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Version Number	Date	Description
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Purpose of Interface Control

This Interface Control Document (ICD) documents and tracks the necessary information required to effectively define PREE's interfaces, including communication rules, to provide the development team guidance on the architecture of the interfaces to be developed. The purpose of this ICD is to clearly communicate all possible inputs and outputs for all potential actions whether they are internal to the system, transiting to the vendor partner or transparent to system users.

This ICD is created during the Planning and Design Phases of the project. Its intended audience is the project manager, project team, development team, Information security and stakeholders interested in interfacing with the system. This ICD helps ensure compatibility between system segments and components.

Introduction

This ICD describes the relationship between Puerto Rico Enrollment and Eligibility (PREE the source system) and Puerto Rico Medicaid Management Information System (PRMMIS).

The Medicaid Management Information System (PRMMIS) is an integrated group of procedures and computer processing operations (subsystems) developed at the general design level to meet principal objectives. For Title XIX purposes, "systems mechanization" and "mechanized claims processing and information retrieval systems" is identified in section 1903(a)(3) of the Act and defined in regulation at 42 CFR 433.111. The objectives of this system and its enhancements include the Title XIX program control and administrative costs; service to recipients, providers, and inquiries; operations of claims control and computer capabilities; and management reporting for planning and control.

This interface is used to provide daily and monthly updated information to PRMMIS for member management and eligibility. The data in this feed includes demographic, eligibility, and Third-Party Liability (TPL).

This ICD covers the scope and requirements for Release 1 in section 0

Requirements Matrix and details its use by the PREE system, post eligibility updates, to member case information. Included in this description are the interface requirements that must be met by participating systems, a definition of the message structure and protocols that govern the exchange of data, and identification of the communication paths along which the project team expects data to flow. Any processing that occurs after the creation of the evidences identified in this ICD (i.e. rules being applied) will not be addressed in this document.

For each interface, the ICD provides the following information:

A description of the data exchange format and protocol for exchange.

A general description of the interface.

Assumptions and Constraints where appropriate.

Estimated size and frequency of data exchange.

Post processing steps that are completed by PREE.

Scope

The Scope of this ICD document and the interfaces that it covers are outlined in the table below. This scope table only represents this ICD and does not represent the scope of the PREE project and its interfaces.

Table 1: PRMMIS ICD Interface Scope

In Scope	Out of Scope
Daily Outbound Eligibility File.	Any processing on PRMMIS side.
Monthly Reconciliation Outbound Eligibility File.	Any interface from PRMMIS to another downstream system that is not PREE.
Error Inbound Response File.	Any interface to and from PRMMIS that have not been identified in this document.
Processing the Error Inbound Response File, notifying associated parties and incorporating changes for the next Daily Outbound file.	Any processing of the PRMMIS monthly discrepancy report that is generated by PRMMIS when processing the monthly reconciliation file. ***

*** This has been deemed as out of scope since the discrepancy report will not be a direct interface to PREE. This report will be uploaded to a report depository and PRMP will download it and continue the process manually.

Team Members

Table 2: Team Members

Attendees	Organization
John Gough	IV&V
Kelvin Jarrett	IV&V
Christina Lopez	IV&V
Steve Clarke	PMO
Eric Kanigan	PMO
Eric Henrichsen	PMO
James Kenfield	PMO
<CR177> <CR214> Jean Beaty	PMO
Luis F. González	PRMP
Yazlin Trinidad Martin	PRMP
María del Cotto Bloise	PRMP
Evelyn Santos	PRMP
Armando Vargas-Sosa	PRMP

Alan Erenfryd	SI
Sudo Sakar	SI
Brandon Pecylak	SI
Sachin Shah	SI
Blair Richardson	SI
Tanvi Gupta	SI
<CR177> <CR214> Ryon Johnson	SI
<CR177> <CR214> Stephanie Nieves	SI
Paranika Natarajan	Gainwell
Laura Anderson	Gainwell
Sandra Simandle	Gainwell
Christine Sullivan	Gainwell

Glossary of Terms

In Table 3: Acronym Definitions a list of Acronyms is presented with their corresponding descriptions.

