



Development Applications and Technical Services

**Centers for Medicare & Medicaid Services
CMS eXpedited Life Cycle (XLC)**

Electronic Submission of Medical Documentation (esMD)

Review Contractor (RC) Client Microsoft .NET User Guide and Installation Handbook

Version 1.1 Final

08/30/2016

Document Number: DATS_RCClient_NET_Imp_Gd

Contract Number: HHSM-500-2015-00146U

Table of Contents

1. Introduction	1
1.1 Overview of the esMD	1
1.1.1 The esMD Claim Review Contractors.....	1
1.2 System Overview	2
1.3 System Requirements	3
1.4 RC Client Overview	3
1.4.1 RC Client Pull/Push Functionality.....	4
1.4.2 RC Client Application Overview.....	4
1.4.3 RC Client Operation Overview.....	6
2. Overview of How This Document is Structured	8
3. How to Start the RC Client and Log In	10
4. How to Enter a Decision on the Review Decision Response to Prior Authorization (PA) Request Tab	11
4.1 How to Enter an A-Affirmed Decision.....	11
4.2 How to Enter a M-Affirmed with Change Decision.....	17
4.3 How to Enter a N-Non Affirmed Decision.....	28
5. How to Enter an Error Code on the Error Response to PA Request Tab	34
6. How to Submit an Inbound Submission Error on the Administrative Error Response to Inbound Submissions Tab	39
7. How to Verify Connection to TIBCO MFT Server, Using the Advanced/Debugging Tab	42
8. System Requirements	43
8.1 Processor.....	43
8.2 Disk Space.....	43
8.3 Memory.....	44
8.4 Permissions.....	44
8.5 Network.....	44
8.6 Microsoft .NET Framework.....	44
8.7 Libraries.....	44
9. How to Install and Configure a Microsoft .NET Version of RC Client	44
9.1 Out-of-the-Box	45
9.1.1 Keystore Set Up.....	45
9.1.2 Configuring the RC Client.....	45
9.1.3 Running the RC Client.....	47

9.2	Custom RC Client	48
10.	TIBCO® MFT File Transfers	48
11.	XML Messages	49
11.1	Inbound	49
11.1.1	Payload Files	50
11.1.2	Flat File Rendering (FFR)	50
11.1.3	Cover Sheet.....	51
11.1.4	Metadata File	56
11.1.5	Pickup HIH Status Response.....	59
11.1.6	Pickup Validation Error Response	59
11.1.7	Administrative Error HIH Status Response	60
11.1.8	Administrative Error Response Validation Error.....	60
11.1.9	esMD Virus Scanning Service Down Error Response	61
11.1.10	Virus Scan Error Response	62
11.1.11	PA Review Response HIH Status Response.....	62
11.1.12	PA Review Response Validation Error Response	63
11.2	Outbound	63
11.2.1	Pickup Notification	64
11.2.2	Error Pickup Notification	64
11.2.3	Review Decision Response to PA Request	65
11.2.4	Error Response to PA Request.....	67
11.2.5	Administrative Error Response to Inbound Submissions	68
12.	RC Client Components	69
12.1	SFTP Client	70
12.2	Compression Utility	70
12.3	Encryption Utility	71
12.4	XML Processor	71
12.5	Scheduler	71
13.	RC Client Workflow	71
13.1	Start RC Client	71
13.1.1	Login and Encryption	71
13.2	Outbound Process	73
13.2.1	Outbound Start	73
13.2.2	Get Outbound Documents	73
13.2.3	Connect	73
13.2.4	Push	73
13.3	Inbound Processes	73
13.3.1	Inbound Start	73
13.3.2	Extraction Failure.....	73
13.3.3	Extraction.....	74
13.3.4	Checksum Verification	74
13.4	Acknowledgements	74

13.4.1	Pickup Notification	74
13.4.2	Error Pickup Notification	74
13.5	Connect.....	74
13.6	Get Notifications	75
13.7	Process Document.....	75
13.8	Pull Document	75
14.	Release 4.0 Changes in the API.....	75
15.	.NET Client API.....	76
15.1	Security.....	76
15.2	.NET API Documentation	77
15.2.1	Login.....	77
15.2.2	Inbound.....	78
15.2.3	Outbound.....	79
15.2.4	PA Review Decision Response	80
15.2.5	PA Error (Rejected Decision) Response.....	81
15.2.6	Administrative Error Response to Inbound Submissions	81
15.2.7	Utilities – Encryption	82
15.2.8	Advanced / Debugging API.....	83
15.2.9	Validation API	83
15.3	Logs	84
16.	Error Codes	85
16.1	Errors: esMD to RC	85
16.2	Errors: RC to esMD	87
16.2.1	Administrative Errors:	87
16.2.2	Pickup Errors	87
17.	PA Requests and Responses Automation with Shared Systems.....	88
17.1	Introduction	88
17.1.1	Overview of the Automation Process.....	88
17.1.2	Shared Systems	88
17.2	Assumptions	88
17.3	Automation of PA Requests/Responses – Application Workflow	89
17.3.1	Logical Workflow.....	89
17.3.2	Application Workflow	89
18.	Contacts	90
Appendix A:	Description of Fields on RC Client Tabs.....	92
Appendix B:	Reject Error Codes	95
Appendix C:	Industry Codes.....	96
Appendix D:	PA Reason Codes.....	97

Appendix E:	PA Procedure Codes	98
Appendix F:	Data Directories	100
Appendix G:	Content Type Codes	102
Appendix H:	Record of Changes	103
Appendix I:	Acronyms	104
Appendix J:	Glossary	106
Appendix K:	Referenced Documents.....	107
Appendix L:	Approvals	108

List of Figures

Figure 1: RC Client Inbound and Outbound Process	5
Figure 2: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 1	53
Figure 3: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 2	54
Figure 4: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 3	55
Figure 5: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 4	56
Figure 6: RC Client Components	70
Figure 7: RC Client Workflow	72
Figure 8: Encryption and Decryption Process	77
Figure 9: esMD Shared System/Workload Integration - Logical.....	89
Figure 10: Information Flow – X12N 278 PA Request/Response Integration with Shared Systems	90

List of Tables

Table 1: Medicare Contractors, Responsibilities and Contact Information ...	2
--	----------

Table 2: Libraries.....	44
Table 3: Sample RC Client Configuration File.....	46
Table 4: Inbound Files	49
Table 5: Outbound Files	49
Table 6: E_185457-flatfilerendering.ffr	51
Table 7: E_123456-metadata.xml	57
Table 8: Example of ParentUnique Id and Split Number Tag.....	59
Table 9: A_123456_Pickup_HIH_Status_Response.xml.....	59
Table 10: R_123456_Pickup_Validation_Error.xml	60
Table 11: S_123456_Administrative_Error_HIH_Status_Response.xml.....	60
Table 12: M_123456_Administrative_Response_Validation_Error.xml	61
Table 13: Y_1234567_Virus_Scan_Gateway_Failure.xml.....	61
Table 14: Y_1234567_Virus_Scan_Gateway_Failure.xml.....	61
Table 15: X_123456_Virus_Scan_Error.xml.....	62
Table 16: N_123456_PA_Review_Result_HIH_Status_Response.xml.....	63
Table 17: V_123456_PA_Review_Response_Validation_Error.xml	63
Table 18: P_186303_Pickup_Notification.xml	64
Table 19: P_186303_Pickup_Error_Notification.xml.....	65
Table 20: E_1523121_PA_Review_Response.xml	65
Table 21: E_1523124_PA_Review_Response.xml	66
Table 22: E_1541233_PA_Review_Response.xml	67
Table 23: E_1521342_PA_Review_Response.xml	68
Table 24: D_1532432AdministrativeErrorResponse.xml	69
Table 25: Inbound Client Methods.....	75
Table 26: The esMD.RcClient.Login.LoginProcess Methods.....	77
Table 27: The esMD.RcClient.Inbound.Inbound Methods.....	78

Table 28: The esMD.RcClient.Outbound.Outbound Methods	80
Table 29: Manual Submission of PA Result	80
Table 30: Manual Submission of PA Error (Rejected Decision) Response .	81
Table 31: Administrative Error Response to Inbound Submissions	82
Table 32: EMSD.RcClient.Encryption.EncryptionUtil Methods	82
Table 33: Remote Troubleshooting	83
Table 34: Validation Methods	84
Table 35: Error Codes Sent from the esMD to RC	85
Table 36: Administrative Error Codes	87
Table 37: Pickup Error Codes	87
Table 38: Support Points of Contact	91
Table 39: Descriptions of Fields on Review Decision Response to PA Request Tab	92
Table 40: Descriptions of Fields on Error Response to PA Request Tab	93
Table 41: Descriptions of Fields on Administrative Error Response to Inbound Submissions Tab	93
Table 42: Descriptions of Fields on Advanced/Debugging Tab	94
Table 43: Procedure Codes for the PA Programs	98
Table 44: Inbound File Names and Data Directories	100
Table 45: Outbound File Names and Data Directories	100
Table 46: Content Type Code Descriptions	102
Table 47: Content Type Codes and Business Types	102
Table 48: Record of Changes	103
Table 49: Acronyms	104
Table 50: Glossary	106
Table 51: Referenced Documents	107

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 of the 50 states in the nation, for their Medicaid programs and Children's Health Insurance Program (CHIP). The CMS works together with the CMS community and organizations in delivering improved and better coordinated care.

1.1 Overview of the esMD

Each year, the Medicare Fee-For-Service (FFS) Program makes billions of dollars in estimated improper payments. The CMS employs several types of Review Contractors (RCs) 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. Some HIHs are beginning to offer esMD gateway services; Claim Clearinghouses, Release of Information vendors, Health Information Exchanges, and Electronic Health Record vendors are often referred to as HIHS.

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

1.1.1 The esMD Claim 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 rules and regulations. Table 1: Medicare Contractors, Responsibilities and Contact Information lists the review contractors referenced in this implementation guide.

Table 1: Medicare Contractors, Responsibilities and Contact Information

Type of Contractor	Responsibilities	Contact Information
Medicare Administrative Contractors (MACs)	Process claims submitted by physicians, hospitals, and other health care professionals, and submit payment to those providers in accordance with Medicare rules and regulations. This includes identifying and correcting underpayments and overpayments.	http://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/Medicare-FFS-Compliance-Programs/Review-Contractor-Directory-Interactive-Map
Zone Program Integrity Contractors (ZPICs), formerly Program Safeguard Contractors (PSCs)	Identify cases of suspected fraud and take appropriate corrective actions.	http://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/Medicare-FFS-Compliance-Programs/Review-Contractor-Directory-Interactive-Map
Supplemental Medical Review Contractor (SMRC)	Conduct nationwide medical review, as directed by CMS. This includes identifying underpayments and overpayments.	http://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/Medicare-FFS-Compliance-Programs/Medical-Review/SMRC.html
Contractor (CERT DC), CERT Review Contractor (CERT RC), and CERT Statistical Contractor (CERT SC)	Collect documentation and perform reviews on a statistically-valid random sample of Medicare FFS claims to produce an annual improper payment rate.	https://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/Medicare-FFS-Compliance-Programs/CERT/index.html?redirect=/cert
Recovery Auditors	Identify underpayments and overpayments, as part of the Recovery Audit Program.	http://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/Medicare-FFS-Compliance-Programs/Recovery-Audit-Program/
Qualified Independent Contractor (QIC)	A party to the redetermination may request a reconsideration if dissatisfied with the redetermination decision. A QIC conducts the reconsideration.	https://www.cms.gov/medicare/appeals-and-grievances/orgmedffsappeals/reconsiderationbyaqualifiedindependentcontractor.html

1.2 System Overview

The esMD system provides a mechanism for exchanging medical documentation and responses for Cross-Enterprise Document Reliable Interchange (XDR) and X12N 278 requests between the Medicare Provider community and the Medicare RC community. The purpose is to enable the electronic transmission of information between HIHs who represent Providers and the Medicare RCs, replacing paper documents where possible.

The RC Client is a utility that enables RCs to communicate with esMD by exchanging files via TIBCO® Managed File Transfer (MFT) server.

Note: The esMD identifies submissions and requests sent from the HIHs to RCs, as inbound files, and identifies transactions and responses for XDR and X12N 278 sent from the RCs to HIHs, as outbound files.

1.3 System Requirements

See Section 8, System Requirements for the system requirements for installing a Microsoft .NET version of the RC Client.

Section 8, System Requirements provides the requirements needed for the computer system where the RC Client will be installed, including the computer system's processor, amount of disk space and free memory needed, permissions, minimum internet connectivity Kilobits Per Second (Kbps) transfer speeds, and the Microsoft .NET Framework version needed to run the RC Client properly.

Refer to the EIDM Instructions in the link below on how to obtain an EIDM login:
<http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Downloads/EIDMInstructions.docx>

Refer to Section 1.4.3 RC Client Operation Overview for Enterprise File Transfer (EFT) Password requirements as per CMS policy for logging in to Internal Server.

1.4 RC Client Overview

Since September 2011, the CMS has implemented the esMD program for providers to submit medical documentation in response to requests from Medicare RCs and also enhanced the esMD Gateway to support electronic responses to requests.

In September 2012, the CMS implemented a Prior Authorization (PA) process via the esMD Gateway for Power Mobility Devices (PMD) for FFS Medicare beneficiaries who reside in seven states with high populations of error-prone providers (California, Florida, Illinois, Michigan, New York, North Carolina, and Texas).

In January 2013, the CMS expanded the CMS esMD Gateway to allow Durable Medical Equipment (DME) suppliers and providers to send electronic PA Requests to Medicare RCs.

In June 2013, the CMS enabled automated "Prior Authorization Review Results Responses" from Medicare RCs to HIHs via the esMD Gateway.

In June 2014, the "RC Client" application was implemented to allow data exchanges between HIHs and facilitate Medicare RCs electronically receiving PA requests to the RC's computer system and allow RCs to electronically enter decisions on PA requests.

In June 2015, the “RC Client” application was extended to allow RCs to enter a Reject Error Code for a PA request electronically received, or electronically submit that there was an error in receiving the PA request’s response that was transmitted to the RC Client installed on the Medicare RC’s computer system or network. The RC will be able to submit responses for PA programs, such as the Ambulance and Hyperbaric Oxygen (HBO) and PMD programs.

In July 2016, the “RC Client” application began receiving Durable Medical Equipment, Prosthetics, Orthotics and Supplies (DMEPOS) PA requests and Pre-Claim Review Demonstration for Home Health Services Pre-Claim Review (HHPCR) requests as X12N transactions, and is able to send Review Result Responses for these programs. The “RC Client” also receives Second Level Appeal Requests via the esMD system.

Beginning in October 2016, the “RC Client” application will receive HHPCR and DMEPOS PA Requests as XDR transactions as well as additional information (ParentUniqueId and SplitNumber value in optional metadata element tags) in the RC Metadata Extensible Markup Language (XML) for matching/grouping the split payloads submitted by HIH because of file size limitation in the esMD system.

1.4.1 RC Client Pull/Push Functionality

The RC Client provides the following functionality:

- Pull:
 - Inbound documents (submitted by HIHs) from the TIBCO MFT server;
 - HIH acknowledgements indicating receipt of pick-up notifications and PA review result responses; and
 - Data Element Validation results for the outbound process.
- Push:
 - PA review decision responses to PA Requests for XDR and X12N 278 to esMD;
 - Error responses to PA Requests for XDR and X12N 278 to esMD;
 - Administrative Error responses for XDR and X12N 278 to esMD;
 - Error messages generated due to file decompression and checksum verification;
 - Acknowledgement messages for receipt of documents and authorization requests; and
 - Site-Specific Configuration settings:
 - Push frequency/Pull frequency; and
 - Folder locations for both Inbound and Outbound files.

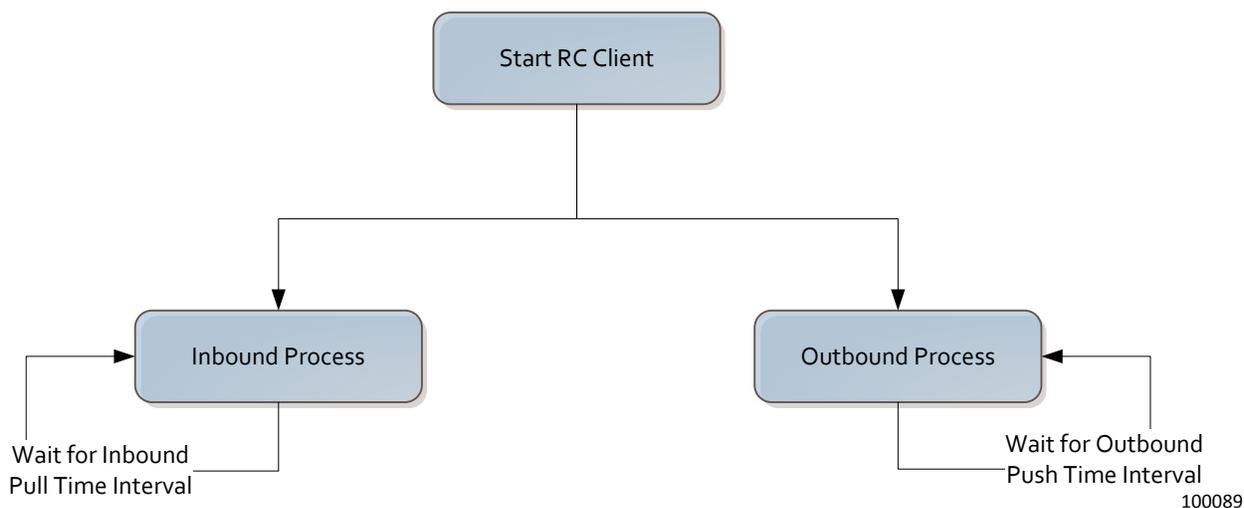
1.4.2 RC Client Application Overview

The esMD RC .NET Client is a standalone .NET Windows desktop application that runs outside the CMS network on the RC’s machine, computer, or server. The purpose of the RC .NET Client is to connect to the TIBCO MFT server at the Baltimore Data Center (BDC) and push and pull

files. The RC .NET Client uses the Enterprise Identity Management (EIDM) login credentials to authenticate with the TIBCO MFT server. The RC Client users (at the RC site) provide their login credentials when they start the RC Client on their machines.

Users enter their login credentials only once at the program startup. When the RC Client starts, it initiates and then continuously runs two parallel threads as shown in Figure 1: RC Client Inbound and Outbound Process. When a user starts the RC Client, it will run continuously and will push and pull files automatically without continual user intervention, based on the frequencies set by the RC.

Figure 1: RC Client Inbound and Outbound Process



In the inbound process, when the RC Client connects to the TIBCO MFT server, the RC Client immediately executes a pull cycle. The documents are pulled into the RC's inbound user directory for the authenticated user, and then the RC Client disconnects and waits for the next cycle, as determined by the Inbound Pull Time Interval setting.

In the outbound process, when the RC Client connects to the TIBCO MFT server, the RC Client executes a push cycle. The documents are pushed from the RC's outbound user directory to the TIBCO MFT server, and then the RC Client disconnects and waits for the next cycle as determined by the Outbound Push Time Interval setting.

The inbound pull frequency is independent of the outbound push frequency. After each successful push or pull process, the RC Client thread disconnects from the TIBCO MFT server. To ensure continuous operation of the RC Client, it must preserve each user's EIDM login credentials during the program execution.

Note: Running multiple instances of the .NET RC Client for the same jurisdiction could result in errors while pulling the files.

The RC Client has been updated as part of esMD Release 4.0 to allow RCs to submit review responses for the new PA programs using the Graphical User Interface (GUI). The RC does not

need to login to the TIBCO MFT Server in order to create Review Responses, Error Responses and Administrative Error Responses. The login is necessary only to pull or push files from or to TIBCO MFT Server.

1.4.3 RC Client Operation Overview

The RC Client runs in a cyclical manner, sleeping for a specified time interval between the operating cycles. The sleep intervals are configured in the “checkFrequency” parameter for the Inbound process and the “pushFrequency” parameter for the Outbound process. The RC is advised to use the default of 240 minutes (4 hours) for the Inbound process and 15 minutes for the Outbound process.

The RC Client operation is interrupted in two events:

1. EIDM passwords that have expired (Note: EIDM passwords expire every 60 days, if not changed); and
2. A Virus Scan error notification is received from the esMD.

In the first scenario, when the EIDM password expires, the RC Client suspends its operation and is terminated. The RC must restart the RC Client and the user must provide the right credentials to login to the TIBCO MFT Server. The EIDM notifies the user 15 days prior to the password expiring. For more information on the EIDM User Credentials and how to reset the password, please refer to the EIDM Instructions document in the esMD Downloads section, using the link below:

[http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Information for Review-Contractors.html](http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/ESMD/Information%20for%20Review-Contractors.html)

The password setup in the portal must meet the following CMS policy (which differs from EIDM's policy) for users to be able to log into Internet Server:

PASSWORD POLICY

1. Check password against the dictionary
2. Maximum Length: 8
3. Maximum Special: 0
4. Minimum Alpha: 1
5. Minimum Begin Alpha: 1
6. Minimum Length: 8
7. Minimum Lowercase: 1
8. Minimum Number of Character Type Rules That Must Pass: All
9. Minimum Numeric: 1
10. Minimum Uppercase: 1
11. Must not contain values of attributes: accountId

12. Must not contain words: 1234, PASSWORD, WELCOME, CMS, HCFA, SYSTEM, MEDICARE, MEDICAID, TEMP, LETMEIN, GOD, SEX, MONEY, QUEST, F20ASYA, RAVENS, REDSKIN, ORIOLES, BULLETS, CAPITOL, MARYLAND, TERPS, DOCTOR, 567890, 12345678, ROOT, BOSSMAN, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER, SSA, FIREWALL, CITIC, ADMIN, UNISYS, PWD, SECURITY, 76543210, 43210, 098765, IRAQ, OIS, TMG, INTERNET, INTRANET, EXTRANET, ATT, LOCKHEED

Note: After the password reset, update the password to the new password in the configuration or script file if it is being stored and used by RC Client.

In the second scenario, when a Virus Scan error notification has been received from esMD, all the processes of the RC Client are suspended and the RC Client is terminated. In addition, the RC Client is locked and cannot pull/push files even if the RC Client is restarted. The RC is advised to contact the esMD Help Desk (refer to Section 18 Contacts for more details) to unlock the RC Client.

2. Overview of How This Document is Structured

This document is structured into the following two primary sections.

1. First primary section of this document provides the following:

- How to start and log into the RC Client;
- How to enter a Review Response decision;
- How to enter an error code for a PA request;
- How to submit Inbound Submissions errors; and
- Advanced debugging, which shows how to test to see if your RC Client application can connect to the TIBCO MFT server and if you have any inbound files ready for downloading.

❖ The audience for this first section is intended for the **RC business users**.

2. How to install and configure a Microsoft .NET version of RC Client.

❖ The audience for this second section is intended for the **person(s) installing the RC Client application**.

This section provides the technical specifications for installing and configuring RC Client on a computer system or network and includes the following:

- Overview of the installation process;
- Systems Requirements for a Microsoft .NET installation;
- Installing an Out-of-Box .NET version of the RC Client application;
- TIBCO MFT file transfers;
- XML Messages, including Outbound, Inbound, and Error messages;
- Inbound Processes and Files;
- Outbound Processes and Files;
- Configuring the RC Client application;
- RC Client Components;
- RC Client Workflow;
- RC Client application Utilities, Components, Schedulers, and Encryption;
- Release 4.0 Changes to the Application Programming Interface (API);

- Using API;
- Configuring the RC Client application for notifications;
- Processing and pulling in documents; and
- Security.

3. How to Start the RC Client and Log In

The following are the step-by-step instructions for starting the RC Client and logging in.

Step 1. Start the RC Client by selecting the **RCClientUI-V4.0.0.exe** in the RC Installation folder or directory.

Starting the RC Client and Logging In

Step 2. The **Login** screen is displayed.

Enter your EIDM **User ID** and **password** and then select **Login and Run RC Client**.

Starting the RC Client and Logging In

Note: The EIDM login credentials are confidential and should not be shared with others. (For more information on EIDM login credentials, see EIDM's Frequently Asked Questions (FAQs) <https://portal.cms.gov/wps/portal/unauthportal/faq>).

Step 3.

Starting the
RC Client and
Logging In

After a successful log in, the **Login Successful. RC Client is Active** message is displayed.

4. How to Enter a Decision on the Review Decision Response to Prior Authorization (PA) Request Tab

This section provides step-by-step instructions on how to enter a decision on the **Review Decision Response to PA Request** tab for the following:

- How to Enter an A-Affirmed Decision;
- How to Enter a M-Affirmed with Change Decision; and
- How to Enter a N-Non Affirmed Decision.

Note: An RC has up to ten business days to process and respond to a PA Request.

4.1 How to Enter an A-Affirmed Decision

This section provides step-by-step instructions on how to enter an Affirmed decision on the **Review Decision Response to PA Request** tab.

