

DATS

Development Applications and Technical Services

**Centers for Medicare & Medicaid
Services**

Electronic Submission of Medical Documentation (esMD)

HH Implementation Guide

Version 3.1

02/05/2021

Document Number: HH_Imp_Guide_AR2021.04.0

Contract Number: HHSM-500-75FCMC-20C0035

Table of Contents

1. Introduction	7
1.1 The esMD Overview	7
1.1.1 Review Contractors.....	8
1.1.2 Review Programs.....	8
1.2 Overview of the esMD Processes.....	9
1.2.1 Previous esMD Process.....	9
1.2.2 Current esMD Process.....	9
1.3 The esMD Primary Audiences	14
1.3.1 Important Note on the Onboarding Process for HIHs.....	15
2. The esMD Onboarding Process for HIHs	16
2.1 The esMD Onboarding Instructions for Prospective HIHs.....	16
2.1.1 The esMD Gateway Environment Testing and Configuration	16
2.1.2 Health Level 7 Organizational Identifiers	16
2.1.3 Obtaining an HL7 OID.....	16
2.1.4 HIH Gateway IP Address	17
2.1.5 HIH Gateway Endpoint Uniform Resource Locator for Responses	17
2.1.6 Transport Layer Security Certificate	17
2.1.7 Federal Information Processing Standards for Cryptographic Modules.....	18
2.1.8 X12 Specific Information	18
2.1.9 Completion of Onboarding process	18
3. The esMD Offboarding Process for HIHs	19
3.1 HIHs Suspending Participation before Completing Onboarding Process	19
3.2 Temporary or Permanent Access Removal (Offboarding an HIH)	19
4. The esMD System XDR Profile	20
4.1 Profile Definition	20
4.1.1 Purpose of Use Attribute.....	20
4.1.2 NPI Attribute.....	20
4.1.3 Intended Recipients Attribute.....	20
4.1.4 Authentication Statement.....	20
4.1.5 Authentication Method (AuthnContext).....	20
4.1.6 Subject Locality	21
4.1.7 Authentication Instant (AuthnInstant).....	21
4.1.8 Session Index.....	21
4.1.9 Example	21
4.1.10 Authorization Decision Statement.....	21
4.1.11 Action	21
4.1.12 Decision	22
4.1.13 Resource	22
4.1.14 Evidence	22
4.1.15 Assertions	22
4.1.16 Target Communities.....	23
4.1.17 Metadata Fields	23
4.1.18 The esMD Functional Specific Submission Set Metadata Attributes	24
4.1.19 Attachment Control Number	68
4.1.20 Intended Recipients	68
4.2 Interface Definition	68

4.2.1	<i>Interaction Behavior</i>	68
4.2.2	<i>Triggers</i>	70
4.2.3	<i>Transaction Standard</i>	70
4.2.4	<i>Technical Pre-Conditions</i>	70
4.2.5	<i>SOAP Message Envelope</i>	71
4.2.6	<i>SAML Assertions</i>	72
4.2.7	<i>Assertions Design Principals and Assumptions</i>	73
4.2.8	<i>Assertions Transaction Standard</i>	73
4.2.9	<i>Specific Assertions</i>	73
4.2.10	<i>The esMD SAML Assertion Details</i>	74
4.2.11	<i>SAML Assertion Attributes</i>	83
4.2.12	<i>Version Attribute</i>	83
4.2.13	<i>ID Attribute</i>	83
4.2.14	<i>Issue Instant</i>	83
4.2.15	<i>Issuer</i>	83
4.2.16	<i>Subject</i>	83
4.2.17	<i>SAML Statement Elements</i>	83
4.2.18	<i>Attribute Statement</i>	83
4.2.19	<i>Subject ID Attribute</i>	84
4.2.20	<i>Home Community ID Attribute</i>	84
4.2.21	<i>Content Type Code</i>	84
4.3	<i>Submitting Split Payloads</i>	94
4.4	<i>XDR Validation</i>	95
4.5	<i>XDR Error Messages</i>	96
4.6	<i>XDR Status and Notification Messages</i>	97
4.6.1	<i>The esMD First Acknowledgment - HTTP Status Code</i>	97
4.6.2	<i>Success Message</i>	98
4.6.3	<i>The esMD Error Messages</i>	99
4.6.4	<i>The esMD System First Notification</i>	100
4.6.5	<i>The esMD System Second Notification</i>	116
4.6.6	<i>The esMD System Third Notification</i>	118
4.6.7	<i>Review Contractor Administrative Error Notification</i>	119
4.6.8	<i>Information Contained in Response Message</i>	120
4.6.9	<i>Message ID (Correlated with Request MessageID)</i>	120
4.6.10	<i>Unique ID (Correlated with Request UniqueID)</i>	120
4.6.11	<i>RequestID</i>	121
4.6.12	<i>Status</i>	121
4.6.13	<i>Response Slots</i>	122
4.6.14	<i>Delivery to the CMS Enterprise File Transfer System (First Notification)</i>	123
4.7	<i>Structured Documentation</i>	123
4.7.1	<i>C-CDA Structure</i>	124
4.7.2	<i>esMD Document Metadata Changes for C-CDA Document</i>	124
4.7.3	<i>esMD Support Clinical Document Types</i>	127
4.7.4	<i>esMD Support Structured Document in CDP Set 1</i>	128
4.8	<i>Unsolicited PWK Claim Documentations in XDR</i>	128
4.8.1	<i>Unsolicited PWK Claim Request</i>	129
4.8.2	<i>Administrative Error Responses for PWK Unsolicited Documentation</i>	139
4.9	<i>PA/PCR Review Results Response</i>	139
4.9.1	<i>XDR Review Response Data Elements</i>	140
4.9.2	<i>Rules about Unique Tracking Number in PA and HHPCR Review Results Response</i>	144
4.9.3	<i>Status and Notification Messages for PA</i>	145
4.9.4	<i>Information Contained in the PA and PCR Review Results Response for XDR</i>	147

5. The esMD System Council for Affordable Quality Healthcare (CAQH) Profile	152
5.1 X12N 278 5010 Companion Guide.....	152
5.2 X12N 275 6020 Companion Guide.....	153
6. Multiple Services.....	154
6.1 Submission of Multiple Services.....	154
6.2 PA/PCR Responses.....	154
6.3 Inbound X12.....	154
6.4 Outbound XDR.....	154
6.5 X12 Review Response.....	155
6.6 Sample Files	155
6.7 Request Provider Information - 999 Errors.....	157
6.8 Administrative Error Response	157
7. Retry Functionality	165
7.1 XDR Retry Scenarios.....	165
7.2 X12 Retry Scenario.....	166
7.3 eMDR Pre-Pay and eMDR Post-Pay Retry Scenario.....	167
8. Pilot Programs	168
8.1 ADR RRL and PA PCR Decision letters Business Overview	168
8.2 ADR RRL and PA/PCR Decision Letters Process Flow Overview.....	169
8.3 Service Registration Request Processing Overview	170
8.4 eMDR Letters (Pre-Pay and Post-Pay).....	173
8.4.1 eMDR Pre-Pay Logical Flow.....	174
8.4.2 eMDR Post-Pay Logical Flow.....	177
8.4.3 Provider Delivery Acknowledgment.....	180
9. Reports.....	181
9.1 The esMD Reconciliation Reports to HIH	181
9.2 eMDR Failure Report	183
Appendix A Glossary.....	185
Appendix B Acronyms.....	188
Appendix C Referenced Documents.....	192
Appendix D Setup of Disaster Recovery Sites	195
Appendix E Record of Changes	196
Appendix F Approvals.....	198

List of Figures

Figure 1: Current esMD Process	11
Figure 2: Home Community ID Example	23
Figure 3: Document Payload Example	24
Figure 4: Asynchronous Acknowledgments with Multiple Hypertext Transfer Protocol (HTTP) Connections	69
Figure 5: SOAP Envelope with XDR Interchange/HITSP C62 Construct	71
Figure 6: Document Submission Deferred Responses with Multiple HTTP Connections.....	97

Figure 7: Success Message Example	98
Figure 8: XDR Error Message Example	99
Figure 9: Claim Review Pickup Status Notification.....	116
Figure 10: Claim Review Pickup Error Notification Example.....	117
Figure 11: Administrative Error Response XML Message Example	119
Figure 12: Unsolicited PWK Claim Document Submission Flow	129
Figure 13: Sample PWK Claim Request	129
Figure 14: Outbound Response Notification.....	146
Figure 15: Message ID Example	147
Figure 16: UniqueID Example.....	148
Figure 17: RequestID Example.....	149
Figure 18: Status Example.....	150
Figure 19: ASC X12N 278 5010 over CONNECT (CAQH CORE 270).....	152
Figure 20: hhpcr_x12n278.txt File	155
Figure 21: hhpcr_AdminError.txt File.....	158
Figure 22: ADR RRL Business Process Flow Diagram.....	168
Figure 23: PA/PCR Decision Letters Flow Diagram	169
Figure 24: Service Registration Process Flow	171
Figure 25: eMDR Pre-Pay Process Flow.....	175
Figure 26: eMDR Post-Pay Process Flow	178
Figure 29: MR101esMD Reconciliation Report in Excel Format	182
Figure 30: MR102-esMD Reconciliation Report in CSV Format	183
Figure 31: (MR115) eMDR Transaction Failure Report	184

List of Tables

Table 1: Medicare Prepayment and Post Payment Claim Review Programs	8
Table 2: The esMD Functional Specific Submission Set Metadata Attributes	25
Table 3: The esMD Document Metadata Attributes	47
Table 4: Name Spaces Details with CONNECT Software	72
Table 5: Standard SAML Assertions in SOAP Envelope	73
Table 6: The esMD SAML Assertion Details	75
Table 7: ClassCodes and Corresponding ClassCode Display Names	85
Table 8: Content Type Codes and Corresponding Content Type Code Display Names	85
Table 9: Confidentiality Codes.....	87
Table 10: HealthCare Facility Type Code.....	88
Table 11: Submission Set/Document Title	88
Table 12: Document Format Code and Payload Type	88
Table 13: Overall Mapping of Document Submission with Class and Content Type Codes	89
Table 14: Combination of the esMD Codes and Claim/Case IDs for Different Types of Submission Requests	91
Table 15: First Split Transaction	94
Table 16: Second Split Transaction.....	95
Table 17: Third Split Transaction.....	95
Table 18: Error Messages.....	96
Table 19: HTTP Status Codes.....	98
Table 20: Sample Error Message Content	101
Table 21: Possible Request Types	121
Table 22: Status Example.....	121
Table 23: Response Slots Example.....	123

Table 24: Format Code Updates	124
Table 25: esMD Program Content Types and Conformance Requirements.....	125
Table 26: Clinical Document Templates	127
Table 27: CDP Set 1 Template ID	128
Table 28: Administrative Errors	139
Table 29: PA and PCR Review Results Response XDR	140
Table 30: Affirmed PA and PCR Review Results Responses	142
Table 31: Non-Affirmed PA and PCR Review Results Responses	142
Table 32: Modified PA Review Results Responses	143
Table 33: Rejected PA and PCR Review Results Responses	144
Table 34: UTNs in PA and PCR Review Results Responses	144
Table 35: PA and PCR Outbound Request Type	149
Table 36: Outbound Interface Solution	155
Table 37: 999 Error Messages to HIH	157
Table 38: Retry Scenarios common for both X12 and XDR Transactions.....	165
Table 39: Retry Scenarios for X12 Transactions Only	166
Table 40: Retry Scenario for eMDR Pre-Pay and Post-Pay.....	167
Table 41: ADR RRL Processing	169
Table 42: PA/PCR Decision Letter Processing	170
Table 43: Service Registration Flow Steps.....	173
Table 44: eMDR Content Type Codes.....	173
Table 45: eMDR Pre-Pay Logical Process Flow Steps	176
Table 46: eMDR Post-Pay Logical Process Flow Steps	179
Table 47: Acronyms	188
Table 48: Record of Changes.....	196

1. Introduction

The Centers for Medicare & Medicaid Services (CMS) is a federal agency that ensures health care coverage for more than 100 million Americans. The CMS administers Medicare and provides funds and guidance for all 50 states in the nation, for their Medicaid programs and Children's Health Insurance Program. The CMS works together with the CMS community and organizations in delivering improved and better coordinated care.

1.1 The esMD Overview

Each year, the Medicare Fee-For-Service Program makes billions of dollars in estimated improper payments. The CMS employs several types of Review Contractors (RC) to measure, prevent, identify, and correct these improper payments. RCs find improper payments and manually review claims against medical documentation obtained to verify the providers' compliance with Medicare rules. The RCs request medical documentation by sending a paper letter to the provider. In the past, medical documentation providers had only two options for delivering the medical documentation requested by sending it by letter or fax.

The Electronic Submission of Medical Documentation (esMD) system gives providers the option of sending medical documentation electronically to a requesting RC, instead of sending the documentation by letter or fax.

Many providers use a Health Information Handler (HIH) organization to perform tasks, such as submitting claims and providing electronic health record systems. Any organization that handles health information on behalf of a provider is an HIH.

The esMD allows providers, HIHs, and gateway services to send responses for requests for additional documentation electronically to a RC during the claims review process.

Currently, electronic medical documentation can be sent, using the esMD, in either a Portable Document Format (PDF) or Extensible Markup Language (XML).

The esMD system allows providers the ability to send medical documentation to RCs electronically and allowed providers the ability to receive a Prior Authorization Review Response from RCs.

The esMD utilizes and leverages web services, as a central source for providing greater interoperability, connectivity, and compatibility between providers, HIHs, and gateway services and is based on standards developed by the U.S. Department of Health and Human Services (HHS) Office of the National Coordinator for Health Information Technology.

1.1.1 Review Contractors

Under the authority of the Social Security Act, CMS employs a variety of contractors to process and review claims in accordance with Medicare and/or Medicaid rules and regulations. Please refer to the following link for more information on the esMD Review Contractors:

http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Which_Review_Contractors_Accept_esMD_Transactions.html

1.1.2 Review Programs

This implementation guide describes the claim review programs and their roles in the life cycle of Medicare claims processing. Each claim review program has a level of review: complex or non-complex. Non-complex reviews do not require a clinical review of medical documentation. Complex reviews require licensed professionals who review additional requested documentation associated with a claim.

Table 1: Medicare Prepayment and Post Payment Claim Review Programs lists the prepayment and Post Payment Claim Review Programs referenced in this implementation guide.

The columns in Table 1: Medicare Prepayment and Post Payment Claim Review Programs divide the Medicare claim review programs based on performance of prepayment or Post Payment reviews. Prepayment reviews occur prior to payment. Post Payment reviews occur after payment. The Medical Review (MR) Program can perform both prepayment and Post Payment reviews.

Table 1: Medicare Prepayment and Post Payment Claim Review Programs

Prepayment Claim Review Programs*	Post Payment Claim Review Programs
National Correct Coding Initiative (NCCI) Edits	Comprehensive Error Rate Testing (CERT) Program
Medically Unlikely Edits (MUE)	Recovery Audit Program
Medical Review (MR)	Medical Review (MR)

The Recovery Audit Prepayment Review Demonstration allows Recovery Auditors to conduct prepayment reviews on certain types of claims that historically result in high rates of improper payments. The demonstration focuses on all 50 states. Currently, the esMD system delivers the following types of electronic medical documentation in either PDF or XML format:

1. Additional Documentation Request (ADR) Responses;
2. Prior Authorization (PA) requests;
3. PA requests for Repetitive Scheduled Non-Emergent Ambulance Transport;
4. First level and Second level appeal requests;
5. Recovery Auditor discussion requests;
6. Advance Determination of Medical Coverage (ADMC) requests;
7. Home Health Pre-Claim Review (HHPCR);
8. Durable Medical Equipment, Prosthetics/Orthotics and Services (DMEPOS);
9. Durable Medical Equipment (DME) Phone Discussion Requests;
10. Service Registration Requests; and
11. Hospital OutPatient Department (HOPD) – XDR format only.

1.2 Overview of the esMD Processes

1.2.1 Previous esMD Process

In the past, RCs sent a notification and medical documentation request letter to inform providers that they have been selected for a review and that the RC is requesting the provider to provide specific medical documentation in order for the review to be completed.

A provider could send the medical documentation to the RC in three ways: mail the requested documentation to the RC, mail a Compact Disc containing the medical documentation in a PDF or Tagged Image File Format (TIFF) file, or transmit the documentation using a fax machine.

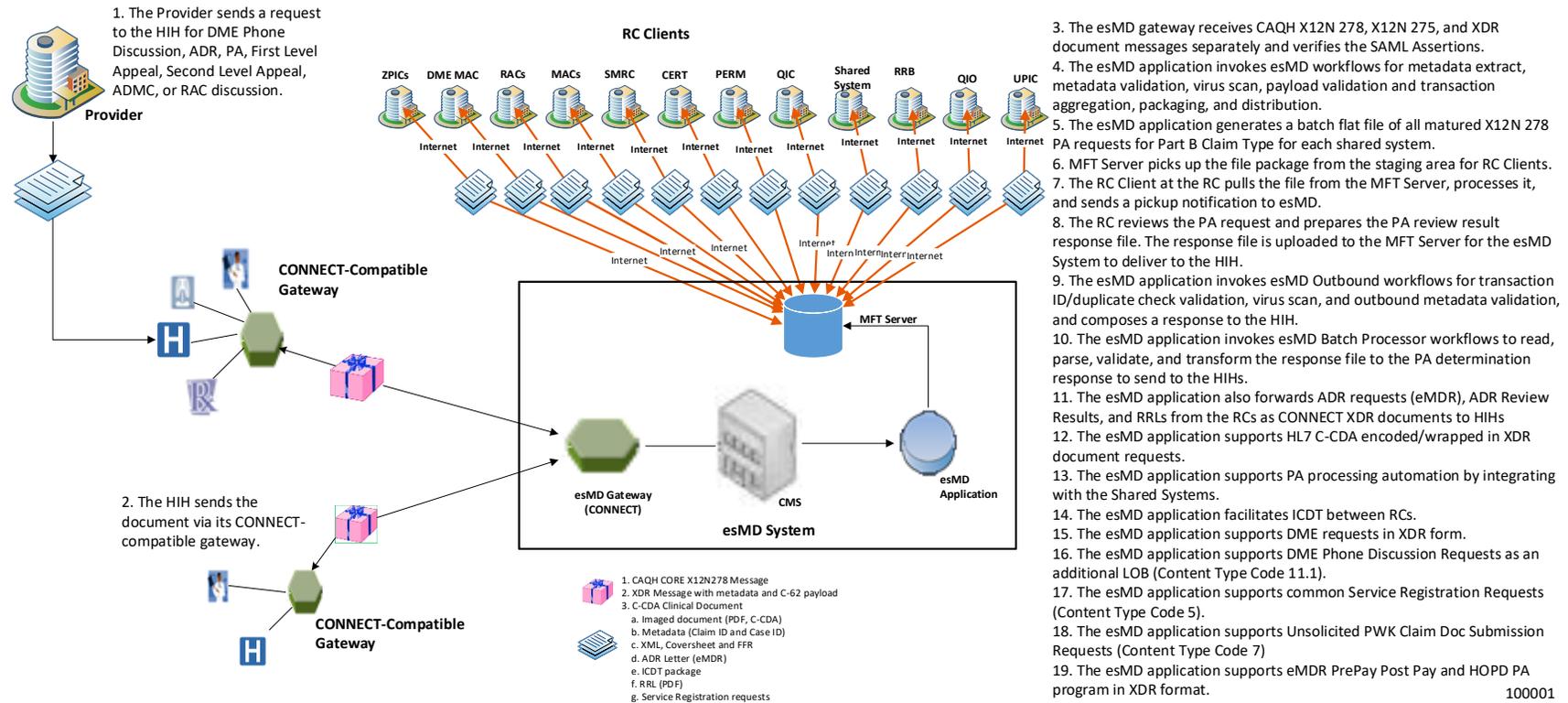
1.2.2 Current esMD Process

1. With the current esMD system that is available for providers, HIHs, and RCs, these organizations now have a fourth choice. The esMD system allows providers, who have successfully completed the CMS esMD Onboarding, to electronically send a response back in answer to the ADR letter, to RCs, saving time, postage, and reducing paperwork;
2. In addition, the esMD system allowed providers with an electronic way of submitting PA requests to DME Medicare Administrative Contractors (MAC), starting in January 2013;
3. The esMD system enabled providers to submit a First Level Appeals Request, Recovery Auditors Discussion Requests, and ADMC Requests with the Release 3.0 (July 2014);
4. Repetitive Scheduled Non-Emergent Ambulance Transport (Ambulance) to RCs with the Implementation of Release 3.1 (October 2014);

5. The esMD system enabled providers to submit Second Level Appeal Requests with the implementation of AR2016.07.0 release (July 2016);
6. The esMD system enabled HHPCR requests to RCs with the Implementation of Release AR2016.10.0 (October 2016);
7. The esMD system enabled DMEPOS PA program and DME phone Discussion Requests to RCs with the Implementation of Release AR2017.07.0 (July 2017);
8. The esMD system enabled HHPCR Multiple Services for X12N 278, and Cross-Enterprise Document Reliable Interchange (XDR) for both requests and responses with the implementation of Release AR2018.04.0 (April 2018);
9. The esMD system enabled receiving ADR Review Results Letters in PDF format as attachments in XDR using Content Type Code (CTC) 1.3 with the implementation of Release AR2018.04.0 (April 2018);
10. The esMD system enabled providers to submit Unsolicited Paperwork (PWK) Claim attachments in XDR using CTC 7 with the implementation of Release AR2018.07.0 (July 2018);
11. The esMD system enabled providers to receive PA/Pre-Claim Review (PCR) Decision Letters in PDF format as attachments in XDR using CTC 1.4 with the implementation of Release AR2018.10.0 (October 2018);
12. The esMD system enabled providers to submit Unsolicited Paperwork (PWK) Claim attachments in X12N 275 format with the implementation of Release AR2019.10.0 (October 2019);
13. The esMD system enabled providers to receive eMDR PrePay and PostPay using ContentType code 1.5 and 1.6 with the implementation of Release AR2020.01(January 2020);
14. The esMD system enabled Hospital OutPatient Department (HOPD) Multiple services for XDR format using ContentType code with the implementation Release AR2020.07(July 2020);
15. The esMD system addressed few gaps that were identified for X12N 278 PA/PCR requests and responses with the implementation of Release AR2020.11 (November 2020); and
16. The esMD system will enhance and bridge the gap of specific items in eMDR process with the implementation of Release AR2021.04 (April 2021).

Figure 1: Current esMD Process illustrates the current esMD process.

Figure 1: Current esMD Process



100001

The following provides an overview of the steps in the process:

1. **The provider decides what to submit.** In both the current paper process and the new esMD process, the RC does not specify which documents the provider must send. It is up to the provider to decide which documents to send. The documents that a provider may submit include discharge summaries, progress notes, orders, radiology reports, lab results, etc.;
2. **The initial phase of the esMD allows only unstructured documents.** The esMD accepts unstructured documents in PDF files as well as structured medical documentation using the Health Level Seven International (HL7) standard, Consolidated Clinical Document Architecture (C-CDA) Clinical Documents for Payers (CDP) Set1;
3. **Provider-to-RC Documentation Submission and PA Review Responses only.** Phase 1 of the esMD includes electronic document submissions (from provider to RC) and PA Review Responses (from RC to provider) only. It does not include the Electronic Medical Documentation Request (eMDR) from RC to provider;
4. **Each package must contain documentation about a single claim of a beneficiary.** Throughout this profile, the term “package” refers to one or more documents associated with a single beneficiary. Each package can contain multiple documents as long as all documents relate to the same claim of a beneficiary. The technical term for a package is a Simple Object Access Protocol (SOAP) message.
Note: More details about the esMD data exchange can be found in the esMD Profile. Refer to <http://exchange-specifications.wikispaces.com/esMD+Profile+Definition>; and
5. **CMS is not involved in the business relationship between the HIH and the provider.** This document does not describe how HIHs should collect or store medical documentation from the providers. The HIH and provider must comply with all applicable Health Information Portability and Accountability Act (HIPAA) provisions.

The esMD Release 4.0 (R4.0) was implemented in June 2015 and focused on the Electronic Data Interchange (EDI) between the HIHs and the esMD. R4.0 introduced the EDI Accredited Standards Committee (ASC) X12N 278 5010 file format for submitting all PA requests. In addition to the above, the esMD R4.0 is utilizing existing XDR profile to submit all PA programs and other Lines of Business. The following list describes the PA programs and other Lines of Business:

1. PA programs: Ambulance;
2. First Level Appeal Requests;
3. Recovery Auditor (RA) Discussion requests;
4. ADMC requests; and
5. Responses to ADRs.

esMD Release AR2016.07.0 was implemented in July 2016 and included the following programs.

1. Pre-Claim Review Demonstration for HHPCR. The Pre-Claim Review Demonstration for Home Health Services is hereafter referred to as “HHPCR.”; and
2. Second level Appeal Requests.

esMD Release AR2016.10.0 was implemented in October 2016 and included the following programs. The following program is available in the XDR profile.

1. HHPCR.

esMD Release AR2017.01.0 was implemented in January 2017 and included the following changes:

1. The esMD system also accepts structured documentation in C-CDA for ADR and supporting documentation for PA Requests.

esMD Release AR2017.07.0 was implemented in July 2017 and included the following additional Lines of Businesses (LOB):

1. DME Phone Discussion Requests; and
2. DMEPOS.

esMD Release AR2017.10.0 was implemented in October 2017 and includes the following:

1. HIHs are able to submit additional documentation for X12N 278 requests through X12N 275 transactions, in addition to the existing XDR transactions to esMD system.

esMD Release AR2018.01.0 was implemented in January 2018 and includes the following:

1. The esMD system shall validate the Parent Unique Identifier (ID) and Split Number for all the XDR transactions submitted by the HIH; for any split payloads that are attached in the XDR transaction, both Parent Unique ID and Split Number are required elements. Refer to Section 4.3 Submitting Split Payloads for additional information.

esMD Release AR2018.04.0 was implemented in April 2018 and included the following:

1. The esMD system accepts X12N 278 and flat file updates for request/response with HHPCR multiple services;
2. The esMD system accepts XDR PA/ PCR responses to multiple services including "Partially Affirmed" decisions;
3. The esMD system is upgraded to accept ADR Review Results Letters in PDF format attached to the XML from additional RCs using CTC 1.3; and
4. The esMD system accepts Structured Documentation in CDP Set 1 format in addition to the existing C-CDA pilot program.

esMD Release AR2018.07.0 was implemented in July 2018 and includes the following:

1. The esMD system accepts Unsolicited PWK Claims documentation in XDR using CTC 7;
2. esMD cross-validates the SenderID in the request envelope with the ISA06 element in the Inbound X12N 278 EDI request;
3. ADR Payment Error Rate Measurement (PERM) submissions with valid Case IDs in composite format are accepted by esMD; and
4. Warning message descriptions sent to the HIHs for missing/duplicate split numbers are updated to include the Parent Unique ID.

esMD Release AR2018.10.0 was implemented in October 2018 and includes the following:

1. The esMD system accepts the PA/PCR Decision Letters in PDF format from RCs and deliver to the HIH using CTC 1.4;

2. Implemented the missing requirement for Split Load Functionality where Split (2-3) is accepted even though Split (1-3) is rejected by esMD;
3. Implemented the changes to the existing Home Health program to support the PA process for Review Choice Demonstration via esMD;
4. Changed the label of the data element 'HICN' in the letter details section to 'Subscriber ID';
5. Changed an eMDR request metadata schema. The Health Insurance Claim Number (HICN) element name/label for Part A/Part B (A/B) MAC eMDR Requested metadata XML Schema Definition will now be termed as subscriberId; and
6. The esMD system implemented and moved the Power Mobility Device procedure codes to the DMEPOS PA Program as of 08/18/2018 during an emergency release and started accepting the Procedure Codes received with CTC 8.4.

esMD Release AR2019.07.0 was implemented in July 2019 and includes the following:

1. The esMD system started accepting the eMDR Registration Request with CTC 5 initiated by HIH with a valid National Provider Identifier (NPI) if it is active in the National Plan and Provider Enumeration System (NPPES) system;
2. The esMD replaced the existing 7-numeric-character Transaction ID with the new esMD 15-alphanumeric (AN) Transaction ID for all the inbound requests initiated by HIH; and
3. The esMD started sending multiple PA review responses received from RC to the providers through HIHs;

esMD Release AR2020.01.0 was implemented in January 2020 and includes the following;

1. The esMD system started supporting eMDR Pre-Pay and Post-Pay functionality using Content type code 1.5 and 1.6.

esMD Release AR2020.07.0 was implemented in July 2020 and included the following;

1. The esMD system will start accepting Hospital OutPatient Department (HOPD) PA program in XDR format using Content type code 8.5.

esMD Release AR2020.11.0 was implemented in November 2020 and includes the following:

1. The esMD system addressed few gaps that were identified for X12N 278 PA/PCR requests and responses.

esMD Release AR2021.04.0 will be implemented in April 2021 and includes the following:

1. The esMD system will enhance and bridge the gap of specific items in eMDR process.

1.3 The esMD Primary Audiences

The primary audience for this document includes HIHs such as Regional Health Information Organizations (RHIO), Health Information Exchanges (HIE), Release of Information (ROI) vendors, claim clearinghouses, and other organizations that securely submit medical documentation on behalf of providers via CONNECT compatible gateways to RCs.

Note: This implementation guide refers to RHIOs, HIEs, ROI vendors, claim clearinghouses, and other entities that move health information over secure CONNECT compatible gateways on behalf of health care providers as HIHs.

HIHs who have built a CONNECT compatible gateway and wish to submit through the esMD system, please follow the instructions provided at this link:

http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Information_for_HIHs.html.

For more information about CONNECT Gateways, refer to www.connectopensource.org.

For a list of HIHs that currently participate in the CMS esMD Program, refer to http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Which_HIHs_Plan_to_Offer_Gateway_Services_to_Providers.html.

Another audience for this document includes the software developers who aim to assist RCs in viewing and more efficiently processing documents received in the esMD format. Software developers develop products to assist HIHs in receiving data easily from a provider's Electronic Health Record in the esMD format.

For additional information and related documents on the esMD processes and software, see Appendix C Referenced Documents.

1.3.1 Important Note on the Onboarding Process for HIHs

The esMD will only accept transactions from organizations that have successfully completed the esMD Onboarding process. The HIH must sign the CMS esMD agreement for submitting XDR and X12 requests.

2. The esMD Onboarding Process for HIHs

Note: The Onboarding process below applies to HIHs submitting both XDR and X12 transactions.

2.1 The esMD Onboarding Instructions for Prospective HIHs

The HIH shall complete and submit the esMD HIH Onboarding Request Form, along with the results of successfully completed CONNECT/CONNECT-compatible self-tests to the esMD Support Team to the following email address: esMD_Support@cms.hhs.gov.

The HIH Onboarding Request Form is located on the following CMS Government website:

http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Information_for_HIHs.html. The following sections include additional information that will be provided by an HIH on the HIH Onboarding Request Form.

2.1.1 The esMD Gateway Environment Testing and Configuration

The esMD Support Team will verify the environment details that have been provided by the HIH are acceptable and will validate the CONNECT/CONNECT-compatible self-tests conducted by the HIH were successful, based on the self-tests results submitted to the esMD Support Team.

Note: Any changes to any environment details, submitted in the HIH's HIH Onboarding Request Form, after the submission of the form to the esMD Support Team, could possibly cause a delay in testing.

2.1.2 Health Level 7 Organizational Identifiers

All HL7 Organizational Identifiers (OID) will have a "2.16.840.1.113883." prefix.

The [joint-iso-itu-t(2) country(16) us(840) organization(1) hl7(113883).] will be followed by an OID Type (e.g., 2.16.840.1.113883.3.xxx.x).

The HIH will use the appropriate OID Type, based on their organization type and purpose.

Most HIHs will register, using their OIDs with an OID Type = "3 - Root" to be a Registration Authority with the esMD.

Note: External groups have been issued a specific "HL7 OID Root" that is appropriate for their use.

2.1.3 Obtaining an HL7 OID

A HIH may obtain a HL7 OID and find more information on obtaining an OID from the following Health Level 7 organization's website: www.hl7.org.

A HIH may register an OID obtained from the HL7 website on the following website: <http://www.hl7.org/oid/index.cfm>.

Note: After going to the <http://www.hl7.org/oid/index.cfm> website, select the **Obtain or Register an OID** link on the top right corner to register an OID.

2.1.4 HIH Gateway IP Address

1. The HIH is required to submit the HIH's Internet Protocol (IP) address for the HIH's Gateway to the esMD Support Team;

Note: A "public-facing" IP Address is the IP address that identifies the HIH's network and allows the esMD Gateway to connect to the HIH's network from the Internet.

2. The HIH will hide their internal private IP address by using Network Address Translation (NAT) (known as, "NATing") for the HIH's public-facing IP address;
3. The HIH technical team will contact their network team to procure or assign a public-facing IP address to their internal private IP. (For example: A public-facing IP address can be purchased from AT&T, Verizon, etc.); and
4. If an HIH is using multiple esMD servers, then the HIH will submit either "one" IP address for both inbound and outbound traffic; or submit "one" IP address for inbound transactions and "another" IP address for outbound traffic.

Note: The esMD Support Team suggests that an HIH use load balancing and NATing to convert and submit a request from multiple servers to one IP address. The HIH can submit either one IP address for both inbound and outbound traffic; or, two IP addresses, one for inbound traffic and another one for outbound traffic, by submitting this information to the esMD Support Team on the HIH Environmental Details Form.

2.1.5 HIH Gateway Endpoint Uniform Resource Locator for Responses

A HIH is required to submit the Uniform Resource Locator (URL) for the HIH's Gateway Endpoint to receive responses from the esMD system to the esMD Support Team.

2.1.6 Transport Layer Security Certificate

The HIH is required to obtain a server certificate from a Certificate Authority (CA), a trusted third-party organization or company that issues digital certificates used to create digital signatures.

The HIH shall include the following sever certificate information in the HIH Onboarding Request Form submitted to the esMD Support Team:

- Server Certificate;
- Intermediate Certificates (if applicable); and
- Root Certificate.

All CAs must adhere to the following guidelines in order to be submitted to the esMD Support Team:

1. Level 2 Identity Proofing, as described in the National Institute of Standards and Technology (NIST) publication:
<http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-63-2.pdf>
(Specifically, refer to Table 3 - Identity Proofing Requirements by Assurance Level, in the PDF, under section 5.3.1. General Requirements per Assurance Level.);
2. 2048-bit Rivest, Shamir, & Adelman (RSA) keys;
3. Advance Encryption Standard 128-bit encryption;

4. Secure Hash Algorithm-2 (SHA-2, 256-bit at least) certificate signing algorithm since SHA-1 is being rapidly deprecated; and
5. Server Level and server-to-server communication certificate. (**Note:** No wild card (*.*) or domain level certificate are accepted).

Note: HIHs should note the expiration date of their certificates and plan accordingly to renew and submit certificate renewals to the esMD Support Team four weeks in advance of the expiration date.

For more information, refer to:

- <https://www.cms.gov/Research-Statistics-Data-and-Systems/CMS-Information-Technology/InformationSecurity/Information-Security-Library.html>; and
- <https://doi.org/10.6028/NIST.FIPS.140-2>.

2.1.7 Federal Information Processing Standards for Cryptographic Modules

All cryptographic modules used by HIH eHealth Exchange instances (typically CONNECT) must adhere to Federal Information Processing Standards (FIPS) 140-2 Compliance criteria and must have a Transport Layer Security (TLS) CA.

"FIPS 140-2" is a government standard that provides a benchmark on how to implement cryptographic software (<https://technet.microsoft.com/en-us/library/cc180745.aspx>).

For a CONNECT-based solution, this standard has to be followed to ensure that the CONNECT Gateway is FIPS 140-2 compliant. Any HIH that needs to communicate with the esMD Gateway needs to have the FIPS mode enabled.

2.1.8 X12 Specific Information

As part of the HIH Onboarding form, the HIH is required to provide the EDI ID it will use as the Sender ID when submitting X12N 278 Requests to esMD. esMD will use the HIH's EDI ID as the Receiver ID when sending X12N 278 Responses to the HIH. This is only required if the HIH is planning to submit X12N 278 requests.

2.1.9 Completion of Onboarding process

Upon successfully completing the onboarding process, the HIH will receive an e-mail notification from the esMD Support team that they have completed the onboarding process. The HIH will then be involved in integration and interoperability testing. The start of testing begins with sending the required claim documentation through the esMD Gateway for the Validation environment and later for the Production environment.

3. The esMD Offboarding Process for HIHs

3.1 HIHs Suspending Participation before Completing Onboarding Process

HIHs, who suspend participation before they fully complete the onboarding process, will receive an esMD program Exit Letter from the esMD Support team.

3.2 Temporary or Permanent Access Removal (Offboarding an HIH)

CMS reserves the right to temporarily or permanently remove access for the HIH, if the HIH fails to meet the requirements and standards set forth in this document (refer to sections 4.2.3 Transaction Standard and 4.2.4 Technical Pre-Conditions); and, by doing so effectuates a technical disruption to the esMD application.

4. The esMD System XDR Profile

4.1 Profile Definition

This esMD Implementation Guide provides more information about the transactions sent using the esMD XDR at the following link: <https://s3.amazonaws.com/seqprojectehex/wp-content/uploads/2018/09/28215041/esmd-xdr-production-specification-v1.0.pdf>.

