# **Transaction Contents**



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### **Transaction Contents**

# 7.1 Referral Request Payload

7.9.3.2 Document Entry7.9.4 HL7 v2 Cancel Confirmation object

### 7.1.1 Referral Request Package

The referral request will consist of an XDM package containing:

- The referral request in an HL7 V2 OMG (generic clinical order message)
- A C-CDA and associated metadata per HL7 Implementation Guide. While 360X does not specify nor validate C-CDA Implementation Guide version, version 2.0 shall not be used as it is not backward compatible with v1.1 and may cause interoperability challenges with existing implementations. C-CDA IG v1.1 or 2.1 should be used. Referral Note or SOEN templates are encouraged, but any appropriate C-CDA doc type may be used.

The format of the request will be an XDM package (containing the HL7 V2 Order, C-CDA and XD metadata), sent as an attachment of a Direct Protocol message. Per the summary above, 360X does not specify the C-CDA nor its contents, but to qualify for MU objectives, CMS and ONC require the C-CDA contain the Common MU data Set (2014 Edition) or the Common Clinical Data Set (CCDS) (2015 Edition) and be of the specified version. The document template used may be a CCD Summary of Episode Note (where industry has indicated that this is the "best fit" doc template for that data set) or a Referral Note template; both templates are allowed under the Meaningful Use program and 360X.

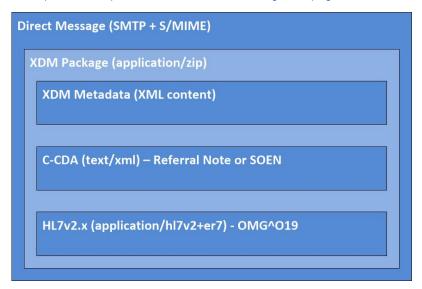


Figure 7.1: 360X compliant transport protocol and referral request payload

Note that in the current state of industry interoperability, many application providers support a C-CDA alone transmitted using Direct. If an application needs to communicate to both 360X compliant applications and applications using exiting capabilities, a single message might be constructed as follows so as to avoid crafting different messages for different recipient capabilities.

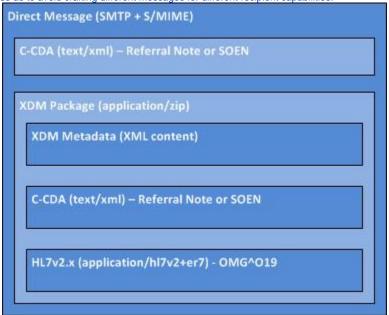


Figure 7.2: 360X compliant application providing a single message to accommodate both 360X compliant and legacy recipients

### 7.1.2 Referral Request : HL7 V2 General Clinical Order (OMG)

The 360X referral request package SHALL contain an HL7 V2 General Clinical Order, OMG^O19^OMG\_O19 message as defined in the HL7 V2 message Payload Definition found in Appendix C. The HL7 message is represented as a distinct document entry object in the XDM metadata, and it shall be present as a separate file within the XDM structure, with a file extension of .hl7.

A sample OMG^O19 message is provided here:

### 7.1.3 Related Clinical Information: C-CDA

The 360X referral request package SHALL contain a C-CDA document for the related clinical information. The C-CDA is represented as a distinct document entry object in the XDM metadata, and it shall be present as a separate file within the XDM structure, with a file extension of .xml. The following spreadsheet contains the analysis of available C-CDA document and section templates:

blocked URL RN\_w\_CCDS\_sections\_empty.xml

- Details
- Download
- 20 KB

blocked URL RN\_minimum\_empty.xml

- Details
- Download
- 13 KB



### 7.1.4 XD Metadata Requirements

The XD metadata will represent the following information which includes and augments the data defined in the paragraph above, for the initial referral request. Defined below is the meta data for

- the submission set
- the HL7 V2 order document entry of the payload
- · the C-CDA document entry of the payload

### 7.1.4.1 Submission Set

Attrib ute	Purpose within 360X	Source data	R/RE/C/O (Source of Requirement)
author	MUST indicate the message sender as a slot named "authorTelecommunication", see Extensions. When converted from an RFC 5322 message, MUST indicate the value of the from the header. Even though the authorPerson slot is required by IHE, since authorTelecommunication is valued the authorPerson may be omitted.		R (XDR and XDM for Direct Messaging)
intend edRec ipient	Recipient of the referral message – person, department, institution. Contains the Direct address. MUST indicate the message receiver. When converted from RFC 5322, MUST carry the recipient address. See Extensions for how to carry the Direct Address. Note that this is not necessarily the provider who will perform or is asked to perform the referral; it is simply the message recipient which is negotiated at the time of implementation.	Direct Address from the SMTP message handler	R (XDR and XDM for Direct messaging)

patien tld	Per IHE for XD*, the patientId is as defined in context of the document registry (i.e. known to the message recipient), whereas the sourcePatientId (on the document entry) is in the context of the message initiator. The submission set patientId MUST be identical to the Document Entry patientId.  Note per above, source is PID-3 segment of the HL7 V2 OMG message where the value from the list of identifiers is the ID as known to the referral request recipient. If not known, this value may be empty.  See the discussion on patient identifiers in section 3.4		R2 XDR and XDM for Direct messaging)
submi ssion Time	Point in time, as defined at the initiator of the message, of when the submission set was created. Shall be a single value.		R (XDM and XDR for Direct Messaging)
uniqu eld	Globally unique ID for the submission set. The format is an OID per IHE, assigned by the message initiator. This ID MUST be different than the uniqueld for any documentEntry.	Generated and assigned by message initiating technology	R (XDM/XDR)
conte ntTyp eCode	Describes the content of the submissions set	57133-1 LOINC code indicates that this is a referral request	R (360X)

