

Technical Publications

INFINITT Broker PBMHL7 HL7 Conformance Statement

Revision 1.1

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Revision 1.1

0. Introduction

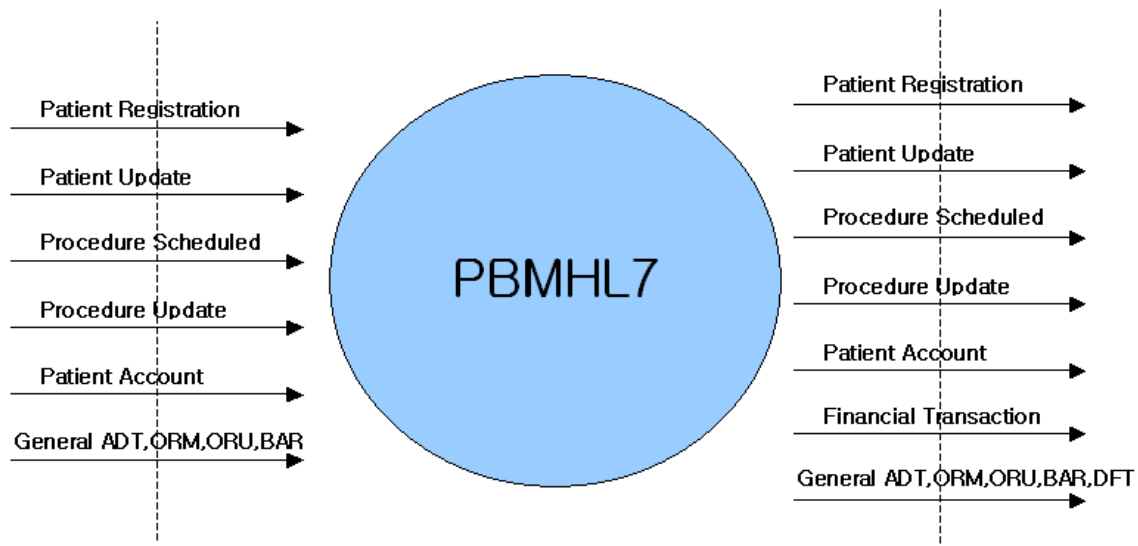
This conformance statement (CS) specifies the compliance of PBMHL7 to HL7. It details the HL7 and the messages that are supported by this product.

PBMHL7 is a PBMHL7 for INFINITT Server running on Microsoft Windows NT/2000. It uses HL7 Messages to inbound from HIS or RIS.

1. Implementation Model

1.1 Application Data Flow Diagram

The following figure shows that PBMHL7 can receive and process ADT, ORM,ORU, and BAR messages and send ADT,ORM,ORU,BAR, and DFT specified in HL7.



1.2 Fundamental Definitions of Message

PBMHL7 can support HL7 Version 2.3.x and 2.4 and inbound all HL7 messages to interface

between HIS and PACS and same as outbound.

1.3 Sequencing of Real-World Activities

Not Applicable

2. HL7 In/Outbound Specifications

2.1 HL7 2.3.x/2.4 Inbound Supported Profiles

PBMHL7 can inbound the following segments and Messages.

Event	All Segments in this list to be sent from HIS
ACK (Acknowledgement)	MSH,MSA,ERR
A01 (Admit/Visit Notification)	MSH,EVN,PID,PV1
A02 (Transfer a Patient)	MSH,EVN,PID,PV1
A03 (Discharge / End Visit)	MSH,EVN,PID,PV1
A04 (Register a Patient)	MSH,EVN,PID,PV1
A05 (Pre-admit a Patient)	MSH,EVN,PID,PV1
A06 (Transfer Outpatient to Inpatient)	MSH,EVN,PID,PV1
A07 (Transfer Inpatient to Outpatient)	MSH,EVN,PID,PV1
A08 (Update Patient Information)	MSH,EVN,PID,PV1
A11 (Cancel Admit)	MSH,EVN,PID,PV1
A12 (Cancel Transfer)	MSH,EVN,PID,PV1
A13 (Cancel discharge)	MSH,EVN,PID,PV1
A18 (Merge Patient Information)	MSH,EVN,PID,PV1,MRG
A38 (Cancel Pre-admit)	MSH,EVN,PID,PV1
A40 (Merge Patient identifier-list)	MSH,EVN,PID,MRG,PV1
ORM (General Order Message)	MSH, PID, PV1, ORC, OBR, ZDS
ORR (General Order Response)	MSH,MSA,ERR,PID,ORC,OBR
ORU (Observation Result)	MSH,PID,PV1,OBR,OBX
BAR(Billing Account)	MSH,EVN,PID,PV1,DG1,GT1,IN1

Table 2-2: HL7 2.3.x/2.4 Inbound Classes Supported Messages

2.1.1 Segments

2.1.1.1 MSH

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	FieldSeparator	String	Yes	0..1	..		
2	EncodingCharacters	String	Yes	0..4	..		
3	SendingApplication	HD	No	0..180	..		
4	SendingFacility	HD	No	0..180	..		
5	ReceivingApplication	HD	No	0..180	..		
6	ReceivingFacility	HD	No	0..180	..		
7	DateTimeOfMessage	TS	No	0..26	..		
8	Security	String	No	0..40	..		
9	MessageType	CM..MT	Yes	0..16	..		
10	MessageControlID	String	Yes	0..20	..		
11	ProcessingID	PT	Yes	0..3	..		
12	VersionID	VID	Yes	0..60	..		
13	SequenceNumber	Long	No	0..15	..		
14	ContinuationPointer	String	No	0..180	..		
15	AcceptAcknowledgementType	String	No	0..2	..		
16	ApplicationAcknowledgementType	String	No	0..2	..		
17	CountryCode	String	No	0..2	..		
18	CharacterSet	String	No	0..6	0..Infinite		
19	PrincipalLanguageOfMessage	CE	No	0..60	..		
20	AlternateCharacterSetHandlingScheme	String	No	0..20	..		

2.1.1.2 EVN

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	EventTypeCode	String	No	0..3	..		
2	RecordedDateTime	TS	Yes	0..26	..		
3	DateTimePlannedEvent	TS	No	0..26	..		
4	EventReasonCode	String	No	0..3	..		
5	OperatorID	XCN	No	0..60	0..Infinite		
6	EventOccurred	TS	No	0..26	..		

2.1.1.3 PID

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	Long	No	0..4	..		
2	PatientID	CX	No	0..20	..		
3	PatientIdentifierList	CX	Yes	0..20	..		
4	AlternatePatientID	CX	No	0..20	..		

5	PatientName	XPN	Yes	0.48	..		
6	MothersMaidenName	XPN	No	0.48	..		
7	DateTimeOfBirth	TS	No	0.26	..		
8	Sex	String	No	0.1	..		
9	PatientAlias	XPN	No	0.48	..		
10	Race	CE	No	0.80	..		
11	PatientAddress	XAD	No	0.106	..		
12	CountyCode	String	No	0.4	..		
13	HomePhoneNumber	XTN	No	0.40	..		
14	BusinessPhoneNumber	XTN	No	0.40	..		
15	PrimaryLanguage	CE	No	0.60	..		
16	MaritalStatus	CE	No	0.80	..		
17	Religion	CE	No	0.80	..		
18	PatientAccountNumber	CX	No	0.20	..		
19	SSNNumber	String	No	0.16	..		
20	DriversLicenseNumber	DLN	No	0.25	..		
21	MothersIdentifier	CX	No	0.20	..		
22	EthnicGroup	CE	No	0.80	..		
23	BirthPlace	String	No	0.60	..		
24	MultipleBirthIndicator	String	No	0.2	..		
25	BirthOrder	Short	No	0.2	..		
26	Citizenship	CE	No	0.80	..		
27	VeteransMilitaryStatus	CE	No	0.60	..		
28	Nationality	CE	No	0.80	..		
29	PatientDeathDateAndTime	TS	No	0.26	..		
30	PatientDeathIndicator	String	No	0.1	..		

