

# Technical HL7 Conformance Profile

# **ENTERPRISE IMAGING**

# **INBOUND ADT\_A40**

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## Message Profile

### About this Conformance

#### Remarks:

Segments present in the message structure, but marked as -not supported- are allowed to be present in the message, but are not processed. The same counts for fields, components, subcomponents marked as not supported.

### Conformance parameters

#### Message Profile

- HL7 Version: 2.3,2.3.1,2.4,2.5
- Profile Type: Constrainable
- Topics: confsig-Agfa Healthcare-2.3,2.3.1,2.4,2.5-profile-accNE\_accAL-Deferred

#### Encoding Method

ER7

## Interaction 1

### Dynamic Definition

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

### Static Definition

- Message Type: ADT
- Trigger Event: A40
- Message Structure: ADT\_A39
- Topics: confsig-Agfa Healthcare-2.3,2.3.1,2.4,2.5-static-ADT-A40-null-ADT\_A39-V1.0-DRAFT-Receiver

### Message structure

MSH EVN PID [PD1] MRG

### 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   | O    | 0..1  | HD     | HL70361 |              |
| 3.1  | namespace ID          | O    | 0..   | IS     | HL70363 |              |
| 4    | Sending Facility      | O    | 0..1  | HD     | HL70362 |              |
| 4.1  | namespace ID          | O    | 0..   | IS     | HL70363 |              |
| 5    | Receiving Application | O    | 0..1  | HD     | HL70361 |              |
| 5.1  | namespace ID          | O    | 0..   | IS     | HL70363 |              |
| 6    | Receiving Facility    | O    | 0..1  | HD     | HL70362 |              |
| 6.1  | namespace ID          | O    | 0..   | IS     | HL70363 |              |
| 7    | Date/Time Of Message  | O    | 0..1  | TS     |         |              |
| 7.1  | Date/Time             | O    | 0..   | NM     |         |              |
| 9    | Message Type          | R    | 1..1  | CM_MSG | HL70076 |              |
| 9.1  | message type          | R    | 1..1  | ID     | HL70076 | e.g. ADT     |
| 9.2  | trigger event         | R    | 1..1  | ID     | HL70003 | e.g. A40     |
| 9.3  | message structure     | O    | 0..   | ID     | HL70354 | e.g. ADT_A39 |
| 10   | Message Control ID    | R    | 1..1  | ST     |         |              |
| 11   | Processing ID         | O    | 0..1  | PT     |         |              |
| 11.1 | processing ID         | O    | 0..   | ID     | HL70103 |              |
| 12   | Version ID            | R    | 1..1  | VID    | HL70104 |              |
| 12.1 | version ID            | R    | 1..1  | ID     | HL70104 | e.g. 2.4     |

| Seq. | Name          | Opt. | Card. | Type | Table   | Contents |
|------|---------------|------|-------|------|---------|----------|
| 18   | Character Set | O    | 0..1  | ID   | HL70211 |          |

### 1. Field Separator

### 2. Encoding Characters

### 3. Sending Application

### 4. Sending Facility

### 5. Receiving Application

### 6. Receiving Facility

### 7. Date/Time Of Message

#### 7.1. Date/Time

YYYYMMDD[HHMM[SS]][+-ZZZ Z]

If timezone information is present, it is taken into account for all date/time fields in the message. If timezone information is present also in other datetime fields, it overrules the timezone information in this field.

### 9. Message Type

### 10. Message Control ID

### 11. Processing ID

### 12. Version ID

Supported versions: 2.3 - 2.3.1 - 2.4 - 2.5.