## 7.1.4.2 Document Entry for the HL7 V2 OMG^O19^OMG\_O19 message (Referral Request)

The document for the initial referral request SHALL be the HL7 V2 order message OMG^O19^OMG\_O19 defined in section 3.1.1 in the Closed Loop Referral Implementation Guide: HL7 V2 message Payload Definition in Appendix C. Example message can be found in that document.

The XD meta data for the document entry, based on the minimal XDR data set and extended as needed for 360X is defined below.

Attribute	Purpose within 360X	Required (Source of Requirement)	Corresponding HL7 Field/Component/Subcomponent
author	If supplied, MUST indicate the document's (order) author, which may be different from the message sender. For the order, this is the clinician who is requesting the referral.	>R2 (XDR and XDM for Direct Messaging)	Ordering Provider in ORC-12
classCo de	Identifies the specific document type, in this case an HL7 V2 Order. See also typeCode which further refines the class definition and should not be ambiguous	R (360X) (R2 XDR and XDM for Direct Messaging)	Message Type in MSH-9.1 (OMG)
confident ialityCode	Identifies the confidentiality defined for the order. Implementations SHOULD NOT use codes that reveal the specific trigger causes of confidentiality (e.g., ETH, HIV, PSY, SDV)	R2 (XDR and XDM for Direct Messaging)	Confidentiality Code in ORC-28 Implementations SHOULD constrain to values that do not reflect the cause of confidentiality such as: V Very restricted R Restricted U Usual control
creation Time	Defines the creation time of the message (vs. the order)	R2 (XDR and XDM for Direct Messaging)	Date/Time of Message in MSH-7
entryUUID	The identifier used for referencing the Document Entry object within the metadata	R (XDR and XDM for Direct Messaging)	N/A
eventCo deList	This list of codes represents the main clinical acts which does not conflict with the class and type codes. In this case, extends the document type (classCode=OMG, type=O19) to define the specific service requested.	O (IHE XDR)	Universal Service Identifier in OBR-4, CWE_2.1 Where XDR classification scheme is name of coding system in CWE_2.3
formatC ode	Globally unique identifier specifying the format of the document (referral request/order) to allow systems to determine if / how to process.  For 360X can be formed from MSH-9 Message Type MSH-12 Version ID MSH-21 Message	R (360X)	OMG^O19_2.5.1_360XReferralRequest
healthca reFacility TypeCode	See also practice setting type. This code represents the type of organizational setting of the clinical encounter during which the documented act occurred. Note that in context of 360X, this is the facility type of the Referral Request Initiator.	R2 (XDR and XDM for Direct)	Should be derived from / mapped to the information in ORC-21 through 24
languag eCode	Specifies the language of the document (order / referral request)	R2 (XDR and XDM for Direct)	Principal Language of Message in MSH-19
mimeTy pe	The MIME type of the document	R (XDR and XDM for Direct Messaging)	x-application/hl7-v2+er7
patientId	See also sourcePatientID. patient ID MUST be the same as the patientID in the submission set (which, not does not include the sourcePatientID) and all document entries.  Per IHE, is the ID as known to the referral request recipient / target document registry, if known.	R2 (360X) (R2 XDR and XDM for Direct Messaging)	The patientID in context of the message recipient (referral request recipient), if known, from the PID-3 list in the order.  Referral request acceptance/responses will include a sourcePatientID (ID in context of referral request recipient) which the initiator shall use as patientID in subsequent transactions to aid in matching.

sourceP atientId	See also Patient ID. The sourcePatientID is the ID as known by the document submitter (in this case, the referral request initiator). This ID Shall be the same as that for the C-CDA document meta data.	R (360X)	The patient ID in the PID-3 list that represents the referral request initiator's patient ID.
sourceP atientInfo	Relevant patient demographics such as last name, first name, sex, DOB that may help in matching (electronically or by a person) if IDs are insufficient.	R2 per XDR, O per IHE??	PID-5, PID-7, PID-8 content should be used.
practice SettingC ode	Identifies the setting that created the order at a high granularity e.g., Cardiology, FamilyPractice. Should not create ambiguity as compared to healthcareFacilityTypeCode.	R2 (XDR and XDM for Direct)	Should be derived from/mapped to the information in ORC-21 through 24
typeCode	Further refines classCode and should not make ambiguous. Defines the specific HL7 V2 message event type, for this message it is O19	R (360X)	MSH-9.2^9.3 OMG^O19^OMG_O19
uniqueld	Globally unique identifier assigned to the document by its creator.	R (XDR and XDM for Direct Messaging)	May be based on Message Control ID in MSH-10