Table 3: Acronym Definitions

Acronym	Definition
ACK	Acknowledge
AST	Atlantic Standard Time
CFR	Code of Federal Regulations
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare & Medicaid Services
CSV	Comma Separated Value
CWLTH	Commonwealth
FTP	File Transfer Protocol
ICD	Interface Control Document
IDD	Interface Design Document
IL	Integration Layer. For additional information refer to the IDD.
JAD	Joint Application Design
JDBC	Java Database Connectivity
MPI	Medicare Provider Inventory
NACK	Not Acknowledge
OOS	Out of Scope
PR	Puerto Rico
PREE	Puerto Rico Eligibility and Entitlements
PRMMIS	Puerto Rico Medicaid Management Information System
SFTP	Secured File Transfer Protocol

SSH	Secure Shell
SSN	Social Security Number
TCP/IP	Transmission Control Protocol / Internet Protocol
TPL	Third Party Liability
TXIX	Title Nineteen

In the document "[PREE Glossary](#)" a glossary is available for common terminology used to describe system components in PREE.

Overview

The PRMMIS data exchange process contains 2 separate outbound interfaces and 1 inbound interface that is received as a result of processing the 2 outbound interfaces.

The member population included in the Daily and Monthly Reconciliation files for their corresponding interfaces are made up of active PR Medicaid program (regular Medicaid, CHIP and Commonwealth Only) members.

Daily Outbound Interface

The purpose of the Daily Outbound Interface is to provide PRMMIS with the information about addition of new members and associated eligibility, updates to existing member demographics, updates to existing member eligibility, new eligibility for existing members, cancellation of eligibility, or extension of eligibility. This interface also provides updates regarding TPL changes, which may include new or cancelled Medicare or other Insurance data.

Monthly Reconciliation Interface

The purpose of the Monthly Reconciliation Outbound Interface is to send the Monthly Reconciliation file to PRMMIS which contains members who are eligible on the 1st calendar day of the month. PRMMIS will use the reconciliation file to compare to the active eligible members in the PRMMIS database. Any difference between the file and PRMMIS data will be documented on the Reconciliation Discrepancies Report. Additionally, differences will be written to a file that will be used to update PRMMIS.

Daily Error Inbound Interface

This file will be transmitted from PRMMIS to PREE and will contain all errors identified from all files processed by PRMMIS during the last daily update cycle.

The error report will contain errors associated to the daily outbound as well as the Monthly Reconciliation file.

Once PREE receives the error report, it will analyze and correct the source data. The updated data will be re sent using the daily interface process.

Assumptions/Constraints/Risks

Assumptions

The following assumptions applies to the PRMMIS Service:

The basis for the Daily Outbound interface is the ICD_PRMMIS_ELG_0003_MEDITI_Daily_Interface_v1.1 provided by DXC.

The basis for the Monthly Reconciliation Interface is the ICD_PRMMIS_ELG_0005_MEDITI_Monthly_Recon_Interface_v1.1 provided by DXC.

The basis for the Daily Error interface is the ICD_PRMMIS_ELG_0006_MEDITI_Error_File_Interface_v1.0 provided by DXC.

The electronic data verification plan for PREE will include this interface and will be approved by CMS for operationalization.

PREE will be able to validate using a certificate to establish and electronic connect to the PRMMIS SFTP.

PREE will receive ACK/NACK from PRMMIS when the file transfer is completed.

By the time of implementation, the specifications detailed by DXC, which are covered in this ICD, will remain the same.

The eligibility determination provided by PREE will be correct and will match what PRMMIS should receive.

A Daily Outbound file is sent every business day (Monday to Friday) regardless if there is a Holiday scheduled during those days.

A Daily Error Inbound file is sent every business day (Monday to Friday) regardless if there is a Holiday scheduled during those days.

Communication for any type of file transfer support will be sent via email.