4.1.1 Purpose of Use Attribute

This attribute element has the purpose of use disclosure Name attribute. The value of the attribute element is a child element, "PurposeOfUse", in the namespace "urn:hl7-org:v3", whose content is defined by the "CE" (coded element) data type from the HL7 version 3 specification. The PurposeOfUse element contains the coded representation of the Purpose for Use that is, in effect, for the request. The PurposeOfUse is defined in Authorization Framework document. Refer to the sample in Table 6: The esMD SAML Assertion Details.

4.1.2 NPI Attribute

An NPI is a unique 10-digit identification number issued to health care providers in the United States by the CMS. This attribute provides the ability to specify an NPI value, as part of the , Security Assertion Markup Language (SAML) Assertion that accompanies a message that is transmitted across the eHealth Exchange.

Starting in R4.0, the NPI value can be sent in a new element ***NationalProviderId*** that has been added to the ***assertion*** element of the RespondingGateway_ProvideAndRegisterDocumentSetRequest.

The esMD system will continue to support the existing format for sending the NPI, as the value for the ***userInfo/username*** for the RespondingGateway_ProvideAndRegisterDocumentSetRequest.

4.1.3 Intended Recipients Attribute

Intended Recipients are RCs, to whom the esMD needs to send the HIH submitted Claim Medical documentation payloads. The valid values are addressed in Table 2: The esMD Functional Specific Submission Set Metadata Attributes.

4.1.4 Authentication Statement

The SAML Authentication Assertions are associated with authentication of the Subject (HIH Gateway Identification). The <AuthnStatement> element is required to contain an <AuthnContext> element and an AuthnInstant attribute. The SAML AuthnStatement contains one AuthnContextClassRef element identifying the method by which the subject was authenticated. Other elements of SAML AuthnStatement include <SubjectLocality> element and a SessionIndex attribute. The saml: Authentication is comprised of the four Attributes or Elements: AuthnContext, Subject Locality, AuthnInstant, and Session Index.

4.1.5 Authentication Method (AuthnContext)

An authentication method, the <AuthnContext> element indicates how that authentication was done. **Note:** The authentication statement does not provide the means to perform that

authentication, such as a password, key, or certificate. This element will contain an authentication context class reference.

Authentication Method - X.509 Public Key

URN - urn:oasis:names:tc:SAML:2.0:ac:classes:X509

4.1.6 Subject Locality

Subject Locality references from where the user was authenticated. The Subject Locality element specifies the Domain Name System (DNS) domain name and IP address for the system entity that was authenticated.

4.1.7 Authentication Instant (AuthnInstant)

The Authentication Instant, <AuthnInstant>, attribute specifies the time at which the authentication took place which is an xs:dateTime, as defined by <http://www.w3.org/TR/xmlschema-2/>.

4.1.8 Session Index

The Session Index, *SessionIndex*, attribute identifies the session between the Subject and the Authentication Authority.

4.1.9 Example

Refer to the sample in Table 6: The esMD SAML Assertion Details.

4.1.10 Authorization Decision Statement

This is an optional element that could convey all valid NPI submissions.

The *Authorization Decision Statement* element describes a statement by the SAML authority asserting that a request for access, by the statements subject to the specified resource, has resulted in the specified authorization decision based on some optionally specified evidence. This element provides the HIH an opportunity to assert that it holds an Access Consent Policy which the esMD CONNECT Gateway may wish to evaluate in order to determine if access to the requested resource(s) should be allowed for the submitted provider.

The information conveyed within the Authorization Decision Statement may be used by the esMD CONNECT Gateway to retrieve the asserted Access Consent Policy. The format of the Access Consent Policy is defined in the Access Consent Policy specification.

The Authorization Decision Statement will be used when the provider has granted permission to submit the documentation to the esMD CONNECT Gateway, and the HIH needs to make that authorization known to the esMD CONNECT Gateway.

The Authorization Decision Statement has the following content: Action, Decision, Resource, Evidence, and Assertions.

4.1.11 Action

This action must be specified using a value of Execute.

4.1.12 Decision

The Decision attribute of the Authorization Decision Statement must be Permit.

4.1.13 Resource

The Resource attribute of the Authorization Decision Statement must be the Uniform Resource Identifier (URI) of the endpoint to which the esMD CONNECT Gateway request is addressed or an empty URI reference.

4.1.14 Evidence

The Authorization Decision Statement must contain an <Evidence> element, containing a single <Assertion> child element.

4.1.15 Assertions

This <Assertion> element must contain an ID attribute, an IssueInstant attribute, a Version attribute, an Issuer element, and an Attribute Statement element. Refer to Section 4.1.18, The esMD Functional Specific Submission Set Metadata Attributes for more details on building the Assertion.

There must be at least one of the following Attributes in the Attribute Statement.

- An <Attribute> element with the name AccessConsentPolicy and NameFormat. The value(s) for this attribute will be the OIDs of the access policies that the asserting entity has previously agreed to with other entities. The OIDs MUST be expressed, using the urn format (e.g., - urn:oid:1.2.3.4). See the following example:

```
<saml2:Attribute Name="AccessConsentPolicy"
NameFormat="http://www.hhs.gov/healthit/nhin">
<saml2:AttributeValue>urn:oid:1.2.3.4</saml2:AttributeValue>
</saml2:Attribute>
```

- An <Attribute> element with the name InstanceAccessConsentPolicy and NameFormat, for example, <http://www.hhs.gov/healthit/nhin>. The value(s) of this attribute will be the OIDs of the patient specific access policy instances. The OIDs MUST be expressed, using the urn format (e.g., - urn:oid:1.2.3.4.123456789). If a requestor specifies this Attribute, the requestor MUST support the ability for the specified policy document(s) to be retrieved via the transactions defined in Health Information Technology Standards Panel (HITSP) TP30. See the following example:

```
<saml2:Attribute Name="InstanceAccessConsentPolicy"
NameFormat="http://www.hhs.gov/healthit/nhin">
<saml2:AttributeValue
xmlns:ns6="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ns7="http://www.w3.org/2001/XMLSchema"
ns6:type="ns7:string">urn:oid:1.2.3.4.123456789
</saml2:AttributeValue>
</saml2:Attribute>
```

- The "ContentReference", "ContentType", and "Content" attributes from the Trial Implementation specifications have been removed and should no longer be used. Refer to the sample in Table 6: The esMD SAML Assertion Details and Figure 2: Home Community ID Example.

Note: For more details, refer to Section 3.2.3 of <http://sequoiaproject.org/wp-content/uploads/2014/11/nhin-authorization-framework-production-specification-v3.0.pdf>.

Figure 2: Home Community ID Example

```
<urn:nhinTargetCommunities>
  <urn1:homeCommunity>
    <urn1:description>
esMD CONNECT Gateway Home Community ID Description
    </urn1:description>
      <urn1:homeCommunityId>urn:oid:1.3.6.1.4.1.101420.6.1</urn1:homeCommunityId>
      <urn1:name>Name of the esMD CONNECT Gateway Home Community ID</urn1:name>
    </urn1:homeCommunity>
  </urn:nhinTargetCommunities>
```

4.1.16 Target Communities

The target communities must specify the targeted the esMD CONNECT Gateway OID details. It contains three values:

- **Description:** The esMD CONNECT Gateway with an XDR document submission endpoint to accept claim related document submissions to the esMD;
- **HomeCommunityId:** The esMD CONNECT Gateway Home Community ID (OID); and
- **Name:** The Name of the esMD CONNECT Gateway Home Community ID (OID).

For CMS response Message to HIH, these nhinTargetCommunities will have the HIH OID information.

4.1.17 Metadata Fields

The HIH adopts the Integrating the Healthcare Enterprise (IHE) XDR profile in a SOAP envelope with an XDS Repository Submission Request-Provide and Register Document set, b (ITI-41) transaction metadata and C62 document payload with Message Transmission Optimization Mechanism (MTOM), Base64 encoded attachments. Refer to Figure 3: Document Payload Example.

Figure 3: Document Payload Example

```

<urn:ProvideAndRegisterDocumentSetRequest>
<urn2:SubmitObjectsRequest id="999" comment="comment">
  <urn4:RegistryObjectList>
<urn4:ExtrinsicObject id="Document01" mimeType="application/pdf"
objectType="urn:uuid:7edca82f-054d-47f2-a032-9b2a5b5186c1">
  <urn4:RegistryPackage id="SubmissionSet01">
<urn4:Classification id="classification01" classifiedObject="SubmissionSet01"
classificationNode="urn:uuid:a54d6aa5-d40d-43f9-88c5-b4633d873bdd"/>
<urn4:Association id="association01" associationType="HasMember"
sourceObject="SubmissionSet01" targetObject="Document01">
</urn4:RegistryObjectList>
<urn2:SubmitObjectsRequest>
<urn5:Document id="Document02">
  <ClinicalDocument ...(Encoded Message)
  .....
  <nonXMLBody>
2PD943454OIJKD2lvbj0iMS4wliBlbmNvZGluZz0iVVRGLTgiPz4NjxDbGluaWNhbERvY3VtZW5=
  </nonXMLBody>
</ClinicalDocument>
</urn5:Document>
<urn5:Document id="Documentnn">
nnPD94bWwgdIvJ0iMS4wliBlbmNvZGluZz0DLKFALDFALDECjxDbGluaWNhbERvY3VtZW5=
</urn5:Document>
</urn:ProvideAndRegisterDocumentSetRequest>

```

A “**SubmitObjectsRequest**” is a collection of repository metadata of multiple MTOM base64 encoded document attachments transferred between an HIH and the esMD Gateway.

An **ExtrinsicObject (XDSDocumentEntry)** represents a single attached document metadata in the XDR the esMD Document Submission SOAP message, which refers to its attached document.

A “**RegistryPackage**” is a collection of repository metadata of just one MTOM base64 encoded document.

Following are the esMD Functional (mandatory) and Transaction (mandatory) metadata elements needed for the esMD Gateway to process the submitted claim medical document. For further details on each of the tags, review XDS IHE_ITI_TF Volume 3, Revision 6.

4.1.18 The esMD Functional Specific Submission Set Metadata Attributes

Table 2: The esMD Functional Specific Submission Set Metadata Attributes details the esMD Functional Specific Submission Set Metadata Attributes to confirm with the IHE ITI Technical Framework Volume 3, Revision 6, and XDR Interoperability Testing.

Table 2: The esMD Functional Specific Submission Set Metadata Attributes

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PA, PCR ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
1.	esMDClaimId	<p>Claim Identifier is the identifier with which the provider submits the Claim to the esMD. It can be found in the ADR letter from the RC and needs to be used to submit:</p> <ul style="list-style-type: none"> Documents in response to ADR from the CMS RC(s); and RA Discussion Requests. 	<p>Required</p> <p>Note: While the Claim ID for the First Level Appeal Requests and Second Level Appeal Requests are optional, HIHs are encouraged to include it as per the Claim ID defined standards.</p>	Not Required	Not Required	ADR Letter	<ul style="list-style-type: none"> 8 numeric characters in length; 13 – 15 numeric characters in length; or 17 – 23 variable characters in length (letters, numbers, dashes, and spaces are allowed, but Claim ID cannot be all zeros, all dashes, or all spaces).

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PA, PCR ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
1. Cont. 1	No additional information	<p>The esMD Claim ID could be sent in Standard or Composite format; however, it is recommended for the HHH to submit the Claim ID in the Standard Format.</p> <p>a. The HL7 CX composite format, which contains two components, the Claim ID number, and the Assigning Authority (AA) like the CMS RC, which identifies the domain over which the Claim ID number represents a unique entity.</p> <p>Note 1: For submissions sent with the name "esMDClaimID"(i.e., with an upper Claim ID) for the ClaimId slot, the submission will be rejected, and they will not be passed on to the RC.</p> <p>Note 2: In the example below, the Claim ID value is 8 numeric characters:</p> <pre><urn4:Slot name="esMDClaimId"> <urn4:ValueList> <urn4:Value>12345678^^&2.16.840.1.113883.13.34.110.1.100.1& ;ISO</urn4:Value></pre>	No additional information	No additional information	No additional information	No additional information	<p>The composite format looks like so: Claim ID^^&RC OID&ISO</p> <p>Note 1: The ampersand "&" character must be properly encoded, for example "&amp", in the XML content.</p>

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PA, PCR ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
1. Cont. 2	No additional information	<p></urn4:ValueList> </urn4:Slot></p> <p>Note 3: If there are any errors in the composite format, or in the format/length of the esMD Claim ID, the submission shall be rejected.</p> <p>HIHs can send just the esMD Claim ID alone, as displayed in the example below:</p> <pre><urn4:Slot name="esMDClaimId"> <urn4:ValueList> <urn4:Value>12345678</urn4:Value> </urn4:ValueList> </urn4:Slot></pre> <p>Note 4: If there are any errors in the format/length of the Claim ID, the submission shall be rejected. HIHs are advised to send submissions relating to Non-Emergent Ambulance Transport PA Requests, HHPCR demonstration requests, ADMC, HHPCR and DMEPOS without the XML tag for the esMD Claim ID field. If HIHs send a value for the esMDClaimId attribute, the submission shall be rejected.</p>	No additional information	No additional information	No additional information	No additional information	No additional information

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PA, PCR ADC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
2.	esMDCaseld	<p>Case Identifier is the identifier generated by the RC to open a claim specific case. This could be found in the ADR letter from the RC if the request is from MACs. It can be used to submit:</p> <ul style="list-style-type: none"> • Documents in response to ADR; • RA Discussion Requests; and • DME Phone Discussion requests. <p>For submissions to the PERM RC, HIHs/providers need to send the 11 alphanumeric characters PERM ID they get on the ADR from PERM, in the esMDCaseld tag.</p> <p>For submissions related to responses to an ADR, RA Discussion Requests, First Level Appeal Requests, Second Level Appeal Requests, and DME Phone Discussion Requests, HIHs/providers shall have a choice to send the esMDCaseld in either Standard or Composite format.</p>	Required if known	Required	Not Required	ADR Letter (if MAC is the RC)	<p>Standard format of esMDCaseld can be up to 32 characters in length</p> <p>The esMDCaseld could be sent in the HL7 CX composite format, which contains two components: the Case ID number and AA (i.e., the CMS RC that identifies the domain over which the Case Id number represents a unique entity). The composite format: Case Id^^&RC OID&ISO</p> <p>Note 1: The ‘&’ character must be properly (like &amp;) encoded in the XML content:</p> <pre><urn4:Slot name="esMDCaseld"> <urn4:ValueList> <urn4:Value>12345678901234567 890AB^^&amp;2.16.840.1.113883 .13.34.110.1.100.1&amp;ISO </urn4:Value> </urn4:ValueList> </urn4:Slot></pre>

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PA, PCR ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
2. Cont. 1	No additional information	<p>Note 1: Submissions (other than ADR PERM), sent with the name as "esMDCaseld"(i.e., with an uppercase ID) for the Caseld slot, will receive a blank Case ID value in the RC metadata XML file. For an ADR PERM request, sent with the name as "esMDCaseld"(i.e., with an uppercase ID) for the Caseld slot, the submission will be rejected and will not be passed on to the RC.</p> <p>a. HIHs can send just the esMDCaseld alone, as displayed in the example below:</p> <pre data-bbox="445 885 898 1084"><urn4:Slot name="esMDCaseld"> <urn4:ValueList> <urn4:Value>12345678901234567890 AB </urn4:Value> </urn4:ValueList> </urn4:Slot></pre> <p>b. HIHs can send the Composite format of the Case ID for ADR PERM requests to the esMD system in addition to the existing standard format.</p>	No additional information	No additional information	No additional information	No additional information	No additional information

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
3.	IntendedRecipient	<p>Intended Recipient represents the organization(s) or person(s) for whom the Document Submission set is intended for:</p> <p>In the esMD, the Intended Recipient will be an organization (RC) to whom the sender (HIH) will submit the message with the esMD Claim supporting Documents. This Intended Recipient will be identified by a HL7 issued OID</p> <p>Example: RC OID</p> <pre><urn4:Slot name="intendedRecipient"> <urn4:ValueList> <urn4:Value>2.16.840.1.113883.13.34.110.2.100.1< /urn4:Value> </urn4:ValueList> </urn4:Slot></pre>	Required	Required	Required	Refer to Section 4.1.3 Intended Recipients Attribute	String (64)

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
4.	Author	<p>Represents the provider (NPI), who submits the Claim Supporting Documents</p> <p>This attribute could either contain the following sub-attributes based on who (either provider or institution NPI) submits the documentation:</p> <p>This is the esMD Required Field.</p>	Required	Required	Required	<p>NPI</p> <p>Table 4.1-5 Document Metadata Attribute Definition in IHE ITI TF Volume 3 Revision 6.0 (https://www.ihe.net/uploadedFiles/Documents/ITI/IHE_ITI_TF_Rev16-0_Vol3_FT_2019-07-12.pdf)</p>	Numeric (10)

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
4.	No additional information	authorInstitution authorPerson <urn4:Classification id="c108" classificationScheme="urn:uuid: a7058bb9-b4e4-4307-ba5b-e3f0ab85e12d" classifiedObject="SubmissionSet01" nodeRepresentation="author"> <urn4:Slot name="authorInstitution"> <urn4:ValueList> <urn4:Value>6041232345</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Slot name="authorPerson"> <urn4:ValueList> <urn4:Value>6031112345</urn4:Value> </urn4:ValueList> </urn4:Slot> </urn4:Classification>	No additional information	No additional information	No additional information	No additional information	No additional information

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
5.	authorInstitution (sub-attribute of author)	<p>If there is only one document in the SubmissionSet, authorInstitution attribute of the SubmissionSet will have the same NPI as the one used in the authorInstitution attribute at the document level.</p> <p>If there is more than one document in the SubmissionSet, authorInstitution attribute of the SubmissionSet will have the NPI of the organization/institution, which put together all the documents, included in the SubmissionSet.</p> <p>Note: At the SubmissionSet level, either the authorInstitution or the authorPerson attribute will be used but never both.</p> <pre> <urn4:Slot name="authorInstitution"> <urn4:ValueList> <urn4:Value>6041231234</urn4:Value> </urn4:ValueList> </urn4:Slot> </pre>	Required if known	Required if known	Required if known	NPI Institution Name	Numeric (10)

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
5.1.	authorPerson (sub-attribute of author)	<p>If there is only one document in the SubmissionSet, authorPerson attribute of the SubmissionSet will have the same NPI as the one used in the authorPerson attribute at the document level.</p> <p>If there is more than one document in the SubmissionSet, authorPerson attribute of the SubmissionSet will have the NPI of the provider who put together all the documents in the SubmissionSet.</p> <p>Note: At the SubmissionSet level, either the authorInstitution or the authorPerson attribute will be used but never both.</p> <pre> <urn4:Slot name="authorPerson"> <urn4:ValueList> <urn4:Value>6031111234</urn4:Value> </urn4:ValueList> </urn4:Slot> </pre>	Required if known	Required if known	Required if known	NPI Person or Machine Name	Numeric (10)
6.	Comments	<p>Comments associated with the Submission Set in free form text.</p> <pre> <urn4:Description> <urn4:LocalizedString value="esMD Claim Document Submission in response to Review Contractor ADR Letter"/> </urn4:Description> </pre>	Optional	Optional	Optional	N/A	String (256)

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
7.	ContentTypeCode	<p>The ContentTypeCode identifies the line of business for which the provider/HH/ is sending the submission request. the submission request could be:</p> <ul style="list-style-type: none"> • A response to the CMS RC ADR letter • First Level Appeal Requests • Second Level Appeal Requests • RA Discussion Requests • DME Phone Discussion Request • ADMC Requests • Non-Emergent Ambulance Transport PA Requests • HHPCR • DMEPOS • Service Registration Request • Unsolicited PWK • HOPD <p>Note 1: Refer to Table 8: Content Type Codes and Corresponding Content Type Code Display Names for more details on the Content Type Codes.</p>	Required	Required	Required	Refer to 4.2.21 Content Type Code	String (16)

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
7.	No additional information	<p>Note 2: In the example below, the Content Type Code with a value of '1' is used which specifies that this submission request is in response to an ADR.</p> <pre> <urn4:Classification id="cl09" classificationScheme="urn:uuid:aa543740-bdda-424e-8c96-df4873be8500" classifiedObject="SubmissionSet01" nodeRepresentation="2.16.840.1.113883.13.34.110.1.1000.1"> <urn4:Slot name="ContentTypeCode"> <urn4:ValueList> <urn4:Value>1</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Name> <urn4:LocalizedString value="Response to Additional Documentation Request (ADR)"/> </urn4:Name> </urn4:Classification> </pre>	No additional information	No additional information	No additional information	No additional information	No additional information

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	P/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
8.	entryUUID	<p>A unique ID or a globally unique identifier within the document submission request for the SubmissionSet. For example, "SubmissionSet01" can be entryUUID. It can also be in the UUID format.</p> <p>In the below example, "SubmissionSet01" is used as entryUUID. This can also be UUID format.</p> <p>Example:</p> <pre><urn4:RegistryPackage id="SubmissionSet01"> </urn4:RegistryPackage></pre>	Required	Required	Required	Unique Name for each attached document with a submitted document. Either UUID or some unique identifier.	String (64)

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
9.	patientID	<p>As per XDR specification, this metadata attribute is mandatory. Currently the esMD does not handle patientID.</p> <p>HIHs/providers need to submit the esMDClaimId value in this patientID metadata attribute as follows: The ClaimId value needs to be sent in the standard format or the HL7 composite format as mentioned under the esMDClaimId metadata attribute.</p> <p>Note 1: The ‘&’ character must be properly (like &amp;) encoded in the XML content.</p> <pre><urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="1234567890123^&amp;2.16.840.1.113883.13.34&amp;ISO"></pre>	Required	Required	Required	CMS RC OID.ClaimID	HL7 CX data type with String (256)

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
9. Cont . 1	No additional information	<pre> <urn4:Name> <urn4:LocalizedString value="XDSDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier> Note 2: To enable backward compatibility, HIHs/providers may submit this patientID metadata attribute with the esMDClaimId value in the standard format (No HL7 composite format) as follows: <urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d- 4603-a4bc-96a0a7b38446" value="1234567890123"> <urn4:Name> <urn4:LocalizedString value="XDSDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier> </pre>	No additional information	No additional information	No additional information	No additional information	No additional information

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
9. Cont . 2	No additional information	For Non-Emergent Ambulance Transport PA Requests, HHPCR Demonstration, HOPD, DMEPOS and ADR PERM requests use case submissions (since there is no ClaimId value), HIHs/providers may submit the value of "NA" in the HL7 composite format as follows: <pre> <urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="NA^^&2.16.840.1.113883.13.34&ISO" > <urn4:Name> <urn4:LocalizedString value="XDSDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier> </pre>	No additional information	No additional information	No additional information	No additional information	No additional information

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
9. Cont . 3	No additional information	<pre><urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="NA" > <urn4:Name> <urn4:LocalizedString value="XSDSDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier></pre> <p>For submissions to PERM RC (since there is no ClaimId value), HIHs/providers shall submit the value of "NA" in the HL7 composite format as follows:</p> <pre><urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="NA^^^&2.16.840.1.113883.13.34.110.1.200.2&ISO" > <urn4:Name> <urn4:LocalizedString value="XSDSDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier></pre>	No additional information	No additional information	No additional information	No additional information	No additional information

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
9. Cont . 4	No additional information	<p>Note 4: To enable backward compatibility, HIHs/providers can also submit this patientID metadata attribute with the esMDClaimId value of 'NA' in standard format (i.e., no HL7 composite format):</p> <pre><urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="NA" > <urn4:Name> <urn4:LocalizedString value="XDSDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier></pre>	No additional information	No additional information	No additional information	No additional information	No additional information

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	P/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
10.	sourceId	Globally unique identifier, in OID format, identifying the Health Information Handler (HIH) Gateway through which document/s are being sent to the CMS the esMD Gateway. <pre> <urn4:ExternalIdentifier id="ei04" registryObject="SubmissionSet01" identificationScheme="urn:uuid:554ac39e-e3fe-47fe-b233-965d2a147832" value="12.16.840.1.113883.13.34.110.2"> <urn4:Name> <urn4:LocalizedString value="XDSSubmissionSet.sourceId"/> </urn4:Name> </urn4:ExternalIdentifier> </pre>	Required	Required	Required	HIH OID	String (64)
11.	submissionTime	Point in Time when the SubmissionSet was created at the HIH CONNECT Adapter. <pre> <urn4:Slot name="submissionTime"> <urn4:ValueList> <urn4:Value>20041225235050</urn4:Value> </urn4:ValueList> </urn4:Slot> </pre>	Required	Required	Required	Timestamp	Date (YYYYMMDDHHMMSS)

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
12.	Title	Represents the title of the Submission Set. The esMD Title for the Document SubmissionSet will be – ‘Claim Supporting Medical Documentation’. <pre> <urn4:Name> <urn4:LocalizedString value="Claim Supporting Medical Documentation"/> </urn4:Name> </pre>	Optional	Optional	Optional	Text	String (256)
13.	unique ID	A globally unique identifier, in OID format, assigned by the HIH to the submission set in the transaction. <pre> <urn4:ExternalIdentifier id="ei05" registryObject="SubmissionSet01" identificationScheme="urn:uuid:96fdda7c-d067-4183-912e-bf5ee74998a8" value="554ac39e-ef6343434-b233-965d34345555"> <urn4:Name> <urn4:LocalizedString value="XDSSubmissionSet.uniqueId"/> </urn4:Name> </urn4:ExternalIdentifier> </pre>	Required	Required	Required	N/A	String(64)

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
14	Parent Unique ID	<p>Represents the Parent Unique ID for the split payload transactions. The Parent Unique ID is the same as the Unique ID for the first transaction. The same Parent Unique ID will be used for all the other split payload transactions.</p> <pre data-bbox="428 841 993 1096"> <urn4:Slot name="parentUniqueNumber"> <urn4:ValueList> <urn4:Value>554ac39e-ef6343434-b233-965d3434555</urn4:Value> </urn4:ValueList> </urn4:Slot> </pre>	Optional	Optional	Optional	Alphanumeric, Underscores	String (64)

No.	esMD XDR Submission Set Metadata Attribute	Definition and Example	ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion, DME Phone Discussion Request	ADR to PERM	PAP/PCR, ADMC, X12 XDR (CTC 13)	References to the esMD Domain Specific Values	XDR Value -Data Type (Length/Format)
15	Split Number	Represents the Split Load Number for the particular transaction. <pre> <urn4:Slot name="splitNumber"> <urn4:ValueList> <urn4:Value>2- 4</urn4:Value> </urn4:ValueList> </urn4:Slot> </pre>	Optional	Optional	Optional	Numeric/dash	5

Table 3: The esMD Document Metadata Attributes details the esMD-specific Document Metadata Attributes to confirm with the IHE ITI Technical Framework, Volume 3, Revision 6 and XDR Interoperability Testing.

Table 3: The esMD Document Metadata Attributes

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
1.	Author	Represents the provider NPI or institution NPI who authored the individual Document included in the Submission Set This attribute contains either the following sub-attributes and never both: authorInstitution authorPerson <urn4:Classification id="cI01" classificationScheme="urn:uuid:93606bcf-9494-43ec-9b4e-a7748d1a838d" classifiedObject="Document01" nodeRepresentation="author"> <urn4:Slot name="authorInstitution"> <urn4:ValueList> <urn4:Value>603111</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Slot name="authorPerson"> <urn4:ValueList> <urn4:Value>603</urn4:Value> </urn4:ValueList> </urn4:Slot> </urn4:Classification>	Required if known	Required if known	Required if known	Refer to Table 4.1-5 Document Metadata Attribute Definition in IHE ITI TF Volume 3 Revision 6.0 (https://www.ihe.net/uploadedFiles/Documents/ITI/IHE_ITI_TF_Rev16-0_Vol3_FT_2_019-07-12.pdf)	Numeric (10)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
1.1.	authorInstitution (sub-attribute of author)	<p>Represents the NPI of the institution or the organization under which the human or machine authored the individual document included in the SubmissionSet.</p> <p>Note: At the Document Metadata level, either the authorInstitution or the authorPerson attribute will be used but never both.</p> <pre><urn4:Slot name="authorInstitution"> <urn4:ValueList> <urn4:Value>604</urn4:Value> </urn4:ValueList> </urn4:Slot></pre>	Required if known	Required if known	Required if known	Institution NPI of the provider	Numeric (10)
1.2.	authorPerson (sub-attribute of author)	<p>Represents the NPI of the provider who authored the individual document included in the SubmissionSet.</p> <p>Note: At the Document Metadata level, either the authorInstitution or the authorPerson attribute will be used but never both.</p> <pre><urn4:Slot name="authorPerson"> <urn4:ValueList> <urn4:Value>603</urn4:Value> </urn4:ValueList> </urn4:Slot></pre>	Required if known	Required if known	N/A	Document author NPI	Numeric (10)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
2.	classCode	<p>The code specifying the particular kind of document.</p> <pre><urn4:Classification id="cl02" classificationScheme="urn:uuid:41a5887f-8865-4c09-adf7-e362475b143a" classifiedObject="Document01" nodeRepresentation="2.16.840.1.113883.13.34.110.1.1000.1"> <urn4:Slot name="classCode"> <urn4:ValueList> <urn4:Value>1</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Name> <urn4:LocalizedString value="See Table 7: ClassCodes and Corresponding ClassCode Display Names in this Implementation Guide "/> </urn4:Name> </urn4:Classification></pre>	Required	Required	Required	See Table 7: ClassCodes and Corresponding ClassCode Display Names in this Implementation Guide	String (64)
3.	classCode DisplayName	<p>The name to be displayed for communicating to a human the meaning of the classCode. Will have a single value for each value of classCode used</p> <pre><urn4:Name> <urn4:LocalizedString value="See Table 7: ClassCodes and Corresponding ClassCode Display Names in this Implementation Guide "/> </urn4:Name></pre>	Required	Required	Required	Refer to Table 7: ClassCodes and Corresponding ClassCode Display Names in this Implementation Guide	String (256)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
4.	Comments	Comments associated with the Document in a free form text format <urn4:Description> <urn4:LocalizedString value="esMD Claim Document Submission in response to Review Contractor ADR Letter"/> </urn4:Description>	Optional	Optional	Optional	N/A	String (256)
5.	confidentialityCode	The code specifying the level of confidentiality of the Document. For the esMD, the value is always 'V': <urn4:Classification id="cl03" classificationScheme="urn:uuid:f4f85eac-e6cb-4883-b524-f2705394840f" classifiedObject="Document01" nodeRepresentation="2.16.840.1.113883.5.25"> <urn4:Slot name="confidentialityCode"> <urn4:ValueList> <urn4:Value>V</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Name> <urn4:LocalizedString value="VeryRestricted"/> </urn4:Name> </urn4:Classification>	Required	Required	Required	Refer to Table 9: Confidentiality Codes in this Implementation Guide	N/A

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
6.	creationTime	Represents the time the HIH created the document. <urn4:Slot name="creationTime"> <urn4:ValueList> <urn4:Value>20110101165910</urn4:Value> </urn4:ValueList> </urn4:Slot>	Required	Required	Required	Timestamp (DTM). HIH XDR created/submitted timestamp.	Date (YYYYMMDDHHMMSS)
7.	entryUUID	A unique ID or a globally unique identifier for each document in the Submission Set In the below example "Document01" is used as entryUUID. This can also be UUID format. Example: <urn4:ExtrinsicObject id="Document01" mimeType="application/pdf" objectType="urn:uuid:7edca82f-054d-47f2-a032-9b2a5b5186c1"> </urn4:ExtrinsicObject>	Required	Required	Required	Unique Name for each attached document with a submitted document. Either UUID or some unique identifier.	String (64)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
8.	formatCode	<p>Globally unique code for specifying the format of the document.</p> <pre><urn4:Classification id="cl05" classificationScheme="urn:uuid:a09d5840-386c-46f2-b5ad-9c3699a4309d" classifiedObject="Document01" nodeRepresentation=" 2.16.840.1.113883.13.34.110.1.1000.1"> <urn4:Slot name="formatCode"> <urn4:ValueList> <urn4:Value>1</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Name> <urn4:LocalizedString value="see description from Table 12: Document Format Code and Payload Type "/> </urn4:Name> </urn4:Classification></pre>	Required	Required	Required	See Table 12: Document Format Code and Payload Type in this Implementation Guide	String (64)
9.	Hash	<p>Hash key of the XDR payload – C62 Document attachment based on the SHA1 Hash Algorithm</p> <pre><urn4:Slot name="hash"> <urn4:ValueList> <urn4:Value>ad18814418693512b7676760 06a21d8ec7291e84</urn4:Value> </urn4:ValueList> </urn4:Slot></pre>	Required	Required	Required	SHA1 hash	String (256)

10.	healthcareFacility TypeCode	<p>This code represents the type of organizational, provider setting of the claim or clinical encounters, or during which the documented act occurred.</p> <p>Note: If the submission request happens to be a response to an ADR letter, an Appeal, a RA Discussion Request, an ADMC Request, a Non-Emergent Ambulance Transport PA Request, a DME Phone Discussion Request, or a DMEPOS request the healthcareFacility TypeCode with the value of either a 1 (which represents an HHH) or a 2 (which represents a provider) can be used. Please refer to Table 10: HealthCare Facility Type Code for HealthCare Facility Type Code information.</p> <pre><urn4:Classification id="cl05" classificationScheme="urn:uuid:f33fb8ac-18af-42cc-ae0e-ed0b0bdb91e1" classifiedObject="Document01" nodeRepresentation=" 2.16.840.1.113883.13.34.110.1.1000.1"> <urn4:Slot name=" healthcareFacilityTypeCode"> <urn4:ValueList> <urn4:Value>1</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Name> <urn4:LocalizedString value="see description from table"/> </urn4:Name> </urn4:Classification></pre>	Required	Required	Required	Refer to Table 10: HealthCare Facility Type Code in this Implementation Guide	String (64)
11.	healthcareFacility TypeCodeDisplay Name	<p>The name to be displayed for communicating to a human the meaning of the healthcareFacilityTypeCode. Will have a single value corresponding to the healthcareFacilityTypeCode.</p> <pre><urn4:Classification id="cl05" classificationScheme="urn:uuid:f33fb8ac-18af-42cc-ae0e-ed0b0bdb91e1" classifiedObject="Document01" nodeRepresentation=" 2.16.840.1.113883.13.34.110.1.1000.1"></pre>	Required	Required	Required	Refer to Table 10: HealthCare Facility Type Code in this Implementation Guide	String (128)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
		<pre> <urn4:Slot name=" healthcareFacilityTypeCode "> <urn4:ValueList> <urn4:Value>1</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Name> <urn4:LocalizedString value="see description from table"/> </urn4:Name> </urn4:Classification> </pre>					
12.	languageCode	Specifies the human language of character data in the document. The values of the attribute are language identifiers as described by the Internet Engineering Task Force (IETF) RFC 3066. <pre> <urn4:Slot name="languageCode"> <urn4:ValueList> <urn4:Value>en-us</urn4:Value> </urn4:ValueList> </urn4:Slot> </pre>	Required	Required	Required	The esMD value may be "en-us"	String (16)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
13.	mimeType	Multipurpose Internet Mail Extension (MIME) type of the document. <urn4:ExtrinsicObject id="Document01" mimeType="application/pdf" objectType="urn:uuid:7edca82f-054d-47f2-a032-9b2a5b5186c1"> </urn4:ExtrinsicObject>	Required	Required	Required	The esMD PDF mimeType value shall be only "application/pdf" for PDF documents Note: Mime type is case sensitive.	String (64)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
14.	patientID	<p>As per XDR specification, this patientID metadata attribute is mandatory. At this moment, the esMD does not handle patientID.</p> <p>For ADR, First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, ADMC Requests use case submissions, and DME Phone Discussion Request HIHs/providers need to submit the esMDClaimId value in this patientID metadata attribute as follows: The ClaimId value needs to be sent in the HL7 composite format as mentioned under the esMDClaimId metadata attribute:</p> <p>Note 1: The ‘&’ character must be properly (like &amp;) encoded in the XML content.</p> <pre><urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="1234567890123^&amp;2.16.840.1.113883.13.34&amp;ISO"> <urn4:Name> <urn4:LocalizedString value="XDSDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier></pre>	Required	Required	Required	The esMD value may be "NA"	HL7 CX Data type with String (256)

<p>14. Cont. 1</p>	<p>No additional information</p>	<p>Note 2: To enable backward compatibility, HIHs/providers may submit this patient metadata attribute with the esMDClaimId value in standard format (No HL7 composite format) as follows: <urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="1234567890123"> <urn4:Name> <urn4:LocalizedString value="XSDDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier></p> <p>For Power Mobility, Non-Emergent Ambulance Transport, HOPD and HHPCR demonstrations requests (since there is no ClaimID value), HIHs/providers may submit the value of "NA" in the HL7 composite format as follows: <urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="NA^^^&2.16.840.1.113883.13.34&ISO" > <urn4:Name> <urn4:LocalizedString value="XSDDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier></p>	<p>No additional information</p>				
<p>14. Cont. 2</p>	<p>No additional information</p>	<p>Note 3: To enable backward compatibility, HIHs/providers may submit this patientId metadata attribute with the esMDClaimId value in standard format (No HL7 composite format): <urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="NA" > <urn4:Name></p>	<p>No additional information</p>				

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
		<p><urn4:LocalizedString value="XSDDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier> For submissions to PERM RC (since there is no ClaimId value), HlHs/providers shall submit the value of "NA" in the HL7 composite format as follows: <urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="NA^^^&2.16.840.1.113883.13.34.110.1.200.2&ISO" > <urn4:Name> <urn4:LocalizedString value="XSDDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier></p>					