# 7.1.4.3 Document Entry for C-CDA

The Document Entry metadata is usually derived from the C-CDA header, as shown in the table below:

Attribute	Purpose within 360X	Required (Source of Requirement)	Corresponding C-CDA element
author	If supplied, MUST indicate the document's author, which may be different from the message sender. For the order, this is the clinician who is requesting the referral.  Note that C-CDAs are often multi-authored and author may be defaulted in the document.	R2 (XDR and XDM for Direct Messaging)	Author entry in US Realm header.
classCode	Identifies the specific document type, in this case a C-CDA template (e.g., CCD, SOEN, Referral Note). See also typeCode which further refines the class definition and should not be ambiguous	R (360X) (R2 XDR and XDM for Direct Messaging)	Type ID entry in US Realm header.
confidentiali tyCode	Identifies the confidentiality defined for the document. Implementations SHOULD NOT use codes that reveal the specific trigger causes of confidentiality (e.g., ETH, HIV, PSY, SDV)	R2 (XDR and XDM for Direct Messaging)	ConfidentialityCode in US Realm Header
creationTime	Defines the creation time of the document (vs. the message)	R2 (XDR and XDM for Direct Messaging)	effectiveTime in US Realm Header
entryUUID	Globally unique identifier UUID for the document as assigned by the message sender and used only in the XD* handling.	R (XDR and XDM for Direct Messaging)	N/A
formatCode	Globally unique identifier specifying the format of the document to allow systems to determine if / how to process.	R (360X)	Per the C-CDA specificaiton
healthcareF acilityType Code	See also practice setting type. This code represents the type of organizational setting of the clinical encounter during which the documented act occurred. Note that in context of 360X, this is the facility type of the Referral Request Initiator.	R2 (XDR and XDM for Direct)	N/A
languageC ode	Specifies the language of the document (order / referral request)	R2 (XDR and XDM for Direct)	languageCode of US Realm Header
mimeType	The MIME type of the document	R (XDR and XDM for Direct Messaging)	Currently the MIME type for CDA documents is simply "text/xml"
patientId	See also sourcePatientID. patient ID MUST be the same as the patientID in the submission set (which, not does not include the sourcePatientID) and all document entries.  Per IHE, is the ID as known to the referral request recipient / target document registry, if known.	R2 (360X) (R2 XDR and XDM for Direct Messaging)	N/A
sourcePatie ntId	See also Patient ID.  The sourcePatientID is the ID as known by the document submitter (in this case, the referral request initiator).  This ID Shall be the same as that for the C-CDA document meta data.	R (360X)	targetID in US Realm Header
sourcePatie ntInfo	Relevant patient demographics such as last name, first name, sex, DOB that may help in matching (electronically or by a person) if IDs are insufficient.	R2 per XDR, O per IHE??	Elements in patient section of US Realm Header such as name, administrative sex, birth time, etc.
practiceSett ingCode	Identifies the setting that created the order at a high granularity e.g., Cardiology, FamilyPractice. Should not create ambiguity as compared to healthcareFacilityTypeCode.	R2 (XDR and XDM for Direct)	Should be derived from/mapped to the information in ORC-21 through 24
typeCode	Further refines classCode and should not make ambiguous. Defines the specific C-CDA document type such as <code code="34133-9" codesystem=" 2.16.840.1.113883.6.1" codesystemname="LOINC" displayname="Summarization of Episode Note"></code>	R (360X)	Code element from the US realm header
uniqueld	Globally unique identifier assigned to the document by its creator.	R (XDR and XDM for Direct Messaging)	Id element (Globally unique identifier) in US realm header

# 7.2 Accept

## 7.2.1 Accept Payload

The accept referral payload is one of two REQUIRED responses to the referral request in the referral process necessary to indicate the transfer of patient care. By accepting the referral, the receiver will be expected to perform the treatment and/or provide the requested input per the specified reason for referral in the referral request. Provided the receiver cannot fulfill this obligation, the referral SHOULD be declined. This payload will consist of a XDM package (containing an HL7 status update message and associated metadata) as described below.



Figure 7.3: 360X compliant transport protocol and accept payload

### 7.2.2 Meaningful Use Required Data Elements

Meaningful use content is not required for this step in the process.