PREE will be able to send required information for the TPL record such as Policy Number, Policy Begin Date, Policy Expiration Date and Covered Service Code associated to converted cases at time of go live.

Constraints

The following constraints apply to the PRMMIS data exchange:

The Daily and Monthly data exchange cannot handle special characters.

As agreed with the Security Team, Production data shall be used in the production environment while performing testing with PRMMIS.

The Interface call to PRMMIS will be made using the approved architecture as detailed in the deliverable i.2.2 System Architecture plan.

PREE must meet the guidelines by PRMMIS for values of certain fields sent to them.

Risks

EE-RI00175: PRMMIS has not finalized the analysis and impact of their interface with PREE. Therefore, field values and processing has not been defined yet which will impact PREE processing.

EE-RI00179: The longer Truenorth is unable to provide estimates for adding fields to MEDITI2, there will be a greater delay to RedMane's design and development plans which poses a risk to RM's schedule. This impacts the TPL record information that needs to be sent to PRMMIS.

General Interface Requirements

This section describes the functional process for the transfer of the Daily Eligibility and Monthly Reconciliation files to PRMMIS and receipt of the respective Error Response file. The section will also provide an overview of how the PREE system interacts with other components of the transactions and cover the security and integrity requirements needed for the calls to be considered successful and achievable.

Interface Overview

On a daily basis, PREE will initiate the PRMMIS process which include a daily outbound update as well as an inbound daily error file in response to the daily update. The reconciliation file is sent monthly.

On the first business day of every month the Monthly Reconciliation file will also be sent in addition to the Daily Outbound file. The PRMMIS system will process both these files and then return a single error response file containing errors for both input files.

This document will cover this process as three separate interfaces:

Daily Eligibility file transfer from PREE to PRMMIS

Monthly Reconciliation file transfer from PREE to PRMMIS

Daily Error Response file transfer from PRMMIS to PREE

The below sections provide an interface overview of each of these interfaces mentioned above.

Daily Outbound Interface

At the end of each business day (Monday-Friday), the Daily Outbound file is sent over to PRMMIS. This file contains details about changes in demographics, eligibility and TPL data that have occurred on that day. Any change of circumstance, which might include a new eligibility determination as well as an end in coverage, that causes a change in data is pushed to PREE's Interface Trigger Table. A Daily Outbound file is created and sent to PRMMIS by the Integration Layer using this table.

A high-level depiction of the interaction among PREE-Integration Layer-PRMMIS systems can be found in section 0 Daily Outbound Transactions.

Monthly Reconciliation Outbound Interface

On the first business day of the month, PREE sends a Monthly Reconciliation File to PRMMIS. This file contains records and information using the Daily Outbound file layout, but unlike the Daily Outbound file, it contains all individuals that are eligible

as of the first calendar day of the month and not just the ones whose information has changed on that day.

A high-level depiction of the interaction among PREE-Integration Layer-PRMMIS systems can be found in section 5.4.2 Daily Outbound Transactions.

Daily Error Inbound Interface

From Monday to Friday, PRMMIS will send an Error file back to PREE. The file contains all errors identified from all files processed by PRMMIS during the last daily update cycle.

A high-level depiction of the interaction between PREE, Integration Layer and PRMMIS can be found in section 5.4.3 Daily Error Transactions.

Functional Allocation

Daily Outbound Functional Allocation

The PRMMIS Daily Outbound interface is triggered by an automated batch job that is scheduled to run on each business day. This will trigger the following operations to move information:

PREE populates the PRMMIS Daily Outbound staging tables within PREE based on the information on the Interface Trigger Table. This process is described in more depth in section 0 **Daily Outbound Trigger Points**.

PREE sends a trigger to the Integration Layer.

The Integration layer pulls out the Daily Outbound information from the staging tables.

The Integration Layer creates the Daily Outbound file as per the applicable technical transformations.

The Integration layer sends the Daily Outbound file to PRMMIS.

Monthly Reconciliation Functional Allocation

The PRMMIS Monthly Reconciliation interface is triggered by an automated batch job that is scheduled to run on the first business day of each month. This will trigger the following operations to move information:

PREE populates the PRMMIS Monthly Reconciliation staging tables within PREE.

