      | R    | 1..1  | IS   | HL70004 |          |
| 3     | Assigned Patient Location                          | O    | 0..1  | PL   |         |          |
| 3.1   | point of care                                      | O    | 0..   | IS   | HL70302 |          |
| 3.2   | room                                               | O    | 0..   | IS   | HL70303 |          |
| 3.3   | bed                                                | O    | 0..   | IS   | HL70304 |          |
| 3.4   | facility (HD)                                      | O    | 0..   | HD   |         |          |
| 3.4.1 | namespace ID                                       | O    | 0..   | IS   | HL70363 |          |
| 4     | Admission Type                                     | O    | 0..1  | IS   | HL70007 |          |
| 7     | Attending Doctor                                   | O    | 0..*  | XCN  | HL70010 |          |
| 7.1   | ID number (ST)                                     | O    | 0..   | ST   |         |          |
| 7.2   | family name                                        | O    | 0..   | FN   |         |          |
| 7.2.1 | surname                                            | O    | 0..   | ST   |         |          |
| 7.3   | given name                                         | O    | 0..   | ST   |         |          |
| 7.4   | second and further given names or initials thereof | O    | 0..   | ST   |         |          |
| 7.5   | suffix (e.g., JR or III)                           | O    | 0..   | ST   |         |          |
| 7.6   | prefix (e.g., DR)                                  | O    | 0..   | ST   |         |          |
| 7.9   | assigning authority                                | O    | 0..   | HD   |         |          |
| 7.9.1 | namespace ID                                       | O    | 0..   | IS   | HL70363 |          |
| 8     | Referring Doctor                                   | O    | 0..*  | XCN  | HL70010 |          |
| 8.1   | ID number (ST)                                     | O    | 0..   | ST   |         |          |
| 8.2   | family name                                        | O    | 0..   | FN   |         |          |
| 8.2.1 | surname                                            | O    | 0..   | ST   |         |          |
| 8.3   | given name                                         | O    | 0..   | ST   |         |          |
| 8.4   | second and further given names or initials thereof | O    | 0..   | ST   |         |          |
| 8.5   | suffix (e.g., JR or III)                           | O    | 0..   | ST   |         |          |

| Seq.   | Name                                               | Opt. | Card. | Type | Table   | Contents                      |
|--------|----------------------------------------------------|------|-------|------|---------|-------------------------------|
| 8.6    | prefix (e.g., DR)                                  | O    | 0..   | ST   |         |                               |
| 8.9    | assigning authority                                | O    | 0..   | HD   |         |                               |
| 8.9.1  | namespace ID                                       | O    | 0..   | IS   | HL70363 |                               |
| 15     | Ambulatory Status                                  | O    | 0..*  | IS   | HL70009 |                               |
| 16     | VIP Indicator                                      | O    | 0..1  | IS   | HL70099 |                               |
| 17     | Admitting Doctor                                   | O    | 0..*  | XCN  | HL70010 |                               |
| 17.1   | ID number (ST)                                     | O    | 0..   | ST   |         |                               |
| 17.2   | family name                                        | O    | 0..   | FN   |         |                               |
| 17.2.1 | surname                                            | O    | 0..   | ST   |         |                               |
| 17.3   | given name                                         | O    | 0..   | ST   |         |                               |
| 17.4   | second and further given names or initials thereof | O    | 0..   | ST   |         |                               |
| 17.5   | suffix (e.g., JR or III)                           | O    | 0..   | ST   |         |                               |
| 17.6   | prefix (e.g., DR)                                  | O    | 0..   | ST   |         |                               |
| 17.9   | assigning authority                                | O    | 0..   | HD   |         |                               |
| 17.9.1 | namespace ID                                       | O    | 0..   | IS   | HL70363 |                               |
| 18     | Patient Type                                       | O    | 0..1  | IS   | HL70018 |                               |
| 19     | Visit Number                                       | R    | 1..1  | CX   |         |                               |
| 19.1   | ID                                                 | R    | 1..1  | ST   |         |                               |
| 19.4   | assigning authority                                | O    | 0..   | HD   |         |                               |
| 19.4.1 | namespace ID                                       | O    | 0..   | IS   | HL70363 |                               |
| 44     | Admit Date/Time                                    | O    | 0..1  | TS   |         |                               |
| 44.1   | Date/Time                                          | O    | 0..   | NM   |         | e.g. 20040328134602.1234+0600 |
| 45     | Discharge Date/Time                                | O    | 0..*  | TS   |         |                               |
| 45.1   | Date/Time                                          | O    | 0..   | NM   |         | e.g. 20040328134602.1234+0600 |

## 1. Set ID - PV1

## 2. Patient Class

## 3. Assigned Patient Location

## 4. Admission Type

## 7. Attending Doctor

### 7.1. ID number (ST)

physician identifier.