## 7.2.3 XD Metadata Requirements

#### **Submission Set**

Attribute	Source	Expectations
sourceld	MSH-4	R
patientId PID-3		R

### **Document Entry**

Attribute	Source	Expectations
creationTime	MSH-7	R
classCode	MSH-9 component 1	R
formatCode	MSH-9 component 3	R
typeCode	MSH-9 component 2	R
sourcePatientId		O (patientId as represented by the specialist)
sourcePatientInfo		
- patient identifier	PID-3	R
- patient name	PID-5	R
- patient DOB	PID-7	0
- patient gender	PID-8	R
- patient address	PID-11	0
servicStartTime		Do not send
serviceStopTime		Do not send
uri		Should match the name of the hI7 file in the xdm zip

## 7.2.4 HL7 v2.5.1 OSU Accept object

Example:

```
MSH|^~\&||^1.3.6.1.4.1.21367.2016.10.1.32^ISO||^1.3.6.1.4.1.21367.2016.10.1.21
^ISO|20161003092015+0000||OSU^O51^OSU_O51|19882|P|2.5.1|||NE|NE|||||360X|
PID|1||T7190334^^^&1.3.6.1.4.1.21367.2016.10.1.21.5&ISO^MRN~L53HG67^^^&1.3.6.1.4.1.21367.2016.10.1.32.11
&ISO^MRN||Packton^Peter^^^L||19580817|M|
ORC|OK|889342^^1.3.6.1.4.1.21367.2016.10.1.21.15^ISO|||IP||||||
```

### 7.3 Decline

### 7.3.1 Decline Payload

The decline referral payload is the other possible REQUIRED response to the referral request in the referral process. It is necessary to indicate to the initiator that the transfer of patient care will not be occurring with the declining provider. By declining the referral, the receiver will NOT be expected to perform the treatment and/or provide the requested input per the specified reason for referral in the referral request. This payload will consist of a XDM package (containing an HL7 status update message and associated metadata) as described below.

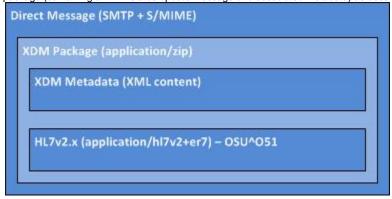


Figure 7.4: 360X compliant transport protocol and decline payload

### 7.3.2 Meaningful Use Required Data Elements

Meaningful use content is not required for this step in the process.

#### 7.3.3 XD Metadata Requirements

#### 7.3.3.1 Submission Set

Attribute	Expectations
sourceld	MSH-4
patientId	PID-3

## 7.3.3.4 Document Entry

Attribute	Source	Expectations
creationTime	MSH-7	R
classCode	MSH-9 component 1	R
formatCode	MSH-9 component 3	R
typeCode	MSH-9 component 2	R
sourcePatientId		O (patientId as represented by the specialist)
sourcePatientInfo		
- patient identifier	PID-3	R
- patient name	PID-5	R
- patient DOB	PID-7	0

- patient gender	PID-8	R
- patient address	PID-11	0
servicStartTime		Do not send
serviceStopTime		Do not send
uri		Should match the name of the hI7 file in the xdm zip

Example:

### 7.3.4 HL7 v2.5.1 OSU Decline object

Example:

```
MSH|^~\&||^1.3.6.1.4.1.21367.2016.10.1.32^ISO||^1.3.6.1.4.1.21367.2016.10.1.21
^ISO|20161003092015+0000||OSU^O51^OSU_O51|22882|P|2.5.1|||NE|NE|||||360X|
PID|1||T7190334^^^&1.3.6.1.4.1.21367.2016.10.1.21.5&ISO^MRN~L53HG67^^^&1.3.6.1.4.1.21367.2016.10.1.32.11
&ISO^MRN||Packton^Peter^^^L||19580817|M|
ORC|UA|889342^^1.3.6.1.4.1.21367.2016.10.1.21.15^ISO|||CA||||20130629074500|||||||^Unable to schedule patient within the timeframe requested|
```

## 7.4 Scheduled Notification

Schedule

Required: Ref ID + "Schedule" status from requesting provider or referral provider + appt date / time

## 7.4.1 Scheduled Notification Payload

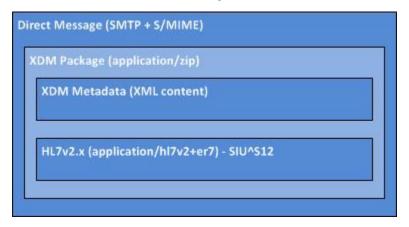


Figure 7.5: 360X compliant transport protocol and scheduled notification payload

### 7.4.2 MU2 Required Data Elements

Meaningful use content is not required for this step in the process.

## 7.4.3 XD Metadata Requirements

#### 7.4.3.1 Submission Set

Attribute	Expectations
sourceld	MSH-4
patientId	PID-3

#### 7.4.3.2 Document Entry

Attribute	Source	Expectations
creationTime	MSH-7	R
classCode	MSH-9 component 1	R
formatCode	MSH-9 component 3	R
typeCode	MSH-9 component 2	R
sourcePatientId		O (patientId as represented by the specialist)
sourcePatientInfo		
- patient identifier	PID-3	R
- patient name	PID-5	R
- patient DOB	PID-7	0
- patient gender	PID-8	R
- patient address	PID-11	0
servicStartTime		Do not send
serviceStopTime		Do not send
uri		Should match the name of the hI7 file in the xdm zip