PREE sends a trigger to the Integration Layer.

The Integration layer pulls the Monthly Reconciliation information from the staging tables.

The Integration Layer creates the Monthly Reconciliation file as per the applicable technical transformations.

The Integration layer sends the Monthly Reconciliation file to PRMMIS.

Daily Error File Interface Functional Allocation

The PRMMIS Daily Error File Interface is triggered by the completion of the Daily Outbound processing by the integration layer. This will trigger the following operations to move information:

PRMMIS creates the Daily Error file and uploads it to the defined SFTP.

The Integration Layer pulls the file, performs technical transformations on the data received and transforms the data to PREE format.

Once the data is transformed, the Integration Layer pushes it to the Response staging tables.

Based on the entries on the staging table PREE will create Tasks and add them to the corresponding queue so that Caseworkers can verify the information.

Data Transfer

For each interface additional information on the exact communication that occurs between interface components, and the movement of data among them can be found in the following sections:

Daily Outbound – see section 0 Daily Outbound Transactions.

Monthly Reconciliation – see section 0 Monthly Reconciliation Transactions.

Daily Error Inbound – see section 0 Daily Error Transactions.

Transactions

The transactions are split per interface, detailed information about each interface is described in the following sections.

Daily Outbound Transactions

The transaction between PREE and PRMMIS to transfer the daily eligibility file is described below:

Leg 1 - PREE-to-Integration Layer

The Integration Layer will connect to PREE using a secure Java Database Connectivity (JDBC) connection.

The Integration Layer pulls the data required to create the Daily Eligibility file directly off the PRMMIS staging tables in PREE and creates the flat file as per PRMMIS specifications. For more details on PRMMIS specifications, please refer to section 0 Daily Outbound File Generation.

Leg 2 – Integration Layer-to-PRMMIS system transfer

The Integration Layer will authenticate against the PRMMIS SFTP server using an electronic certificate and place the Daily Outbound file into the SFTP location. For more details on the transfer mechanism, please refer to section 0 Daily Outbound file transfer to PRMMIS.

PRMMIS system pulls the file from the location and performs further processing. Any processing done at PRMMIS's end, is out of scope of this document.

PRMMIS sends an ACK message back to PREE depending on the upload success of the file.