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
14. Cont. 3	No additional information	<p>Note 4: To enable backward compatibility, HIEs/providers can also submit this patientID metadata attribute with the esMDCclaimId value of 'NA' in the standard format (i.e., no HL7 composite format).</p> <pre><urn4:ExternalIdentifier id="ei03" registryObject="Document01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="NA" > <urn4:Name> <urn4:LocalizedString value="XDSDocumentEntry.patientId"/> </urn4:Name> </urn4:ExternalIdentifier></pre>	No additional information	No additional information	No additional information	No additional information	No additional information

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
15.	practiceSetting Code	<p>The code specifying the clinical specialty where the act that resulted in the document was performed.</p> <p>This value will not be used by the esMD (i.e., will be ignored). However, since this field is required by XDR, an input is required.</p> <p>Not applicable to the esMD but required by XDR Interoperability.</p> <pre> <urn4:Classification id="cl07" classificationScheme="urn:uuid:cccf5598-8b07-4b77-a05e-ae952c785ead" classifiedObject="Document01" nodeRepresentation=" 2.16.840.1.113883.13.34.110.1.1000.1"> <urn4:Slot name="practiceSettingCode"> <urn4:ValueList> <urn4:Value>1</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Name> <urn4:LocalizedString value="Practice Settings Code description"/> </urn4:Name> </urn4:Classification> </pre>	Required	Required	Required	The esMD value may be "1".	String (64)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
16.	practiceSettingCode DisplayName	<p>The name to be displayed for communicating to a human the meaning of the practiceSettingCode. Will have a single value corresponding to the practiceSettingCode.</p> <p>This value will not be used by the esMD (i.e., will be ignored). However, since this field is required by XDR, an input is required. Any possible value assigned by the sender will be accepted.</p> <pre><urn4:Name> <urn4:LocalizedString value="NA"/> </urn4:Name></pre>	Required	Required	Required	The esMD value may be "NA".	String (64)
17.	serviceStartTime	<p>Represents the start time of the provider service being documented.</p> <p>This value will not be used by the esMD (i.e., will be ignored). However, since this field is required by XDR, an input is required. Any possible value assigned by the sender will be accepted.</p> <p>Not applicable to the esMD but required by XDR Interoperability.</p> <pre><urn4:Slot name="serviceStartTime"> <urn4:ValueList> <urn4:Value>20110101165910</urn4:Value> </urn4:ValueList> </urn4:Slot></pre>	Required	Required	Required	DateTimeStamp (HL7 V2 DTM). To pass the Interoperability Test – entry HIH submitted timestamp.	Date (YYYYMMDDHHMMSS)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
18.	serviceStopTime	<p>Represents the stop time of the provider service being documented. This value will not be used by the esMD (i.e., will be ignored). However, since this field is required by XDR, an input is required. Any possible value assigned by the sender will be accepted.</p> <pre><urn4:Slot name="serviceStopTime"> <urn4:ValueList> <urn4:Value>20110101165910</urn4:Value> </urn4:ValueList> </urn4:Slot></pre>	Required	Required	Required	DateTimeStamp (HL7 V2 DTM). To pass the Interoperability Test – entry HIH submitted timestamp.	Date (YYYYMMDDHHMMSS)
19.	Size	<p>Size in bytes of the C62 attachment byte stream that was provided through the request. Note: It is strongly recommended that HIHs/providers send the correct size of the payload.</p> <pre><urn4:Slot name="size"> <urn4:ValueList> <urn4:Value>1024000</urn4:Value> </urn4:ValueList> </urn4:Slot></pre>	Required	Required	Required	In Bytes	Numeric (10,2)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
20.	Title	Represents the title of the document. Max length, 128 bytes, UTF-8. <pre> <urn4:ExtrinsicObject id="Document01" mimeType="application/pdf" objectType="urn:uuid:7edca82f-054d-47f2-a032-9b2a5b5186c1"> <urn4:Name> <urn4:LocalizedString value="Get value from Table 11: Submission Set/Document Title"/> </urn4:Name> </urn4:ExtrinsicObject> </pre>	Optional	Optional	Optional	Possible Titles – Refer to Table 11: Submission Set/Document Title in this Implementation Guide No validation for this Title	String (256)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
21.	typeCode	<p>The code specifying the precise kind of document (e.g., Lab Order, Progress Notes, Orders).</p> <p>Note: The codes for typeCode metadata element are not defined yet for the esMD. HIHs/providers can send the value of '1' as mentioned in the example below. Also, note that typeCode (a document level metadata element) is different from ContentType code (a submission set metadata element).</p> <pre><urn4:Classification id="cl07" classificationScheme=" urn:uuid:f0306f51-975f-434e-a61c-c59651d33983 " classifiedObject="Document01" nodeRepresentation=" 2.16.840.1.113883.13.34.110.1.1000.1"> <urn4:Slot name=" codingScheme "> <urn4:ValueList> <urn4:Value>1</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Name> <urn4:LocalizedString value="Progress Note"/> </urn4:Name> </urn4:Classification></pre>	Required	Required	Required	N/A	String (64)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
22.	typeCodeDisplay Name	<p>The name to be displayed for communicating to a human the meaning of the typeCode. Will have a single value for each value of typeCode.</p> <p>Note: Since the typeCodes are not yet defined for the esMD as noted in row 21 of this table (see above), the type CodeDisplay name can have any appropriate name.</p> <pre><urn4:Classification id="cl07" classificationScheme=" urn:uuid:f0306f51-975f-434e-a61c-c59651d33983 " classifiedObject="Document01" nodeRepresentation=" 2.16.840.1.113883.13.34.110.1.1000.1"> <urn4:Slot name=" codingScheme "> <urn4:ValueList> <urn4:Value>1</urn4:Value> </urn4:ValueList> </urn4:Slot> <urn4:Name> <urn4:LocalizedString value="Progress Note"/> </urn4:Name> </urn4:Classification></pre>	Required	Required	Required	N/A	String (64)
23.	legalAuthenticator	<p>The authenticator of the document at the provider.</p> <pre><urn4:slot name="legalAuthenticator"> <urn4:ValueList> <urn4:Value>NA</urn4:Value> </urn4:ValueList> </urn4:slot></pre>	Optional	Optional	Optional	NA	String (32)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
24.	uniqueId	<p>A globally unique identifier assigned by the HIH to each document in the SubmissionSet. The length of the Unique Identifier will not exceed 128 bytes. The structure and format of this ID will be consistent with the specification corresponding to the format attribute. This ID will be generated based on the UUID. The same ID will be returned with the response message.</p> <pre data-bbox="474 841 953 1112"><urn4:ExternalIdentifier id="ei02" registryObject="Document01" identificationScheme="urn:uuid:96fdda7c-d067-4183-912e-bf5ee74998a8" value="1.3.6.1.4.1.21367.2005.3.9999.33"> <urn4:Name> <urn4:LocalizedString value="XDSDocumentEntry.uniqueId"/> </urn4:Name> </urn4:ExternalIdentifier></pre>	Required	Required	Required	UUID Refer to ITI TF 4.1.7.2 Volume 3 Revision 6	String (64)

No.	The esMD Document Metadata Attribute	Definition and Example	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, Non-Perm	ADR First Level Appeal Requests, Second Level Appeal Requests, RA Discussion Requests, DME Phone Discussion Request, ADMC Requests, PERM	PA X12 XDR (CTC 13)	References to a Possible esMD Domain Specific Value	XDR Value - Data Type (Length/Format)
25	Attachment Control Number	<p>Identification number provided by the requester in element PWK06 if the requester has additional documentation associated with the health services review that applies to the service requested. This is used to associate a X12N 278 5010 request with the supporting documentation received in the XDR format. This applies to Content Type Code 7 and 13.</p> <pre data-bbox="474 841 951 943"><ns3:Slot name="attachmentControlNumber"><ns3:ValueList><ns3:Value>acn1234</ns3:Value></ns3:ValueList></ns3:Slot></pre>	Not Required	Not Required	Required	N/A	Allowed length for ACN field for CTC 13 is minimum 2 and maximum 40 and allowed format is A-Z; a-z; and 0-9 only. And for CTC 7, its 2-80 characters with (A-Za-z0-9-)

4.1.19 Attachment Control Number

The Attachment Control Number (ACN) received originally on an EDI X12 278 5010 request is stored in the esMD database. The supporting documentation submitted in XDR format shall include same ACN as the original EDI X12N 278 5010 request in order for the esMD to associate the request with its supporting documentation. As soon as the documentation is received, the esMD locates the EDI X12N 278 5010 request in the esMD database using the ACN. Once the matching request and documentation is found having the same ACN and NPI combination, the esMD packages the request and the documentation together in order to forward it to the Review Contractor. The supporting documentation can also be submitted in X12N 275 transactions. Refer to *X12N 275 Companion Guide* for additional information.

4.1.20 Intended Recipients

The HIH should provide the receiving RC's OID as the value for Intended Recipient field. For more information on the RC OIDs, Sender IDs, refer to the link below:

http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Which_Review_Contractors_Accept_esMD_Transactions.html

Note 1: From the implementation of the esMD R3.1, a validation has been put in place to check whether a specific RC accepts a particular Content Type Code. If an RC does not accept a specific use case (Content Type Code), then the submission will be rejected.

Please refer to the following CMS Government website in the download section for the updated list of Review Contractors and the lines of business accepted by each RC:

http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Which_Review_Contractors_Accept_esMD_Transactions.html.

4.2 Interface Definition

4.2.1 Interaction Behavior

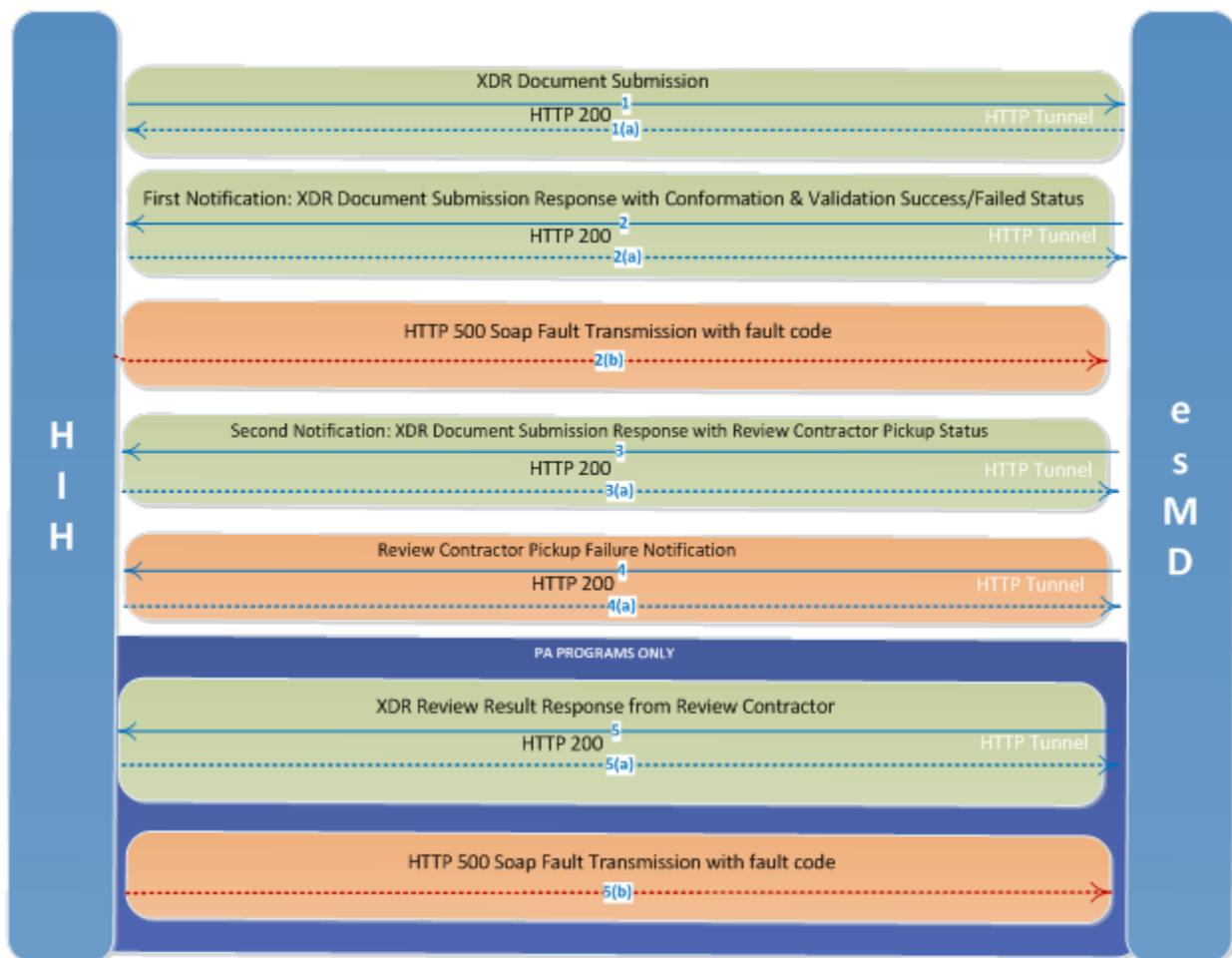
Figure 4: Asynchronous Acknowledgments with Multiple Hypertext Transfer Protocol (HTTP) Connections illustrates the communication between the HIH and the esMD CONNECT Gateway with asynchronous messaging with three Hypertext Transfer Protocol Secure (HTTPS) requests.

The HIH Gateway submits the electronic medical claim documentation, based on the CMS onboarded HIH and their gateway OID. The HIH submits the IHE XDR profile SOAP Messages to the CMS with the ITI – 41 (Provide and Register Document Set – b) transaction, SAML Assertions, Document Submission Meta Data, and C62 Payload in the SOAP body.

The esMD CONNECT Gateway receives the request, with SAML Assertions, and consults its gateway Policy Enforcement Point (which could be a SAML authority) which, in turn, uses the esMD database to establish whether the submitted Home Community ID will be allowed to perform the esMD document submission function.

Assertions can convey information about the authentication and authorization acts that the HIH performed by subjects (the OID acts as a User ID), its attributes, and authorization decisions (to check whether the subject/OID is allowed to submit the claim supporting documents).

Figure 4: Asynchronous Acknowledgments with Multiple Hypertext Transfer Protocol (HTTP) Connections



1. The HIH sends an XDR Document Submission Request to the esMD.
 - The esMD system responds with an HTTP 200, as First Acknowledgement.
2. The esMD system validates the metadata and sends a First Notification to the HIH denoting success or failure validation status. The esMD system also sends the package to RC.
 - The HIH responds with a HTTP 200 in case of a successful receipt of this first notification; and
 - The HIH responds with a HTTP 500 in case of a service unavailable error or internal server error.
3. Upon successful receipt of the package, the RC sends a pickup notification that is forwarded to the HIH.
 - The HIH responds with a HTTP 200 in case of a successful receipt of this pickup notification.
4. If there is an error in the receipt of the package, the RC sends a pickup failure notification that is forwarded to the HIH.
 - The HIH responds with a HTTP 200 in case of a successful receipt of this pickup failure notification.

5. For PA Programs, the workloads will respond with Review Results Response which is then sent to the HIH.
 - The HIH responds with an HTTP 200 in case of a successful receipt of this Response. The HIH responds with an HTTP 500 in case of a service unavailable error or internal server error.

Note: The RC can submit an Administrative Error response to the HIH for XDR and X12 requests. The HIH will respond with an HTTP 200 in case of a successful receipt of the Administrative Response.

4.2.2 Triggers

All requests issued by the HIH must implement the Messaging Platform Service Interface Specification and the Authorization Framework Service Interface Specification.

4.2.3 Transaction Standard

The authorization framework is based on the implementation of the OASIS WS-I Security Profile SAML Token Profile, as specified in the Messaging Platform Service Interface Specification. SAML 2.0 is the base specification for expressing assertions in the eHealth Exchange.

4.2.4 Technical Pre-Conditions

The HIH must conform to the interoperability standards:

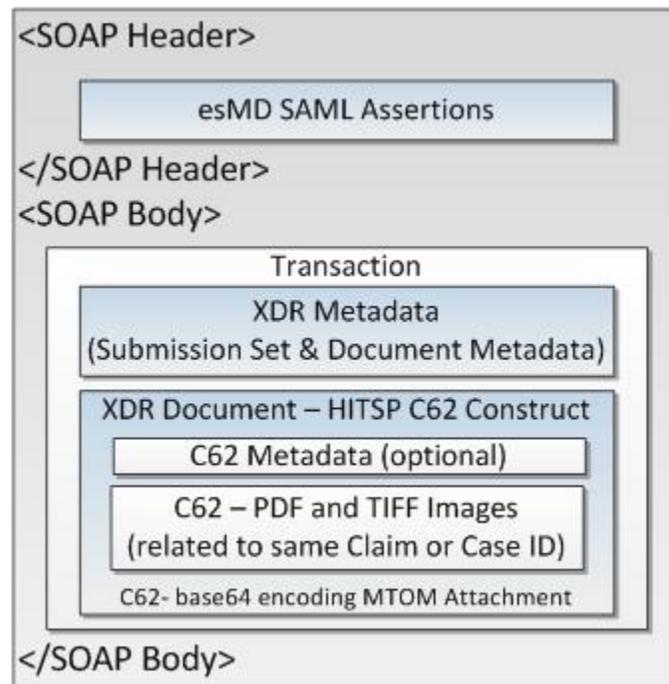
1. The esMD Profile;
2. IHE XDR;
3. WS-I Basic Profile;
4. WS-I Basic Security Profile;
5. The HIH must conform to the Claim Medical Document to the HITSP C62 Interoperability Specification;
6. The HIHs must conform to messaging platform and authorization framework for communication;
7. Messages: SOAP v2.0 with MTOM attachments;
8. Service Descriptions: Web Service Definition Language;
9. Addressing/Routing: WS-Addressing;
10. Security: WS-Security, XML DSIG;
11. Authorization: SAML Assertion;
12. Authentication: X509 certificate, 2-way TLS with FIPS 140-2 enable mode, 128-bit encryption;
13. Base64 encoding of the C62 payload;
14. The esMD Document Submission data is transmitted in the SOAP message with IHE XDR transactions;
15. There will be mutual authentication between the HIH Gateway and the CMS CONNECT Gateway using a Non-ONC TLS certificate;
16. The CMS CONNECT Gateway will authorize the requests based on the SAML Assertions with its Home Community ID and Organization IDs;
17. The HIH will create digitally signed SAML Assertions;

18. A globally unique identifier, assigned by HIH internal system and primarily intended for use as a unique identifier for each submission that can be used to correlate the request and responses of a particular submission, is generated. **Note:** The Gateway created message ID is different from this unique ID;
19. The HIH will encode the attached C62 document in Base64 encoding and add its hash key to the XDR metadata;
20. Architectures of the HIH are decoupled from, and are opaque to, the esMD and other HIHs. The HIH is not required to use the same the esMD security mechanisms or standards internally; and
21. We suggest the initiating HIH authenticate and authorize the gateway system by sending the document submission request to the esMD project, and it is required that they do so internally. The esMD is not responsible for this action.

4.2.5 SOAP Message Envelope

Figure 5: SOAP Envelope with XDR Interchange/HITSP C62 Construct illustrates the SOAP envelope with XDR interchange and HITSP C62 construct.

Figure 5: SOAP Envelope with XDR Interchange/HITSP C62 Construct



<soapenv:Envelope

```

xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:urn="urn:gov:hhs:fha:nhinc:common:nhinccommententity"
xmlns:urn1="urn:gov:hhs:fha:nhinc:common:nhinccommon"
xmlns:add="http://schemas.xmlsoap.org/ws/2004/08/addressing"
xmlns:urn2="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0"
xmlns:urn3="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0"

```

```

xmlns:urn4="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
xmlns:urn5="urn:ihe:iti:xds-b:2007">
<soapenv:Header/>
<soapenv:Body>
  <urn:RespondingGateway_ProvideAndRegisterDocumentSetRequest>
    <urn:assertion>
      <urn:nhinTargetCommunities>
        <urn:ProvideAndRegisterDocumentSetRequest>
          </urn:RespondingGateway_ProvideAndRegisterDocumentSetRequest>
        </urn:ProvideAndRegisterDocumentSetRequest>
      </urn:nhinTargetCommunities>
    </urn:assertion>
  </urn:RespondingGateway_ProvideAndRegisterDocumentSetRequest>
</soapenv:Body>
</soapenv:Envelope>

```

The MTOM-related tags are abstracted in above soap envelope.

Table 4: Name Spaces Details with CONNECT Software lists the name space details associated with the CONNECT Software.

Table 4: Name Spaces Details with CONNECT Software

No.	Name Space	Name Space URL
1.	soapenv	http://schemas.xmlsoap.org/soap/envelope/
2.	Urn	urn:gov:hhs:fha:nhinc:common:nhinccommonentity"
3.	urn1	urn:gov:hhs:fha:nhinc:common:nhinccommon
4.	add	urn:http://schemas.xmlsoap.org/ws/2004/08/addressing
5.	urn2	urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0
6.	urn3	urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0
7.	urn4	urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0
8.	urn5	urn:ihe:iti:xds-b:2007

4.2.6 SAML Assertions

The SAML Assertions define the exchange of metadata used to characterize the initiator of an HIH request, so that it may be evaluated by the esMD CONNECT Gateway in local authorization decisions. The purpose of this SAML Assertion exchange is to provide the esMD CONNECT Gateway with the information needed to make an authorization decision, using the policy enforcement point for the requested esMD function. Each initiating SOAP

message must convey information regarding the HIH attributes and authentication using SAML 2.0 Assertions.

4.2.7 Assertions Design Principals and Assumptions

The esMD CONNECT Gateway uses the information conveyed via the Assertions (Authorization Framework) to inform its local authorization policy decision.

The initiating HIH must include all REQUIRED attributes in each request message. It is at the discretion of the receiving esMD CONNECT Gateway to decide which attributes to consider in its local authorization decision against its policy decision controller.

The initiating HIH is responsible for the authentication and authorization of its users and system requests.

4.2.8 Assertions Transaction Standard

1. Authorization Framework v 2.0;
2. OASIS SAML V2.0;
3. Authentication Context for SAML V2.0; and
4. Cross-Enterprise Security and Privacy Authorization (XSPA) Profile of SAML for Healthcare Version 1.0 OASIS Web Services Security: SAML Token Profile 1.1 specifications.

4.2.9 Specific Assertions

The SAML Assertions in Table 5: Standard SAML Assertions in SOAP Envelope are designated as required (R) for all communications between the HIH and the esMD CONNECT Gateway.

Table 5: Standard SAML Assertions in SOAP Envelope

Parent Element	Child Element / Attribute	esMD Required	Who Create? - Gateway or Manual
SAML ASSERTION (Required)	Version	Required	CONNECT Gateway
SAML ASSERTION (Required)	ID	Required	CONNECT Gateway
SAML ASSERTION (Required)	IssueInstant	Required	CONNECT Gateway
SAML ASSERTION (Required)	Issuer	Required	CONNECT Gateway
SAML ASSERTION (Required)	Subject	Required	CONNECT Gateway
Authn Statement (Required)	AuthnContext	Required	HIH Application will add under assertion.
Authn Statement (Required)	SubjectLocality	Required	HIH Application will add under assertion.
Authn Statement (Required)	AuthnInstant	Required	HIH Application will add under assertion.

Parent Element	Child Element / Attribute	esMD Required	Who Create? - Gateway or Manual
Authn Statement (Required)	SessionIndex	Optional	HIH Application will add under assertion.
Attribute Statement (Required)	subject-ID	Required	CONNECT Gateway
Attribute Statement (Required)	Organization	Required	HIH Application will add under assertion.
Attribute Statement (Required)	homeCommunityID	Required	HIH Application will add under assertion.
Attribute Statement (Required)	purposeofuse	Required	HIH Application will add under assertion.
Attribute Statement (Required)	NPI	Required	HIH Application will add under assertion – ‘userInfo.userName’ or as nationalProviderId (for CONNECT, Version 4.0 and greater).
Attribute Statement (Required)	Intended Recipient	Required	HIH Application will add under assertion - ‘uniquePatientId’.
Authorization Decision Statement (Optional)	Action	Required	HIH Application will add under assertion, if Authorization Decision Statement is provided.
Authorization Decision Statement (Optional)	Decision	Required	HIH Application will add under assertion, if Authorization Decision Statement is provided.
Authorization Decision Statement (Optional)	Resource	Required	HIH Application will add under assertion, if Authorization Decision Statement is provided.
Authorization Decision Statement (Optional)	Evidence	Required	HIH Application will add under assertion, if Authorization Decision Statement is provided.

4.2.10 The esMD SAML Assertion Details

Table 6: The esMD SAML Assertion Details provides the esMD SAML Assertion details.

Table 6: The esMD SAML Assertion Details

No.	SAML Assertion Attribute	Definition and Example	Required/ Required if known/ Optional	Source / CONNECT Software Allowed	References to the esMD Domain Specific Values
1.	homeCommunityId	<p><urn1:homeCommunityId ></p> <p><urn1:description>Description of the submitting HIH CONNECT or CONNECT Compatible Gateway</urn1:description></p> <p><urn1:homeCommunityId>urn:oid:1.3.6.1.4.1.101420.6.1</urn1:homeCommunityId></p> <p><urn1:name>Name of the submitting HIH CONNECT or CONNECT Compatible Gateway</urn1:name></p> <p></urn1:homeCommunityId></p>	Required	The esMD Requirement / Yes	HIH OID
2.	organizationId	<p><urn1:organizationId ></p> <p><urn1:description>Description of Broker Organization between provider and the submitting HIH CONNECT or CONNECT Compatible Gateway</urn1:description></p> <p><urn1:homeCommunityId>urn:oid:1.3.6.1.4.1.101420.6.1</urn1:homeCommunityId></p> <p><urn1:name>Name of Broker Organization between provider and the submitting HIH CONNECT or CONNECT Compatible Gateway</urn1:name></p> <p></urn1:organizationId></p>	Required	esMD Requirement / Yes	HIH OID or any broker organization (its OID) between providers and HIH

No.	SAML Assertion Attribute	Definition and Example	Required/ Required if known/ Optional	Source / CONNECT Software Allowed	References to the esMD Domain Specific Values
3.	intendedRecipient	<p>Note: Temporarily, add the Intended Recipient value in the unique Patient ID as OID.</p> <pre><urn1:uniquePatientId>urn:oid:2.16.840.1.113883.13.34.110.1.110.9</urn1:uniquePatientId></pre> <p>In the next spec factory changes, the intended recipient values will be change to HL7 XON.</p> <p>The intendedRecipient field in the XDS Metadata will use the HL7 XON data type for this profile.</p> <p>This data type contains 10 subfields separated by a ^ sign, of which three are required:</p> <p>XON.1 is the name of the organization that is the intended recipient. This will be the name of the RA that is intended to receive the submission.</p> <p>XON.6 identifies the assigning authority for the identifiers appearing in XON.10. This field will be completed using the following string: &CMS OID FOR RAS&ISO [Ed. Note: Replace CMD OID FOR RAS with a CMS assigned OID].</p> <p>XON.10 is the CMS Identifier for the RA. An example appears below (bold text should be replaced with the appropriate values): [Ed. Note: Replace CMD OID FOR RAs with a CMS assigned OID].</p> <p>RA ORGANIZATION NAME^^^^&CMS OID FOR RAS&ISO^^^^CMS ASSIGNED IDENTIFIER<urn1:intendedReceipient ></p>	Required	esMD Requirement / NO*	Refer to section 4.1.3 Intended Recipients Attribute

No.	SAML Assertion Attribute	Definition and Example	Required/ Required if known/ Optional	Source / CONNECT Software Allowed	References to the esMD Domain Specific Values
3. Cont.	No additional information	<p><urn1:description>Description of receiving Review Contractor</urn1:description></p> <p><urn1:organizationId>DCS^^^^&2.16.840.1.113883.13.34.110.1.100.1&ISO^^^^2.16.840.1.113883.13.34.110.1</urn1:organizationId></p> <p><urn1:name>Name of Review Contractor, to whom Claim Medical Documentation shall be submitted.</urn1:name></p> <p></urn1:intendedRecipient></p>	No additional information	No additional information	No additional information

No.	SAML Assertion Attribute	Definition and Example	Required/ Required if known/ Optional	Source / CONNECT Software Allowed	References to the esMD Domain Specific Values
4.	NPI	<p>HIH will provide the National Provider Identifier (NPI) value NationalProviderId element added to the assertion element of the RespondingGateway_ProvideAndRegisterDocumentSetRequest.</p> <p>The esMD system will also support NPI format, as the value for the userInfo/username for the RespondingGateway_ProvideAndRegisterDocumentSetRequest</p> <pre> <urn1:userInfo> <urn1:userName>6101234512</urn1:userName> <urn1:org> <urn1:description>Description of provider NPI </urn1:description> <urn1:homeCommunityId>Any Broker organization in between provider and HIH or HIH OID</urn1:homeCommunityId> <urn1:name>Name of provider from whom Claim Medical Documentation are submitted</urn1:name> </urn1:org> </urn1:userInfo> </pre> <p>Note: The NPI value needs to be 10 numeric characters long to comply with the standard specification. If the NPI value sent by the HIH does not conform to this format, the submission request shall be rejected, and an error message will be sent to the submitting HIH gateway. Please refer to Table 20: Sample Error Message Content for the error code and related message text.</p>	Required	esMD Requirement / NO*	Refer to section 4.1.2 NPI Attribute

No.	SAML Assertion Attribute	Definition and Example	Required/ Required if known/ Optional	Source / CONNECT Software Allowed	References to the esMD Domain Specific Values
5.	purposeOfDisclosureCoded	<p>HIH will enter appropriate values. This is used by the CONNECT Gateway for SOAP header SAML processing.</p> <pre> <urn1:purposeOfDisclosureCoded> <urn1:code>PAYMENT</urn1:code> <urn1:codeSystem>2.16.840.1.113883.3.18.7.1</urn1:codeSystem> <urn1:codeSystemName> esMD CMS Purpose</urn1:codeSystemName> <urn1:codeSystemVersion>1.0</urn1:codeSystemVersion> <urn1:displayName>Medical Claim Documentation Review</urn1:displayName> <urn1:originalText>Medical Claim Documentation Review</urn1:originalText> </urn1:purposeOfDisclosureCoded> </pre>	Required	esMD Requirement / Yes	N/A

No.	SAML Assertion Attribute	Definition and Example	Required/ Required if known/ Optional	Source / CONNECT Software Allowed	References to the esMD Domain Specific Values
6.	samlAuthnStatement	<p>HIH will enter appropriate values. This is used by the CONNECT Gateway for SOAP header SAML processing.</p> <pre> <urn1:samlAuthnStatement> <urn1:authInstant>2011-01-05T16:50:01.011Z</urn1:authInstant> <urn1:sessionIndex>987</urn1:sessionIndex> <urn1:authContextClassRef>urn:oasis:names:tc:SAML:2.0:ac:classes:X509</urn1:authContextClassRef> <urn1:subjectLocalityAddress>158.147.185.168</urn1:subjectLocalityAddress> <urn1:subjectLocalityDNSName>cms.hhs.gov</urn1:subjectLocalityDNSName> </urn1:samlAuthnStatement> </pre>	Required	esMD Requirement / Yes	N/A

No.	SAML Assertion Attribute	Definition and Example	Required/ Required if known/ Optional	Source / CONNECT Software Allowed	References to the esMD Domain Specific Values
7.	samlAuthzDecisionStatement	<p>Except ID attribute in samlAuthzDecisionStatement, all the other appropriate values will be entered by HIH.</p> <p>ID attribute will be used by the esMD application and other values will be used by the CONNECT Gateway for SOAP header SAML processing.</p> <p>ID attribute will be used to correlate the request to response and to verify the double submission of Claim Document submission. Each Claim Document Submission SOAP Message from CONNECT Gateway will have a Unique ID populated by HIH CONNECT Adapter or CONNECT Compatible software.</p> <p>This unique ID will be created by HIH using the JAVA Universally Unique Identifier (UUID) Application Programming Interface (API) and populate into "id" attribute of this SAML Authorization Decision Statement.</p> <pre><urn1:id>40df7c0a-ff3e-4b26-baeb-f2910f6d05a9</urn1:id></pre> <p>Note: Unique ID is different from CONNECT Gateway Message ID. CONNECT Gateway automatically adds the message id to the SOAP Header. This message ID is unique for any outgoing messages.</p> <pre><urn1:samlAuthzDecisionStatement > <urn1:decision>Permit</urn1:decision> <urn1:resource>https://158.147.185.168:8181/esMD/Document Submission</urn1:resource> ;2 <urn1:action>TestSaml</urn1:action> <urn1:evidence> <urn1:assertion></pre>	Required	esMD Requirement / Yes	N/A

No.	SAML Assertion Attribute	Definition and Example	Required/ Required if known/ Optional	Source / CONNECT Software Allowed	References to the esMD Domain Specific Values
7. Cont.	No additional information	<pre> <urn1:id>40df7c0a-ff3e-4b26-baeb- f2910f6d05a9</urn1:id> <urn1:issueInstant>2011-01- 05T16:50:01.011Z</urn1:issueInstant> <urn1:version>2.0</urn1:version> <urn1:issuerFormat>urn:oasis:names:tc:SAML:1.1:nameid- format:X509SubjectName</urn1:issuerFormat> <urn1:issuer>CN=HIH SAML User,OU=QSSI,O=QSSI,L=Baltimore,ST=MD,C=US</urn1:issu er> <urn1:conditions> <urn1:notBefore>2011-01- 05T16:50:01.011Z</urn1:notBefore> <urn1:notOnOrAfter>2011-01- 05T16:53:01.011Z</urn1:notOnOrAfter> </urn1:conditions> ; <urn1:accessConsentPolicy>Claim-Ref-1234 NA for the esMD</urn1:accessConsentPolicy> <urn1:instanceAccessConsentPolicy>Claim-Instance-1 NA for the esMD</urn1:instanceAccessConsentPolicy> </urn1:assertion> </urn1:evidence> </urn1:samlAuthzDecisionStatement> </pre>	No additional information	No additional information	No additional information

* The Interim solution is to populate the 'Intended Recipient' and 'NPI' values into 'uniquePatientId' and 'userInfo.userName' field of the current CONNECT software Assertion Type object.

4.2.11 SAML Assertion Attributes

This will be added in the Authorization Decision Statement.

4.2.12 Version Attribute

The version attribute defines SAML v2.0, as the version.

4.2.13 ID Attribute

The ID Attribute is an xs:ID, as defined by <http://www.w3.org/TR/xml-Id/>.

4.2.14 Issue Instant

The Issue Instant attribute is an xs:dateTime, as defined by <http://www.w3.org/TR/xmlschema-2/>.

4.2.15 Issuer

The <Issuer> element identifies the individual gateway system responsible for issuing the Assertions carried in the message. Since the esMD does not have the user's IDs, the issuer will be the HIH's System Name. This element includes a NameID format attribute, which declares the format used to express the value contained in this element. The NameID format is ***urn:oasis:names:tc:SAML:1.1:nameid-format:X509SubjectName*** for sending National Health Information Organization (NHIO), acting as a node on the eHealth Exchange.

4.2.16 Subject

The Subject element will identify the Subject of the assertion. This element also includes a NameID. The Format attribute declares the format used to express the value contained in this element: the HIH's System Name making the request at the initiating NHIO. The NameID format is ***urn:oasis:names:tc:SAML:1.1:nameid-format:X509SubjectName*** for the sending the NHIO.

4.2.17 SAML Statement Elements

The esMD SAML statement elements are separated into Authentication and Attribute. Each statement will be further defined in the following paragraphs.

4.2.18 Attribute Statement

The Attribute Statement element describes a statement by the SAML authority asserting that the requesting HIH system is associated with the specified attributes. The Attribute Statement is required to contain attribute elements, as defined by the

OASIS XSPA profile of SAML and described in the sections that follow. The Attribute Statement is comprised of the following attributes: Subject ID, Subject Organization, Home Community ID, Purpose of Use, NPI, and Intended Recipient.

The value on the Subject ID and Subject Organization attributes will be a plain text description of the user's name (not user ID) and organization, respectively. These are primarily intended to support auditing.

4.2.19 Subject ID Attribute

This Subject Identifier element has the HIH initiating gateway Name. The name of the system, as required by HIPAA Privacy Disclosure Accounting is placed in the value of the element.

```
<urn1:QualifiedSubjectIdentifier xmlns:urn1="urn:gov:hhs:fa:nhinc:common:nhincommon">
  <urn1:SubjectIdentifier>HIH esMD Initiating Gateway </urn1:SubjectIdentifier >
  <urn1:AssigningAuthorityIdentifier>HIH Name</urn1: AssigningAuthorityIdentifier >
</ urn1:QualifiedSubjectIdentifier>
```

Subject Organization Attribute

This Assigning Authority Identifier element has the subject organization Name under which the initiating gateway (subject name) is running. In plain text, the organization to which the user belongs, as required by HIPAA Privacy Disclosure Accounting, is placed in the value of the Attribute Value element.

```
<urn1:QualifiedSubjectIdentifier xmlns:urn1="urn:gov:hhs:fa:nhinc:common:nhincommon">
  <urn1:SubjectIdentifier>HIH esMD Initiating Gateway </urn1: SubjectIdentifier >
  <urn1:AssigningAuthorityIdentifier>HIH Name</urn1: AssigningAuthorityIdentifier >
</ urn1:QualifiedSubjectIdentifier>
```

4.2.20 Home Community ID Attribute

This attribute element has the HIH gateway Name attribute. The value is the HL7 issued Home Community ID (an Object Identifier) assigned to the HIH that is initiating the request, using the URN format (i.e., "urn:oid:" appended with the OID). One home community gateway can have multiple organization IDs. Organization IDs act as a broker to home community organizations. If there are no brokers to the organizations, then both the home community ID and the organization ID attributes will be the same.