2.1.1.4 PV1

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	Long	No	0.4	..		
2	PatientClass	String	Yes	0.1	..		
3	AssignedPatientLocation	PL	No	0.80	..		
4	AdmissionType	String	No	0.2	..		
5	PreadmitNumber	CX	No	0.20	..		
6	PriorPatientLocation	PL	No	0.80	..		
7	AttendingDoctor	XCN	No	0.60	..		
8	ReferringDoctor	XCN	No	0.60	..		
9	ConsultingDoctor	XCN	No	0.60	..		
10	HospitalService	String	No	0.3	..		
11	TemporaryLocation	PL	No	0.80	..		
12	PreadmitTestIndicator	String	No	0.2	..		
13	ReadmissionIndicator	String	No	0.2	..		
14	AdmitSource	String	No	0.3	..		
15	AmbulatoryStatus	String	No	0.2	..		
16	VIPIndicator	String	No	0.2	..		
17	AdmittingDoctor	XCN	No	0.60	..		
18	PatientType	String	No	0.2	..		
19	VisitNumber	CX	No	0.20	..		
20	FinancialClass	FC	No	0.50	..		
21	ChargePriceIndicator	String	No	0.2	..		
22	CourtesyCode	String	No	0.2	..		
23	CreditRating	String	No	0.2	..		
24	ContractCode	String	No	0.2	..		
25	ContractEffectiveDate	DT	No	0.8	..		
26	ContractAmount	Double	No	0.12	..		

27	ContractPeriod	Double	No	0.3	..		
28	InterestCode	String	No	0.2	..		
29	TransferToBadDebtCode	String	No	0.1	..		
30	TransferToBadDebtDate	DT	No	0.8	..		
31	BadDebtAgencyCode	String	No	0.10	..		
32	BadDebtTransferAmount	Double	No	0.12	..		
33	BadDebtRecoveryAmount	Double	No	0.12	..		
34	DeleteAccountIndicator	String	No	0.1	..		
35	DeleteAccountDate	DT	No	0.8	..		
36	DischargeDisposition	String	No	0.3	..		
37	DischargedToLocation	CM_DL	No	0.25	..		
38	DietType	CE	No	0.80	..		
39	ServicingFacility	String	No	0.2	..		
40	BedStatus	String	No	0.1	..		
41	AccountStatus	String	No	0.2	..		
42	PendingLocation	PL	No	0.80	..		
43	PriorTemporaryLocation	PL	No	0.80	..		
44	AdmitDateTime	TS	No	0.26	..		
45	DischargeDateTime	TS	No	0.26	..		
46	CurrentPatientBalance	Double	No	0.12	..		
47	TotalCharges	Double	No	0.12	..		
48	TotalAdjustments	Double	No	0.12	..		
49	TotalPayments	Double	No	0.12	..		
50	AlternateVisitID	CX	No	0.20	..		
51	VisitIndicator	String	No	0.1	..		
52	OtherHealthcareProvider	XCN	No	0.60	..		

2.1.1.5 MRG

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	PriorPatientIdentifierList	CX	Yes	0.20	..		
2	PriorAlternatePatientID	CX	No	0.16	..		
3	PriorPatientAccountNumber	CX	No	0.20	..		
4	PriorPatientID	CX	No	0.16	..		
5	PriorVisitNumber	CX	No	0.20	..		
6	PriorAlternateVisitID	CX	No	0.20	..		
7	PriorPatientName	XPN	No	0.48	..		

2.1.1.6 OBR

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	Long	No	0.4	..		
2	PlacerOrderNumber	EI	No	0.22	..		
3	FillerOrderNumber	EI	No	0.22	..		
4	UniversalServiceID	CE	Yes	0.200	..		
5	Priority	String	No	0.2	..		
6	RequestedDateTime	TS	No	0.26	..		
7	ObservationDateTime	TS	No	0.26	..		
8	ObservationEndTime	TS	No	0.26	..		
9	CollectionVolume	CQ	No	0.20	..		
10	CollectorIdentifier	XCN	No	0.60	..		
11	SpecimenActionCode	String	No	0.1	..		
12	DangerCode	CE	No	0.60	..		
13	RelevantClinicalInfo	String	No	0.300	..		

14	SpecimenReceivedDateTime	TS	No	0.26	..		
15	SpecimenSource	CM_SS	No	0.300	..		
16	OrderingProvider	XCN	No	0.120	..		
17	OrderCallbackPhoneNumber	XTN	No	0.40	0.2		
18	PlacerField1	String	No	0.60	..		
19	PlacerField2	String	No	0.60	..		
20	FillerField1	String	No	0.60	..		
21	FillerField2	String	No	0.60	..		
22	ResultsRptStatusChngDateTime	TS	No	0.26	..		
23	ChargeToPractice	CM_CH	No	0.40	..		
24	DiagnosticServSectID	String	No	0.10	..		
25	ResultStatus	String	No	0.1	..		
26	ParentResult	CM_PR	No	0.200	..		
27	QuantityTiming	TQ	No	0.200	..		
28	ResultCopiesTo	XCN	No	0.150	0.5		
29	ParentNumber	CM_PA	No	0.150	..		
30	TransportationMode	String	No	0.20	..		
31	ReasonForStudy	CE	No	0.300	..		
32	PrincipalResultInterpreter	CM_RI	No	0.200	..		
33	AssistantResultInterpreter	CM_RI	No	0.200	..		
34	Technician	CM_RI	No	0.200	..		
35	Transcriptionist	CM_RI	No	0.200	..		
36	ScheduledDateTime	TS	No	0.26	..		
37	NumberOfSampleContainers	Double	No	0.4	..		
38	TransportLogisticsOfCollectedSample	CE	No	0.60	..		
39	CollectorsComment	CE	No	0.200	..		
40	TransportArrangementResponsibility	CE	No	0.60	..		
41	TransportArranged	String	No	0.30	..		
42	EscortRequired	String	No	0.1	..		
43	PlannedPatientTransportComment	CE	No	0.200	..		
44	ProcedureCode	CE	No	0.80	..		
45	ProcedureCodeModifier	CE	No	0.80	..		

2.1.1.7 ORC

	Name	DataType	Required	Length	Repeats	Default Value	Validation Table
1	OrderControl	String	Yes	0.2	..		
2	PlacerOrderNumber	EI	No	0.22	..		
3	FillerOrderNumber	EI	No	0.22	..		
4	PlacerGroupNumber	EI	No	0.22	..		
5	OrderStatus	String	No	0.2	..		
6	ResponseFlag	String	No	0.1	..		
7	QuantityTiming	TQ	No	0.200	..		
8	Parent	CM_PA	No	0.200	..		
9	DateTimeOfTransaction	TS	No	0.26	..		
10	EnteredBy	XCN	No	0.120	..		
11	VerifiedBy	XCN	No	0.120	..		
12	OrderingProvider	XCN	No	0.120	..		
13	EnterersLocation	PL	No	0.80	..		
14	CallBackPhoneNumber	XTN	No	0.40	0.2		
15	OrderEffectiveDateTime	TS	No	0.26	..		

16	OrderControlCodeReason	CE	No	0.200	..		
17	EnteringOrganization	CE	No	0.60	..		
18	EnteringDevice	CE	No	0.60	..		
19	ActionBy	XCN	No	0.120	..		
20	AdvancedBeneficiaryNoticeCode	CE	No	0.40	..		
21	OrderingFacilityName	XON	No	0.60	..		
22	OrderingFacilityAddress	XAD	No	0.106	..		
23	OrderingFacilityPhoneNumber	XTN	No	0.48	..		
24	OrderingProviderAddress	XAD	No	0.106	..		

2.1.1.8 OBX

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	Long	No	0.10	..		
2	ValueType	String	No	0.2	..		
3	ObservationIdentifier	CE	Yes	0.590	..		
4	ObservationSubID	String	No	0.20	..		
5	ObservationValue	FT	No	0.65536	..		
6	Units	CE	No	0.60	..		
7	ReferencesRange	String	No	0.60	..		
8	AbnormalFlags	String	No	0.5	0.5		
9	Probability	Double	No	0.5	..		
10	NatureOfAbnormalTest	String	No	0.2	..		
11	ObservationResultStatus	String	Yes	0.1	..		
12	DateLastObsNormalValues	TS	No	0.26	..		
13	UserDefinedAccessChecks	String	No	0.20	..		
14	DateTimeOfTheObservation	TS	No	0.26	..		
15	ProducersID	CE	No	0.60	..		
16	ResponsibleObserver	XCN	No	0.80	..		
17	ObservationMethod	CE	No	0.60	..		