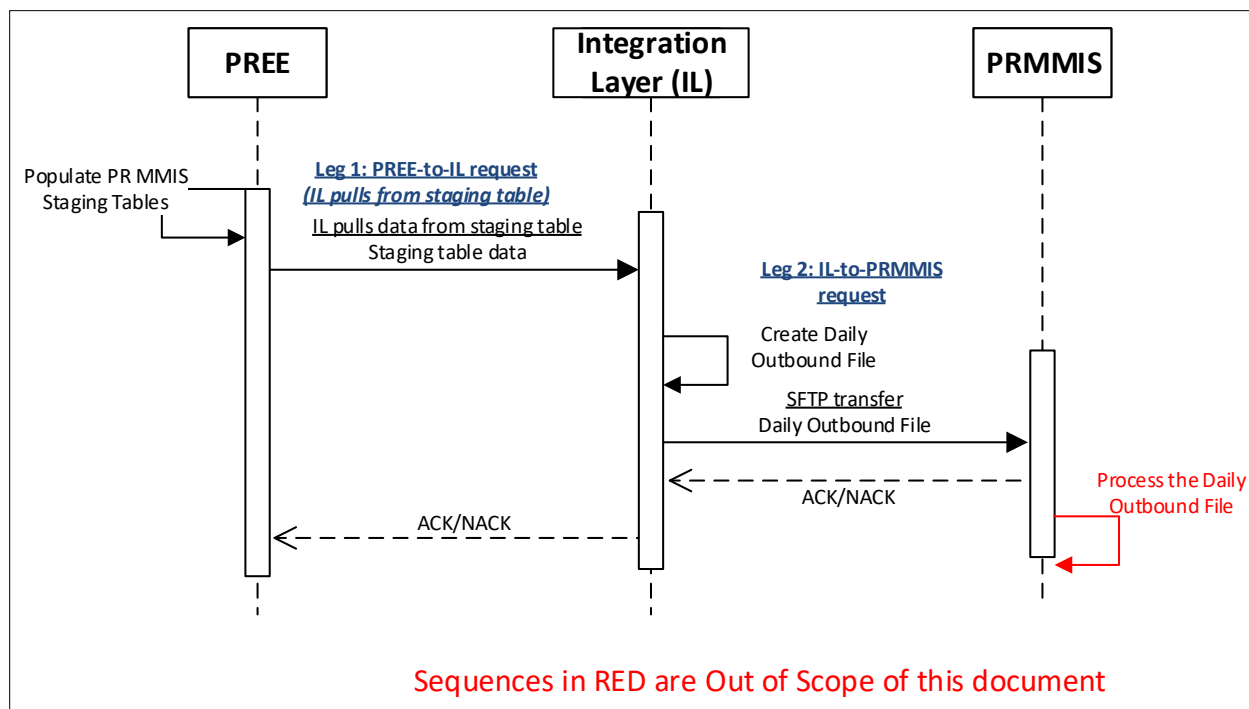


Figure 1 - PREE-IL-PRMMIS Daily Outbound Sequence

Figure 1 - PREE-IL-PRMMIS Daily Outbound Sequence shows at a high level the full end to end interactions that occur to send data from PREE to PRMMIS. Starting from the Integration Layer's initial data pull from PREE, to the sending of the Daily Outbound file to PRMMIS.

To determine if a file has been successfully uploaded PRMMIS will send as part of the SFTP User configuration and ACK. There is no NACK received when the file fails the upload process. The processing for this outcome is defined in section 0 **Flow Control**.

Once received by PRMMIS the file is processed and their database is updated accordingly. Though any process that is done on PRMMIS side is (OOS)out of scope of this document.

Monthly Reconciliation Transactions

The transaction between PREE and PRMMIS to transfer the Monthly Reconciliation file is described below:

Leg 1 - PREE-to-Integration Layer

The Integration Layer will connect to PREE using a secure Java Database Connectivity (JDBC) connection.

The Integration Layer pulls the data required to create the Monthly Reconciliation file directly off the PRMMIS staging tables in PREE and creates the flat file as per PRMMIS specifications. For more details on PRMMIS specifications, please refer to section 0 Monthly Reconciliation File Generation.

Leg 2 - Integration Layer-to-PRMMIS system transfer

The Integration Layer will authenticate against the PRMMIS SFTP server using an electronic certificate and place the Monthly Reconciliation file into the SFTP location. For more details on the transfer mechanism, please refer to section 0 Monthly Reconciliation file transfer to PRMMIS.

PRMMIS system pulls the file from the location and performs further processing. Any processing done at PRMMIS's end, is out of scope of this document.

PRMMIS sends and ACK message back to PREE depending on the upload success of the file.