#### Example:

### 7.4.4 HL7 v2 Scheduled Notification object

#### Example:

```
MSH|^~\&||^1.3.6.1.4.1.21367.2016.10.1.32^ISO||^1.3.6.1.4.1.21367.2016.10.1.21
^ISO|20161004142352+0000||SIU^S12^SIU_S12|31882|P|2.5.1|||NE|NE|||||360X|
SCH||18467^^1.3.6.1.4.1.21367.2016.10.1.32.14^ISO|||57133-
1^\LN||||||||^Name^Registrar|||^Name^Enterer|||||889342^1.3.6.1.4.1.21367.2016.10.1.21.15^ISO|
TQ1||||||20161009140000+0000|20161009143000+0000|
PID|1||T7190334^^&1.3.6.1.4.1.21367.2016.10.1.21.5&ISO^MRN~L53HG67^^&1.3.6.1.4.1.21367.2016.10.1.32.11
&ISO^MRN||Packton^Peter^^L||19580817|M|
RGS|1|A|
AIP|1||^Brown^Beatrice|
```

## 7.5 No Show Notification

The no show referral payload is an optional response preceded by a scheduled event in the referral process. Its purpose is to indicate to the referral initiator that the patient did not show for the scheduled appointment with the referral recipient. By indicating a referral is a no show, the receiver will NOT be expected to perform the treatment and/or provide the requested input per the specified reason for referral in the referral request. However, there is the option for the referral recipient to reschedule the appointment. This payload will consist of a XDM package (containing a HL7 SIU and associated metadata) as described below.

## 7.5.1 No Show Notification Payload

blocked URL

Figure 7.6: 360X compliant transport protocol and no show notification payload

### 7.5.2 MU2 Required Data Elements

Meaningful use content is not required for this step in the process.

### 7.5.3 XD Metadata Requirements

#### 7.5.3.1 Submission Set

Attribute	Source	Expectations
sourceld	MSH-4	R

patientId PID-3 R

#### 7.5.3.2 Document Entry

Attribute	Source	Expectations
creationTime	MSH-7	R
classCode	MSH-9 component 1	R
formatCode	MSH-9 component 3	R
typeCode	MSH-9 component 2	R
sourcePatientId		O (patientId as represented by the specialist)
sourcePatientInfo		
- patient identifier	PID-3	R
- patient name	PID-5	R
- patient DOB	PID-7	0
- patient gender	PID-8	R
- patient address	PID-11	О
servicStartTime		Do not send
serviceStopTime		Do not send
uri		Should match the name of the hI7 file in the xdm zip

Example:

## 7.5.4 HL7 v2 No Show notification object

#### HL7 SIU^S26 Example:

```
MSH|^~\&||^1.3.63.998.999.3^ISO||^1.3.63.5444.345.2.1^ISO|20161010172813+0000||SIU^S26^SIU_S26|25882|P|2.5.1 ||NE|NE||||360X| | SCH||18467^^1.3.6.1.4.1.21367.2016.10.1.32.14^ISO|||57133- | 1^*LN|||||||||Name^Registrar|||^Name^Enterer|||||889342^*1.3.6.1.4.1.21367.2016.10.1.21.15^ISO| | TQ1||||||20161009140000+0000| | 20161009143000+0000| | PID|1||T7190334^^&1.3.6.1.4.1.21367.2016.10.1.21.5&ISO^MRN~L53HG67^^&1.3.6.1.4.1.21367.2016.10.1.32.11 & ISO^MRN||Packton^Peter^^*L||19580817|M| | RGS|1|D|
```

## 7.6 Interim Consultation Note

Visit Summary – Requires Clinical Content / Payload (MU2 C-CDA) Required: Ref ID + "Consult report (Interim)" status

## 7.6.1 Interim Consultation Note Payload

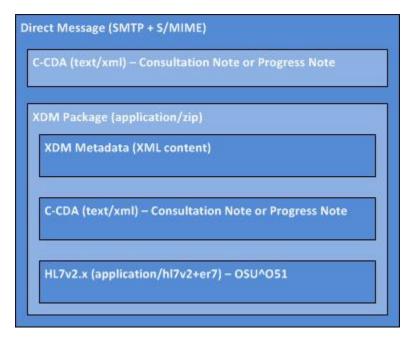


Figure 7.7: 360X compliant transport protocol and interim consultation note payload

## 7.6.2 MU2 Required Data Elements

# 7.6.3 XD Metadata Requirements

## 7.6.3.3 Document Entry for C-CDA

The Document Entry metadata is usually derived from the C-CDA header, as shown in the table below:

Attrib ute	Purpose within 360X	Required (Source of Require ment)	Corresponding C-CDA element
author	If supplied, MUST indicate the document's author, which may be different from the message sender. For the order, this is the clinician who is requesting the referral. Note that C-CDAs are often multi-authored and author may be defaulted in the document.	R2 (XDR and XDM for Direct Messagin g)	Author entry in US Realm header.
class Code	Identifies the specific document type, in this case a C-CDA template (e.g., CCD, SOEN, Referral Note). See also typeCode which further refines the class definition and should not be ambiguous	R (360X) (R2 XDR and XDM for Direct Messagin g)	Type ID entry in US Realm header.
confid entialit yCode	Identifies the confidentiality defined for the document. Implementations SHOULD NOT use codes that reveal the specific trigger causes of confidentiality (e.g., ETH, HIV, PSY, SDV)	R2 (XDR and XDM for Direct Messagin g)	ConfidentialityCode in US Realm Header
creati onTime	Defines the creation time of the document (vs. the message)	R2 (XDR and XDM for Direct Messagin g)	effectiveTime in US Realm Header
entry UUID	Globally unique identifier UUID for the document as assigned by the message sender and used only in the XD* handling.	R (XDR and XDM for Direct Messagin g)	N/A
event Code List	Contains a list of codes that reflect the clinical events occurring as the source of the information contained in the C-CDA document	R2 (360X) O (IHE)	When the 360X transaction occurs in an environment tracking eCQM measure CMS50vN, the eventCodeList SHALL contain at least one of the SNOMED CT codes from value set Consultant Report (2.16.840.1.113883.3.464.1003.121.12.1006), AND at least one of the SNOMED CT codes from value set Referral (2.16.840.1.113883.3.464.1003.101.12.1046)

format Code	Globally unique identifier specifying the format of the document to allow systems to determine if / how to process.	R (360X)	Per the C-CDA specificaiton
health careF acility Type Code	See also practice setting type. This code represents the type of organizational setting of the clinical encounter during which the documented act occurred. Note that in context of 360X, this is the facility type of the Referral Request Initiator.	R2 (XDR and XDM for Direct)	N/A
langu ageC ode	Specifies the language of the document (order / referral request)	R2 (XDR and XDM for Direct)	languageCode of US Realm Header
mime Type	The MIME type of the document	R (XDR and XDM for Direct Messagin g)	Currently the MIME type for CDA documents is simply "text/xml"
patien tld	See also sourcePatientId. The patientId attribute MUST be the same as the patientId in the submission set, and all document entries. Per IHE, it is the ID as known to the referral request initiator, and it MUST be the same as the sourcePatientId of the Referral Request that was sent by the referral initiator.	R (360X) (R2 XDR and XDM for Direct Messagin g)	N/A
sourc ePatie ntId	See also Patient ID. The sourcePatientID is the ID as known by the document submitter (in this case, the referral request recipient). This ID Shall be the same as that for the HL7v2 document entry meta data.	R2 (360X)	targetID in US Realm Header
sourc ePatie ntInfo	Relevant patient demographics such as last name, first name, sex, DOB that may help in matching (electronically or by a person) if IDs are insufficient.	R2 per XDR, O per IHE	Elements in patient section of US Realm Header such as name, administrative sex, birth time, etc.
practi ceSett ingCo de	Identifies the setting that created the order at a high granularity e. g., Cardiology, FamilyPractice. Should not create ambiguity as compared to healthcareFacilityTypeCode.	R2 (XDR and XDM for Direct)	Should be derived from/mapped to the information in ORC-21 through 24
typeC ode	Further refines classCode and should not make ambiguous. Defines the specific C-CDA document type such as <code code="34133-9" codesystem="2.16.840.1.113883.6.1" codesystemname="LOINC" displayname="Summarization of Episode Note"></code>	R (360X)	Code element from the US realm header
uniqu eld	Globally unique identifier assigned to the document by its creator.	R (XDR and XDM for Direct Messagin g)	Id element (Globally unique identifier) in US realm header

## 7.6.4 HL7 v2 Interim Consultation Note object

## Example:

```
MSH|^~\&||^1.3.6.1.4.1.21367.2016.10.1.32^ISO||^1.3.6.1.4.1.21367.2016.10.1.21
^ISO|20161010142311+0000||OSU^O51^OSU_O51|20882|P|2.5.1|||NE|NE|||||360X|
PID|1||T7190334^^&1.3.6.1.4.1.21367.2016.10.1.21.5&ISO^MRN~L53HG67^^&1.3.6.1.4.1.21367.2016.10.1.32.11
&ISO^MRN||Packton^Peter^^^L||19580817|M|
ORC|SC|889342^^1.3.6.1.4.1.21367.2016.10.1.21.15^ISO|||A||||||34225PC^Allen^Anthony^M^III^MD^^^&1.
3.6.1.4.1.21367.2016.10.1.21.10&ISO^L^^DN|
```

# 7.7 Referral Summary (Close the Loop)

Referral Summary (End of Episode) – Requires Clinical Content /Payload (MU2 C-CDA) Required: Ref ID + "Consult report (Final)" status

## 7.7.1 Referral Summary Payload

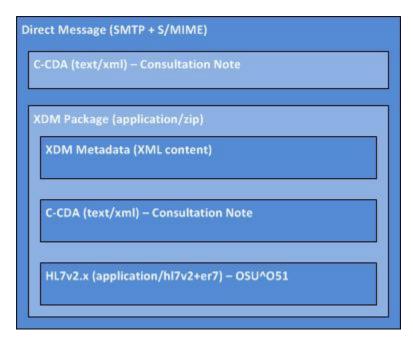


Figure 7.8: 360X compliant transport protocol and referral summary payload

## 7.7.2 MU2 Required Data Elements

## 7.7.3 XD Metadata Requirements

## 7.7.3.1 Submission Set

## 7.7.3.2 Document Entry for HL7v2 Status Update message

### 7.7.3.3 Document Entry for C-CDA

The Document Entry metadata is usually derived from the C-CDA header, as shown in the table below:

Attrib ute	Purpose within 360X	Required (Source of Require ment)	Corresponding C-CDA element
author	If supplied, MUST indicate the document's author, which may be different from the message sender. For the order, this is the clinician who is requesting the referral. Note that C-CDAs are often multi-authored and author may be defaulted in the document.	R2 (XDR and XDM for Direct Messagin g)	Author entry in US Realm header.
class Code	Identifies the specific document type, in this case a C-CDA template (e.g., CCD, SOEN, Referral Note).  See also typeCode which further refines the class definition and should not be ambiguous	R (360X) (R2 XDR and XDM for Direct Messagin g)	Type ID entry in US Realm header.
confid entialit yCode	Identifies the confidentiality defined for the document. Implementations SHOULD NOT use codes that reveal the specific trigger causes of confidentiality (e.g., ETH, HIV, PSY, SDV)	R2 (XDR and XDM for Direct Messagin g)	ConfidentialityCode in US Realm Header
creati onTime	Defines the creation time of the document (vs. the message)	R2 (XDR and XDM for Direct Messagin g)	effectiveTime in US Realm Header

entry UUID	Globally unique identifier UUID for the document as assigned by the message sender and used only in the XD* handling.	R (XDR and XDM for Direct Messagin g)	N/A
event Code List	Contains a list of codes that reflect the clinical events occurring as the source of the information contained in the C-CDA document	R2 (360X) O (IHE)	When the 360X transaction occurs in an environment tracking eCQM measure CMS50vN, the eventCodeList SHALL contain at least one of the SNOMED CT codes from value set Consultant Report (2.16.840.1.113883.3.464.1003.121.12.1006), AND at least one of the SNOMED CT codes from value set Referral (2.16.840.1.113883.3.464.1003.101.12.1046)
format Code	Globally unique identifier specifying the format of the document to allow systems to determine if / how to process.	R (360X)	Per the C-CDA specificaiton
health careF acility Type Code	See also practice setting type. This code represents the type of organizational setting of the clinical encounter during which the documented act occurred. Note that in context of 360X, this is the facility type of the Referral Request Initiator.	R2 (XDR and XDM for Direct)	N/A
langu ageC ode	Specifies the language of the document (order / referral request)	R2 (XDR and XDM for Direct)	languageCode of US Realm Header
mime Type	The MIME type of the document	R (XDR and XDM for Direct Messagin g)	Currently the MIME type for CDA documents is simply "text/xml"
patien tld	See also sourcePatientId. The patientId attribute MUST be the same as the patientId in the submission set, and all document entries. Per IHE, it is the ID as known to the referral request initiator, and it MUST be the same as the sourcePatientId of the Referral Request that was sent by the referral initiator.	R (360X) (R2 XDR and XDM for Direct Messagin g)	N/A
sourc ePatie ntId	See also Patient ID. The sourcePatientID is the ID as known by the document submitter (in this case, the referral request recipient). This ID Shall be the same as that for the HL7v2 document entry meta data.	R2 (360X)	targetID in US Realm Header
sourc ePatie ntInfo	Relevant patient demographics such as last name, first name, sex, DOB that may help in matching (electronically or by a person) if IDs are insufficient.	R2 per XDR, O per IHE	Elements in patient section of US Realm Header such as name, administrative sex, birth time, etc.
practi ceSett ingCo de	Identifies the setting that created the order at a high granularity e. g., Cardiology, FamilyPractice. Should not create ambiguity as compared to healthcareFacilityTypeCode.	R2 (XDR and XDM for Direct)	Should be derived from/mapped to the information in ORC-21 through 24
typeC ode	Further refines classCode and should not make ambiguous. Defines the specific C-CDA document type such as <code code="34133-9" codesystem="2.16.840.1.113883.6.1" codesystemname="LOINC" displayname="Summarization of Episode Note"></code>	R (360X)	Code element from the US realm header
uniqu eld	Globally unique identifier assigned to the document by its creator.	R (XDR and XDM for Direct Messagin g)	Id element (Globally unique identifier) in US realm header

# 7.7.4 HL7 v2 Referral Summary object

### Example:

```
MSH|^~\&||^1.3.6.1.4.1.21367.2016.10.1.32^ISO||^1.3.6.1.4.1.21367.2016.10.1.21
^ISO|20161012170822+0000||OSU^O51^OSU_O51|21882|P|2.5.1|||NE|NE|||||360X|
PID|1||T7190334^^&1.3.6.1.4.1.21367.2016.10.1.21.5&ISO^MRN~L53HG67^^&1.3.6.1.4.1.21367.2016.10.1.32.11
&ISO^MRN||Packton^Peter^^^L||19580817|M|
ORC|SC|889342^^1.3.6.1.4.1.21367.2016.10.1.21.15^ISO|||CM|||||||
```

# 7.8 Request to Cancel the Referral

The request to cancel the referral payload is an optional action potentially performed by the referral initiator during the referral process. Its purpose is to indicate to the referral recipient that the originally requested treatment is no longer necessary. By initiating a cancel request, the referral initiator SHOULD NOT expect the referral receiver to cancel the referral nor should the referral initiator expect a cancel confirmation. This payload will consist of a XDM package (containing a HL7 status update and associated metadata) as described below.