2.1.1.9 ZDS

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	ZDS_Field1	String	No	0.128	..		
2	ZDS_Field2	String	No	0.128	..		
3	ZDS_Field3	String	No	0.128	..		
4	ZDS_Field4	String	No	0.128	..		
5	ZDS_Field5	String	No	0.128	..		
6	ZDS_Field6	String	No	0.128	..		
7	ZDS_Field7	String	No	0.128	..		
8	ZDS_Field8	String	No	0.128	..		
9	ZDS_Field9	String	No	0.128	..		
10	ZDS_Field10	String	No	0.128	..		

2.1.1.10 MSA

	Name	Data Type	Required	Length	Repeats	Default	Validation
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						Value	Table
1	AcknowledgementCode	String	Yes	0..2	..		
2	MessageControlID	String	Yes	0..20	..		
3	TextMessage	String	No	0..80	..		
4	ExpectedSequenceNumber	Long	No	0..15	..		
5	DelayedAcknowledgementType	String	No	0..1	..		
6	ErrorCondition	CE	No	0..100	..		

2.1.1.11 ERR

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	ErrorCodeAndLocation	CM_EC	Yes	0..80	1..Infinite		

2.1.1.12 DG1

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	SI	Yes	0..4	..		
2	DiagnosisCodingMethod	ID	No	0..2	..		
3	DiagnosisCode	CE	No	0..60	..		
4	DiagnosisDescription	ST	No	0..40	..		
5	DiagnosisDateTime	TS	No	0..26	..		
6	DiagnosisType	IS	Yes	0..2	..		
7	MajorDiagnosticCategory	CE	No	0..60	..		
8	DiagnosticRelatedGroup	CE	No	0..60	..		
9	DRGApprovalIndicator	ID	No	0..1	..		
10	DRGGroupReviewCode	IS	No	0..2	..		
11	OutlierType	CE	No	0..60	..		
12	OutlierDays	NM	No	0..3	..		
13	OutlierCost	CP	No	0..12	..		
14	GroupVersionAndType	ST	No	0..4	..		
15	DiagnosisPriority	ID	No	0..2	..		
16	DiagnosingClinician	XCN	No	0..60	0..Infinite		
17	DiagnosisClassification	IS	No	0..3	..		
18	ConfidentialIndicator	ID	No	0..1	..		
19	AttestationDateTime	TS	No	0..26	..		

2.1.1.13 GT1

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	SI	Yes	0..4	..		
2	GuarantorNumber	CX	No	0..59	0..Infinite		
3	GuarantorName	XPN	Yes	0..48	1..Infinite		
4	GuarantorSpouseName	XPN	No	0..48	0..Infinite		
5	GuarantorAddress	XAD	No	0..106	0..Infinite		
6	GuarantorHomePhone	XTN	No	0..40	0..Infinite		

7	GuarantorBusinessPhone	XTN	No	0.40	0. Infinite
8	GuarantorDateTimeOfBirth	TS	No	0.26	..
9	GuarantorSex	IS	No	0.1	..
10	GuarantorType	IS	No	0.2	..
11	GuarantorRelationship	CE	No	0.80	..
12	GuarantorSSN	ST	No	0.11	..
13	GuarantorBeginDate	DT	No	0.8	..
14	GuarantorEndDate	DT	No	0.8	..
15	GuarantorPriority	NM	No	0.2	..
16	GuarantorEmployerName	XPN	No	0.130	0. Infinite
17	GuarantorEmployerAddress	XAD	No	0.106	0. Infinite
18	GuarantorEmployerPhoneNumber	XTN	No	0.40	0. Infinite
19	GuarantorEmployeeIDNumber	CX	No	0.20	0. Infinite
20	GuarantorEmploymentStatus	IS	No	0.2	..
21	GuarantorOrganizationName	XON	No	0.130	0. Infinite
22	GuarantorBillingHoldFlag	ID	No	0.1	..
23	GuarantorCreditRatingCode	CE	No	0.80	..
24	GuarantorDeathDateAndTime	TS	No	0.26	..
25	GuarantorDeathFlag	ID	No	0.1	..
26	GuarantorChargeAdjustmentCode	CE	No	0.80	..
27	GuarantorHouseholdAnnualIncome	CP	No	0.10	..
28	GuarantorHouseholdSize	NM	No	0.3	..
29	GuarantorEmployerIDNumber	CX	No	0.20	0. Infinite
30	GuarantorMaritalStatusCode	CE	No	0.80	..
31	GuarantorHireEffectiveDate	DT	No	0.8	..
32	EmploymentStopDate	DT	No	0.8	..
33	LivingDependency	IS	No	0.2	..
34	AmbulatoryStatus	IS	No	0.2	0. Infinite
35	Citizenship	CE	No	0.80	0. Infinite
36	PrimaryLanguage	CE	No	0.60	..
37	LivingArrangement	IS	No	0.2	..
38	PublicityIndicator	CE	No	0.80	..
39	ProtectionIndicator	ID	No	0.1	..
40	StudentIndicator	IS	No	0.2	..
41	Religion	CE	No	0.80	..
42	MothersMaidenName	XPN	No	0.48	0. Infinite
43	Nationality	CE	No	0.80	..
44	EthnicGroup	CE	No	0.80	0. Infinite
45	ContactPersonName	XPN	No	0.48	0. Infinite
46	ContactPersonsTelephone Number	XTN	No	0.40	0. Infinite
47	ContactReason	CE	No	0.80	..
48	ContactRelationship	IS	No	0.3	..
49	ContactJobTitle	ST	No	0.20	..

50	JobCodeClass	JCC	No	0.20	..		
51	GuarantorEmployersOrganizationName	XON	No	0.130	0..Infinite		
52	Handicap	IS	No	0.2	..		
53	JobStatus	IS	No	0.2	..		
54	GuarantorFinancialClass	FC	No	0.50	..		
55	GuarantorRace	CE	No	0.80	0..Infinite		

2.1.1.14 IN1

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	SI	Yes	0.4	..		
2	InsurancePlanID	CE	Yes	0.60	..		
3	InsuranceCompanyID	CX	Yes	0.59	1..Infinite		
4	InsuranceCompanyName	XON	No	0.130	0..Infinite		
5	InsuranceCompanyAddress	XAD	No	0.106	0..Infinite		
6	InsuranceCoContactPerson	XPN	No	0.48	0..Infinite		
7	InsuranceCoPhoneNumber	XTN	No	0.40	0..Infinite		
8	GroupNumber	ST	No	0.12	..		
9	GroupName	XON	No	0.130	0..Infinite		
10	InsuredsGroupEmpID	CX	No	0.12	0..Infinite		
11	InsuredsGroupEmpName	XON	No	0.130	0..Infinite		
12	PlanEffectiveDate	DT	No	0.8	..		
13	PlanExpirationDate	DT	No	0.8	..		
14	AuthorizationInformation	AUI	No	0.55	..		
15	PlanType	IS	No	0.3	..		
16	NameOfInsured	XPN	No	0.48	0..Infinite		
17	InsuredsRelationshipToPatient	CE	No	0.80	..		
18	InsuredsDateOfBirth	TS	No	0.26	..		
19	InsuredsAddress	XAD	No	0.106	0..Infinite		
20	AssignmentOfBenefits	IS	No	0.2	..		
21	CoordinationOfBenefits	IS	No	0.2	..		
22	CoordOfBenPriority	ST	No	0.2	..		
23	NoticeOfAdmissionFlag	ID	No	0.1	..		
24	NoticeOfAdmissionDate	DT	No	0.8	..		
25	ReportOfEligibilityFlag	ID	No	0.1	..		
26	ReportOfEligibilityDate	DT	No	0.8	..		
27	ReleaseInformationCode	IS	No	0.2	..		
28	PreAdmitCertPAC	ST	No	0.15	..		
29	VerificationDateTime	TS	No	0.26	..		
30	VerificationBy	XCN	No	0.60	0..Infinite		
31	TypeOfAgreementCode	IS	No	0.2	..		
32	BillingStatus	IS	No	0.2	..		
33	LifetimeReserveDays	NM	No	0.4	..		
34	DelayBeforeLRDay	NM	No	0.4	..		
35	CompanyPlanCode	IS	No	0.8	..		