Refer to the sample in Table 6: The esMD SAML Assertion Details.

4.2.21 Content Type Code

The Content Type Code with the value of "1", response to ADR Letter is accepted by all RCs participating in the esMD.

The esMD supports the following Prior Authorization programs. These PA Programs will be utilized by the A/B MACs only:

1. The Content Type Code with a value of “8.1” is used for Repetitive Scheduled Non-Emergent Ambulance Transport Prior Authorization requests. Novitas and Palmetto are accepting this line of business.

Refer to the Table 8: Content Type Codes and Corresponding Content Type Code Display Names for more details on the Content Type Codes supported by the esMD.

Please refer to the following link for CMS Government website for the updated list of lines of businesses accepted by each RC:

http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Which_Review_Contractors_Accept_esMD_Transactions.html

Table 7: ClassCodes and Corresponding ClassCode Display Names provides the ClassCodes and corresponding ClassCode Display Names.

Metadata Vocabulary - Class Schema: urn:uuid:41a5887f-8865-4c09-adf7-e362475b143a

Table 7: ClassCodes and Corresponding ClassCode Display Names

Class Code	Class Code Display Name	Coding Schema / Code System
1	Unstructured	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
2	Structured	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema

Table 8: Content Type Codes and Corresponding Content Type Code Display Names provides the Content Type Codes and Corresponding Content Type Code Display Names.

Metadata Vocabulary - Class Schema: urn:uuid:f0306f51-975f-434e-a61c-c59651d33983

Table 8: Content Type Codes and Corresponding Content Type Code Display Names

Content Type Code	Content Type Code Display Name	Coding Schema / Code System
1	Response to Additional Documentation Request (ADR)	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema

Content Type Code	Content Type Code Display Name	Coding Schema / Code System
5	Service Registration Request	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
7	Unsolicited PWK XDR	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
8.1	Non-Emergent Ambulance Transport PA Request	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
8.3	HHPCR	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
8.4	DMEPOS	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
8.5	HOPD	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
9	First Level Appeal Requests	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
9.1	Second Level Appeal Requests	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
10	Advance Determination of Medicare Coverage (ADMC) Request	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
11	RA Discussion Requests	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema
11.1	DME Phone Discussion Requests	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema

Content Type Code	Content Type Code Display Name	Coding Schema / Code System
13	Supporting Documentation for an unsolicited X12N 278 5010 Request that was submitted to the RC via esMD.	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Schema

The Content Type Code Display Name column in Table 8: Content Type Codes and Corresponding Content Type Code Display Names represents the lines of business for the CMS. The esMD accepts documentation from providers and HIHs.

Table 9: Confidentiality Codes provides the Confidentiality Codes.

Metadata Vocabulary - Class Schema: urn:uuid:f4f85eac-e6cb-4883-b524-f2705394840f

Reference URL: <http://xml.coverpages.org/CDA-Release2-Unofficial.html>.

Table 9: Confidentiality Codes

Confidentiality Code	Description	Coding Schema / Code System
N	Normal	2.16.840.1.113883.5.25
R	Restricted	2.16.840.1.113883.5.25
V *	Very Restricted (default for the esMD)	2.16.840.1.113883.5.25

* The esMD will only accept the Very Restricted Confidentiality Code.

Table 10: HealthCare Facility Type Code provides the HealthCare Facility Type Codes.

Metadata Vocabulary - Class Schema: urn:uuid:f33fb8ac-18af-42cc-ae0e-ed0b0bdb91e1

Table 10: HealthCare Facility Type Code

Type Code	HealthCare Facility Type Code Display Name	Coding Schema / Code System
1.	Health Information Handler (HIH)	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Class Codes
2.	Health Care provider	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Class Codes
3.	The CMS Review Contractor	2.16.840.1.113883.13.34.110.1.1000.1 - CMS Class Codes

Table 11: Submission Set/Document Title provides the Submission Set or Document Title.

Table 11: Submission Set/Document Title

Submission Set/Document Title
Solicited Supporting Documentation
Additional Documentation Request
Unsolicited Documentation

Table 12: Document Format Code and Payload Type provides the Document Format Code and Payload Type.
 Metadata Vocabulary - Class Schema: urn:uuid:a09d5840-386c-46f2-b5ad-9c3699a4309d

Table 12: Document Format Code and Payload Type

No.	Format Code	Format Description	Coding Schema / Code System
1.	HITSP C62 urn:hitasp:c62:cda:pdf	Scanned PDF Document in Clinical Document Architecture (CDA) C62 Construct	2.16.840.1.113883.13.34.110.1.1000.1 – The esMD Schema

No.	Format Code	Format Description	Coding Schema / Code System
2.	HITSP C62 urn:hitsp:c62:cda:tiff	Scanned TIFF Document in CDA C62 Construct	2.16.840.1.113883.13.34.110.1.1000.1 – The esMD Schema
3.	HITSP C83	HITSP C83	2.16.840.1.113883.13.34.110.1.1000.1 - The esMD Schema
4.	HITSP C32	HITSP C32	2.16.840.1.113883.13.34.110.1.1000.1 - The esMD Schema
5.	urn:ihe:iti:xds-sd:pdf:2008	Scanned PDF Document in XDS	1.3.6.1.4.1.19376.1.2.3
6.	urn:ihe:iti:xds-sd:text:2008	Scanned Documents with text (XDS-SD)	1.3.6.1.4.1.19376.1.2.3

Table 13: Overall Mapping of Document Submission with Class and Content Type Codes details the Overall Mapping of the Document Submission with the Class and Content Type Codes.

This table shows the possible combinations/mappings between Unsolicited and Solicited Documentation, Format Code, Class Code, and Type Code.

Table 13: Overall Mapping of Document Submission with Class and Content Type Codes

Solicited Supporting and Unsolicited Documentation	FormatCode (Payload Construct)	ClassCode	Class Code Display Name	Content Type Code	Content Type Code Display Name
Solicited Supporting Documentation	HITSP C62	1	Unstructured	1	Response to Additional Documentation Request (ADR)
Unsolicited Documentation	HITSP C62	1	Unstructured	8.1	Non-Emergent Ambulance Transport PA Request

Solicited Supporting and Unsolicited Documentation	FormatCode (Payload Construct)	ClassCode	Class Code Display Name	Content Type Code	Content Type Code Display Name
Unsolicited Documentation	HITSP C62	1	Unstructured	8.3	HHPCR
Unsolicited Documentation	HITSP C62	1	Unstructured	8.4	DMEPOS
Unsolicited Documentation	HITSP C62	1	Unstructured	8.5	HOPD
Unsolicited Documentation	HITSP C62	1	Unstructured	9	First Level Appeal Requests
Unsolicited Documentation	HITSP C62	1	Unstructured	9.1	Second Level Appeal Requests
Unsolicited Documentation	HITSP C62	1	Unstructured	10	Advance Determination of Medicare Coverage
Unsolicited Documentation	HITSP C62	1	Unstructured	11	RA Discussion Requests
Unsolicited Documentation	HITSP C62	1	Unstructured	11.1	DME Phone Discussion Request
Unsolicited Supporting Documentation	HITSP C62	1	Unstructured	13	Supporting documentation for an unsolicited X12N 278 5010 Request that was submitted to the RC via esMD.

Note: Table 14: Combination of the esMD Codes and Claim/Case IDs for Different Types of Submission Requests presents the possible values that will be accepted. If the values sent by the HIH/provider do not match for the corresponding type of submission request, the submission will be rejected.

Table 14: Combination of the esMD Codes and Claim/Case IDs for Different Types of Submission Requests

No.	Type of Submission Request	Content Type Code (SubmissionSet Metadata Attribute)	HealthCare Facility Type Code (Document Metadata Attribute)	Format Code (Document Metadata Attribute)	Class Code (Document Metadata Attribute)	The esMDClaimId (SubmissionSet Metadata Attribute)	The esMDCaseld (SubmissionSet Metadata Attribute)	The AttachmentControlNumber (SubmissionSet Metadata Attribute)
1.	Response to ADR	1	1, 2	1	1	Required	Required if known	N/A
2.	Unsolicited PWK	7	1, 2	1	1	Required	Optional	Required
3.	Non-Emergent Ambulance Transport PA Requests	8.1	1, 2	1	1	No. The esMDClaimId XML metadata attribute tag shall not be provided	No. The esMDCaseld XML metadata attribute tag shall not be provided	N/A
5.	HHPCR	8.3	1, 2	1	1	No. The esMDClaimId XML metadata attribute tag shall not be provided	No. The esMDCaseld XML metadata attribute tag shall not be provided	N/A

No.	Type of Submission Request	Content Type Code (SubmissionSet Metadata Attribute)	HealthCare Facility Type Code (Document Metadata Attribute)	Format Code (Document Metadata Attribute)	Class Code (Document Metadata Attribute)	The esMDClaimId (SubmissionSet Metadata Attribute)	The esMDCaseld (SubmissionSet Metadata Attribute)	The AttachmentControlNumber (SubmissionSet Metadata Attribute)
6.	DMEPOS	8.4	1,2	1	1	No. The esMDClaimId XML metadata attribute tag shall not be provided	No. The esMDCaseld XML metadata attribute tag shall not be provided	N/A
7.	HOPD	8.5	1,2	1	1	No. The esMDClaimId XML metadata attribute tag shall not be provided	No. The esMDCaseld XML metadata attribute tag shall not be provided	N/A
7.	First Level Appeal Requests	9	1, 2	1	1	Optional	Optional	N/A
8.	Second Level Appeal Requests	9.1	1, 2	1	1	Optional	Optional	N/A
9.	Advance Determination of Medicare Coverage	10	1, 2	1	1	Not Required	Optional	N/A

No.	Type of Submission Request	Content Type Code (SubmissionSet Metadata Attribute)	HealthCare Facility Type Code (Document Metadata Attribute)	Format Code (Document Metadata Attribute)	Class Code (Document Metadata Attribute)	The esMDClaimId (SubmissionSet Metadata Attribute)	The esMDCaseld (SubmissionSet Metadata Attribute)	The AttachmentControlNumber (SubmissionSet Metadata Attribute)
10.	RA Discussion Requests	11	1, 2	1	1	Required	Required if known	N/A
11.	DME Phone Discussion Requests	11.1	1, 2	1	1	Required	Required if known	N/A
12.	Supporting Documentation for the X12N 278 5010 Request	13	1, 2	1	1	No. The esMD ClaimID XML metadata attribute tag shall not be provided	No. The esMD systemCaseld XML metadata attribute tag shall not be provided	Required

4.3 Submitting Split Payloads

There is an **optional** functionality provided in esMD for HIHs to use while submitting the payloads larger than the 200 MB in size. To facilitate the RC to identify the split payloads, the additional two tags for parent Unique ID and Split Number are added in the XDR requests.

The following are the validations occur in esMD when the request contain either Parent Unique ID or the Split number or both the values.

1. The Parent Unique Number and the submission Unique ID should be the same for the first split load transaction;
2. The parent Unique Number provided in the first split transaction must be used in the rest of the split transactions. This helps RC to identify all the split transactions.
3. The Parent Unique ID must be the same for the first split and the rest of the split transactions based on the split payloads.
4. The esMD system will reject the subsequent split transactions for the same parent Unique Number if the first split load was rejected due to any validation errors.
5. The HIH must submit the subsequent split submission after receiving the successful processing confirmation (i.e., esMD - Delivery To Enterprise File Transfer) of the first split payload.
6. Split number provided in the request helps HIHs and RCs to better manage and track split payloads. Minimum length of the Split number is three and maximum length is five. Example: 1-3, 99-99.
7. When the esMD receives the duplicate split number or any split number is missed or additional split numbers than numbered in the request for the same Parent Unique Number, HIH would receive the warning message but that particular split transaction is still sent to RC.
8. When any of the split payloads fails validations in esMD or any of the splits are missed, HIHs are required to send only the split transaction that had failed/missed earlier.

Refer to Table 15: First Split Transaction , Table 16: Second Split Transaction , Table 17: Third Split Transaction for examples for submitting the Split payload transactions.

Table 15: First Split Transaction

```

<ns1:assertion>           <ns1:id>TD635208P_8442_7882_1477_2020080714340001701</ns1:id>
</ns1:assertion>

<ns2:Slot name="parentUniqueNumber">
<ns2:ValueList>
<ns2:Value>TD635208P_8442_7882_1477_2020080714340001701</ns2:Value>
</ns2:ValueList>
</ns2:Slot>

<ns2:Slot name="splitNumber">
<ns2:ValueList>
<ns2:Value>1-3</ns2:Value>
</ns2:ValueList>
</ns2:Slot>

```

Table 16: Second Split Transaction

```

<ns1:assertion>
<ns1:id>TestHIH_8442_7882_1477_20200804</ns1:id>
</ns1:assertion>

<ns2:Slot name="parentUniqueNumber">
<ns2:ValueList>
<ns2:Value>TD635208P_8442_7882_1477_2020080714340001701</ns2:Value>
</ns2:ValueList>
</ns2:Slot>

<ns2:Slot name="splitNumber">
<ns2:ValueList>
<ns2:Value>2-3</ns2:Value>
</ns2:ValueList>
</ns2:Slot>

```

Table 17: Third Split Transaction

```

<ns1:assertion>
<ns1:id>TestHIH_3456_7882_1477_20200805</ns1:id>
</ns1:assertion>

<ns2:Slot name="parentUniqueNumber">
<ns2:ValueList>
<ns2:Value>TD635208P_8442_7882_1477_2020080714340001701</ns2:Value>
</ns2:ValueList>
</ns2:Slot>

<ns2:Slot name="splitNumber">
<ns2:ValueList>
<ns2:Value>3-3</ns2:Value>
</ns2:ValueList>
</ns2:Slot>

```

4.4 XDR Validation

The following validations occur in the esMD for the inbound submission in XDR format:

1. TLS Authentication;
2. OID Validation (Authorization) - Home Community OID Verification against the CMS Certified HIHs based on CMS Onboarding Process;
3. Check Payload Size;
4. A Copy of Payload is Sent to Blue Coat Gateway for Virus Scanning;
5. Check for Duplicate Unique ID;
6. Claim reviewer Participation Validation;
7. Affinity Values validation;
8. Document Availability in submission;
9. Base64 SHA1 Decoding Validation for Payload attachments; and
10. Review Contractor and Content Type Code cross validation – this is to check whether a particular CMS RC accepts a particular document submission (e.g., Response to ADR,

First Level Appeal Requests and Second Level Appeal Requests., ADMC Request, RA Discussion Request, Non-Emergent Ambulance Transport Requests, HHPCR demonstration requests, DME Phone Discussion Request , DMEPOS and HOPD).

4.5 XDR Error Messages

Table 18: Error Messages provides details for each error message and identifies the error messages currently used by the esMD Gateway.

Table 18: Error Messages

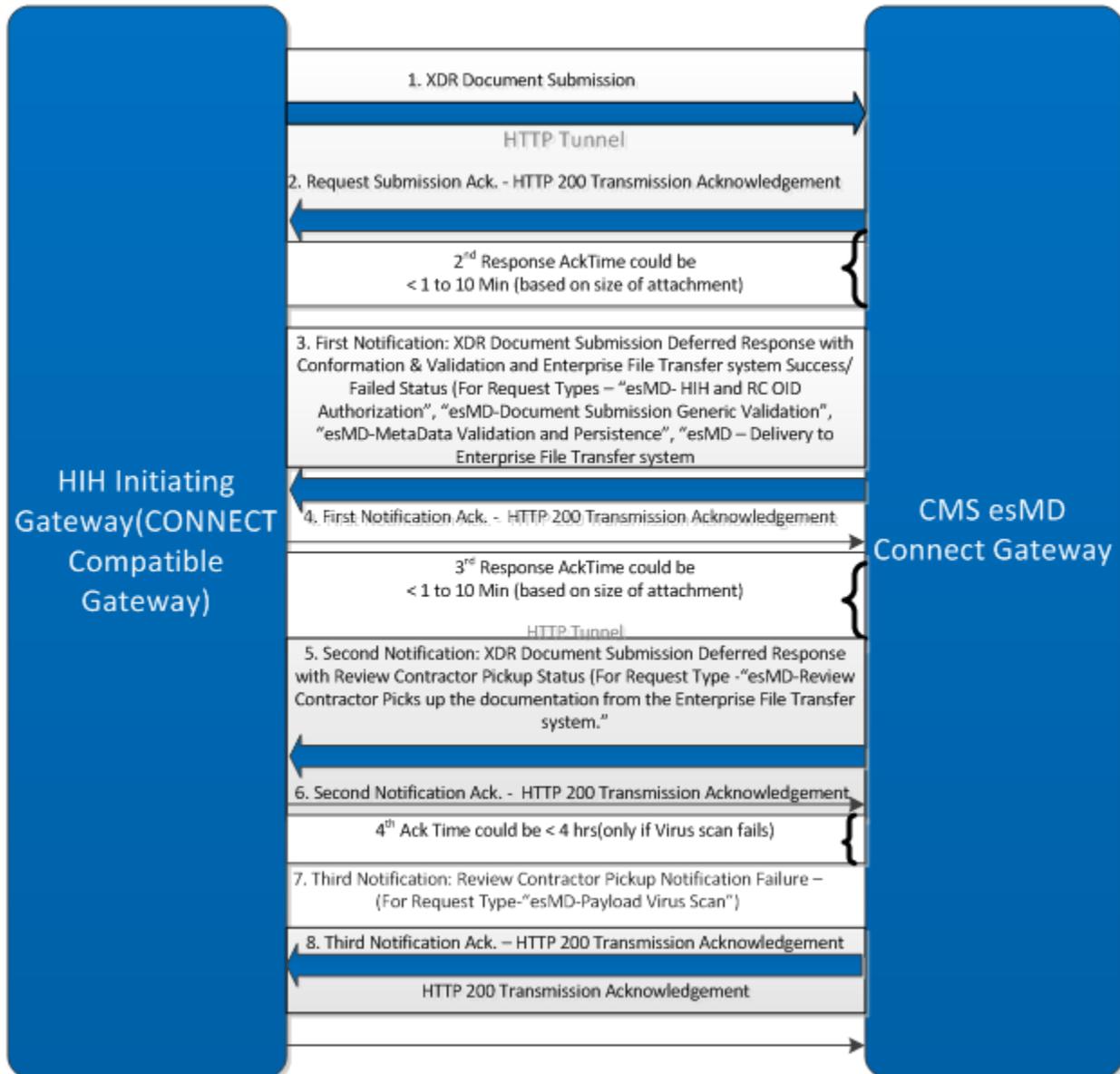
No.	Fatal Error Code	Discussion
1.	XDSHOIDIdDoesNotMatch	The XDR specifies where the submitted HIH Home Community IDs must match between documents (i.e., submission sets and the esMD Onboarded HIH OID).
2.	XDSDuplicateUniqueIDInRegistry	The UniqueID received was not unique within the Registry. The UniqueID could have been attached to earlier XDSSubmissionSet.
3.	XDSMissingDocumentMetadata	The MIME package contains the MIME part with Content-ID header not found.
4.	XDSRegistryMetadataError	An Error was detected in the metadata. The Actor name indicates where the error was detected. The CodeContext indicates the nature of the problem. This error code will be used to convey validation related errors for the following: Class Code, Content Type Code, Format Code, HealthCare Facility Type code, Confidentiality Code, the esMDClaimId, the esMDCaseld, and NPI. It will also be used to convey errors related to RC OID and Content Type Code cross validation.
5.	XDSMissingDocument	The Metadata exists with no corresponding attached document.
6.	XDSNonIdenticalHash	The Hash code of the attached document does not match.
7.	CMS DocumentVirus ScanError	Any Antivirus scan failures that occur in the process of delivery and at RC end.
8.	XDSRegistryError	Internal the esMD Registry/Repository Error
9.	XDSRegistryBusy	Too Much Activity
10.	XDSRegistryOutOfResources	Resources are low
11.	RCAdministrativeError	Administrative Errors was received from RC. This error code will be used to convey RC Administrative related errors for the following: corrupt Files

* Warning messages will be considered as information and will not be categorized as fatal errors. No warning messages have been identified at this time.

4.6 XDR Status and Notification Messages

Refer to Figure 6: Document Submission Deferred Responses with Multiple HTTP Connections for the information discussed in this section.

Figure 6: Document Submission Deferred Responses with Multiple HTTP Connections



4.6.1 The esMD First Acknowledgment - HTTP Status Code

HIHs will take actions based on the HTTP Status code. The HTTP Status code of 200 indicates a successful submission while the HTTP status codes from 300 through 499

indicate the possibility of a fatal error. The esMD Team expects HIHs to take appropriate action to fix fatal errors. The esMD specific HTTP Status codes series will begin from 500. HTTP status codes are the codes that the client (HIH) Web server uses to communicate with the esMD Web browser or user agent.

The HTTP status codes will allow HIHs to control their Web server with a higher degree of accuracy and effectiveness.

Table 19: HTTP Status Codes indicates the category assigned to each HTTP Status Code numerical series.

Table 19: HTTP Status Codes

HTTP Status Code Series	Code Category
HTTP Status Codes 100-101	Informational Status Codes
HTTP Status Codes 200-206	Successful Status Codes
HTTP Status Codes 300-307	Redirection Status Codes
HTTP Status Codes 400-416	Client Error Status Codes
HTTP Status Codes 500-505	Server Error Status Codes

For more details, please visit: http://webdesign.about.com/od/http/a/http_status_codes.htm.

The XDR Deferred Document Submission Response SOAP message will have the Assertions, Target Communities (as HIH OID, Description, and Name), and Response.

To correlate the request to the response, the unique ID (AssertionType.getSamlAuthzDecisionStatement().getEvidence().getAssertion().getId()) and message ID will be copied back into the response message.

4.6.2 Success Message

Refer to Figure 7: Success Message Example.

Figure 7: Success Message Example

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header>
    <Action
      xmlns="http://www.w3.org/2005/08/addressing">urn:ihe:iti:xdr:2007:XDRRequestAcknowledgem
entMessage</Action>
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:7a38905c-8235-400c-
8c7a-bf96f5a12834</MessageID>
    <To
      xmlns="w.w3.org/2005/08/addressing">http://www.w3.org/2005/08/addressing/anonymous</To>
    <RelatesTo xmlns="http://www.w3.org/2005/08/addressing">uuid:37f4ac23-da88-4fcb-8030-
dd15d9835ded</RelatesTo>
```

```

<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-
wss-wssecurity-utility-1.0.xsd" soap:mustUnderstand="true">
  <wsu:Timestamp wsu:id="TS-131">
    <wsu:Created>2015-02-09T17:07:23.267Z</wsu:Created>
    <wsu:Expires>2015-02-09T17:12:23.267Z</wsu:Expires>
  </wsu:Timestamp>
  <wsse11:SignatureConfirmation xmlns:wsse11="http://docs.oasis-open.org/wss/oasis-wss-
wssecurity-secext-1.1.xsd"
Value="SNkSuCQE5E9IGAOWSG5N3zxmwexC1m4YEFi70phOUeJO2I/3PZhF9FynZEUji9C5DdVK
oSS8eVmh/WqExC8dTSVZahSeSbwK+jxE484hTRJtT5gxnj7G4/5OkMmcxYDBkdILOyZNZy6Pmh
mZ1RxAFNzNTPOCgrnbuFlceTg5FT8ERaNV4y/4CDlpRIPDYgt7AoQvhNINeBsJzgcFiSzUijFFTut
xfK+Rvs/53aoyEDtXsGgw1Xf+HFGBAN+CjcNi/pHuk0HEIO1U8aLfiJjqbYs1sAjiB+4YVDTwHyxsi2
jdCBzww/w/V1fRZMF08sMauHhTjz9nyHmZK2H/zWV24w==" wsu:id="SC-132"/>
</wsse:Security>
</soap:Header>
<soap:Body>
  <ns6:XDRAcknowledgement xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
xmlns:ns2="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" xmlns:ns3="urn:oasis:names:tc:ebxml-
regrep:xsd:lcm:3.0" xmlns:ns4="urn:ihe:iti:xds-b:2007" xmlns:ns5="urn:oasis:names:tc:ebxml-
regrep:xsd:query:3.0" xmlns:ns6="http://www.hhs.gov/healthit/nhin">
    <ns6:message status="urn:oasis:names:tc:ebxml-
regrep:ResponseStatusType:RequestAccepted"/>
  </ns6:XDRAcknowledgement>
</soap:Body>
</soap:Envelope>

```

4.6.3 The esMD Error Messages

Figure 8: XDR Error Message Example serves as a generic XDR error message example. Note the use of errorCode and codeContext below.

Figure 8: XDR Error Message Example

```

<ns2:RegistryResponse xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
xmlns:ns2="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" xmlns:ns3="urn:oasis:names:tc:ebxml-
regrep:xsd:query:3.0" xmlns:ns4="http://www.hhs.gov/healthit/nhin"
xmlns:ns5="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0" requestId="esMD - Meta Data
Validation and Persistence" status="urn:oasis:names:tc:ebxml-
regrep:ResponseStatusType:Failure">
  <ns2:ResponseSlotList>
    <Slot name="esMDTransactionId">
      <ValueList>
        <Value> ABF000007845931</Value>
      </ValueList>
    </Slot>
    <Slot name="esMDClaimId">
      <ValueList>
        <Value>1234567890123</Value>
      </ValueList>
    </Slot>
    <Slot name="esMDCaseld">

```

```

    <ValueList>
      <Value>1234567890123</Value>
    </ValueList>
  </Slot>
  <Slot name="contentTypeCode">
    <ValueList>
      <Value>9</Value>
    </ValueList>
  </Slot>
</ns2:ResponseSlotList>
<ns2:RegistryErrorList highestSeverity="urn:oasis:names:tc:ebxml-
regrep:ErrorSeverityType:Error">
  <ns2:RegistryError codeContext=" THE ESMD_317 - The Review Contractor to whom this
submission was sent does not accept this particular document, identified by the ContentType
code. Please change either the Review Contractor OID or the ContentType Code and submit
again" errorCode="XDSRegistryMetadataError" severity="urn:oasis:names:tc:ebxml-
regrep:ErrorSeverityType:Error">
  </ns2:RegistryError>
</ns2:RegistryErrorList>
</ns2:RegistryResponse>

```

4.6.4 The esMD System First Notification

4.6.4.1 Metadata Validation

Based on the following validations, an asynchronous XDR Response message with success or detailed failed acknowledgment messages will be sent out to the HIH:

1. Validate the syntaxes;
2. Validate Semantics with the esMD affinity domain values;
3. Validate Payload Size;
4. Validate duplicate Unique ID for the message;
5. Validate participation of intended recipient claim reviewers;
6. Validate HIH OID authorization based on the CMS Onboarding; and
7. Cross validate RC OID and Content Type Code to check whether a particular RC accepts a document submission (e.g., Responses to ADR, First Level Appeal Requests and Second Level Appeal Requests., ADMC, RA Discussion Requests, DME Phone Discussion Request, Non-Emergent Ambulance Transport PA Requests, DMEPOS ,HHPCR and HOPD).

This acknowledgment will be sent anywhere from less than one minute up to ten minutes after validation and is based on the size of attachment.

4.6.4.2 Metadata Validation Errors

Table 20: Sample Error Message Content gives the sample first notification response “error message content” that will be sent for different scenarios.

The error messages listed in shall be sent in the First Notification Response.

Table 20: Sample Error Message Content

No.	Use Case	Scenario	First Notification Error Message	Comments
1.	All	Combination of Content Type Code, Healthcare FacilityType Code, Format Code and Class Code is incorrect	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_315 - The combination of Content Type Code, Healthcare Facility Type Code, Format Code, and Class Code is incorrect for this type of document submission. Correct and resubmit."/> </ns10:RegistryErrorList></pre>	N/A
2.	All	Invalid Content Type Code	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_316 - The Content Type Code is incorrect; the submission is not accepted. Correct and resubmit."/> </ns10:RegistryErrorList></pre>	N/A
3.	All	Duplicate Submission	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSDuplicateUniqueIdInRegistry" codeContext=" THE ESMD_302 - Duplicate Claim document submission found, the Claim document submission was not accepted."/> </ns10:RegistryErrorList></pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
4.	All	NPI is incorrect	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_312 - Either NPI length or data type is incorrect; the submission is not accepted."/> </ns10:RegistryErrorList> </ns20:RegistryResponse> </pre>	N/A
5.	ADR, RA Discussion Requests and DME Phone Discussion Request	Claim ID format is incorrect	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_318 - The Claim ID was sent in the incorrect composite format. The correct format needs to be 'Claim ID ^^&RCOID&ISO'. Please check the format and resubmit again." /> </ns10:RegistryErrorList> </pre>	N/A
6.	ADR, RA Discussion Requests and DME Phone Discussion Request.	Case Id format is incorrect	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_319 - The Case ID was sent in the incorrect composite format. The correct format needs to be 'CaseID ^^&RCOID&ISO'. Please check the format and resubmit again." /> </ns10:RegistryErrorList> </pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
7.	ADR, ADMC Requests, RA Discussion Requests and DME Phone Discussion Request.	Case Id is more than 32 characters in length	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_311 - Case ID is more than 32 characters; the submission is not accepted." /> </ns10:RegistryErrorList> </pre>	N/A
8.	Non-Emergent Ambulance Transport, Pre-Claim Review (PCR) Demonstrations for HHPCR , Durable Medical Equipment, Prosthetics/ Orthotics & Supplies (DMEPOS) and Hospital Outpatient Department Services (HOPD) requests.	Submission request contains Claim and Case Id tags	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_322 – Case ID is an invalid field for PA Requests."/> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_321 – Claim ID is not allowed. Resubmit with no XML tag for the Claim ID." /> </ns10:RegistryErrorList> </pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
9.	All	Review Contractor does not accept a document submission	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode=" XDSRegistryMetadataErrorXDSHOIDIdDoesNotMatch" codeContext=" THE ESMD_317 - The Review Contractor to whom this submission was sent does not accept this particular document, identified by the ContentType code. Please change either the Review Contractor OID or the ContentType Code and submit again." /> </ns10:RegistryErrorList> </pre>	N/A
10.	All programs requiring Claim ID	Claim Id for ADR, First Level Appeal Requests and Second Level Appeal Requests., RA Discussions and DME Phone Discussion Request does not match either the 8 numeric, 13 numeric or 15 numeric or 17-23 varchar	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_320 - Either the length or format of the Claim ID is incorrect. The Claim ID needs to be either 8 or 13-15 numeric characters or 17-23 alphanumeric (the only special characters allowed are hyphens, underscores and spaces) in length. Please correct and resubmit. "/> </ns10:RegistryErrorList> </pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
11.	ADR	ADR PERM transaction submitted with the Case ID in standard format	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_323 - For submissions to PERM, the esMD Claim ID value needs to be blank and the esMD Case ID value needs to be the PERM ID, which is 11 alphanumeric characters long or in the composite format CaseID^^&amp;RCOID&amp;ISO. Correct and resubmit." /> </ns10:RegistryErrorList> </pre>	N/A
12.	All	XDR submission request sent by the HIH could not be processed by the esMD Gateway because of system issues	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_000 - There was an error processing your request at this time by the esMD Data Application. Please retry. If you get the same error, please notify the esMD Help Desk." /> </ns10:RegistryErrorList> </pre>	N/A
12. Cont. 1	No additional information	No additional information	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_203 - There was an error validating the HIH/RC OID because of system issues. Please retry. If you get the same error, please notify the esMD Help Desk." /> </ns10:RegistryErrorList> </pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
12. Cont. 2	No additional information	No additional information	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_313- There was an error validating the submission metadata because of system issues. Please retry. If you get the same error, please notify the esMD Help Desk." /> </ns10:RegistryErrorList> </pre>	N/A
13.	All	XDR submission request sent by the HIH gateway cannot be processed by the esMD Gateway since the payload size is more than 200 MB in size.	<pre> <ns3:RegistryErrorList> <ns3:RegistryError errorCode="XDSRegistryOutOfResources" codeContext=" THE ESMD_324 - The submission is not accepted because the esMD Gateway cannot process requests with a payload size more than 200 MB in size. Please make sure the encoded payload is less than 200 MB in size and resubmit." /> </ns3:RegistryErrorList> </pre>	N/A
14.	All	Copy files in Storage Area Network /Storage Area Network area is not available	<pre> <ns3:RegistryErrorList highestSeverity="ERROR"> <ns3:RegistryError severity="ERROR" errorCode="XDSRegistryOutOfResources" codeContext=" THE ESMD_001 - THE ESMD internal system error Please resubmit." /> </ns3:RegistryErrorList> </pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
15.	All	File fails to copy to file transfer folder	<pre> <ns3:RegistryErrorList highestSeverity="ERROR"> <ns3:RegistryError severity="ERROR" errorCode="XDSRegistryOutOfResources" codeContext=" THE ESMD_002 - THE ESMD internal system error (File copy error). Please resubmit." /> </ns3:RegistryErrorList> </pre>	N/A
16.	All	File contains virus	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="CMSDocumentVirusScanError " codeContext=" THE ESMD_127 - THE ESMD validation error: Submission is infected with virus xxx." /> </ns10:RegistryErrorList> </pre>	N/A
17.	All	If file fails to decode	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSNonIdenticalHash" codeContext=" THE ESMD_128 - THE ESMD Processing error (Unable to decode submission). Please resubmit." /> </ns10:RegistryErrorList> </pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
18.	All	File fails to zip	<pre> <ns3:RegistryErrorList highestSeverity="ERROR"> <ns3:RegistryError severity="ERROR" errorCode="XDSRegistryOutOfResources" codeContext=" THE ESMD_400 - THE ESMD internal system error (Compression error). Please resubmit." /> </ns3:RegistryErrorList> </pre>	N/A
19.	All	Payload is missing	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSMissingDocument" codeContext=" THE ESMD_369 - Submission is missing the payload. Please resubmit." /> </ns10:RegistryErrorList> </pre>	N/A
20.	All	Document ID inside metadata does not match the document ID assigned to payload	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryMetadataError" codeContext=" THE ESMD_368 - validation error: Document ID inside metadata does not match the Payload Document ID." /> </ns10:RegistryErrorList> </pre>	N/A
21.	All	MIME type is not correct	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSMissingDocumentMetadata" codeContext=" THE ESMD_367 - MIME type is not correct. Correct and resubmit." /> </ns10:RegistryErrorList> </pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
22.	All	Unzip file fails	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_405 - Review Contractor Client processing error (Unzip failure). Please resubmit." /> </ns10:RegistryErrorList> </pre>	N/A
23.	All	Checksum does not match	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_406 - Review Contractor Client processing error (Checksum issue). Please resubmit." /> </ns10:RegistryErrorList> </pre>	N/A
24.	XDR supporting documentation with CTC 13 for the previously submitted X12N 278 PA requests.	ACN does not match the ACN in the X12	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_376 - Attachment Control Number does not match the Attachment Control Number received in X12N 278 request. Provide matching X12N 278 Attachment Control Number and resubmit." /> </ns10:RegistryErrorList> </pre>	N/A
25.	XDR supporting documentation with CTC 13 for the previously submitted X12N 278 PA requests.	Invalid ACN	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_377 - Incorrect format/length of the Attachment Control Number. Provide a valid X12N 278 Attachment Control Number and resubmit." /> </ns10:RegistryErrorList> </pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
26	All	Virus Scanning	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_375 - esMD Virus Scanning service is unavailable. Retry later" /> </ns10:RegistryErrorList></pre>	N/A
27	All	Invalid HIH OID	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_201- Either HIH OID is invalid or agreement has expired. Correct and resubmit." /> </ns10:RegistryErrorList></pre>	N/A
28	All	Parent Unique ID and Unique ID do not match	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_573: The Parent Unique ID and Unique ID received in the Submission does not match. Correct and Resubmit." /> </ns10:RegistryErrorList></pre>	N/A
29	All	Split Number Length and Format	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_575: The Split Number received is in invalid format, must be minimum 3 and maximum 5 in length and can contain numbers and dash. Correct and Resubmit." /> </ns10:RegistryErrorList></pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
30	All	Missing a Split Number sequence	<pre><ns10:RegistryErrorList highestSeverity="WARNING"> <ns10:RegistryError severity="WARNING" errorCode="XDSRegistryError" codeContext=" THE ESMD_576: Warning Message: Missing Split number sequence from the Submission for the Parent Unique ID <ParentUniqueID>." /> </ns10:RegistryErrorList></pre>	N/A
31	All	More split numbers received than numbered	<pre><ns10:RegistryErrorList highestSeverity="WARNING"> <ns10:RegistryError severity="WARNING" errorCode="XDSRegistryError" codeContext=" THE ESMD_577: Warning Message: Additional split number received for the Parent Unique ID." /> </ns10:RegistryErrorList></pre>	N/A
32	All	Duplicate split numbers received in the submission	<pre><ns10:RegistryErrorList highestSeverity="WARNING"> <ns10:RegistryError severity="WARNING" errorCode="XDSRegistryError" codeContext=" THE ESMD_578: Warning Message: Duplicate split number received from the Submission for the Parent Unique ID <ParentUniqueID>." /> </ns10:RegistryErrorList></pre>	N/A
33	All	Combination of template ID and format code received in the submission	<pre><ns10:RegistryErrorList highestSeverity="WARNING"> <ns10:RegistryError severity="WARNING" errorCode="XDSRegistryError" codeContext=" THE ESMD_580: Warning Message: The combination of Template ID and Format code is incorrect. Correct and resubmit." /> </ns10:RegistryErrorList></pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
34	All	Invalid Confidentiality Code	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_306 - Either Confidentiality Code or corresponding Schema Code is invalid; the submission is not accepted. Correct and resubmit." /> </ns10:RegistryErrorList></pre>	N/A
35	Unsolicited PWK documents	The format and length for the ACN is a minimum of 2 and a maximum of 80 alphanumeric (A-Za-z0-9)characters	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_561 - Invalid Attachment Control Number. Correct and Resubmit. " /> </ns10:RegistryErrorList></pre>	N/A
36	All	Reject current split submission if Parent split submission was not accepted by esMD	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_579 - The current split submission is rejected because the parent split submission was not accepted by esMD. Correct and resubmit." /> </ns10:RegistryErrorList></pre>	N/A
37	All	More than one XML attachment received in the eMDR Registration Request	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_585 - The request received from HIH has more than one XML attachment. Correct and resubmit." /> </ns10:RegistryErrorList></pre>	N/A

No.	Use Case	Scenario	First Notification Error Message	Comments
38	All	MIME Type Code and CTC combination (Applies to eMDR Registration Request)	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_586 - Invalid combination of MIME Type and Content Type Code received in the XDR Request Metadata. Correct and resubmit." /> </ns10:RegistryErrorList></pre>	N/A
39	eMDR Service Registration	Schema validation failed for the data elements received in XML	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_587 - Unable to parse Services Registration Request XML file. Correct and resubmit." /> </ns10:RegistryErrorList></pre>	eMDR Registration Request XML schema validation failed for below data elements: Provider Name, Provider Zip Code, Provider Tax ID, Service Code,)
40	eMDR Service Registration	Service Start Date for eMDR Registration	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_611 - The Service Start Date is Missing for NPI [NPI] in the eMDR Registration Request XML. Correct and resubmit." /> </ns10:RegistryErrorList></pre>	Service Start Date is valid and present for action code "A"
41	eMDR Service Registration	Service Code is for eMDR Registration	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_613 - The Service Code associated with NPI [NPI] received in the eMDR Registration Request XML for Action Code <<A/R>> is invalid. Correct and resubmit." /> </ns10:RegistryErrorList></pre>	Service Code is valid and present when the action code is "A" or "R"

No.	Use Case	Scenario	First Notification Error Message	Comments
42	eMDR Service Registration	Unique Provider NPI	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_614 - The NPI [NPI] received must be unique within the eMDR Registration Request XML. Correct and resubmit." /> </ns10:RegistryErrorList></pre>	<p>Provider NPI must be Unique if the Action Code is "A" or "R".</p> <p>Duplicate NPI</p> <p>NPI received twice</p>
43	eMDR Service Registration	Active NPI/NPI Consent Check	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_615 - The NPI [NPI] received in the eMDR Registration Request for Action Code "A" is inactive or missing consent in the NPPES. Correct and Resubmit." /> </ns10:RegistryErrorList></pre>	<p>NPI must be active in the NPPES if the Action Code is "A".</p>
44	eMDR Service Registration	Consent value check	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_618 - The NPI [NPI] received in the eMDR Registration Request has incorrect value [consentTxtFromNPPES] for the NPPES consent. Correct value is "CMS esMD eMDR" in the [useOtherDescription] field. Request provider to correct the consent and resubmit the eMDR Registration Request" /> </ns10:RegistryErrorList></pre>	<p>NPI consent value must be "CMS esMD eMDR"</p>
45	eMDR Service Registration	HIH OID and NPI	<pre><ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_616 - The HIH OID and NPI [NPI] received in the eMDR Registration Request XML for Action Code "A" is already registered with the submitting HIH or other HIH. Correct and Resubmit." /> </ns10:RegistryErrorList></pre>	<p>Combination Check of HIH OID and NPI in the eMDR Registration Request XML for Action Code "A"</p>

No.	Use Case	Scenario	First Notification Error Message	Comments
46	eMDR Service Registration	Provider not Linked to any HIH	<pre> <ns10:RegistryErrorList highestSeverity="ERROR"> <ns10:RegistryError severity="ERROR" errorCode="XDSRegistryError" codeContext=" THE ESMD_617 - The Action Code "R" Received in the eMDR Registration Request is not allowed for NPI [NPI] as association with the HIH OID does not exist in esMD. Correct and Resubmit." /> </ns10:RegistryErrorList> </pre>	NPI is not linked to any HIH OID in eMDR Registration Request XML for Action Code "R".

4.6.5 The esMD System Second Notification

4.6.5.1 Claim Review Pickup Status Notification

A Notification message will be sent to the HIH after the RC picks up the submitted documents from the TIBCO Managed File Transfer (MFT) Server. The time to receive this notification acknowledgment is dependent upon the RC inbound submission pulling process from the TIBCO MFT Server. If no response is received after eight hours, the sender should contact the esMD Support team (esMD_Support@cms.hhs.gov). Refer to Figure 9: Claim Review Pickup Status Notification.

Note: The format of the “HIHToESMDDeliveryTimeStamp” and “ESMDClaimReviewerPickUpTimeStamp” are updated to include the offset. Figure 9: Claim Review Pickup Status Notification includes the new format.

Figure 9: Claim Review Pickup Status Notification