#### 7.2.1. surname

Family name of the physician.

**7.3. given name**

Given name of the physician.

**7.4. second and further given names or initials thereof**

Middle name of the physician.

**7.5. suffix (e.g., JR or III)**

Name suffix, like SR

**7.6. prefix (e.g., DR)**

Name prefix, like Dr

**7.9. assigning authority**

Assigning Authority of attending physician code.

**7.9.1. namespace ID**

Identifier of the Assigning Authority that issued the attending physician code.

**8. Referring Doctor**

Referring physician information (see detailed component description in PV1-7)

**8.9. assigning authority**

Assigning Authority of referring physician code.

**8.9.1. namespace ID**

Identifier of the Assigning Authority that issued the referring physician code.

**15. Ambulatory Status****16. VIP Indicator****17. Admitting Doctor**

Admitting physician information (see detailed component description in PV1-7)

**17.9. assigning authority**

Assigning Authority of admitting physician code.

**17.9.1. namespace ID**

Identifier of the Assigning Authority that issued the admitting physician code.

**18. Patient Type****44.1. Date/Time**

YYYYMMDD[HHHMM[SS[.SSSS]]][+-ZZZZ]

**45. Discharge Date/Time****45.1. Date/Time**

YYYYMMDD[HHHMM[SS[.SSSS]]][+-ZZZZ]

**End of segment group VISIT**

**End of segment group PATIENT**

### **Segment group: ORDER OBSERVATION**

- Usage: Required
- Cardinality:1..\*

### **ORC**

- Usage: Optional
- Cardinality:0..1

| Seq.   | Name                                               | Opt. | Card. | Type | Table   | Contents            |
|--------|----------------------------------------------------|------|-------|------|---------|---------------------|
| 1      | Order Control                                      | R    | 1..1  | ID   | HL70119 |                     |
| 2      | Placer Order Number                                | R    | 1..1  | EI   |         |                     |
| 2.1    | entity identifier                                  | R    | 1..1  | ST   |         |                     |
| 2.2    | namespace ID                                       | O    | 0..   | IS   | HL70363 |                     |
| 3      | Filler Order Number                                | R    | 1..1  | EI   |         |                     |
| 3.1    | entity identifier                                  | R    | 1..1  | ST   |         |                     |
| 3.2    | namespace ID                                       | O    | 0..   | IS   | HL70363 |                     |
| 5      | Order Status                                       | O    | 0..1  | ID   | HL70038 |                     |
| 7      | Quantity/Timing                                    | O    | 0..*  | TQ   |         |                     |
| 7.4    | start date/time                                    | O    | 0..   | TS   |         |                     |
| 7.4.1  | Date/Time                                          | R    | 1..1  | NM   |         | e.g. 20040328134602 |
| 7.5    | end date/time                                      | O    | 0..   | TS   |         |                     |
| 7.5.1  | Date/Time                                          | R    | 1..1  | NM   |         | e.g. 20040328134602 |
| 7.6    | priority                                           | O    | 0..   | ST   |         |                     |
| 10     | Entered By                                         | O    | 0..1  | XCN  |         |                     |
| 10.1   | ID number (ST)                                     | O    | 0..   | ST   |         |                     |
| 10.2   | family name                                        | O    | 0..   | FN   |         |                     |
| 10.2.1 | surname                                            | O    | 0..   | ST   |         |                     |
| 10.2.2 | own surname prefix                                 | O    | 0..   | ST   |         |                     |
| 10.2.3 | own surname                                        | O    | 0..   | ST   |         |                     |
| 10.3   | given name                                         | O    | 0..   | ST   |         |                     |
| 10.4   | second and further given names or initials thereof | O    | 0..   | ST   |         |                     |
| 10.5   | suffix (e.g., JR or III)                           | O    | 0..   | ST   |         |                     |
| 10.6   | prefix (e.g., DR)                                  | O    | 0..   | ST   |         |                     |
| 10.9   | assigning authority                                | O    | 0..   | HD   |         |                     |
| 10.9.1 | namespace ID                                       | O    | 0..   | IS   | HL70363 |                     |
| 12     | Ordering Provider                                  | O    | 0..1  | XCN  |         |                     |