36	PolicyNumber	ST	No	0.15	..		
37	PolicyDeductible	CP	No	0.12	..		
38	PolicyAmountLimit	CP	No	0.12	..		
39	PolicyDaysLimit	NM	No	0.4	..		
40	RoomSemiPrivateRate	CP	No	0.12	..		
41	RoomPrivateRate	CP	No	0.12	..		
42	InsuredsEmployStatus	CE	No	0.60	..		
43	InsuredsSex	IS	No	0.1	..		
44	InsuredsEmployerAddress	XAD	No	0.106	0..Infinite		
45	VerificationStatus	ST	No	0.2	..		
46	PriorInsurancePlanID	IS	No	0.8	..		
47	CoverageType	IS	No	0.3	..		
48	Handicap	IS	No	0.2	..		
49	InsuredsIDNumber	CX	No	0.12	0..Infinite		

2.1.2 Messages

2.1.2.1 ACK

Item	Description
MSH MSA [ERR]	

2.1.2.2 ADTA01

Item	Description
MSH EVN PID [PV1]	

2.1.2.3 ADTA02

Item	Description
MSH EVN PID [PV1]	

2.1.2.4 ADTA03

Item	Description
MSH EVN PID [PV1]	

2.1.2.5 ADTA04

Item	Description
MSH EVN PID [PV1]	

2.1.2.6 ADTA05

Item	Description
MSH EVN PID [PV1]	

2.1.2.7 ADTA06

Item	Description
MSH EVN PID [PV1]	

2.1.2.8 ADTA07

Item	Description
MSH EVN PID [PV1]	

2.1.2.9 ADTA08

Item	Description
MSH EVN PID [PV1]	

2.1.2.10 ADTA11

Item	Description
MSH EVN PID [PV1]	

2.1.2.11 ADTA12

Item	Description
MSH EVN PID [PV1]	

2.1.2.12 ADTA13

Item	Description
MSH EVN PID [PV1]	

2.1.2.13 ADTA18

Item	Description
MSH EVN PID PV1 [MRG]	

2.1.2.14 ADTA38

Item	Description
MSH EVN PID [PV1]	

2.1.2.15 ADTA40

Item	Description
MSH EVN PID MRG [PV1]	

2.1.2.16 ORMO01

Item	Description
MSH [PID] [PV1] [{ (0 - Infinite) [ORC] [OBR] }] [ZDS]	

2.1.2.17 ORRO01

Item	Description
MSH	
[MSA]	
[ERR]	
[PID]	
[ORC]	
[OBR]	

2.1.2.18 ORUR01

Item	Description
MSH	
PID	
PV1	
OBR	
[OBX]	

2.1.2.19 BARP01

Item	Description
MSH	
[EVN]	
PID	
[PV1]	
[{ DG1 }] (0 - Infinite)	
[{ GT1 }] (0 - Infinite)	
[{ IN1 }] (0 - Infinite)	

2.1.2.20 BARP05

Item	Description
MSH	
[EVN]	
PID	
[PV1]	
[{ DG1 }] (0 - Infinite)	
[{ GT1 }] (0 - Infinite)	
[{ IN1 }] (0 - Infinite)	

2.1.2.21 BARP06

Item	Description
MSH	
EVN	
[PID]	
[PV1]	

2.1.3 Separators

Separator Type	Value	Field Path	Replacement
Segment	\x0D		
Field Repeat	~	MSH.EncodingCharacters	\R\
Null Value	""		
Field Level 1		MSH.FieldSeparator	\F\
Field Level 2	^	MSH.EncodingCharacters	\S\
Field Level 3	&	MSH.EncodingCharacters	\T\
User Defined String 1	\	MSH.EncodingCharacters	\E\

2.2 HL7 2.3.x/2.4 Outbound Supported Profiles

PBMHL7 can outbound the following segments and Messages.

Event	All Segments in this list to be sent from HIS
ACK (Acknowledgement)	MSH,MSA,ERR
A01 (Admit/Visit Notification)	MSH,EVN,PID,PV1
A02 (Transfer a Patient)	MSH,EVN,PID,PV1
A03 (Discharge / End Visit)	MSH,EVN,PID,PV1
A04 (Register a Patient)	MSH,EVN,PID,PV1
A05 (Pre-admit a Patient)	MSH,EVN,PID,PV1
A06 (Transfer Outpatient to Inpatient)	MSH,EVN,PID,PV1
A07 (Transfer Inpatient to Outpatient)	MSH,EVN,PID,PV1
A08 (Update Patient Information)	MSH,EVN,PID,PV1
A11 (Cancel Admit)	MSH,EVN,PID,PV1
A12 (Cancel Transfer)	MSH,EVN,PID,PV1
A13 (Cancel discharge)	MSH,EVN,PID,PV1
A18 (Merge Patient Information)	MSH,EVN,PID,PV1,MRG
A38 (Cancel Pre-admit)	MSH,EVN,PID,PV1
A40 (Merge Patient identifier-list)	MSH,EVN,PID,MRG,PV1
ORM (General Order Message)	MSH, PID, PV1, ORC, OBR, ZDS
ORR (General Order Response)	MSH,MSA,ERR,PID,ORC,OBR
ORU (Observation Result)	MSH,PID,PV1,OBR,OBX
BAR(Billing Account)	MSH,EVN,PID,PV1,DG1,GT1,IN1
DFT(Detail Financial Transaction)	MSH,EVN,PID,PV1,FT1,PR1

Table 2-2: HL7 2.3.x/2.4 Outbound Classes Supported Messages

2.2.1 Segments

2.2.1.1 MSH

	Name	DataType	Required	Length	Repeats	Default Value	Validation Table
1	FieldSeparator	String	Yes	0..1	..		
2	EncodingCharacters	String	Yes	0..4	..		
3	SendingApplication	HD	No	0..180	..		
4	SendingFacility	HD	No	0..180	..		
5	ReceivingApplication	HD	No	0..180	..		
6	ReceivingFacility	HD	No	0..180	..		
7	DateTimeOfMessage	TS	No	0..26	..		
8	Security	String	No	0..40	..		
9	MessageType	CM..MT	Yes	0..16	..		
10	MessageControlID	String	Yes	0..20	..		
11	ProcessingID	PT	Yes	0..3	..		
12	VersionID	VID	Yes	0..60	..		
13	SequenceNumber	Long	No	0..15	..		
14	ContinuationPointer	String	No	0..180	..		
15	AcceptAcknowledgementType	String	No	0..2	..		
16	ApplicationAcknowledgementType	String	No	0..2	..		
17	CountryCode	String	No	0..2	..		
18	CharacterSet	String	No	0..6	0..Infinite		
19	PrincipalLanguageOfMessage	CE	No	0..60	..		
20	AlternateCharacterSetHandlingScheme	String	No	0..20	..		

2.2.1.2 EVN

	Name	DataType	Required	Length	Repeats	Default Value	Validation Table
1	EventTypeCode	String	No	0..3	..		
2	RecordedDateTime	TS	Yes	0..26	..		
3	DateTimePlannedEvent	TS	No	0..26	..		
4	EventReasonCode	String	No	0..3	..		
5	OperatorID	XCN	No	0..60	0..Infinite		
6	EventOccurred	TS	No	0..26	..		

2.2.1.3 PID

	Name	DataType	Required	Length	Repeats	Default Value	Validation Table
1	SetID	Long	No	0..4	..		
2	PatientID	CX	No	0..20	..		
3	PatientIdentifierList	CX	Yes	0..20	..		
4	AlternatePatientID	CX	No	0..20	..		
5	PatientName	XPN	Yes	0..48	..		
6	MothersMaidenName	XPN	No	0..48	..		
7	DateTimeOfBirth	TS	No	0..26	..		
8	Sex	String	No	0..1	..		

9	PatientAlias	XP	No	0.48	..		
10	Race	CE	No	0.80	..		
11	PatientAddress	XAD	No	0.106	..		
12	CountyCode	String	No	0.4	..		
13	HomePhoneNumber	XTN	No	0.40	..		
14	BusinessPhoneNumber	XTN	No	0.40	..		
15	PrimaryLanguage	CE	No	0.60	..		
16	MaritalStatus	CE	No	0.80	..		
17	Religion	CE	No	0.80	..		
18	PatientAccountNumber	CX	No	0.20	..		
19	SSNNumber	String	No	0.16	..		
20	DriversLicenseNumber	DLN	No	0.25	..		
21	MothersIdentifier	CX	No	0.20	..		
22	EthnicGroup	CE	No	0.80	..		
23	BirthPlace	String	No	0.60	..		
24	MultipleBirthIndicator	String	No	0.2	..		
25	BirthOrder	Short	No	0.2	..		
26	Citizenship	CE	No	0.80	..		
27	VeteransMilitaryStatus	CE	No	0.60	..		
28	Nationality	CE	No	0.80	..		
29	PatientDeathDateAndTime	TS	No	0.26	..		
30	PatientDeathIndicator	String	No	0.1	..		