Step	Action
Step 1. Entering an A-Affirmed Decision	Select the Review Decision Response to PA Request tab. ❖ After a successful log in, another log in is not required to navigate to and use the Review Decision Response to PA Request tab.



Step	Action
------	--------

Step 2.
Entering an
A-Affirmed
Decision

The fields for the **Review Decision Response to PA Request** tab are displayed.

❖ **Before You Begin:** If you need a brief description of any of the fields on the tabs, see Appendix A: [Description of Fields on RC Client Tabs](#) on page 92.

Enter the **Transaction ID** and the **Procedure Code**.

The screenshot shows the 'esMD RC CLIENT' interface. At the top, there's a navigation bar with 'Login', 'Review Decision Response to PA Request', 'Error Response to PA Request', and 'Administrative Error Response to Inbound'. The main heading is 'Review Decision Response to PA Request'. The form contains several input fields: 'Transaction ID' (1517975), 'Procedure Code' (K0802), 'Procedure Level Decision' (Select), 'Procedure Level UTN', 'Number of Approved Units', 'Approved Service Date' (radio button), 'Approved Service Date Range' (radio button), 'Start Date' (Wednesday, March 18, 2015), and 'End Date' (Wednesday, March 18, 2015). There are also 'Industry Code(s)' and 'Reason Code(s)' sections. 'Add' and 'Remove' buttons are located to the right of the 'Industry Code(s)' field. At the bottom, there are 'Clear' and 'Save' buttons.

Step	Action
------	--------

Step 3.
Entering an
A-Affirmed
Decision

Select the A-Affirmed decision from the Procedure Level Decision drop down menu and enter the Procedure Level UTN.

The screenshot shows the 'esMD RC CLIENT' interface for 'Review Decision Response to PA Request'. The form contains the following fields and options:

- Transaction ID**: 1517975
- Procedure Code**: K0802
- Procedure Level Decision**: A -Affirmed (highlighted with a blue box and arrow)
- Procedure Level UTN**: A0014280106600
- Number of Approved Units**: [Empty field]
- Approved Service Date**: [Empty field] Wednesday, March 18, 2015
- Approved Service Date Range**: [Empty field]
- Start Date**: [Empty field] Wednesday, March 18, 2015
- End Date**: [Empty field] Wednesday, March 18, 2015
- Industry Code(s)**: [Empty list box] with 'Add' and 'Remove' buttons.
- Reason Code(s)**: [Empty list box]
- Buttons**: 'Clear' and 'Save' at the bottom.

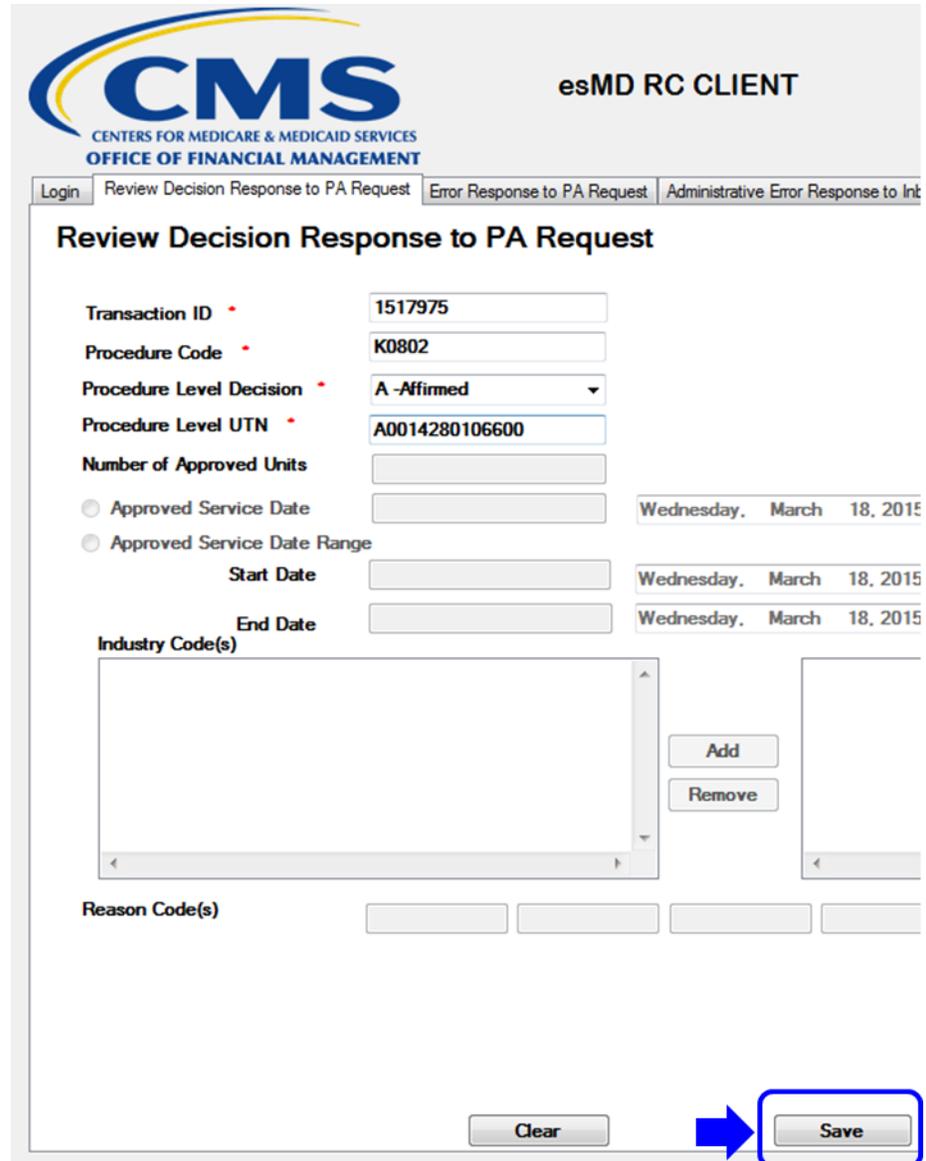
Step	Action
------	--------

Step 4.

Entering an
A-Affirmed
Decision

Select **Save** to save the A-Affirmed decision for submission.

 **Technical Note:** After selecting Save, an XML message will be created to be sent to the esMD system and will be packaged into a compressed zip file. The zip file will be placed in a directory specified in the OutboundConfig/outputDirectory of the esmd-rc-client-config.xml. The outbound thread running on the RC Client will push the file to the TIBCO Managed File Transfer (MFT) server.



CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
OFFICE OF FINANCIAL MANAGEMENT

esMD RC CLIENT

Login | Review Decision Response to PA Request | Error Response to PA Request | Administrative Error Response to Int

Review Decision Response to PA Request

Transaction ID *

Procedure Code *

Procedure Level Decision *

Procedure Level UTN *

Number of Approved Units

Approved Service Date

Approved Service Date Range

Start Date

End Date

Industry Code(s)

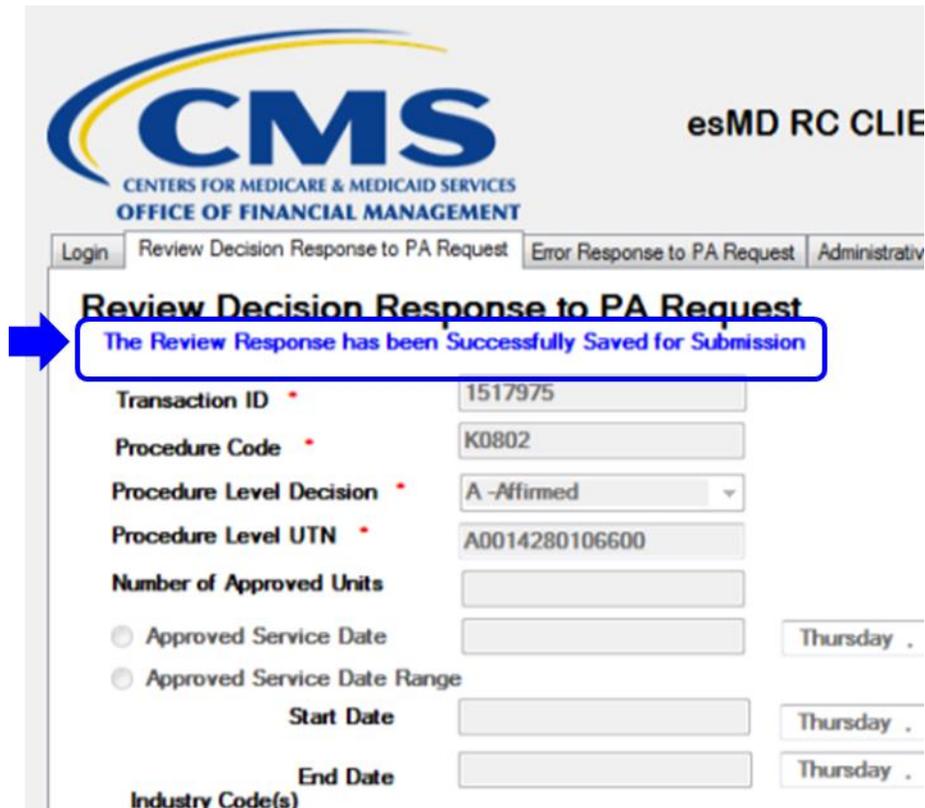
Reason Code(s)

Step	Action
Step 5. Entering an A-Affirmed Decision	After selecting Save, the “ The Review Response has been Successfully Saved for Submission ” message is displayed.

🔗 Technical Note: After selecting Save, the RC Client validates the data entered and displays errors messages, as applicable.

If the data validation is successful, the A-Affirmed decision is created, and the “The Review Response has been Successfully Saved for Submission” message is displayed.

Note: After successfully saving a decision for submission, all information in the fields are cleared and another response may be entered.



4.2 How to Enter a M-Affirmed with Change Decision

This section provides step-by-step instructions on how to enter a M-Affirmed with Change decision on the **Review Decision Response to PA Request** tab.

Step	Action
Step 1. Entering a M-Affirmed with Change Decision	Select the Review Decision Response to PA Request tab. ❖ After a successful log in, another log in is not required to navigate to and use the Review Decision Response to PA Request tab.



Step	Action
------	--------

Step 2.
 Entering a
M-Affirmed
 with Change
 Decision

The fields for the **Review Decision Response to PA Request** tab are displayed.

❖ Before You Begin: If you need a brief description of any of the fields on the tabs, see Appendix A: [Description of Fields on RC Client Tabs](#) on page 92.

Enter the **Transaction ID** and the **Procedure Code**.

Step	Action
------	--------

Step 3.
 Entering a
**M-Affirmed
 with Change
 Decision**

Select the **M-Affirmed with Change** decision from the **Procedure Level Decision** drop down menu.

Note: After selecting a M-Affirmed **with Change** decision, the "**Decision M is not valid decision for the PMD PA review result response**" message is displayed. A M-Affirmed **with Change** decision selected and saved for submission for a PMD PA review result response will be treated as an invalid response in the esMD system.

Enter the **Procedure Level Universal Tracking Number (UTN)**.

Enter the **Number of Approved Units**, when you also have to submit this information. (This is not a required field.)

The screenshot shows the 'esMD RC CLIENT' interface with the 'Review Decision Response to PA Request' form. The 'Procedure Level Decision' dropdown menu is highlighted with a blue arrow and contains the text 'M -Affirmed with Change'. To the right of this dropdown, a warning message reads: 'Decision M is not valid decision for the PMD PA review result response'. Other form fields include: Transaction ID (1517979), Procedure Code (A0426), Procedure Level UTN (A0014280106601), and Number of Approved Units (5). Below these fields are radio buttons for 'Approved Service Date' and 'Approved Service Date Range', with date pickers set to 'Wednesday, March 18, 2015'. There are also 'Add' and 'Remove' buttons for 'Industry Code(s)' and 'Reason Code(s)'. At the bottom of the form are 'Clear' and 'Save' buttons.

Step	Action
Step 4a. Entering a M-Affirmed with Change Decision	Enter a single Approved Service Date or an Approved Service Date Range . To enter a single Approved Service Date , select the date on the Approved Service Date calendar, as illustrated below.

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
OFFICE OF FINANCIAL MANAGEMENT

esMD RC CLIENT

Login | Review Decision Response to PA Request | Error Response to PA Request | Administrative Error Response to Inbound Subm

Review Decision Response to PA Request

Transaction ID * 1517979

Procedure Code * A0426

Procedure Level Decision * M - Affirmed with Change Decision M is not valid decision for the PMI

Procedure Level UTN * A0014280106601

Number of Approved Units 5

Approved Service Date

Approved Service Date Range

Start Date

End Date

Industry Code(s)

Reason Code(s)

Thursday, March 19, 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
22	23	24	25	26	27	28
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

Today: 3/19/2015

Remove

Step	Action
Step 4b. Entering a M-Affirmed with Change Decision	The date selected is then placed in the Approved Service Date field. ❖ To enter an Approved Service Date Range, see Step 5.

The screenshot shows the 'esMD RC CLIENT' interface for the 'Review Decision Response to PA Request' tab. The form contains the following fields and options:

- Transaction ID: 1517979
- Procedure Code: A0426
- Procedure Level Decision: M - Affirmed with Change (Note: Decision M is not valid decision for the PA)
- Procedure Level UTN: A0014280106601
- Number of Approved Units: 5
- Approved Service Date: 03/20/2015 (highlighted with a blue box and arrow)
- Approved Service Date Range: (radio button selected)
- Start Date: (empty field)
- End Date: (empty field)
- Industry Code(s): (empty list with Add and Remove buttons)
- Reason Code(s): (empty list)

Step	Action
------	--------

Step 5.
 Entering a
**M-Affirmed
 with Change
 Decision**

To enter an **Approved Service Date Range** (i.e. a Start Date and an End Date), first, select the date on the Approved Service Date calendar for the **Start Date**, as illustrated below.

Note: An RC has to provide either **Approved Service Date** or **Approved Service Date Range** as they are mutually exclusively.

The screenshot shows the 'esMD RC CLIENT' interface for 'Review Decision Response to PA Request'. The form includes fields for Transaction ID (1517979), Procedure Code (A0426), Procedure Level Decision (M -Affirmed with Change), Procedure Level UTN (A0014280106601), and Number of Approved Units (5). The 'Approved Service Date Range' radio button is selected and highlighted with a blue box and arrow. Below it are fields for Start Date and End Date. A calendar is open for March 2015, with the date 12 highlighted and a blue arrow pointing to it. The 'Industry Code(s)' and 'Reason Code(s)' fields are empty. 'Clear' and 'Save' buttons are at the bottom.

Step	Action
<p>Step 5a. Entering a M-Affirmed with Change Decision</p>	<p>Now, select the date on the Approved Service Date calendar for the End Date.</p> <p>Note: The End Date cannot be the same date as the Start Date.</p>

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
OFFICE OF FINANCIAL MANAGEMENT

esMD RC CLIENT

Login | Review Decision Response to PA Request | Error Response to PA Request | Administrative Error Response to Inbound Sub

Review Decision Response to PA Request

Transaction ID * 1517979

Procedure Code * A0426

Procedure Level Decision * M -Affirmed with Change Decision M is not valid decision for the PA

Procedure Level UTN * A0014280106601

Number of Approved Units 5

Approved Service Date Thursday . March 19, 2015

Approved Service Date Range

Start Date 03/12/2015 Thursday . March 12, 2015

End Date Thursday . March 19, 2015

Industry Code(s)

March, 2015						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
22	23	24	25	26	27	28
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

Today: 3/19/2015

Reason Code(s)

Clear Save

Step	Action
------	--------

Step 5b.
 Entering a
**M-Affirmed
 with Change**
 Decision

The **Start Date** and **End Date** are added to the Start Date and End Date fields, as illustrated below.

The screenshot displays the 'esMD RC CLIENT' interface for the 'Review Decision Response to PA Request' tab. The form includes the following fields and values:

- Transaction ID: 1517979
- Procedure Code: A0426
- Procedure Level Decision: M - Affirmed with Change (Note: Decision M is not valid decision for)
- Procedure Level UTN: A0014280106601
- Number of Approved Units: 5
- Approved Service Date Range (selected):
 - Start Date: 03/12/2015 (Thursday, March 12, 2015)
 - End Date: 03/23/2015 (Monday, March 23, 2015)
- Industry Code(s): (Empty field with Add and Remove buttons)
- Reason Code(s): (Empty field)

Buttons for 'Clear' and 'Save' are located at the bottom of the form.

Step	Action
------	--------

Step 6.

Entering a
**M-Affirmed
with Change
Decision**

Enter a **Reason Code** or multiple **Reason Codes**.

For information on how to access an up-to-date list of PA Reason Codes, see Appendix D: PA Reason Codes.

Note: When you have to enter more than five Reason Codes, select **Add** at the end of the row of Reason Code fields to add a new row. Continue to select Add at the end of each row, until all of your Reason Codes have been entered. You may enter a maximum of 25 Reason Codes.

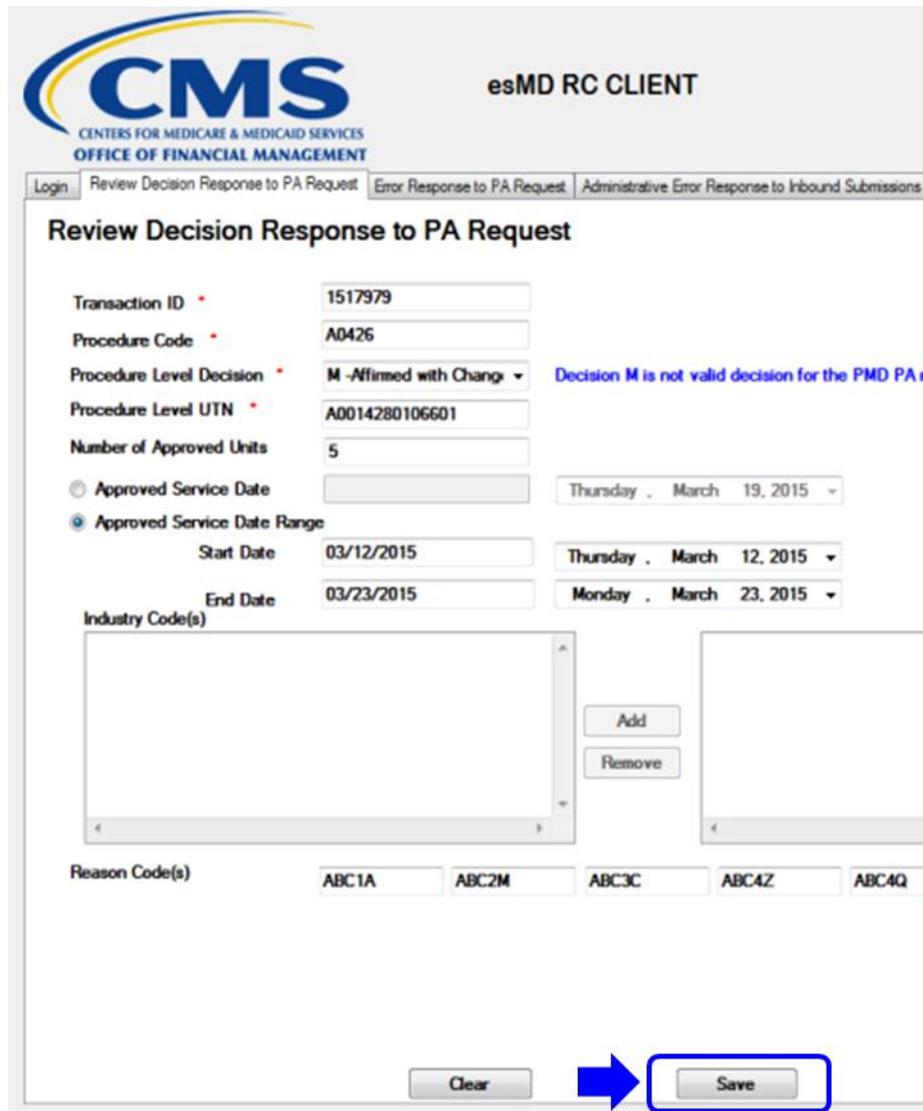
The screenshot displays the 'esMD RC CLIENT' interface for 'Review Decision Response to PA Request'. The form contains the following fields and options:

- Transaction ID: 1517979
- Procedure Code: A0426
- Procedure Level Decision: M -Affirmed with Change (Note: Decision M is not valid decision for the PMD PA review result response)
- Procedure Level UTN: A0014280106601
- Number of Approved Units: 5
- Approved Service Date Range: Start Date 03/12/2015, End Date 03/23/2015
- Industry Code(s): (Empty list with Add and Remove buttons)
- Reason Code(s): ABC1A, ABC2M, ABC3C, ABC4Z, ABC4Q, Add

Buttons for 'Clear' and 'Save' are located at the bottom of the form.

Step	Action
<p>Step 7. Entering a M-Affirmed with Change Decision</p>	<p>Select Save to save the M-Affirmed with Change decision for submission.</p>

 **Technical Note:** After selecting Save, an XML message will be created to be sent to the esMD system and will be packaged into a compressed zip file. The zip file will be placed in a directory specified in the OutboundConfig/outputDirectory of the esmd-rc-client-config.xml. The outbound thread running on the RC Client will push the file to the TIBCO Managed File Transfer (MFT) server.



CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
OFFICE OF FINANCIAL MANAGEMENT

esMD RC CLIENT

Login | Review Decision Response to PA Request | Error Response to PA Request | Administrative Error Response to Inbound Submissions

Review Decision Response to PA Request

Transaction ID * 1517979

Procedure Code * A0426

Procedure Level Decision * M -Affirmed with Change Decision M is not valid decision for the PMD PA n

Procedure Level UTN * A0014280106601

Number of Approved Units 5

Approved Service Date Thursday . March 19, 2015 ▾

Approved Service Date Range

Start Date 03/12/2015 Thursday . March 12, 2015 ▾

End Date 03/23/2015 Monday . March 23, 2015 ▾

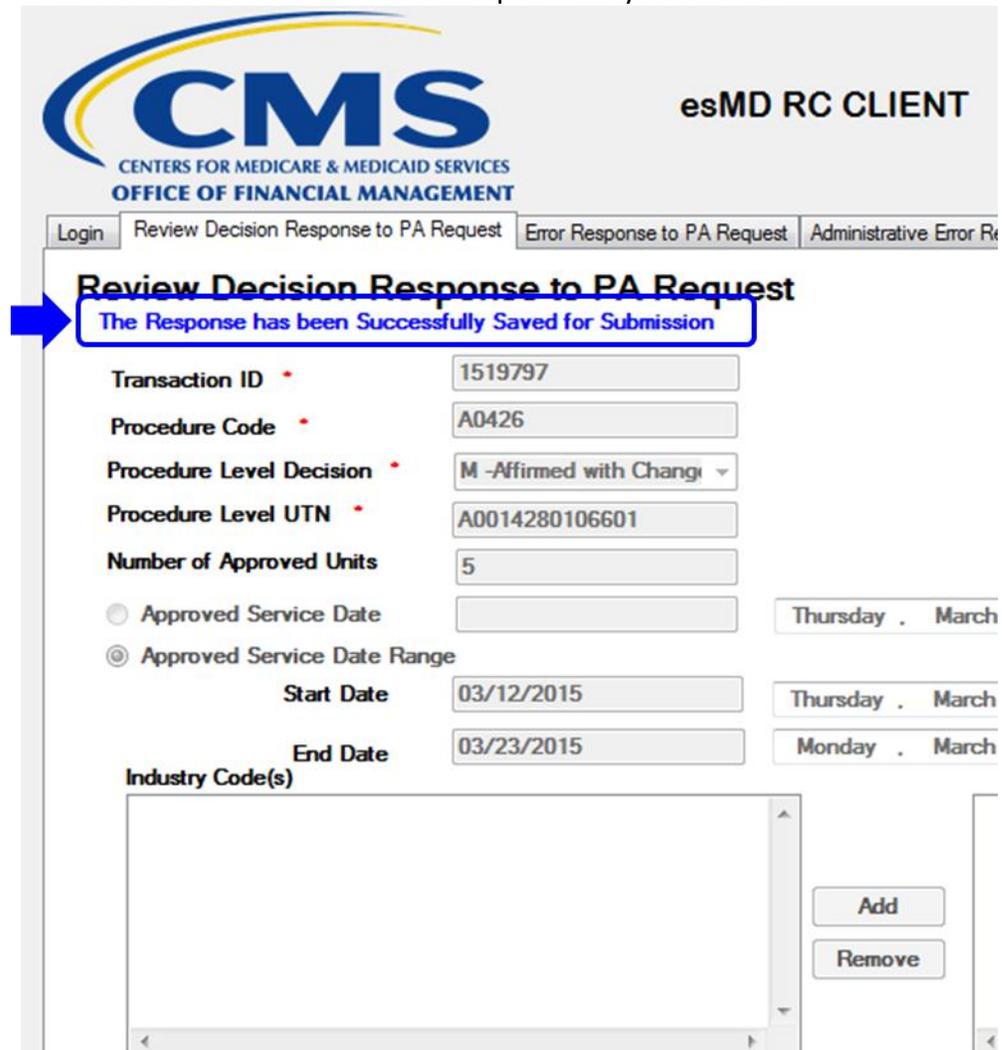
Industry Code(s)

Reason Code(s) ABC1A ABC2M ABC3C ABC4Z ABC4Q



Step	Action
<p>Step 8. Entering a M-Affirmed with Change Decision</p>	<p>After selecting Save, the “The Response has been Successfully Saved for Submission” message is displayed.</p> <p> Technical Note: After selecting Save, the RC Client validates the data entered and displays errors messages, as applicable.</p> <p>If the data validation is successful, the M-Affirmed with Change decision is created, and the “The Response has been Successfully Saved for Submission” message is displayed.</p>

Note: After successfully saving a decision for submission, all information in the fields are cleared and another response may be entered.



