

HL7 Conformance Statement

Product	Image-Arena 4.5 (or higher)
Product No.:	T.08.0122-08 (or higher)
Effective Date:	2011-08-10
Originator:	Benjamin Wagner
Document rev.:	08

Table of contents

1	GENERAL INFORMATION.....	3
2	INCOMING MESSAGES	5
3	OUTGOING MESSAGES.....	13
4	ACKNOWLEDGEMENTS	21
5	SAMPLE MESSAGES.....	22



1 General information

1.1 Revision history

REV	Date (YYYY-MM-DD)	Author	Reason	Changes
INI	2008-08-01	HKra	Initial	Initial
02	2009-01-22	RSle	New Feature	New: Send Images via HL7 (OnKeyNote / link to JPG/...)
03	2009-11-16	RSle	New Feature	Receive HL7 Message (Patient Update / Patient Merge) Change of Semantic file structure
04	2010-04-19	BWag	Complete change of document	Complete change of document
05	2010-09-28	BWag/ DPan	Update of ACK section	More detailed description added
06	2010-11-12	SFro	Update for Image-Arena 4.4	Relabel on Image-Arena 4.4
07	2010-11-22	SFro	Update for Image-Arena 4.5	Relabel on Image-Arena 4.5
08	2011-05-12	BWag	Update of available Image-Arena actions	Sections 2 + 3

Table 1: Revision history

1.2 Abbreviations

ADT	Admission, Discharge, and Transfer message
EVN	Event Type segment
HL7	Health Level 7
IHE	Integrating the Healthcare Enterprise
DICOM	Digital Imaging and Communication in Medicine
MRG	Merge Patient Information segment
MSH	Message Header segment
OBR	Observation Request segment
OBX	Observation Result segment
ORC	Common Order segment
ORM	Order Request message
ORU	Observation Results - Unsolicited message
PID	Patient ID segment
PV1	Patient Visit segment
MDM	Medical document management



1.3 Related documents

HL7 standard v 2.3.x

1.4 Purpose and intended audience

This document is an HL7 conformance statement for HL7 services associated with Image-Arena 4.5.

The user of this document is involved with system integration and/or software design. We assume that the reader is familiar with the terminology and concepts that are used in HL7 2.3.x standard and the IHE technical framework. Readers not familiar with HL7 terminology should first read the appropriate parts of the HL7 standard itself, prior to reading this conformance statement.

Although the use of this conformance statement in conjunction with the HL7 standard is intended to facilitate communication with Image-Arena, it is not sufficient to guarantee, by itself the inter-operation of the connection between Image-Arena and the 3rd party HL7-based system.

The integration of any device into a system of interconnected devices goes beyond the scope of the HL7 standard and this conformance statement when interoperability is desired. The responsibility for analyzing the applications requirements and developing a solution that integrates the TomTec equipment with other vendors' systems is the user's responsibility.



2 INCOMING MESSAGES

Image-Arena 4.5 is able to perform following actions depending on incoming HL7 messages (details see in the following sections):

- Update patient information based on Patient ID or StudyInstanceUID
- Merge 2 patients based on Patient ID or StudyInstanceUID
- Assign dedicated studies to a patient
- Create ordered studies
- Delete ordered study/studies
- Store content of HL7 messages based on PatientID or StudyInstanceUID as data container

2.1 Supported trigger events

2.1.1 ADT messages

2.1.1.1 Message overview

Event code	Description	Inbound supported
A01	Admit a patient	*
A08	Update patient information (patient's visit data)	√
A11	Cancel admit	√
A28	Add person information	*
A29	Delete person information	**
A31	Update person data	√
A34	Merge person data	√
A45	Move visit information – visit number	√

Table 2: Supported ADT events

*) Content of message types can be processed, but messages are ignored by default. Intended use of messages can be triggered by ORM messages (e.g. ORM^O01 – with control code (ORC.1) NW creates a patient/study in Image-Arena)

***) Person is only deleted if no DICOM objects belong to the patient. As soon as DICOM objects belong to the patient, the patient/study has to be deleted manually

2.1.1.2 ADT segments processed

The following segments are processed when Image-Arena receives an ADT message:

- **MSH**
- [EVN]
- **PID**
- **PV1**
- **MRG**



2.1.2 ORM messages

2.1.2.1 Overview

Event code	Description	Inbound supported
001	General order message	√

Table 3: Supported ORM events

2.1.2.2 Supported control codes

Control code	Description	Inbound supported
NW	New order	√
XO	Change order	*
OC	Order cancel	√

Table 4: Supported order control codes from ORC.1

*) The support can be changed by configuration.

