
HL7 Conformance Profile

Inbound ORM O01 from Order Placer

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About this Conformance Profile

Conformance profile ORM Inbound from Order Placer

HL7Server5

This profile describes the ORM message structure used to import order messages from a 3rd party order placer application into Impax RIS Order module. (QPOrder / Mediweb Order) ORM messages treated by this interface are seen as Orders from an Order placer system, and are available in the Order waiting list in Impax RIS. Depending on the parameters a Qdoc request is created. This can also be immediate without order creation. The orders will appear in RIS as if they were created with Agfa's own QPOrder/Mediweb order placer application.

The use case is described in the IHE Radiology Technical Framework - Chapter 4.2 - Scheduled Workflow - Transaction 2 : Placer Order Management.

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.

When messages are received via HL7 MLLP (socket) HL7Server5 processes the message before sending an acknowledgement message. HL7Server5 only supports original mode acknowledgements, enhanced acks are not supported.

Please verify length attributes at the lowest level of detail if a field consists of components, subcomponents.

For more information on HL7 conformance profiles please consult HL7 ANSI standard chapter 2 and HL7 Implementation/Conformance Technical Committee documents at <http://www.hl7.org/special/committees/ictc/docs.cfm>

Conformance parameters

Message Profile

- HL7 Version: 2.4
- Profile Type: Constrainable

- Topics: confsig-AGFA/QUADRAT-2.4-profile-accNE_accNE-Immediate

Encoding Method (s)

ER7, XML

Interaction 1

Dynamic Definition

- Accept Acknowledgement: NE
- Application Acknowledgement: NE
- Acknowledgement Mode: Immediate

Static Definition

- Message Type: ORM
- Trigger Event: O01
- Message Structure: ORM_O01
- Topics: confsig-AGFA/QUADRAT-2.4-static-ORM-O01-null-ORM_O01-2005.2.0--Receiver

Message structure

MSH {[NTE]} PID {[PD1]} {[NTE]} [PV1 {[PV2]}] [{[IN1]} {[IN2]} {[IN3]}] {[GT1]} {[AL1]} { ORC
[OBR {[NTE]} {[CTD]} {[DG1]} [{OBX} {[NTE]}]] {[FT1]} {[CTI]} {[BLG]} }

MSH - Message Header

- Usage: Required
- Cardinality:1..1

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
1	Field Separator	ST		1	R	1..1	e.g.
2	Encoding Characters	ST		4	R	1..1	e.g. ^~\&
3	Sending Application	HD		227	R	1..1	
3.1	namespace ID	IS		50	R	..	e.g. HIS1
4	Sending Facility	HD		227	O	0..1	
4.1	namespace ID	IS		50	O	..	e.g. FAC1
7	Date/Time Of Message	TS		26	R	1..1	
7.1	Date/Time	NM		24	R	..	e.g. 20060125163934110
9	Message Type	CM_MSG	HL70076	15	R	1..1	
9.1	message type	ID	HL70076	3	R	..	e.g. ORM
9.2	trigger event	ID	HL70003	3	R	..	e.g. 001
9.3	message structure	ID	HL70354	7	O	..	e.g. ORM_001
10	Message Control ID	ST		20	R	1..1	e.g. UC01_TR02A_003320
11	Processing ID	PT		3	R	1..1	
11.1	processing ID	ID	HL70103	3	R	..	e.g. P
12	Version ID	VID	HL70104	973	R	1..1	
12.1	version ID	ID	HL70104	60	R	..	e.g. 2.4
18	Character Set	ID	HL70211	16	O	0..*	e.g. 8859/1

1. Field Separator

This field contains the separator between the segment ID and the first real field, MSH-2-encoding characters. As such it serves as the separator and defines the character to be used as a separator for the rest of the message.

Recommended value and used by Agfa is |, (ASCII 124).

2. Encoding Characters

This field contains the four characters in the following order: the component separator, repetition separator, escape character, and subcomponent separator.

Recommended values and used by Agfa Healthcare are ^~\&, (ASCII 94, 126, 92, and 38).

3. Sending Application

This field uniquely identifies the sending application among all other applications within the network enterprise. The network enterprise consists of all those applications that participate in the exchange of HL7 messages within the enterprise.

Entirely site-defined and a parameter for Agfa.

7. Date/Time Of Message

This field contains the date/time that the sending system created the message.

If the time zone is specified, it is expected to be the local time zone !

9.3. message structure

Only used/required when the message is hl7 v2.xml encoded

10. Message Control ID

This field contains a number or other identifier that uniquely identifies the message. The receiving system echoes this ID back to the sending system in the Message acknowledgment segment (MSA).

11.1. processing ID

No difference in processing by HL7SERVER5 if Production or Test

12.1. version ID

Versions supported by HL7SERVER5 are 2.2, 2.3, 2.3.1, 2.4

18. Character Set

Character set has to be a subset of the Windows ANSI codepage of the pc where HL7SERVER5 is running !

e.g. ISO 8859/1 on a windows 1252 code page UTF-8 is not supported !