The screenshot displays the 'esMD RC CLIENT' interface for the 'Review Decision Response to PA Request' tab. At the top, the CMS logo and 'OFFICE OF FINANCIAL MANAGEMENT' are visible. A navigation bar includes 'Login', 'Review Decision Response to PA Request', 'Error Response to PA Request', and 'Administrative Error R'. The main heading is 'Review Decision Response to PA Request'. A blue arrow points to a message box that reads 'The Response has been Successfully Saved for Submission'. Below this, the form contains the following fields:

- Transaction ID: 1519797
- Procedure Code: A0426
- Procedure Level Decision: M -Affirmed with Change
- Procedure Level UTN: A0014280106601
- Number of Approved Units: 5
- Approved Service Date Range:
 - Start Date: 03/12/2015
 - End Date: 03/23/2015
- Industry Code(s): (Empty list with 'Add' and 'Remove' buttons)

4.3 How to Enter a N-Non Affirmed Decision

This section provides step-by-step instructions on how to enter a N-Non Affirmed decision on the **Review Decision Response to PA Request** tab.

Step	Action
Step 1. Entering a N-Non Affirmed Decision	Select the Review Decision Response to PA Request tab. ❖ After a successful log in, another log in is not required to navigate to and use the Review Decision Response to PA Request tab.



Step	Action
------	--------

Step 2.
Entering a
N-Non
Affirmed
Decision

The fields for the **Review Decision Response to PA Request** tab are displayed.

❖ Before You Begin: If you need a brief description of any of the fields on the tabs, see Appendix A: [Description of Fields on RC Client Tabs](#) on page 92.

Enter the **Transaction ID** and the **Procedure Code**.

The screenshot shows the 'esMD RC CLIENT' interface for the 'Review Decision Response to PA Request' tab. The 'Transaction ID' field is populated with '1542313' and the 'Procedure Code' field is populated with 'K0802'. A blue arrow points to these two fields. Below these are several other input fields: 'Procedure Level Decision' (a dropdown menu currently showing 'Select'), 'Procedure Level UTN', 'Number of Approved Units', 'Approved Service Date' (with a radio button), 'Approved Service Date Range' (with a radio button and sub-fields for 'Start Date' and 'End Date'), 'Industry Code(s)' (a large text area with 'Add' and 'Remove' buttons), and 'Reason Code(s)' (a text area). At the bottom of the form are 'Clear' and 'Save' buttons.

Step	Action
<p>Step 3. Entering a N-Non Affirmed Decision</p>	<p>Select the N-Non Affirmed decision from the Procedure Level Decision drop down menu and enter the Procedure Level Universal Tracking Number (UTN).</p>

The screenshot shows the 'Review Decision Response to PA Request' form in the esMD RC CLIENT interface. The form includes the following fields and options:

- Transaction ID:** 1542313
- Procedure Code:** K0802
- Procedure Level Decision:** N-Non Affirmed (highlighted with a blue box and arrow)
- Procedure Level UTN:** A0014280106710
- Number of Approved Units:** (empty field)
- Approved Service Date:** Thursday, March 19, 2015
- Approved Service Date Range:**
 - Start Date:** Thursday, March 12, 2015
 - End Date:** Monday, March 23, 2015
- Industry Code(s):** (empty field)
- Additional Patient Information required:**
 - Ambulance Certification Segment information doesn't correspond
 - Authorized Quantity Exceeded
 - Certification Not Required for this Service
 - Duplicate Request
 - Inappropriate facility type
 - Level of Care Not Appropriate
 - Non-covered Service
 - Not Medically Necessary
 - Plan/contractual geographic restriction
- Reason Code(s):** (empty field)

Buttons for 'Add', 'Remove', 'Clear', and 'Save' are visible at the bottom of the form.

Step	Action
------	--------

Step 4.
 Entering a
 N-Non
 Affirmed
 Decision

Select an **Industry Code** from the list of Industry Codes available and then select **Add**. This will move the selection to the list of Industry Codes to be included in the response. Continue to select an **Industry Code** and then **Add**, until all of the Industry Codes have been added for this N-Non Affirmed decision.

In the example below, the “Not Medically Necessary” Industry Code will be the Industry Code added to this N-Non Affirmed decision.

Note: The Appendix C: Industry Codes provides a list all of the Industry Codes available in esMD. A maximum of five Industry Codes can be selected for a Review Decision Response to PA Request.

The screenshot shows the 'Review Decision Response to PA Request' form in the esMD RC CLIENT. The form contains the following fields and options:

- Transaction ID: 1542313
- Procedure Code: K0802
- Procedure Level Decision: N -Non Affirmed
- Procedure Level UTN: A0014280106710
- Number of Approved Units: (empty)
- Approved Service Date: Thursday, March 19, 2015
- Approved Service Date Range:
 - Start Date: Thursday, March 12, 2015
 - End Date: Monday, March 23, 2015
- Industry Code(s) list:
 - Additional Patient Information required
 - Ambulance Certification Segment information doesn't correspond
 - Authorized Quantity Exceeded
 - Certification Not Required for this Service
 - Duplicate Request
 - Inappropriate facility type
 - Level of Care Not Appropriate
 - Non-covered Service
 - Not Medically Necessary** (highlighted with a blue arrow)
 - Physician not licensed restriction
- Buttons: Add (circled in blue with a blue arrow pointing to it), Remove
- Reason Code(s): (empty)
- Bottom buttons: Clear, Save

Step	Action
------	--------

Step 5.
 Entering a
**N-Non
 Affirmed
 Decision**

After selecting Add, the Industry Code is added to the N-Non Affirmed decision, as illustrated below.

Enter the **Reason Code** or **Reason Codes** and then select **Save** to save the N-Non Affirmed decision for submission. You may enter a maximum of 25 Reason Codes.

For information on how to access an up-to-date list of PA Reason Codes, see Appendix D: PA Reason Codes.

 **Technical Note:** After selecting Save, an XML message will be created to be sent to the esMD system and will be packaged into a compressed zip file. The zip file will be placed in a directory specified in the OutboundConfig/outputDirectory of the esmd-rc-client-config.xml. The outbound thread running on the RC Client will push the file to the TIBCO Managed File Transfer (MFT) server.

The screenshot shows the 'esMD RC CLIENT' interface. At the top, it displays the CMS logo and 'esMD RC CLIENT Version 4.0'. Below the navigation tabs, the main form is titled 'Review Decision Response to PA Request'. The form contains several input fields: Transaction ID (1542313), Procedure Code (K0802), Procedure Level Decision (N-Non Affirmed), Procedure Level UTN (A0014280106710), Number of Approved Units, Approved Service Date (Thursday, March 19, 2015), Approved Service Date Range (Start Date: Thursday, March 12, 2015; End Date: Monday, March 23, 2015), and Industry Code(s). A list of reason codes is shown, with 'Not Medically Necessary' selected. The 'Reason Code(s)' field contains 'PMD2B' and 'PMD9A'. The 'Save' button is highlighted with a blue arrow.

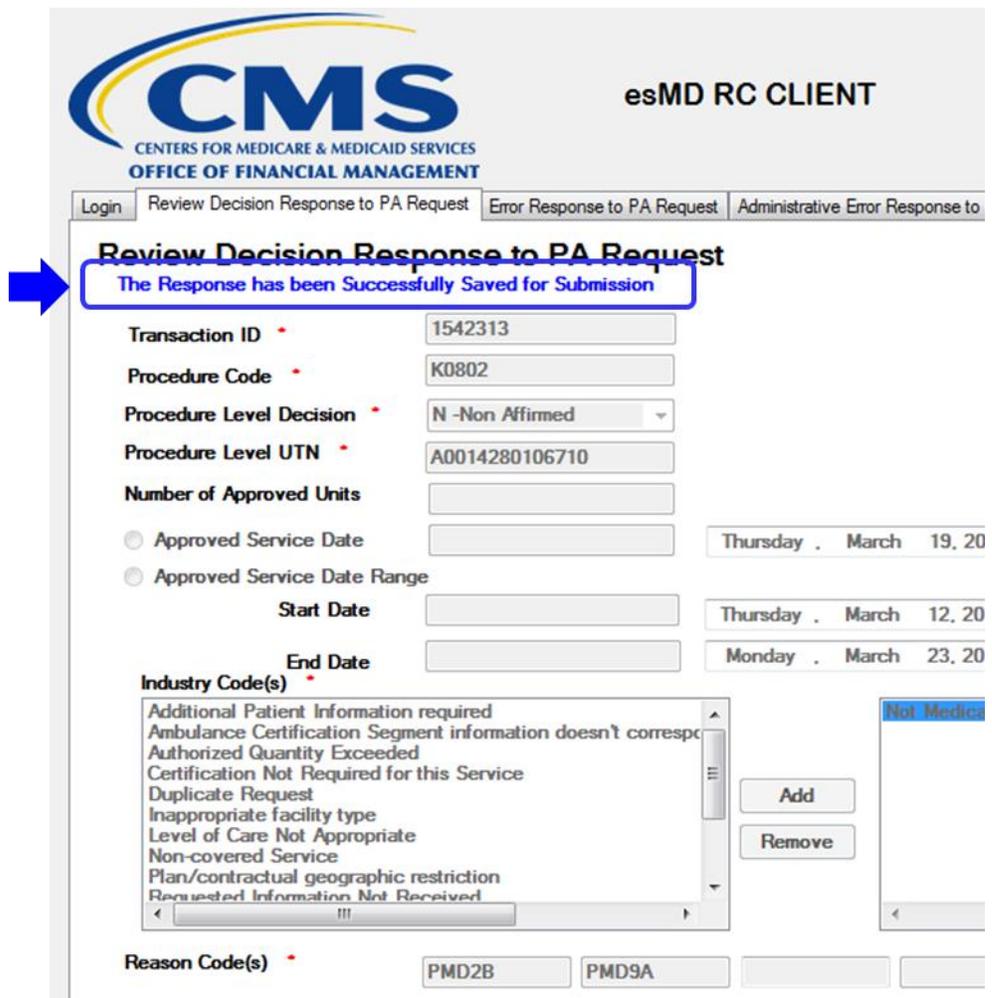
Step	Action
------	--------

Step 6. Entering a N-Non Affirmed Decision	After selecting Save, the “ The Response has been Successfully Saved for Submission ” message is displayed.
---	--

 **Technical Note:** After selecting Save, the RC Client validates the data entered and displays errors messages, as applicable.

If the data validation is successful, the N-Non Affirmed decision is created, and the “The Response has been Successfully Saved for Submission” message is displayed.

Note: After successfully saving a decision for submission, all information in the fields are cleared and another response may be entered.



The screenshot shows the 'esMD RC CLIENT' interface. At the top, there is a navigation bar with tabs: 'Login', 'Review Decision Response to PA Request' (which is active), 'Error Response to PA Request', and 'Administrative Error Response to...'. Below the navigation bar, the title 'Review Decision Response to PA Request' is displayed, followed by a blue-bordered box containing the message: 'The Response has been Successfully Saved for Submission'. A blue arrow points to this message box. Below the message, there is a form with the following fields:

- Transaction ID: 1542313
- Procedure Code: K0802
- Procedure Level Decision: N -Non Affirmed (dropdown menu)
- Procedure Level UTN: A0014280106710
- Number of Approved Units: (empty text box)
- Approved Service Date: (radio button) Thursday, March 19, 20
- Approved Service Date Range: (radio button)
 - Start Date: Thursday, March 12, 20
 - End Date: Monday, March 23, 20
- Industry Code(s): (list box containing error messages like 'Additional Patient Information required', 'Ambulance Certification Segment information doesn't correspond', etc.)
- Reason Code(s): PMD2B, PMD9A, (empty text boxes)

Buttons for 'Add' and 'Remove' are visible next to the Industry Code(s) list box.

5. How to Enter an Error Code on the Error Response to PA Request Tab

This section provides step-by-step instructions on how to enter an error code on the **Error Response to PA Request** tab.

Step	Action
Step 1. Entering an Error Code	Select the Error Response to PA Request tab. ❖ After a successful log in, another log in is not required to navigate to and use the Error Response to PA Request tab.



Step	Action
------	--------

Step 2.
 Entering an
 Error Code

The fields for the **Error Response to PA Request** tab are displayed.

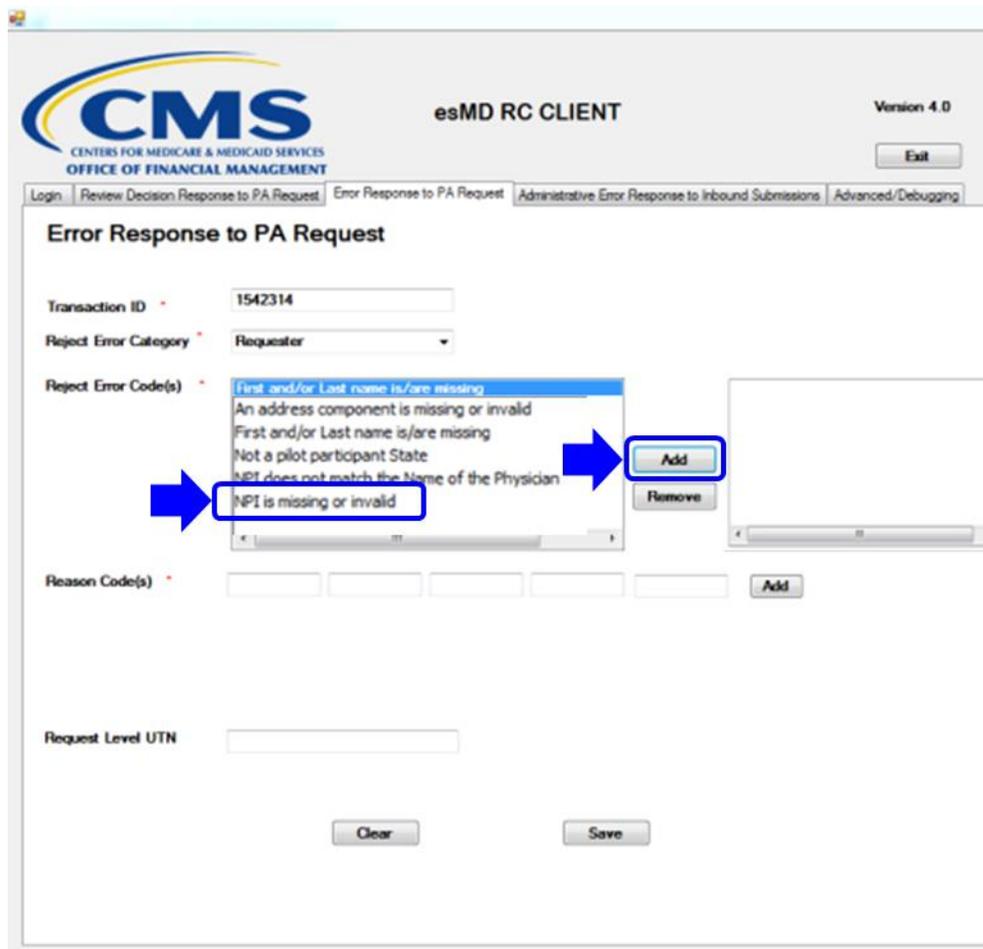
❖ **Before You Begin:** If you need a brief description of any of the fields on the tabs, see Appendix A: [Description of Fields on RC Client Tabs](#) on page [92](#).

Enter the **Transaction ID** and select a **Reject Error Category**.

The screenshot shows the 'Error Response to PA Request' form in the esMD RC CLIENT. The form is titled 'Error Response to PA Request' and is part of the 'esMD RC CLIENT' interface. The CMS logo and 'OFFICE OF FINANCIAL MANAGEMENT' are visible at the top. The form contains several fields and buttons:

- Transaction ID:** A text input field containing the value '1542314'.
- Reject Error Category:** A dropdown menu with 'Select' as the current selection. A blue arrow points to this field.
- Reject Error Code(s):** A list of error categories: Beneficiary, Facility, Medical-Info, Ordering MD, Rendering MD/Supplier, and Requester. The 'Requester' option is selected and highlighted with a blue box and a blue arrow.
- Reason Code(s):** A series of empty text input fields.
- Request Level UTN:** A text input field.
- Buttons:** 'Add', 'Remove', 'Clear', and 'Save' buttons are located at the bottom of the form.

Step	Action
Step 3. Entering an Error Code	Select a Reject Error Code and then Add to add the Reject Error Code. For information on how to access an up-to-date list of Reject Error Codes, see Appendix B: Reject Error Codes.



Step
Step 4.
 Entering an
 Error Code

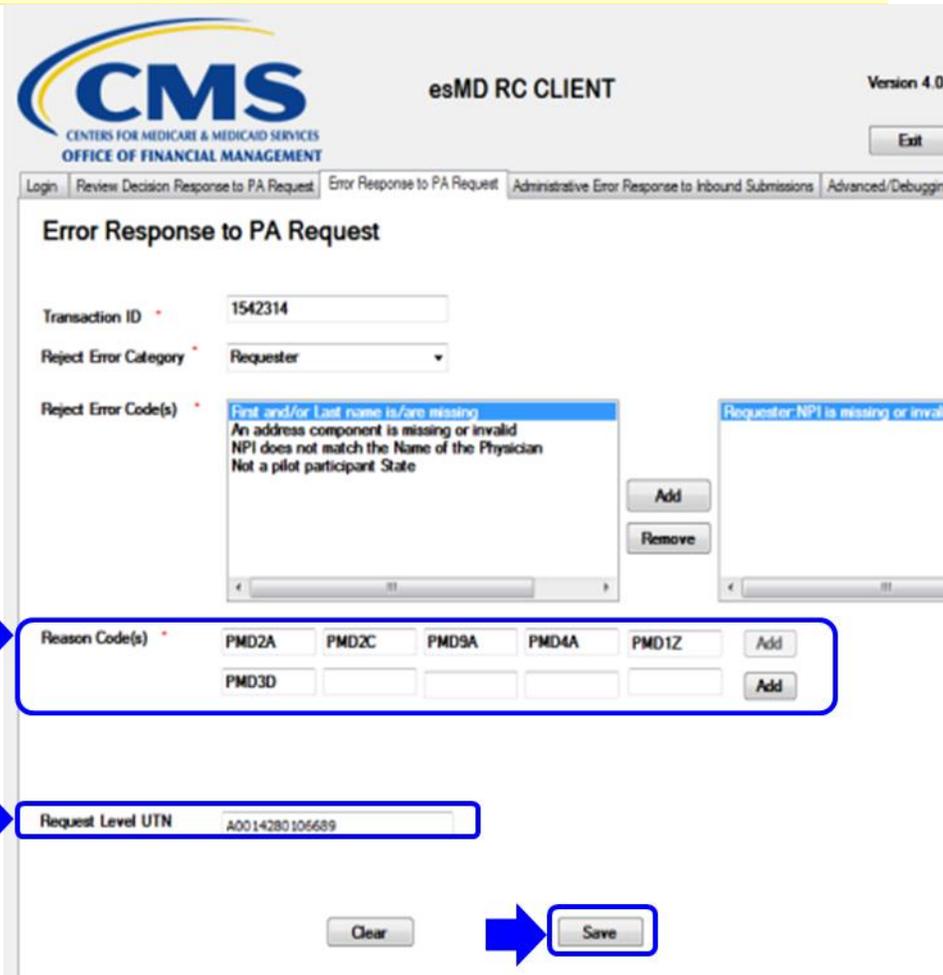
Action

Enter the **Reason Code** or **Reason Codes**. Select Add at the end of the row of Reason Code fields to add additional rows of Reason Codes, as needed.

Enter the **Request Level UTN** and then select **Save** to submit the Error Code for submission.

For information on how to access an up-to-date list of Reason Codes, see Appendix D: PA Reason Codes.

 **Technical Note:** After selecting Save, an XML message will be created to be sent to the esMD system and will be packaged into a compressed zip file. The zip file will be placed in a directory specified in the OutboundConfig/outputDirectory of the esmd-rc-client-config.xml. The outbound thread running on the RC Client will push the file to the TIBCO Managed File Transfer (MFT) server.



The screenshot displays the 'esMD RC CLIENT' interface for 'Error Response to PA Request'. The 'Transaction ID' is 1542314 and the 'Reject Error Category' is 'Requester'. The 'Reject Error Code(s)' field contains a list of error messages: 'First and/or Last name is/are missing', 'An address component is missing or invalid', 'NPI does not match the Name of the Physician', and 'Not a pilot participant State'. Below this, there are two rows of Reason Code fields: PMD2A, PMD2C, PMD9A, PMD4A, PMD1Z, and PMD3D, each with an 'Add' button. The 'Request Level UTN' field contains 'A0014280106689'. The 'Save' button is highlighted with a blue arrow.

Step	Action
Step 5. Entering an Error Code	After selecting Save, the “ The Error Response has been Successfully Saved for Submission ” message is displayed.

 **Technical Note:** After selecting Save, the RC Client validates the data entered and displays errors messages, as applicable.

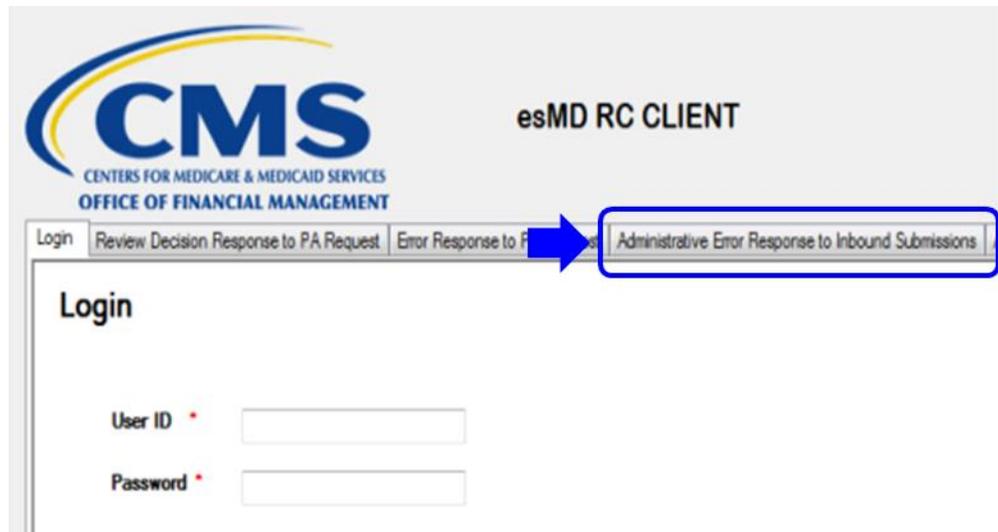
If the data validation is successful, the Error Code is created, and the “The Error Response has been Successfully Saved for Submission” message is displayed.

Note: After successfully saving a decision for submission, all information in the fields are cleared and another response may be entered.

6. How to Submit an Inbound Submission Error on the Administrative Error Response to Inbound Submissions Tab

This section provides step-by-step instructions on how to enter an inbound submission error on the **Administrative Error Response to Inbound Submissions** tab.

Step	Action
Step 1. Entering an Inbound Submissions Error	Select the Administrative Error Response to Inbound Submissions tab. ❖ After a successful log in, another log in is not required to navigate to and use the Administrative Error Response to Inbound Submissions tab.