| Seq.                   | Name                                             | Opt. | Card. | Type | Table   | Contents |
|------------------------|--------------------------------------------------|------|-------|------|---------|----------|
| <a href="#">12.1</a>   | ID number (ST)                                   | C    | 0..   | ST   |         |          |
| 12.2                   | family name                                      | O    | 0..   | FN   |         |          |
| 12.2.1                 | surname                                          | O    | 0..   | ST   |         |          |
| 12.3                   | given name                                       | O    | 0..   | ST   |         |          |
| <a href="#">12.9</a>   | assigning authority                              | O    | 0..   | HD   |         |          |
| <a href="#">12.9.1</a> | namespace ID                                     | O    | 0..   | IS   | HL70363 |          |
| 12.9.2                 | universal ID                                     | O    | 0..   | ST   |         |          |
| <a href="#">17</a>     | Entering Organization                            | O    | 0..1  | CE   |         |          |
| 17.1                   | identifier                                       | R    | 1..1  | ST   |         |          |
| <a href="#">17.2</a>   | text                                             | O    | 0..   | ST   |         |          |
| <a href="#">17.3</a>   | name of coding system                            | O    | 0..   | IS   | HL70396 |          |
| <a href="#">21</a>     | Ordering Facility Name                           | O    | 0..*  | XON  |         |          |
| <a href="#">21.1</a>   | organization name                                | O    | 0..   | ST   |         |          |
| 21.2                   | organization name type code                      | O    | 0..   | IS   | HL70204 |          |
| 21.3                   | ID number (NM)                                   | R    | 1..1  | NM   |         |          |
| 21.4                   | check digit                                      | O    | 0..   | NM   |         |          |
| 21.5                   | code identifying the check digit scheme employed | O    | 0..   | ID   | HL70061 |          |
| <a href="#">21.6</a>   | assigning authority                              | O    | 0..   | HD   |         |          |
| 21.6.1                 | namespace ID                                     | R    | 1..1  | IS   | HL70363 |          |
| 21.7                   | identifier type code (IS)                        | O    | 0..   | IS   |         |          |
| 21.8                   | assigning facility ID                            | O    | 0..   | HD   | HL70300 |          |
| 21.8.1                 | namespace ID                                     | O    | 0..   | IS   | HL70363 |          |
| 21.8.2                 | universal ID                                     | O    | 0..   | ST   |         |          |
| 21.8.3                 | universal ID type                                | O    | 0..   | ID   | HL70301 |          |
| 21.9                   | Name Representation code                         | O    | 0..   | ID   | HL70465 |          |

## 1. Order Control

Fixed value: SC (Status changed)

## 2. Placer Order Number

### 2.2. namespace ID

Identifier of the Assigning Authority that issued the placer order number.

## 3. Filler Order Number

### 3.2. namespace ID

Identifier of the Assigning Authority that issued the filler order number.

**5. Order Status**

Supported: IP (In Progress), CM (Completed), DC (Discontinued), CA (Cancelled), SC (Scheduled)

**7. Quantity/Timing**

Identical to the Quantity/Timing in OBR-Segment

**7.4. start date/time**

Requested procedure scheduled study date/time and the scheduled procedure step start date/time.