```
<ns2:RegistryResponse xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
xmlns:ns2="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0"
xmlns:ns3="urn:oasis:names:tc:ebxml-regrep:xsd:query:3.0"
xmlns:ns4="http://www.hhs.gov/healthit/nhin" xmlns:ns5="urn:oasis:names:tc:ebxml-
regrep:xsd:lcm:3.0" requestId="esMD - Review Contractor Pick up the documents from
CMS Enterprise File Transfer" status="urn:oasis:names:tc:ebxml-
regrep:ResponseStatusType:Success">
  <ns2:ResponseSlotList>
    <Slot name="esMDTransactionId">
      <ValueList>
        <Value>ABC000000001234</Value>
      </ValueList>
    </Slot>
    <Slot name="esMDClaimId">
      <ValueList>
        <Value>Claim5678901234568</Value>
      </ValueList>
    </Slot>
    <Slot name="esMDCaseld">
      <ValueList>
        <Value>AA90133333301</Value>
      </ValueList>
    </Slot>
    <Slot name="contentTypeCode">
      <ValueList>
```

```

    <Value>1</Value>
  </ValueList>
</Slot>
<Slot name="HIHTo THE ESMDDeliveryTimeStamp">
  <ValueList>
    <Value>2018-05-03T11:33:50.510-04:00</Value>
  </ValueList>
</Slot>
<Slot name=" THE ESMDClaimReviewerPickUpTimeStamp">
  <ValueList>
    <Value>2018-05-03T11:33:51.518-04:00</Value>
  </ValueList>
</Slot>
<Slot name=" THE ESMDPickedUpClaimReviewer">
  <ValueList>
    <Value>urn:oid:2.16.840.1.113883.13.34.110.1.999.2</Value>
  </ValueList>
</Slot>
</ns2:ResponseSlotList>
</ns2:RegistryResponse>

```

4.6.5.2 Claim Review Pickup Error Notification

This notification message is sent to the HIH in the event there is an error in processing the downloaded file at the RC end or in the TIBCO MFT Server. If no response is received after eight hours, the sender should contact the esMD Support team (esMD_Support@cms.hhs.gov). Refer to Figure 10: Claim Review Pickup Error Notification Example.

Figure 10: Claim Review Pickup Error Notification Example

```

<ns2:RegistryResponse status="urn:oasis:names:tc:ebxml-
regrep:ResponseStatusType:Failure"
  requestId="esMD - Review Contractor Pickup the documents from CMS
Enterprise File Transfer">
  <ns4:ResponseSlotList>
    <ns3:Slot name="esMDTransactionId">

```

```

<ns3:ValueList>
  <ns3:Value> ABF000007845931</ns3:Value>
</ns3:ValueList>
</ns3:Slot>
<ns3:Slot name="HIHTo THE ESMDDeliveryTimeStamp">
  <ns3:ValueList>
    <ns3:Value>20150211121249</ns3:Value>
  </ns3:ValueList>
</ns3:Slot>
<ns3:Slot name=" THE ESMDClaimReviewerPickUpTimeStamp">
  <ns3:ValueList>
    <ns3:Value>20150211121249</ns3:Value>
  </ns3:ValueList>
</ns3:Slot>
<ns3:Slot name=" THE ESMDPickedUpClaimReviewer">
  <ns3:ValueList/>
</ns3:Slot>
</ns4:ResponseSlotList>
<ns4:RegistryErrorList highestSeverity="urn:oasis:names:tc:ebxml-
regrep:ErrorSeverityType:Error">
  <ns4:RegistryError codeContext="Review Contractor Client processing error (Unzip
failure). Please resubmit"
    errorCode="XDSRegistryMetadataError"
    severity="urn:oasis:names:tc:ebxml-regrep:ErrorSeverityType:Error"/>
</ns4:RegistryErrorList>
</ns2:RegistryResponse>

```

4.6.6 The esMD System Third Notification

4.6.6.1 PA and HHP CR Review Response

This notification message includes PA Review Response in the event the RC has determined their decision for a PA and HHP CR request. The notification message could include 3 types of responses, i.e.:

1. Affirmed (A) - An Affirmed response denotes that the RC has successfully approved the PA and HHP CR request. See Section 4.9.1.1, Situational Data Elements for Affirmed Decision for more details;

2. Non-Affirmed (N) - A Non-Affirmed response denotes that the RC has not approved the PA and HHPCR request for one or more reasons. See Section 4.9.1.2, Situational Data Elements for Non-Affirmed Decision, for more details;
3. Affirmed with a Change (M) - An Affirmed with a Change response denotes that the RC has partly approved the Ambulance PA . See Section 4.9.1.3, Situational Data Elements for Modified Decision , for more details; and
4. Partially Affirmed (P) – A Partially-Affirmed response denotes that the request level review decision response to the PCR request (Partially Affirmed decision is set at the request level based on the decisions (Affirmed, Non-Affirmed, Modified (in case of Ambulance) at service levels).

CMS mandates that the Review Contractor submit a response for a PA and PCR request received by the Review Contractor within ten business days. If neither a PA and PCR review response nor a PA and PCR review error response is received after ten days, the sender should contact the esMD Support team (esMD_Support@cms.hhs.gov).

4.6.6.2 PA and PCR Review Error Response

This notification message includes PA/HHPCR Error Response in the event RC has determined their decision for a PA request. The notification message includes a Reject (R) response from RCs. A Rejected response denotes that the RC has completely rejected the PA request for one or more reasons.

If no response is received after 10 days, the sender should contact the esMD Support Team (esMD_Support@cms.hhs.gov).

See Section 4.9.1.4, Situational Data Elements for Rejected Decision for more details.

4.6.7 Review Contractor Administrative Error Notification

This notification message includes an Administrative Error Response in the event RC encounters issues on inbound submissions. The notification message could include four types of responses:

1. Corrupt Files/Cannot Read Files;
2. Submission Send to Incorrect RC;
3. Virus Found;
4. Other;
5. Incomplete File;
6. Unsolicited Response;
7. Documentation cannot be matched to a case/claim; and
8. Duplicate.

These Administrative Error Responses are sent to the respective HIH as well as the esMD Support Team to resolve manually. Refer to Figure 11: Administrative Error Response XML Message Example.

Figure 11: Administrative Error Response XML Message Example

```
<ns17:RegistryResponse requestId="esMD- PA Administrative Response"
  status="urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Failure">
  <ns6:ResponseSlotList>
    <ns5:Slot name="esMDTransactionId">
```

```

<ns5:ValueList>
  <ns5:Value>ABC000000001234</ns5:Value>
</ns5:ValueList>
</ns5:Slot>
</ns6:ResponseSlotList>
<ns6:RegistryErrorList highestSeverity="ERROR">
  <ns6:RegistryError severity="ERROR"
    errorCode="RCAdministrativeError"
    codeContext=" THE ESMD_410 - Files that were received by Review Contractor
have been corrupt."/>
  <ns6:RegistryError severity="ERROR"
    errorCode="RCAdministrativeError"
    codeContext=" THE ESMD_411 - The Submission is sent to incorrect Review
Contractor."/>
  <ns6:RegistryError severity="ERROR"
    errorCode="RCAdministrativeError"
    codeContext=" THE ESMD_412 - Files that were received by Review Contractor
have been infected with virus."/>
  <ns6:RegistryError severity="ERROR"
    errorCode="RCAdministrativeError"
    codeContext=" THE ESMD_413 - Review Contractor cannot read the files that
have been submitted."/>
  <ns6:RegistryError severity="ERROR"
    errorCode="RCAdministrativeError"
    codeContext=" THE ESMD_414 - Other errors encountered by Review
Contractor."/>
</ns6:RegistryErrorList>
</ns17:RegistryResponse>

```

4.6.8 Information Contained in Response Message

HIHs should look for the following information in the response message: Message ID, Unique ID, Request ID, Status, and Response Slots.

4.6.9 Message ID (Correlated with Request MessageID)

To correlate the Request MessageID with the response message, the message ID will be copied back to the response message.

Example:

```

<S:Header>
  .....
  <MessageID xmlns="http://www.w3.org/2005/08/addressing">5a3d7012-029e-4559-
9a55-49e3d80d0190</MessageID>
</S:Header>

```

4.6.10 Unique ID (Correlated with Request UniqueID)

To correlate the request UniqueID with the response, the Request UniqueID will be copied back to response message under Assertion ID.

Example:

```
<ns20:assertion>
<ns20:id>40df7c0a-ff3e-4b26-baeb-f2910f6d0mc202</ns20:id>
```

4.6.11 RequestID

The RequestID explains the type of response Type. Table 21: Possible Request Types lists the possible request types:

Table 21: Possible Request Types

No.	Request Type String	Request Type in Response Messages
1.	The esMD - HIH and RC OID Authorization The esMD - RC OID and Content Type Code Cross Validation	First Notification Response
2.	The esMD - Document Submission Generic Validation	First Notification Response
3.	The esMD - Meta Data Validation and Persistence	First Notification Response
4.	The esMD - Delivery To CMS Enterprise File Transfer System	First Notification Response
5.	The esMD - RC picks up the documents from the CMS Enterprise File Transfer system	Second Notification Response
6.	The esMD – Payload Virus Scan	Third Notification Response

Example:

```
<ns21:RegistryResponse requestId="esMD - Delivery To EFT"
status="urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success">
```

4.6.12 Status

Status describes the status of the message:

1. urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success;
2. urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Warning; or
3. urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Error.

Refer to Table 22: Status Example.

Table 22: Status Example

```
<ns2:RegistryResponse xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
xmlns:ns2="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0"
xmlns:ns3="urn:oasis:names:tc:ebxml-regrep:xsd:query:3.0"
xmlns:ns4="http://www.hhs.gov/healthit/nhin" xmlns:ns5="urn:oasis:names:tc:ebxml-
```

```

regrep:xsd:icm:3.0" requestId="esMD - Delivery To CMS Enterprise File Transfer"
status="urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success">
  <ns2:ResponseSlotList>
    <Slot name="esMDTransactionId">
      <ValueList>
        <Value>ABC000000001234</Value>
      </ValueList>
    </Slot>
    <Slot name="esMDClaimId">
      <ValueList>
        <Value>Claim5678901234568</Value>
      </ValueList>
    </Slot>
    <Slot name="esMDCasId">
      <ValueList>
        <Value>AA90133333301</Value>
      </ValueList>
    </Slot>
    <Slot name="contentTypeCode">
      <ValueList>
        <Value>1</Value>
      </ValueList>
    </Slot>
  </ns2:ResponseSlotList>
</ns2:RegistryResponse>

```

Note: In addition to the statuses listed above, the esMD also uses:

urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Failure.

In the future, both Error and Failure strings will be merged and only the 'Error' string shall be used.

4.6.13 Response Slots

The esMD specific response slots will have the esMD transaction information. The information in the slots is related to the following:

1. esMD TransactionId;

2. Caseld;
3. ClaimId; and
4. contentType Code.

Refer to Table 23: Response Slots Example.

Table 23: Response Slots Example

```

<ns7:ResponseSlotList>
  <ns8:Slot name="TransactionId">
    <ns8:ValueList>
      <ns8:Value>532</ns8:Value>
    </ns8:ValueList></ns8:Slot>
  <ns8:Slot name="ClaimId">
    <ns8:ValueList>
      <ns8:Value>69777777</ns8:Value>
    </ns8:ValueList></ns8:Slot>
  <ns8:Slot name="Caseld">
    <ns8:ValueList>
      <ns8:Value>6000045</ns8:Value>
    </ns8:ValueList>
  </ns8:Slot>
  <ns8:Slot name="contentTypeCode">
    <ns8:ValueList>
      <ns8:Value>1</ns8:Value>
    </ns8:ValueList>
  </ns8:Slot>
</ns7:ResponseSlotList>

```

4.6.14 Delivery to the CMS Enterprise File Transfer System (First Notification)

In the event the sender does not receive the first notification response within 20 minutes of the document submission, the sender may take the following steps.

1. The sender can resubmit the claim documentation a second time. After this second submission, the sender should allow 20 minutes to receive an acknowledgement response; and
2. The sender may attempt submissions for a total of three attempts. If the acknowledgement is not received after the third attempt, the sender should contact the esMD Support Team (esMD_Support@cms.hhs.gov) for further resolution.

4.7 Structured Documentation

The esMD system shall support receiving C-CDA documents and CDP Set 1 documents embedded within the XDR profile. The following LOBs, including PA programs that are currently supported receiving unstructured documentation in PDF format, shall also accept structured documentation in C-CDA and CDP Set1:

1. Responses to ADR; and
2. Supporting Documentation for PA and PCR Requests.

4.7.1 C-CDA Structure

A C-CDA document has two primary groupings of information:

1. The **header** defines the document classifications, such as the template used, patient and provider information, attachment identifier, etc.; and
2. The **body** contains the encoded clinical report that can be represented using a **nonXMLBody** or a **structuredBody** element.

esMD supports the use of wrapping encoded PDF documents, also known as unstructured documents, within the nonXMLBody with the CDA header. In addition, esMD is adopting capabilities of structured document attachments to offer participants such as HIHs or providers to encapsulate the XML-based structured document with the CDA header as XDR attachments.

4.7.2 esMD Document Metadata Changes for C-CDA Document

The following changes are made in the Document Metadata:

1. Format Code (refer to Table 24: Format Code Updates).

Table 25: esMD Program Content Types and Conformance Requirements describes the respective esMD program content types and conformance requirements for each of the structured (C-CDA) Submissions. Failure to meet the requirements for the combination of code classifications supported for Structured (C-CDA) Submissions based on esMD program CTCs would lead to submission metadata validation failures followed by rejection of the submissions with the appropriate error code.

Table 24: Format Code Updates

Format ID	Format Name	Format Description	Format Schema ID
1	HITSP C62	C62 Unstructured Document Component	2.16.840.1.113883.13.34.110.1.1000.1
2	C-CDA	CDA Structured/Unstructured Documents	2.16.840.1.113883.13.34.110.1.1000.1

Table 25: esMD Program Content Types and Conformance Requirements

CTC	Class Code	Class Code Description	Format Code	Format Code Description	Health Care Facility Type Code	Health Care Facility Type Code Description	Confidentiality Code	Confidentiality Code Description
1	2	Structured Document Submission	4	C-CDA	1	HIH	V	Very Restricted
1	2	Structured Document Submission	4	C-CDA	2	Health Care Provider	V	Very Restricted
7	1	Structured Document Submission	1	C-CDA	1	HIH	V	Very Restricted
7	1	Structured Document Submission	1	C-CDA	2	Health Care Provider	V	Very Restricted
8.1	2	Structured Document Submission	4	C-CDA	1	HIH	V	Very Restricted
8.1	2	Structured Document Submission	4	C-CDA	2	Health Care Provider	V	Very Restricted
8.3	2	Structured Document Submission	4	C-CDA	1	HIH	V	Very Restricted
8.3	2	Structured Document Submission	4	C-CDA	2	Health Care Provider	V	Very Restricted
8.4	2	Structured Document Submission	4	C-CDA	1	HIH	V	Very Restricted

CTC	Class Code	Class Code Description	Format Code	Format Code Description	Health Care Facility Type Code	Health Care Facility Type Code Description	Confidentiality Code	Confidentiality Code Description
8.4	2	Structured Document Submission	4	C-CDA	2	Health Care Provider	V	Very Restricted
8.5	2	Structured Document Submission	4	C-CDA	1	HIH	V	Very Restricted
8.5	2	Structured Document Submission	4	C-CDA	2	Health Care Provider	V	Very Restricted

4.7.3 esMD Support Clinical Document Types

Table 26: Clinical Document Templates depicts the clinical document templates that will be supported by esMD. The header identifies and classifies the document and provides information on authentication, the encounter, patient, and involved providers.

Table 26: Clinical Document Templates

S. No.	Clinical Document Type	Description	Coding Schema/ Code System	Source
1	HITSP C62	HITSP C62 Unstructured Document	2.16.840.1.113883.3.88.11.62.1	/cda:CinicalDocument/cda:templatlId/@root
2	C-CDA	Continuity of Care Documents (CCD)	2.16.840.1.113883.10.20.22.1.2	/cda:CinicalDocument/cda:templatlId/@root
3	C-CDA	Consultation Note	2.16.840.1.113883.10.20.22.1.4	/cda:CinicalDocument/cda:templatlId/@root
4	C-CDA	DIR	2.16.840.1.113883.10.20.22.1.5	/cda:CinicalDocument/cda:templatlId/@root
5	C-CDA	Discharge Summary	2.16.840.1.113883.10.20.22.1.8	/cda:CinicalDocument/cda:templatlId/@root
6	C-CDA	History and Physical (H&P)	2.16.840.1.113883.10.20.22.1.3	/cda:CinicalDocument/cda:templatlId/@root
7	C-CDA	Operative Note	2.16.840.1.113883.10.20.22.1.7	/cda:CinicalDocument/cda:templatlId/@root
8	C-CDA	Procedure Note	2.16.840.1.113883.10.20.22.1.6	/cda:CinicalDocument/cda:templatlId/@root
9	C-CDA	Progress Note	2.16.840.1.113883.10.20.22.1.9	/cda:CinicalDocument/cda:templatlId/@root

S. No.	Clinical Document Type	Description	Coding Schema/ Code System	Source
10	C-CDA	Unstructured Document	2.16.840.1.113883.10.20.22.1.10	/cda:CinicalDocument/cda:templateId/@root

4.7.4 esMD Support Structured Document in CDP Set 1

Table 27: CDP Set 1 Template ID provides the template IDs for sending the Structured Format HL7-standard CDP Set 1 (extension to the C-CDA).

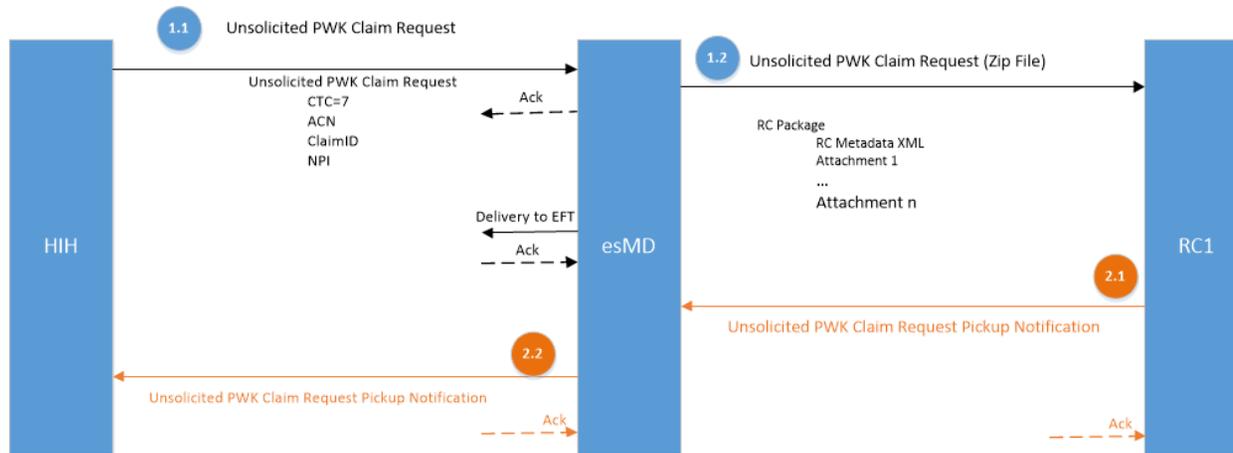
Table 27: CDP Set 1 Template ID

Type	Document Template Type	Document Template ID
CDP SET1	Enhanced Discharge Document (CDP1)	2.16.840.1.113883.10.20.35.1.2
CDP SET1	Enhanced Encounter Document (CDP1)	2.16.840.1.113883.10.20.35.1.1
CDP SET1	Enhanced Operative Note Document (CDP1)	2.16.840.1.113883.10.20.35.1.3
CDP SET1	Enhanced Procedure Document (CDP1)	2.16.840.1.113883.10.20.35.1.4
CDP SET1	Interval Document (CDP1)	2.16.840.1.113883.10.20.35.1.5

4.8 Unsolicited PWK Claim Documentations in XDR

Providers can send the unsolicited documentation to the RCs via esMD. HIHs will have the capability to send Unsolicited PWK Claim documentation in XDR format to the RCs via esMD using the new CTC 7. ACN, Claim ID, and NPI are the mandatory elements in addition to the existing Registry Metadata elements. Refer to Figure 12: Unsolicited PWK Claim Document Submission Flow.

Figure 12: Unsolicited PWK Claim Document Submission Flow



1. HIH submits the unsolicited PWK claim request:
 - a. HIH submits the unsolicited PWK claim request to esMD with information about the RC(s), Provider(s), and Service(s):
 - i. esMD sends the synchronous request acknowledgment to the HIH;
 - ii. esMD sends a “Delivered to EFT” notification (asynchronous) to the HIH after copying the request package to Enterprise File Transfer (EFT); and
 - iii. HIH sends a synchronous acknowledgment to the esMD Delivery notification.
 - b. esMD splits and submits the HIH’s unsolicited PWK claim request package to one or more RCs via EFT.
2. RC sends the unsolicited PWK claim Pickup Notification(s):
 - a. RC(s) send the unsolicited PWK claim package Pickup Notification to esMD:
 - i. esMD returns the asynchronous pickup notification acknowledgment to the RC.
 - b. esMD sends an unsolicited PWK claim request Pickup Notification to the HIH:
 - i. HIH returns a synchronous acknowledgment to the esMD’s Pickup notification.

4.8.1 Unsolicited PWK Claim Request

Figure 13: Sample PWK Claim Request shows a sample PWK Claim Request.

Note: No changes are made to the existing “Delivery to MFT” notifications and Pickup notifications.

Figure 13: Sample PWK Claim Request

```
<?xml version="1.0" encoding="UTF-8"?>
```

```

<ns0:RespondingGateway_ProvideAndRegisterDocumentSetRequest xmlns:ns0="urn:gov:hhs:fha:nhinc:common:nhinccommentity">
  <ns0:assertion xmlns:ns0="urn:gov:hhs:fha:nhinc:common:nhinccommentity">
    <urn1:homeCommunity xmlns:urn3="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" xmlns:urn4="urn:oasis:names:tc:ebxml-
regrep:xsd:rim:3.0" xmlns:urn="urn:gov:hhs:fha:nhinc:common:nhinccommentity"
xmlns:urn1="urn:gov:hhs:fha:nhinc:common:nhinccommon" xmlns:urn2="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0"
xmlns:urn5="urn:ihe:iti:xds-b:2007" xmlns:add="http://schemas.xmlsoap.org/ws/2004/08/addressing"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <urn1:description>esMD OID</urn1:description>
      <urn1:homeCommunityId>urn:oid:123.456.657.126</urn1:homeCommunityId>
      <urn1:name>esMD OID</urn1:name>
    </urn1:homeCommunity>
    <ns1:nationalProviderId xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">111111112</ns1:nationalProviderId>
    <ns1:uniquePatientId
xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">urn:oid:2.16.840.1.113883.13.34.110.1.999.1</ns1:uniquePatientId>
      <urn1:userInfo xmlns:urn3="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" xmlns:urn4="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
xmlns:urn="urn:gov:hhs:fha:nhinc:common:nhinccommentity" xmlns:urn1="urn:gov:hhs:fha:nhinc:common:nhinccommon"
xmlns:urn2="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0" xmlns:urn5="urn:ihe:iti:xds-b:2007"
xmlns:add="http://schemas.xmlsoap.org/ws/2004/08/addressing" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <urn1:userName>111111112</urn1:userName>
        <urn1:org>
          <urn1:description>esMD OID</urn1:description>
          <urn1:homeCommunityId>urn:oid:123.456.657.126</urn1:homeCommunityId>
          <urn1:name>esMD OID</urn1:name>
        </urn1:org>
      </urn1:userInfo>
      <urn1:purposeOfDisclosureCoded xmlns:urn3="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" xmlns:urn4="urn:oasis:names:tc:ebxml-
regrep:xsd:rim:3.0" xmlns:urn="urn:gov:hhs:fha:nhinc:common:nhinccommentity"
xmlns:urn1="urn:gov:hhs:fha:nhinc:common:nhinccommon" xmlns:urn2="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0"
xmlns:urn5="urn:ihe:iti:xds-b:2007" xmlns:add="http://schemas.xmlsoap.org/ws/2004/08/addressing"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <urn1:code>PAYMENT</urn1:code>
        <urn1:codeSystem>2.16.840.1.113883.3.18.7.1</urn1:codeSystem>
        <urn1:codeSystemName>esMD CMS Purpose</urn1:codeSystemName>
        <urn1:codeSystemVersion>1.0</urn1:codeSystemVersion>
        <urn1:displayName>Medical Claim Documentation Review</urn1:displayName>
        <urn1:originalText>Medical Claim Documentation Review</urn1:originalText>
      </urn1:purposeOfDisclosureCoded>

```

```

<urn1:samlAuthnStatement xmlns:urn3="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" xmlns:urn4="urn:oasis:names:tc:ebxml-
regrep:xsd:rim:3.0" xmlns:urn="urn:gov:hhs:fha:nhinc:common:nhinccommonentity"
xmlns:urn1="urn:gov:hhs:fha:nhinc:common:nhinccommon" xmlns:urn2="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0"
xmlns:urn5="urn:ihe:iti:xds-b:2007" xmlns:add="http://schemas.xmlsoap.org/ws/2004/08/addressing"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <urn1:authInstant>2011-01-05T16:50:01.011Z</urn1:authInstant>
  <urn1:sessionIndex>987</urn1:sessionIndex>
  <urn1:authContextClassRef>urn:oasis:names:tc:SAML:2.0:ac:classes:X509</urn1:authContextClassRef>
  <urn1:subjectLocalityAddress>158.147.185.168</urn1:subjectLocalityAddress>
  <urn1:subjectLocalityDNSName>cms.hhs.gov</urn1:subjectLocalityDNSName>
</urn1:samlAuthnStatement>
<ns1:samlAuthzDecisionStatement xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">
  <ns1:decision>Permit</ns1:decision>
  <ns1:resource>https://158.147.185.168:8181/esMD/DocumentSubmission</ns1:resource>
  <ns1:action>TestSaml</ns1:action>
  <ns1:evidence>
    <ns1:assertion>
      <ns1:id>AA569852P</ns1:id>
      <ns1:issueInstant>2011-01-05T16:50:01.011Z</ns1:issueInstant>
      <ns1:version>2.0</ns1:version>
      <ns1:issuer>CN=HIH SAML User,OU=QSSI,O=QSSI,L=Baltimore,ST=MD,C=US</ns1:issuer>
      <ns1:issuerFormat>urn:oasis:names:tc:SAML:1.1:nameid-format:X509SubjectName</ns1:issuerFormat>
      <ns1:conditions>
        <ns1:notBefore>2011-01-05T16:50:01.011Z</ns1:notBefore>
        <ns1:notOnOrAfter>2011-01-05T16:53:01.011Z</ns1:notOnOrAfter>
      </ns1:conditions>
      <ns1:accessConsentPolicy>Claim-Ref-1234 NA for esMD</ns1:accessConsentPolicy>
      <ns1:instanceAccessConsentPolicy>Claim-Instance-1 NA for esMD</ns1:instanceAccessConsentPolicy>
    </ns1:assertion>
  </ns1:evidence>
</ns1:samlAuthzDecisionStatement>
</ns0:assertion>
<urn:nhinTargetCommunities xmlns:ns0="urn:gov:hhs:fha:nhinc:common:nhinccommonentity" xmlns:urn3="urn:oasis:names:tc:ebxml-
regrep:xsd:rs:3.0" xmlns:urn4="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
xmlns:urn="urn:gov:hhs:fha:nhinc:common:nhinccommonentity" xmlns:urn1="urn:gov:hhs:fha:nhinc:common:nhinccommon"
xmlns:urn2="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0" xmlns:urn5="urn:ihe:iti:xds-b:2007"
xmlns:add="http://schemas.xmlsoap.org/ws/2004/08/addressing" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <urn1:nhinTargetCommunity>

```

```

    <urn1:homeCommunity>
      <urn1:description>CMS esMD VAL OID</urn1:description>
      <urn1:homeCommunityId>2.16.840.1.113883.13.34.110.3</urn1:homeCommunityId>
      <urn1:name>CMS esMD VAL OID</urn1:name>
    </urn1:homeCommunity>
  </urn1:nhinTargetCommunity>
</urn:nhinTargetCommunities>
<ns0:ProvideAndRegisterDocumentSetRequest>
  <urn2:SubmitObjectsRequest xmlns:ns0="urn:gov:hhs:fha:nhinc:common:nhinccommonentity"
xmlns:urn3="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" xmlns:urn4="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
xmlns:urn="urn:gov:hhs:fha:nhinc:common:nhinccommonentity" xmlns:urn1="urn:gov:hhs:fha:nhinc:common:nhinccommon"
xmlns:urn2="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0" xmlns:urn5="urn:ihe:iti:xds-b:2007"
xmlns:add="http://schemas.xmlsoap.org/ws/2004/08/addressing" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" id="999"
comment="esMD Claim Document Submission in response to Review Contractor ADR Letter">
  <urn4:RegistryObjectList>
    <urn4:ExtrinsicObject id="Document01" mimeType="application/pdf" objectType="urn:uuid:7edca82f-054d-47f2-a032-
9b2a5b5186c1" isOpaque="false">
      <urn4:Slot name="creationTime">
        <urn4:ValueList>
          <urn4:Value>20170101165910</urn4:Value>
        </urn4:ValueList>
      </urn4:Slot>
      <urn4:Slot name="hash">
        <urn4:ValueList>
          <urn4:Value>ad18814418693512b767676006a21d8ec7291e84</urn4:Value>
        </urn4:ValueList>
      </urn4:Slot>
      <urn4:Slot name="languageCode">
        <urn4:ValueList>
          <urn4:Value>en-us</urn4:Value>
        </urn4:ValueList>
      </urn4:Slot>
      <urn4:Slot name="attachmentControlNumber">
        <urn4:ValueList>
          <urn4:Value>ESMAO745</urn4:Value>
        </urn4:ValueList>
      </urn4:Slot>
      <urn4:Slot name="legalAuthenticator">

```

```

    <urn4:ValueList>
      <urn4:Value>NA</urn4:Value>
    </urn4:ValueList>
  </urn4:Slot>
  <urn4:Slot name="serviceStartTime">
    <urn4:ValueList>
      <urn4:Value>20170101165910</urn4:Value>
    </urn4:ValueList>
  </urn4:Slot>
  <urn4:Slot name="serviceStopTime">
    <urn4:ValueList>
      <urn4:Value>20170101165910</urn4:Value>
    </urn4:ValueList>
  </urn4:Slot>
  <urn4:Slot name="size">
    <urn4:ValueList>
      <urn4:Value>1024000</urn4:Value>
    </urn4:ValueList>
  </urn4:Slot>
  <urn4:Name>
    <urn4:LocalizedString value="Claim Supporting Medical Documentation" xml:lang="en-US" charset="UTF-8"/>
  </urn4:Name>
  <urn4:Description>
    <urn4:LocalizedString value="esMD Claim Document Submission in response to Review Contractor ADR Letter"
xml:lang="en-US" charset="UTF-8"/>
  </urn4:Description>
  <urn4:Classification id="cI01" classificationScheme="urn:uuid:93606bcf-9494-43ec-9b4e-a7748d1a838d"
classifiedObject="Document01" nodeRepresentation="author">
    <urn4:Slot name="authorInstitution">
      <urn4:ValueList>
        <urn4:Value>603111</urn4:Value>
      </urn4:ValueList>
    </urn4:Slot>
    <urn4:Slot name="authorPerson">
      <urn4:ValueList>
        <urn4:Value>603</urn4:Value>
      </urn4:ValueList>
    </urn4:Slot>
  </urn4:Classification>

```