Step	Action
------	--------

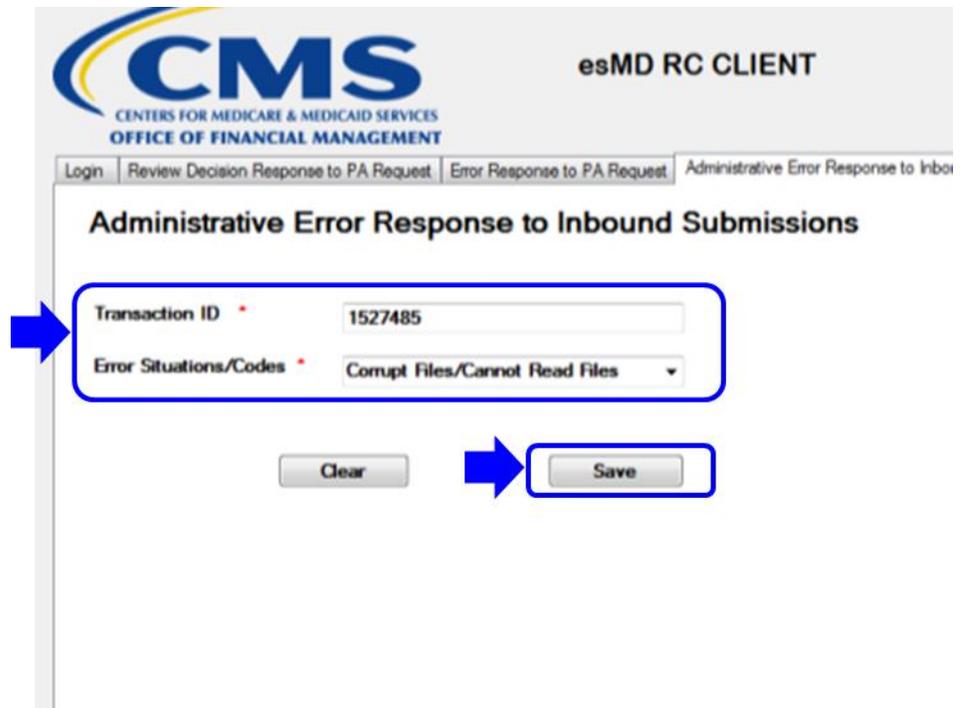
Step 2.
 Entering an
 Inbound
 Submissions
 Error

The fields for the **Administrative Error Response to Inbound Submissions** tab are displayed.

❖ **Before You Begin:** If you need a brief description of any of the fields on the tabs, see Appendix A: [Description of Fields on RC Client Tabs](#) on page 92.

Enter the **Transaction ID**, select an **Error Situation** or **Error Code** from the Error Situations/Codes drop down menu, and then select **Save** to submit the Inbound Submissions error for submission.

🔗 **Technical Note:** After selecting Save, an XML message will be created to be sent to the esMD system and will be packaged into a compressed zip file. The zip file will be placed in a directory specified in the OutboundConfig/outputDirectory of the esmd-rc-client-config.xml. The outbound thread running on the RC Client will push the file to the TIBCO Managed File Transfer (MFT) server.



Step	Action
------	--------

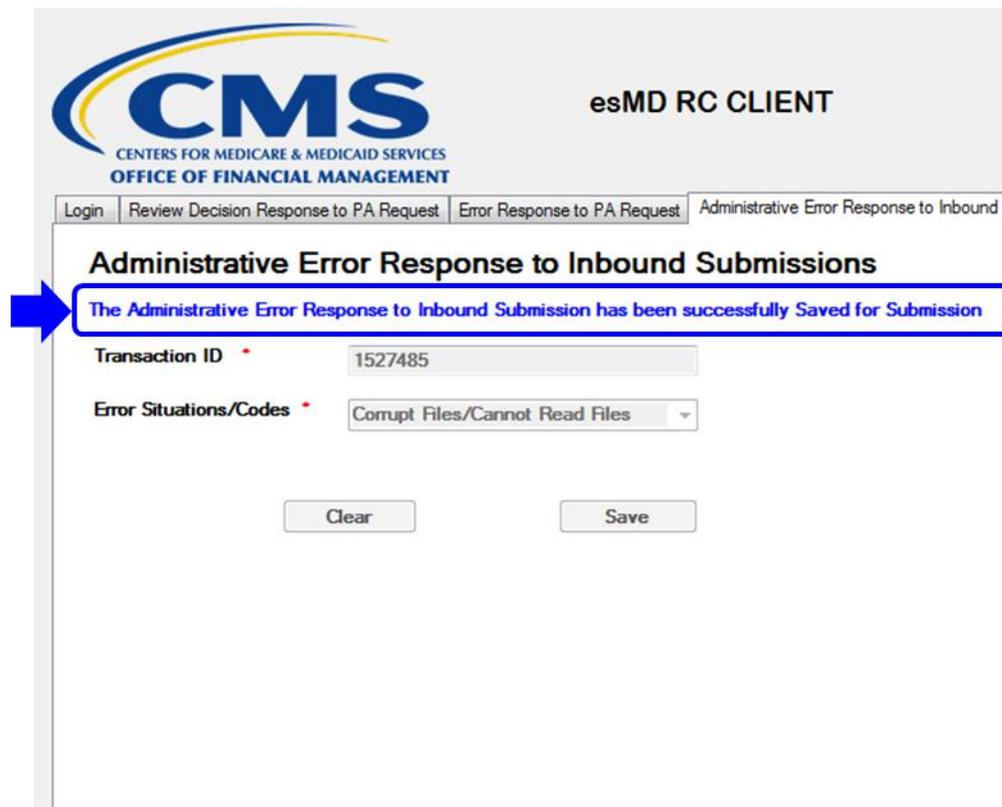
Step 3.
 Entering an
 Inbound
 Submissions
 Error

After selecting Save, the **“The Administrative Error Response to Inbound Submission has been successfully Saved for Submission”** message is displayed.

 **Technical Note:** After selecting Save, the RC Client validates the data entered and displays errors messages, as applicable.

If the data validation is successful, the Inbound Submissions Error is created, and the **“The Administrative Error Response to Inbound Submission has been successfully Saved for Submission”** message is displayed.

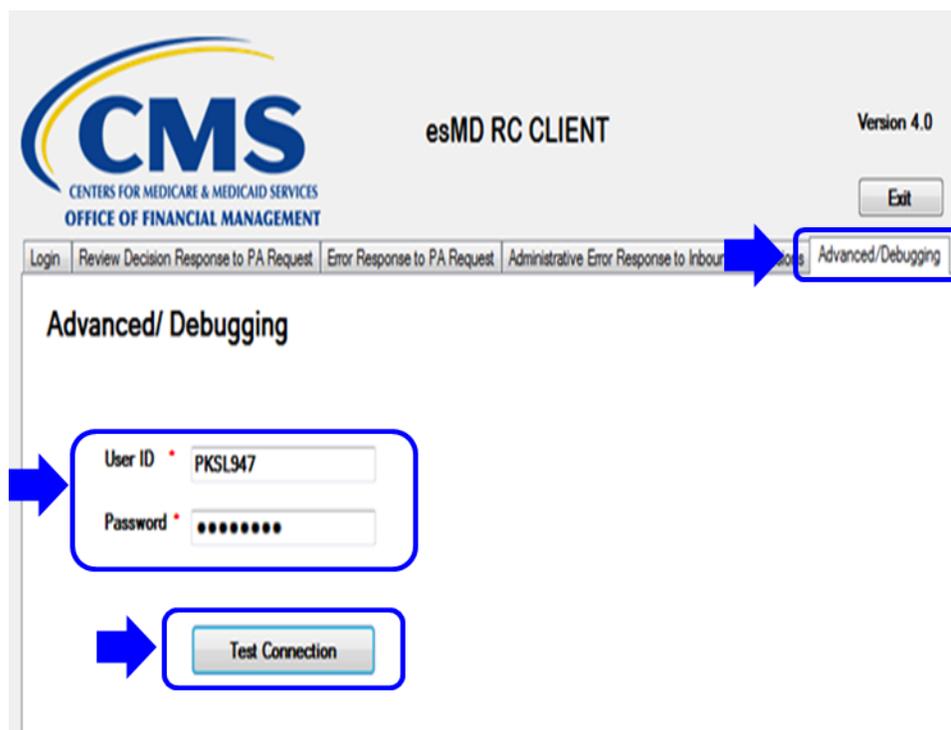
Note: After successfully saving a decision for submission, all information in the fields are cleared and another response may be entered.



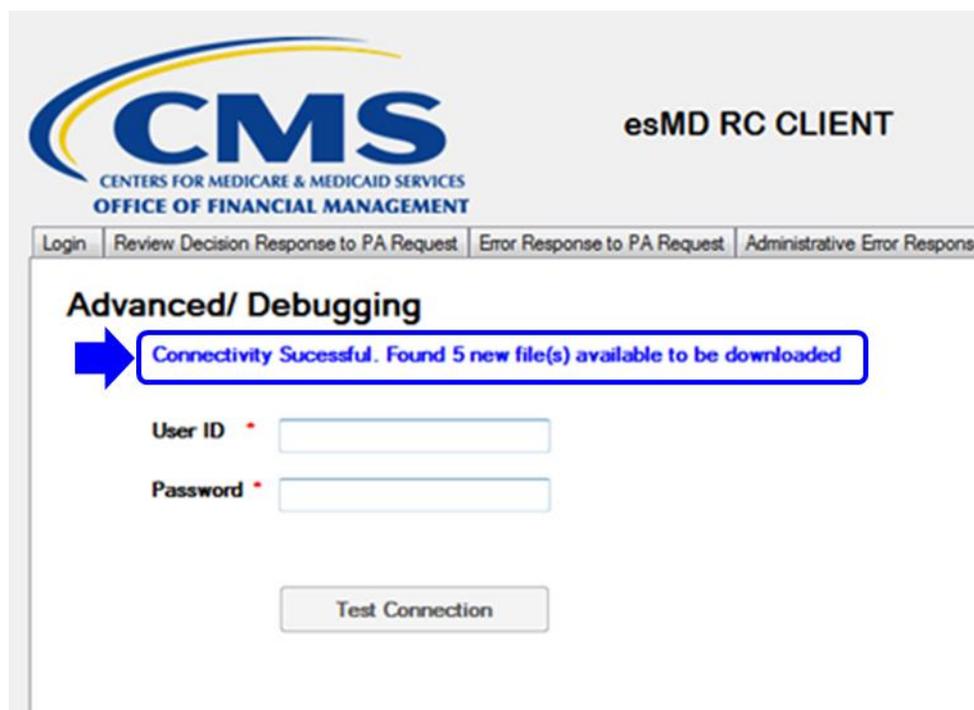
7. How to Verify Connection to TIBCO MFT Server, Using the Advanced/Debugging Tab

This section provides step-by-step instructions on how to verify connection to the TIBCO MFT server, using the **Advanced/Debugging** tab.

Step	Action
Step 1.	Select the Advanced/Debugging tab.
Checking Connection to TIBCO MFT Server	The Advanced/Debugging tab fields are displayed.
	On the Advanced/Debugging tab, enter your EIDM User ID and password . (This is required on the Advanced/Debugging tab.)
	Select Test Connection .



Step	Action
Step 2. Checking Connection to TIBCO MFT Server	After selecting Test Connection, the “Connectivity Successful. Found 5 new file(s) available to be downloaded” message is displayed. Note: After successfully testing your connection, you may select another tab.



8. System Requirements

The following are the system requirements for installing a Microsoft .NET version of the RC Client.

8.1 Processor

The RC Client requires a Pentium 2 266-Megahertz (MHz) processor or greater.

8.2 Disk Space

The disk requirement for the RC .NET Client is 50 Megabytes (MB) for the RC Client itself. The documents that the RC Client pulls from the TIBCO MFT server may require additional disk space.

8.3 Memory

The RC .NET Client requires a minimum of 128 MB of free memory.

8.4 Permissions

The RC Client must have read, write, and execute permissions on all the directories under the installation home.

8.5 Network

The RC Client requires internet connectivity that supports more than 32-Kilobits Per Second (Kbps) transfer speeds.

8.6 Microsoft .NET Framework

The RC .NET Client requires Microsoft .NET Framework 4.5 to run properly.

8.7 Libraries

The Table 2: Libraries lists all the third-party libraries used by the RC Client along with their corresponding versions and a brief description of how the RC Client uses them.

Table 2: Libraries

Library	Version	Description
Common.Logging.dll	2.1.1	Logging Framework
Common.Logging.Log4Net1211.dll	2.1.1	Logging Framework
edtFTPnetPRO.dll	8.6.4	SFTP Library
Ionic.Zip.dll	1.9.1.8	Compression Library
log4net.dll	1.2.11.0	Logging Framework

9. How to Install and Configure a Microsoft .NET Version of RC Client

Review the System Requirements in Section 8, System Requirements, to make sure the machine that will host the RC Client meets the necessary requirements.

You can install the RC Client in two ways:

1. Out of the box; or
2. Custom RC Client (.NET).

9.1 Out-of-the-Box

The RC .NET Client API comes packaged with a sample client. To run this sample client out-of-the-box, the RCs must follow the procedures in the following sections.

9.1.1 Keystore Set Up

Important: The RC .NET Client uses asymmetric encryption to store the EIDM user credentials securely. For this encryption to work, the RC must use the machine-level Rivest, Shamir & Adleman (RSA) key container provided by Microsoft Windows. Please refer to Section 15.1 Security for more details on the Security framework used by the RC Client.

9.1.1.1 Microsoft Windows Machine-Level RSA Key Container

Microsoft Windows provides machine-level RSA key containers to all users who can log in to a computer by default. RSA key containers are used to encrypt or decrypt protected configuration sections while logged in with an administrator account. You can use a machine-level RSA key container to protect information for a single application, all the applications on a server, or a group of applications on a server that runs under the same user identity. Although machine-level RSA key containers are available to all users, they can be secured with New Technology File System (NTFS) Access Control Lists (ACLs) so that only required users can access them. You can use the `aspnet_regiis.exe` tool to create, export, import, or delete an RSA key container:

1. Type the command below at a command console to create a new RSA key container.

```
Cd C:\Windows\Microsoft.NET\Framework64\<v4.xxxxxxx>  
aspnet_regiis -pc <yourKeyName>
```

Note: Replace `<v4.xxxxxxx>` with the actual .NET framework version on your machine, and the `<yourKeyName>` with a name for your key so that you can retrieve it later.

9.1.1.2 Key Handling

The RC .NET Client delegates the key handling to the Windows Operating System environment.

9.1.2 Configuring the RC Client

Once the keystore is created, the RC Client is ready to be configured to use the keystore.

1. Update the keystore information in the configuration file (this is required).

Note: The `certAlias` name in the configuration file should be unique for each instance running on the same machine to avoid any encryption errors.

Important: The XML configuration file (i.e., config/esmd-rc-client-config.xml) is used by the RC Client to retrieve important configuration parameters necessary for its operation.

2. Use the comments for each configuration parameter shown in Table 3: Sample RC Client Configuration File as a guide for entering your data.

Table 3: Sample RC Client Configuration File

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:ESMDCConfig xmlns:ns2="http://esmd.ois.cms.hhs.gov/v1/rc/config"
xmlns:xsi=http://www.w3.org/2001/XMLSchema-instance
xsi:schemaLocation="http://esmd.ois.cms.hhs.gov/v1/rc/config esmd-config.xsd"
">

  <!--The TIBCO MFT Server Configuration-->
  <ESMDSFTPServer>
    <!--TIBCO MFT Sever host name or IP -->
    <host>eftp2.cms.hhs.gov</host>
    <!--The TIBCO SFTP PORT-->
    <port>11022</port>
    <!--Update: Use T for VAL, P for PROD-->
    <environmentId>T</environmentId>
    <!--The EFT File Name Prefix-->
    <eftFilePrefix>#EFT</eftFilePrefix>
  </ESMDSFTPServer>
  <!--The Keycontainer Settings-->
  <KeyStoreInfo>
    <!-- the first 3 elements are not applicable to .NET client-->
    <keyStoreLocation></keyStoreLocation>
    <encKeyInfo></encKeyInfo>
    <encKeyInfoExt></encKeyInfoExt>
    <!-- Update: the name of the Windows Key Container-->
    <certAlias>yourKeyName</certAlias>
  </KeyStoreInfo>
  <!--The Inbound Process Configuration-->
  <InboundConfig>
    <!--Enable the Inbound Process? true/false-->
    <enabled>true</enabled>
    <!--The Pull Frequency for the Inbound Process in minutes; the
default is 240 minutes i.e. 4 hours-->
    <checkFrequency>30</checkFrequency>
    <!-- Update: The RC Client installation/home directory-->
    <rcHomeDirectory>C:\RCClient</rcHomeDirectory>
    <!-- Update: The target directory to extract the downloaded inbound
files before routing-->
    <targetDirectory>C:\RCClient\data\download</targetDirectory>
    <!-- Update: The input directory where the inbound payloads and the
metadata will be routed after the extraction-->
    <inputDirectory>C:\RCClient\data\input</inputDirectory>
    <!-- Update: The temp directory where the files are pulled from
TIBCO-->
    <tempDirectory>C:\RCClient\data\temp</tempDirectory>
    <!-- Update: The Error directory for routing the inbound error
notifications from esMD/HH-->
```

```

<errorDirectory>C:\RCClient\data\error\</errorDirectory>
<!-- Update: The configuration directory for RC Client-->
<configDirectory>C:\RCClient\data\conf\</configDirectory>
<!-- Update: The notifications directory for routing the inbound
notifications from esMD/HIH-->

<notificationsDirectory>C:\RCClient\data\notification\</notificationsDirectory>
<!--Update: The Acknowledgment directory for routing acknowledgments
from esMD/HIH-->