### 18. Character Set

## EVN - Event Type

- Usage: Required

- Cardinality:1..1

| Seq. | Name               | Opt. | Card. | Type | Table | Contents                 |
|------|--------------------|------|-------|------|-------|--------------------------|
| 2    | Recorded Date/Time | R    | 1..1  | TS   |       |                          |
| 2.1  | Date/Time          | R    | 1..1  | NM   |       | e.g. 20040328134602+0600 |

### 2. Recorded Date/Time

#### 2.1. Date/Time

YYYYMMDD[HHMM[SS]][+-ZZZ Z]

If timezone information is present it overrules the timezone information if available in MSH-7

## **Segment group: PATIENT**

- Usage: Required
- Cardinality:1..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                                | O    | 0..   | HD   |         |          |
| 3.4.1  | namespace ID                                       | O    | 0..   | 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)                          | O    | 0..   | ID   | HL70203 |          |
| 3.6    | assigning facility                                 | O    | 0..   | HD   |         |          |
| 3.6.1  | namespace ID                                       | O    | 0..   | IS   | HL70363 |          |
| 3.7    | effective date (DT)                                | O    | 0..   | DT   |         |          |
| 3.8    | expiration date                                    | O    | 0..   | DT   |         |          |
| 5      | Patient Name                                       | R    | 1..*  | XPN  |         |          |
| 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   |         |          |
| 5.1.3  | own surname                                        | O    | 0..   | ST   |         |          |
| 5.2    | given name                                         | O    | 0..   | 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                                          | O    | 0..   | NM   |         |          |
| 8      | Administrative Sex                                 | O    | 0..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   |         |          |

| Seq. | Name                                  | Opt. | Card. | Type | Table   | Contents |
|------|---------------------------------------|------|-------|------|---------|----------|
| 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   | HL70399 |          |
| 11.7 | address type                          | O    | 0..   | ID   | HL70190 |          |
| 11.8 | other geographic designation          | O    | 0..   | ST   |         |          |
| 11.9 | county/parish code                    | O    | 0..   | IS   | HL70289 |          |
| 13   | Phone Number - Home                   | O    | 0..1  | XTN  |         |          |
| 13.1 | Telephone Number                      | O    | 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..1  | XTN  |         |          |
| 14.1 | Telephone Number                      | O    | 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   |         |          |
| 23   | Birth Place                           | O    | 0..1  | ST   |         |          |
| 29   | Patient Death Date and Time           | C    | 0..1  | TS   |         |          |
| 29.1 | Date/Time                             | RE   | 0..   | NM   |         |          |
| 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.

Either only Namespace is specified, or only Universal ID and Universal ID Type are specified, or all three components are specified.

The combination of "Namespace ID" - "Universal ID" - "Universal ID Type" must be unique in EI!  
Though the component is not required, it is strongly advised to provide a value.

**3.4.1. namespace ID**

Identifier of the Assigning Authority that issued the patient id.

If not available an unique internal assigning authority will be used

**3.4.2. universal ID**

Universal Entity ID.

This ID must be unique in EI and must be in the correct format, i.e. containing only digits and dots.  
Its total length  $\leq 64$  characters!

**3.4.3. universal ID type**

Universal Entity ID Type.

Only supported value :

-ISO

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

Supported values: :

-PI = Patient Primary Identifier

-SS = Social Security number

\* If empty PI will be used by default

**5. Patient Name****5.1. family name**

When representation code = alphabetic or Name type code indicates maiden name is specified following rule applies:

if Surname (PID.5.1.1) is empty, Own Surname Prefix (PID.5.1.2) and Own Surname (PID.5.1.3) are concatenated as last name.

**5.1.1. surname**

Patient's lastname

**5.2. given name**

Patient's firstname

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

Patient Middle Name

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

Patient's suffix

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

Patient's prefix

**5.7. name type code**

M = maiden name, only support storing last name for maiden name.

**5.8. Name Representation code**

Supported are :

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

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

YYYYMMDD[HHMM[SS]]

**8. Administrative Sex****11. Patient Address****11.1. street address (SAD)**

This component specifies the street or mailing address of a person or institution.

**11.1.1. street or mailing address**

communication\_channel.Street (if PID-11.1.2 is empty)

**11.1.2. street name**

communication\_channel.Street

**11.1.3. dwelling number**

communication\_channel.Streetnr

**11.2. other designation**

communication\_channel.Address\_Line1

**11.3. city**

municipality.name (if empty -> Unknown is used)

**11.4. state or province**

communication\_channel.Address\_Line3

**11.5. zip or postal code**

municipality.zip (if empty -> code UKW is used - mapping to name = Unknown)

**11.6. country**

communication\_channel.country (3 digit code - if empty: code UKW - mapping to name = Unknown)



**11.7. address type**

communication\_channel.communication\_type (H - for home address / O - for office address / L maps to O / other codes map to H)

**11.8. other geographic designation**

communication\_channel.Address\_Line2

**11.9. county/parish code**

communication\_channel.Address\_Line4

**13. Phone Number - Home**

Segment is used for all home communication.