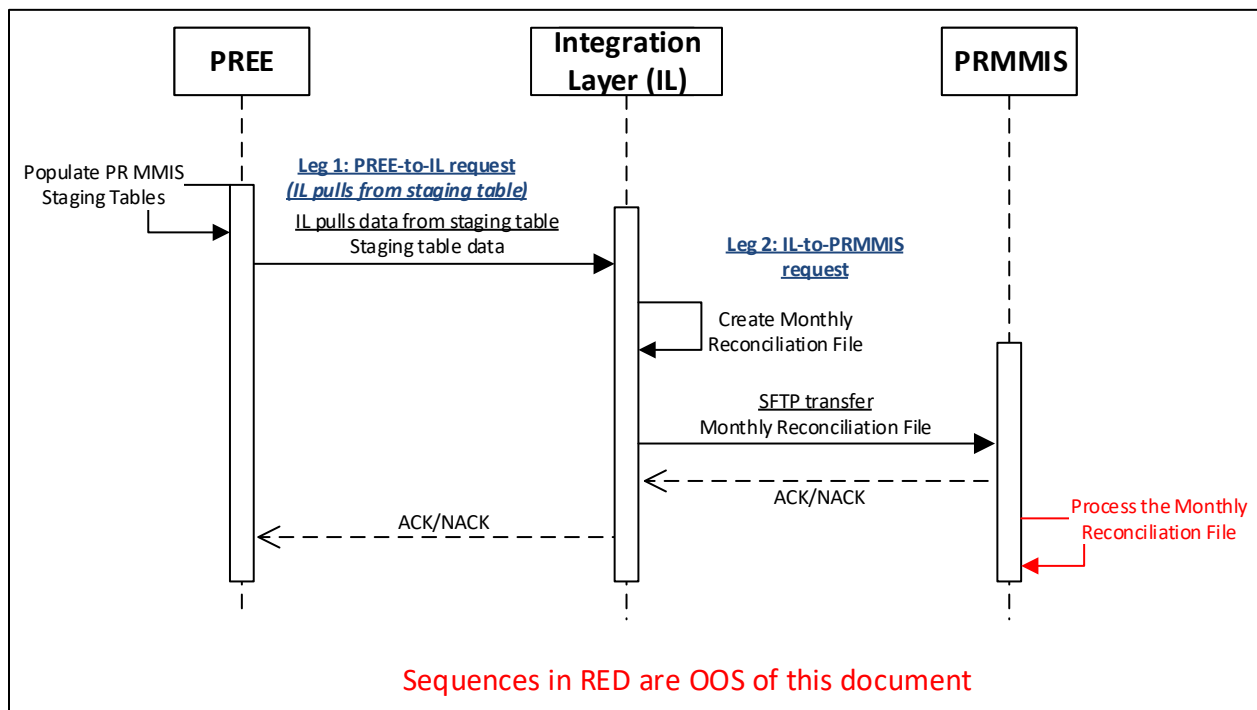


Figure 2 - PREE-IL-PRMMIS Monthly Reconciliation File Sequence

Figure 2 - PREE-IL-PRMMIS Monthly Reconciliation File Sequence shows at a high level the full end to end interactions that occur to send data from PREE to PRMMIS. Starting from the Integration Layer's initial data pull from PREE, to the sending of the Monthly Reconciliation file to PRMMIS.

To determine if a file has been successfully uploaded PRMMIS will send as part of the SFTP User configuration and ACK. There is no NACK received when the file fails the upload process. The processing for this outcome is defined in section 0 **Flow Control**.

Once received by PRMMIS the file is processed and their database is updated accordingly. Though any process that is done on PRMMIS side is out of scope of this document.

Daily Error Transactions

The transaction between PRMMIS and PREE to transfer the Daily Error file is described below:

Leg 1 - PRMMIS-to-Integration Layer

PRMMIS creates and places the Error file at the pre-determined SFTP location.

The Integration Layer will authenticate against the PRMMIS SFTP server using an electronic certificate and poll the folder location. When it identifies that the Daily Error Response file is available it will collect the file.

Leg 2 - Integration Layer-to-PREE transfer

The Integration Layer transforms the data received in file as per PREE requirements. For more details on the transformation, please refer to Section 6.3.6 Daily Error Response Technical Transformations.

The Integration Layer will connect to PREE using a secure JDBC connection. The Integration Layer will then populate the Daily Error response data directly into the PRMMIS Error staging table in PREE.

PREE will identify each error with individuals in PREE and take necessary action. Details of these actions can be found in section 0 Daily Error Detailed Processing Scenarios.