NTE - Notes and Comments

- Usage: Not supported

Segment group: PATIENT

- Usage: Required

- Cardinality:1..1

PID - Patient identification

- Usage: Required

- Cardinality:1..1

- Implementation note: If the patient doesn't exist yet in the Agfa db the patient record is created. If the patient already exists his/her data is NOT updated unless you modify default parameter values.

Only one PID segment is allowed in an ORM message. Orders for several patients should be sent in several ORM messages.

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
2	Patient ID	CX		1913	O	0..1	
2.1	ID	ST		20	O	..	e.g. 1234567
3	Patient Identifier List	CX		1913	R	1..*	
3.1	ID	ST		20	R	..	e.g. 1234567
3.2	Check digit	ST		200	O	..	e.g. 4
3.3	code identifying the check digit scheme	ID	HL70061	200	O	..	e.g. M11

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
	employed						
3.4	assigning authority	HD		603	O	..	
3.4.1	namespace ID	IS		200	O	..	e.g. HIS1
3.4.2	universal ID	ST		200	O	..	
3.4.3	universal ID type	ID		200	O	..	
3.5	identifier type code (ID)	ID	HL70203	200	O	..	e.g. MR
3.6	assigning facility	HD		603	O	..	
3.6.1	namespace ID	IS		200	O	..	e.g. FACILITY1
3.6.2	universal ID	ST		200	O	..	
3.6.3	universal ID type	ID		200	O	..	
3.7	effective date (DT)	DT		24	O	..	e.g. 20051107
3.8	expiration date	DT		24	O	..	
4	Alternate Patient ID - PID	CX		1913	O	0..1	
4.1	ID	ST		20	O	..	e.g. 1234567
5	Patient Name	XPN		1103	R	1..1	
5.1	family name	FN		174	O	..	
5.1.1	surname	ST		30	R	..	e.g. Yarmey
5.2	given name	ST		30	O	..	e.g. Jane
5.3	second and further given names or initials thereof	ST		30	O	..	e.g. C
5.4	suffix (e.g., JR or III)	ST		15	O	..	
5.5	prefix (e.g., DR)	ST		100	O	..	e.g. DR.
6	Mother's Maiden Name	XPN		1103	O	0..1	
6.1	family name	FN		174	O	..	
6.1.1	surname	ST		30	O	..	
7	Date/Time Of Birth	TS		26	O	0..1	
7.1	Date/Time	NM		24	R	..	e.g. 19931022
8	Administrative Sex	IS	HL70001	1	O	0..1	e.g. F
10	Race	CE	HL70005	483	O	0..1	
10.1	identifier	ST		40	O	..	e.g. 2106-3
11	Patient Address	XAD		631	O	0..*	
11.1	street address (SAD)	SAD		318	O	..	
11.1.1	street or mailing address	ST		254	O	..	e.g. Kortrijksesteenweg
11.2	other designation	ST		20	O	..	e.g. 254
11.3	city	ST		30	O	..	e.g. Sint Martens Latem
11.4	state or province	ST		20	O	..	e.g. OVL
11.5	zip or postal code	ST		20	O	..	e.g. 9831
11.6	country	ID		20	O	..	e.g. BEL
11.7	address type	ID	HL70190	10	O	..	e.g. P
13	Phone Number - Home	XTN		850	O	0..1	
13.1	[(999)] 999-9999 [X99999][C any text]	TN		15	O	..	
13.5	Country Code	NM		15	O	..	e.g. 32

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
13.6	Area/city code	NM		15	O	..	e.g. 3
13.7	Phone number	NM		15	O	..	e.g. 4448150
13.8	Extension	NM		15	O	..	e.g. 500
14	Phone Number - Business	XTN		850	O	0..1	
14.1	[(999)] 999-9999 [X99999][C any text]	TN		15	O	..	e.g. 024448150
14.5	Country Code	NM		15	O	..	
14.6	Area/city code	NM		15	O	..	
14.7	Phone number	NM		15	O	..	
14.8	Extension	NM		15	O	..	
15	Primary Language	CE		483	O	0..1	
15.1	identifier	ST		20	O	..	e.g. EN
16	Marital Status	CE	HL70002	483	O	0..1	
16.1	identifier	ST		10	O	..	e.g. M
17	Religion	CE	HL70006	483	O	0..1	
17.1	identifier	ST		40	O	..	
17.2	text	ST		40	O	..	
18	Patient Account Number	CX		1913	O	0..1	
18.1	ID	ST		30	O	..	e.g. 2590852
18.4	assigning authority	HD		257	O	..	
18.4.1	namespace ID	IS		50	O	..	e.g. HIS1
18.7	effective date (DT)	DT		24	O	..	e.g. 20051107
18.8	expiration date	DT		24	O	..	
19	SSN Number - Patient	ST		50	O	0..1	e.g. 19931022175
21	Mother's Identifier	CX		1913	O	0..1	
21.1	ID	ST		40	O	..	e.g. 1234560
22	Ethnic Group	CE	HL70189	483	O	0..1	
22.1	identifier	ST		40	O	..	
23	Birth Place	ST		30	O	0..1	e.g. Deinze
24	Multiple Birth Indicator	ID	HL70136	1	O	0..1	e.g. Y
25	Birth Order	NM		2	O	0..1	e.g. 2
26	Citizenship	CE	HL70171	483	O	0..1	
26.1	identifier	ST		20	O	..	e.g. BE
29	Patient Death Date and Time	TS		26	O	0..1	
29.1	Date/Time	NM		24	O	..	
30	Patient Death Indicator	ID	HL70136	1	O	0..1	e.g. N