2.2.1.4 PV1

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	Long	No	0.4	..		
2	PatientClass	String	Yes	0.1	..		
3	AssignedPatientLocation	PL	No	0.80	..		
4	AdmissionType	String	No	0.2	..		
5	PreadmitNumber	CX	No	0.20	..		
6	PriorPatientLocation	PL	No	0.80	..		
7	AttendingDoctor	XCN	No	0.60	..		
8	ReferringDoctor	XCN	No	0.60	..		
9	ConsultingDoctor	XCN	No	0.60	..		
10	HospitalService	String	No	0.3	..		
11	TemporaryLocation	PL	No	0.80	..		
12	PreadmitTestIndicator	String	No	0.2	..		
13	ReadmissionIndicator	String	No	0.2	..		
14	AdmitSource	String	No	0.3	..		
15	AmbulatoryStatus	String	No	0.2	..		
16	VIPIndicator	String	No	0.2	..		
17	AdmittingDoctor	XCN	No	0.60	..		
18	PatientType	String	No	0.2	..		
19	VisitNumber	CX	No	0.20	..		
20	FinancialClass	FC	No	0.50	..		
21	ChargePriceIndicator	String	No	0.2	..		
22	CourtesyCode	String	No	0.2	..		
23	CreditRating	String	No	0.2	..		
24	ContractCode	String	No	0.2	..		
25	ContractEffectiveDate	DT	No	0.8	..		
26	ContractAmount	Double	No	0.12	..		
27	ContractPeriod	Double	No	0.3	..		
28	InterestCode	String	No	0.2	..		
29	TransferToBadDebtCode	String	No	0.1	..		
30	TransferToBadDebtDate	DT	No	0.8	..		

31	BadDebtAgencyCode	String	No	0..10	..		
32	BadDebtTransferAmount	Double	No	0..12	..		
33	BadDebtRecoveryAmount	Double	No	0..12	..		
34	DeleteAccountIndicator	String	No	0..1	..		
35	DeleteAccountDate	DT	No	0..8	..		
36	DischargeDisposition	String	No	0..3	..		
37	DischargedToLocation	CM_DL	No	0..25	..		
38	DietType	CE	No	0..80	..		
39	ServicingFacility	String	No	0..2	..		
40	BedStatus	String	No	0..1	..		
41	AccountStatus	String	No	0..2	..		
42	PendingLocation	PL	No	0..80	..		
43	PriorTemporaryLocation	PL	No	0..80	..		
44	AdmitDateTime	TS	No	0..26	..		
45	DischargeDateTime	TS	No	0..26	..		
46	CurrentPatientBalance	Double	No	0..12	..		
47	TotalCharges	Double	No	0..12	..		
48	TotalAdjustments	Double	No	0..12	..		
49	TotalPayments	Double	No	0..12	..		
50	AlternateVisitID	CX	No	0..20	..		
51	VisitIndicator	String	No	0..1	..		
52	OtherHealthcareProvider	XCN	No	0..60	..		

2.2.1.5 MRG

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	PriorPatientIdentifierList	CX	Yes	0..20	..		
2	PriorAlternatePatientID	CX	No	0..16	..		
3	PriorPatientAccountNumber	CX	No	0..20	..		
4	PriorPatientID	CX	No	0..16	..		
5	PriorVisitNumber	CX	No	0..20	..		
6	PriorAlternateVisitID	CX	No	0..20	..		
7	PriorPatientName	XPN	No	0..48	..		

2.2.1.6 OBR

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	Long	No	0..4	..		
2	PlacerOrderNumber	EI	No	0..22	..		
3	FillerOrderNumber	EI	No	0..22	..		
4	UniversalServiceID	CE	Yes	0..200	..		
5	Priority	String	No	0..2	..		
6	RequestedDateTime	TS	No	0..26	..		
7	ObservationDateTime	TS	No	0..26	..		
8	ObservationEndDateTime	TS	No	0..26	..		
9	CollectionVolume	CQ	No	0..20	..		
10	CollectorIdentifier	XCN	No	0..60	..		
11	SpecimenActionCode	String	No	0..1	..		
12	DangerCode	CE	No	0..60	..		
13	RelevantClinicalInfo	String	No	0..300	..		
14	SpecimenReceivedDateTime	TS	No	0..26	..		
15	SpecimenSource	CM_SS	No	0..300	..		
16	OrderingProvider	XCN	No	0..120	..		

17	OrderCallbackPhoneNumber	XTN	No	0.40	0.2		
18	PlacerField1	String	No	0.60	..		
19	PlacerField2	String	No	0.60	..		
20	FillerField1	String	No	0.60	..		
21	FillerField2	String	No	0.60	..		
22	ResultsRptStatusChngDateTime	TS	No	0.26	..		
23	ChargeToPractice	CM_CH	No	0.40	..		
24	DiagnosticServSectID	String	No	0.10	..		
25	ResultStatus	String	No	0.1	..		
26	ParentResult	CM_PR	No	0.200	..		
27	QuantityTiming	TQ	No	0.200	..		
28	ResultCopiesTo	XCN	No	0.150	0.5		
29	ParentNumber	CM_PA	No	0.150	..		
30	TransportationMode	String	No	0.20	..		
31	ReasonForStudy	CE	No	0.300	..		
32	PrincipalResultInterpreter	CM_RI	No	0.200	..		
33	AssistantResultInterpreter	CM_RI	No	0.200	..		
34	Technician	CM_RI	No	0.200	..		
35	Transcriptionist	CM_RI	No	0.200	..		
36	ScheduledDateTime	TS	No	0.26	..		
37	NumberOfSampleContainers	Double	No	0.4	..		
38	TransportLogisticsOfCollectedSample	CE	No	0.60	..		
39	CollectorsComment	CE	No	0.200	..		
40	TransportArrangementResponsibility	CE	No	0.60	..		
41	TransportArranged	String	No	0.30	..		
42	EscortRequired	String	No	0.1	..		
43	PlannedPatientTransportComment	CE	No	0.200	..		
44	ProcedureCode	CE	No	0.80	..		
45	ProcedureCodeModifier	CE	No	0.80	..		

2.2.1.7 ORC

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	OrderControl	String	Yes	0.2	..		
2	PlacerOrderNumber	EI	No	0.22	..		
3	FillerOrderNumber	EI	No	0.22	..		
4	PlacerGroupNumber	EI	No	0.22	..		
5	OrderStatus	String	No	0.2	..		
6	ResponseFlag	String	No	0.1	..		
7	QuantityTiming	TQ	No	0.200	..		
8	Parent	CM_PA	No	0.200	..		
9	DateTimeOfTransaction	TS	No	0.26	..		
10	EnteredBy	XCN	No	0.120	..		
11	VerifiedBy	XCN	No	0.120	..		
12	OrderingProvider	XCN	No	0.120	..		
13	EnterersLocation	PL	No	0.80	..		
14	CallBackPhoneNumber	XTN	No	0.40	0.2		
15	OrderEffectiveDateTime	TS	No	0.26	..		
16	OrderControlCodeReason	CE	No	0.200	..		
17	EnteringOrganization	CE	No	0.60	..		
18	EnteringDevice	CE	No	0.60	..		

19	ActionBy	XCN	No	0..120	..		
20	AdvancedBeneficiaryNoticeCode	CE	No	0..40	..		
21	OrderingFacilityName	XON	No	0..60	..		
22	OrderingFacilityAddress	XAD	No	0..106	..		
23	OrderingFacilityPhoneNumber	XTN	No	0..48	..		
24	OrderingProviderAddress	XAD	No	0..106	..		

2.2.1.8 OBX

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	Long	No	0..10	..		
2	ValueType	String	No	0..2	..		
3	ObservationIdentifier	CE	Yes	0..590	..		
4	ObservationSubID	String	No	0..20	..		
5	ObservationValue	FT	No	0..65536	..		
6	Units	CE	No	0..60	..		
7	ReferencesRange	String	No	0..60	..		
8	AbnormalFlags	String	No	0..5	0..5		
9	Probability	Double	No	0..5	..		
10	NatureOfAbnormalTest	String	No	0..2	..		
11	ObservationResultStatus	String	Yes	0..1	..		
12	DateLastObsNormalValues	TS	No	0..26	..		
13	UserDefinedAccessChecks	String	No	0..20	..		
14	DateTimeOfTheObservation	TS	No	0..26	..		
15	ProducersID	CE	No	0..60	..		
16	ResponsibleObserver	XCN	No	0..80	..		
17	ObservationMethod	CE	No	0..60	..		