<acknowledgmentsDirectory>C:\RCClient\data\acknowledgment\</acknowledgmentsDirectory>
<!-- Update: The Remote Inbound Directory path on the TIBCO Server-->
<remoteInboundDir>/ES####</remoteInboundDir>
<!-- Update: The routing id for the inbound files used to pick the
inbound files to pull-->
<inboundRoutingId>ES####</inboundRoutingId>
</InboundConfig>
<!--The Outbound Process Configuration-->
<OutboundConfig>
<!-- Update: Enable the Outbound Process? true/false-->
<enabled>true</enabled>
<!--The push frequency for the Outbound process in minutes default
is 15 minutes-->
<pushFrequency>15</pushFrequency>
<!-- Update: The temp directory to use for the outbound process for
creating the PMPDA/Notification files-->
<tempDirectory>C:\RCClient\data\temp\</tempDirectory>
<!-- Update: The local outbound directory to push the outbound files
from-->
<outputDirectory>C:\RCClient\data\output\</outputDirectory>
<!-- Update: The Remote Outbound directory to push files-->
<remoteOutboundDir>/ES####_UPLOAD</remoteOutboundDir>
<!-- Update: The Remote Outbound Routing ID to push files onto esMD
servers via TIBCO-->
<outboundRoutingId>ESMD2</outboundRoutingId>
<!--The Outbound File name prefix-->
<outboundFilePrefix>ON</outboundFilePrefix>
</OutboundConfig>
</ns2:ESMDConfig>

```

9.1.3 Running the RC Client

Before you, as the RC, run the sample RC Client, you must double-check all the configuration parameters in the XML configuration file, especially the ones with the "Update" prefix in the comments of the sample XML configuration file, as shown in Table 3: Sample RC Client Configuration File.

1. To run the sample RC Client, run the "RcClientUI.exe" utility provided in the distribution package.

2. Start the RC Client by providing the EIDM login credentials (i.e. EIDM User ID and password) for the Login tab and select the “Login and Run RC Client” button.

9.2 Custom RC Client

The RC .NET Client provides an API, so the RC can extend the RC Client to fit the RC’s environmental needs. The API enables the RC to perform the following functions:

- Log in to the TIBCO MFT server;
- Get Notifications from the TIBCO MFT server, using the Secure File Transfer Protocol (SFTP) (refer to Section 15.2.2 Inbound);
- Decrypt/encrypt and store the login credentials using a secure RSA algorithm (refer to Section 15.2.7 Utilities – Encryption);
- Pull medical documentation from the TIBCO MFT server (refer to Section 15.2.2 Inbound);
- Extract the downloaded packages (refer to Section 15.2.2 Inbound);
- Check the payloads using checksums in the metadata (refer to Section 15.2.2 Inbound);
- Push the outbound files from the output directory (refer to Section 15.2.3 Outbound); and
- Create custom files (for example, custom PA Review Response files) (refer to Section 15.2.4 PA Review Decision Response).

Note: The procedures for customizing the RC Client API are beyond the scope of this document. (The source code that will be packaged along with the RC Client contains documentation needed for integrating the API.)

10. TIBCO® MFT File Transfers

The RC Client uses the TIBCO MFT server to interact with the esMD system. It uses SFTP to connect to the TIBCO MFT server and uses the `ls/get/put` commands to interact with the files. There are nine types of inbound files that the RC Client pulls from the TIBCO MFT server, as described in Table 4: Inbound Files.

Note: “ES0001” is a sample mailbox number that the TIBCO MFT server uses to identify the RC, and “0977890” is a sample Transaction ID, which is shown in the Table 4: Inbound Files and Table 5: Outbound Files. The final two qualifiers in the file name that are prefixed with “D” and “T” are the Date and Timestamp, respectively. The Validation files will have a “T” prefix and the Production files will have a “P” prefix.

Only 1,022 files will be visible in the TIBCO MFT Server at one time, by the MFT Mailbox Routing number. As each file is pulled, the TIBCO MFT server will bring new files from the mainframe and place them at the bottom of the queue.

Table 4: Inbound Files

Type	Example File Name	Delivery Type Description
Inbound	T.ES0001.E0977890.D140116.T1033445	The E in prefix to the 0977890 Transaction ID indicates an esMD payload
Inbound	T.ES0001.A0977890.D140116.T1033445	Successful Acknowledgement that the HIH has received the pickup notification.
Inbound	T.ES0001.R0977890.D140116.T1033445	Validation Error received by the RC for the Pickup Notification sent to esMD
Inbound	T.ES0001.N0977890.D140116.T1033445	Successful Acknowledgement that the HIH has received the PA Review Response.
Inbound	T.ES0001.M0977890.D140116.T1033445	Validation Error received by the RC for the Administrative Error Response sent to esMD
Inbound	T.ES0001.V0977890.D140116.T1033445	Validation Error received by the RC for the PA Review Response sent to esMD
Inbound	T.ES0001.X0977890.D140116.T1033445	Virus Scan Failure Error received by the RC from the esMD on a file sent previously.
Inbound	T.ES0001.S0977890.D140116.T1033445	Successful Acknowledgement that the HIH has received the administrative error response.
Inbound	T.ES0001.Y0977890.D140116.T1033445	esMD Virus Scanning Service down Error for outbound processing received by the RC from the esMD on a file sent previously.

Table 5: Outbound Files

Type	Example File Name	Delivery Type Description
Outbound	T#EFT.ON.ESMD2.E0977890.D140116.T1033445	E indicates PA Review Response.
Outbound	T#EFT.ON.ESMD2.D0977890.D140116.T1033445	D indicates an Administrative Error.
Outbound	T#EFT.ON.ESMD2.P0977890.D140116.T1033445	P indicates an esMD pickup notification, i.e., both success and error.

11. XML Messages

This section describes the various XML messages transferred during the inbound and outbound processes.

11.1 Inbound

Note: Please refer to the Appendix F: Data Directories for details on how RC Client routes the inbound files once they are successfully processed into the data directories.

The RC Client transfers the following files during the inbound process:

- Payload Files;
- Flat File Rendering (FFR);
- Cover Sheet;
- Metadata File;
- Pickup HIH Status Response;
- Pickup Validation Error Response;
- Administrative Error HIH Status Response;
- Administrative Error Response Validation Error;
- Virus Scan Error Response;
- PA Review Result HIH Status Response; and
- PA Review Result Validation Error Response.

11.1.1 Payload Files

The RC Client will receive PDF files as payloads in the inbound documents with delivery type “E”. An example payload file name is E_185457-esmdQSSIVG0407141396893280928-0.pdf.

11.1.2 Flat File Rendering (FFR)

The RC Client will receive FFR files in the inbound documents along with the payload files for the X12N 278 request. An example FFR file is shown in Table 6: E_185457-flatfilerendering.ffr.

For more details on the layout of the FFR and X12N 278 requests, please see the X12N 278 Companion Guide under the esMD Downloads section, using the link below:

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

Table 6: E_185457-flatfilerendering.ffr

ST	2781523	005010X217		BHT	
0007013920394930203				200812081615	RUHL
1	201NM1	X3 2JOHNSON			
46111222333					
HL	2	1	211NM1	1P 1SMITH	
MUFFY		M			PH.D
XX1111111112					
N3	PO BOX 123				
N4	CINCINNATI		OH43017		
PER	ICWILBER				
FX8189991234					
TE8187691304					
EXPRV	CO PXC208D00000X				
HL	3	2	221NM1	IL 1JONES	
BARBARA		T		MR	M.D.
IIAA123456					
N3	PO BOX				123
N4	CINCINNATI		OH43017		
DMG	D8 19511204		FHL		4
3	EV1TRN	1	12345678900987654321768958473		
1311234567500			UM		
INI1 13A AA EM AP ONCA U 34Y1 PWK			77ELACATTACHMENT CONTROL		
NUMBER 1					
NM1	72 1JOHNSON				
BARBARA					
461111111111					
N3	PO BOX 123				
N4	CINCINNATI		OH43017		HL
5	4	SS0TRN	1 0001-201501150001UBERTEST-		
20141224-SVC1		9555555555UBERTESTHAPPYPATH			
UM	SCN3	SV1	HC27447		
36345.25	UN1		SE	27	
1523					

11.1.3 Cover Sheet

The RC Client will receive cover sheets in the inbound documents along with the payload files for the X12N 278 request.

In October 2016, the coversheet is modified to add the following information:

1. Workload Number;
2. Receipt Date;
3. PA Request Date;
4. Mode of Receipt;
5. Referring Provider Information;
6. Certification Condition Information;

7. Service Provider;
8. Attending Provider Identification; and
9. Additional detailed information of the Requester.

In addition, the elements are re-aligned based on the *HIPAA-TO-HUPA-VIA-ESMD-spreadsheet*.

Example cover sheets are shown in Figure 2: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 1, Figure 3: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 2, Figure 4: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 3, and Figure 5: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 4.

Figure 2: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 1

EDI Cover Sheet	
Contractor / Workload Number :	12302
Receipt Date (CCYYMMDD):	20180811
esMD Transaction ID :	1213411
PA Request Date (CCYYMMDD):	20150724
Mode of Receipt :	E
Requester Information :	
Provider Type :	Provider
Last Name :	SCWEITZER
First Name :	GEORGE
Middle Name :	
Name Suffix :	H
NPI :	111111112
Address Line 1 :	REQUESTER STREET LOOP 2010B
Address Line 2 :	
City :	COLUMBIA
State :	MD
ZIP :	21045
Contact Telephone # :	4035566789X6788
Contact E-Mail :	
Contact Fax # :	8189991235
Beneficiary Information :	
Last Name :	AMBLSUBSCRIBERLASTMACK
First Name :	AMBLSUBSCRIBERFIRSTFRENCHI
Middle Name :	T
Name Prefix :	MR
Name Suffix :	M.D.
HIC :	215123556A
Address Line 1 :	AMBBENEFICIARY LOOP2010C ADDR LINE 1
Address Line 2 :	SUB ADDR2
City :	ELLICOTCITY
State :	MD
ZIP :	21042
Date of Birth (CCYYMMDD):	19511204
Gender :	M
POS / TOB :	13
Requested Service Date Range/Date (CCYYMMDD-CCYYMMDD or CCYYMMDD):	20150901-20151030
Diagnosis codes :	
Diagnosis Code Qualifier (1) :	BK
Diagnosis Code (1) :	78609

Date: 2016-08-11T01:30:01PM EDT **Page: 1**

Figure 3: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 2

Diagnosis Code Qualifier (2) :	BF
Diagnosis Code (2) :	85135
Diagnosis Code Qualifier (3) :	BF
Diagnosis Code (3) :	8488
Diagnosis Code Qualifier (4) :	BF
Diagnosis Code (4) :	8471
Diagnosis Code Qualifier (5) :	BF
Diagnosis Code (5) :	8472
Certification Condition Information :	
Condition Code Category :	09
Certification Condition Indicator :	Y
Condition Code 1 :	11
Condition Code 2 :	
Condition Code 3 :	
Condition Code 4 :	
Condition Code 5 :	
Attachment Control Number:	SMDATSCRCDEFECT1
Ordering Provider Information :	
Last Name :	FACILITY ORG NAME
First Name :	
Middle Name :	
Name Prefix :	
Name Suffix :	
NPI :	1234567893
Address Line 1 :	LORDSTREET SERVICE PROVIDER 2010EA
Address Line 2 :	
City :	BALTIMORE
State :	MD
ZIP :	21043
Referring Provider Information :	
Last Name :	
First Name :	
Middle Name :	
Name Prefix :	
Name Suffix :	
NPI :	
Address Line 1 :	
Address Line 2 :	
City :	
State :	
ZIP :	

Date: 2016-08-11T01:30:01PM EDT **Page: 2**

Figure 4: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 3

Service Provider :	
Last Name :	AMBORDERINGPHYLASTJOHNS
First Name :	AMBORDERINGPHYFSTEPH
Middle Name :	
Name Prefix :	
Name Suffix :	
NPI :	1234567893
Address Line 1 :	GRSISTREET ORDERING PHYSICIAN 2010EA
Address Line 2 :	
City :	WINDSORMILL
State :	MD
ZIP :	21244
Attending Provider Identification :	
Last Name :	
First Name :	
Middle Name :	
Name Prefix :	
Name Suffix :	
NPI :	
Address Line 1 :	
Address Line 2 :	
City :	
State :	
ZIP :	
Facility Provider :	
Last Name :	FACILITY ORG NAME
First Name :	
Middle Name :	
Name Prefix :	
Name Suffix :	
NPI :	1234567893
Address Line 1 :	GREATSTREET SERVICE PROVIDER 2010EA
Address Line 2 :	
City :	LAUREL
State :	MD
ZIP :	21046
esMD Service Trace Number :	STN000012134111
Service Line Revenue Code :	
Procedure Code Qualifier :	HCPCS
Procedure Code :	K0826
Pricing Modifiers :	
Date: 2016-08-11T01:30:01PM EDT	
Page: 3	

Figure 5: Sample EDI Cover Sheet - E_1234567-coversheet.pdf Page 4

Pricing Modifier 1 :	21
Pricing Modifier 2 :	23
Pricing Modifier 3 :	
Pricing Modifier 4 :	
Number of units requested :	
Quantity :	30

Date: 2016-08-11T01:30:01PM EDT *Page: 4*

11.1.4 Metadata File

The metadata file accompanies the payload files, FFR, and X12N 278 request copy in the inbound documents with delivery type “E”. The metadata file contains information about the

payloads like the Object Identifier (OID), Transaction ID, Submission metadata (includes Attachment Control Number and other information), and optional metadata. The Content Type Code will change for each line of business. See Table 7: E_123456-metadata.xml.

Note: The metadata file will remain the same for all lines of business including Additional Documentation Requests (ADRs), PMD PA Requests, Non-Emergent Ambulance Transport and HBO Prior Authorization requests, First Level Appeal Requests, Second level Appeal Requests, Advance Determination of Medicare Coverage (ADMC), Recovery Auditor (RA) Requests, DMEPOS, and Home Health Services (HHS).

Note: The Claim ID is optional for First Level Appeal Requests, Second Level Appeal Requests and Advance Determination of Medicare Coverage (ADMCs).

Note: Content Type codes 81 and 82 are retired in esMD Application. esMD System will no longer send content type code as 81 for Non-Emergent Ambulance Transport and 82 for HBO Therapy.

For more information on the Content Type Codes, refer to Appendix G: Content Type Codes.

Table 7: E_123456-metadata.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<ns0:RetrieveMedicalDocumentationResponse
xmlns:ns0="http://esmd.ois.cms.hhs.gov/v1/rc" returnCode="1"
serviceSuccessful="true">
  <statusDescription>The RetrieveMedicalDocumentationRequest processed
successfully.</statusDescription>
  <NumberOfDocuments>3</NumberOfDocuments>
  <ESMDPackage>
    <ESMDTransaction TransactionId="2647546" DeliveryType="E"/>
    <SendingOID>urn:oid:123.456.657.126</SendingOID>
    <TargetOID>urn:oid:2.16.840.1.113883.13.34.110.1.999.1</TargetOID>
    <CompleteSubmission>true</CompleteSubmission>
    <RequestType>X12-XDR</RequestType>
    <SubmissionMetadata>
      <BusinessType>XDR X12</BusinessType>
      <CreationTime>2016-07-08T10:21:14.043-04:00</CreationTime>
      <SubmissionTime>2016-07-08T10:21:14.043-04:00</SubmissionTime>
      <EFTSubmissionTime>2016-07-08T10:21:14.043-
04:00</EFTSubmissionTime>
      <ContentTypeCode>13</ContentTypeCode>
      <NPI>1111111112</NPI>
    </SubmissionMetadata>
    <Documentation DocumentUniqueIdentifier="E_2647546-
PNXDRX12VALIDCT1314679876467241467987664418_0" MimeType="application/pdf"
    FileName="E_2647546-PNXDRX12VALIDCT1314679876467241467987664418_0.pdf">
      <OptionalMetadata>
        <FieldName>FileName</FieldName>
        <FieldValue>E_2647546-
PNXDRX12VALIDCT1314679876467241467987664418_0.pdf</FieldValue>
      </OptionalMetadata>
    </OptionalMetadata>
  </ESMDPackage>
</ns0:RetrieveMedicalDocumentationResponse>
```

```

        <FieldName>Description</FieldName>
        <FieldValue>From esMD</FieldValue>
    </OptionalMetadata>
    <OptionalMetadata>
        <FieldName>Checksum</FieldName>
<FieldValue>73d1ba48402985bac6ddab12f47c179dddbbe4c6</FieldValue>
    </OptionalMetadata>
    <OptionalMetadata>
        <FieldName>ParentUniqueId</FieldName>
        <FieldValue>12345a7d3-3b32-32ba-b83c-
7c8fcd1134e8</FieldValue>
    </OptionalMetadata>
    <OptionalMetadata>
        <FieldName>splitNumber</FieldName>
        <FieldValue>1-10</FieldValue>
    </OptionalMetadata>
</Documentation>
<Documentation DocumentUniqueIdIdentifier="E_2647546-
flatfilerendering" MimeType="text/xml" FileName="E_2647546-
flatfilerendering.ffr">
    <OptionalMetadata>
        <FieldName>AttachmentControlNumber</FieldName>
        <FieldValue>TESTCASE0801111</FieldValue>
    </OptionalMetadata>
    <OptionalMetadata>
        <FieldName>Checksum</FieldName>
<FieldValue>d42322235b71c04072622bd2f699eceb13553d45</FieldValue>
    </OptionalMetadata>
</Documentation>
<Documentation DocumentUniqueIdIdentifier="E_2647546-coversheet"
MimeType="application/pdf" FileName="E_2647546-coversheet.pdf">
    <OptionalMetadata>
        <FieldName>AttachmentControlNumber</FieldName>
        <FieldValue>TESTCASE0801111</FieldValue>
    </OptionalMetadata>
    <OptionalMetadata>
        <FieldName>Checksum</FieldName>
<FieldValue>6e390a57baa8c002e47260a74bf915f65cea68ec</FieldValue>
    </OptionalMetadata>
</Documentation>
</ESMDPackage>
</ns0:RetrieveMedicalDocumentationResponse>

```

11.1.4.1 Split Payload Transactions

In case of HIHs splitting the payloads when the sending files are larger than 200 MB in size, RCs will match/group the payloads using the additional information (ParentUniqueId and SplitNumber value set in the OptionalMetadata tag). The same ParentUniqueId and a different SplitNumber (e.g., 1-5) value are passed in the RC Metadata XML file for all the transactions that are intended for a single submission by the HIH. Refer to Table 8: Example of ParentUnique Id and Split Number Tag.

Table 8: Example of ParentUnique Id and Split Number Tag

```

<OptionalMetadata>
  <FieldName>ParentUniqueId</FieldName>
  <FieldValue>12345a7d3-3b32-32ba-b83c-
7c8fcd1134e8</FieldValue>
</OptionalMetadata>
<OptionalMetadata>
  <FieldName>splitNumber</FieldName>
  <FieldValue>1-5</FieldValue>
</OptionalMetadata>

```

11.1.5 Pickup HIH Status Response

When the RC Client sends a pickup notification to esMD, the esMD application processes the notification and sends the response to the HIH. Once the esMD application receives the acknowledgement for the pickup notification from HIH, then it generates the Pickup Status Response and sends it to the RC, indicating the response was sent to the HIH, as detailed in the code in Table 9: A_123456_Pickup_HIH_Status_Response.xml.

Note: The HIH Pickup Status Response will remain the same for all lines of business including ADRs; PMD, Non-Emergent Ambulance Transport, HBO, and DMEPOS PA requests; ADMCs; First-Level Appeal Requests; Second-Level Appeal Requests; RA discussion requests; and HHPCR requests.

Table 9: A_123456_Pickup_HIH_Status_Response.xml

```

<?xml version="1.0" encoding="UTF-8" standalone="true"?>
<ns2:RCPickupNotificationResponse
xmlns:ns2="http://esmd.ois.cms.hhs.gov/v1/rc/config">
  <ESMDTransactionId>123456</ESMDTransactionId>
  <ErrorInfo xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xsi:nil="true"/>
  <status>Success</status>
  <statusDesc>SENT PICKUP STATUS TO HIH</statusDesc>
</ns2:RCPickupNotificationResponse>

```

11.1.6 Pickup Validation Error Response

When the RC Client sends a Pickup Notification to esMD, the esMD application processes and sends the Pickup Notification to the HIH. If there is an error in processing the Pickup Notification submitted by the RC, the esMD application generates the Pickup Validation Error Response, as detailed in Table 10: R_123456_Pickup_Validation_Error.xml, and sends it to the RC. The RC will correct the pickup notification and resubmits it to esMD. Refer to the code located in Table 10: R_123456_Pickup_Validation_Error.xml.

Table 10: R_123456_Pickup_Validation_Error.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<ns0:RCPickupNotificationResponse
xmlns:ns0="http://esmd.ois.cms.hhs.gov/v1/rc/config">
  <ESMDTransactionId>28394</ESMDTransactionId>
  <ErrorInfo>
    <ErrorCode>614</ErrorCode>
    <ErrorName/>
    <ErrorDescription>Unable to parse RC response</ErrorDescription>
  </ErrorInfo>
  <Status>FAILED</Status>
  <StatusDesc>ESMD internal system error, please resubmit proper
file</StatusDesc>
</ns0:RCPickupNotificationResponse>
```

11.1.7 Administrative Error HIH Status Response

When the RC Client sends an administrative error for an inbound submission to esMD, the esMD application processes the administrative error and sends the response to the HIH. Once the esMD application receives the acknowledgement for the administrative error from HIH, then it generates the Administrative Error HIH Status Response and sends it to the RC, indicating the error was sent to the HIH, as detailed in the code in Table 11:

S_123456_Administrative_Error_HIH_Status_Response.xml.

Note: The Administrative Error HIH Status Response will remain the same for all lines of business including ADRs; PMD, Non-Emergent Ambulance Transport, HBO, and DMEPOS PA requests; ADMCs; First-Level Appeal Requests; Second-Level Appeal Requests; RA discussion requests; and HHPDR requests.

Table 11: S_123456_Administrative_Error_HIH_Status_Response.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<ns0:SubmitPADeterminationResponseResult
xmlns:ns0="http://esmd.ois.cms.hhs.gov/v1/rc" returnCode="1"
serviceSuccessful="true">
  <statusDescription>Sent administrative error response delivery to
HIH</statusDescription>
  <ESMDTransaction TransactionId="32839" DeliveryType="S"/>
</ns0:SubmitPADeterminationResponseResult>
```

11.1.8 Administrative Error Response Validation Error

When the RC Client sends an Administrative Error Response to esMD, the esMD application processes and sends the Administrative Error Response to the HIH. If there is an error in processing the Administrative Error Response submitted by the RC, the esMD application generates the Administrative Error Response Validation Error, as detailed in Table 12:

M_123456_Administrative_Response_Validation_Error.xml, and sends it to the RC. The RC will

correct the administrative error response and resubmits it. Refer to the code located in Table 12: M_123456_Administrative_Response_Validation_Error.xml.

Table 12: M_123456_Administrative_Response_Validation_Error.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<ns0:SubmitPADeterminationResponseResult
xmlns:ns0="http://esmd.ois.cms.hhs.gov/v1/rc" returnCode="1"
serviceSuccessful="true">
  <statusDescription>ESMD internal system error (validation failure) for
administrative error response, please resubmit</statusDescription>
  <ESMDTransaction TransactionId="28394" DeliveryType="M"/>
</ns0:SubmitPADeterminationResponseResult>
```

11.1.9 esMD Virus Scanning Service Down Error Response

When the RC Client sends any outbound file to esMD, the esMD application sends it to the esMD Virus Scanning Service for virus scanning. If the service is down and esMD fails to perform virus scanning for any outbound files from RCs, then an error response is sent back to the RC.

The esMD application sends the error response message detailed in Table 13:

Y_1234567_Virus_Scan_Gateway_Failure.xml to the RC if the esMD Virus Scanning Service is unavailable or down while performing virus scanning of pickup notification sent from RCs.

Table 13: Y_1234567_Virus_Scan_Gateway_Failure.xml

```
<ns0:RCPickupNotificationResponse
xmlns:ns0="http://esmd.ois.cms.hhs.gov/v1/rc/config">
  <ESMDTransactionId>1234567</ESMDTransactionId>
  <ErrorInfo>
    <ErrorCode>609</ErrorCode>
    <ErrorName/>
    <ErrorDescription>esMD Virus Scanning service is
unavailable</ErrorDescription>
  </ErrorInfo>
  <Status>FAILED</Status>
  <StatusDesc>esMD internal system error - esMD Virus Scanning service is
unavailable.So the response is rejected.</StatusDesc>
</ns0:RCPickupNotificationResponse>
```

esMD application sends the error response message detailed in Table 14:

Y_1234567_Virus_Scan_Gateway_Failure.xml to the RC if the esMD Virus Scanning Service is unavailable or down while performing virus scanning of Review Result Responses sent from RC.

Table 14: Y_1234567_Virus_Scan_Gateway_Failure.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<esmd:SubmitPADeterminationResponseResult
xsi:schemaLocation="http://esmd.ois.cms.hhs.gov/v1/rc/config/esmd-rc.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
```

```

xmlns:esmdl="http://esmd.ois.cms.hhs.gov/v1/rc/transaction"
xmlns:esmd="http://esmd.ois.cms.hhs.gov/v1/rc"
xmlns:cmsbt="http://esmd.ois.cms.hhs.gov/v1/rc/cmsbt">
  <statusDescription>statusDescription</statusDescription>
  <ESMDTransaction DeliveryType="Y" TransactionId="1234567"/>
  <ValidationFailure>
    <FailureCode>609</FailureCode>
    <FailureReason>esMD Virus Scanning service is
unavailable</FailureReason>
  </ValidationFailure>
</esmd:SubmitPADeterminationResponse>

```

11.1.10 Virus Scan Error Response

When the RC Client sends any outbound file to esMD, the esMD application sends it to the Virus Scan Gateway for virus scanning. If there are any viruses detected in the file received, the esMD application sends the message detailed in Table 15: X_123456_Virus_Scan_Error.xml to the RC. The RC Client will then pull this Virus Scan Error, stop the inbound and outbound processes, and lock down the RC Client to prevent RC Client from interacting with esMD. In this situation, the RC Client does not enable recovery, and the RC will contact esMD Help Desk. Refer to the code located in Table 15: X_123456_Virus_Scan_Error.xml.

Table 15: X_123456_Virus_Scan_Error.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<tns:RCPickupNotificationResponse
xmlns:tns="http://esmd.ois.cms.hhs.gov/v1/rc/config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://esmd.ois.cms.hhs.gov/v1/rc/config esmd-
config.xsd">
  <ESMDTransactionId>123456</ESMDTransactionId>
  <ErrorInfo>
    <ErrorCode>560</ErrorCode>
    <ErrorName>VirusFound</ErrorName>
    <ErrorDescription>ESMD validation error: Submission is infected with
virus</ErrorDescription>
  </ErrorInfo>
  <Status>FAILED</Status>
  <StatusDesc>Outbound Response File contains virus and so the response is
rejected.</StatusDesc>
</tns:RCPickupNotificationResponse>

```

11.1.11 PA Review Response HIH Status Response

When the RC Client sends a PA Review Result to esMD, the esMD application processes the file and sends the PA Review Result to the HIH. The esMD application submits the PA Review Result HIH Status Response, as detailed in Table 16:

N_123456_PA_Review_Result_HIH_Status_Response.xml, and sends it to the RC, indicating the result was sent to the HIH. Refer to the code located in Table 9:

A_123456_Pickup_HIH_Status_Response.xml.

Table 16: N_123456_PA_Review_Result_HIH_Status_Response.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<esmd:SubmitPADeterminationResponseResult
xsi:schemaLocation="http://esmd.ois.cms.hhs.gov/v1/rc ../../config/esmd-rc.xsd "
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:esmdl="http://esmd.ois.cms.hhs.gov/v1/rc/transaction"
xmlns:esmd="http://esmd.ois.cms.hhs.gov/v1/rc"
xmlns:cmsbt="http://esmd.ois.cms.hhs.gov/v1/rc/cmsbt">
  <statusDescription>PA Review Decision Response results - Successfully delivered to HIH</statusDescription>
  <ESMDTransaction DeliveryType="N" TransactionId="123456"/>
</esmd:SubmitPADeterminationResponseResult>
```

11.1.12 PA Review Response Validation Error Response

When the RC Client sends a PA Review Result to esMD, the esMD application processes and sends the PA Review Result to the HIH. If there is an error in processing the PA Review Result submitted by the RC, the esMD application generates the PA Results Response Error, as detailed in Table 17: V_123456_PA_Review_Response_Validation_Error.xml, and sends it to the RC. The RC will correct the response and resubmits the PA Results Result. Refer to the code located in Table 17: V_123456_PA_Review_Response_Validation_Error.xml.

Table 17: V_123456_PA_Review_Response_Validation_Error.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<esmd:SubmitPADeterminationResponseResult
xsi:schemaLocation="http://esmd.ois.cms.hhs.gov/v1/rc/config/esmd-rc.xsd "
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:esmdl="http://esmd.ois.cms.hhs.gov/v1/rc/transaction"
xmlns:esmd="http://esmd.ois.cms.hhs.gov/v1/rc"
xmlns:cmsbt="http://esmd.ois.cms.hhs.gov/v1/rc/cmsbt">
  <statusDescription>statusDescription</statusDescription>
  <ESMDTransaction DeliveryType="R" TransactionId="123456"/>
  <ValidationFailure>
    <FailureCode>556</FailureCode>
    <FailureReason>ESMD validation error: Decision Indicator must be A, N, or M</FailureReason>
  </ValidationFailure>
</esmd:SubmitPADeterminationResponse>
```

11.2 Outbound

Note for API users: Please refer to the properties files packaged with the source code for more details on the reference data needed to populate the outbound XMLs described in this section.

The RC Client transfers the following messages during the outbound process:

- Pickup Notification;
- Error Pickup Notification;
- Review Decision Response to PA Request;
- Error Response to PA request; and
- Administrative Error Response to Inbound Submissions.

11.2.1 Pickup Notification

The RC Client generates pickup notifications for all inbound files with delivery type “E” pulled from the TIBCO MFT server and processed successfully, as detailed in Table 18:

P_186303_Pickup_Notification.xml. Refer to the code located in Table 18:

P_186303_Pickup_Notification.xml.

Table 18: P_186303_Pickup_Notification.xml

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:RCPickupNotification
xmlns:ns2="http://esmd.ois.cms.hhs.gov/v1/rc/config">
  <ESMDTransactionId>186303</ESMDTransactionId>
  <RoutingId>ES9999</RoutingId>
  <PickupTime>2015-03-18T14:42:35.292-04:00</PickupTime>
  <SubmissionTime>2015-03-12T22:51:09.632-04:00</SubmissionTime>
</ns2:RCPickupNotification>
```

11.2.2 Error Pickup Notification

The RC Client generates pickup error notifications for all inbound files pulled from TIBCO MFT and processed unsuccessfully, as detailed in Table 19:

P_186303_Pickup_Error_Notification.xml. The processing errors are generated in two scenarios:

1. Checksum verification failed (i.e., the payload file received by the RC client does not match the file sent by esMD); and
2. Extraction was unsuccessful (i.e., the RC client could not successfully unzip the file received from the server).

Refer to the code located in Table 19: P_186303_Pickup_Error_Notification.xml.

Refer to the section 16.2: Errors: RC to esMD for more details on the errors sent from RC to esMD for an inbound submission processing error.

Table 19: P_186303_Pickup_Error_Notification.xml

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:RCPickupNotification
xmlns:ns2="http://esmd.ois.cms.hhs.gov/v1/rc/config">
  <ESMDTransactionId>186303</ESMDTransactionId>
  <RoutingId>ES9999</RoutingId>
  <PickupTime>2015-03-18T14:42:35.292-04:00</PickupTime>
  <SubmissionTime>2015-03-12T22:51:09.632-04:00</SubmissionTime>
  <ErrorInfo>
    <ErrorCode>53</ErrorCode>
    <ErrorName>ERROR VERIFYING PAYLOAD CHECKSUM</ErrorName>
    <ErrorDescription> ESMD_535 - RC Client processing error (Checksum
issue). Please resubmit </ErrorDescription>
  </ErrorInfo>
</ns2:RCPickupNotification>
```

11.2.3 Review Decision Response to PA Request

The Review Decision Response Result to PA and HHPCR Request is the XML message from the RC to the HIH to inform the HIH of the review decision.

11.2.3.1 PA Review Response with Decision Indicator 'Affirmed'

Table 20: E_1523121_PA_Review_Response.xml shows the XML message generated for a review response with decision indicator as "Affirmed".

The RC process for entering an A-Affirmed decision, which creates the XML indicated below, is detailed in Section 4.1 How to Enter an A-Affirmed Decision.

Table 20: E_1523121_PA_Review_Response.xml

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:SubmitPADeterminationResponse
xmlns:ns2="http://esmd.ois.cms.hhs.gov/v1/rc"
xmlns:ns3="http://esmd.ois.cms.hhs.gov/v1/rc/cmsbt">
  <ESMDTransaction RoutingId="ES9999" DeliveryType="E"
TransactionId="1523121"/>
  <PAReviewResponse>
    <CreationTime>2015-03-17T23:06:27.637-04:00</CreationTime>
    <SubmissionTime>2015-03-17T23:07:28.048-04:00</SubmissionTime>
    <ProcedureLevelRecordList>
      <ProcedureLevelRecord>
        <ProcedureCode>K0802</ProcedureCode>
        <DecisionIndicator>A</DecisionIndicator>
        <UniqueTrackingNumber>A0014280106700</UniqueTrackingNumber>
      </ProcedureLevelRecord>
    </ProcedureLevelRecordList>
  </PAReviewResponse>
</ns2:SubmitPADeterminationResponse>
```

11.2.3.2 PA Review Response with Decision Indicator ‘Affirmed’ with Change

Table 21: E_1523124_PA_Review_Response.xml shows the XML message generated for a review response with decision indicator as “Affirmed” with changes.