2. Patient ID

Please use PID-3 and map them using the parameters PIDDomainForCode, PIDDomainForHISCode ... to the PATIENTS.xxx columns

2.1. ID

patients.p_extracode, patients.p_code

3. Patient Identifier List

Patient Identifier (list) which UNIQUELY identifies a single patient.

Combination of components ID and Assigning Authority should be sufficient to UNIQUELY identify a

patient.

3.1. ID

patient_identifiers.pid_id,
patients.p_natnumber

3.4. assigning authority

Authority/System that generated the patient identifier

3.6. assigning facility

Facility in which the patient identifier was generated

4. Alternate Patient ID - PID

Please use PID-3 and map them using the parameters PIDDomainForCode, PIDDomainForHISCode ... to the PATIENTS.xxx columns

4.1. ID

patients.p_extracode

5. Patient Name

Patient name - no repetitions allowed!

6. Mother's Maiden Name

to exchange the patients maiden name

7. Date/Time Of Birth

Patient birth date - is a required field in the RIS database

8. Administrative Sex

patients.p_sex

11. Patient Address

The occurrence that has an address type (PID-11-7) of P or M or blank is considered the main address and is stored in the PATIENTS table.

ALL occurrences are stored in PAT_ADDRESSES.

11.6. country

In a multi-site environment with multiple HIS systems, make sure that each HIS is using the same code-set.

HL7.org suggests the 3 character alphanumeric codes from the ISO 3366-1table.

11.7. address type

In a multi-site environment with multiple HIS systems, make sure that each HIS is using the same code-set.

13. Phone Number - Home

Patients primary phone number - only the first occurrence is used !

14. Phone Number - Business

Additional (second) phone number

16.1. identifier

In a multi-site environment with multiple HIS systems, make sure that each HIS is using the same code-set.

18. Patient Account Number

Account number (billing) will be linked to the visit number (PV1-19).

In a multi-site environment with multiple HIS systems, make sure that the component Assigning Authority is provided !

19. SSN Number - Patient

Social security number: patients.p_siscode

21. Mother's Identifier

ID of the mother in case of a newborn

23. Birth Place

PATIENTS.P_BIRTHPLACE

PD1 - patient additional demographic

- Usage: Not supported

NTE - Notes and Comments

- Usage: Not supported

Segment group: PATIENT VISIT

- Usage: Required but may be empty

- Cardinality: 0..1

PV1 - Patient visit

- Usage: Required

- Cardinality: 1..1

- Implementation note: By default the ORM interface doesn't create/update visits, but the order refers to the visit identified by PV1-19

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
1	Set ID - PV1	SI		4	O	0..1	e.g. 1
2	Patient Class	IS	HL70004	1	R	1..1	e.g. I
3	Assigned Patient Location	PL		1230	O	0..1	
3.1	point of care	IS		25	O	..	e.g. U31
3.2	room	IS		8	O	..	e.g. 310
3.3	bed	IS		25	O	..	e.g. A
3.4	facility (HD)	HD		223	O	..	
3.4.1	namespace ID	IS		15	O	..	e.g. FACILITY1
4	Admission Type	IS		2	O	0..1	e.g. R
7	Attending Doctor	XCN	HL70010	3002	O	0..1	
7.1	ID number (ST)	ST		15	O	..	e.g. 759
7.2	family name	FN		184	O	..	
7.2.1	surname	ST		40	O	..	e.g. Rudjord
7.3	given name	ST		30	O	..	e.g. Anders
8	Referring Doctor	XCN	HL70010	3002	O	0..1	
8.1	ID number (ST)	ST		15	O	..	e.g. 1282
8.2	family name	FN		184	O	..	
8.2.1	surname	ST		40	O	..	e.g. Blichfeldt
8.3	given name	ST		30	O	..	e.g. Erik
9	Consulting Doctor	XCN	HL70010	3002	O	0..*	
9.1	ID number (ST)	ST		20	O	..	
9.2	family name	FN		184	O	..	
9.2.1	surname	ST		40	O	..	