2.1.2.3 ORM segments processed

The following segments are processed when Image-Arena receives an ORM message:

- MSH
- PID
- PV1
- ORC
- [OBR]



2.2 Supported HL7 attributes

2.2.1 MSH

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Field Separator	YES	YES	
2	Encoding Characters	YES	YES	^~&
3	Sending Application	YES	YES	
4	Sending Facility	N	N	
5	Receiving Application	N	N	
6	Receiving Facility	N	N	
7	Date/time of Message	N	YES	
8	Security	N	N	
9	Message Type	YES	YES	
10	Message Control ID	YES	YES	
11	Processing ID	YES	YES	
12	Version ID	YES	YES	
13	Sequence Number	N	N	
14	Continuation Pointer	N	N	
15	Accept Acknowledgement Type	N	N	
16	Application Acknowledgement Type	N	N	
17	Country Code	N	N	
18	Character Set	N	N	
19	Principal Language of Message	N	N	

Table 5: MSH attribute support in Image-Arena



2.2.2 PID

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Set ID - PID	N	N	
2	Patient ID (external)	N	N	
3	Patient ID (internal)	YES	YES	
4	Alternate Patient ID - PID	N	N	
5	Patient Name	N	YES	
6	Mother's Maiden Name	N	N	
7	Date/Time of Birth	N	YES	
8	Sex	N	YES	
9	Patient Alias	N	N	
10	Race	N	N	
11	Patient Address	N	N	
12	County Code	N	N	
13	Phone Number - Home	N	N	
14	Phone Number - Business	N	N	
15	Primary Language	N	N	
16	Marital Status	N	N	
17	Religion	N	N	
18	Patient Account Number	N	N	
19	SSN Number - Patient	N	N	
20	Driver's License Number - Patient	N	N	
21	Mother's Identifier	N	N	
22	Ethnic Group	N	N	
23	Birth Place	N	N	
24	Multiple Birth Indicator	N	N	
25	Birth Order	N	N	
26	Citizenship	N	N	
27	Veterans Military Status	N	N	
28	Nationality	N	N	
29	Patient Death Date and Time	N	N	
30	Patient Death Indicator	N	N	

Table 6: PID attribute support in Image-Arena



2.2.3 PV1

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Set ID - PV1	N	N	
2	Patient Class	N	N	
3	Assigned Patient Location	N	N	
4	Admission Type	N	N	
5	Pre-admit Number	N	N	
6	Prior Patient Location	N	N	
7	Attending Doctor	N	N	
8	Referring Doctor	N	N	
9	Consulting Doctor	N	N	
10	Hospital Service	N	N	
11	Temporary Location	N	N	
12	Pre-admit Test Indicator	N	N	
13	Re-admission Indicator	N	N	
14	Admit Source	N	N	
15	Ambulatory Status	N	N	
16	VIP Indicator	N	N	
17	Admitting Doctor	N	N	
18	Patient Type	N	N	
19	Visit Number	YES	YES	
20	Financial Class	N	N	
21	Charge Price Indicator	N	N	
22	Courtesy Code	N	N	
23	Credit Rating	N	N	
24	Contract Code	N	N	
25	Contract Effective Date	N	N	
26	Contract Amount	N	N	
27	Contract Period	N	N	
28	Interest Code	N	N	
29	Transfer to Bad Debt Code	N	N	
30	Transfer to Bad Debt Date	N	N	
31	Bad Debt Agency Code	N	N	
32	Bad Debt Transfer Amount	N	N	
33	Bad Debt Recovery Amount	N	N	
34	Delete Account Indicator	N	N	
35	Delete Account Date	N	N	
36	Discharge Disposition	N	N	
37	Discharged to Location	N	N	
38	Diet Type	N	N	
39	Servicing Facility	N	N	
40	Bed Status	N	N	
41	Account Status	N	N	
42	Pending Location	N	N	
43	Prior Temporary Location	N	N	
44	Admit Date/Time	N	N	



SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
45	Discharge Date/Time	N	N	
46	Current Patient Balance	N	N	
47	Total Charges	N	N	
48	Total Adjustments	N	N	
49	Total Payments	N	N	
50	Alternate Visit ID	N	N	
51	Visit Indicator	N	N	
52	Other Healthcare Provider	N	N	

Table 7: PV1 attribute support in Image-Arena

2.2.4 MRG

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Prior Patient Identifier internal	YES	YES	
2	Prior Alternate Patient ID	N	N	
3	Prior Patient Account Number	N	N	
4	Prior Patient ID	N	N	
5	Prior Visit Number	N	N	
6	Prior Alternate Visit ID	N	N	
7	Prior Patient Name	N	N	

Table 8: MRG attribute support in Image-Arena



2.2.5 ORC

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Order Control	YES	YES	
2	Placer Order Number	YES	YES	
3	Filler Order Number	YES	YES	
4	Placer Group Number	N	N	
5	Order Status	N	N	
6	Response Flag	N	N	
7	Quantity/Timing	N	N	
8	Parent	N	N	
9	Date/Time of Transaction	N	N	
10	Entered By	N	N	
11	Verified By	N	N	
12	Ordering Provider	N	N	
13	Enterer's Location	N	N	
14	Call Back Phone Number	N	N	
15	Order Effective Date/Time	N	N	
16	Order Control Code Reason	N	N	
17	Entering Organization	N	N	
18	Entering Device	N	N	
19	Action By	N	N	

Table 9: ORC attribute support in Image-Arena



2.2.6 OBR

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Set ID - OBR	N	N	
2	Placer Order Number	YES	YES	Required if ORC.2 is absent
3	Filler Order Number	YES	YES	Required if ORC.3 is absent
4	Universal Service ID	N	N	
5	Priority	N	N	
6	Requested Date/time	N	N	
7	Observation Date/Time #	N	N	
8	Observation End Date/Time #	N	N	
9	Collection Volume	N	N	
10	Collector Identifier	N	N	
11	Specimen Action Code	N	N	
12	Danger Code	N	N	
13	Relevant Clinical Info.	N	N	
14	Specimen Received Date/Time	N	N	
15	Specimen Source	N	N	
16	Ordering Provider	N	N	
17	Order Callback Phone Number	N	N	
18	Placer Field 1	N	N	
19	Placer Field 2	N	N	
20	Filler Field 1	N	N	
21	Filler Field 2	N	N	
22	Results Rpt/Status Chng - Date/Time	N	N	
23	Charge to Practice	N	N	
24	Diagnostic Serv Sect ID	N	N	
25	Result Status	N	N	
26	Parent Result	N	N	
27	Quantity/Timing	N	N	
28	Result Copies To	N	N	
29	Parent	N	N	
30	Transportation Mode	N	N	
31	Reason for Study	N	N	
32	Principal Result Interpreter	N	N	
33	Assistant Result Interpreter	N	N	
34	Technician	N	N	
35	Transcriptionist	N	N	
36	Scheduled Date/Time	N	N	
37	Number of Sample Containers	N	N	
38	Transport Logistics of Collected Sample	N	N	
39	Collector's Comment	N	N	
40	Transport Arrangement Responsibility	N	N	
41	Transport Arranged	N	N	
42	Escort Required	N	N	
43	Planned Patient Transport Comment	N	N	



Table 10: OBR attribute support in Image-Arena

3 OUTGOING MESSAGES

3.1 IA internal trigger events

- OnNewStudy – activated whenever a study is added to the Image-Arena data base
- OnComplete – activated whenever the study state changes to “completed”
- OnFinalize – activated whenever the study state changes to “finalized”
- OnDelete – activated whenever a study is deleted

Further events can be implemented by configuration (e.g.OnMeasureComplete) but have to be clarified beforehand.

3.2 Supported message types

3.2.1 ORU

3.2.1.1 Message overview

Event code	Description	Outbound supported
R01	Observation result - unsolicited	√

Table 11: Supported ORU events

3.2.1.2 ORU Segments

The following segments are processed when Image-Arena receives an ORU message:

- MSH
- PID
- PV1
- OBR
- OBX



3.2.2 MDM

3.2.2.1 Message overview

Event code	Description	Outbound supported
T01	Medical document management - original document notification	√

Table 12: Supported MDM events

3.2.2.2 MDM Segments

The following segments are processed when Image-Arena receives an MDM message:

- MSH
- PID
- PV1
- TXA

3.3 Supported HL7 attributes

3.3.1 MSH

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Field Separator	YES	YES	
2	Encoding Characters	YES	YES	^~&
3	Sending Application	YES	YES	
4	Sending Facility	N	N	
5	Receiving Application	N	N	
6	Receiving Facility	N	N	
7	Date/time of Message	N	YES	
8	Security	N	N	
9	Message Type	YES	YES	
10	Message Control ID	YES	YES	
11	Processing ID	YES	YES	
12	Version ID	YES	YES	
13	Sequence Number	N	N	
14	Continuation Pointer	N	N	
15	Accept Acknowledgement Type	N	N	
16	Application Acknowledgement Type	N	N	
17	Country Code	N	N	
18	Character Set	N	N	
19	Principal Language of Message	N	N	

Table 13: Outgoing MSH attribute support in Image-Arena



3.3.2 PID

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Set ID - PID	N	N	
2	Patient ID (external)	N	N	
3	Patient ID (internal)	YES	YES	
4	Alternate Patient ID - PID	N	N	
5	Patient Name	YES	YES	
6	Mother's Maiden Name	N	N	
7	Date/Time of Birth	N	YES	
8	Sex	N	YES	
9	Patient Alias	N	N	
10	Race	N	N	
11	Patient Address	N	N	
12	County Code	N	N	
13	Phone Number - Home	N	N	
14	Phone Number - Business	N	N	
15	Primary Language	N	N	
16	Marital Status	N	N	
17	Religion	N	N	
18	Patient Account Number	N	N	
19	SSN Number - Patient	N	N	
20	Driver's License Number - Patient	N	N	
21	Mother's Identifier	N	N	
22	Ethnic Group	N	N	
23	Birth Place	N	N	
24	Multiple Birth Indicator	N	N	
25	Birth Order	N	N	
26	Citizenship	N	N	
27	Veterans Military Status	N	N	
28	Nationality	N	N	
29	Patient Death Date and Time	N	N	
30	Patient Death Indicator	N	N	

Table 14: Outgoing PID attribute support in Image-Arena



3.3.3 PV1

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Set ID - PV1	N	N	
2	Patient Class	N	N	
3	Assigned Patient Location	N	N	
4	Admission Type	N	N	
5	Preadmit Number	N	N	
6	Prior Patient Location	N	N	
7	Attending Doctor	N	N	
8	Referring Doctor	N	N	
9	Consulting Doctor	N	N	
10	Hospital Service	N	N	
11	Temporary Location	N	N	
12	Preadmit Test Indicator	N	N	
13	Re-admission Indicator	N	N	
14	Admit Source	N	N	
15	Ambulatory Status	N	N	
16	VIP Indicator	N	N	
17	Admitting Doctor	N	N	
18	Patient Type	N	N	
19	Visit Number	YES	YES	
20	Financial Class	N	N	
21	Charge Price Indicator	N	N	
22	Courtesy Code	N	N	
23	Credit Rating	N	N	
24	Contract Code	N	N	
25	Contract Effective Date	N	N	
26	Contract Amount	N	N	
27	Contract Period	N	N	
28	Interest Code	N	N	
29	Transfer to Bad Debt Code	N	N	
30	Transfer to Bad Debt Date	N	N	
31	Bad Debt Agency Code	N	N	
32	Bad Debt Transfer Amount	N	N	
33	Bad Debt Recovery Amount	N	N	
34	Delete Account Indicator	N	N	
35	Delete Account Date	N	N	
36	Discharge Disposition	N	N	
37	Discharged to Location	N	N	
38	Diet Type	N	N	
39	Servicing Facility	N	N	
40	Bed Status	N	N	
41	Account Status	N	N	
42	Pending Location	N	N	
43	Prior Temporary Location	N	N	
44	Admit Date/Time	N	N	



SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
45	Discharge Date/Time	N	N	
46	Current Patient Balance	N	N	
47	Total Charges	N	N	
48	Total Adjustments	N	N	
49	Total Payments	N	N	
50	Alternate Visit ID	N	N	
51	Visit Indicator	N	N	
52	Other Healthcare Provider	N	N	