**7.4.1. Date/Time**

If Enterprise Imaging is configured to send timezone information, datetime format YYYYMMDD[HHMM[SS]][+-ZZZZ] is used else YYYYMMDD[HHMM[SS]] is used

**7.5.1. Date/Time**

If Enterprise Imaging is configured to send timezone information, datetime format YYYYMMDD[HHMM[SS]][+-ZZZZ] is used else YYYYMMDD[HHMM[SS]] is used

**7.6. priority**

1) For existing sites (migration)

STAT priority code: S

Urgent priority codes: A

High Priority codes: A

Normal Priority codes: R

Low priority Code: PRN

2) For new installations

STAT priority code: S

Urgent priority codes: A

High Priority code: C

Normal Priority codes: P

Routine Priority Code: R

These values are configurable

**10. Entered By****12. Ordering Provider****12.1. ID number (ST)**

Code of physician providing the order.

**12.9. assigning authority**

Assigning Authority

**12.9.1. namespace ID**

Identifier of the Assigning Authority that issued the physician code.

## 17. Entering Organization

### 17.2. text

Name of Requesting department. If empty, the default requesting department will be taken.

### 17.3. name of coding system

Identifier of the Assigning Authority that issued the department identifier.

## 21. Ordering Facility Name

### 21.1. organization name

If empty, the identifier of the requesting facility will be taken as name.

### 21.6. assigning authority

Identifier of the Assigning Authority that issued the facility identifier.

## OBR

- Usage: Required

- Cardinality:1..1

| Seq. | Name                            | Opt. | Card. | Type | Table   | Contents                 |
|------|---------------------------------|------|-------|------|---------|--------------------------|
| 1    | Set ID - OBR                    | R    | 1..1  | SI   |         |                          |
| 2    | Placer Order Number             | R    | 1..1  | EI   |         |                          |
| 2.1  | entity identifier               | R    | 1..1  | ST   |         |                          |
| 2.2  | namespace ID                    | O    | 0..   | IS   | HL70363 |                          |
| 3    | Filler Order Number             | R    | 1..1  | EI   |         |                          |
| 3.1  | entity identifier               | R    | 1..1  | ST   |         |                          |
| 3.2  | namespace ID                    | O    | 0..   | IS   | HL70363 |                          |
| 4    | Universal Service Identifier    | R    | 1..1  | CE   |         |                          |
| 4.1  | identifier                      | R    | 1..1  | ST   |         |                          |
| 4.2  | text                            | O    | 0..   | ST   |         |                          |
| 4.3  | name of coding system           | O    | 0..   | IS   | HL70396 |                          |
| 4.4  | alternate identifier            | R    | 1..1  | ST   |         |                          |
| 4.5  | alternate text                  | O    | 0..   | ST   |         |                          |
| 4.6  | name of alternate coding system | O    | 0..   | IS   | HL70396 |                          |
| 5    | Priority                        | O    | 0..1  | ID   |         |                          |
| 6    | Requested Date/Time             | O    | 0..1  | TS   |         |                          |
| 6.1  | Date/Time                       | O    | 0..   | NM   |         | e.g. 20040328134602+0600 |
| 7    | Observation Date/Time #         | O    | 0..1  | TS   |         |                          |
| 7.1  | Date/Time                       | R    | 1..1  | NM   |         | e.g. 20040328134602      |
| 13   | Relevant Clinical Info.         | O    | 0..1  | ST   |         |                          |
| 16   | Ordering Provider               | O    | 0..1  | XCN  |         |                          |