The RC process for entering a M-Affirmed with Change decision, which creates the XML indicated below, is detailed in the Section 4.2 How to Enter a M-Affirmed with Change Decision.

Please refer to the Appendix D: PA Reason Codes for more information on the reason codes used in the PA Review Response.

Table 21: E_1523124_PA_Review_Response.xml

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:SubmitPADeterminationResponse
xmlns:ns2="http://esmd.ois.cms.hhs.gov/v1/rc"
xmlns:ns3="http://esmd.ois.cms.hhs.gov/v1/rc/cmsbt">
  <ESMDTransaction RoutingId="ES9999" DeliveryType="E"
TransactionId="1523124"/>
  <PAReviewResponse>
    <CreationTime>2015-03-17T23:03:29.861-04:00</CreationTime>
    <SubmissionTime>2015-03-17T23:05:18.938-04:00</SubmissionTime>
    <ProcedureLevelRecordList>
      <ProcedureLevelRecord>
        <ProcedureCode>A0426</ProcedureCode>
        <DecisionIndicator>M</DecisionIndicator>
        <UnitsDateRangeRecord>
          <ApprovedUnits>9</ApprovedUnits>
          <ApprovedDateRange>
            <StartDate>2015-03-18</StartDate>
            <EndDate>2015-03-26</EndDate>
          </ApprovedDateRange>
        </UnitsDateRangeRecord>
        <UniqueTrackingNumber>A0014280106621</UniqueTrackingNumber>
        <ReasonCodeList>
          <ReasonCode>ADB23</ReasonCode>
          <ReasonCode>WVYZ1</ReasonCode>
        </ReasonCodeList>
      </ProcedureLevelRecord>
    </ProcedureLevelRecordList>
  </PAReviewResponse>
</ns2:SubmitPADeterminationResponse>
```

11.2.3.3 PA Review Response with Decision Indicator ‘Non Affirmed’

Table 22: E_1541233_PA_Review_Response.xml shows the XML message generated for a review response with decision indicator as “Non Affirmed”.

The RC process for entering a N-Non Affirmed decision, which creates the XML indicated below, is detailed in the Section 4.3 How to Enter a N-Non Affirmed Decision.

Please refer to the Appendix D: PA Reason Codes for more information on the reason codes used in the PA Review Response.

Please refer to the Appendix C: Industry Codes for more information on the Industry Codes to be used in the N-Non Affirmed response.

Note for API users: For the XDR PA Responses, the IndustryCodeRecordList will be discarded if RC sends the list, when the esMD system processes the PA Review Response.

Table 22: E_1541233_PA_Review_Response.xml

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:SubmitPADeterminationResponse
xmlns:ns2="http://esmd.ois.cms.hhs.gov/v1/rc"
xmlns:ns3="http://esmd.ois.cms.hhs.gov/v1/rc/cmsbt">
  <ESMDTransaction RoutingId="ES9999" DeliveryType="E"
TransactionId="1541233"/>
  <PAReviewResponse>
    <CreationTime>2015-03-17T23:07:32.455-04:00</CreationTime>
    <SubmissionTime>2015-03-17T23:08:40.451-04:00</SubmissionTime>
    <ProcedureLevelRecordList>
      <ProcedureLevelRecord>
        <ProcedureCode>K0802</ProcedureCode>
        <DecisionIndicator>N</DecisionIndicator>
        <UniqueTrackingNumber>A0014280106680</UniqueTrackingNumber>
        <IndustryCodeRecordList>
          <IndustryCodeRecord>
            <IndustryCode>04</IndustryCode>
            <IndustryCodeDescription>Authorized Quantity
Exceeded</IndustryCodeDescription>
          </IndustryCodeRecord>
          <IndustryCodeRecord>
            <IndustryCode>16</IndustryCode>
            <IndustryCodeDescription>Inappropriate facility
type</IndustryCodeDescription>
          </IndustryCodeRecord>
        </IndustryCodeRecordList>
        <ReasonCodeList>
          <ReasonCode>PMD1A</ReasonCode>
          <ReasonCode>PMD3A</ReasonCode>
          <ReasonCode>PMD2B</ReasonCode>
        </ReasonCodeList>
      </ProcedureLevelRecord>
    </ProcedureLevelRecordList>
  </PAReviewResponse>
</ns2:SubmitPADeterminationResponse>
```

11.2.4 Error Response to PA Request

The Error Response to PA Request is the XML message from the RC to the HIH, to inform the HIH of the error response as detailed in Table 23: E_1521342_PA_Review_Response.xml. Refer to the code located in Table 23: E_1521342_PA_Review_Response.xml.

Please refer to the Appendix B: Reject Error Codes for more information on the error codes used in the Error Review Response for a PA Request.

Table 23: E_1521342_PA_Review_Response.xml

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:SubmitPADeterminationResponse
xmlns:ns2="http://esmd.ois.cms.hhs.gov/v1/rc"
xmlns:ns3="http://esmd.ois.cms.hhs.gov/v1/rc/cmsbt">
  <ESMDTransaction RoutingId="ES9999" DeliveryType="E"
TransactionId="1521342"/>
  <PAReviewResponse>
    <CreationTime>2015-03-17T23:10:22.327-04:00</CreationTime>
    <SubmissionTime>2015-03-17T23:11:46.176-04:00</SubmissionTime>
    <ErrorResponseDetail>
      <DecisionIndicator>R</DecisionIndicator>
      <RejectErrorCodeRecordList>
        <RejectErrorCodeRecord>
          <ErrorCategoryName>Medical-Info</ErrorCategoryName>
          <ErrorCodeRecordList>
            <ErrorCodeRecord>
              <ErrorCode>15</ErrorCode>
              <ErrorCodeDescription>Number of Units is missing
or invalid</ErrorCodeDescription>
            </ErrorCodeRecord>
            <ErrorCodeRecord>
              <ErrorCode>33</ErrorCode>
              <ErrorCodeDescription>Place of Service code is
missing or invalid</ErrorCodeDescription>
            </ErrorCodeRecord>
          </ErrorCodeRecordList>
        </RejectErrorCodeRecord>
        <RejectErrorCodeRecord>
          <ErrorCategoryName>Beneficiary</ErrorCategoryName>
          <ErrorCodeRecordList>
            <ErrorCodeRecord>
              <ErrorCode>64</ErrorCode>
              <ErrorCodeDescription>HIC Number is missing or
invalid</ErrorCodeDescription>
            </ErrorCodeRecord>
          </ErrorCodeRecordList>
        </RejectErrorCodeRecord>
      </RejectErrorCodeRecordList>
      <ReasonCodeList>
        <ReasonCode>PMD1A</ReasonCode>
        <ReasonCode>PMD2C</ReasonCode>
        <ReasonCode>PMD3A</ReasonCode>
        <ReasonCode>PMD3B</ReasonCode>
      </ReasonCodeList>
      <UniqueTrackingNumber>A0014280106600</UniqueTrackingNumber>
    </ErrorResponseDetail>
  </PAReviewResponse>
</ns2:SubmitPADeterminationResponse>

```

11.2.5 Administrative Error Response to Inbound Submissions

The Administrative Error Response is the XML message from the RC to the HIH to inform the HIH of the administrative error response to inbound submissions.

Note: Section 6 How to Submit an Inbound Submission Error on the Administrative Error Response to Inbound Submissions Tab describes the process of creating an XML message, using the RC Client.

The Administrative Error Response to Inbound Submissions xml is detailed in Table 24: D_1532432AdministrativeErrorResponse.xml.

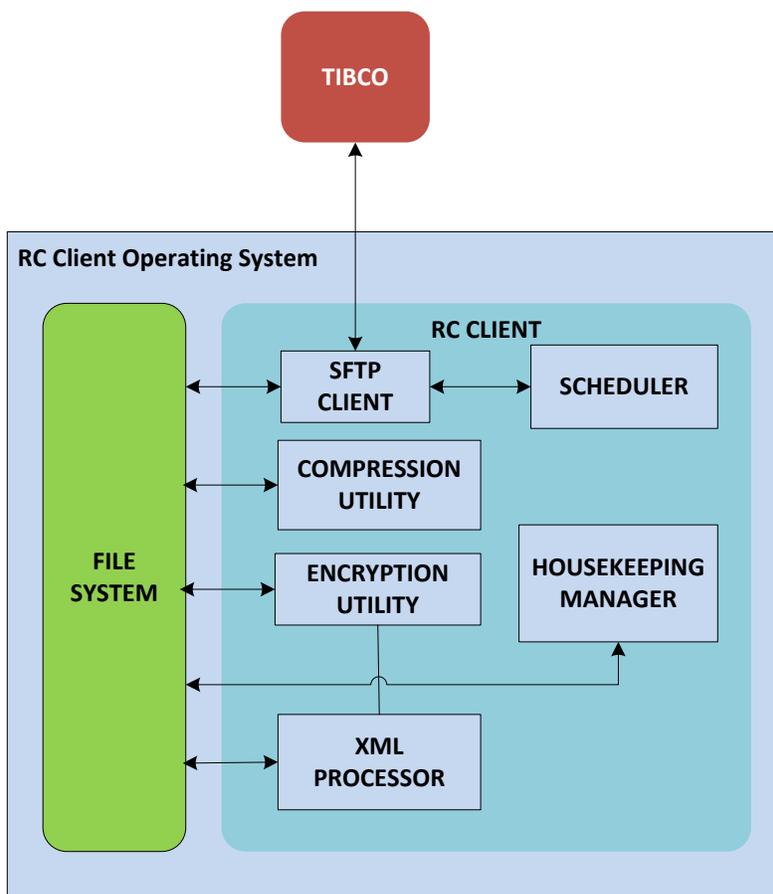
Table 24: D_1532432AdministrativeErrorResponse.xml

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:SubmitAdministrativeErrorResponse
xmlns:ns2="http://esmd.ois.cms.hhs.gov/v1/rc"
xmlns:ns3="http://esmd.ois.cms.hhs.gov/v1/rc/cmsbt">
  <ESMDTransaction RoutingId="ES9999" DeliveryType="D"
TransactionId="1532432"/>
  <AdministrativeErrorResponse>
    <CreationTime>2015-03-17T23:11:57.521-04:00</CreationTime>
    <SubmissionTime>2015-03-17T23:12:10.931-04:00</SubmissionTime>
    <ErrorResponseList>
      <ErrorResponseRecord>
        <ErrorCode>ESMD_410</ErrorCode>
        <ErrorName>Cannot Read Files / Corrupt Files</ErrorName>
      </ErrorResponseRecord>
    </ErrorResponseList>
  </AdministrativeErrorResponse>
</ns2:SubmitAdministrativeErrorResponse>
```

12. RC Client Components

Figure 6: RC Client Components shows the internal components of RC Client application. The following sections describe each component in detail.

Figure 6: RC Client Components



100090

12.1 SFTP Client

The SFTP Client is an internal component of the RC Client. It provides the following functionality:

- Connects to the TIBCO MFT server using EIDM ID;
- Lists the available documents on the TIBCO MFT server;
- Pulls the documents to the RC Client; and
- Pushes the outbound documents from the RC Client to the TIBCO MFT server.

12.2 Compression Utility

The Compression utility allows the RC Client to extract the payload, metadata file, and messages from the compressed file downloaded from the TIBCO MFT server. The RC Client uses the zip file format.

The same utility is used to create compressed file logs for extraction.

12.3 Encryption Utility

The Encryption utility encrypts the login credentials that will be stored in memory for the duration of the RC Client program execution. The Encryption utility is described in detail in Section 15.1 Security.

12.4 XML Processor

The XML Processor supports creating XML messages to send to esMD as well as loading the configuration files for the RC Client.

12.5 Scheduler

After the RC Client starts, the polling cycle begins. The poll is a redundant cycle; you can configure the interval (e.g., 1 hour or 4 hours) through the RC Client property file. The Scheduler component controls the RC Client threads and ensures the RC Client runs in regular intervals determined by the “checkFrequency” parameter in the XML Configuration File.

13. RC Client Workflow

Figure 6: RC Client Components illustrates the internal components of RC Client application. Figure 7: RC Client Workflow illustrates how the RC Client connects to the TIBCO MFT server using EIDM login credentials.

13.1 Start RC Client

The RC Client starts on the RC machine or server. It loads the XML Configuration File.

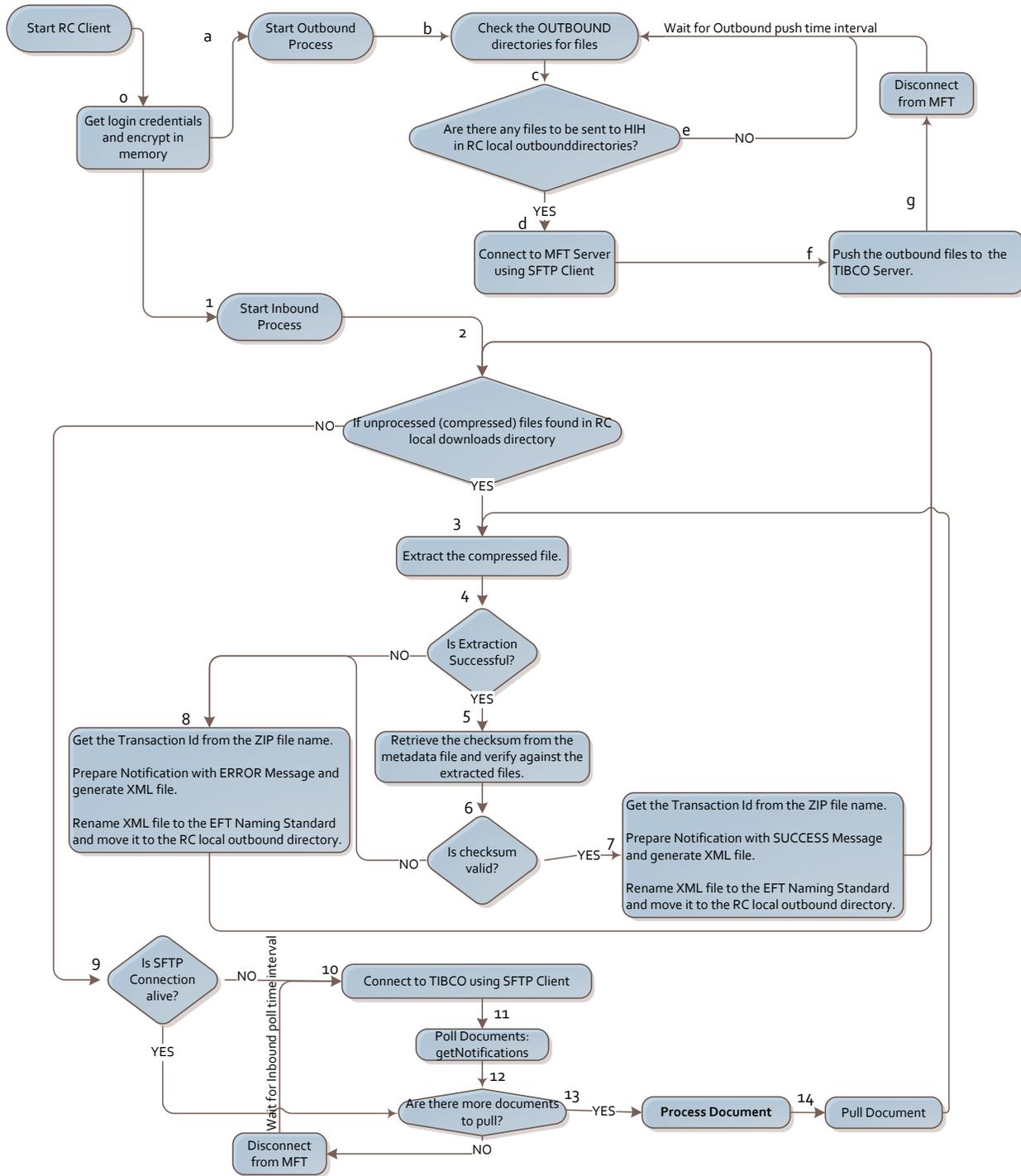
13.1.1 Login and Encryption

The RC Client prompts the user for the following details:

1. EIDM User ID; and
2. EIDM Password.

After successful login, TIBCO login credentials are encrypted in memory and used when needed to log in to the TIBCO MFT server. The RC Client initiates two threads, one for the inbound process and another one for the outbound process in sections 13.2 Outbound Process and 13.3 Inbound Processes, respectively.

Figure 7: RC Client Workflow



100091

13.2 Outbound Process

13.2.1 Outbound Start

The RC Client loads configuration parameters for the outbound process from the XML configuration file. The configuration parameters are as follows:

- Directories used by the RC Client to create the outbound files (`outputDirectory`);
- The remote outbound directory to push the files to (`remoteOutboundDir`);
- Push frequency (`pushFrequency`);
- The outbound file name prefix for the TIBCO MFT server (`outboundFilePrefix`); and
- SFTP server details for the chosen environment (`ESMDSFTPServer`).

13.2.2 Get Outbound Documents

The RC Client checks the output directory for any files to be sent to the H1H. If any such files exist, the process continues to Step D (Connect); otherwise, the outbound process thread sleeps for the time interval determined by the `pushFrequency` parameter in the XML Configuration file.

13.2.3 Connect

The RC Client connects to the TIBCO MFT server using EIDM login credentials. The Encryption utility decrypts the credentials in memory and logs in to the TIBCO MFT server. If the user password is expired, the connection fails, prompting the user to provide the login information again.

13.2.4 Push

The RC Client pushes outbound files to the TIBCO MFT server. After that, the outbound process thread sleeps. The sleep time interval is determined by the outbound push frequency configuration parameter in the XML Configuration file.

13.3 Inbound Processes

13.3.1 Inbound Start

The RC Client loads configuration parameters from the XML Configuration file. The configuration parameters are for the following inbound processes:

- Pull frequency; and
- SFTP server details for the chosen environment.

13.3.2 Extraction Failure

If the extraction process was interrupted during extraction during the run, then there will be files sitting in the local "temp" directory, which needs to be manually moved/deleted.

13.3.3 Extraction

When the RC Client runs the inbound process and downloads the files. It will then extract the downloaded file, if the extraction is successful, RC Client proceeds to “checksum verification”; otherwise, RC Client creates an error pickup notification.

13.3.4 Checksum Verification

After the extraction is complete, the RC Client uses the XML Processor to parse the metadata file from the zip package. This metadata file contains the checksums for all payloads in the package. The RC Client verifies the checksum for each file in the package against the checksum in the metadata file. If the checksum is valid for all files, the RC Client will create a pickup notification; otherwise, the RC Client will create an error pickup notification.

13.4 Acknowledgements

13.4.1 Pickup Notification

If the RC Client successfully extracts and verifies compressed files, the RC Client sends a SUCCESS notification through esMD to inform the HIH that the document has been received and successfully processed.

To generate this SUCCESS notification, the RC Client should:

1. Get the Transaction ID from the compressed file name;
2. Prepare the notification with a SUCCESS message and generate an XML notification file; and
3. Rename the XML notification file to the EFT naming standard and move it to the outbound directory. Refer to Section 13.2 Outbound Process for more information.

13.4.2 Error Pickup Notification

If the RC Client encounters an error indicating a failure, while either extracting the compressed file or verifying the checksum for the contents of the package, the RC Client sends an error notification through the esMD system, asking the HIH to resubmit the package. In order to generate this error notification, the RC Client must:

- Obtain the Transaction Identifier(TID) from the compressed file name;
- Prepare the notification with an Error message;
- Generate an XML notification file; and
- Rename the XML notification file to the EFT naming standard and move it to the outbound directory. This file will be handled by the outbound process.

13.5 Connect

The RC Client checks for an active connection to the TIBCO MFT server. If a connection is active, the RC Client uses this connection. If the connection is inactive, the RC Client uses the

Encryption utility to decrypt the login credentials from memory and connect to the TIBCO MFT server.

13.6 Get Notifications

The RC Client uses the SFTP Client to get a list of the available inbound documents for the RC on the TIBCO MFT server.

13.7 Process Document

If any documents are available for the RC Client to pull from the TIBCO MFT server, the RC Client will go through the list to pull each document.

13.8 Pull Document

The RC Client uses the SFTP Client to pull each inbound document from the TIBCO MFT server. The RC Client then extracts the contents of the zip file and continues processing.

14. Release 4.0 Changes in the API

The following Client methods are modified as part of RC Client 4.0 version for the inbound flow. Table 25: Inbound Client Methods compares similar methods in the Release 3.1 RC Client and Release 4.0 RC Client.

Table 25: Inbound Client Methods

Method	Description
LoginProcess()	<ul style="list-style-type: none"> Collects the EIDM login credentials provided in the login prompt or by decrypting the encrypted login details in memory. Calls getNotifications() with the login credentials to get list of available downloads from TIBCO. Calls processMedicalDocumentation() for each available document from TIBCO. Calls acknowledge() each document processed with a success/error XML response message. <p>Sleeps for the checkFrequency time interval before next pull.</p>
getNotifications()	<ul style="list-style-type: none"> Connects to TIBCO MFT server with EIDM Login and Password. Retrieves the list of files available for download for that environment.

Method	Description
processMedicalDocumentation()	<ul style="list-style-type: none"> • Pulls the zip file from the TIBCO MFT server using the pullDocument() method based on the name passed to it. • Extracts the zip file into the download directory using the extractDocument() method. • If extraction fails, calls the acknowledge method with an error event and exits. • After successful extraction, verifies the extracted payloads against the checksum in the metadata file using the checkPayloads() method. • If checksum fails, calls the acknowledge method with an error event. <p>If checksum passes, calls the acknowledge method with a success event.</p>
acknowledge()	<ul style="list-style-type: none"> • This generates the pickup notification based on the rcPickupNotification. If the rcPickupNotification has errorInfo, it will generate an error notification Otherwise, it will generate a pickup notification.
ManualSubmitReviewResponseToPARquest()	<ul style="list-style-type: none"> • CreateCompressedTIBCOFileForErrorResponse- Takes Error Response object and creates XML response file in the output directory. • CreateCompressedTIBCOFileForPARReviewResponse - Takes Review Decision Response object and creates XML response file in the output directory.
ManualSubmitAdministrativeErrorToInboundSubmissions ()	<ul style="list-style-type: none"> • CreateCompressedTIBCOFileForAdministrativeErrorResponse - Takes Administrative Error Response to Inbound Submission Decision Response object and creates XML response file in the output directory.