## 7.8.1 Request to Cancel Payload

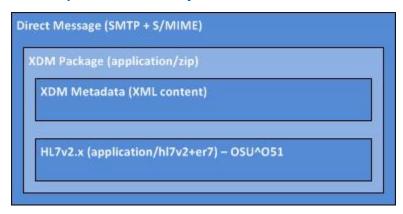


Figure 7.9: 360X compliant transport protocol and request to cancel payload

### 7.8.2 MU2 Required Data Elements

Meaningful use content is not required for this step in the process.

## 7.8.3 XD Metadata Requirements

#### 7.8.3.1 Submission Set

Attribute	Source	Expectations
sourceld	MSH-4	R
patientId	PID-3	R

## 7.8.3.2 Document Entry

Attribute	Source	Expectations
creationTime	MSH-7	R
classCode	MSH-9 component 1	R
formatCode	MSH-9 component 3	R
typeCode	MSH-9 component 2	R
sourcePatientId		O (patientId as represented by the specialist)
sourcePatientInfo		
- patient identifier	PID-3	R
- patient name	PID-5	R
- patient DOB	PID-7	0
- patient gender	PID-8	R
- patient address	PID-11	0
servicStartTime		Do not send
serviceStopTime		Do not send
uri		Should match the name of the hI7 file in the xdm zip

Example:

## 7.8.4 HL7 v2 Request to Cancel object

Example:

```
MSH|^~\&||^1.3.6.1.4.1.21367.2016.10.1.21^ISO||^1.3.6.1.4.1.21367.2016.10.1.32
^ISO|20161007092857+0000||OSU^O51^OSU_O51|23882|P|2.5.1|||NE|NE|||||360X|
PID|1||T7190334^^^&1.3.6.1.4.1.21367.2016.10.1.21.5&ISO^MRN||Packton^Peter^^^L||19580817|M|
ORC|CA|889342^^1.3.6.1.4.1.21367.2016.10.1.21.15^ISO||||||||||34225PC^Allen^Anthony^M^III^MD^^^&1.
3.6.1.4.1.21367.2016.10.1.21.10&ISO^L^^DN||||^+Headache disappeared|
```

### 7.9 Cancel Confirmation

The cancel confirmation referral payload is an optional response preceded by a cancel request in the referral process. Its purpose is to indicate to the referral initiator that the treatment through the originally requested referral will not be completed. By indicating a referral is a canceled, the receiver will NOT be expected to perform the treatment and/or provide the requested input per the specified reason for referral in the referral request. This payload will consist of a XDM package (containing a HL7 status update and associated metadata) as described below.

### 7.9.1 Cancel Confirmation Payload

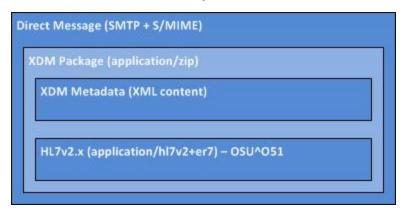


Figure 7.10: 360X compliant transport protocol and cancel confirmation payload

### 7.9.2 MU2 Required Data Elements

Meaningful use content is not required for this step in the process.

## 7.9.3 XD Metadata Requirements

#### 7.9.3.1 Submission Set

Attribute	Source	Expectations
sourceld	MSH-4	R
patientId	PID-3	R

#### 7.9.3.2 Document Entry

Attribute	Source	Expectations
creationTime	MSH-7	R
classCode	MSH-9 component 1	R
formatCode	MSH-9 component 3	R
typeCode	MSH-9 component 2	R
sourcePatientId		O (patientId as represented by the specialist)
sourcePatientInfo		
- patient identifier	PID-3	R
- patient name	PID-5	R
- patient DOB	PID-7	0
- patient gender	PID-8	R
- patient address	PID-11	0

servicStartTime	Do not send
serviceStopTime	Do not send
uri	Should match the name of the hI7 file in the xdm zip

#### Example:

# 7.9.4 HL7 v2 Cancel Confirmation object

#### Example:

```
MSH|^~\&||^1.3.6.1.4.1.21367.2016.10.1.32^ISO||^1.3.6.1.4.1.21367.2016.10.1.21
^ISO|20161008110543+0000||OSU^O51^OSU_O51|24882|P|2.5.1|||NE|NE|||||360X|
PID|1||T7190334^^^&1.3.6.1.4.1.21367.2016.10.1.21.5&ISO^MRN~L53HG67^^^&1.3.6.1.4.1.21367.2016.10.1.32.11
&ISO^MRN||Packton^Peter^^^L||19580817|M|
ORC|CR|889342^^1.3.6.1.4.1.21367.2016.10.1.21.15^ISO|||CA||||||34225PC^Allen^Anthony^M^III^MD^^^&1.
3.6.1.4.1.21367.2016.10.1.21.10&ISO^L^^DN||||^Glad to hear that|
```