

Technical HL7 Conformance Profile

ENTERPRISE IMAGING

INBOUND ADT_A28

Copyright notice:

Copyright 2012 Agfa HealthCare

All rights reserved.

Agfa shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this publication.

Agfa reserves the right to revise this publication and to make changes to its content at any time, without obligation to notify any person or entity of such revisions and changes.

This publication may only be used in connection with the promotion, sales, installation and use of Agfa equipment by Agfa personnel.

Publication date:

11-2023

Publication number:

V1.0 (technical)

Corporate address:

Agfa HealthCare

SIV Connectivity

Septestraat 27

B-2640 Mortsel

Belgium

+32 3 444 7588

<http://www.agfahealthcare.com/>

email : connectivity@agfa.com

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

Encoding Method

ER7

Interaction 1

Dynamic Definition

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

Static Definition

- Message Type: ADT
- Trigger Event: A28
- Message Structure: ADT_A05

Message structure

MSH EVN PID [PD1] [PV1] {[OBX]} {[AL1]}

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. A28
9.3	message structure	O	0..	ID	HL70354	e.g. ADT_A05
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
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]][+-ZZZZ]

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[HHHMM[SS]][+-ZZZZ]

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

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	
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		
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	

Seq.	Name	Opt.	Card.	Type	Table	Contents
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	O	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 a 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 <= 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 or empty = 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]][+ZZZZ]

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		
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.

PV1 - Patient visit

- Usage: Optional
- Cardinality:0..1
- Implementation note: When patient admission data is present in the PV1-segment, EI will not process it

Seq.	Name	Opt.	Card.	Type	Table	Contents
-	-	-	-	-	-	-

All childs identified as not supported.

OBX - Observation/Result

- Usage: Optional
- Cardinality:0..*

Seq.	Name	Opt.	Card.	Type	Table	Contents
1	Set ID - OBX	O	0..1	SI		
2	Value Type	R	1..1	ID	HL70125	
3	Observation Identifier	R	1..1	CE		
3.1	identifier	R	1..1	ST		
3.2	text	O	0..	ST		
4	Observation Sub-Id	C	0..1	ST		
5	Observation Value	R	1..1	*		
11	Observation Result Status	R	1..1	ID	HL70085	
14	Date/Time of the Observation	O	0..1	TS		
14.1	Date/Time	O	0..	NM		e.g. 20040328134602.1234+0600

1. Set ID - OBX

2. Value Type

Supported value(s)

- TX (For Text Attachment type or Pregnancy information)
- FT (For Text Attachment type)

3. Observation Identifier

3.1. identifier

Must correspond with an attachment code that is set up in Administrator desktop as a __Patient level__-attachment. For Pregnancy : PREGNANT to indicate Pregnancy information

4. Observation Sub-Id

5. Observation Value

Supported:

- plain text (in case of Text attachment type)
- YES/NO/UNKNOWN (in case of pregnancy information)

11. Observation Result Status

14. Date/Time of the Observation

YYYYMMDD (date of last menstrual period - in case of pregnancy information)

14.1. Date/Time

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

AL1 - Patient allergy information

- Usage: Optional
- Cardinality:0..*

Seq.	Name	Opt.	Card.	Type	Table	Contents
3	Allergen Code/Mnemonic/Description	R	1..1	CE		
3.1	identifier	R	1..1	ST		
4	Allergy Severity Code	O	0..1	CE	HL70128	
4.1	identifier	O	0..	ST		
5	Allergy Reaction Code	O	0..*	ST		
6	Identification Date	O	0..1	DT		

3. Allergen Code/Mnemonic/Description

Allergy code, name

4. Allergy Severity Code

Severity code, supported values : SV - Severe, MO - Moderate, MI - Mild, U - Unknown.

5. Allergy Reaction Code

Reaction code

6. Identification Date

The start date when the allergy was identified. Format : YYYYMMDD