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
9.3	given name	ST		30	O	..	
10	Hospital Service	IS		10	O	0..1	e.g. MED
18	Patient Type	IS		10	O	0..1	e.g. H1
19	Visit Number	CX		1913	R	1..1	
19.1	ID	ST		20	R	..	e.g. 2004111143
19.4	assigning authority	HD		258	O	..	
19.4.1	namespace ID	IS		50	O	..	e.g. HIS1
20	Financial Class	FC		47	O	0..1	
20.1	Financial Class	IS		10	O	..	e.g. 4
44	Admit Date/Time	TS		26	O	0..1	
44.1	Date/Time	NM		24	R	..	e.g. 200511070945
45	Discharge Date/Time	TS		26	O	0..1	
45.1	Date/Time	NM		24	O	..	

2. Patient Class

Important field !

Can be mapped to specific patient class in RIS.

In a multi-site environment with multiple HIS systems, make sure that each HIS is using the same code-set.

3.1. point of care

Care unit where the patient resides.

In a multi-site environment with multiple HIS systems, make sure that each HIS is using the same code-set.

3.4. facility (HD)

Facility where the patient resides - encouraged to use this field - certainly in a multi-site implementation.

In a multi-site environment with multiple HIS systems, make sure that each HIS is using the same code-set.

7.1. ID number (ST)

In a multi-site environment with multiple HIS systems, make sure that each HIS is using the same code-set.

8.1. ID number (ST)

In a multi-site environment with multiple HIS systems, make sure that each HIS is using the same code-set.

9. Consulting Doctor

Stored as patient related physician - NOT linked to the visit

9.1. ID number (ST)

In a multi-site environment with multiple HIS systems, make sure that each HIS is using the same code-set.

10. Hospital Service

transfer.tr_admservcode

18. Patient Type

YYYYMMDDHHMMSS transfers.tr_patttype

In a multi-site environment with multiple HIS systems, make sure that each HIS is using the same code-set.

19. Visit Number

Required field for Agfa RIS when exchanging visit information Identifier generated per patient stay in a facility.

In a multi-site environment with multiple HIS systems make sure the component Assigning Authority is provided

19.4. assigning authority

Encouraged to use this component in a multi-site environment

44. Admit Date/Time

Admission date/time

44.1. Date/Time

YYYYMMDDHHMMSS

transfers.tr_date_from

PV2 - Patient visit - additional information

- Usage: Not supported

End of segment group PATIENT_VISIT

Segment group: INSURANCE

- Usage: Not supported

IN1 - Insurance

- Usage: Not supported

IN2 - Insurance Additional Information

- Usage: Not supported

IN3 - Insurance Additional Information, Certification

- Usage: Not supported

End of segment group INSURANCE

GT1 - Guarantor

- Usage: Not supported

AL1 - Patient allergy information

- Usage: Not supported

End of segment group PATIENT

Segment group: ORDER

- Usage: Required

- Cardinality:1..*

ORC - Common Order

- Usage: Required

- Cardinality:1..1

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
1	Order Control	ID	HL70119	2	R	1..1	e.g. NW
2	Placer Order Number	EI		427	R	1..1	
2.1	entity identifier	ST		50	R	..	e.g. 000216

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
2.2	namespace ID	IS		20	R	..	e.g. HIS1
3	Filler Order Number	EI		427	CE	0..1	
3.1	entity identifier	ST		3	O	..	
3.2	namespace ID	IS	HL70363	3	O	..	
4	Placer Group Number	EI		427	O	0..1	
4.1	entity identifier	ST		50	RE	..	e.g. S000216
4.2	namespace ID	IS		20	RE	..	e.g. HIS1
5	Order Status	ID	HL70038	2	O	0..1	
7	Quantity/Timing	TQ		1545	O	0..1	
7.4	start date/time	TS		27	O	..	
7.4.1	Date/Time	NM		24	O	..	e.g. 200601251639
7.5	end date/time	TS		27	O	..	
7.5.1	Date/Time	NM		24	O	..	e.g. 200602251639
7.6	priority	ST		3	O	..	e.g. R
7.8	text (TX)	TX		200	O	..	
9	Date/Time of Transaction	TS		26	O	0..1	
9.1	Date/Time	NM		24	O	..	e.g. 200601251639
10	Entered By	XCN		3002	O	0..*	
10.1	ID number (ST)	ST		254	O	..	e.g. 123131
10.2	family name	FN		398	O	..	
10.2.1	surname	ST		254	O	..	e.g. Liekens
10.3	given name	ST		254	O	..	e.g. Jan
12	Ordering Provider	XCN		3002	O	0..1	
12.1	ID number (ST)	ST		15	R	..	e.g. 64578
12.2	family name	FN		184	O	..	
12.2.1	surname	ST		40	O	..	e.g. De Baerdemaker
12.3	given name	ST		30	O	..	e.g. Jos
12.9	assigning authority	HD		12	O	..	
12.9.1	namespace ID	IS	HL70363	3	O	..	
12.9.2	universal ID	ST		3	O	..	
12.9.3	universal ID type	ID	HL70301	3	O	..	
13	Enterer's Location	PL		1230	O	0..1	
13.1	point of care	IS		15	O	..	e.g. ORTHO
14	Call Back Phone Number	XTN		850	O	0..1	
14.1	[(999)] 999-9999 [X999999][C any text]	TN		254	O	..	e.g. 8150
15	Order Effective Date/Time	TS		26	O	0..1	
15.1	Date/Time	NM		14	O	..	e.g. 20131003143802
17	Entering Organization	CE		483	O	0..1	
17.1	identifier	ST		15	O	..	e.g. 67842
17.2	text	ST		30	O	..	e.g. St John
21	Ordering Facility Name	XON		567	O	0..1	
21.3	ID number (NM)	NM		15	O	..	e.g. 67842
25	Order Status Modifier	CWE		705	O	0..1	