```

    </urn4:Classification>
    <urn4:Classification id="cI02" classificationScheme="urn:uuid:41a5887f-8865-4c09-adf7-e362475b143a"
classifiedObject="Document01" nodeRepresentation="2.16.840.1.113883.13.34.110.1.1000.1">
    <urn4:Slot name="classCode">
    <urn4:ValueList>
    <urn4:Value>1</urn4:Value>
    </urn4:ValueList>
    </urn4:Slot>
    <urn4:Name>
    <urn4:LocalizedString value="Unstructured Document Submission" xml:lang="en-US" charset="UTF-8"/>
    </urn4:Name>
    </urn4:Classification>
    <urn4:Classification id="cI03" classificationScheme="urn:uuid:f4f85eac-e6cb-4883-b524-f2705394840f"
classifiedObject="Document01" nodeRepresentation="2.16.840.1.113883.5.25">
    <urn4:Slot name="confidentialityCode">
    <urn4:ValueList>
    <urn4:Value>V</urn4:Value>
    </urn4:ValueList>
    </urn4:Slot>
    <urn4:Name>
    <urn4:LocalizedString value="Very" xml:lang="en-US" charset="UTF-8"/>
    </urn4:Name>
    </urn4:Classification>
    <urn4:Classification id="cI04" classificationScheme="urn:uuid:a09d5840-386c-46f2-b5ad-9c3699a4309d"
classifiedObject="Document01" nodeRepresentation="2.16.840.1.113883.13.34.110.1.1000.1">
    <urn4:Slot name="formatCode">
    <urn4:ValueList>
    <urn4:Value>1</urn4:Value>
    </urn4:ValueList>
    </urn4:Slot>
    <urn4:Name>
    <urn4:LocalizedString value="Scanned PDF Document in CDA C62 Construct" xml:lang="en-US" charset="UTF-8"/>
    </urn4:Name>
    </urn4:Classification>
    <urn4:Classification id="cI06" classificationScheme="urn:uuid:ccc5598-8b07-4b77-a05e-ae952c785ead"
classifiedObject="Document01" nodeRepresentation="2.16.840.1.113883.13.34.110.1.1000.1">
    <urn4:Slot name="practiceSettingCode">
    <urn4:ValueList>

```

```

        <urn4:Value>1</urn4:Value>
    </urn4:ValueList>
</urn4:Slot>
<urn4:Name>
    <urn4:LocalizedString value="NA" xml:lang="en-US" charset="UTF-8"/>
</urn4:Name>
</urn4:Classification>
<urn4:Classification id="cI05" classificationScheme="urn:uuid:f33fb8ac-18af-42cc-ae0e-ed0b0bdb91e1"
classifiedObject="Document01" nodeRepresentation="2.16.840.1.113883.13.34.110.1.1000.1">
    <urn4:Slot name="healthcareFacilityTypeCode">
        <urn4:ValueList>
            <urn4:Value>1</urn4:Value>
        </urn4:ValueList>
    </urn4:Slot>
    <urn4:Name>
        <urn4:LocalizedString value="Health Information Handler (HIH)" xml:lang="en-US" charset="UTF-8"/>
    </urn4:Name>
</urn4:Classification>
<urn4:Classification id="cI07" classificationScheme="urn:uuid:f0306f51-975f-434e-a61c-c59651d33983"
classifiedObject="Document01" nodeRepresentation="2.16.840.1.113883.13.34.110.1.1000.1">
    <urn4:Slot name="codingScheme">
        <urn4:ValueList>
            <urn4:Value>2</urn4:Value>
        </urn4:ValueList>
    </urn4:Slot>
    <urn4:Name>
        <urn4:LocalizedString value="Outpatient Evaluation And Management" xml:lang="en-US" charset="UTF-8"/>
    </urn4:Name>
</urn4:Classification>
<urn4:Classification id="cI08" classificationScheme="urn:uuid:41a5887f-8865-4c09-adf7-e362475b143a"
classifiedObject="Document01" nodeRepresentation="2.16.840.1.113883.13.34.110.1.1000.1">
    <urn4:Slot name="classCode">
        <urn4:ValueList>
            <urn4:Value>1</urn4:Value>
        </urn4:ValueList>
    </urn4:Slot>
    <urn4:Name>
        <urn4:LocalizedString value="Unstructured Document Submission" xml:lang="en-US" charset="UTF-8"/>
    </urn4:Name>

```

```

    </urn4:Name>
  </urn4:Classification>
  <urn4:ExternalIdentifier id="ei01" registryObject="Document01" identificationScheme="urn:uuid:58a6f841-87b3-4a3e-92fd-
a8ffeff98427" value="2.16.840.1.113883.13.34.110.1.1000.1^^^&12345">
    <urn4:Name>
      <urn4:LocalizedString value="XDSDocumentEntry.patientId" xml:lang="en-US" charset="UTF-8"/>
    </urn4:Name>
  </urn4:ExternalIdentifier>
  <urn4:ExternalIdentifier id="ei02" registryObject="Document01" identificationScheme="urn:uuid:96fdda7c-d067-4183-912e-
bf5ee74998a8" value="1.3.6.1.4.1.21367.2005.3.9999.33">
    <urn4:Name>
      <urn4:LocalizedString value="XDSSubmissionSet.uniqueId" xml:lang="en-US" charset="UTF-8"/>
    </urn4:Name>
  </urn4:ExternalIdentifier>
</urn4:ExtrinsicObject>
<urn4:RegistryPackage id="SubmissionSet01">
  <urn4:Slot name="parentUniqueNumber">
    <urn4:ValueList>
      <urn4:Value>AA569852P_871081508181199526</urn4:Value>
    </urn4:ValueList>
  </urn4:Slot>
  <urn4:Slot name="splitNumber">
    <urn4:ValueList>
      <urn4:Value>1-1</urn4:Value>
    </urn4:ValueList>
  </urn4:Slot>

  <urn4:Slot name="esMDClaimId">
    <urn4:ValueList>
      <urn4:Value>12345678</urn4:Value>
    </urn4:ValueList>
  </urn4:Slot>
  <urn4:Slot name="esMDCaseld">
    <urn4:ValueList>
      <urn4:Value/>
    </urn4:ValueList>
  </urn4:Slot>
  <urn4:Slot name="intendedRecipient">

```

```

    <urn4:ValueList>
      <urn4:Value>2.16.840.1.113883.13.34.110.2.100.1</urn4:Value>
    </urn4:ValueList>
  </urn4:Slot>
  <urn4:Slot name="submissionTime">
    <urn4:ValueList>
      <urn4:Value>20170101165910</urn4:Value>
    </urn4:ValueList>
  </urn4:Slot>
  <urn4:Name>
    <urn4:LocalizedString value="Claim Supporting Medical Documentation" xml:lang="en-US" charset="UTF-8"/>
  </urn4:Name>
  <urn4:Description>
    <urn4:LocalizedString value="Unsolicited PWK Claim documents" xml:lang="en-US" charset="UTF-8"/>
  </urn4:Description>
  <urn4:Classification id="cI11" classificationScheme="urn:uuid: a7058bb9-b4e4-4307-ba5b-e3f0ab85e12d" classifiedObject="
SubmissionSet01" nodeRepresentation="author">
    <urn4:Slot name="authorInstitution">
      <urn4:ValueList>
        <urn4:Value>897654</urn4:Value>
      </urn4:ValueList>
    </urn4:Slot>
    <urn4:Slot name="authorPerson">
      <urn4:ValueList>
        <urn4:Value>808</urn4:Value>
      </urn4:ValueList>
    </urn4:Slot>
  </urn4:Classification>
  <urn4:Classification id="cI09" classificationScheme="urn:uuid:aa543740-bdda-424e-8c96-df4873be8500"
classifiedObject="SubmissionSet01" nodeRepresentation="2.16.840.1.113883.13.34.110.1.1000.1">
    <urn4:Slot name="contentTypeCode">
      <urn4:ValueList>
        <urn4:Value>7</urn4:Value>
      </urn4:ValueList>
    </urn4:Slot>
  <urn4:Name>
    <urn4:LocalizedString value="Unsolicited PWK Claim documents" xml:lang="en-US" charset="UTF-8"/>
  </urn4:Name>

```

```

    </urn4:Classification>
    <urn4:ExternalIdentifier id="ei03" registryObject="SubmissionSet01" identificationScheme="urn:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" value="2.16.840.1.113883.13.34.110.1.1000.1^^^&12345">
      <urn4:Name>
        <urn4:LocalizedString value="XSDDocumentEntry.patientId" xml:lang="en-US" charset="UTF-8"/>
      </urn4:Name>
    </urn4:ExternalIdentifier>
    <urn4:ExternalIdentifier id="ei04" registryObject="SubmissionSet01" identificationScheme="urn:uuid:554ac39e-e3fe-47fe-b233-965d2a147832" value="12.16.840.1.113883.13.34.110.2">
      <urn4:Name>
        <urn4:LocalizedString value="XDSSubmissionSet.sourceId" xml:lang="en-US" charset="UTF-8"/>
      </urn4:Name>
    </urn4:ExternalIdentifier>
    <urn4:ExternalIdentifier id="ei05" registryObject="SubmissionSet01" identificationScheme="urn:uuid:96fdda7c-d067-4183-912e-bf5ee74998a8" value="554ac39e-ef6343434-b233-965d3434555">
      <urn4:Name>
        <urn4:LocalizedString value="XDSSubmissionSet.uniqueId" xml:lang="en-US" charset="UTF-8"/>
      </urn4:Name>
    </urn4:ExternalIdentifier>
  </urn4:RegistryPackage>
  <urn4:Classification id="c110" classifiedObject="SubmissionSet01" classificationNode="urn:uuid:a54d6aa5-d40d-43f9-88c5-b4633d873bdd"/>
  <urn4:Association id="as01" associationType="HasMember" sourceObject="SubmissionSet01" targetObject="Document01">
    <urn4:Slot name="SubmissionSetStatus">
      <urn4:ValueList>
        <urn4:Value>Original</urn4:Value>
      </urn4:ValueList>
    </urn4:Slot>
  </urn4:Association>
</urn4:RegistryObjectList>
</urn2:SubmitObjectsRequest>
<urn5:Document xmlns:urn="urn:gov:hhs:fha:nhinc:common:nhinccommonentity"
xmlns:urn1="urn:gov:hhs:fha:nhinc:common:nhinccommon" xmlns:add="http://schemas.xmlsoap.org/ws/2004/08/addressing"
xmlns:urn2="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0" xmlns:urn3="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0"
xmlns:urn4="urn:oasis:names:tc:ebxml-regrep:xsd:rsm:3.0" xmlns:urn5="urn:ihe:iti:xds-b:2007"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" id="Document01">real_payload_1mb.txt</urn5:Document>
  </ns0:ProvideAndRegisterDocumentSetRequest>
</ns0:RespondingGateway_ProvideAndRegisterDocumentSetRequest>

```

4.8.2 Administrative Error Responses for PWK Unsolicited Documentation

Table 28: Administrative Errors lists the additional administrative error responses for PWK Unsolicited documents received from the RCs.

Table 28: Administrative Errors

Administrative Error Code	Administrative Error Response
GEX10	The date(s) of service on the cover sheet received is missing or invalid.
GEX11	The NPI on the cover sheet received is missing or invalid.
GEX12	The state where services were provided is missing or invalid on the cover sheet received.
GEX13	The Medicare ID on the cover sheet received is missing or invalid.
GEX14	The billed amount on the cover sheet received is missing or invalid.
GEX15	The contact phone number on the cover sheet received is missing or invalid.
GEX16	The beneficiary name on the cover sheet received is missing or invalid.
GEX17	The claim number on the cover sheet received is missing or invalid.
GEX18	The ACN on the coversheet received is missing or invalid.

4.9 PA/PCR Review Results Response

The esMD Gateway is accepting Prior Authorization Requests from the HIHs as X12 and/or XDR submissions. The recipients of these requests are the RCs. These submission requests are identified based on the CTC, which is a submission set metadata element in the XDR submission request sent by the HIHs.

The outbound responses from the Workloads shall be called PA/PCR review results responses. It is important to note that the Workloads shall be able to send outbound PA and PCR review results responses for XDR and X12 requests using the esMD for only those Prior Authorization Requests (PAR), which were sent by the HIHs.

Note: If multiple PA review result responses are received for the same transaction, the HIH should consider the most recent response as the final decision from the RC. If the original PA review result response does not have a timestamp, the HIH must consider the most current and recent response received from the RC as the final decision.

4.9.1 XDR Review Response Data Elements

The PA Review Results Response for XDR will be composed of the following data elements as described in Table 29: PA and PCR Review Results Response XDR.

Table 29: PA and PCR Review Results Response XDR

No.	Data Element Name	Format	Length	Required	Values	Field Description
1.	Content Type Code	Numeric	2	Yes	8.1,8.3, 8.4 and 8.5	The value of this code indicates the line of business. For example, the values '8.1' for Ambulance, '8.3' for HHPCR, 8.4 for DMEPOS and 8.5 for HOPD. The esMD returns the code back in the PA review results response message.
2.	TransactionID	Numeric	15	Yes	Assigned by the esMD	esMD TransactionID is generated by the esMD Gateway when a PA request is received from the HIH Gateway. The TransactionID is sent to the Workloads/RCs. The Workloads shall send the TransactionID back in the PA review results response message.
3.	Decision Indicator	Char	1	Yes	One of the four possible values: A, N, M, P	The value of this data element shall indicate whether a PA request has been Affirmed (A), Non-affirmed (N), Modified (M) or Partial(P)
4.	Number of Units Approved	Numeric	4	Situational	Assigned by RC	The value of this data element shall indicate the modified value of units approved by RC for Non-Emergent Ambulance Transport.

No.	Data Element Name	Format	Length	Required	Values	Field Description
5.	Approved Service Date	Date (YYYY-MM-DD)	17	Situational Only one of these elements (Approved date or date range) can be used in a given response	Assigned by RC	The value of this data element shall indicate the date for which the service is approved by RC for Non-Emergent Ambulance Transport PA program.
6.	Approved Service Date Range (Start Date and End Date)	Date (YYYY-MM-DD)	17	Situational Only one of these elements (Approved date or date range) can be used in a given response	Assigned by RC	The value of this data element shall indicate the date range (start date and end date) for which the service is approved by RC for Non-Emergent Ambulance Transport.
7.	Unique Tracking Number (UTN)	String	14	Situational	Assigned by RC	A unique tracking number assigned by the RCs. This number is used by the provider/RC supplier to file a claim with the CMS.
8.	Program Reason Code	String	5	Situational	example: PMD1A	The Program reason codes for each of the PA and PCR programs.
9	Review Decision Reason Code	String	2	Situational	Assigned by RC	Review Decision reason codes for Non-Affirmed PA and PCR response.

4.9.1.1 Situational Data Elements for Affirmed Decision

Table 30: Affirmed PA and PCR Review Results Responses elaborates the situational data elements for an affirmed decision in the PA review results response.

Table 30: Affirmed PA and PCR Review Results Responses

No.	Rule
1.	Affirmed (A) PA and PCR review results responses shall contain a UTN value.
2.	Affirmed (A) PA and PCR review results responses shall not contain Number of Approved Units.
3.	Affirmed (A) PA and PCR review results responses shall not contain either Approved Date or Approved Date Range (Start Date and End Date).
4.	Affirmed (A) PA and PCR review results responses shall not contain Reason Identifier(s).

4.9.1.2 Situational Data Elements for Non-Affirmed Decision

Table 31: Non-Affirmed PA and PCR Review Results Responses elaborates the situation data elements for non-affirmed decision in the PA and HHPCR review results response.

Table 31: Non-Affirmed PA and PCR Review Results Responses

No.	Rule
1.	Non-affirmed (N) PA and PCR review results responses shall contain a UTN provided by the RCs.
2.	Non-Affirmed (N) PA and PCR review results responses shall not contain Number of Approved Units.
3.	Non-Affirmed (N) PA and PCR review results responses shall not contain either Approved Date or Approved Date Range (Start Date and End Date).

No.	Rule
4.	Non-affirmed (N) PA and PCR review results responses shall contain Program Reason Identifier(s) and Decision Reason codes provided by the RCs.

4.9.1.3 Situational Data Elements for Modified Decision

Table 32: Modified PA Review Results Responses elaborates the situation data elements for modified decision in the PA review results response.

Table 32: Modified PA Review Results Responses

No.	Rule
1.	Modified (M) Ambulance PA review results responses shall contain a UTN provided by the RCs.
2.	Modified (M) Ambulance PA review results responses may contain the Number of Approved Units.
3.	Modified (M) Ambulance PA review results responses may contain either the Approved Date or Approved Date Range (Start Date and End Date).
4.	Modified (M) Ambulance PA review results responses shall have either an Approved Number of Units or an Approved Date/Date Range, and may have both an approved Number of Units and an Approved Date/Date Range.
5.	Modified (M) Ambulance PA review results responses may contain Reason Identifiers.

4.9.1.4 Situational Data Elements for Rejected Decision

Table 33: Rejected PA and PCR Review Results Responses elaborates the situation data elements for rejected decision in the PA and PCR review results response.

Table 33: Rejected PA and PCR Review Results Responses

No.	Rule
1.	Rejected (R) PA and PCR review results responses may contain a UTN provided by the RCs.
2.	Rejected (R) PA and PCR review results responses shall not contain Number of Approved Units.
3.	Rejected (R) PA and PCR review results responses shall not contain either Approved Date or Approved Date Range (Start Date and End Date).
4.	Rejected (R) PA and PCR review results responses shall contain Reason Identifier(s).

4.9.2 Rules about Unique Tracking Number in PA and HHPCR Review Results Response

In a single PA and PCR Review Result Response or PA and PCR Error Response, the unique tracking number value should follow the rules as described in Table 34: UTNs in PA and PCR Review Results Responses.

Table 34: UTNs in PA and PCR Review Results Responses

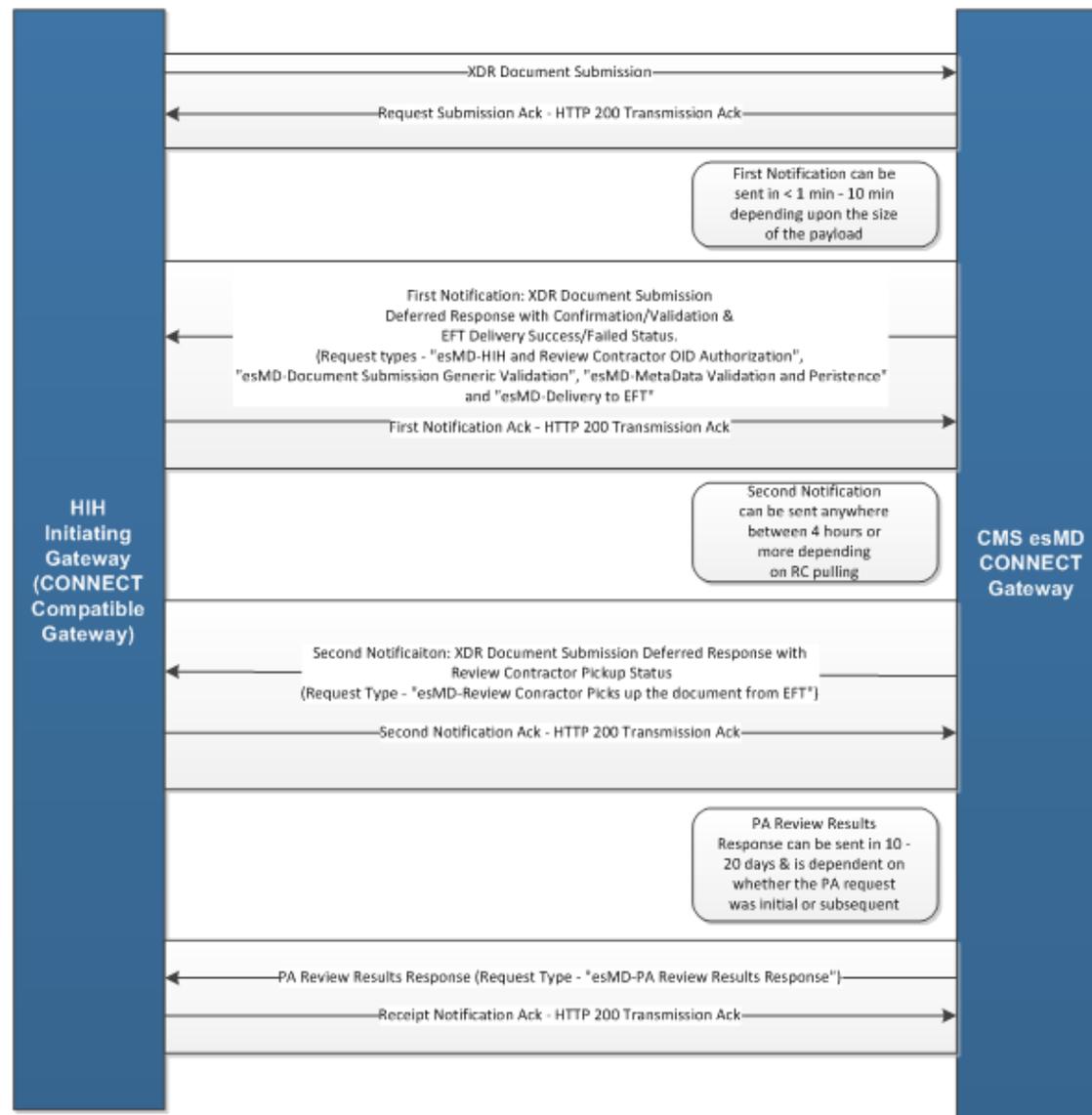
No.	Rule
1.	For a single Affirmed (A), Non-Affirmed (N) or Affirmed with a Change (M)(only for Ambulance) PA and PCR Review Result Response, a unique tracking number must be provided. A unique tracking number must be a minimum of 1 and a maximum of 14 alphanumeric characters long.
2.	For a single Rejected (R) Error Response, unique tracking number may or may not be provided. A unique tracking number must be a minimum of 1 and a maximum of 14 alphanumeric characters long.

4.9.3 Status and Notification Messages for PA

In Figure 14: Outbound Response Notification, the very last response refers to the outbound (i.e., from the esMD Gateway to HIH) PA and PCR Review Results Response and was the new functionality for esMD Release 2.0.

Note: The First and Second Notifications depicted in Figure 14: Outbound Response Notification are existing notifications sent in response to inbound submissions to the esMD Gateway from the HIHs. Please refer to Section 4.6, XDR Status and Notification Messages and Section 4.7, Structured Documentation for more information on the existing notifications.

Figure 14: Outbound Response Notification



4.9.4 Information Contained in the PA and PCR Review Results Response for XDR

HIHs should look for the following information in the response message: MessageID, UniqueID, Request ID, Status, and Response Slots.

4.9.4.1 MessageID (Shall be Correlated with PA and HHPCR Request Message ID)

To correlate the PA/HHPCR review results response with the PA/HHPCR request sent by the HIHs, the MessageID sent by the HIHs in the PA/HHPCR request shall be returned in the response message. The MessageID is described in the example in Figure 15: Message ID Example.

Figure 15: Message ID Example

```

<ns20:assertion>
  -----
  -----
  <ns19:samlAuthnStatement>
    <ns19:authInstant>2009-04-16T13:15:39Z</ns19:authInstant>
    <ns19:sessionIndex>987</ns19:sessionIndex>

<ns19:authContextClassRef>urn:oasis:names:tc:SAML:2.0:ac:classes:X509</ns19:authContextClassRef>
  <ns19:subjectLocalityAddress>158.147.185.168</ns19:subjectLocalityAddress>
  <ns19:subjectLocalityDNSName>esmdval.cms.hhs.gov</ns19:subjectLocalityDNSName>
</ns19:samlAuthnStatement>
<ns19:samlAuthztement>
  <ns19:decision>Permit</ns19:decision>
  <ns19:resource>https://158.147.185.168:8181/SamlReceiveService/SamlProcessWS</ns19:resource>
  <ns19:action>TestSaml</ns19:action>
  <ns19:evidence>
    <ns19:assertion>
      <ns19:id>esMDQSSI_NM_04042013_ADMC_11</ns19:id>
      <ns19:issueInstant>2009-04-16T13:10:39.093Z</ns19:issueInstant>
      <ns19:version>2.0</ns19:version>
      <ns19:issuer>CN=SAML
        User,OU=Harris,O=HITS,L=Melbourne,ST=FL,C=US</ns19:issuer>
      <ns19:issuerFormat>urn:oasis:names:tc:SAML:1.1:nameid-

```

```

format:X509SubjectName</ns19:issuerFormat>
  <ns19:conditions>
    <ns19:notBefore>2009-04-16T13:10:39.093Z</ns19:notBefore>
    <ns19:notOnOrAfter>2009-12-31T12:00:00.000Z</ns19:notOnOrAfter>
  </ns19:conditions>

<ns19:accessConsentPolicy>urn:oid:2.16.840.1.113883.13.34.110.3</ns19:accessConsentPolicy>

<ns19:instanceAccessConsentPolicy>urn:oid:2.16.840.1.113883.13.34.110.3</ns19:instanceAccessConsentPolicy>
  </ns19:assertion>
  </ns19:evidence>
  </ns19:samlAuthzDecisionStatement>
  <ns19:messageId>uuid:4e0903af-4145-42b1-a06b-45381786bf1c</ns19:messageId>
</ns20:assertion>

```

4.9.4.2 UniqueID (Shall Be Correlated with PA Request Unique ID)

To correlate the PA/HHPCR review results response with the PA/HHPCR request sent by the HIHs, the UniqueID sent by the HIHs in the PA/HHPCR request shall be copied back in the response message. Refer to Figure 16: UniqueID Example.

Figure 16: UniqueID Example

```

<urn1:samlAuthzDecisionStatement>
  -----
  <urn1:evidence>
    <urn1:assertion>
      <urn1:id>esMD_NM_04042013_ADMC_11</urn1:id>
      -----
    </urn1:assertion>
  </urn1:evidence>
</urn1:samlAuthzDecisionStatement>

```

4.9.4.3 RequestID

The RequestID explains the type of response Type. Table 35: PA and PCR Outbound Request Type lists the request type string that shall be used for PA outbound. Refer to Figure 17: RequestID Example.

Table 35: PA and PCR Outbound Request Type

No.	Request Type String	Request Type in Response Messages
1.	"esMD- PA Review Results Response"	PA Review Results Response

Figure 17: RequestID Example

```

<ns20:RegistryResponse
  requestId="esMD - PA Review Results Response"
  status="urn:oasis:names:tc:ebxml-
  regrep:ResponseStatusType:Success">
  <ns10:ResponseSlotList>
    ----
    ---
  </ns10:ResponseSlotList>
</ns20:RegistryResponse>
    
```

4.9.4.4 Status

Status describes the status of the message:

1. urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success;
2. urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Warning; or
3. urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Error.

Refer to Figure 18: Status Example.

Figure 18: Status Example

```

<ns2:RegistryResponse xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0" xmlns:ns2="urn:oasis:names:tc:ebxml-
regrep:xsd:rs:3.0" xmlns:ns3="urn:oasis:names:tc:ebxml-regrep:xsd:query:3.0" xmlns:ns4="http://www.hhs.gov/healthit/nhin"
xmlns:ns5="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0" requestId="esMD - Delivery To CMS Enterprise File Transfer"
status="urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success">
  <ns2:ResponseSlotList>
    <Slot name="esMDTransactionId">
      <ValueList>
        <Value>ABC000000001234</Value>
      </ValueList>
    </Slot>
    <Slot name="esMDClaimId">
      <ValueList>
        <Value>Claim5678901234568</Value>
      </ValueList>
    </Slot>
    <Slot name="esMDCaseld">
      <ValueList>
        <Value>AA90133333301</Value>
      </ValueList>
    </Slot>
    <Slot name="contentTypeCode">
      <ValueList>
        <Value>1</Value>
      </ValueList>
    </Slot>
  </ns2:ResponseSlotList>
</ns2:RegistryResponse>

```

4.9.4.5 Response Slots

The PA review results response specific slots shall have the response specific information. The following shall be the slots:

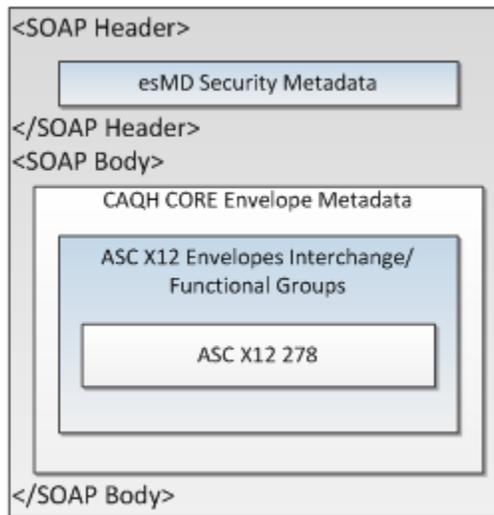
1. creationTime;

2. submissionTime;
3. esMDTransactionId;
4. contentTypeCode;
5. DecisionIndicator;
6. approvedUnits;
7. approvedDate;
8. Approved Date Range (approvedStartDate and approvedEndDate);
9. uniqueTrackingNumber; and
10. ReasonIdentifierDtIs.

5. The esMD System Council for Affordable Quality Healthcare (CAQH) Profile

The esMD implemented the Sequoia Project (formerly known as Healthway) Phase II CAQH Committee on Operating Rules for Information Exchange (CORE) Rule 270: Connectivity Rule Version v2.2.0 to exchange ASC X12 Administrative Transactions with HIHs via the Internet. CONNECT support for CAQH Profile has been implemented as part of the CONNECT release 4.4. The “CAQH CORE X12 Document Submission Service Interface Specification” defines specific constraints on the use of the CAQH CORE Connectivity Rule. Figure 19: ASC X12N 278 5010 over CONNECT (CAQH CORE 270) presents the components of a request or response message using 278 and CONNECT with the Nationwide Health Information Network (NHIN) CAQH CORE X12 Document Submission Service Interface Specification.

Figure 19: ASC X12N 278 5010 over CONNECT (CAQH CORE 270)



5.1 X12N 278 5010 Companion Guide

For details on the X12N 278 5010 requests and responses, refer to the *X12N 278 Companion Guide*:

https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Information_for_HIHs.html

5.2 X12N 275 6020 Companion Guide

For details on the X12N 275 6020 requests and responses, refer to the *X12N 275 Companion Guide*:

https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Information_for_HIHs.html

6. Multiple Services

esMD system accepting multiple HHPCR services in one request, in the form of X12N 278 and XDR focused on the business use case of receiving and processing multiple HHPCR services in a single transactional interaction from the HIH to the RC. esMD system started accepting multiple services for HOPD requests in XDR format only.

6.1 Submission of Multiple Services

esMD will allow the submission of multiple HHPCR services in a single request by HIH in XDR/X12 formats. Per the current process, esMD allows one item/service per PA or PCR request to be submitted by the HIH in either XDR or X12 format.

6.2 PA/PCR Responses

The current esMD process provides decision responses to one item/service per HOPD PA or HHPCR response to the HIH. esMD also provides decision responses to multiple items/services per HOPD PA or PCR response to HIHs, and provides a UTN-level decision response indicating the summary of all the services included in the response as A (Affirmed), N (Non-Affirmed), or P (Partially-Affirmed).

6.3 Inbound X12

The HHPCR requests have the provision to include multiple services in the X12N 278 5010 request in the SV2 segment of the 2010F Loop. As a result, no change is necessary at the interface level or the content level.

Note: Even though the impact to HIHs for HHPCR initiation (inbound to esMD) is negligible, it should be noted that both the HIHs and esMD must ensure the necessary processing capabilities are enabled/implemented on both sides for successful processing of multi-service HHPCR requests.

6.4 Outbound XDR

In order to convey multiple review decisions in a single response, esMD must use the CONNECT operation with the custom XML structure as defined below. A similar enhancement is already required for communicating eMDR/ADR responses in the past from esMD to the HIHs, i.e., the HIHs currently receiving eMDR/ADR responses via esMD, are already equipped to receive this multi-service HHPCR response.

6.5 X12 Review Response

The current X12 review response EDI supports a response-level decision at the ActionCode (HCR01) element of the Health Care Services Review (HCR) segment of the Patient Event Detail (2000E) loop. In order to convey multiple review decisions in a single response, esMD continues to use the current 278 Review Response EDI, which supports both response-level decision by way of the ActionCode (HCR01) element of the HCR segment of the Patient Event Detail (2000E) loop as well as the service level decisions via the Action Code (HCR01) element of the HCR segment of the Service Detail (2000F) loop. Refer to Table 36: Outbound Interface Solution.

Table 36: Outbound Interface Solution

EDI Element	EDI Location	Current Value(s)	Additional Value(s)
ActionCode	2000E/HCR/HCR01	A1 – Certified in Total A3 – Not Certified A4 – Pended A6 – Modified	A2 – Certified–partial
Action Code	2000F/HCR/HCR01	A1 – Certified in Total A3 – Not Certified A4 – Pended A6 – Modified	N/A

6.6 Sample Files

Figure 20: hhpcr_x12n278.txt File shows the sample X12N 278 request. The HHPCR X12N 278 response sample file is included in the *X12N 278 Companion Guide*.

Figure 20: hhpcr_x12n278.txt File

```
ISA*00*      *00*      *ZZ*Test HIH   *ZZ*111222333   *150724*0817*^*00501*000001235*0*T*+~
GS*HI*Test HIH*111222333*20150724*0817*1235*X*005010X217~
ST*278*1235*005010X217~
BHT*0007*13*3920394930203*20150724*0817~
HL*1**20*1~
NM1*X3*2*REVIEW ORG NAME*****PI*12302~
HL*2*1*21*1~
```

NM1*1P*1*REQUESTERLASTNAME*REQUESTERFIRSTNAME***PH.D*XX*111111112~
 N3*REQUESTER STREET LOOP 2010B~
 N4*WINDSORMILL*MD*21244~
 PER*IC*DR.AMBULANCECONTACT*FX*8189991235*TE*4035556789*EX*6788~
 HL*3*2*22*1~
 NM1*IL*1*HPCRSUBSCRIBERLASTNAME*HPCRSUBSCRIBERFIRSTNAME*T*MR*M.D.*MI*215123556A~
 N3*AMBBENEFICIARY LOOP2010C ADDR LINE 1*SUB ADDR2~
 N4*WINDSORMILL*MD*21244~
 DMG*D8*19511204*M~
 HL*4*3*EV*1~
 TRN*1*201507221235*1311235567*NEUROLOGY~
 UM*HS*I*1*32+A*AA+EM+AP+ON+CA*U*3*4*Y*1~
 DTP*439*D8*20150722~
 DTP*ABC*D8*19511204~
 DTP*AAH*RD8*20150901-20151030~
 HI*BK+78609*BF+85135*BF+8488~
 HSD*FL*80~
 NM1*FA*2*FACILITY ORG NAME****XX*1234567893~
 N3*AMBSTREET SERVICE PROVIDER 2010EA~
 N4*WINDSORMILL*MD*21244~
 NM1*DK*1*AMBORDERINGPHYLASTNAME*AMBORDERINGPHYFNAME****XX*1234567893~
 N3*AMBSTREET ORDERING PHYSICIAN 2010EA~
 N4*WINDSORMILL*MD*21244~
 HL*5*4*SS*0~
 TRN*1*0001-201501150001COVERTEST-HHPCRNCE*955555555*HHPCRNCREQUEST~
 DTP*472*RD8*20150930-20151030~
 SV2*HC+G0151+22*10.50*UN*80~
 PWK*77*FX***AC*KUMACNTESTMU123456009~
 HL*6*4*SS*0~
 TRN*1*0001-201501150001COVERTEST-HHPCRNCE*955555555*HHPCRNCREQUEST~
 DTP*472*RD8*20150930-20151030~
 SV2*HC+G0151+22*10.50*UN*80~
 PWK*77*FX***AC*ESMDACNTESTMUL123456009~
 SE*39*1235~
 GE*1*1235~
 IEA*1*000001235~

6.7 Request Provider Information - 999 Errors

The X12N 278 request provider information is to be submitted in the 2010EA loop only. If provider information is provided in the 2010F loop, a 999 error is returned to the HIH. Table 37: 999 Error Messages to HIH provides information about the messages that are updated, added, and removed.

Table 37: 999 Error Messages to HIH

SNO	Validation Message	Update to the Message	Existing or Added
1	Either the 2010EA or 2010F Loop must have at least one combination of NM101 with "DK" and "SJ" or "DK" and "FA"	2010EA loop must have at least one combination of NM101 with "DK" and "SJ" or "DK" and "FA"	Existing
2	"SJ" should be one of the providers in 2010EA or 2010F loops for DMEPOS program	"SJ" should be one of the providers in the 2010EA loop for the DMEPOS program	Existing
3	Provider Information is not allowed in 2010F loop; it has to be sent in 2010EA NM1 segment only	N/A	Added
4	When the 2010F/NM101 = "DK", "SJ", or "FA", the segments 2010F/N3/N4 must be present.	Removed	Existing
5	If "SJ" is present in the 2010F loop, then there should be at least one combination of NM101 in the 2010F loop with "SJ" and "DK" as providers	Removed	Existing

6.8 Administrative Error Response

The esMD system shall include the Decision 'Indicator C' for the Admin Error. Refer to Figure 21: hhpcr_AdminError.txt File.

Figure 21: hhpcr_AdminError.txt File