2.2.1.9 ZDS

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	ZDS_Field1	String	No	0..128	..		
2	ZDS_Field2	String	No	0..128	..		
3	ZDS_Field3	String	No	0..128	..		
4	ZDS_Field4	String	No	0..128	..		
5	ZDS_Field5	String	No	0..128	..		
6	ZDS_Field6	String	No	0..128	..		
7	ZDS_Field7	String	No	0..128	..		
8	ZDS_Field8	String	No	0..128	..		
9	ZDS_Field9	String	No	0..128	..		
10	ZDS_Field10	String	No	0..128	..		

2.2.1.10 MSA

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	AcknowledgementCode	String	Yes	0..2	..		
2	MessageControllID	String	Yes	0..20	..		

3	TextMessage	String	No	0.80	..		
4	ExpectedSequenceNumber	Long	No	0.15	..		
5	DelayedAcknowledgementType	String	No	0.1	..		
6	ErrorCondition	CE	No	0.100	..		

2.2.1.11 ERR

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	ErrorCodeAndLocation	CM_EC	Yes	0.80	1..Infinite		

2.2.1.12 DG1

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	SI	Yes	0.4	..		
2	DiagnosisCodingMethod	ID	No	0.2	..		
3	DiagnosisCode	CE	No	0.60	..		
4	DiagnosisDescription	ST	No	0.40	..		
5	DiagnosisDateTime	TS	No	0.26	..		
6	DiagnosisType	IS	Yes	0.2	..		
7	MajorDiagnosticCategory	CE	No	0.60	..		
8	DiagnosticRelatedGroup	CE	No	0.60	..		
9	DRGApprovalIndicator	ID	No	0.1	..		
10	DRGGroupReviewCode	IS	No	0.2	..		
11	OutlierType	CE	No	0.60	..		
12	OutlierDays	NM	No	0.3	..		
13	OutlierCost	CP	No	0.12	..		
14	GroupVersionAndType	ST	No	0.4	..		
15	DiagnosisPriority	ID	No	0.2	..		
16	DiagnosingClinician	XCN	No	0.60	0..Infinite		
17	DiagnosisClassification	IS	No	0.3	..		
18	ConfidentialIndicator	ID	No	0.1	..		
19	AttestationDateTime	TS	No	0.26	..		

2.2.1.13 GT1

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	SI	Yes	0.4	..		
2	GuarantorNumber	CX	No	0.59	0..Infinite		
3	GuarantorName	XPN	Yes	0.48	1..Infinite		
4	GuarantorSpouseName	XPN	No	0.48	0..Infinite		
5	GuarantorAddress	XAD	No	0.106	0..Infinite		
6	GuarantorHomePhone	XTN	No	0.40	0..Infinite		
7	GuarantorBusinessPhone	XTN	No	0.40	0..Infinite		

8	GuarantorDateTimeOfBirth	TS	No	0.26	..		
9	GuarantorSex	IS	No	0.1	..		
10	GuarantorType	IS	No	0.2	..		
11	GuarantorRelationship	CE	No	0.80	..		
12	GuarantorSSN	ST	No	0.11	..		
13	GuarantorBeginDate	DT	No	0.8	..		
14	GuarantorEndDate	DT	No	0.8	..		
15	GuarantorPriority	NM	No	0.2	..		
16	GuarantorEmployerName	XPN	No	0.130	0..Infinite		
17	GuarantorEmployerAddress	XAD	No	0.106	0..Infinite		
18	GuarantorEmployerPhoneNumber	XTN	No	0.40	0..Infinite		
19	GuarantorEmployeeIDNumber	CX	No	0.20	0..Infinite		
20	GuarantorEmploymentStatus	IS	No	0.2	..		
21	GuarantorOrganizationName	XON	No	0.130	0..Infinite		
22	GuarantorBillingHoldFlag	ID	No	0.1	..		
23	GuarantorCreditRatingCode	CE	No	0.80	..		
24	GuarantorDeathDateAndTime	TS	No	0.26	..		
25	GuarantorDeathFlag	ID	No	0.1	..		
26	GuarantorChargeAdjustmentCode	CE	No	0.80	..		
27	GuarantorHouseholdAnnualIncome	CP	No	0.10	..		
28	GuarantorHouseholdSize	NM	No	0.3	..		
29	GuarantorEmployerIDNumber	CX	No	0.20	0..Infinite		
30	GuarantorMaritalStatusCode	CE	No	0.80	..		
31	GuarantorHireEffectiveDate	DT	No	0.8	..		
32	EmploymentStopDate	DT	No	0.8	..		
33	LivingDependency	IS	No	0.2	..		
34	AmbulatoryStatus	IS	No	0.2	0..Infinite		
35	Citizenship	CE	No	0.80	0..Infinite		
36	PrimaryLanguage	CE	No	0.60	..		
37	LivingArrangement	IS	No	0.2	..		
38	PublicityIndicator	CE	No	0.80	..		
39	ProtectionIndicator	ID	No	0.1	..		
40	StudentIndicator	IS	No	0.2	..		
41	Religion	CE	No	0.80	..		
42	MothersMaidenName	XPN	No	0.48	0..Infinite		
43	Nationality	CE	No	0.80	..		
44	EthnicGroup	CE	No	0.80	0..Infinite		
45	ContactPersonName	XPN	No	0.48	0..Infinite		
46	ContactPersonsTelephoneNumber	XTN	No	0.40	0..Infinite		
47	ContactReason	CE	No	0.80	..		
48	ContactRelationship	IS	No	0.3	..		
49	ContactJobTitle	ST	No	0.20	..		
50	JobCodeClass	JCC	No	0.20	..		
51	GuarantorEmployersOrganizationName	XON	No	0.130	0..Infinite		

52	Handicap	IS	No	0.2	..		
53	JobStatus	IS	No	0.2	..		
54	GuarantorFinancialClass	FC	No	0.50	..		
55	GuarantorRace	CE	No	0.80	0..Infinite		

2.2.1.14 IN1

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	SI	Yes	0.4	..		
2	GuarantorNumber	CX	No	0.59	0..Infinite		
3	GuarantorName	XPN	Yes	0.48	1..Infinite		
4	GuarantorSpouseName	XPN	No	0.48	0..Infinite		
5	GuarantorAddress	XAD	No	0.106	0..Infinite		
6	GuarantorHomePhone	XTN	No	0.40	0..Infinite		
7	GuarantorBusinessPhone	XTN	No	0.40	0..Infinite		
8	GuarantorDateTimeOfBirth	TS	No	0.26	..		
9	GuarantorSex	IS	No	0.1	..		
10	GuarantorType	IS	No	0.2	..		
11	GuarantorRelationship	CE	No	0.80	..		
12	GuarantorSSN	ST	No	0.11	..		
13	GuarantorBeginDate	DT	No	0.8	..		
14	GuarantorEndDate	DT	No	0.8	..		
15	GuarantorPriority	NM	No	0.2	..		
16	GuarantorEmployerName	XPN	No	0.130	0..Infinite		
17	GuarantorEmployerAddress	XAD	No	0.106	0..Infinite		
18	GuarantorEmployerPhoneNumber	XTN	No	0.40	0..Infinite		
19	GuarantorEmployeeIDNumber	CX	No	0.20	0..Infinite		
20	GuarantorEmploymentStatus	IS	No	0.2	..		
21	GuarantorOrganizationName	XON	No	0.130	0..Infinite		
22	GuarantorBillingHoldFlag	ID	No	0.1	..		
23	GuarantorCreditRatingCode	CE	No	0.80	..		
24	GuarantorDeathDateAndTime	TS	No	0.26	..		
25	GuarantorDeathFlag	ID	No	0.1	..		
26	GuarantorChargeAdjustmentCode	CE	No	0.80	..		
27	GuarantorHouseholdAnnualIncome	CP	No	0.10	..		
28	GuarantorHouseholdSize	NM	No	0.3	..		
29	GuarantorEmployerIDNumber	CX	No	0.20	0..Infinite		
30	GuarantorMaritalStatusCode	CE	No	0.80	..		
31	GuarantorHireEffectiveDate	DT	No	0.8	..		
32	EmploymentStopDate	DT	No	0.8	..		
33	LivingDependency	IS	No	0.2	..		