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
25.1	identifier (ST)	ST		3	O	..	e.g. AD

1. Order Control

Application logic depends heavily on the value of this field !

NW is used for a new order

CA is used to cancel an order

DC is used to discontinue an order

XO is used to update an order

When using CA for Cancel, the cancelled order will be completely removed from the RIS system.

When DC is used, the order is still available in RIS with status discontinued.

2.1. entity identifier

Order (session) id from order placer system

2.2. namespace ID

Used to identify the order placer - required when multiple order placer systems are in place.

3. Filler Order Number

Required to be empty - otherwise the ORM message is stored as a QDoc servicerequest (filler order). ID that should be generated by the filler application !

4. Placer Group Number

Used to group procedures in an order session.

4.1. entity identifier

If a notion of order session is used (to group different procedures within one order) this field should contain a unique identifier for the order session.

4.2. namespace ID

see ORC-2-2

7.4. start date/time

Preferred start date/time for order

7.5. end date/time

Preferred end date for order.

Can be influenced by parameter OrderEndDateSameDayAsStartdate

7.6. priority

This field is used to map a priority to a qdocstatus - parameter mapprioritytoqdocstatus + highpriority mapping

7.8. text (TX)

stored as procedure info (e.g. to indicate that a patient is only available in the afternoon)

9. Date/Time of Transaction

Date/time of creation of the order. If this field is empty the current date/time is used as creation date.

Also used as order date if ORC-7 is empty

10. Entered By

Stored as order information

12. Ordering Provider

Requesting physician

12.9. assigning authority

Assigning authority - Only applicable to Enterprise Imaging

See parameter MapAssAuthForPhysicianId

13. Enterer's Location

Requesting department

14. Call Back Phone Number

Stored as order info

15. Order Effective Date/Time

will only be used when creating a request

15.1. Date/Time

YYYYMMDDHHMMSS

gbprestaties.planuitvoering

17. Entering Organization

Defaults to requesting facility, but can also be configured to be stored as requesting department. Also stored as remark

21. Ordering Facility Name

Requesting facility/hospital

25. Order Status Modifier

MapOrderStatusModifier: Comma separated list to map an HL7 status modifier (ORC-25) to a QPOrder status key and a Qdoc status code (eg ARRIVED#3#A).

Segment group: ORDER DETAIL

- Usage: Required but may be empty

- Cardinality: 0..1

OBR - Observation Request

- Usage: Required

- Cardinality: 1..1

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
1	Set ID - OBR	SI		4	O	0..1	e.g. 1
2	Placer Order Number	EI		427	R	1..1	
2.1	entity identifier	ST		50	R	..	e.g. 000216
2.2	namespace ID	IS		20	R	..	e.g. HIS1
3	Filler Order Number	EI		427	CE	0..1	
3.1	entity identifier	ST		3	O	..	
3.2	namespace ID	IS	HL70363	3	O	..	
4	Universal Service Identifier	CE		483	R	1..1	
4.1	identifier	ST		64	R	..	e.g. 15060
4.2	text	ST		100	O	..	e.g. FL Gastro Enema
4.3	name of coding system	IS		20	O	..	e.g. L
4.4	alternate identifier	ST		20	O	..	
4.6	name of alternate coding system	IS		20	O	..	
6	Requested Date/Time	TS		26	O	0..1	
6.1	Date/Time	NM		14	O	..	e.g. 20131003143940
7	Observation Date/Time #	TS		26	O	0..1	
7.1	Date/Time	NM		14	O	..	e.g. 20131003144110
13	Relevant Clinical Info.	ST		2000	O	0..1	e.g. INDICATIONS:

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
							Constipation, Incomplete Colonoscopy
16	Ordering Provider	XCN		3002	O	0..1	
16.1	ID number (ST)	ST		15	O	..	e.g. 97845
16.2	family name	FN		184	O	..	
16.2.1	surname	ST		40	O	..	e.g. De Vos
16.3	given name	ST		30	O	..	e.g. Marcel
18	Placer Field 1	ST		15	O	0..1	
27	Quantity/Timing	TQ		1545	O	0..1	
27.4	start date/time	TS		26	O	..	
27.4.1	Date/Time	NM		24	O	..	e.g. 200601251639
27.5	end date/time	TS		26	O	..	
27.5.1	Date/Time	NM		24	O	..	e.g. 200602251639
27.6	priority	ST		3	O	..	e.g. R
28	Result Copies To	XCN		3002	O	0..*	
28.1	ID number (ST)	ST		15	O	..	e.g. 777788
28.2	family name	FN		184	O	..	
28.2.1	surname	ST		40	O	..	e.g. Michiels
28.3	given name	ST		30	O	..	e.g. Daniel
30	Transportation Mode	ID	HL70124	10	O	0..1	e.g. WALK
31	Reason for Study	CE		483	O	0..1	
31.1	identifier	ST		254	C	..	e.g. CM
31.2	text	ST		254	O	..	e.g. Constipation, Incomplete Colonoscopy
32	Principal Result Interpreter +	CM_NDL		835	O	0..1	
32.1	name	CN		140	O	..	
32.1.1	ID number (ST)	ST		20	O	..	
32.1.2	family name	FN		56	O	..	
32.1.3	given name	ST		30	O	..	
32.1.4	second and further given names or initials thereof	ST		3	O	..	
32.1.5	suffix (e.g., JR or III)	ST		3	O	..	
32.1.6	prefix (e.g., DR)	ST		3	O	..	
32.1.7	degree (e.g., MD)	IS	HL70360	3	O	..	
32.1.8	source table	IS	HL70297	3	O	..	
32.1.9	assigning authority	HD		11	O	..	
32.4	point of care (IS)	IS		3	O	..	
32.5	room	IS	HL70303	3	O	..	
32.6	bed	IS	HL70304	3	O	..	
32.7	facility (HD)	HD		11	O	..	
32.7.1	namespace ID	IS	HL70363	3	O	..	
32.7.2	universal ID	ST		3	O	..	
32.7.3	universal ID type	ID	HL70301	3	O	..	

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
32.8	location status	IS	HL70306	3	O	..	
32.9	person location type	IS	HL70305	3	O	..	
32.10	building	IS	HL70307	3	O	..	
32.11	floor	IS	HL70308	3	O	..	
34	Technician +	CM_NDL		835	O	0..1	
34.1	name	CN		130	O	..	
34.1.1	ID number (ST)	ST		20	O	..	
34.1.2	family name	FN		46	O	..	
34.1.3	given name	ST		30	O	..	
34.1.4	second and further given names or initials thereof	ST		3	O	..	
34.1.5	suffix (e.g., JR or III)	ST		3	O	..	
34.1.6	prefix (e.g., DR)	ST		3	O	..	
34.1.7	degree (e.g., MD)	IS	HL70360	3	O	..	
34.1.8	source table	IS	HL70297	3	O	..	
34.1.9	assigning authority	HD		11	O	..	
34.2	start date/time	TS		2	O	..	
34.4	point of care (IS)	IS		3	O	..	
34.5	room	IS	HL70303	3	O	..	
34.6	bed	IS	HL70304	3	O	..	
34.7	facility (HD)	HD		11	O	..	
34.7.1	namespace ID	IS	HL70363	3	O	..	
34.7.2	universal ID	ST		3	O	..	
34.7.3	universal ID type	ID	HL70301	3	O	..	
34.8	location status	IS	HL70306	3	O	..	
34.9	person location type	IS	HL70305	3	O	..	
34.10	building	IS	HL70307	3	O	..	
34.11	floor	IS	HL70308	3	O	..	
45	Procedure Code Modifier	CE	HL70340	483	O	0..1	
45.1	identifier	ST		1	O	..	
45.2	text	ST		3	O	..	
45.3	name of coding system	IS	HL70396	3	O	..	
45.4	alternate identifier	ST		3	O	..	
45.5	alternate text	ST		3	O	..	
45.6	name of alternate coding system	IS	HL70396	3	O	..	
46	Placer Supplemental Service Information	CE	HL70411	483	O	0..2	
46.1	identifier	ST		100	O	..	
47	Filler Supplemental Service Information	CE	HL70411	483	O	0..1	
47.1	identifier	ST		50	R	..	
47.2	text	ST		3	O	..	
47.3	name of coding system	IS	HL70396	3	O	..	
47.4	alternate identifier	ST		20	O	..	
47.5	alternate text	ST		40	O	..	

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
47.6	name of alternate coding system	IS	HL70396	3	O	..	

1. Set ID - OBR

If ORC-4 Group number is not used the value of OBR-1 is stored as ID of the procedure.

Ideally is when the unique order number is sent in OBR-2, this value should be unique on exam level. When that is not the case, OBR-1 is used as unique ID on exam level. OBR-1 should have a unique number within the ORM message.

2. Placer Order Number

Order ID

If ORC-4 is used the value of this field should contain a unique identifier (per procedure) within the order session !

2.2. namespace ID

Should match ORC-2-2 - value of OBR not stored in the database.

3. Filler Order Number

Required to be empty - otherwise the ORM message is stored as a QDoc servicerequest. ID that should be generated by the filler application !