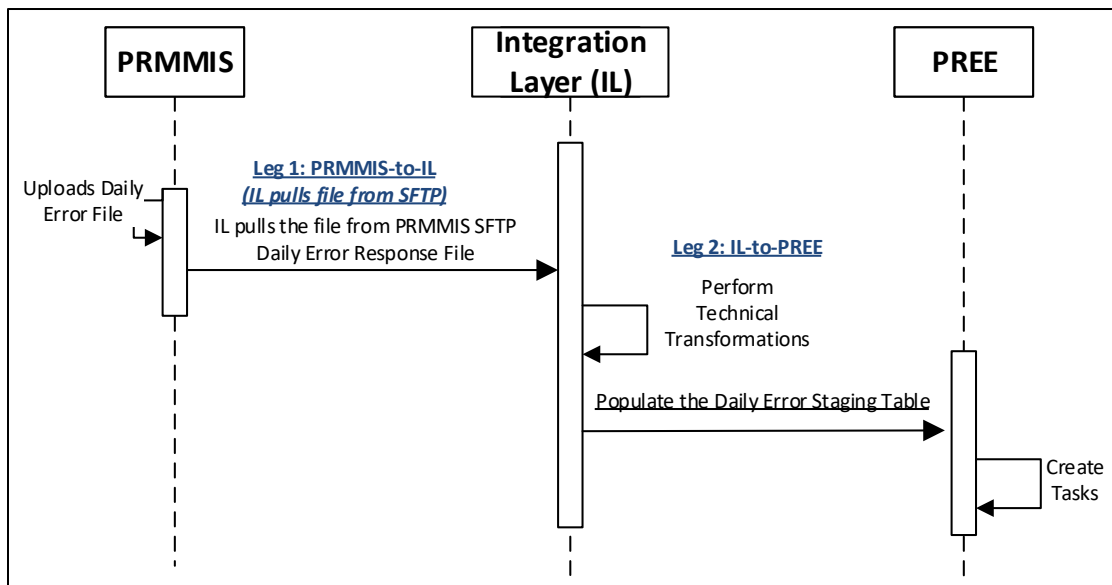


Figure 3 - Daily Error Inbound File

Figure 3 - Daily Error Inbound File shows at a high level the full end to end interactions from PRMMIS uploading the daily error response to their SFTP to PREE creating the corresponding tasks as a response to the errors detected.

Security and Integrity

The Daily and the Monthly Reconciliation files are transmitted using the same file transfer methods and SFTP. Therefore, the below section will only explicitly outline the security for the Daily file transfer process as the same detail will apply to the Monthly file transfer.

The Daily file is transmitted using the PRMMIS File Transfer process over a secure connection. Below are further details on the security measures taken in each connection:

Leg 1 – The integration layer will reach out to the PREE DB, authenticate using a certificate that will be provided by the PR govt, and then establish a JDBC connection.

Leg 2 - Once the integration layer has created the request file it will authenticate using an electronic certificate to create a secure connection with PRMMIS SFTP server and drop the file in the share file location for PRMMIS to collect.

The Daily Error response file transfer is processed over a secure connection, which details are described below:

Leg 1 – The Integration layer will authenticate against the PRMMIS SFTP using an electronic certificate and poll the location to see if the Daily Error Response file has been returned. When it detects the file in this location it will retrieve it.

Leg 2 – The integration layer will reach out to the PREE database, authenticate using a certificate that will be provided by the PR govt, and then establish a JDBC connection.

In addition to the security measures specified for each of the data transfers outlined above, the interfaces will rely on security from PREEs configuration of networks and firewalls to protect data at rest and in transit. For additional information on these configurations see the i.2.2 System Architecture plan.

Audit and logging

The audit and logging plan that will cover the requirements and process involving the interface is referenced in the Audit and Quality Plan Deliverable.

Detailed Interface Requirements

This section of the ICD describes the interaction between PREE and PRMMIS for all the three interfaces – Daily Outbound, Monthly Reconciliation, and Daily Error Inbound which are involved in the process of exchanging data with PRMMIS.