34	AmbulatoryStatus	IS	No	0.2	0..Infinite		
35	Citizenship	CE	No	0.80	0..Infinite		
36	PrimaryLanguage	CE	No	0.60	..		
37	LivingArrangement	IS	No	0.2	..		
38	PublicityIndicator	CE	No	0.80	..		
39	ProtectionIndicator	ID	No	0.1	..		
40	StudentIndicator	IS	No	0.2	..		
41	Religion	CE	No	0.80	..		
42	MothersMaidenName	XPN	No	0.48	0..Infinite		
43	Nationality	CE	No	0.80	..		
44	EthnicGroup	CE	No	0.80	0..Infinite		
45	ContactPersonName	XPN	No	0.48	0..Infinite		
46	ContactPersonsTelephone Number	XTN	No	0.40	0..Infinite		
47	ContactReason	CE	No	0.80	..		
48	ContactRelationship	IS	No	0.3	..		
49	ContactJobTitle	ST	No	0.20	..		
50	JobCodeClass	JCC	No	0.20	..		
51	GuarantorEmployersOrgani zationName	XON	No	0.130	0..Infinite		
52	Handicap	IS	No	0.2	..		
53	JobStatus	IS	No	0.2	..		
54	GuarantorFinancialClass	FC	No	0.50	..		
55	GuarantorRace	CE	No	0.80	0..Infinite		

2.2.1.15 FT1

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	SI	No	0.4	..		
2	TransactionID	ST	No	0.12	..		
3	TransactionBatchID	ST	No	0.10	..		
4	TransactionDate	TS	Yes	0.26	..		
5	TransactionPostingDate	TS	No	0.26	..		
6	TransactionType	IS	Yes	0.8	..		
7	TransactionCode	CE	Yes	0.80	..		
8	TransactionDescription	ST	No	0.40	..		
9	TransactionAltDescription	ST	No	0.40	..		
10	TransactionQuantity	NM	No	0.6	..		
11	TransactionExtendedAmou nt	CP	No	0.12	..		
12	TransactionUnitAmount	CP	No	0.12	..		
13	DepartmentCode	CE	No	0.60	..		
14	InsurancePlanID	CE	No	0.60	..		
15	InsuranceAmount	CP	No	0.12	..		
16	AssignedPatientLocation	PL	No	0.80	..		
17	FeeSchedule	IS	No	0.1	..		
18	PatientType	IS	No	0.2	..		
19	DiagnosisCode	CE	No	0.60	0..Infinite		
20	PerformedByCode	XCN	No	0.120	0..Infinite		
21	OrderedByCode	XCN	No	0.120	0..Infinite		

22	UnitCost	CP	No	0.12	..	ite
23	FillerOrderNumber	EI	No	0.22	..	
24	EnteredByCode	XCN	No	0.120	0..Infinite	
25	ProcedureCode	CE	No	0.80	..	
26	ProcedureCodeModifier	CE	No	0.80	0..Infinite	

2.2.1.16 PR1

	Name	Data Type	Required	Length	Repeats	Default Value	Validation Table
1	SetID	SI	Yes	0.4	..		
2	ProcedureCodingMethod	IS	No	0.2	..		
3	ProcedureCode	CE	Yes	0.80	..		
4	ProcedureDescription	ST	No	0.40	..		
5	ProcedureDateTime	TS	Yes	0.26	..		
6	ProcedureFunctionalType	IS	Yes	0.2	..		
7	ProcedureMinutes	NM	No	0.4	..		
8	Anesthesiologist	XCN	No	0.120	0..Infinite		
9	AnesthesiaCode	IS	No	0.2	..		
10	AnesthesiaMinutes	NM	No	0.4	..		
11	Surgeon	XCN	No	0.120	0..Infinite		
12	ProcedurePractitioner	XCN	No	0.230	0..Infinite		
13	ConsentCode	CE	No	0.60	..		
14	ProcedurePriority	NM	No	0.2	..		
15	AssociatedDiagnosisCode	CE	No	0.80	..		
16	ProcedureCodeModifier	CE	No	0.80	0..Infinite		

2.2.2 Messages

2.2.2.1 ACK

Item	Description
MSH	
MSA	
[ERR]	

2.2.2.2 ADTA01

Item	Description
MSH	
EVN	
PID	
[PV1]	

2.2.2.3 ADTA02

Item	Description
MSH EVN PID [PV1]	

2.2.2.4 ADTA03

Item	Description
MSH EVN PID [PV1]	

2.2.2.5 ADTA04

Item	Description
MSH EVN PID [PV1]	

2.2.2.6 ADTA05

Item	Description
MSH EVN PID [PV1]	

2.2.2.7 ADTA06

Item	Description
MSH EVN PID [PV1]	

2.2.2.8 ADTA07

Item	Description
MSH EVN PID [PV1]	

2.2.2.9 ADTA08

Item	Description
MSH EVN PID [PV1]	

2.2.2.10 ADTA11

Item	Description
MSH EVN PID [PV1]	

2.2.2.11 ADTA12

Item	Description
MSH EVN PID [PV1]	

2.2.2.12 ADTA13

Item	Description
MSH EVN PID [PV1]	

2.2.2.13 ADTA18

Item	Description
MSH EVN PID PV1 [MRG]	

2.2.2.14 ADTA38

Item	Description
MSH EVN PID [PV1]	

2.2.2.15 ADTA40

Item	Description
MSH EVN PID MRG [PV1]	

2.2.2.16 ORMO01

Item	Description
MSH [PID] [PV1] [{ (0 - Infinite) [ORC] [OBR] }] [ZDS]	

2.2.2.17 ORRO01

Item	Description
MSH [MSA] [ERR] [PID] [ORC] [OBR]	

2.2.2.18 ORUR01

Item	Description
MSH PID PV1 OBR [OBX]	

2.2.2.19 BARP01

Item	Description
MSH [EVN] PID [PV1] [{ DG1 }] (0 - Infinite) [{ GT1 }] (0 - Infinite) [{ IN1 }] (0 - Infinite)	

2.2.2.20 BARP05

Item	Description
MSH	
[EVN]	
PID	
[PV1]	
[{ DG1 }] (0 - Infinite)	
[{ GT1 }] (0 - Infinite)	
[{ IN1 }] (0 - Infinite)	

2.2.2.21 BARP06

Item	Description
MSH	
EVN	
[PID]	
[PV1]	

2.2.2.22 DFTP03

Item	Description
MSH	
[EVN]	
PID	
[PV1]	
[{ FT1 }] (0 - Infinite)	
[{ PR1 }] (0 - Infinite)	

2.2.3 Separators

Separator Type	Value	Field Path	Replacement
Segment	\x0D		
Field Repeat	~	MSH.EncodingCharacters	\R\
Null Value	""		
Field Level 1		MSH.FieldSeparator	\F\
Field Level 2	^	MSH.EncodingCharacters	\S\
Field Level 3	&	MSH.EncodingCharacters	\T\
User Defined String 1	\	MSH.EncodingCharacters	\E\

3. HL7 to PBMHL7 XML Mapping Profiles

3.1 ADT to XML ADT Element Mapping Table

ADT	XML ADT Element
PID_PatientID	PID/PID.3/CX
PID_PatientName	PID/PID.5/XPN
PID_DateTimeOfBirth	PID/PID.7/TS
PID_Sex	PID/PID.8/ST
PID_PatientAlias	PID/PID.9/XPN
PID_PatientAddress	PID/PID.11/XAD
PID_CountyCode	PID/PID.12/ST
PID_HomePhoneNumber	PID/PID.13/XTN

PID_PatientAccountNumber	PID/PID.18/CX
PID_SSNNumber	PID/PID.19/ST
PID_EthnicGroup	PID/PID.22/CE
PV1_PatientClass	PV1/PV1.2/ST
PV1_AssignedPatientLocation	PV1/PV1.3/PL
PV1_PriorPatientLocation	PV1/PV1.6/PL
PV1_AttendingDoctor	PV1/PV1.7/XCN
PV1_ReferringDoctor	PV1/PV1.8/XCN
MRG_PriorPatientIdentifierList	MRG/MRG.1/CX
MRG_PriorPatientID	MRG/MRG.4/CX
MRG_PriorPatientName	MRG/MRG.7/XPN