4. Universal Service Identifier

Procedure identifier Procedure identifiers from an order placer system can be mapped to Agfa procedures using the Ordermapping option in the interface configuration tool.

6.1. Date/Time

YYYYMMDDHHMMSS

gbprestatiegroep.voorschrift - will only be used when creating a request

7.1. Date/Time

YYYYMMDDHHMMSS

gbprestatiegroep.planuitvoering,rq_exams.rqex_done - will only be used when creating a request

13. Relevant Clinical Info.

Clinical Info string. This free text field will be available in the Order and in the QDoc request that is created based on an order. When the clinical info string is longer than 512 characters, the field NTE-3 is advised be used instead of OBR-13.

Database:

The clinical info columns on order, appointment and request level have a max field length in the database of 2000 (bytes).

Important:

If appending is used for the clinical information (parameters: appendclinicalinfoinobr13 or appendclinicalinfoinobr13order) a cutoff will happen if the combined length would exceed 2000.

OBR 13 â€œ NTE 3 relation:

When NTE.3 is used in combination with OBR.13. the value from OBR.13 will be overwritten unless parameter appendclinicalinfoinobr13 or appendclinicalinfoinobr13order depending if it is an order or request.

Difference in OBR 13 and NTE 3 treatment:

There are checks inside OBR.13 processing logic so if the next procedure code is different within the same message. The procedure code will be automatically added as a prefix. Also duplicated clinical info

strings will not be added if it is identical to the previous clinical info string inside the message.

Why use NTE.3?

NTE.3 is an HL7 FT datatype which gives more formatting options.

16. Ordering Provider

Requesting physician - should correspond to ORC-12.

OBR-16 will only be used when ORC-12 is empty.

18. Placer Field 1

Can be used if the order placer creates the accession numbers - not recommended !

27. Quantity/Timing

Only used when ORC-7 is empty !

See ORC-7 notes

27.6. priority

Only used if ORC7-6 is empty

See parameters PriorityMap, QPOrderPriorityThatCorrespondsTo High When empty, R is used

28. Result Copies To

Addressees

30. Transportation Mode

Patient mobility - constants APP_PATMOBILITY

31. Reason for Study

Stored as order remark but can be stored as clinical information too, depending on the HL7Server parameter AddReasonForStudyToClinInfo.

31.1. identifier

If OBR-31-2 (text) is empty the value is taken from this field. Suggested to fill in the text component of OBR-31.

Condition Predicate:

Only used if OBR-31-2 is empty

32. Principal Result Interpreter +

Only when a request is created

32.1.1. ID number (ST)

doctors.d_code, doctors.d_hospitalkey, doctors.d_riziv

32.1.3. given name

doctors.d_fname

34. Technician +

Only when a request is created

34.1.1. ID number (ST)

technicians.te_code

45. Procedure Code Modifier

Only when a request is created

45.1. identifier

rq_exams.rqex_paymode

46. Placer Supplemental Service Information

Used to map to QPOrder/QPlanner exam subdivisions

47. Filler Supplemental Service Information

Only when a request is created

47.1. identifier

rq_exams.rqex_code or BILLINGDOC or ANESTHESIA_BY or ANESTHESIE_BY

47.4. alternate identifier

doctors.d_code, doctors.d_hospitalkey, doctors.d_riziv

if OBR47.1 = exam code, not used

47.5. alternate text

doctors.d_lname

if OBR47.1 = exam code, not used

NTE - Notes and Comments

- Usage: Required but may be empty

- Cardinality:0..*

- Implementation note: Stored as clinical information. It is mandatory to use the NTE segment for clinical info when the clinical info string is longer than 300 characters.

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
3	Comment	FT		2000	O	0..1	e.g. Constipation, Incomplete Colonoscopy

3. Comment

Stored as clinical information

CTD - Contact Data

- Usage: Not supported

DG1 - Diagnosis

- Usage: Required but may be empty

- Cardinality:0..*

- Implementation note: Link ICD-9-CM or ICD-10-CM codes to an order.

The ICD9-CM or ICD10-CM codes should be properly loaded and configured in the RIS database before using the DG1 segment in an ORM message. Unknown diagnosis codes will not be added to the RIS database by the ORM interface.

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
1	Set ID - DG1	SI		4	O	0..1	e.g. 1
3	Diagnosis Code - DG1	CE	HL70051	483	O	0..1	
3.1	identifier	ST		100	O	..	e.g. V76.1
3.2	text	ST		100	O	..	e.g. 0TH SCREEN MAMMO-MALIGN NEOPLASM OF BREAST
3.3	name of coding system	IS	HL70396	3	O	..	e.g. I9C

3. Diagnosis Code - DG1

ICD-9-CM and ICD-10-CM supported! ICD-9-CM or ICD10-CM codes should have been preloaded in Agfa database

3.3. name of coding system

Important : I9C and I10C coding system supported !

Segment group: OBSERVATION

- Usage: Required but may be empty
- Cardinality:0..*

OBX - Observation/Result

- Usage: Required
- Cardinality:1..*
- Implementation note: Additional order information - stored as user definable properties and/or clinical information or patient remark.