| Seq.   | Name                                  | Opt. | Card. | Type   | Table   | Contents                      |
|--------|---------------------------------------|------|-------|--------|---------|-------------------------------|
| 16.1   | ID number (ST)                        | O    | 0..   | ST     |         |                               |
| 16.2   | family name                           | O    | 0..   | FN     |         |                               |
| 16.2.1 | surname                               | O    | 0..   | ST     |         |                               |
| 16.3   | given name                            | O    | 0..   | ST     |         |                               |
| 16.9   | assigning authority                   | O    | 0..   | HD     |         |                               |
| 16.9.1 | namespace ID                          | O    | 0..   | IS     | HL70363 |                               |
| 16.9.2 | universal ID                          | O    | 0..   | ST     |         |                               |
| 16.9.3 | universal ID type                     | O    | 0..   | ID     | HL70301 |                               |
| 18     | Placer Field 1                        | R    | 1..1  | ST     |         |                               |
| 19     | Placer Field 2                        | R    | 1..1  | ST     |         |                               |
| 20     | Filler Field 1 +                      | R    | 1..1  | ST     |         |                               |
| 22     | Results Rpt/Status Chng - Date/Time + | O    | 0..1  | TS     |         |                               |
| 22.1   | Date/Time                             | R    | 1..1  | NM     |         | e.g. 20040328134602.1234+0600 |
| 24     | Diagnostic Serv Sect ID               | O    | 0..1  | ID     | HL70074 |                               |
| 25     | Result Status +                       | R    | 1..1  | ID     | HL70123 |                               |
| 27     | Quantity/Timing                       | O    | 0..*  | TQ     |         |                               |
| 27.3   | duration                              | O    | 0..   | ST     |         |                               |
| 27.4   | start date/time                       | O    | 0..   | TS     |         |                               |
| 27.4.1 | Date/Time                             | R    | 1..1  | NM     |         | e.g. 20040328134602           |
| 27.5   | end date/time                         | O    | 0..   | TS     |         |                               |
| 27.5.1 | Date/Time                             | R    | 1..1  | NM     |         | e.g. 20040328134602           |
| 27.6   | priority                              | O    | 0..   | ST     |         |                               |
| 28     | Result Copies To                      | O    | 0..1  | XCN    |         |                               |
| 28.1   | ID number (ST)                        | R    | 1..1  | ST     |         |                               |
| 28.2   | family name                           | O    | 0..   | FN     |         |                               |
| 28.2.1 | surname                               | O    | 0..   | ST     |         |                               |
| 28.3   | given name                            | O    | 0..   | ST     |         |                               |
| 28.9   | assigning authority                   | O    | 0..   | HD     |         |                               |
| 28.9.1 | namespace ID                          | O    | 0..   | IS     | HL70363 |                               |
| 31     | Reason for Study                      | O    | 0..2  | CE     |         |                               |
| 31.1   | identifier                            | O    | 0..   | ST     |         |                               |
| 31.2   | text                                  | O    | 0..   | ST     |         |                               |
| 32     | Principal Result Interpreter +        | O    | 0..1  | CM_NDL |         |                               |
| 32.1   | name                                  | O    | 0..   | CN     |         |                               |
| 32.1.1 | ID number (ST)                        | O    | 0..   | ST     |         |                               |
| 32.1.2 | family name                           | O    | 0..   | FN     |         |                               |
| 32.1.3 | given name                            | O    | 0..   | ST     |         |                               |

| Seq.   | Name                                               | Opt. | Card. | Type   | Table   | Contents |
|--------|----------------------------------------------------|------|-------|--------|---------|----------|
| 32.1.4 | second and further given names or initials thereof | B    | ..    | ST     |         |          |
| 32.1.9 | assigning authority                                | O    | 0..   | HD     |         |          |
| 33     | Assistant Result Interpreter +                     | O    | 0..*  | CM_NDL |         |          |
| 33.1   | name                                               | O    | 0..   | CN     |         |          |
| 33.1.1 | ID number (ST)                                     | O    | 0..   | ST     |         |          |
| 33.1.2 | family name                                        | O    | 0..   | FN     |         |          |
| 33.1.3 | given name                                         | O    | 0..   | ST     |         |          |
| 33.1.9 | assigning authority                                | O    | 0..   | HD     |         |          |
| 33.10  | building                                           | B    | ..    | IS     | HL70307 |          |
| 35     | Transcriptionist +                                 | O    | 0..*  | CM_NDL |         |          |
| 35.1   | name                                               | O    | 0..   | CN     |         |          |
| 35.1.1 | ID number (ST)                                     | O    | 0..   | ST     |         |          |
| 35.1.2 | family name                                        | O    | 0..   | FN     |         |          |
| 35.1.3 | given name                                         | O    | 0..   | ST     |         |          |
| 35.1.9 | assigning authority                                | O    | 0..   | HD     |         |          |

## 1. Set ID - OBR

## 2. Placer Order Number

Identical to ORC-2

### 2.2. namespace ID

Identifier of the Assigning Authority that issued the placer order number.

## 3. Filler Order Number

Identical to ORC-3

### 3.2. namespace ID

Identifier of the Assigning Authority that issued the filler order number.