3.2 ORM to XML ORM Element Mapping Table

ORM	XML ORM Element
PID_PatientID	PID/PID.3/CX
PID_PatientName	PID/PID.5/XPN
PID_DateTimeOfBirth	PID/PID.7/TS
PID_Sex	PID/PID.8/ST
PID_PatientAlias	PID/PID.9/XPN
PID_PatientAddress	PID/PID.11/XAD
PID_CountyCode	PID/PID.12/ST
PID_HomePhoneNumber	PID/PID.13/XTN
PID_PatientAccountNumber	PID/PID.18/CX
PID_SSNNumber	PID/PID.19/ST
PID_EthnicGroup	PID/PID.22/CE
PV1_PatientClass	PV1/PV1.2/ST
PV1_AssignedPatientLocation	PV1/PV1.3/PL
PV1_PriorPatientLocation	PV1/PV1.6/PL
PV1_AttendingDoctor	PV1/PV1.7/XCN
PV1_ReferringDoctor	PV1/PV1.8/XCN
PV1_ConsultingDoctor	PV1/PV1.9/XCN
ORC_OrderControl	ORC/ORC.1/ST
ORC_FillerOrderNumber	ORC/ORC.3/EI
ORC_QuantityTiming	ORC/ORC.7/TQ
ORC_OrderingProvider	ORC/ORC.12/XCN
ORC_EnteringOrganization	ORC/ORC.17/CE
OBR_UniversalServiceID	OBR/OBR.4/CE
OBR_RequestedDateTime	OBR/OBR.6/TS
OBR_SpecimenSource	OBR/OBR.15/CM_SS
OBR_PlacerField1	OBR/OBR.18/ST
OBR_PlacerField2	OBR/OBR.19/ST
OBR_FillerField1	OBR/OBR.20/ST
OBR_FillerField2	OBR/OBR.21/ST
OBR_DiagnosticServSectID	OBR/OBR.24/ST
OBR_ReasonForStudy	OBR/OBR.31/CE
OBR_ScheduledDateTime	OBR/OBR.36/TS
ZDS_Field1	ZDS/ZDS.1/ST

3.3 ORR to XML ORR Element Mapping Table

ORR	XML ORR Element
PID_PatientID	PID/PID.3/CX
PID_PatientName	PID/PID.5/XPN
PID_PatientAccountNumber	PID/PID.18/CX
PV1_PatientClass	PV1/PV1.2/ST
PV1_VisitNumber	PV1/PV1.19/CX
PV1_VisitIndicator	PV1/PV1.51/ST

ORC_OrderControl	ORC/ORC.1/ST
ORC_PlacerOrderNumber	ORC/ORC.2/EI
ORC_FillerOrderNumber	ORC/ORC.3/EI
ORC_QuantityTiming	ORC/ORC.7/TQ
ORC_DateTimeOfTransaction	ORC/ORC.9/TS
ORC_EnteredBy	ORC/ORC.10/XCN
ORC_OrderingProvider	ORC/ORC.12/XCN
ORC_CallBackPhoneNumber	ORC/ORC.14/XTN
ORC_EnteringOrganization	ORC/ORC.17/CE
OBR_PlacerOrderNumber	OBR/OBR.2/EI
OBR_FillerOrderNumber	OBR/OBR.3/EI
OBR_UniversalServiceID	OBR/OBR.4/CE
OBR_DangerCode	OBR/OBR.12/CE
OBR_RelevantClinicalInfo	OBR/OBR.13/ST
OBR_SpecimenSource	OBR/OBR.15/CM_SS
OBR_OrderingProvider	OBR/OBR.16/XCN
OBR_QuantityTiming	OBR/OBR.27/TQ
OBR_TransportationMode	OBR/OBR.30/ID
OBR_ReasonForStudy	OBR/OBR.31/CE
OBR_TransportArranged	OBR/OBR.36/TS

3.4 ORU to XML ORU Element Mapping Table

ORU	XML ORU Element
PID_PatientID	PID/PID.3/CX
PID_PatientName	PID/PID.5/XPN
PID_DateTimeOfBirth	PID/PID.7/TS
PID_Sex	PID/PID.8/ST
PID_PatientAlias	PID/PID.9/XPN
PID_PatientAccountNumber	PID/PID.18/CX
PID_SSNNumber	PID/PID.19/ST
PV1_PatientClass	PV1/PV1.2/ST
PV1_PriorPatientLocation	PV1/PV1.6/PL
PV1_AttendingDoctor	PV1/PV1.7/XCN
PV1_ReferringDoctor	PV1/PV1.8/XCN
PV1_ConsultingDoctor	PV1/PV1.9/XCN
OBR_UniversalServiceID	OBR/OBR.4/CE
OBR_RequestedDateTime	OBR/OBR.6/TS
OBR_SpecimenSource	OBR/OBR.15/CM_SS
OBR_PlacerField1	OBR/OBR.18/ST
OBR_PlacerField2	OBR/OBR.19/ST
OBR_FillerField1	OBR/OBR.20/ST
OBR_FillerField2	OBR/OBR.21/ST
OBR_DiagnosticServSectID	OBR/OBR.24/ST
OBR_ReasonForStudy	OBR/OBR.31/CE
OBR_ScheduledDateTime	OBR/OBR.36/TS
OBX_ObservationIdentifier	OBX/OBX.3/CE
OBX_ObservationValue	OBX/OBX.5/FT
OBX_ObservationResultStatus	OBX/OBX.11/ST
OBX_DateTimeOfTheObservation	OBX/OBX.14/TS
OBX_ResponsibleObserver	OBX/OBX.16/XCN

3.5 BAR to XML BAR Element Mapping Table

BAR	XML BAR Element
PID_PatientID	PID/PID.3/CX
PID_PatientName	PID/PID.5/XPN
PID_DateTimeOfBirth	PID/PID.7/TS

PID_Sex	PID/PID.8/ST
PID_PatientAlias	PID/PID.9/XPN
PID_PatientAccountNumber	PID/PID.18/CX
PID_SSNNumber	PID/PID.19/ST
PV1_PatientClass	PV1/PV1.2/ST
PV1_PriorPatientLocation	PV1/PV1.6/PL
PV1_AttendingDoctor	PV1/PV1.7/XCN
PV1_ReferringDoctor	PV1/PV1.8/XCN
PV1_ConsultingDoctor	PV1/PV1.9/XCN
DG1_DiagnosisDescription	DG1/DG1.5/ST
DG1_DiagnosisType	DG1/DG1.6/TS
GT1_GuarantorName	GT1/GT1.3/XPN
IN1_InsurancePlanID	IN1/IN1.2/CE
IN1_InsuranceCompanyID	IN1/IN1.3/CX
IN1_InsuranceCompanyName	IN1/IN1.4/XON

3.6 DFT to XML DFT Element Mapping Table

DFT	XML DFT Element
PID_PatientID	PID/PID.3/CX
PID_PatientName	PID/PID.5/XPN
PID_DateTimeOfBirth	PID/PID.7/TS
PID_Sex	PID/PID.8/ST
PID_PatientAlias	PID/PID.9/XPN
PID_PatientAccountNumber	PID/PID.18/CX
PID_SSNNumber	PID/PID.19/ST
FT1_TransactionDate	FT1/FT1.4/TS
FT1_TransactionPostingDate	FT1/FT1.5/TS
FT1_TransactionType	FT1/FT1.6/IS
FT1_TransactionCode	FT1/FT1.7/CE
FT1_PerformedByCode	FT1/FT1.20/XCN
FT1_OrderedByCode	FT1/FT1.21/XCN
FT1_FillerOrderNumber	FT1/FT1.23/EI
FT1_ProcedureCode	FT1/FT1.25/CE
FT1_ProcedureCodeModifier	FT1/FT1.26/CE
PR1_ProcedureCodingMethod	PR1/PR1.2/IS
PR1_ProcedureCode	PR1/PR1.3/CE
PR1_ProcedureDateTime	PR1/PR1.5/TS
PR1_ProcedureFunctionalType	PR1/PR1.6/IS
PR1_ProcedureCodeModifier	PR1/PR1.16/CE

4. Communication Profiles

3.7 Supported Communication Stacks

PBMHL7 can send messages by using TCP/IP Socket communication

3.8 TCP/IP Stack

TCP/IP stack inherits from Microsoft Windows Socket implementation.

3.8.1 API

Not Applicable

3.8.2 Physical Media Support

5. Support of Extended Character Sets

The supportable character-set is as follows.

- UTF8(Unicode Transformation Format-8) - A transformation format of ISO 10646