With the HL7Server parameters OrderParamListForClinicalInfo and OrderParamListForPatientremark, the OBX segments can be treated as Clinical info or as Patient remark.

By default, OBX segments are treated as user-definable properties.

Specific for the integration between EI Scheduling and Enterprise Imaging:

- Messageboard text attachments supported

Seq.	Name	Type	Table	Len.	Opt.	Card.	Contents
1	Set ID - OBX	SI		4	O	0..1	e.g. 1
2	Value Type	ID	HL70125	2	R	1..1	e.g. NM
3	Observation Identifier	CE		483	R	1..1	
3.1	identifier	ST		50	R	..	e.g. PREGNANT
3.2	text	ST		50	O	..	e.g. Pregnant
3.4	alternate identifier	ST			O	..	
3.5	alternate text	ST			O	..	
3.6	name of alternate coding system	IS	HL70396		O	..	
4	Observation Sub-Id	ST		20	O	0..1	
5	Observation Value	ST		254	R	1..1	e.g. NO
6	Units	CE		483	O	0..1	
6.1	identifier	ST		40	O	..	
11	Observation Result Status	ID	HL70085	1	O	0..*	
13	User Defined Access Checks	ST		20	O	0..*	
14	Date/Time of the Observation	TS		26	O	0..*	
16	Responsible Observer	XCN		3002	O	0..*	
16.1	ID number (ST)	ST		3	R	..	
16.2	family name	FN		147	O	..	
16.2.1	surname	ST		3	O	..	
16.3	given name	ST		3	O	..	
16.9	assigning authority	HD		210	R	..	
16.9.1	namespace ID	IS	HL70363	3	R	..	

2. Value Type

Not stored in db, but used to transform OBX-5.

When OBX-2 = RP, the value in OBX-5 should be a reference pointer to a file.
This file will be linked as attachment to the order in RIS.

When OBX-2 is ST, and the value from OBX-3 is not listed in the HL7Server parameters
OrderParamListForClinicalInfo and OrderParamListForPatientremark, the value in OBX-5 will be
available as user-definable property in the order in RIS.

Specific for the integration between EI Scheduling and Enterprise Imaging:

- For Messageboard text attachments:

TX

3.1. identifier

Categorydef.cd_code

example -->

OBX||RP|SCANNEDREQUEST||presc.jpeg|

Specific for the integration between EI Scheduling and Enterprise Imaging:

EI attachment code

- For Messageboard text attachments:

Messageboard text attachment code

3.2. text

Specific for the integration between EI Scheduling and Enterprise Imaging:

EI attachment description

3.4. alternate identifier

Specific for the integration between EI Scheduling and Enterprise Imaging:

EI accession number where attachment belongs to (in case of study/PPS level attachment). In case of
order/patient/report level attachment, this will be empty.

3.5. alternate text

Specific for the integration between EI Scheduling and Enterprise Imaging:

ACC (in case of study level attachment), PAT (in case of patient level attachment), ORD (in case of order
level attachment), REP (in case of report level attachment), PPS (in case of PPS level attachment)

4. Observation Sub-Id

If filled the value is added to the value of OBX-3-1 and used as property identifier in the user-definable
properties.

Specific for the integration between EI Scheduling and Enterprise Imaging:

Unique key identifying the specific Messageboard text attachment item (primary key of attachment item)

5. Observation Value

Depending on the parameter order.attachmentfilepath the complete path is added or not to the file name in
obx.5

Specific for the integration between EI Scheduling and Enterprise Imaging:

- For Messageboard text attachments:

The actual attachment text of the messageboard text attachment

6.1. identifier

Added after the value in the property

11. Observation Result Status

Specific for the integration between EI Scheduling and Enterprise Imaging:

Supported value: O

13. User Defined Access Checks

Specific for the integration between EI Scheduling and Enterprise Imaging:

Used in combination with messageboard attachments. Possible values 'PUB' or 'PRV'

PUB or PRV - used to mark the message board item as 'public' (PUB) or 'private' (PRV)

14. Date/Time of the Observation

Specific for the integration between EI Scheduling and Enterprise Imaging:

Used in combination with messageboard attachments.

Date/time of the creation of the message board item (format: YYYYMMDDHH24MISS)

16. Responsible Observer

Specific for the integration between EI Scheduling and Enterprise Imaging:

Used in combination with messageboard attachments.

OBX(16) = the user that added the messageboard text attachment

OBX(16.1) = code of the user - (Employee Code field in QDoc for a user)

OBX(16.2) = family name of the user

OBX(16.3) = given name of the user

OBX(16.9) = assigning authority

NTE - Notes and Comments

- Usage: Not supported

End of segment group OBSERVATION

End of segment group ORDER_DETAIL

FT1 - Financial Transaction

- Usage: Not supported

CTI - Clinical Trial Identification

- Usage: Not supported

BLG - Billing

- Usage: Not supported

End of segment group ORDER