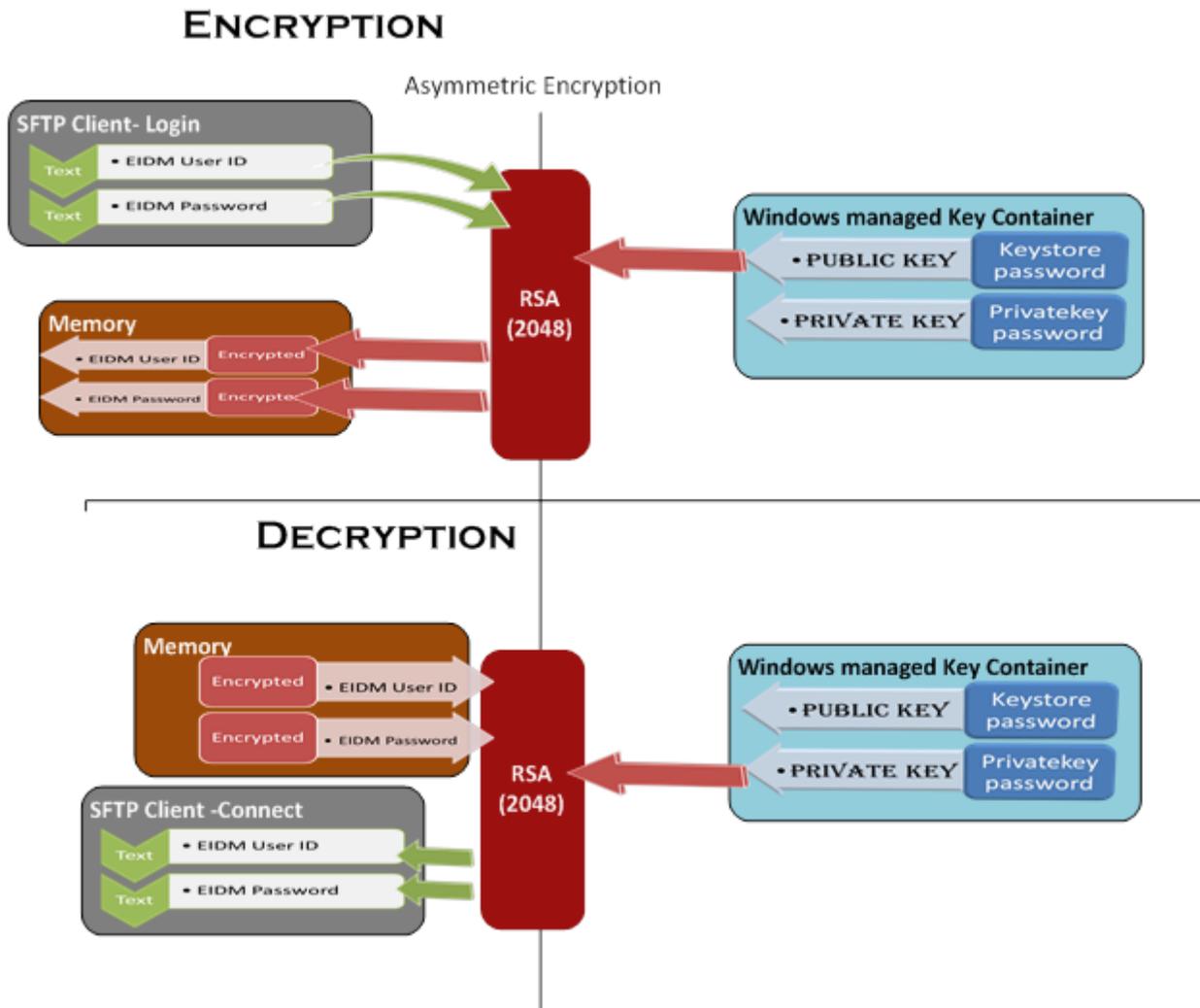
15. .NET Client API

15.1 Security

When the RC Client starts, the user credentials are provided because they are stored in encrypted form in memory. Figure 8: Encryption and Decryption Process shows the processes used to safeguard the EIDM user credentials from exposure.

The RC .NET Client uses RSA asymmetric encryption algorithms to secure the login credentials.

Figure 8: Encryption and Decryption Process



15.2 .NET API Documentation

This section discusses API methods that can be called for a custom solution to interface with the TIBCO MFT server. If you, as the RC, choose to use the RC .NET client out-of-the-box, skip this section.

15.2.1 Login

Table 26: The esMD.RcClient.Login.LoginProcess Methods describes the RC Client Login process.

Table 26: The esMD.RcClient.Login.LoginProcess Methods

No.	Method	Description
1.	public bool Authenticate()	User login procedure. The username and password properties are encrypted and set only when this method returns TRUE. Returns: TRUE if the user logs in successfully.

No.	Method	Description
2.	<pre>MessageDTO ValidateLogin(LoginDTO logindto);</pre>	<p>This method validates the User ID and Password For Login Tab</p> <p>Returns: FALSE if error Messages are found, returns with a list of Error Messages</p>
3.	<pre>MessageDTO LoginProcessAPI(LoginDTO logindto);</pre>	<p>This method does the Login Process.</p> <p>Returns: TRUE if the user logs in successfully.</p> <p>Returns: FALSE if the user fails to login with an Error Message.</p>

15.2.2 Inbound

Table 27: The esMD.RcClient.Inbound.Inbound Methods details the RC Client Inbound process.

Table 27: The esMD.RcClient.Inbound.Inbound Methods

No.	Method	Description
1.	<pre>public SortedList<long, string> GetNotifications(string remoteDownloadDirectoryPath, string filePattern)</pre>	<p>This method connects to the TIBCO MFT server and checks for any available notifications.</p> <p>Parameters:</p> <ol style="list-style-type: none"> remoteDownloadDirectoryPath – The remote directory path to download from as a String; and filePattern – The File Name Pattern to look for as a String. <p>Returns: A list for file names sorted by last modified time, oldest first.</p>
2.	<pre>public string PullDocument(string remoteDocName, string localDocName)</pre>	<p>This method is used to pull the document (i.e., zip file) from the TIBCO MFT server using the remoteDocName and saves it locally in the “temp” directory as the localDocName.</p> <p>Parameters:</p> <ol style="list-style-type: none"> remoteDocName – The remote file to pull as a String; and localDocName – The local file name to save as a String. <p>Returns: Error message if any errors. A null return value means downloading succeeded.</p>
3.	<pre>public string ExtractDocument(string zipFileName, string targetDirectory)</pre>	<p>Extracts the zip file that was downloaded from the TIBCO MFT server.</p> <p>Parameters:</p> <ol style="list-style-type: none"> zipFileName – The local zip file to extract; and targetDirectory – The target directory to place the extracted contents. <p>Returns: The directory name – the location where the extracted file(s) stored in the local file system.</p>

No.	Method	Description
4.	public bool ProcessMedicalDocumentation(string remoteDocumentName)	<p>This is the “housekeeping” method. It does the following:</p> <ol style="list-style-type: none"> 1. Pulls the zip file from the TIBCO MFT server using the PullDocument() method based on the name passed to the “temp” directory; 2. Extracts the zip file into the “download” directory using the ExtractDocument() method; 3. If extraction fails, calls the Acknowledge() method with an error event; 4. After successful extraction, verifies the extracted payloads against the checksum in the metadata file using the CheckPayloads() method; 5. If checksum fails, calls the Acknowledge() method with an error event; and 6. If checksum passes, calls the Acknowledge() method with a success event. <p>Parameter:</p> <ol style="list-style-type: none"> 1. remoteDocumentName – The remote document name to pull and process. <p>Returns: The Boolean status of the processing for that document.</p>
5.	public string Acknowledge(RCPickupNotification rcPickupNotification)	<p>Generates the pickup notification for a downloaded document. If the ErrorInfo object is populated, it generates an error pickup notification. If the ErrorInfo object is null, it generates a pickup notification.</p> <p>Parameter:</p> <ol style="list-style-type: none"> 1. rcPickupNotification – The RCPickupNotification object. <p>Returns: The compressed file name (in TIBCO naming conventions) created in the output directory as a String.</p>
6.	public bool CheckPayloads(string localExtractedDirectory, ESMDDocument[] esmdDocuments)	<p>Checks the payload files against the metadata from the package.</p> <p>Parameters:</p> <ol style="list-style-type: none"> 1. localExtractedDirectory – The directory in which the payloads were extracted to as a File; and 2. esmdDocuments – The payloads metadata captured in ESMDDocument objects. <p>Returns: The status of the checksum verification.</p>

15.2.3 Outbound

Table 28: The esMD.RcClient.Outbound.Outbound Methods details the esMD RC Client Outbound Process.

Table 28: The esMD.RcClient.Outbound.Outbound Methods

No.	Methods	Description
1.	public SortedList<long, string> GetOutboundDocuments(string outboundDir, string filePattern)	This method is used to retrieve the list of outbound documents in the “output” directory to be pushed. Parameters: 1. outboundDir – The local “output” directory to push files from as a String; and 2. filePattern – The file name pattern to push as a String. Returns: A list of file names (without a directory path).
2.	public string PushDocument(string localDocName, string remoteDirectory)	This method used to push a local compressed document from the “output” directory to the TIBCO MFTserver. Parameters: 1. localDocName _ – The name of the file to push as a String; and 2. remoteDirectory –The remote directory name to push to as a String. Returns: An error message if any. A null return value means uploading succeeded.

15.2.4 PA Review Decision Response

Table 29: Manual Submission of PA Result details the methods to submit the PMD PA Result.

Table 29: Manual Submission of PA Result

No.	Methods	Description
1.	MessageDTO ValidateReviewResponse(ReviewDecisionResponseToPARequestDTO reviewresponsedto)	This method takes ReviewDecisionResponseToPARequestDTO object as input, which has the review decision response information provided by user and validates all information before generating the XML response. Parameter: ReviewDecisionResponseToPARequestDTO – The ReviewDecisionResponseToPARequestDTO object to use. Returns: The Message Object which has status of validations result and also the list of Validation Failure DTO object if there is any validation failure with the data provided by the user.
2.	string CreateReviewResponseAPI(ReviewDecisionResponseToPARequestDTO reviewresponsedto);	This method takes ReviewDecisionResponseToPARequestDTO object as input which has the review decision response information and creates the SubmitPADeterminationResponse object.
3.	public string CreateCompressedTIBCOFileForPARReviewResponse(SubmitPADeterminationResponse submitPADeterminationResponse)	This method is used create the XML file and compress it into a TIBCO MFT server file. Parameter: 1. submitPADeterminationResponse_ – The SubmitPADeterminationResponse object to use. Returns: The compressed outbound file name ready to be pushed by the outbound process.

15.2.5 PA Error (Rejected Decision) Response

Table 30: Manual Submission of PA Error (Rejected Decision) Response details the methods to submit the PA Error (Rejected Decision) Response.

Table 30: Manual Submission of PA Error (Rejected Decision) Response

No.	Methods	Description
4.	<code>MessageDTO validateErrorResponse(ErrorResponseToPARequestDTO ErrorRespDTO);</code>	<p>This method takes <code>ErrorResponseToPARequestDTO</code> object as input, which has the review decision response information provided by user and validates all information before generating the XML response.</p> <p>Parameter: <code>ErrorResponseToPARequestDTO</code>– The <code>ErrorResponseToPARequestDTO</code> object to use.</p> <p>Returns: The Message Object which has status of validations result and also the list of Validation Failure DTO object if there is any validation failure with the data provided by the user.</p>
5.	<code>string CreateErrorResponseAPI(ErrorResponseToPARequestDTO ErrorRespDTO);</code>	<p>This method takes <code>ErrorResponseToPARequestDTO</code> object as input which has the review error (rejected decision) response information provided by user and creates the <code>SubmitPADeterminationResponse</code> object.</p> <p>Parameter:</p> <ol style="list-style-type: none"> 1. <code>ErrorResponseToPARequestDTO</code> – The <code>ErrorResponseToPARequestDTO</code> object to use. <p>Returns: The <code>SubmitPADeterminationResponse</code> object populated with the data provided by the user.</p>
6.	<code>public string CreateCompressedTIBCOFileForErrorResponse(SubmitPADeterminationResponse submitPADeterminationResponse)</code>	<p>This method is used create the XML file and compress it into a TIBCO MFT server file.</p> <p>Parameter:</p> <ol style="list-style-type: none"> 1. <code>submitPADeterminationResponse</code> – The <code>SubmitPADeterminationResponse</code> object to use. <p>Returns: The compressed outbound file name ready to be pushed by the outbound process.</p>

15.2.6 Administrative Error Response to Inbound Submissions

Table 31: Administrative Error Response to Inbound Submissions details the methods to submit the Administrative Error Response to inbound submission.

Table 31: Administrative Error Response to Inbound Submissions

No.	Methods	Description
7.	<p><code>MessageDTO</code> <code>ValidateAdminResponseAPI(AdministrativeErrorPropertiesDTO adminErrDTO);</code></p>	<p>This method takes <code>AdministrativeErrorPropertiesDTO</code> object as input which has the administrative error response information provided by user and validates all those information before generating the response XML</p> <p>Parameter:</p> <ol style="list-style-type: none"> 1. <code>AdministrativeErrorPropertiesDTO</code>– the <code>AdministrativeErrorPropertiesDTO</code> object to use. <p>Returns: The Message Object which has status of validations result and also the list of Validation Failure DTO object if there is any validation failure with the data provided by the user.</p>
8.	<p><code>public string</code> <code>CreateAdministrativeErrorResponseAPI(AdministrativeErrorPropertiesDTO adminErrDTO)</code></p>	<p>This method takes <code>AdministrativeErrorPropertiesDTO</code> object as input which has the administrative error response information provided by user and creates the <code>AdministrativeErrorPropertiesDTO</code> object.</p> <p>Parameter:</p> <ol style="list-style-type: none"> 1. <code>AdministrativeErrorPropertiesDTO</code> – The <code>AdministrativeErrorPropertiesDTO</code> object to use. <p>Returns: The <code>SubmitAdministrativeErrorResponse</code> object populated with the data provided by the user.</p>
9.	<p><code>public</code> <code>ManualSubmitAdministrativeErrorToInboundSubmissions(SubmitAdministrativeErrorResponse AdminErrResponse)</code></p>	<p>This method is used create the XML file and compress it into a TIBCO MFT server file.</p> <p>Parameter:</p> <ol style="list-style-type: none"> 1. <code>submitAdministrativeErrorResponse_</code> – The <code>SubmitAdministrativeErrorResponse</code> object to use. <p>Returns: The compressed outbound file name ready to be pushed by the outbound process.</p>

15.2.7 Utilities – Encryption

Note: The .NET Client release from April 28, 2014 does not include the encryption of login credentials. This section depicts the planned design and is subject to change. This guide will be updated as required when the security implementation is completed.

Refer to Table 32: `EMSD.RcClient.Encryption.EncryptionUtil` Methods for details on the `EMSD.RcClient.Encryption.EncryptionUtil` methods.

Table 32: `EMSD.RcClient.Encryption.EncryptionUtil` Methods

No.	Methods	Description
1.	<p><code>public string</code> <code>EncryptCredential(string credential)</code></p>	<p>This method is used to encrypt the EIDM login credentials using an RSA Public Key from the key container.</p> <p>Parameter:</p> <ol style="list-style-type: none"> 1. <code>credential</code> – User’s login name or password to encrypt as a String. <p>Returns: The encrypted credential.</p>

No.	Methods	Description
2.	public string DecryptCredential(string credential)	<p>This method is used to decrypt the EIDM login credentials using an RSA Private Key from the key container.</p> <p>Parameter:</p> <ol style="list-style-type: none"> credential – User’s encrypted login name or password. <p>Returns: The decrypted credential.</p>

15.2.8 Advanced / Debugging API

Refer to Table 33: Remote Troubleshooting for details on the ExecuteHandshake method.

Table 33: Remote Troubleshooting

No.	Methods	Description
1.	public bool ExecuteHandshake()	<p>This sample method invokes a call to the TIBCO MFT server to pass login information to assist in remote troubleshooting.</p> <p>Returns: TRUE if handshake succeeded.</p>
2.	<pre>MessageDTO ValidateTestConnection(TestConnec tionDTO TestConnDTO);</pre>	<p>This method takes <code>TestConnectionDTO</code> object as input which has the Advanced/Debugging information provided by user and validates all those information before Testing the connection to TIBCO.</p> <p>Parameter:</p> <ol style="list-style-type: none"> <code>TestConnectionDTO</code>– the <code>TestConnectionDTO</code> object to use. <p>Returns: The Message Object which has status of validations result and also the list of Validation Failure DTO object if there is any validation failure with the data provided by the user.</p>

15.2.9 Validation API

Refer to Table 34: Validation Methods used for validating fields on the Review Response screen.

Table 34: Validation Methods

No.	Methods	Description
1.	<p>ValidationUtil</p> <ul style="list-style-type: none"> public bool ValidFormatAlphaNumeric(string TextToValidate) public bool ValidFormatNumeric(string TextToValidate) public void validateReasonCodesInPAErrorResponse(List<String> ReasonCodesList, ref List<ValidationFailureDTO> validationFailureListDTO) private bool validateIndividualReasonCodes(List<String> ReasonCodesList, ref List<ValidationFailureDTO> validationFailureListDTO) private bool validateReasonCodesExceedsMax(List<String> reasonCodesList, ref List<ValidationFailureDTO> validationFailureListDTO) private bool isDuplicatesReasonCodesExists(List<String> ReasonCodesList, ref List<ValidationFailureDTO> validationFailureListDTO) 	<p>ValidationUtil Class has two methods</p> <ul style="list-style-type: none"> public bool ValidFormatAlphaNumeric(string TextToValidate)- This method will be used Validate the input for Alphanumeric characters(Used for Procedure Code & UTN) Returns True , if the string is alphanumeric or else returns False public bool ValidFormatNumeric(string TextToValidate) - This method will be used Validate the input for Numeric characters(Used for Transaction ID and Number of units), Returns True, if the string is Numeric or else returns False This method will be used to validate the missing reason codes for PA Review response (Decision 'N' only) and for PA Error response. This method will be used to validate the length of a reason code for PA review response (Decision 'M' and 'N') and PA Error Response. This method validates if more than 25 reason codes are provided. This method validates if Duplicate reason codes are provided.

15.3 Logs

The RC .NET Client Sample application is a Windows desktop application. All log messages are written to the RcClient.log file.

16. Error Codes

16.1 Errors: esMD to RC

Table 35: Error Codes Sent from the esMD to RC lists all the error codes sent from the esMD to the RC.

Table 35: Error Codes Sent from the esMD to RC

Error Code	Error Description
305	esMD validation error: Review Contractor PickUp Timestamp is not a valid Timestamp. Correct and resubmit.
306	esMD validation error: esMD Delivery Timestamp is not a valid Timestamp. Correct and resubmit.
539	esMD internal system error (Unzip failure). Resubmit.
544	esMD validation error: Reason Code is required when Decision Indicator is N or R. Correct and resubmit.
545	esMD validation error: Total number of Reason Codes cannot exceed 25. Reduce the number of Reason Codes and resubmit.
556	esMD validation error: Decision Indicator must be A, N, M or R. Correct and resubmit.
557	esMD validation error: Review Contractor Unique Tracking Number must be 1 - 50 alphanumeric characters with no special characters. Correct and resubmit.
558	esMD validation error: Reason Code does not exist in the esMD database. Correct and resubmit.
560	esMD validation error: Submission is infected with virus. Correct and resubmit.
562	esMD validation error: Unique Tracking Number is required when Decision Indicator is A, N, or M. Correct and resubmit.
565	esMD Internal System Error: Unable to process your response. Correct and resubmit.
566	esMD validation error: A required element is either missing, has an invalid element format, or has an invalid length. Correct and resubmit.
567	esMD validation error: A Decision Indicator of 'M' is invalid for PMD PA response. Provide a valid Decision Indicator and resubmit.
569	esMD validation error: Number of Approved Units; and/or Approved Service Date or Approved Service Date Range are not required elements for this PA response and Procedure Level Decision. Correct and resubmit.
572	esMD validation error: Approved Service End Date is less than or equal to Approved Service Start Date. Correct and resubmit.
576	esMD validation error: Number of Approved Units, Approved Service Date, Approved Service Date Range, Industry Code(s), and Reason Code(s) are not allowed for this response. Correct and resubmit.
577	esMD validation error: Unable to parse response XML file. Correct XML and resubmit.
600	esMD validation error: Duplicate Reason Codes found. Correct and resubmit.
601	esMD validation error: Procedure Code in response not equal Procedure Code in request. Correct and resubmit.
602	esMD validation error: Approved Service Date must be greater than or equal to current system date.

Error Code	Error Description
603	esMD validation error: Decision Indicator = R; response is missing at least one combination of Error Category Code: Error Code. Add the combination(s) of Error Category Code: Error Code and resubmit.
604	esMD validation error: More than 9 Error Codes were reported for a single Error Category Code. Reduce the number of errors for each Error Category Code to 9 and resubmit.
605	esMD validation error: Decision Indicator = R; Category Code is invalid for the combination of Error Category Code: Error Code. Correct the Error Category Code and resubmit with correct combination(s) of Error Category Code: Error Code.
606	esMD validation error: Decision Indicator = R; invalid Error Code for the combination of Error Category Code: Error Code. Correct the Error Code and resubmit with correct combination(s) of Error Category Code: Error Code
607	esMD validation error: Invalid Industry Code. Correct and resubmit.
608	esMD validation error: Invalid Reason Code. Correct and resubmit.
609	esMD Virus Scanning service is unavailable. Retry later.
610	esMD validation error: Empty File Received in the Response. Correct and Resubmit.
611	esMD validation error: Multiple Files Received in the Response
612	esMD validation error: Approved Service Date and Approved Service Date Range and Approved Unit should not be provided for this response. Correct and Resubmit
613	esMD validation error: Administrative Error Code is invalid. Correct and Resubmit
614	esMD validation error: Approved Service End Date is less than the Current Date. Correct and resubmit
615	esMD validation error: Invalid error in the pickup notification
616	esMD validation error: Intended Recipient OID is deactivated and cannot accept response. Correct and resubmit.
617	esMD validation error: Mailbox ID in the response does not match with the Mailbox ID that the request was sent. Correct and resubmit.
618	ESMD validation error: Error occurred while storing the Review Contractor Status Pickup.
619	ESMD validation error: Error occurred while validating the Review Contractor Pickup Status Data.
620	esMD validation error: Invalid Review Response Creation Time format
621	esMD validation error: Invalid review Response Submission Time Format
622	esMD validation error: This Decision Indicator is not valid for this response
623	esMD validation error: Both Approved Service Date and Approved Service Date range cannot exist in same response. Correct and Resubmit.
624	esMD validation error: Approved Service Start Date cannot be greater than the Approved Service End Date. Correct and Resubmit
625	esMD validation error: Reason code is not required for decision Indicator A. Correct and Resubmit
626	esMD validation error: Unable to parse RC response
627	esMD validation error: Error encountered while saving ReviewContractorPickUpStatus data
628	esMD validation error: Failure in sending the Administrative error response to HIH
629	esMD validation error: Failure in sending the Administrative PA response to HIH
630	esMD validation error: Failure in sending the Pickup notification to HIH
634	esMD validation error: Invalid Number of Approved Unit value, The Number of Approved Unit value should be greater than zero, a non-negative whole number.
640	esMD validation error: Intended recipient OID and Procedure Code is not a valid combination. Correct and resubmit

16.2 Errors: RC to esMD

There are two types of Error Codes sent by the RC to the esMD. They are:

1. Administrative Errors; and
2. Pickup Errors.

16.2.1 Administrative Errors:

Table 36: Administrative Error Codes lists the error codes used to report unexpected errors related to the payload received in a downloaded file from the esMD system. For more details, please refer to section 11.2.5 Administrative Error Response to Inbound Submissions.

Table 36: Administrative Error Codes

Administrative Error	Error Code	Description
corrupt files/cannot read files	ESMD_410	ESMD_410- Administrative Error (corrupt files/cannot read files).
Submission Sent to Incorrect RC	ESMD_411	ESMD_411- Administrative Error (Submission Sent to Incorrect RC).
Virus Found	ESMD_412	ESMD_412- Administrative Error (Virus Found).
Other	ESMD_413	ESMD_413- Administrative Error (Other).

16.2.2 Pickup Errors

Table 37: Pickup Error Codes lists the pickup error codes and their descriptions. These codes are used to populate the ErrorInfo object inside the error pickup notification XML (e.g., R_TID_Pickup_Error_Request.xml). Please refer to section 11.2.2 Error Pickup Notification for more details.

Table 37: Pickup Error Codes

Error Type	Error Code	Description
UNZIP ERROR	534	ESMD_534 – RC Client processing error (Unzip failure). Please resubmit.
CHECKSUM ERROR	535	ESMD_535 – RC Client processing error (Checksum issue). Please resubmit.
METADATA ERROR	536	ESMD_536 – RC Client processing error (Metadata issue). Please resubmit.

17. PA Requests and Responses Automation with Shared Systems

17.1 Introduction

PA requests and responses are exchanged between the Providers and RCs via mail and fax as well as through the esMD system. esMD allows the exchange of PA information in electronic format as ASC X12N 278 transactions (requests/responses) along with the current acceptable format as XDR transactions. The corresponding medical documentation to the PA request is in XDR (PDF) format only. esMD includes an extract from the ASC X12N 278 PA request as a coversheet with required information to support the RC data entries into their PA screens.

17.1.1 Overview of the Automation Process

Currently, populating the PA screens in the Shared Systems is a manual process that is laborious and time consuming. The RCs receive the requests, manually enter the information, and respond with a written response or a response entered into RC Client. With the automation of PA requests/responses, esMD will intake the PA requests, automatically send the requests into the Shared System PA Screens, and process the finalized PA requests sent from Shared Systems. This implementation will remove the manual data entry of X12N 278 PA request information into the PA screens by the RCs.

Refer to sections 17.3.1 Logical Workflow and 17.3.2 Application Workflow for detailed information on the automation processing of PA requests and responses with Shared System/Workloads.

17.1.2 Shared Systems

The automation of PA requests/responses will be implemented at different timelines by each of the Shared Systems (Multi-Carrier System (MCS), Viable Information Processing System (VIPS) Medicare System (VMS), and Fiscal Intermediary Shared System (FISS)).