```

<?xml version="1.0" encoding="UTF-8"?>
<ns0:RespondingGateway_ProvideAndRegisterDocumentSetResponseRequest
xmlns:ns0="urn:gov:hhs:fha:nhinc:common:nhinccommonentity">
  <ns0:assertion>
    <ns1:address xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">
      <ns1:addressType>
        <ns1:code>AddrCodeSyst</ns1:code>
        <ns1:codeSystem>AddrCodeSyst</ns1:codeSystem>
        <ns1:codeSystemName>AddrCodeSystName</ns1:codeSystemName>
        <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
        <ns1:displayName>AddrCode</ns1:displayName>
        <ns1:originalText>AddrCode</ns1:originalText>
      </ns1:addressType>
      <ns1:city>Baltimore</ns1:city>
      <ns1:country>USA</ns1:country>
      <ns1:state>MD</ns1:state>
      <ns1:streetAddress>7100 Securty blvd</ns1:streetAddress>
      <ns1:zipCode>21244</ns1:zipCode>
    </ns1:address>
    <ns1:dateOfBirth xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">03/10/2011 05:21:00</ns1:dateOfBirth>
    <ns1:explanationNonClaimantSignature
xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">Electronic</ns1:explanationNonClaimantSignature>
    <ns1:haveSecondWitnessSignature
xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">>false</ns1:haveSecondWitnessSignature>
    <ns1:haveSignature xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">>false</ns1:haveSignature>
    <ns1:haveWitnessSignature xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">>false</ns1:haveWitnessSignature>
    <ns1:homeCommunity xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">
      <ns1:description>CMS esMD WAS Dev Gateway in Baltimore Data Center</ns1:description>
      <ns1:homeCommunityId>2.16.840.1.113883.13.34.110.4</ns1:homeCommunityId>
      <ns1:name>CMS esMD WAS Dev Gateway</ns1:name>
    </ns1:homeCommunity>
    <ns1:personName xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">
      <ns1:familyName>CMS Family Name - na</ns1:familyName>
      <ns1:givenName>CMS Given Name - na</ns1:givenName>
      <ns1:nameType>
        <ns1:code>nameCodeSyst</ns1:code>
        <ns1:codeSystem>nameCodeSyst</ns1:codeSystem>
        <ns1:codeSystemName>nameCodeSystName</ns1:codeSystemName>

```

```

    <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
    <ns1:displayName>nameCode</ns1:displayName>
    <ns1:originalText>nameCode</ns1:originalText>
  </ns1:nameType>
  <ns1:secondNameOrInitials>C</ns1:secondNameOrInitials>
  <ns1:fullName>CMS Given Name. C. Family Name - na</ns1:fullName>
</ns1:personName>
<ns1:phoneNumber xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">
  <ns1:areaCode>410</ns1:areaCode>
  <ns1:countryCode>1</ns1:countryCode>
  <ns1:extension>1234</ns1:extension>
  <ns1:localNumber>567-8901</ns1:localNumber>
  <ns1:phoneNumberType>
    <ns1:code>phoneCodeSyst</ns1:code>
    <ns1:codeSystem>phoneCodeSyst</ns1:codeSystem>
    <ns1:codeSystemName>phoneCodeSystName</ns1:codeSystemName>
    <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
    <ns1:displayName>phoneCode</ns1:displayName>
    <ns1:originalText>phoneCode</ns1:originalText>
  </ns1:phoneNumberType>
</ns1:phoneNumber>
<ns1:secondWitnessAddress xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">
  <ns1:addressType>
    <ns1:code>AddrCodeSyst</ns1:code>
    <ns1:codeSystem>AddrCodeSyst</ns1:codeSystem>
    <ns1:codeSystemName>AddrCodeSystName</ns1:codeSystemName>
    <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
    <ns1:displayName>AddrCode</ns1:displayName>
    <ns1:originalText>AddrCode</ns1:originalText>
  </ns1:addressType>
  <ns1:city>Baltimore</ns1:city>
  <ns1:country>USA</ns1:country>
  <ns1:state>MD</ns1:state>
  <ns1:streetAddress>7100 Securty blvd</ns1:streetAddress>
  <ns1:zipCode>21244</ns1:zipCode>
</ns1:secondWitnessAddress>
<ns1:secondWitnessName xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">
  <ns1:familyName>CMS Family Name - na</ns1:familyName>
  <ns1:givenName>CMS Given Name - na</ns1:givenName>
  <ns1:nameType>

```

```

    <ns1:code>nameCodeSyst</ns1:code>
    <ns1:codeSystem>nameCodeSyst</ns1:codeSystem>
    <ns1:codeSystemName>nameCodeSystName</ns1:codeSystemName>
    <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
    <ns1:displayName>nameCode</ns1:displayName>
    <ns1:originalText>nameCode</ns1:originalText>
  </ns1:nameType>
  <ns1:secondNameOrInitials>C</ns1:secondNameOrInitials>
  <ns1:fullName>CMS Given Name. C. Family Name - na</ns1:fullName>
</ns1:secondWitnessName>
<ns1:secondWitnessPhone xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">
  <ns1:areaCode>410</ns1:areaCode>
  <ns1:countryCode>1</ns1:countryCode>
  <ns1:extension>1234</ns1:extension>
  <ns1:localNumber>567-8901</ns1:localNumber>
  <ns1:phoneNumberType>
    <ns1:code>phoneCodeSyst</ns1:code>
    <ns1:codeSystem>phoneCodeSyst</ns1:codeSystem>
    <ns1:codeSystemName>phoneCodeSystName</ns1:codeSystemName>
    <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
    <ns1:displayName>phoneCode</ns1:displayName>
    <ns1:originalText>phoneCode</ns1:originalText>
  </ns1:phoneNumberType>
</ns1:secondWitnessPhone>
<ns1:SSN xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">111-22-3333</ns1:SSN>
<ns1:witnessAddress xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">
  <ns1:addressType>
    <ns1:code>AddrCodeSyst</ns1:code>
    <ns1:codeSystem>AddrCodeSyst</ns1:codeSystem>
    <ns1:codeSystemName>AddrCodeSystName</ns1:codeSystemName>
    <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
    <ns1:displayName>AddrCode</ns1:displayName>
    <ns1:originalText>AddrCode</ns1:originalText>
  </ns1:addressType>
  <ns1:city>Baltimore</ns1:city>
  <ns1:country>USA</ns1:country>
  <ns1:state>USA</ns1:state>
  <ns1:streetAddress>7100 Securty blvd</ns1:streetAddress>
  <ns1:zipCode>21244</ns1:zipCode>
</ns1:witnessAddress>

```

```

<ns1:witnessName xmlns:ns1="urn:gov:hhs:fa:nhinc:common:nhinccommon">
  <ns1:familyName>CMS Family Name - na</ns1:familyName>
  <ns1:givenName>CMS Family Name - na</ns1:givenName>
  <ns1:nameType>
    <ns1:code>nameCodeSyst</ns1:code>
    <ns1:codeSystem>nameCodeSyst</ns1:codeSystem>
    <ns1:codeSystemName>nameCodeSystName</ns1:codeSystemName>
    <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
    <ns1:displayName>nameCode</ns1:displayName>
    <ns1:originalText>nameCode</ns1:originalText>
  </ns1:nameType>
  <ns1:secondNameOrInitials>C</ns1:secondNameOrInitials>
  <ns1:fullName>CMS Given Name. C. Family Name - na</ns1:fullName>
</ns1:witnessName>
<ns1:witnessPhone xmlns:ns1="urn:gov:hhs:fa:nhinc:common:nhinccommon">
  <ns1:areaCode>410</ns1:areaCode>
  <ns1:countryCode>1</ns1:countryCode>
  <ns1:extension>1234</ns1:extension>
  <ns1:localNumber>567-8901</ns1:localNumber>
  <ns1:phoneNumberType>
    <ns1:code>phoneCodeSyst</ns1:code>
    <ns1:codeSystem>phoneCodeSyst</ns1:codeSystem>
    <ns1:codeSystemName>phoneCodeSystName</ns1:codeSystemName>
    <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
    <ns1:displayName>phoneCode</ns1:displayName>
    <ns1:originalText>phoneCode</ns1:originalText>
  </ns1:phoneNumberType>
</ns1:witnessPhone>
<ns1:userInfo xmlns:ns1="urn:gov:hhs:fa:nhinc:common:nhinccommon">
  <ns1:personName>
    <ns1:familyName>CMS Family Name - na</ns1:familyName>
    <ns1:givenName>CMS Family Name - na</ns1:givenName>
    <ns1:nameType>
      <ns1:code>nameCodeSyst</ns1:code>
      <ns1:codeSystem>nameCodeSyst</ns1:codeSystem>
      <ns1:codeSystemName>nameCodeSystName</ns1:codeSystemName>
      <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
      <ns1:displayName>nameCode</ns1:displayName>
      <ns1:originalText>nameCode</ns1:originalText>
    </ns1:nameType>
  </ns1:personName>
</ns1:userInfo>

```

```

    <ns1:secondNameOrInitials>C</ns1:secondNameOrInitials>
    <ns1:fullName>CMS User Given Name. C. Family Name - na</ns1:fullName>
  </ns1:personName>
  <ns1:userName>abcd</ns1:userName>
  <ns1:org>
    <ns1:description>CMS esMD WAS Dev Gateway in Baltimore Data Center</ns1:description>
    <ns1:homeCommunityId>urn:oid:2.16.840.1.113883.13.34.110.1.999.1</ns1:homeCommunityId>
    <ns1:name>CMS esMD WAS Dev Gateway</ns1:name>
  </ns1:org>
  <ns1:roleCoded>
    <ns1:code>2.16.840.1.113883.6.96</ns1:code>
    <ns1:codeSystem>2.16.840.1.113883.6.96</ns1:codeSystem>
    <ns1:codeSystemName>SNOMED_CT</ns1:codeSystemName>
    <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
    <ns1:displayName>Claim Processing</ns1:displayName>
  </ns1:roleCoded>
</ns1:userInfo>
<ns1:authorized xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhincommon">true</ns1:authorized>
<ns1:purposeOfDisclosureCoded xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhincommon">
  <ns1:code>2.16.840.1.113883.3.18.7.1</ns1:code>
  <ns1:codeSystem>2.16.840.1.113883.3.18.7.1</ns1:codeSystem>
  <ns1:codeSystemName>nhin-purpose</ns1:codeSystemName>
  <ns1:codeSystemVersion>1.0</ns1:codeSystemVersion>
  <ns1:displayName>Use or disclosure of Psychotherapy Notes</ns1:displayName>
  <ns1:originalText>Use or disclosure of Psychotherapy Notes</ns1:originalText>
</ns1:purposeOfDisclosureCoded>
<ns1:samlAuthnStatement xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhincommon">
  <ns1:authInstant>2009-04-16T13:15:39Z</ns1:authInstant>
  <ns1:sessionIndex>987</ns1:sessionIndex>
  <ns1:authContextClassRef>urn:oasis:names:tc:SAML:2.0:ac:classes:X509</ns1:authContextClassRef>
  <ns1:subjectLocalityAddress>158.147.185.168</ns1:subjectLocalityAddress>
  <ns1:subjectLocalityDNSName>esmdg.cms.cmstest</ns1:subjectLocalityDNSName>
</ns1:samlAuthnStatement>
<ns1:samlAuthzDecisionStatement xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhincommon">
  <ns1:decision>Permit</ns1:decision>
  <ns1:resource>https://158.147.185.168:8181/SamlReceiveService/SamlProcessWS</ns1:resource>
  <ns1:action>TestSaml</ns1:action>
  <ns1:evidence>
    <ns1:assertion>
      <ns1:id/>

```

```

<ns1:issueInstant>2009-04-16T13:10:39.093Z</ns1:issueInstant>
<ns1:version>2.0</ns1:version>
<ns1:issuer>CN=SAML User,OU=Harris,O=HITS,L=Melbourne,ST=FL,C=US</ns1:issuer>
<ns1:issuerFormat>urn:oasis:names:tc:SAML:1.1:nameid-format:X509SubjectName</ns1:issuerFormat>
<ns1:conditions>
  <ns1:notBefore>2009-04-16T13:10:39.093Z</ns1:notBefore>
  <ns1:notOnOrAfter>2009-12-31T12:00:00.000Z</ns1:notOnOrAfter>
</ns1:conditions>
<ns1:accessConsentPolicy>urn:oid:2.16.840.1.113883.13.34.110.3</ns1:accessConsentPolicy>
<ns1:instanceAccessConsentPolicy>urn:oid:2.16.840.1.113883.13.34.110.3</ns1:instanceAccessConsentPolicy>
</ns1:assertion>
</ns1:evidence>
</ns1:samlAuthzDecisionStatement>
<ns1:messageId xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">AA569852P_1235959</ns1:messageId>
</ns0:assertion>
<ns0:nhinTargetCommunities>
  <ns1:nhinTargetCommunity xmlns:ns1="urn:gov:hhs:fha:nhinc:common:nhinccommon">
    <ns1:homeCommunity>
      <ns1:homeCommunityId>urn:oid:123.456.657.126</ns1:homeCommunityId>
      <ns1:name>Test HIH</ns1:name>
    </ns1:homeCommunity>
  </ns1:nhinTargetCommunity>
</ns0:nhinTargetCommunities>
<ns0:RegistryResponse status="urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Failure" requestId="esMD- PA Administrative Response">
  <ns1:ResponseSlotList xmlns:ns1="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0">
    <ns2:Slot xmlns:ns2="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0" name="esMDTransactionId">
      <ns2:ValueList>
        <ns2:Value> ABF000007845931</ns2:Value>
      </ns2:ValueList>
    </ns2:Slot>
    <ns2:Slot xmlns:ns2="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0" name="contentTypeCode">
      <ns2:ValueList>
        <ns2:Value>13</ns2:Value>
      </ns2:ValueList>
    </ns2:Slot>
    <ns2:Slot xmlns:ns2="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0" name="decisionIndicator">
      <ns2:ValueList>
        <ns2:Value>C</ns2:Value>
      </ns2:ValueList>
    </ns2:Slot>
  </ns1:ResponseSlotList>

```

