**User Story Number:** USIN-62

**User Story Name:** Processing MAD & MUP Messages (FSC Development)

**Product Backlog ID: 62**

**Backlog Priority:** (High, Medium, Low) High Sizing 8

**Initial Sizing Estimate:**

**Rational ID:**

**Author:** eInsurance Team

# Background

When the Financial Services Center (FSC) sends an Electronic Insurance Verification (eIV) table update to VistA, FSC is not notified if VistA is unavailable or is unable to process the table update. The ePharmacy package sends acknowledgement messages to FSC when table updates are received. The eIV package should follow this same process to ensure communication with FSC.

If FSC sends an eIV ADD message that isn’t processed by the eIV package, a subsequent update message cannot be processed either.

Currently the FSC system does not resend eIV table updates to VistA unless requested by the eInsurance team. The eIV package does not acknowledge FSC table messages at all.

This lack of communication between the eIV package and FSC has caused a long standing issue. We want to implement standard HL7 acknowledgements.

# Story

As the eIV VistA package, I want to acknowledge eIV table updates from FSC so FSC can resend updates as needed to keep eIV tables in synch with FSC’s master data source.

# Conversation

ePharmacy is sending HL7 acknowledgements (ACK), both Application ACK and Commit ACK. The acknowledgements serve different purposes. The Commit ACK indicates that VistA received the HL7 message. The Application ACK confirms ePharmacy processing with a response to indicate success (ACK) or failure (NAK) in processing. For ePharmacy, table updates are put into a sequential queue. When the sending system gets a successful Application ACK, the next message in queue is sent from FSC. Multiple error codes and corrective actions were implemented for ePharmacy. ePharmacy also has a maximum number of retries. If the maximum number of retries is hit for an ePharmacy update, then FSC skips the message.

Technical note: please see what max is set to for ePharmacy and mimic.

eIV wants to implement the same flow that ePharmacy has implemented. There are no sequential dependencies in eIV. Since there is no dependency, multiple error codes and corrective actions may not be necessary.

The eInsurance team is comfortable with skipping message if application ACK is not received in 3 days. The number of attempts will be a parameter for FSC.

Technical Note: For the eBilling patch 517, they do application acks.

Technical Note: Developer: look at ibcnehlt (from Darlene), Make sure that we only send ACK for Successful transactions

Initially, error codes will not be necessary. Error codes will only be included for this user story if determined necessary during tech analysis. If error codes are necessary, this user story will be revised.

FSC will not take any action based on commit ACK but will monitor for application ACK. FSC will keep the message in queue until the application ACK is received or until the maximum days and attempts are hit, as defined by parameters.

There is specific discussion about the Payer Table in this user story because the Payer Table is most often impacted. This user story applies to all VistA tables maintained by FSC. The following email contains information on the tables that are affected.

Discussion: Payer Table

As part of the current process, a user must ask FSC to resend files when VistA is out of synch with FSC. There isn’t a good way to know the eIV tables are out of synch. Only FSC knows if table updates are not accepted by a VistA site.

Implement the following changes:

1. VistA will send an HL7 acknowledgement to FSC to indicate the message has been received in VistA (Commit ACK).
2. The eIV package will send acknowledgement when the message is processed successfully (Application ACK). A NAK will be sent if the message is not processed successfully.

If the acknowledgment indicates failure (NAK)

* + FSC should resend the message, stopping after a maximum number of retries.
  + The maximum number of tries will be stored in a parameter by FSC.
  + After the maximum number of retries, FSC removes the message from queue and sends an email notification to the eInsurance team using an Outlook mail group: VHAEINSURANCERR@VA.GOV.

1. If FSC does not receive a response from eIV within a specified number of days, FSC will treat lack of response as NAK. The number of days will be stored in a parameter by FSC.

During patch installation, increment the Interface version number; coordinate with FSC to implement.

# Detailed Listing of Acceptance Criteria

|  |  |  |
| --- | --- | --- |
| Requirement ID | Description | External Dependency  (Y/N)  If Y, provide organization and description |
| USIN-1.01 | FSC sends table update to VistA. |  |
| USIN-1.02 | VistA generates a commit ACK and sends to FSC. |  |
| USIN-1.03 | VistA processes the transaction table update and generates an Application ACK and sends to FSC |  |
| USIN-1.04 | FSC sends a table update to VistA and VistA is not available to respond. No commit ACK is sent to FSC. Verify that FSC will treat lack of response as a NAK within specified number of days. |  |
| USIN-1.05 | FSC Sends table update to VistA and VistA generates Commit ACK, but sends an application NAK. FSC will try several times according to the system parameter, then move to next record in queue. After max number of retries, failed record is terminated and notification is sent to eInsurance team via Outlook email. |  |
| USIN-1.06 | FSC Sends table update to VistA and VistA generates Commit ACK, but VistA cannot successfully process the record change and sends NAK to FSC. FSC proceeds with processing next transaction in queue. |  |

# Tester Notes:

* This change can only be tested between FSC and VistA (standard end user tester cannot do it).
* During IOC, this change can only be tested in a production account. FSC does not communicate with MIRROR accounts.
* This change can be tested in test lab environment such as Bay Pines (CIT, SQA, UAT).
* To see the results of a MAD or MUP message in a VistA table, assistance is needed from a VistA developer.

# Constraints

* FSC and VistA development is required.
* This user story should go into the same build as user story USIN-359: Treat MUP messages as MAD messages.

# Risks

* If we don’t do this work, certain sites will have multiple tables with different values that can cause transaction issues.

# Assumptions

* This change also requires a code change at FSC.
* This user story applies to all FSC updates pertaining to eIV.
* Clearinghouses and payers are not involved in this process.
* Table entry missing from VistA is only occurring when VistA does not receive the message from FSC.
* Table update is not successfully processed in VistA only occurs when VistA does not receive the message from FSC.
* After initial testing, this capability of continuously resending a message that was not acknowledged will only occur for FSC’s Eligibility Communicatory (EC) production account.
* This user story is related to user story USIN-359: Treat MUP messages as MAD messages.

# Approval Signatures

|  |
| --- |
|  |

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Version |  | Description | Author |
| 09/22/2016 | V0.1 |  | Original | PII |
| 09/22/2016 | V0.2 |  | Developer elaboration | PII |
| 09/27/2016 | V0.3 |  | eInsurance finalization | PII |
| 10/25/2016 | V0.4 |  | Edits from meeting review | PII |
| 11/4/2016 | V0.5 |  | Incorporate changes from USD&P review | PII |