## 4. Universal Service Identifier

## 5. Priority

High priority code: A (ASAP)

Medium Priority Code: R (Routine)

Low priority Code: PRN (As needed)

## 6. Requested Date/Time

### 6.1. Date/Time

If Enterprise Imaging is configured to send timezone information, datetime format

YYYYMMDD[HHMM[SS]][+/-ZZZZ] is used else YYYYMMDD[HHMM[SS]] is used

**7. Observation Date/Time #**

Specifies Observation date/time modified and is not related to report date and time. It is

- the PPS date/time modified when images are available.
- the request date/time modified in other cases

Date/time the report version is being distributed is found in OBR.22.

Date/time the report version is created is found in OBX.14.

**7.1. Date/Time**

If Enterprise Imaging is configured to send timezone information, datetime format YYYYMMDD[HHMM[SS]][+-ZZZZ] is used else YYYYMMDD[HHMM[SS]] is used

**13. Relevant Clinical Info.**

Clinical information.

**16. Ordering Provider**

same as ORC-12

**16.1. ID number (ST)**

the default identifier of the ordering provider

**16.2.1. surname**

Family name of the physician.

**16.3. given name**

Given name of the physician.

**16.9.1. namespace ID**

Identifier of the Assigning Authority that issued the physician code.

**18. Placer Field 1****19. Placer Field 2****20. Filler Field 1 +****22. Results Rpt/Status Chng - Date/Time +**

Date/time the report version is being distributed. For dictated report, date/time of the modification to the latest dictation.

**22.1. Date/Time**

If Enterprise Imaging is configured to send timezone information, datetime format YYYYMMDD[HHMM[SS]][+-ZZZZ] is used else YYYYMMDD[HHMM[SS]] is used

**24. Diagnostic Serv Sect ID****25. Result Status +**

Supported: F (final), P (Preliminary), C (Correction), D (Deleted), I (Dictated), S (Partially validated)

**27. Quantity/Timing**

Identical to ORC-7

**27.4.1. Date/Time**

If Enterprise Imaging is configured to send timezone information, datetime format YYYYMMDD[HHMM[SS]][+ZZZZ] is used else YYYYMMDD[HHMM[SS]] is used

**27.5.1. Date/Time**

If Enterprise Imaging is configured to send timezone information, datetime format YYYYMMDD[HHMM[SS]][+ZZZZ] is used else YYYYMMDD[HHMM[SS]] is used

**27.6. priority**

Priority code of requested procedure(configured in EI)

**28. Result Copies To****28.1. ID number (ST)**

code of the physician

**28.2.1. surname**

family name of the physician

**28.3. given name**

given name of the physician

**28.9.1. namespace ID**

Identifier of the Assigning Authority that issued the physician code.

**31. Reason for Study****32. Principal Result Interpreter +**

The segment contains:

- the validator when the report is final
- the author when the report is preliminary
- the latest partial approver when the report is partially validated

**32.1.1. ID number (ST)**

The default identifier of the principal result interpreter

**32.1.2. family name**

Family name of the principal result interpreter.

**32.1.3. given name**

Given name of the principal result interpreter.

**32.1.9. assigning authority**

Identifier of the Assigning Authority that issued the physician code.

### 33. Assistant Result Interpreter +

This segment contains:

- every contributor when preliminary report
- the author (when different from validator) and every contributor when final report and partially validated report

#### 33.1.1. ID number (ST)

the default identifier of the assistant result interpreter

#### 33.1.2. family name

Family name of the assistant result interpreter.

#### 33.1.3. given name

Given name of the assistant result interpreter.

#### 33.1.9. assigning authority

Identifier of the Assigning Authority that issued the physician code.

### 35. Transcriptionist +

#### 35.1.1. ID number (ST)

the default identifier of the transcriptionist

#### 35.1.2. family name

Family name of the transcriptionist.

#### 35.1.3. given name

Given name of the transcriptionist.

#### 35.1.9. assigning authority

Identifier of the Assigning Authority that issued the physician code.