In October 2016, release AR2016.10.0 will implement the changes in the esMD System to cover the initial rollout changes at MCS and Part B RCs.

17.1.2.1 PA Review Response

The X12N 278 Part B and XDR PA Review Response can be submitted using the Shared System PA Screens. RCs can still continue to submit PA Review Response for XDR transactions through RC Client as well.

17.2 Assumptions

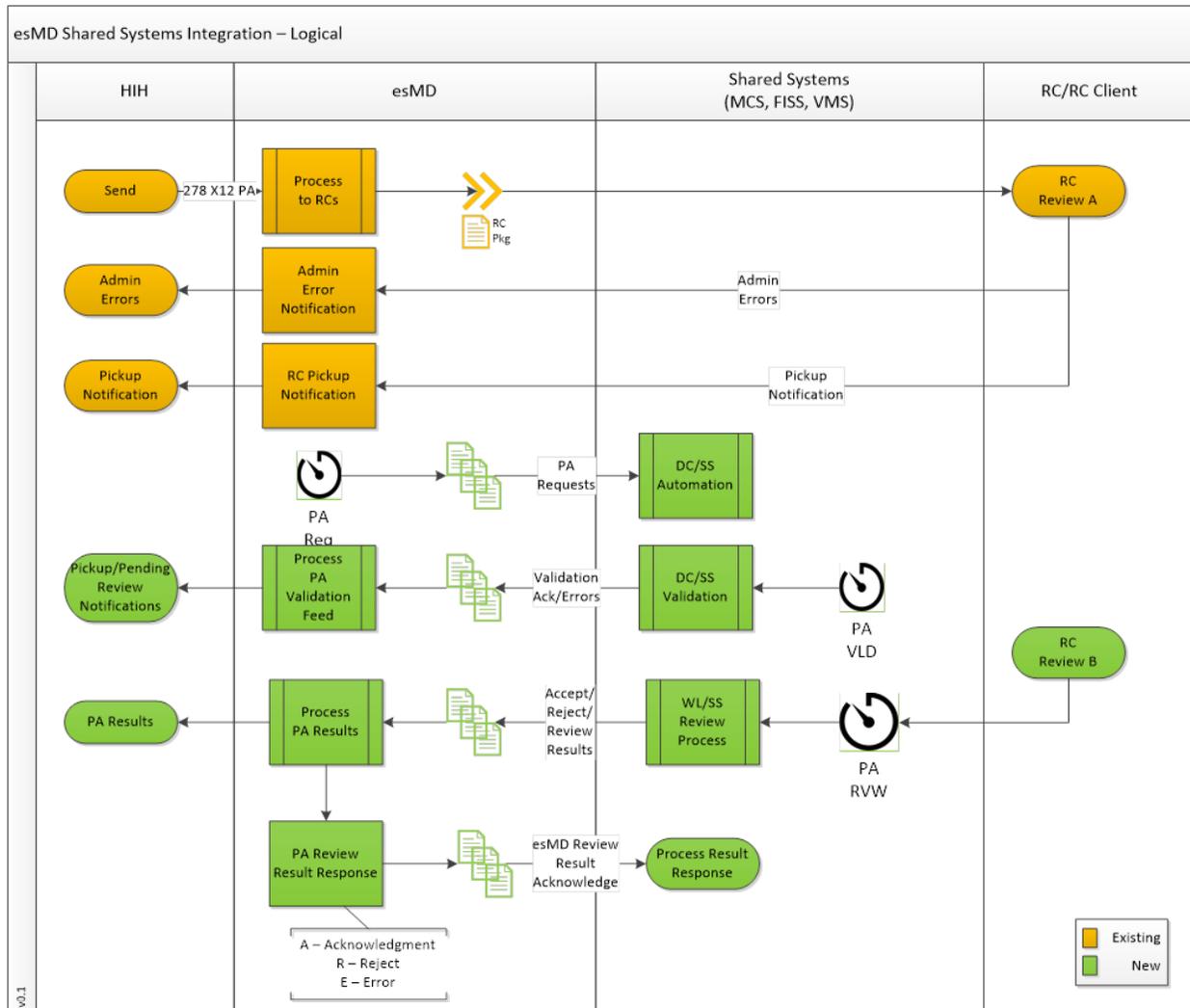
1. The esMD system will not perform any virus scanning of the batch file responses received from the shared system (data center or workload).

17.3 Automation of PA Requests/Responses – Application Workflow

17.3.1 Logical Workflow

Figure 9: esMD Shared System/Workload Integration - Logical provides an overview of the logical flow of PA Requests/Responses between esMD and Shared System/Workload.

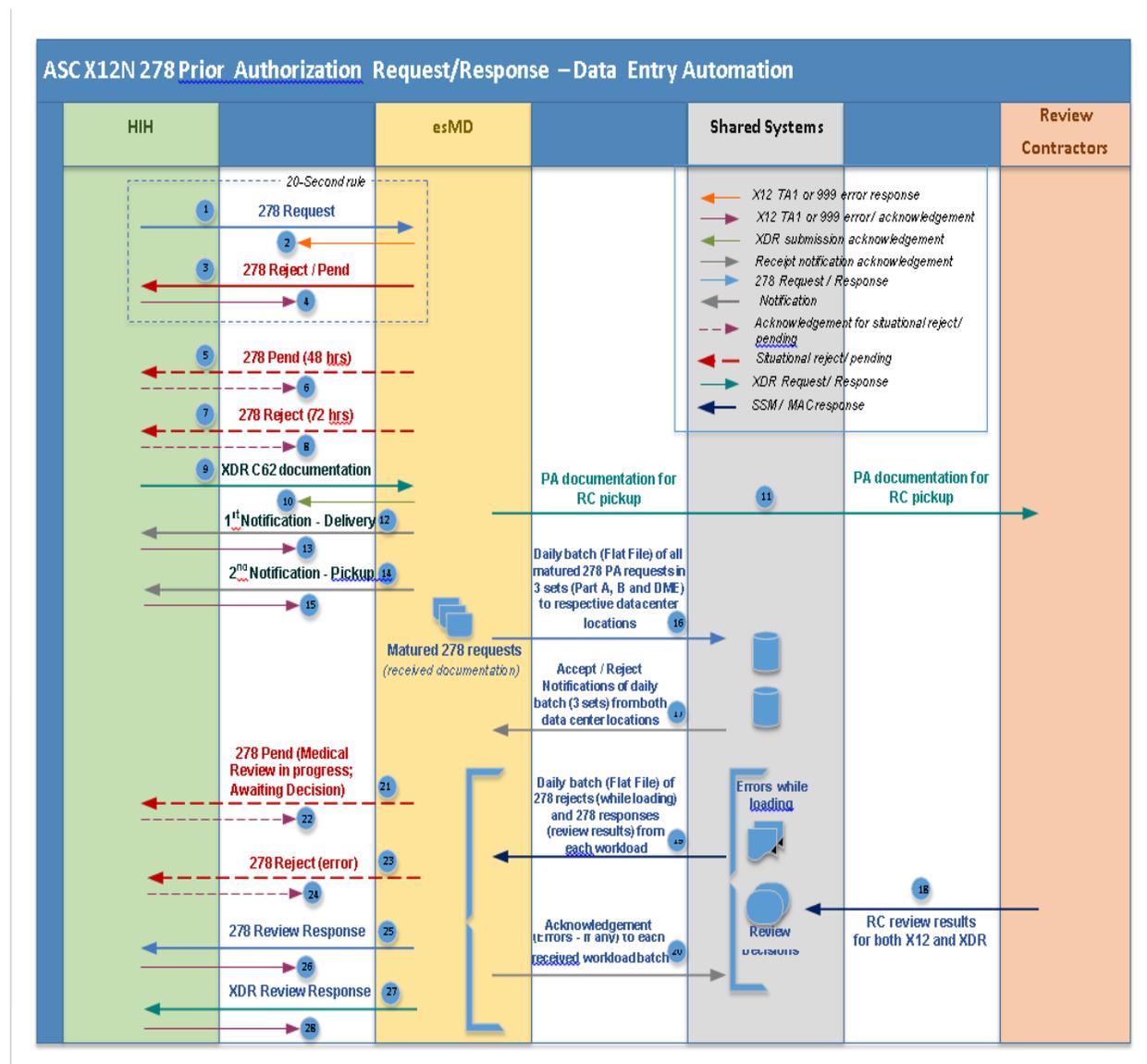
Figure 9: esMD Shared System/Workload Integration - Logical



17.3.2 Application Workflow

Figure 10: Information Flow – X12N 278 PA Request/Response Integration with Shared Systems provides an overview of the workflow of automation of X12N 278 PA Requests/Responses between esMD and Shared System/Workload. The work flow is as follows:

Figure 10: Information Flow – X12N 278 PA Request/Response Integration with Shared Systems



18. Contacts

Table 38: Support Points of Contact provides the contact list for esMD.

Table 38: Support Points of Contact

Contact	Phone	Email	Hours of Operation
CMS esMD Help Desk	(443) 832-1856	esMD_Support@cms.hhs.gov	Regular Business Hours: 8 a.m. to 8 p.m. Eastern Time (ET).

Appendix A: Description of Fields on RC Client Tabs

Table 39: Descriptions of Fields on Review Decision Response to PA Request Tab lists the descriptions of the fields on the Review Decision Response to PA Request tab.

Table 39: Descriptions of Fields on Review Decision Response to PA Request Tab

Name of Field	Description
Transaction ID	Transaction Identifier of the request this response is being sent for. Required Element. Minimum Length should be 7 and Maximum Length should be 7. Format of this element is Numeric.
Procedure Code	Procedure Code for the Review Response. It should be same as the one that was sent in the request. Required Element. Length should be 1 – 48 Alpha – Numeric.
Procedure Level Decision	Decision provided for the Review Response; can be one of the following: <ul style="list-style-type: none"> • “A” for Affirmed; • “M” for Affirmed With Change; or • “N” for N-Non Affirmed.
Number of Approved Units	Number of Approved Units for the request service; entered only when Procedure Level Decision is M-Affirmed with Change decision. Maximum Length should be 10. It should be Numeric.
Approved Service Date	Approved Service Date for approving the requested service if the response is for M - Affirmed with Change Decision; the format is mm-dd-yyyy; can be selected from the calendar with Start Date and End Date; and is entered only when Procedure Level Decision is M - Affirmed with Change decision.
Approved Service Date Range	Approved Service Date Range is the new date the RC is approving for the requested service if the response is for M-Affirmed with Change Decision; the format is mm-dd-yyyy and the date must be same or later than the current date; can be selected from the calendar; and is entered only when Procedure Level Decision is M-Affirmed with Change decision.
<ul style="list-style-type: none"> • Start Date 	Start Date is the approved service start date for approving the requested service if the response is for M-Affirmed with Change Decision; the format is mm-dd-yyyy; can be selected from the calendar; can be past, current or Future date; and is entered only when Procedure Level Decision is M-Affirmed with Change decision.
<ul style="list-style-type: none"> • End Date 	End Date is the approved service end date for approving the requested service if the response is for M-Affirmed with Change Decision; the format is mm-dd-yyyy; can be selected from the calendar; is greater than the Start Date provided and should be same or later than current date; and is entered only when Procedure Level Decision is M-Affirmed with Change decision.
Procedure Level UTN	Unique Tracking Number for review response. Required element for all decisions; format of the unique tracking number is 1 – 50 Alpha Numeric characters.
Industry Code	Industry Code(s) if the decision is N-Non Affirmed for the response; minimum one and maximum of five industry code(s).

Name of Field	Description
Reason Code	Reason code required only when Procedure Level Decision is N-Non Affirmed; optional when Procedure Level Decision is M-Affirmed with Change; format is five character alpha numeric characters; and a minimum of 1 and up to maximum of 25 reason codes can be provided.

Table 40: Descriptions of Fields on Error Response to PA Request Tab lists the descriptions of the fields on the Review Decision Response to PA Request tab.

Table 40: Descriptions of Fields on Error Response to PA Request Tab

Name of Field	Description
Transaction ID	Transaction Identifier of the request this response is being sent for. Required Element. Minimum Length should be 7 and Maximum Length should be 7. Format of this element is Numeric.
Reject Error Category	One or multiple Reject Error Category is selected for each Response; each Reject Error Category has number of Reject Error Codes associated with it. Required Element.
Reject Error Code	Under Each Reject Error Category, either one or multiple Reject Error Codes are selected. Required Element. Minimum 1 and maximum 9 reject error codes can be selected for each category.
Reason Code	5-character reason code is provided. Minimum of 1 and up to maximum of 25 reason codes can be provided. Required Element.
Request Level UTN	UTN is provided for each response. Optional Element. Format of the unique tracking number is 1 – 50 Alpha Numeric Characters.

Table 41: Descriptions of Fields on Administrative Error Response to Inbound Submissions Tab lists the descriptions of the fields on the Administrative Error Response to Inbound Submissions tab.

Table 41: Descriptions of Fields on Administrative Error Response to Inbound Submissions Tab

Name of Field	Description
Transaction ID	Transaction Identifier of the request this response is being sent for. Required Element. Minimum Length should be 7 and Maximum Length should be 7. Format of this element is Numeric.
Error Situation	Error code/situation; can be one of the following: <ul style="list-style-type: none"> • Corrupt Files/Cannot read file; • Virus found; • Submission sent to incorrect RC; or, • Other. Required Element.

Table 42: Descriptions of Fields on Advanced/Debugging Tab lists the descriptions of the fields on the Advanced/Debugging tab.

Table 42: Descriptions of Fields on Advanced/Debugging Tab

Name of Field	Description
User ID	EIDM User ID is a Required Element for testing the connectivity to TIBCO MFT Server.
Password	EIDM password is a Required Element for testing the connectivity to TIBCO MFT Server.

Appendix B: Reject Error Codes

For an up-to-date list of Reject Error Codes, please refer to the esMD Downloads section, using the link below:

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

(Note: An up-to-date list of Reject Error Codes will be added to this web site by CMS.)

Appendix C: Industry Codes

For an up-to-date list of Industry Codes, please refer to the esMD Downloads section, using the link below:

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

(Note: An up-to-date list of Industry Codes will be added to this web site by CMS.)

Appendix D: PA Reason Codes

For an up-to-date list of PA Reason Codes, please refer to the esMD Downloads section, using the link below:

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

(Note: An up-to-date list of PA Reason Codes will be added to this web site by CMS.)

Appendix E: PA Procedure Codes

Table 43: Procedure Codes for the PA Programs lists the Procedure Codes for the PA programs for the X12 requests and responses.

Table 43: Procedure Codes for the PA Programs

Procedure Code	PA Program
K0800	Power Mobility Device
K0898	Power Mobility Device
K0891	Power Mobility Device
K0890	Power Mobility Device
K0855	Power Mobility Device
K0854	Power Mobility Device
K0853	Power Mobility Device
K0852	Power Mobility Device
K0851	Power Mobility Device
K0850	Power Mobility Device
K0849	Power Mobility Device
K0848	Power Mobility Device
K0843	Power Mobility Device
K0842	Power Mobility Device
K0841	Power Mobility Device
K0840	Power Mobility Device
K0839	Power Mobility Device
K0838	Power Mobility Device
K0837	Power Mobility Device
K0836	Power Mobility Device
K0835	Power Mobility Device
K0802	Power Mobility Device
K0812	Power Mobility Device
K0813	Power Mobility Device
K0814	Power Mobility Device
K0815	Power Mobility Device
K0816	Power Mobility Device
K0817	Power Mobility Device
K0818	Power Mobility Device
K0819	Power Mobility Device
K0820	Power Mobility Device
K0821	Power Mobility Device
K0822	Power Mobility Device
K0823	Power Mobility Device
K0824	Power Mobility Device
K0825	Power Mobility Device
K0826	Power Mobility Device
K0827	Power Mobility Device

Procedure Code	PA Program
K0828	Power Mobility Device
K0829	Power Mobility Device
G0277	Hyperbaric Oxygen (HBO) Therapy
A0426	Non-Emergent Ambulance Transport
A0428	Non-Emergent Ambulance Transport
K0856	Durable Medical Equipment Prosthetics Orthotics and Supplies
K0861	Durable Medical Equipment Prosthetics Orthotics and Supplies
G0161	Home Health Services
G0153	Home Health Services
G0160	Home Health Services
G0158	Home Health Services
G0152	Home Health Services
G0159	Home Health Services
G0157	Home Health Services
G0151	Home Health Services
G0156	Home Health Services
G0299	Home Health Services
G0300	Home Health Services
G0162	Home Health Services
G0163	Home Health Services
G0155	Home Health Services
G0164	Home Health Services

Appendix F: Data Directories

Table 44: Inbound File Names and Data Directories lists out all the files received by the RC and the corresponding data directories these files will reside in along with a brief description.

Note: "TID" indicates a "Transaction ID" in the table below.

Table 44: Inbound File Names and Data Directories

Data Directory	Folder	File Name	Description
acknowledgements	A_TID	A_TID_Pickup_HIH_Status_Response.xml	Successful Acknowledgement that the HIH has received the pickup notification.
error	M_TID	M_TID_Administrative_Response_Validation_Error.xml	Validation Error received by the RC for the Administrative Error Response sent to esMD
error	R_TID	R_TID_Pickup_Validation_Error.xml	Validation Error received by the RC for the Pickup Notification sent to esMD
error	V_TID	V_TID_PA_Review_Response_Validation_Error.xml	Validation Error received by the RC for the PA Review Response sent to esMD
error	Y_TID	Y_1234567_Virus_Scan_Gateway_Failure.xml	esMD Virus scanning service unavailable error received by the RC from esMD on a file sent previously.
error	X_TID	X_TID_Virus_Scan_Error.xml	Virus Scan Failure Error received by the RC from the esMD on a file sent previously.
input	E_TID	E_TID-UniqueIdDateTimestamp_sequence.pdf	Documentation received as part of the inbound submission i.e. PDF
input	E_TID	E_TID-flatfilerendering.ffr	Flat File Rendering of the X12N 278 PA Request received by the RC from esMD
input	E_TID	E_TID-coversheet.pdf	Coversheet PDF of the X12N 278 PA Request received by the RC from esMD
Input	E_TID	E_TID-metadata.xml	Metadata XML for the payloads received by the RC in the inbound submission from esMD
notifications	N_TID	N_TID_PA_Review_Result_HIH_Status_Response.xml	Successful Acknowledgement that the HIH has received the PA Review Response.
notifications	S_TID	S_TID_Administrative_Error_HIH_Status_Response.xml	Successful Acknowledgement that the HIH has received the administrative error response.

Table 45: Outbound File Names and Data Directories lists all the outbound files sent from the RC to the esMD along with a brief description and the data directory where they are created.

Note: "TID" indicates a "Transaction ID" in the table below.

Table 45: Outbound File Names and Data Directories

Data Directory	Folder	File Name	Description
output	P_TID	P_TID_Pickup_Notification.xml	Successful pickup notification being sent to esMD inside the zip file.
output	P_TID	P_TID_Pickup_Error_Notification.xml	Error pickup notification (i.e. unzip, checksum etc.) being sent to esMD inside the zip file.

Data Directory	Folder	File Name	Description
output	D_TID	D_TID_Administrative_Error_Response.xml	Administrative Error Response being sent to esMD inside the zip file.
output	E_TID	E_TID_PA_Review_Response.xml	PA Review Response being sent to esMD inside the zip file.

Appendix G: Content Type Codes

Table 46: Content Type Code Descriptions provides the description of the Content Type Code used in the esMD Release 4.0.

Table 46: Content Type Code Descriptions

Content Type Code	Description	Comment
1	Response to Additional Documentation Request(ADR)	N/A
8	PMD PA	N/A
8.1	Non-Emergent Ambulance Transport	N/A
8.2	HBO Therapy	N/A
8.3	HHPCR	N/A
8.4	DMEPOS	N/A
9	First Level Appeal Requests	N/A
9.1	Second Level Appeal Requests	N/A
10	ADMC	N/A
11	RA Requests	N/A
12	Supporting Documentation for the unsolicited X12N 278 Request	N/A
13	Supporting Documentation for the X12N 278 Request	N/A

Note: Content Type codes 81 and 82 are retired in esMD Application. esMD System will no longer send content type code as 81 for Non-Emergent Ambulance Transport and 82 for HBO Therapy in RC Metadata XML File.

Table 47: Content Type Codes and Business Types provides the description of the Content Type Codes and the Business Type associated with each Content Type Code.

Table 47: Content Type Codes and Business Types

Content Type Code	Business Type
1	Response message for additional documentation request
8	Requesting PMD PA
8.1	Requesting Non-Emergent Ambulance Transport
8.2	Requesting HBO Therapy
8.3	Requesting HHPCR
8.4	Requesting DMEPOS PA
9	Requesting a First Level Appeal
9.1	Requesting a Second Level Appeal
10	ADMC
11	RA Requests
12	Unsolicited supporting documentation using XDR Profile
13	XDR X12

Appendix H: Record of Changes

Table 48: Record of Changes

Version Number	Date	Author/Owner	Description of Change
1.0	07/27/2016	Murugaraj Kandaswamy	Updated for Release AR2016.10.0
1.1	08/19/2016	Murugaraj Kandaswamy	Resolved CMS comments.

Appendix I: Acronyms

Table 49: Acronyms

Acronym	Literal Translation
ADMC	Advance Determination of Medicare Coverage
API	Application Programming Interface
CMS	Centers for Medicare & Medicaid Services
DPD	Detailed Product Description
DME	Durable Medical Equipment
DMEPOS	Durable Medical Equipment, Prosthetics, Orthotics and Supplies
EFT	Enterprise File Transfer
EIDM	Enterprise Identity Management
esMD	Electronic Submission of Medical Documentation
FFR	Flat File Rendering
FFS	Fee-For-Service
HBO	Hyperbaric Oxygen
HHPCR	Home Health Services Pre-Claim Review
HIH	Health Information Handler
ID	Identifier
LCD	Local Coverage Determination
LCMP	Licensed/Certified Medical Professional
MB	Megabytes
MCS	Multi-Carrier System
MFT	Managed File Transfer
MRADL	Mobility Related Activities of Daily Living
NPI	National Provider Identifier
OID	Object Identifier
PA	Prior Authorization
PDAC	Pricing, Data Analysis, and Coding
PDF	Portable Document Format
PMD	Power Mobility Device
PMD PA	Power Mobility Device Prior Authorization
QIC	Qualified Independent Contractor
RA	Recovery Auditor
RC	Review Contractor
RSA	Rivest, Shamir & Adleman
SFTP	Secure File Transfer Protocol
URL	Universal Resource Locator
UTN	Universal Tracking Number

Acronym	Literal Translation
XDR	Cross-Enterprise Document Reliable Interchange
XML	Extensible Markup Language

Appendix J: Glossary

Table 50: Glossary

Glossary	Description
Additional Documentation Request (ADR)	Official letters sent to Providers from CMS RCs requesting additional documentation that is needed to process claims.
Advanced 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.
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.
Electronic Submission of Medical Documentation (esMD)	A new mechanism for submitting medical documentation via a secure internet gateway connecting Providers to the Centers for Medicare & Medicaid Services (CMS). In its second phase, esMD will allow Medicare RCs to electronically submit claim related Additional Document Request (ADR) letters, and other use case requests, to Providers when their claims are selected for review.
Health Information Handler (HIH)	A Health Information Handler (HIH) is defined as an organization that oversees and governs the exchange of health-related claim reviewer information from Provider to CMS esMD Gateway according to nationally recognized standards.
Interface	A well-defined boundary where direct contact between two different environments, systems, etc., occurs, and where information is exchanged.
Power Mobility Device (PMD) Prior Authorization (PA)	The CMS implemented a Prior Authorization process for scooters and power wheelchairs for people with Fee-For-Service Medicare who reside in seven states with high populations of fraud- and error-prone Providers (CA, FL, IL, MI, NY, NC, and TX). This demonstration will help ensure that a beneficiary's medical condition warrants their medical equipment under existing coverage guidelines. Moreover, the program will assist in preserving a Medicare beneficiary's ability to receive quality products from accredited suppliers.
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.
TLS	Transport Layer Security (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.
Transaction	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.

Appendix K: Referenced Documents

Table 51: Referenced Documents

Document Name	Document Location and/or URL	Issuance Date
HIPAA-TO-HUPA-VIA-ESMD-spreadsheet	https://sharepoint.grsi.com/dats/Releases/AR2016.10.0%20(October%20Release)/Integrity%20OCR%20Attachments/HIPAA-TO-HUPA-VIA-ESMD-AR2016_10_0-05012016.xlsx	02/11/2016

Appendix L: Approvals

The undersigned acknowledge that they have reviewed the Review Contractor (RC) Client Microsoft .NET User Guide and Installation Handbook, Version 1.1 Final, and agree with the information presented within this document. Changes to this Guide will be coordinated with, and approved by, the undersigned, or their designated representatives.

Signature: _____ Date: 08/30/2016

Print Name: Maureen Hoppa

Title: Contracting Officer's Representative

Role: CMS Approving Authority