First one is the primary home communication channel

**13.1. Telephone Number**

In case of telephone number/fax number/cellular number, the phone number is put in this field

[(999)] 999-9999 [X99999][C any text]

**13.2. telecommunication use code**

Required. If this is empty the communication cannot be registered.

Supported are:

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

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

Required. If this is empty the communication cannot be registered.

Supported are:

- Telephone (PH),
- Fax (FX),
- Cellular Phone (CP)
- Internet Address (Internet)

**13.4. Email address**

In case of Network Email Address, this needs to be filled in.

**14. Phone Number - Business**

Segment is used for all business communication.

First one is the primary home business channel

**14.1. Telephone Number**

In case of telephone number/fax number/cellular number, the phone number is put in this field

[(999)] 999-9999 [X99999][C any text]

#### 14.2. telecommunication use code

Required. If this is empty the communication cannot be registered.

Supported are:

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

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

Required. If this is empty the communication cannot be registered.

Supported are:

- Telephone (PH)
- Fax (FX)
- Cellular Phone (CP)
- Internet Address (Internet)

#### 14.4. Email address

In case of Network Email Address, this needs to be filled in.

#### 19. SSN Number - Patient

Social security number of the patient.

#### 23. Birth Place

#### 29. Patient Death Date and Time

*Condition Predicate:*

If Patient Death Indicator (PID.30) has value Y, this field also needs a value.

##### 29.1. Date/Time

YYYYMMDD[HHMM[SS]][+ -ZZZ Z]

If timezone information is present it overrules the timezone information if available in MSH-7

#### 30. Patient Death Indicator

Y or N

### 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   |       |          |

| Seq.  | Name                | Opt. | Card. | Type | Table   | Contents |
|-------|---------------------|------|-------|------|---------|----------|
| 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 of physician code.

##### 4.9.1. namespace ID

Identifier of the Assigning Authority that issued the physicians code. If empty, the default assigning authority will be taken.

### MRG - Merge patient information

- Usage: Required

- Cardinality:1..1

| Seq.  | Name                          | Opt. | Card. | Type | Table   | Contents |
|-------|-------------------------------|------|-------|------|---------|----------|
| 1     | Prior Patient Identifier List | R    | 1..*  | CX   |         |          |
| 1.1   | ID                            | R    | 1..1  | ST   |         |          |
| 1.4   | assigning authority           | O    | 0..   | HD   |         |          |
| 1.4.1 | namespace ID                  | O    | 0..   | IS   | HL70363 |          |
| 1.4.2 | universal ID                  | O    | 0..   | ST   |         |          |
| 1.4.3 | universal ID type             | O    | 0..   | ID   | HL70301 |          |
| 1.5   | identifier type code (ID)     | O    | 0..   | ID   | HL70203 |          |
| 1.9   | Identifier Type Code          | O    | 0..   |      |         |          |

#### 1. Prior Patient Identifier List

Identifiers specified in the MRG segment identify the source patient that needs to be merged to the target patient identified in the PID-segment

##### 1.1. ID

Identification number or code for the patient.

#### **1.4. assigning authority**

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

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

The combination of 'Namespace ID' - 'Universal ID' - 'Universal ID Type' must be unique in EI!

##### **1.4.1. namespace ID**

Identifier of the Assigning Authority that issued the patient id

If not available an unique internal assigning authority will be used

##### **1.4.2. universal ID**

Universal Entity ID.

This ID must be unique in EI and must be in the correct format, i.e. containing only digits and dots.

Its total length  $\leq 64$  characters!

##### **1.4.3. universal ID type**

Universal Entity ID Type.

Only supported value :

-ISO

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

Supported values:

- PI = Patient Primary Identifier

If empty PI will be used by default

Remark : Value entered should match PID 3.5 for succesfull merge

***End of segment group PATIENT***