## NTE - Notes and Comments

- Usage: Optional
- Cardinality:0..1

| Seq. | Name         | Opt. | Card. | Type | Table   | Contents |
|------|--------------|------|-------|------|---------|----------|
| 3    | Comment      | O    | 0..*  | FT   |         |          |
| 4    | Comment Type | O    | 0..1  | CE   | HL70364 |          |
| 4.1  | identifier   | O    | 0..   | ST   |         |          |

### 3. Comment

Procedural comment

## 4. Comment Type

### 4.1. identifier

PC = procedure comment

## ZDS

- Usage: Optional
- Cardinality:0..1

| Seq. | Name              | Opt. | Card. | Type | Table | Contents         |
|------|-------------------|------|-------|------|-------|------------------|
| 1    | Reference Pointer | R    | 1..1  | ST   |       |                  |
| 2    | Application ID    | O    | 0..1  | ST   |       | e.g. AGILITY     |
| 3    | Type of Data      | O    | 0..1  | ST   |       | e.g. Application |
| 4    | Subtype           | O    | 0..1  | ST   |       | e.g. DICOM       |

### 1. Reference Pointer

Study instance UID of the study in Enterprise Imaging

### 2. Application ID

fixed value == AGILITY

### 3. Type of Data

fixed value == Application

### 4. Subtype

fixed value == DICOM

## DG1 - Diagnosis

- Usage: Optional
- Cardinality:0..\*

| Seq. | Name                  | Opt. | Card. | Type | Table   | Contents            |
|------|-----------------------|------|-------|------|---------|---------------------|
| 1    | Set ID - DG1          | R    | 1..1  | SI   |         |                     |
| 3    | Diagnosis Code - DG1  | R    | 1..1  | CE   | HL70051 |                     |
| 3.1  | identifier            | R    | 1..1  | ST   |         |                     |
| 3.2  | text                  | R    | 1..1  | ST   |         |                     |
| 3.3  | name of coding system | R    | 1..1  | IS   | HL70396 |                     |
| 3.4  | alternate identifier  | R    | 1..1  | ST   |         |                     |
| 5    | Diagnosis Date/Time   | R    | 1..1  | TS   |         |                     |
| 5.1  | Date/Time             | R    | 1..1  | NM   |         | e.g. 20040328134602 |
| 6    | Diagnosis Type        | R    | 1..1  | IS   | HL70052 |                     |

### 1. Set ID - DG1

A counter, starting from 1, indicating the occurrence of the segment within the message

### 3. Diagnosis Code - DG1

#### 3.1. identifier

Diagnostic code

#### 3.2. text

Description of diagnostic code

#### 3.3. name of coding system

Catalogue of diagnostic code

#### 3.4. alternate identifier

Accession number of the study in the message where this diagnostic code belongs to.

### 5. Diagnosis Date/Time

#### 5.1. Date/Time

Date/time when the diagnosis was determined

### 6. Diagnosis Type

F, since the diagnosis is final.

## **Segment group: OBSERVATION - PATIENT RESULT.ORDER OBSERVATION.OBSERVATION**

- Usage: Optional
- Cardinality:0..\*
- Implementation note: Segment that repeats for every report and addenda

### **OBX - Observation/Result**

- Usage: Required
- Cardinality:1..1

| Seq. | Name                         | Opt. | Card. | Type | Table   | Contents |
|------|------------------------------|------|-------|------|---------|----------|
| 1    | Set ID - OBX                 | O    | 0..1  | SI   |         |          |
| 2    | Value Type                   | O    | 0..1  | ID   | HL70125 | e.g. FT  |
| 3    | Observation Identifier       | R    | 1..1  | CE   |         |          |
| 3.1  | identifier                   | R    | 1..1  | ST   |         |          |
| 3.2  | text                         | O    | 0..   | ST   |         |          |
| 3.3  | name of coding system        | O    | 0..   | IS   | HL70396 |          |
| 3.4  | alternate identifier         | O    | 0..   | ST   |         |          |
| 4    | Observation Sub-Id           | R    | 1..1  | ST   |         |          |
| 5    | Observation Value            | O    | 0..1  | *    |         |          |
| 11   | Observation Result Status    | R    | 1..1  | ID   | HL70085 | e.g. F   |
| 14   | Date/Time of the Observation | O    | 0..1  | TS   |         |          |