Table 15: Outgoing PV1 attribute support in Image-Arena



3.3.4 OBR

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Set ID - OBR	N	N	
2	Placer Order Number	YES	YES	
3	Filler Order Number	YES	YES	
4	Universal Service ID	N	N	
5	Priority	N	N	
6	Requested Date/time	N	N	
7	Observation Date/Time #	N	N	
8	Observation End Date/Time #	N	N	
9	Collection Volume	N	N	
10	Collector Identifier	N	N	
11	Specimen Action Code	N	N	
12	Danger Code	N	N	
13	Relevant Clinical Info.	N	N	
14	Specimen Received Date/Time	N	N	
15	Specimen Source	N	N	
16	Ordering Provider	N	YES	
17	Order Callback Phone Number	N	N	
18	Placer Field 1	N	N	
19	Placer Field 2	N	N	
20	Filler Field 1	N	N	
21	Filler Field 2	N	N	
22	Results Rpt/Status Chng - Date/Time	N	YES	
23	Charge to Practice	N	N	
24	Diagnostic Serv Sect ID	N	N	
25	Result Status	N	YES	
26	Parent Result	N	N	
27	Quantity/Timing	N	N	
28	Result Copies To	N	N	
29	Parent	N	N	
30	Transportation Mode	N	N	
31	Reason for Study	N	N	
32	Principal Result Interpreter	N	N	
33	Assistant Result Interpreter	N	N	
34	Technician	N	N	
35	Transcriptionist	N	N	
36	Scheduled Date/Time	N	N	
37	Number of Sample Containers	N	N	
38	Transport Logistics of Collected Sample	N	N	
39	Collector's Comment	N	N	
40	Transport Arrangement Responsibility	N	N	
41	Transport Arranged	N	N	
42	Escort Required	N	N	
43	Planned Patient Transport Comment	N	N	



Table 16: Outgoing OBR attribute support in Image-Arena

3.3.5 OBX

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Set ID - OBX	N	N	
2	Value Type	YES	YES	
3	Observation Identifier	YES	YES	
4	Observation Sub-Id	N	N	
5	Observation Value	N	YES	
6	Units	N	N	
7	Reference Range	N	N	
8	Abnormal Flags	N	N	
9	Probability	N	N	
10	Nature of Abnormal Test	N	N	
11	Observ Result Status	N	YES	
12	Data Last Obs Normal Values	N	N	
13	User Defined Access Checks	N	N	
14	Date/Time of the Observation	N	N	
15	Producer's Id	N	N	
16	Responsible Observer	N	N	
17	Observation Method	N	YES	

Table 17: Outgoing OBX attribute support in Image-Arena



3.3.6 TXA

SEQ	ELEMENT NAME	Value required YES/NO	Default mapping YES/NO	Comments
1	Set ID - Document	YES	YES	
2	Document Type	YES	YES	
3	Document Content Presentation	N	N	
4	Activity Date/Time	N	N	
5	Primary Activity Provider Code/Name	N	N	
6	Origination Date/Time	N	N	
7	Transcription Date/Time	N	N	
8	Edit Date/Time	N	YES	
9	Originator Code/Name	N	N	
10	Assigned Document Authenticator	N	N	
11	Transcriptionist Code/Name	N	N	
12	Unique Document Number	N	N	
13	Parent Document Number	N	N	
14	Placer Order Number	N	N	
15	Filler Order Number	N	N	
16	Unique Document File Name	YES	YES	
17	Document Completion Status	N	N	
18	Document Confidentiality Status	N	N	
19	Document Availability Status	N	N	
20	Document Storage Status	N	N	
21	Document Change Reason	N	N	
22	Authentication Person, Time Stamp	N	N	
23	Distributed Copies (Code and Name of Recipients)	N	N	

Table 18: Outgoing TXA attribute support in Image-Arena

3.4 Further attributes to be sent

- Encapsulated PDF
- Link to PDF
- Link to JPG
- Measurements
- Data container



4 Acknowledgements

HL7 ACK messages are used to ensure that HL7 messages are properly transferred between the systems. Depending on inbound- respectively outbound messages Image-Arena handles the ACK messages in a different way.