```
</ns2:Slot>
<ns2:Slot xmlns:ns2="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0" name="creationTime">
  <ns2:ValueList>
    <ns2:Value>2018-01-25T10:18:26.9285722-05:00</ns2:Value>
  </ns2:ValueList>
</ns2:Slot>
<ns2:Slot xmlns:ns2="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0" name="submissionTime">
  <ns2:ValueList>
    <ns2:Value>2018-01-25T10:18:32.3785798-05:00</ns2:Value>
  </ns2:ValueList>
</ns2:Slot>
</ns1:ResponseSlotList>
<ns1:RegistryErrorList xmlns:ns1="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" highestSeverity="urn:oasis:names:tc:ebxml-
regrep:ErrorSeverityType:Error">
  <ns1:RegistryError errorCode="XDSRegistryMetadataError" codeContext="ESMD_414-Administrative Error (Incomplete File)"
severity="Error"/>
</ns1:RegistryErrorList>
</ns0:RegistryResponse>
</ns0:RespondingGateway_ProvideAndRegisterDocumentSetResponseRequest>
```

7. Retry Functionality

The esMD Gateway shall expect an HTTP 200 acknowledgement back from the HIH Gateway as a receipt of the message for any of the transactions that are delivered to HIH by the esMD. If the esMD Gateway does not receive an HTTP 200 acknowledgement back, it will retry sending the following transactions to the HIH Gateway. If the esMD Gateway fails to deliver any of the following transactions due to unavailability of HIH gateway after the three retries, the esMD will initiate an email communication to the esMD Support Team to reach out to HIH/RC manually through phone contact and/or email communication.

7.1 XDR Retry Scenarios

Table 38: Retry Scenarios common for both X12 and XDR Transactions provides the retry scenarios that are common for both X12 and XDR transactions.

Table 38: Retry Scenarios common for both X12 and XDR Transactions

ID	Transaction	1st Retry	2nd Retry	3rd Retry	Retry Failure Scenario
1.	First Notification. See section 4.6.4 The esMD System First Notification for more details.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the first time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the second time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the third time.	The esMD sends email to the esMD Support team with HIH’s phone contact and email to reach out to them manually to convey the message “Status of the HIH submission”.
2.	Second Notification. See section 4.6.5 The esMD System Second Notification for more details.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the first time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the second time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the third time.	The esMD sends email to the esMD Support team with HIH’s phone contact and email to reach out to them manually to convey the message “Failed to deliver Pickup Notification and provide the RC pickup timestamp”.

ID	Transaction	1st Retry	2nd Retry	3rd Retry	Retry Failure Scenario
3.	Third Notification for both X12 and XDR PA Requests. See section 4.6.6 The esMD System Third Notification for more details.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the first time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the second time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the third time.	The esMD sends email to the esMD Support team with RC’s phone contact and email to reach out to them manually to convey the message “Resubmit the decision response”.
4.	Any other error message	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the first time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the second time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the third time.	The esMD sends email to the esMD Support team with HIH’s phone contact and email to reach out to them manually to convey the message “Failed to deliver the error message”.

7.2 X12 Retry Scenario

Table 39: Retry Scenarios for X12 Transactions Only describes the retry scenarios for the X12N 278 5010 transactions only. This does not apply to the XDR transactions.

Table 39: Retry Scenarios for X12 Transactions Only

ID	Transaction	1st Retry	2nd Retry	3rd Retry	Retry Failure Scenario
1.	A 2-Business Day notification	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the first time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the second time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the third time.	The esMD sends an email to the esMD Support team with HIH’s phone contact and email to reach out to them manually to convey the message “Missing documentation must be submitted quickly.”

ID	Transaction	1 st Retry	2 nd Retry	3 rd Retry	Retry Failure Scenario
2.	A 4-Business Day Reject notification	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the first time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the second time.	Retry sending in four hours, i.e., after the “HTTP 400” error is received for the third time.	The esMD sends an email to the esMD Support team with HIH’s phone contact and email to reach out to them manually to convey the message “The Request has been rejected and a new request and documentation to be resubmitted”.

7.3 eMDR Pre-Pay and eMDR Post-Pay Retry Scenario

Table 40: Retry Scenario for eMDR Pre-Pay and Post-Pay describes the retry scenario for eMDR Pre-Pay and eMDR Post-Pay package delivery to HIH.

Table 40: Retry Scenario for eMDR Pre-Pay and Post-Pay

ID	Transaction	1 st Retry	2 nd Retry	3 rd Retry	Retry Failure Scenario
1.	eMDR Pre-Pay or Post-Pay package delivery to HIH	Retry sending in six hours, i.e., after the “HTTP 400” error is received for the first time.	Retry sending in six hours, i.e., after the “HTTP 400” error is received for the second time.	Retry sending in six hours, i.e., after the “HTTP 400” error is received for the third time.	The esMD sends an email to the esMD Support team after every retry failure with HIH’s details to reach out to them manually to convey the message “esMD fails to deliver the eMDR Pre-Pay or Post-Pay package to HIH.

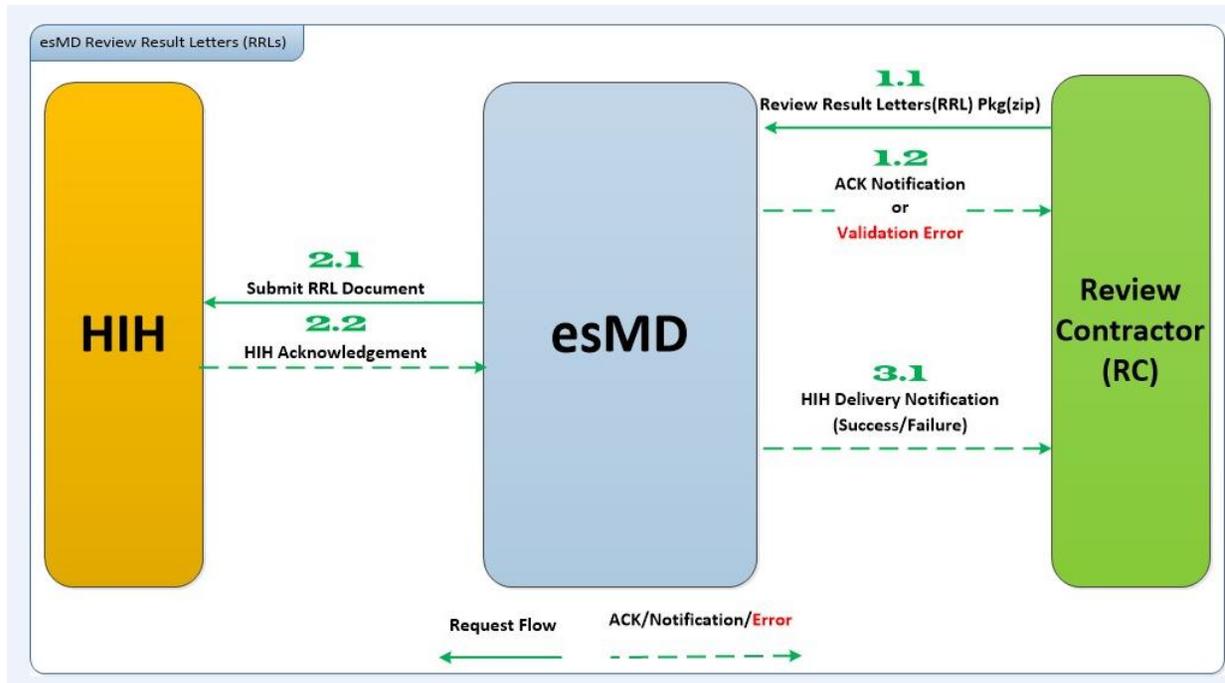
8. Pilot Programs

NOTE: ADR Review Results letter and PA PCR Decision letter functionalities cannot be used or implemented in the way that’s currently implemented in esMD system. esMD will be making the updates to these functionalities in the future release. HIHs may not be receiving these responses until the required updates are made in the esMD system.

8.1 ADR RRL and PA PCR Decision letters Business Overview

This section defines the process flow of PDF Letter(s) attached to the ADR Review Results Letter (RRL) XML sent from the RC to the HIH via the esMD system. Refer to Figure 22: ADR RRL Business Process Flow Diagram.

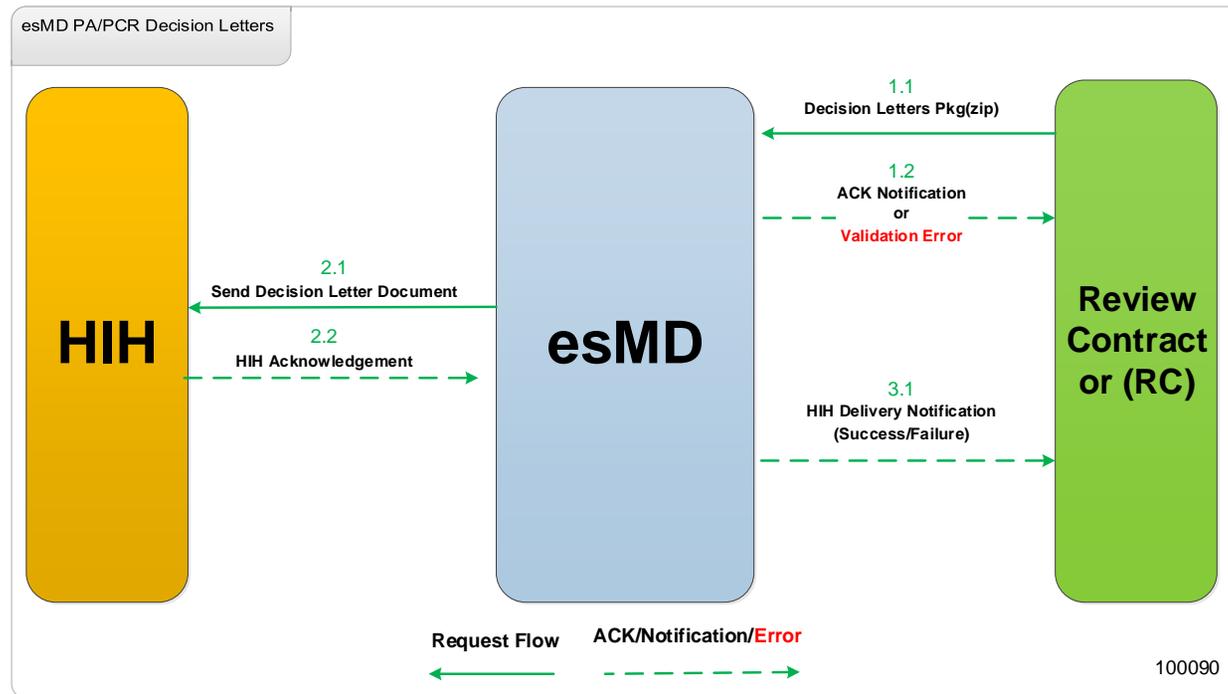
Figure 22: ADR RRL Business Process Flow Diagram



This section provides information on the high-level business use cases in which RCs send PA/PCR decision letters (PDFs only) to the HIHs via the esMD system.

Figure 23: PA/PCR Decision Letters Flow Diagram depicts the PA/PCR Decision Letters workflow in XDR form.

Figure 23: PA/PCR Decision Letters Flow Diagram



8.2 ADR RRL and PA/PCR Decision Letters Process Flow Overview

Refer to Table 41: ADR RRL Processing describes the typical ADR RRL interaction as shown in Figure 22: ADR RRL Business Process Flow Diagram.

Table 41: ADR RRL Processing

Message Sequence	Description
1.1	The RC creates the ADR RRL packages (consisting of RRLs and the esMD Process Metadata XML file) and sends the package to esMD via the TIBCO MFT Server.

Message Sequence	Description
1.2	The esMD validates the RRL Package received from the RC. The RC receives a success acknowledgement as an XML message from esMD after all validations are passed for the RRLs. The RC receives a validation error as an XML message from esMD for ADR RRLs sent by the RC.
2.1	RRLs are sent as clinical documents to the HIH by esMD after successfully processing the packages sent from the RC.
2.2	esMD receives the HIH Acknowledgement from the HIH after the HIH processes the RRL documents.
3.1	esMD creates the success or failure notification based on the response from the HIH on the delivery of RRL package. The RC receives the HIH delivery notification from esMD.

Table 42: PA/PCR Decision Letter Processing describes the typical PA/PCR decision letter interaction as shown in Figure 23: PA/PCR Decision Letters Flow Diagram.

Table 42: PA/PCR Decision Letter Processing

Message Sequence	Description
1.1	The RC sends the PA/PCR decision letters (PDF format) in a zip request package to esMD.
1.2	The esMD system processes the PA/PCR decision letter zip package received from the RC and generates the appropriate acceptance or rejection response acknowledgement to the RC.
2.1	The esMD system constructs the XDR request payload with the RC review decision letters embedded in unstructured HL7 clinical document standard and sends it to the HIH.
2.2	The HIH acknowledges the acceptance status of the document/request received from esMD.
3.1	esMD sends the PA/PCR documentation HIH delivery notifications to the RC.

8.3 Service Registration Request Processing Overview

The HIH shall initiate the eMDR Registration Request XML and send it to esMD as an XDR attachment using Content Type Code - 5. The esMD system allows HIHs to submit information for up to 100 distinct providers (NPIs) within a single service registration request XML. The HIH can submit multiple requests with a valid NPI that exists in NPPES system. esMD allows only EMDR service code in service registration request.

Refer to

Figure 24: Service Registration Process **Flow**. Table 43: Service Registration Flow Steps describes the step by step process of the eMDR Registration Request.

Figure 24: Service Registration Process Flow

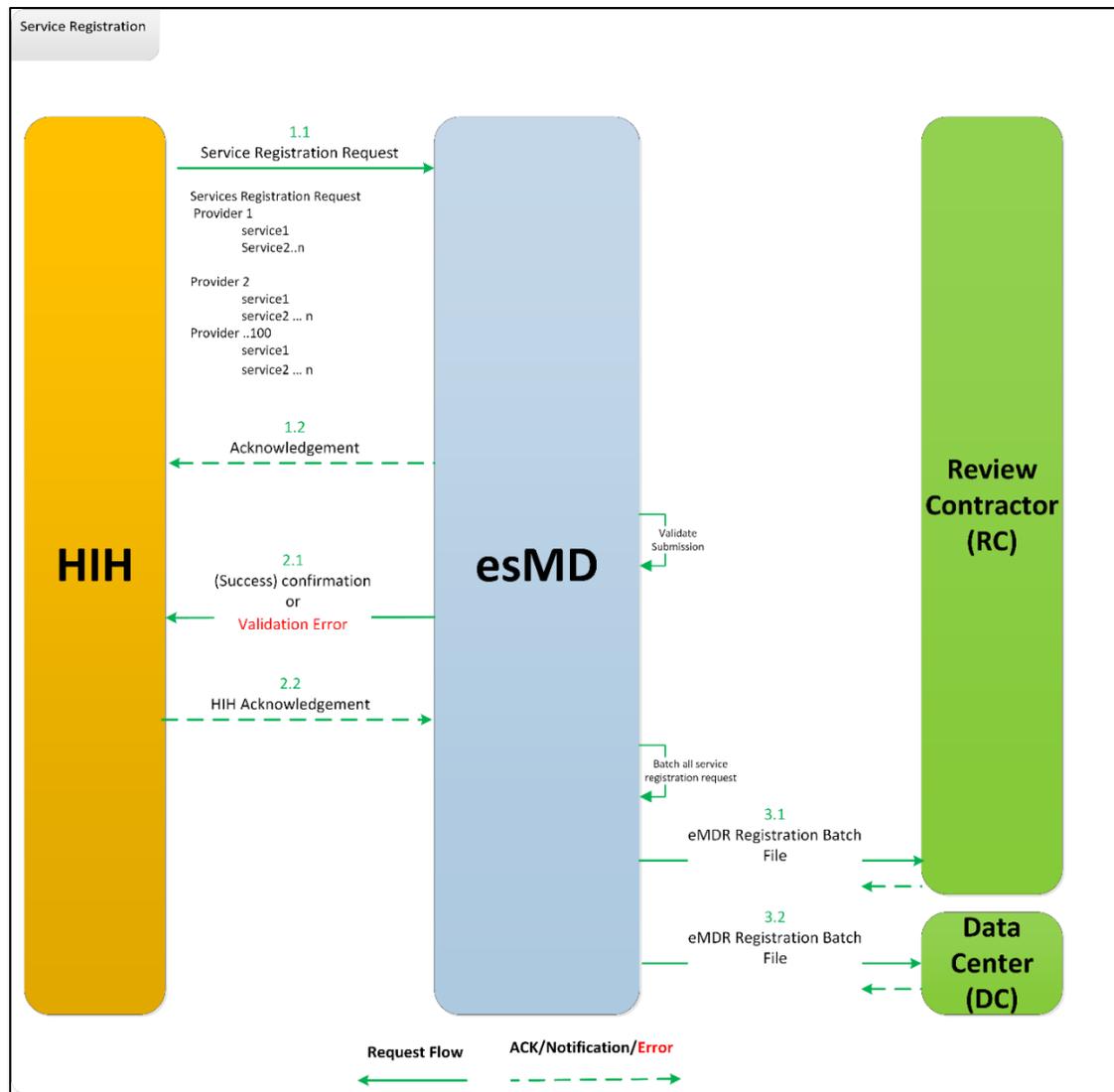


Table 43: Service Registration Flow Steps

Message Sequence	Description
1.1	The HIH submits the service registration request in XDR format to esMD with all necessary metadata information and the Service registration XML (consisting of information for one or more Provider(s) and Service(s)) wrapped as clinical information.
1.2	esMD sends the synchronous request acknowledgment to the HIH.
2.1	The esMD system processes the provider information received in the service registration request, and the success confirmation or error(s) are returned for any validation failures as the first notification. esMD sends one of the following notifications (asynchronous) to the HIH after completing processing of the service registration request: <ol style="list-style-type: none"> 1. esMD - Request Accepted; 2. esMD - Request Accepted with Errors; or 3. esMD - Meta Data Validation and Persistence.
2.2	The HIH acknowledges the acceptance/rejection status of the notification received from esMD.
3.1	esMD batches all the Service Registration requests and sends them to all of the MAC RCs.
3.2	esMD batches all the Service Registration requests and sends them to all of the Data Centers (DC).

8.4 eMDR Letters (Pre-Pay and Post-Pay)

This section focuses on exchanging structured (XML) and unstructured (PDF) eMDR and ADR (Pre-Pay, Post-Pay) transactions in the form of electronic clinical documents and Nationwide Health Information Network (NwHIN)-XDR profile standards, which may already exist in both the initiator and consumer entity system or may need to be created for this exchange.

This section offers guidance on associating the clinical attachment with its metadata, and their technical importance with appropriate examples. Table 44: eMDR Content Type Codes shows the Content Type Code details for eMDR programs.

Table 44: eMDR Content Type Codes

CTC	Display Name
1.5	eMDR Pre-Pay Letters

CTC	Display Name
1.6	eMDR Post-Pay Letters

8.4.1 eMDR Pre-Pay Logical Flow

Figure 25: eMDR Pre-Pay Process Flow depicts the logical processing of the eMDR (Pre-Pay) process, and Table 45: eMDR Pre-Pay Logical Process Flow Steps details the eMDR process.

The eMDR pre-pay logical flow depicts the series of events and sequence of interactions between esMD and HIHs via the XDR interface. The order and timing of the exchange of messages with the HIHs is driven by RC submissions.

Figure 25: eMDR Pre-Pay Process Flow

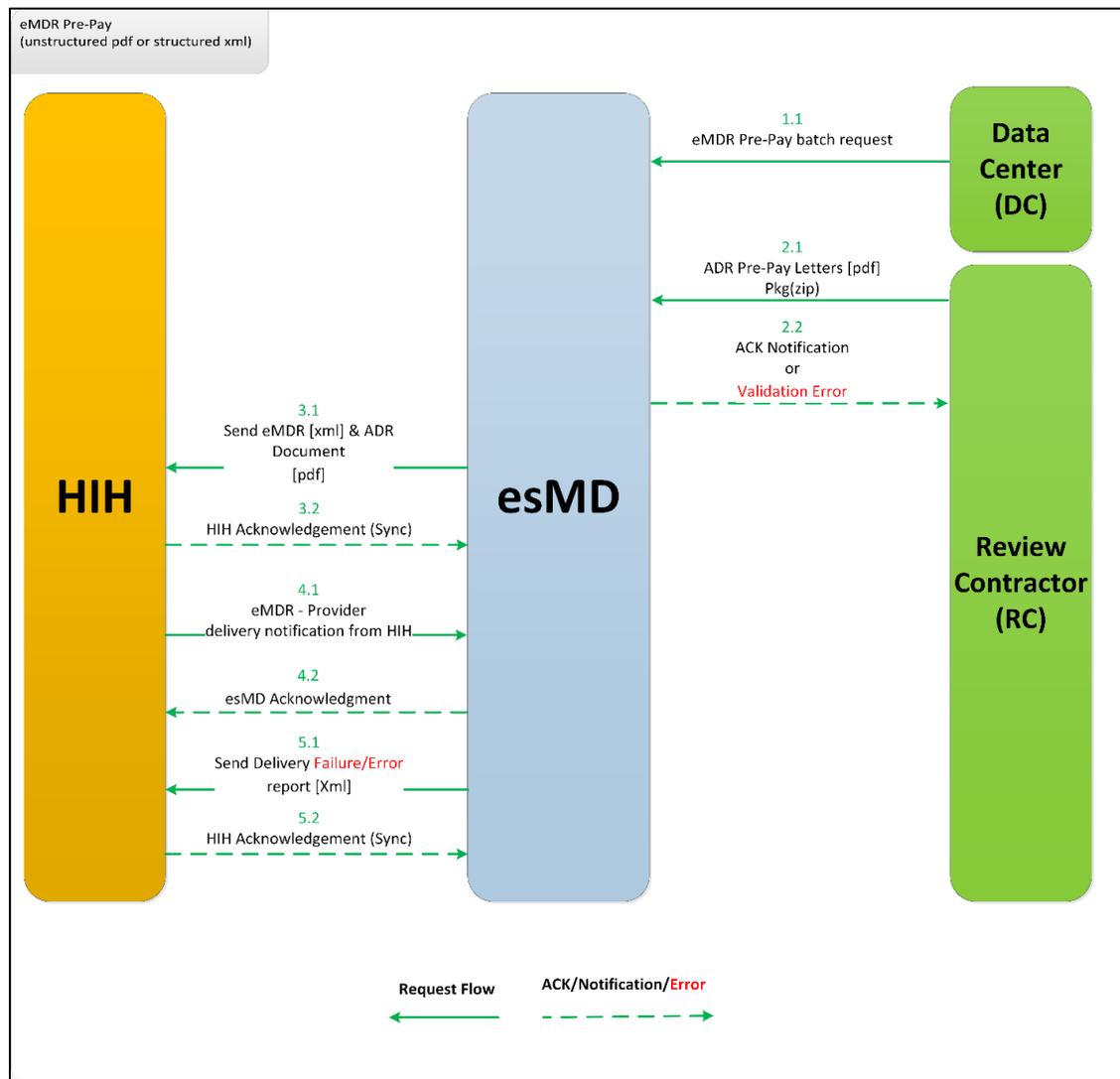


Table 45: eMDR Pre-Pay Logical Process Flow Steps

Message Sequence	Description
1.1	The esMD system receives the eMDR Pre-Pay batch request file from the DC. The esMD system processes the eMDR (Pre-Pay) batch request file and holds the eMDR requests within the esMD system until the matching ADR letter (PDF) is received from the RC. The esMD system maintains the record of any processing errors or failures.
2.1	The RC sends ADR letters (PDF) matching the eMDR requests in the zip request package to esMD.
2.2	The esMD system processes the ADR letter zip packages received from the RC and generates the appropriate acceptance or rejection response acknowledgement to the RC.
3.1	The esMD system constructs the XDR request payload with the RC's ADR PDF letter and structured matching eMDR embedded in the unstructured HL7 clinical document standard and sends the package to the HIH.
3.2	The HIH acknowledges the acceptance/failure with any of the following statuses for the document/request received from esMD: <ol style="list-style-type: none"> 1. RequestAccepted; 2. ResponseAccepted; 3. Success; or 4. Error.
4.1	The HIH sends the package delivery confirmation to esMD after the ADR PDF letter and eMDR structured XML are successfully transmitted to the Provider.
4.2	esMD acknowledges the delivery confirmation received from the HIH with any of the following statuses: <ol style="list-style-type: none"> 1. RequestAccepted; 2. ResponseAccepted; 3. Success; or 4. Error.
5.1	The esMD system sends the details of transaction that failed HIH delivery either due to validation error or transmission error.

Message Sequence	Description
5.2	The HIH acknowledges the acceptance/failure with any of the following statuses for the document/request received from esMD: <ol style="list-style-type: none"> 1. RequestAccepted; 2. ResponseAccepted; 3. Success; or 4. Error

8.4.2 eMDR Post-Pay Logical Flow

The eMDR post-pay logical flow depicts the series of events and sequence of interactions between esMD and the HIH via the XDR interface. The order and timing of the exchange of messages with HIHs is driven by RC submissions.

Figure 26: eMDR Post-Pay Process Flow depicts the logical processing of the eMDR (Post-Pay) process, and Table 46: eMDR Post-Pay Logical Process Flow Steps details the sequence of interactions between esMD and HIH.

Figure 26: eMDR Post-Pay Process Flow

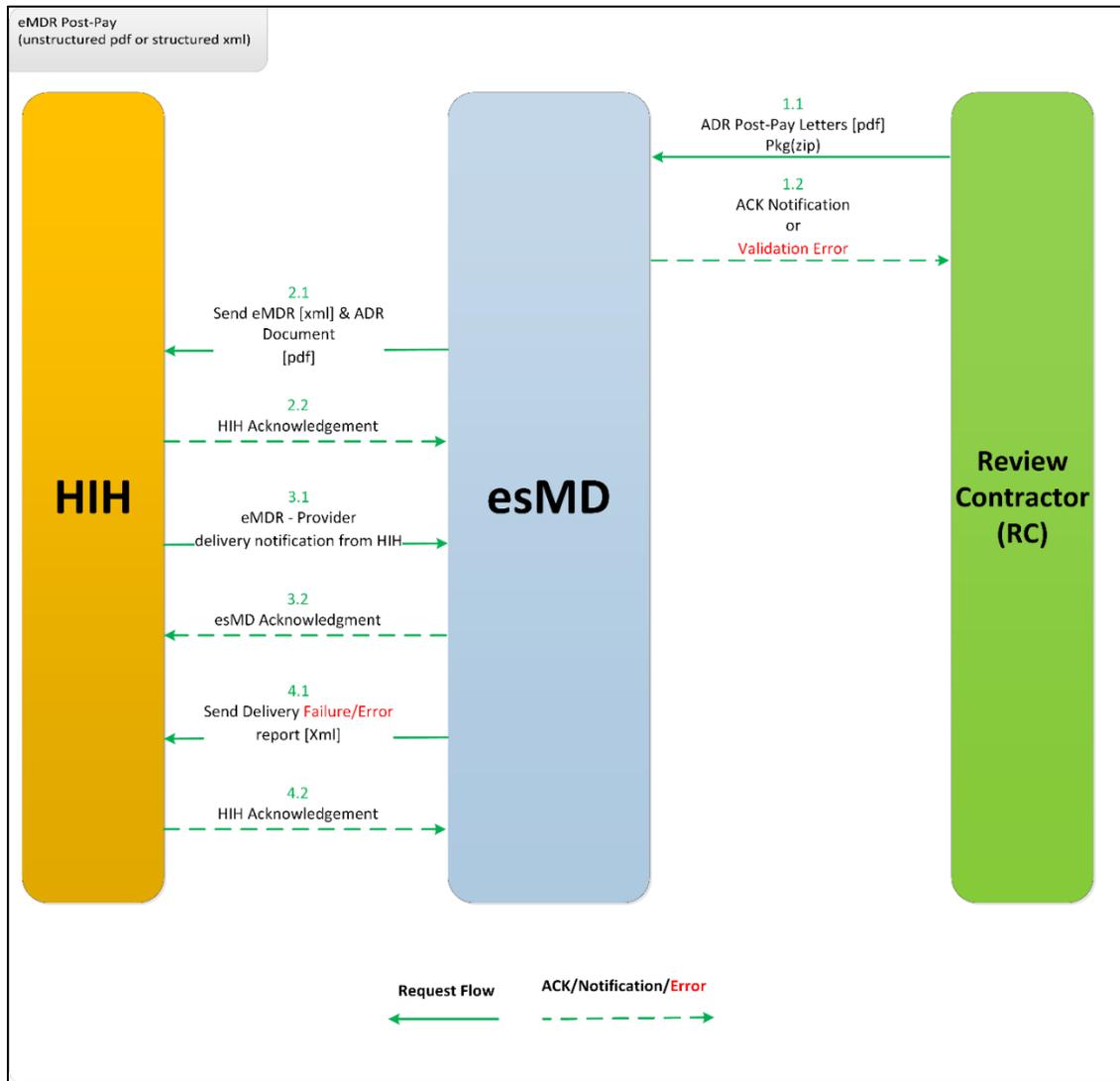


Table 46: eMDR Post-Pay Logical Process Flow Steps

Message Sequence	Description
1.1	The esMD system receives the ADR Letter PDF and structured eMDR Post-Pay XML in a zip file from the RC.
1.2	The esMD system processes the eMDR Post-Pay package received from the RC and generates the appropriate acceptance or rejection response acknowledgement to the RC.
2.1	The esMD system constructs the XDR request payload with the ADR PDF letter and structured Pre-Pay eMDR (XML) embedded in the unstructured HL7 clinical document standard and sends the package to the HIH.
2.2	The HIH acknowledges the acceptance/failure with any of the following statuses for the document/request received from esMD: <ol style="list-style-type: none"> 1. RequestAccepted; 2. ResponseAccepted; 3. Success; or 4. Error.
3.1	The HIH sends the package delivery confirmation to esMD after the ADR PDF letter and eMDR structured XML are successfully transmitted to the Provider.
3.2	The esMD system acknowledges the delivery confirmation received from the HIH with any of the following statuses: <ol style="list-style-type: none"> 1. RequestAccepted; 2. ResponseAccepted; 3. Success; or 4. Error.
4.1	The esMD system sends the details of the transaction that failed HIH delivery due to transmission error.
4.2	The HIH acknowledges the acceptance/failure with any of the following statuses for the document/request received from esMD: <ol style="list-style-type: none"> 1. RequestAccepted; 2. ResponseAccepted; 3. Success; or 4. Error.

8.4.3 Provider Delivery Acknowledgment

The HIH delivers the eMDR (Pre-Pay/Post-Pay) to the respective providers, who are required to send the delivery confirmation to esMD using the XDR Acknowledgment object (i.e., RespondingGateway_ProvideAndRegisterDocumentSetResponseRequest).

9. Reports

9.1 The esMD Reconciliation Reports to HIH

The esMD system sends the reconciliation report to each HIH for the submissions received from that HIH. The report is delivered in two formats: MR-101 esMD Reconciliation Report (Excel) and MR-102 esMD Reconciliation Report (Comma Separated Values (CSV)). This report is sent daily with all the transactions to each HIH, including all XDR and X12 submissions.

Note: The HIH should review the report outputs and report any issues or discrepancies on the report to the esMD Service Desk. Review the “Transaction status” column for administrative responses; if the status is “Sent Administrative Error HIH ACK to RC”, the HIH should contact the affiliated RC to obtain details on the reason for the administrative error.

Refer to Figure 27: MR101esMD Reconciliation Report in Excel Format and Figure 28: MR102-esMD Reconciliation Report in CSV Format for the sample layout of the report. Any changes to this layout will be included in the later version of this document.

Figure 28: MR102-esMD Reconciliation Report in CSV Format

MR102-esMDRecncilRpt- Report Execution Time:12/14/2020	
Report Period:(Submission Timestamp) >= 12/1/2020 12:00:00 AM	
Report Period Update:((Submission Update Timestamp) Between 12/13/2020 12:00:00 AM and 12/14/2020 12:00:00 AM)	
Health Information Handler(s):All	
Review Contractor(s):All	
Transaction Details	
MR102-eSMDRecncilRpt	
Transaction ID,"Parent Transaction ID","Sender ","Sender Type","Recipient ","Recipient Type","Unique Letter ID","Submission Date","Content Type Code","CTC Description","Transaction Type","Claim ID","Case ID","NPI","Unique ID","Transaction Status","Re	
ABT000007080030,"CKR000007080029","DATS Test Review Contractor","RC","Test HIH for DBR","HIH","undefineddqhke28nxe181kbw1fk9x6ayn","12/2/2020 6:54:21 PM","1.5","eMDR Pre-Pay","XDR-Electronic Letters-PDF File","NA","NA","NA","undefined	
ABX000007079689,"NA","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/1/2020 5:36:41 PM","9","First Level Appeal Requests","XDR-First Level Appeals Requests","FLAppeals Claimid SJ11","Test Case SR","1234567890","SJ523422P_	
ADB000007079519,"NA","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/1/2020 11:03:50 AM","8.5","HOPD","XDR-PA","NA","NA","1345678902","SJ523422P_800031606838624947","Complete","12/2/2020 6:50:21 PM","NA","1","C	
AHH000007079647,"NA","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/1/2020 1:54:16 PM","8.3","HHPCR","XDR-Pre-Claim Review","NA","NA","1234567890","SJ523422P_800351606848854876","Complete","12/2/2020 6:51:07 P	
AJG000007080530,"NA","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/9/2020 1:47:16 PM","8.3","HHPCR","X12_278-Pre-Claim Review","NA","NA","1111111112","NA","Supporting Doc Received","NA","NA","0","CONVERT XI	
APB000007080065,"VVG000007080062","DATS Test Review Contractor","RC","NA","NA","undefinedz06yvbvoxky2vhj3aag31mg1w","12/3/2020 6:26:01 AM","1.5","eMDR Pre-Pay","XDR-Electronic Letters-PDF File","NA","NA","NA","undefinedz06yvbvoxky2	
APV000007079662,"NA","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/1/2020 2:44:19 PM","8.4","DMEPOS","XDR-PA","NA","NA","1345678902","SJ523422P_800481606851859865","Complete","12/2/2020 6:51:23 PM","NA","1","	
ASD000007080092,"NA","DATS Test Review Contractor","RC","NA","NA","12/3/2020 7:15:09 AM","1.6","eMDR Post-Pay","XDR-Electronic Letters Post Pay","NA","NA","NA","L16UH4SESD002D120320T0711160","Invalid","NA","NA","2","1","SCHEMA V	
AWJ000007080551,"MSP000007080524","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/9/2020 3:10:30 PM","8.1","Ambulance","XDR_X12-PA","NA","NA","1111111112","SJ523422P_802181607544629214","Complete","12/9/2020	
BET000007080093,"NA","DATS Test Review Contractor","RC","NA","NA","12/3/2020 7:15:14 AM","1.6","eMDR Post-Pay","XDR-Electronic Letters Post Pay","NA","NA","NA","L16UNKTESD002D120320T0712580","Invalid","NA","NA","2","1","SCHEMA V	
BGL000007079660,"NA","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/1/2020 2:42:22 PM","8.4","DMEPOS","XDR-PA","NA","NA","1345678902","SJ523422P_800461606851739875","Complete","12/2/2020 6:51:23 PM","NA","1","	
BHC000007080357,"NA","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/8/2020 3:31:40 PM","8.4","DMEPOS","X12_278-PA","NA","NA","1111111112","NA","Supporting Doc Received","NA","NA","0","X12 VALIDATION SUCCES	
BJI000007080677,"NA","Test HIH for DBR","HIH","Test Review Contractor 3","RC","NA","12/10/2020 11:38:13 AM","8.4","DMEPOS","XDR-PA","NA","NA","1345678902","SM710202P_802351607618290900","Invalid","NA","NA","1","0","AUTHORIZED REVIE	
BJJ000007080384,"CBZ000007080382","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/8/2020 10:31:04 PM","8.3","HHPCR","XDR_X12-Pre-Claim Review","NA","NA","1111111112","SJ523422P_802031607484662822","Invalid","NA	
BLP000007080543,"NA","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/9/2020 3:09:43 PM","7","Unsolicited PWK Documentation","XDR-Unsolicited PWK Documentation","12345678","NA","1234567890","SJ523422P_8021316075	
BLU000007079617,"NA","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/1/2020 12:20:01 PM","8.5","HOPD","XDR-PA","NA","NA","CN=esmdtc.cms.hhs.gov, OU=esMDTestCenter, O=Centers for Medicare & Medicaid Services, L=Ba	
BMA000007080387,"VAZ000007079746","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/8/2020 10:43:18 PM","8.3","HHPCR","X12_275-Pre-Claim Review","NA","NA","1111111112","NA","Invalid","NA","NA","1","1","VALIDATED TR	
BML000007080355,"PCR000007080354","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/8/2020 3:27:40 PM","8.3","HHPCR","XDR_X12-Pre-Claim Review","NA","NA","1111111112","SJ523422P_801981607459257826","Complete","	
BMU000007079661,"NA","Test HIH for DBR","HIH","DATS Test Review Contractor","RC","NA","12/1/2020 2:43:19 PM","8.4","DMEPOS","XDR-PA","NA","NA","1345678902","SJ523422P_800471606851799861","Complete","12/2/2020 6:51:23 PM","NA","1"	

9.2 eMDR Failure Report

The MR115 eMDR transaction failure report is a MicroStrategy report, which contains the eMDR (Pre-Pay/Post-Pay) information, that either esMD fails to deliver to the HIHs or any error associated with the eMDR transaction. See Figure 29: (MR115) eMDR Transaction Failure Report for the sample layout of the report. This report is being sent to all HIHs supporting eMDR Pre-Pay or Post-Pay submissions.

Figure 29: (MR115) eMDR Transaction Failure Report

MR115: eMDR Transaction Failure Report - Report Execution Time 2/4/2021 3:44:26 PM
 Report Period:(eMDR Submission Timestamp) Between 2/3/2021 12:00:00 AM and 2/4/2021 12:00:00 AM
 Report Period:(eMDR Submission Update Timestamp) Between 2/3/2021 12:00:00 AM and 2/4/2021 12:00:00 AM
 Health Information Handler(s):

Transaction Failure Details																			
esMD Transaction ID	Parent Transaction ID	Submission Timestamp	Letter Date	Unique Letter ID	NPI	Health Information	Health Informa	Jurisdiction	Jurisdiction OID	Review Contractor	Batch Cycle Date	Provider/Org	PTAN	Content	EMDR TYPE	Program Name	Claim ID	Case ID	Error Description
ACP000007084376	HPP000007084374	1/26/2021 12:01:53 PM	20210126	SJS23422P73ozwg97hg62vzde1to95p	NA	NA	NA	DATS	urn:oid:2.16.840.1.113883.13.34.110.1.993.1	Test Review Contractor	20210126	NA	NA	1.5	PRE-PAY-PDF	NA	NA	NA	ESMD_1040-No match found for the Unique Letter ID and the Batch Cycle Date received in the ADR ESMD PDF Letter File.
AIL000007084450	MEG000007084443	1/26/2021 11:00:55 PM	20210126	SJS23422P9bnspee5jziva449oa553y	NA	NA	NA	DATS	urn:oid:2.16.840.1.113883.13.34.110.1.993.1	Test Review Contractor	20210126	NA	NA	1.5	PRE-PAY-PDF	NA	NA	NA	ESMD_1040-No match found for the Unique Letter ID and the Batch Cycle Date received in the ADR ESMD PDF Letter File.
BAG000007084382	DDG000007084381	1/26/2021 12:05:54 PM	20210126	SJS23422Pq4u4y20osp1v5u5kvncc0or	NA	NA	NA	DATS	urn:oid:2.16.840.1.113883.13.34.110.1.993.1	Test Review Contractor	20210126	NA	NA	1.5	PRE-PAY-PDF	NA	NA	NA	ESMD_1040-No match found for the Unique Letter ID and the Batch Cycle Date received in the ADR ESMD PDF Letter File.
CUD000007084237	SOQ000007084232	1/26/2021 11:35:58 AM	20210126	SJS23422Ppoo8w0a7tzz4jog3teh32wbd	NA	NA	NA	DATS	urn:oid:2.16.840.1.113883.13.34.110.1.993.1	Test Review Contractor	20210126	NA	NA	1.5	PRE-PAY-PDF	NA	NA	NA	ESMD_1040-No match found for the Unique Letter ID and the Batch Cycle Date received in the ADR ESMD PDF Letter File.
DEF000007084378	EIA000007084373	1/26/2021 12:01:58 PM	20210126	SJS23422Pk863aavq5nkhaccqz5yewq0n	NA	NA	NA	DATS	urn:oid:2.16.840.1.113883.13.34.110.1.993.1	Test Review Contractor	20210126	NA	NA	1.5	PRE-PAY-PDF	NA	NA	NA	ESMD_1040-No match found for the Unique Letter ID and the Batch Cycle Date received in the ADR ESMD PDF Letter File.
DCR000007084435	NA	1/26/2021 3:30:29 PM	02/13/2020	SJS23422P5r6lslgruck4gc48lrvh3z9	1932695756	Test HIH for DBR	urn:oid:12.3.456.65	MAC JF	urn:oid:2.16.840.1.113883.13.34.110.1.110.3	Novitas Solutions	20210126	Bosco	NA	1.5	PRE-PAY	PARTB	4hsg7y9r3kzdl8mo	NA	ESMD_1082-No match found for the Unique Letter ID received in the EMDR FLAT FILE.
EAB000007085450	NA	2/3/2021 11:45:48 AM	04/09/2020	SJS23422Pcwlnkthpcvui0e1v3w19ee	1932695756	Test HIH for DBR	urn:oid:12.3.456.65	MAC JL	urn:oid:2.16.840.1.113883.13.34.110.1.110.12	Novitas Solutions	20210203	Kshlerin	NA	1.5	PRE-PAY	PARTB	NA	NA	ESMD_1025 EITHER THE CLAIM ID IS INVALID OR MISSING
EAB000007085450	NA	2/3/2021 11:45:48 AM	04/09/2020	SJS23422Pcwlnkthpcvui0e1v3w19ee	1932695756	Test HIH for DBR	urn:oid:12.3.456.65	MAC JL	urn:oid:2.16.840.1.113883.13.34.110.1.110.12	Novitas Solutions	20210203	Kshlerin	NA	1.5	PRE-PAY	PARTB	NA	NA	ESMD_1027 EITHER THE BENEFICIARY ID IS INVALID OR MISSING
FKR000007084391	PNZ000007084388	1/26/2021 12:26:56 PM	20210126	SJS23422P	NA	NA	NA	DATS	urn:oid:2.16.840.1.113883.13.34.110.1.993.1	Test Review Contractor	20210126	NA	NA	1.5	PRE-PAY-PDF	NA	NA	NA	ESMD_1040-No match found for the Unique Letter ID and the Batch Cycle Date received in the ADR ESMD PDF Letter File.
FPF000007084349	BFM000007084344	1/26/2021 11:51:57 AM	20210126	SJS23422Plsb4nuhsk87bbj3qyz38e0ul	NA	NA	NA	DATS	urn:oid:2.16.840.1.113883.13.34.110.1.993.1	Test Review Contractor	20210126	NA	NA	1.5	PRE-PAY-PDF	NA	NA	NA	ESMD_1040-No match found for the Unique Letter ID and the Batch Cycle Date received in the ADR ESMD PDF Letter File.
HL000007084404	ATL000007084399	1/26/2021 12:31:59 PM	20210126	SJS23422Pmz6kpp5uu3e2ynjy0n4u	NA	NA	NA	DATS	urn:oid:2.16.840.1.113883.13.34.110.1.993.1	Test Review Contractor	20210126	NA	NA	1.5	PRE-PAY-PDF	NA	NA	NA	ESMD_1040-No match found for the Unique Letter ID and the Batch Cycle Date received in the ADR ESMD PDF Letter File.
IEL000007084351	QYw000007084350	1/26/2021 11:52:54 AM	20210126	SJS23422P1l26hml57hyfwqzvoe3kllm	NA	NA	NA	DATS	urn:oid:2.16.840.1.113883.13.34.110.1.993.1	Test Review Contractor	20210126	NA	NA	1.5	PRE-PAY-PDF	NA	NA	NA	ESMD_1040-No match found for the Unique Letter ID and the Batch Cycle Date received in the ADR ESMD PDF Letter File.
IU000007084379	USA000007084375	1/26/2021 12:01:59 PM	20210126	SJS23422P31h4hp07skg3qf4kdc27os	NA	NA	NA	DATS	urn:oid:2.16.840.1.113883.13.34.110.1.993.1	Test Review Contractor	20210126	NA	NA	1.5	PRE-PAY-PDF	NA	NA	NA	ESMD_1040-No match found for the Unique Letter ID and the Batch Cycle Date received in the ADR ESMD PDF Letter File.

Appendix A Glossary

Term	Definition
Acknowledgement (ACK)	Message (such as one used in 'handshaking' process between two systems) that indicates the status of communications received. It is commonly written as ACK.
Additional Documentation Request (ADR)	Official letters sent to providers from the CMS RCs requesting additional documentation that is needed to process claims.
Advance Determination of Medical Coverage (ADMC)	A voluntary program that allows Suppliers and Beneficiaries to request prior approval of eligible items (e.g., wheelchairs) before delivery of the items to the beneficiary.
ASC	Accredited Standards Committee
CAQH	Council for Affordable Quality Healthcare
CORE	Committee on Operating Rules for Information Exchange
CONNECT	CONNECT implements a flexible, open-source gateway solution that enables healthcare entities - Federal agencies or private-sector health organizations or networks - to connect their existing health information systems to the eHealth Exchange. CONNECT is fully functional out-of-the-box, while at the same time configurable and flexible to allow organizations to customize it to meet their needs and those of their existing health information systems.
De-identified Data	De-identified data is data from which patient identifiers consisting of Personally Identifiable Information (PII) is removed. The business rules for de-identified data follow the HIPAA Privacy Rule including the de-identification of the specified identifiers.
Electronic Submission of Medical Documentation (esMD)	A new mechanism for submitting medical documentation via a secure Internet gateway connecting providers to CMS. In its second phase, the esMD will allow Medicare RCs to electronically submit claim related ADR letters, and other use case requests, to providers when their claims are selected for review.
Health Information Handler (HIH)	An HIH is defined as an organization that oversees and governs the exchange of health-related claim reviewer information from provider to the esMD Gateway according to nationally recognized standards.
Health Information Technology Standards Panel (HITSP)	HITSP is a volunteer-driven, consensus-driven organization that is sponsored through a contract from the Department of Health and Human Services (HHS). HITSP harmonizes and recommends the technical standards that are crucial to assure the interoperability of electronic health records.

Term	Definition
HTTPS	A set of rules for a speedy retrieval and transmission of electronic documents written in Hypertext Markup Language (HTML) over a secure connection. HTTPS addresses differentiated from HTTP because they encrypt and decrypt user pages to prevent unauthorized access to sensitive data. Online credit card processing and banking websites use HTTPS addresses to ensure privacy and provide secure processing for users.
Interoperability	Interoperability is the ability of health information systems to work together, within and across organizational boundaries, in order to advance the effective delivery of healthcare for individuals and communities.
Interface	A well-defined boundary where direct contact between two different environments, systems, etc., occurs, and where information is exchanged.
eHealth Exchange	The eHealth Exchange is a set of standards, protocols, legal agreements, and specifications that a consortium of health information organizations has agreed are necessary for secure and private exchange of health information over the Internet. The eHealth Exchange is overseen by the Office of the National Coordinator for Health Information Technology (IT) (ONC).
Performance	Accomplishment of a transaction measured against preset standards of accuracy, completeness, cost, and speed.
Privacy	An individual's interest in protecting his or her individually identifiable health information and the corresponding obligation of those persons and entities, that participate in a network for the purposes of electronic exchange of such information, to respect those interests through fair information practices.
Response Time	It is the interval between a user-command and the receipt of an action, result, or feedback from the system. It is expressed as the sum of (a) transmission time of the command to the system, (b) processing time at the Central Processing Unit (CPU), (c) access time to obtain required data from a storage device, and (d) transmission time of the result back to the user. When applied to a system component, it is the time taken to react to a system request or a given input.
SAML	Security Assertion Markup Language used for message authentication.
Security	The physical, technological, and administrative safeguards used to protect individually identifiable health information.
SOAP	Simple Object Access Protocol is a message exchange format for web services.

Term	Definition
TLS	<p>TLS and its predecessor, Secure Sockets Layer (SSL), are cryptographic protocols that "provide communications security over the Internet". TLS and SSL encrypt the segments of network connections above the Transport Layer, using symmetric cryptography for privacy and a keyed message authentication code for message reliability. TLS is an IETF standards track protocol, last updated in RFC 5246, and based on the earlier SSL specifications developed by Netscape Corporation.</p> <p>The TLS protocol allows client/server applications to communicate across a network in a way designed to prevent eavesdropping and tampering. A TLS client and server negotiate a successful connection by using a handshaking procedure. During this handshake, the client and server agree on various parameters used to establish the connection's security.</p> <ul style="list-style-type: none"> • The handshake begins when a client connects to a TLS-enabled server requesting a secure connection, and presents a list of supported CipherSuites (ciphers and hash functions). • From this list, the server picks the strongest cipher and hash function that it supports and notifies the client of the decision. • The server sends back its identification in the form of a digital certificate. The certificate usually contains the server name, the trusted CA, and the server's public encryption key. • The client may contact the server that issued the certificate (the trusted CA as above) and confirm that the certificate is valid before proceeding. • In order to generate the session keys used for the secure connection, the client encrypts a Random Number (RN) with the server's public key (PbK), and sends the result to the server. Only the server should be able to decrypt it (with its private key (PvK)): this is the one fact that makes the keys hidden from third parties, since only the server and the client have access to this data. The client knows PbK and RN, and the server knows PvK and (after decryption of the client's message) RN. A third party is only able to know RN if PvK has been compromised.
TLS (Cont.)	<ul style="list-style-type: none"> • From the random number, both parties generate key material for encryption and decryption. • This concludes the handshake and begins the secured connection, which is encrypted and decrypted with the key material until the connection closes. <p>If any one of the above steps fails, the TLS handshake fails, and the connection is not created.</p>
Transaction	<p>Event or process (such as an input message) initiated or invoked by a user or system, regarded as a single unit of work and requiring a record to be generated for processing in a database.</p>

Appendix B Acronyms

Table 47: Acronyms

Acronym	Term
A/B	Part A/Part B
AA	Assigning Authority
ACK	Acknowledgement
ACN	Attachment Control Number
ADMC	Advance Determination of Medical Coverage
ADR	Additional Documentation Request
AN	Alphanumeric
ASC	Accredited Standards Committee
C-CDA	Consolidated Clinical Document Architecture
CA	Certificate Authority
CAQH	Council for Affordable Quality Healthcare
CDA	Clinical Document Architecture
CDP	Clinical Documents for Payers
CMS	Centers for Medicare & Medicaid Services
CORE	Committee on Operating Rules for Information Exchange
CSV	Comma Separated Value
CTC	Content Type Code
DC	Data Center
DME	Durable Medical Equipment
DMEPOS	Durable Medical Equipment, Prosthetics/Orthotics & Supplies
DNS	Domain Name System
EDI	Electronic Data Interchange

Acronym	Term
EFT	Enterprise File Transfer
eMDR	Electronic Medical Documentation Request
esMD	Electronic Submission of Medical Documentation
FIPS	Federal Information Processing Standards
HCR	Health Care Services Review
HHPCR	Home Health Pre-Claim Review
HHS	U.S. Department of Health and Human Services
HICN	Health Insurance Claim Number
HIE	Health Information Exchange
HIH	Health Information Handler
HIPAA	Health Information Portability and Accountability Act
HITSP	Health Information Technology Standards Panel
HL7	Health Level 7 International
HOPD	Hospital Outpatient Department Services
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure
ID	Identifier
IETF	Internet Engineering Task Force
IHE	Integrating the Healthcare Enterprise
IP	Internet Protocol
IT	Information Technology
LOB	Line of Business
MAC	Medicare Administrative Contractor
MFT	Managed File Transfer

Acronym	Term
MIME	Multipurpose Internet Mail Extension
MR	Medical Review
MTOM	Message Transmission Optimization Mechanism
NAT	Network Address Translation
NHIN	Nationwide Health Information Network
NHIO	National Health Information Organization
NIST	National Institute of Standards and Technology
NPI	National Provider Identifier
NPPES	National Plan and Provider Enumeration System
NR	Not Required
OID	Organizational Identifier
ONC	Office of National Coordinator for HIT
PA	Prior Authorization
PAR	Prior Authorization Request
PCR	Pre-Claim Review
PDF	Portable Document Format
PERM	Payment Error Rate Measurement
PROD	Production
PWK	Paperwork
R4.0	esMD Release 4.0
RA	Recovery Auditor
RC	Review Contractor
RHIO	Regional Health Information Organization
RN	Random Number

Acronym	Term
ROI	Release of Information
RRL	Review Results Letter
SAML	Security Assertion Markup Language
SHA	Secure Hash Algorithm
SOAP	Simple Object Access Protocol
SSL	Secure Sockets Layer
TIFF	Tagged Image File Format
TLS	Transport Layer Security
URI	Uniform Resource Identifier
URL	Uniform Resource Locator
UTN	Unique Tracking Number
UUID	Universally Unique Identifier
XDR	Cross-Enterprise Document Reliable Interchange
XML	Extensible Markup Language
XSPA	Cross-Enterprise Security and Privacy Authorization

Appendix C Referenced Documents

- HL7 CDA Release 2
 - Org/SDO: Health Level 7
 - Version: 3
 - Link:
This information may be found in the "Related Documents" or "Implementation Guide" sections on the following web site:
https://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- HL7 Implementation Guide for CDA[®] Release 2: IHE Health Story Consolidation, Release 1.1 - US Realm
 - Org/SDO: Health Level 7
 - Version: 3
 - Link:
This information may be found in the "Related Documents" or "Implementation Guide" sections on the following web site:
https://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- NHIN Exchange Service Interface Specification CAQH CORE X12 Document Submission Service Interface Specifications
 - Org/SDO: eHealth Exchange
 - Version: 1.0
 - For more information on this, please refer to the "Related Documents" or "Implementation Guide" sections on the following web site:
https://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- NHIN Exchange Messaging Platform Specification
 - Org/SDO: eHealth Exchange
 - Version: 3.0
 - For more information on this, please refer to the "Related Documents" or "Implementation Guide" sections on the following web site:
https://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- NHIN Exchange Authorization Framework Specification
 - Org/SDO: eHealth Exchange
 - Version: 3.0
 - For more information on this, please refer to the "Related Documents" or "Implementation Guide" sections on the following web site:
https://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- NHIN Exchange Document Submission Production Web Service Interface Specification
 - Org/SDO: eHealth Exchange
 - Version: 2.0
 - For more information on this, please refer to the "Related Documents" or "Implementation Guide" sections on the following web site:
https://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- NHIN esMD XDR Production Specification

- Org/SDO: eHealth Exchange
- Version: 1.0
- Link:
http://exchange-specifications.wikispaces.com/file/view/ THE ESMD_XDR_Production_Specification_v1.0.pdf
- CAQH Phase II CORE 270 Connectivity Rule
 - Org/SDO: CAQH CORE
 - Version: v2.2.0
 - Link:
<http://www.caqh.org/core/caqh-core-phase-ii-rules>
- XDR and XDM for Direct Messaging Specification
 - Org/SDO: DirectTrust.org
 - Version: 1.0
 - For more information on this, please refer to the "Related Documents" or "Implementation Guide" sections on the following web site:
https://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- IHE XDR
 - Org/SDO: IHE
 - Version: 9.0
 - For more information on this, please refer to the "Related Documents" or "Implementation Guide" sections on the following web site:
https://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- IHE XDS Provide and Register Document Set-b IHE IT Infrastructure 5 Technical Framework Volume 2b (ITI TF-2b) Transactions Part B
 - Org/SDO: IHE
 - Version: 9.0
 - For more information on this, please refer to the "Related Documents" or "Implementation Guide" sections on the following web site:
https://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- For ASC X12N 278 information, see ASC X12
 - Org/SDO: ASC X12
 - Version: 5010
 - Link:
<http://store.x12.org/store/>
- ASC X12N TA1
 - Org/SDO: ASC X12
 - Version: 5010
 - Link:
<http://store.x12.org/store/healthcare-5010-original-guides>
- ASC X12N 999
 - Org/SDO: ASC X12
 - Version: 5010
 - Link:
<http://store.x12.org/store/healthcare-5010-original-guides>

- Electronic Determination of Coverage: Implementation Guide with ASC X12N 278 Transaction Sets
 - Org/SDO: Standards & Interoperability Framework
 - Version: V24
 - Link:
<https://oncprojecttracking.healthit.gov/wiki/download/attachments/16123367/esMD%20eDoC%20Implementation%20Guide%20278%20V24.docx?api=v2>
- IHE Deferred XDR (refer to v1.1.0.6).
 - For more information on this, please refer to the "Related Documents" or "Implementation Guide" sections on the following web site:
https://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- Trial Implementations Document Submission Interface Specification Version 1.1.0, refer to:
http://exchange-specifications.wikispaces.com/file/view/ESMD_XDR_Production_Specification_v1.0.pdf
- Trial Implementations Message Platform Service Interface Specification Version 3.0, refer to:
<http://www.healthit.gov/sites/default/files/nhin-messaging-platform-production-specification-v3.0.pdf>
- Authorization Framework Specification Version 2.0 refer to
<http://www.healthit.gov/sites/default/files/nhin-authorization-framework-production-specification-v2.0-1.pdf>
- IHE TF3 Cross-Transaction Specifications and Content Specifications Version 6.0 refer to
http://www.ihe.net/Technical_Framework/upload/IHE_ITI_TF_6-0_Vol3_FT_2009-08-10-2.pdf

Appendix D Setup of Disaster Recovery Sites

Problem Statement: Providing HIHs the flexibility to perform submission to CMS esMD Production (PROD) environment from the HIH's additional servers or any disaster recovery servers.

Procedure: The esMD system accepts submissions from HIHs through a single-entry point using a universal public URL (shared with HIHs). The esMD system currently does not host a disaster recovery site; hence, only one PROD environment runs in fault-tolerant mode (i.e., server-to-server backup) on multiple servers. Despite having multiple parallel processing servers, esMD is able to manage the use of a single URL to serve the HIHs. This is achieved through the F5 Load Balancer, which plays an important role in delegating the requests and responses to and from multiple servers.

Recommendation: esMD recommends that the HIHs implement a similar concept, i.e., have a load balancer between the regular processing servers and additional backup servers (e.g., disaster recovery) and tie up the load balancer with one DNS URL address. This will provide flexibility in broadcasting and multicasting requests/responses from one source in order to avoid any one-to-one mapping with external organization server complications.

With this approach, esMD will only need to update the HIH Certificate and the Connect Configuration to Point to the HIH's new DNS URL.

For additional information, contact the CMS esMD Service Desk at esMD_Support@cms.hhs.gov.

Appendix E Record of Changes

Table 48: Record of Changes

Version Number	Date	Author/Owner	Description of Change
1.0	10/24/2019	Ramesh Koyi	<ol style="list-style-type: none"> 1. Updated Tables 41 and 42; and 2. Added: <ol style="list-style-type: none"> a. Sections 8.4 and 9.2; b. Figures 29 through 33; and c. Tables 39 through 41.
1.1	10/02/2019	Ramesh Koyi	Resolved review comments. Updated: <ol style="list-style-type: none"> 1. Sections 1.1.2 and 1.2.2; and 2. Tables 2, 13, 14, 17, 24, and 39.
1.2	08/30/2019	Ramesh Koyi	Re-structured document of HIH IG for AR2020.01.0
1.3	04/20/2020	Vijayalakshmi Muthukrishnan	Updated for July 2020 release: <ul style="list-style-type: none"> • Section 1.2.2: Inserted numbers 13 & 14. • Updated Figures 1 & 32 • Updated Section 1.2.2 to include January CTC updates and July CTC update • Updated Tables 8, 13, 14, 20, & 24, to include CTC 8.5
2.0	08/07/2020	Vijayalakshmi Muthukrishnan	Updated for November 2020 release: <ol style="list-style-type: none"> 1. Updated: <ul style="list-style-type: none"> • Section 1.12, 1.2.2, 4.1.18, 4.2.1, 4.2.10, 4.4, 4.6.4.1, 4.6.6.1, 4.9.1, 6, 8, 8.4.3.1, 9.1. • Tables 7, 13, 19. 2. Added: <ul style="list-style-type: none"> • Section 4.3 3. Removed: <ul style="list-style-type: none"> • 1.3.3.0
2.1	08/10/2020	Vijayalakshmi Muthukrishnan	Updated to respond to comments from TOSS review.
2.2	08/17/2020	Vijayalakshmi Muthukrishnan	Updated Table 3 to add ACN changes
2.3	10/13/2020	Vijayalakshmi Muthukrishnan	Added Table 28

Version Number	Date	Author/Owner	Description of Change
3.0	01/15/2021	Vijayalakshmi Muthukrishnan	<ol style="list-style-type: none">1. Updated Section 1.2.2 to add information for AR2021.042. Updated Table 20 - #443. Added Section 7.3 & Table 404. Updated figures 29 & 30
3.1	02/05/2021	Vijayalakshmi Muthukrishnan	<ol style="list-style-type: none">1. Removed section 8.4.32. Updated section 9.2 to include "This report is being sent to all HIHs supporting eMDR Pre-Pay or Post-Pay submissions."3. Updated Figure 31

Appendix F Approvals

The undersigned acknowledge that they have reviewed the HIH Implementation Guide and agree with the information presented within this document. Changes to this HIH Implementation Guide will be coordinated with, and approved by, the undersigned, or their designated representatives.

Signature: _____ Date: 02/10/2021
Print Name: Ayana Chavis
Title: Contracting Officer's Representative (COR)
Role: CMS Approving Authority