| Seq.   | Name                 | Opt. | Card. | Type | Table   | Contents            |
|--------|----------------------|------|-------|------|---------|---------------------|
| 14.1   | Date/Time            | R    | 1..1  | NM   |         | e.g. 20080319103922 |
| 16     | Responsible Observer | O    | 0..1  | XCN  |         |                     |
| 16.1   | ID number (ST)       | O    | 0..   | ST   |         |                     |
| 16.2   | family name          | O    | 0..   | FN   |         |                     |
| 16.2.1 | surname              | O    | 0..   | ST   |         |                     |
| 16.3   | given name           | O    | 0..   | ST   |         |                     |
| 16.9   | assigning authority  | O    | 0..   | HD   |         |                     |
| 16.9.1 | namespace ID         | O    | 0..   | IS   | HL70363 |                     |

### 1. Set ID - OBX

The sequence number

### 2. Value Type

Encapsulated Data (ED) for report content Reference Pointer (RP) for attachments

Text (TX) for Pregnancy information

### 3. Observation Identifier

The OBX contents can describe

- report contents
- an attachment definition
- pregnancy information

Values of the fields depend on the contents the segment describes.

#### 3.1. identifier

Segment for report content :

- The procedure definition code followed by either &ADT for addenda of the report and &GDT for every other type of report

Segment for attachment description :

- Attachment code

Segment for pregnancy information :

- PREGNANT

#### 3.2. text

Segment for report content :

- The name of the procedure definition

Segment for attachment description :

- Attachment name

Segment for pregnancy information :

- PREGNANCY INDICATOR

### 3.3. name of coding system

fixed value == AGILITY

### 3.4. alternate identifier

Segment for report content :

- fill with report ID that stays unchanged over the complete reporting life cycle.

Segment for attachment description :

- in case of study/PPS level attachment this field holds the accession number of the study the attachment refers to

- in case of order/patient/report level attachment this field is empty

Segment for pregnancy information :

- accession number of the study the attachment refers to

## 4. Observation Sub-Id

Segment for report content :

- for main report data, section name of the report

- for addenda, section name of the addenda+"\_suffix"(suffix is the index of addenda starting from 1)

Segment for attachment description :

- unique key identifying a specific attachment (primary key of attachment)

Segment for pregnancy information :

- unique key identifying the primary key of this pregnancy attachment

## 5. Observation Value

Contents depending on Value type of the OBX. Segment for report content :

- FT : plain text

- RP : path + filename

- ED : AGILITY^TEXT^RTF^A^the rtf content of the section

Segment for attachment description :

- path + file name for PDF/image type attachments with referencepointer

- TEXT^PDF^Base64^the Base64 encoded data of the attachment for PDF type attachments as Base64 encoded encapsulated data

- IM^type of the image\*^Base64^the Base64 encoded data of the attachment for image type attachments as Base64 encoded encapsulated data

- the actual attachment text for text attachments

- the actual keyword value for keyword attachments

\*supported image types: JPEG, TIFF, GIF, PNG, BMP

General remark : For each attachment type configured in UCT as "Include in HL7 outbound communication" an OBX segment will be sent. Its contents is "" in case the study has no attachment for this attachment type.

Segment for pregnancy information :

- YES
- NO
- UNKNOWN

#### **11. Observation Result Status**

Supported: F (final), P (Preliminary), C (Correction), D (Deleted), I (Dictated), S (Partially validated)

#### **14. Date/Time of the Observation**

The date of the observation When segment contains pregnancy information, OBX.14 holds date of last menstrual period (when available).

##### **14.1. Date/Time**

If Enterprise Imaging is configured to send timezone information, datetime format YYYYMMDD[HHMM[SS]][+-ZZZZ] is used else YYYYMMDD[HHMM[SS]] is used

#### **16. Responsible Observer**

This segment contains:

In case the OBX-segment contains report content:

- the author when the report is preliminary
- the validator when the report is final
- the latest partial approver when the report is partially validated

In case the OBX-segment contains addendum content:

- the author of this particular addendum content when this addendum is preliminary
- the validator of this particular addendum content when this addendum is final

##### **16.1. ID number (ST)**

The default identifier of the responsible observer

***End of segment group OBSERVATION***

***End of segment group ORDER\_OBSERVATION***

***End of segment group PATIENT\_RESULT***