4.1 Incoming ACK messages

Image-Arena is able to handle the received ACK messages in different way depending on configuration:

- System doesn't support any ACK → NO_ACK_EXPECTED by Image-Arena
- System is sending an ACK, which is useless for Image Arena → IGNORE_ACK_CONTENT
- System is sending an ACK with configured values → handling can be configured in the corresponding semantic file: segments ACK_MSH and ACK_MSA → ACK_MSH, ACK_MSA

4.2 Outgoing ACK messages

Once an HL7 message is received, Image-Arena returns dedicated ACK messages. There are different types of outgoing ACK messages:

- AA: HL7 message is accepted (Accept)
- AE: Receiving error or wrong classification of the HL7 message (Error)
- AE: No license available for sending a HL7 message (NoLicense)
- AE: HL7 message is ignored (IgnoreMessage)

The required configuration can be done in the appropriate Semantic-file section:

[ACK_Files]

IgnoreMessage=HL7AckAccept.ini

NoLicense=HL7AckError.ini

Error=HL7AckError.ini

Accept=HL7AckAccept.ini



5 Sample messages

5.1 INCOMING

5.1.1 ORM^O01 – order control NW

MSH|^~\&|KIS|KIS|IMAGING|KIS|20091217140211||ORM^O01|MSGACCNO09000004|P|2.3
 PID|||123456|130197|TESTNACHNAME^VORNAME^|""|19630830|M|||Strasse^Köln^50999^D |||||
 PV1|||ST1^M^M^931020|||KIS^BEHANDELNDER^ARZT^|N|||||130197|K|||||200904070800
 00|||||ACCNO-09-00046
 AL1|||"
 ORC|NW|385361|ACCNO-09-
 00046^1.2.276.0.48.10002.251877312678.20080526120123483000|||||20091217140211|KIS^BEHANDELN
 DER^ARZT^|KIS^BEHANDELNDER^ARZT^|1.2.40.0.13.0.11.4444.5.0900046.000330.2009121714021
 1^1.2.40.0.13.0.11.4444.5.0900046.000330.20091217140211||
 OBR||385361|ACCNO-09-
 00046^1.2.276.0.48.10002.251877312678.20080526120123483000|FSOECHO^Echokardiographie,
 transthorakal^Echo2D^ECHOKARDIOGRAPHIE^US|||||""|KIS^BEHANDELNDER^ARZT^|2009121714
 0211|US|||||20091218|||||Echokardiographie 2D

5.1.2 ADT^A11

MSH|^~\&|KIS|KIS|IMAGING|PACS|200903191039||ADT^A11|814474|P|2.3||||D||DE
 EVN|A11|200903191047|200903191047||GRAU||
 PID|||123456|130198|TESTNACHNAME^VORNAME^|""|19630830|M|||Strasse^Köln^50999^D |||||
 PV1|||ST1^M^M^931020|||KIS^BEHANDELNDER^ARZT^|N|||||130198|K|||||200904070800
 00|||||ACCNO-09-00047
 PV2|1||01^KH-Behandlung,vollstat.^301|||||N|||||N|
 ZBE|950996^KIS|200903200000||DELETE|

5.1.3 ADT^A31

MSH|^~\&|KIS||RECAPP|KIS|200903181633||ADT^A31|812700|P|2.3||||D||DE
 EVN|A31|200903181641|200903181641||FIRE||
 PID|1|123456|123456||NACH-A31^NEU^|19991219|M|||Strasse.8^Kiel^24103^D |||||||N||D |

5.1.4 ADT^A34

MSH|^~\&|KIS||RECAPP|KIS|200903181518||ADT^A34|812487|P|2.3||||D||DE
 EVN|A34|200903181526|200903181526||KIS||
 PID|1|222222|222222||Patientenmerge^B^|F||^D |||||||N||D |
 MRG|123456|



5.1.5 ADT^A45

MSH|^~\&|KIS||RECAPP|KIS|200903181602||ADT^A45|812621|P|2.3||||D||DE
EVN|A45|200903181610|200903181610||KIS||
PID|1|666666|666666||HL7^TESTBERT^^^M||^D |||||||N||D |
MRG|123456|
PV1|||ST1^^M^^931020|||KIS^BEHANDELNDER^ARZT^||N|||||333333|K|||||||200904070800
00||||ACCNO-09-1111

5.2 OUTGOING

5.2.1 MDM^T01

MSH|^~\&|TOMTEC|IMAGEARENA||200903180913||MDM^T01|TT-10000-PR|D|2.3.1||||DE|8859/1|GER||
PID||000018||SURNAME^FIRSTNAME^|19000101|M|||||||
PV1|||||121314|||||
TXA||Additional-PDF||||200903180913||||1.2.276.0.48.10000.808619208.20090318091341824000.pdf|||||