The requirements for the three interfaces are split as follows in the below sections:

Daily Outbound Data Exchange (section 0 Daily Outbound Daily Outbound)

Monthly Reconciliation Data Exchange (section 0 Monthly Reconciliation Daily Outbound)

Daily Error Data Exchange (section 0 Inbound Daily Error Daily Outbound)

Daily Outbound File

The sections below describe the end to end processing and interactions that occur for PREE to generate a Daily Outbound file and send it to PRMMIS. This transfer occurs daily and provides PRMMIS with details on the following:

Demographics

Eligibility

Third Party Liability

The file contains information for new members on the Medicaid program or existing members whose information may have changed. This includes demographic, eligibility and Medicare and other insurance information.

This service will follow the pre-conditions established as well as the proposed processing steps. If all these steps are successful, PRMMIS will have received data for new applicants as well as updated data for existing applicants as of each day of eligibility in the PREE system.

Requirements for the Daily Outbound Interface

The PRMMIS Daily Outbound file contains demographics, eligibility and Third-Party Liability information and the purpose of sending it to PRMMIS is to add new members and update information for existing members. It will be generated and sent from Monday to Friday. Full details on this end to end process are outlined in the sections below, including:

- Assumptions that have been applied.
- Constraints that have been identified.
- Requirements for generating and sending the request file (*see Table 4: Daily Outbound Interface General Processing Steps*).

Daily Outbound Assumptions

The following assumptions are to be considered for the transfer of Daily Outbound file to PRMMIS:

Values in data fields sent to PRMMIS on the Daily Update File will be passed on after transformation and/or mapping according to the defined mapping tables.

The daily outbound file will contain only changes that were recorded since the last daily file was sent.

TPL changes may include new or cancelled Medicare or Other Insurance data.

All text fields will have right trim spaces.

<PRMO-1525> PREE will send **a new all groups code as they are determined** on the Daily Outbound file and in PRMMIS database this will result in ending the prior group code a day prior to the effective date of the new group code.

When the member is eligible for dual plans, this information will be sent in the TPL record type.

Zero or no end date will be interpreted as open end dated. PRMMIS will assign all '9's on the "Eligibility End Date".

PREE will continue with the current format for the MPI number.

PRMMIS will process the Daily Outbound files in chronological order.

Daily Outbound Constraints

The following constraints apply to the interactions between the PREE system and PRMMIS interface:

PRMMIS processes the file according to Interface Service Availability as mentioned in 0 **Daily Outbound Interface Processing Time Requirements / Service Availability**.

The end date of an eligibility is a subscribed field. Therefore, when there is a change in an eligibility period this should be reflected using the "EXTENSION CANCEL DATE" field.

PRMMIS does not process records where an "Effective Date" on the Eligibility record is missing.

Members can only have one coverage code at a given time (correspondingly one Medicaid plan out of TXIX/CHIP/CWLTH).

The SSN field in the Daily Reconciliation file is mandatory and must be populated with a 9-digit numeric value.

PRMMIS doesn't accept more than one MPI number for an individual.

<PRMO-1543> PRMMIS does not accept Members with an MPI with less than 11 digits.

<PRMO-1042> PRMMIS rejects records with blank county codes derived from members without an address in Puerto Rico.

<PRMO-2231> The demographic record will not be sent until the Date of Death is verified per PRMO-1489.

Daily Outbound files shall be sent in chronological order.

Daily Outbound Trigger Points

PREE will send the applicants Demographic, Eligibility and TPL information to PRMMIS using a flat file that will be generated based on specific scenarios. These scenarios will trigger PREE to include the application information on the next daily outbound file.

On the following sections the scenarios and the trigger processing are defined in more detail.

Daily PRMMIS Outbound Transactions

Figure 4 - PRMMIS Outbound Transactions identifies and detail the scenarios that will result in the applicants corresponding record to be included as part of the PRMMIS Daily Outbound File.

The scenarios described are grouped in categories where an example of each scenario is detailed to serve as guidance on how to proceed in similar circumstances.



PRMMIS Outbound
Transactions v1.0.xls

Figure 4 - PRMMIS Outbound Transactions

Daily Outbound Trigger Processing

The transactions defined in 0 Daily PRMMIS Outbound Transactions will trigger the corresponding information from the Demographic, Eligibility and/or TPL record to be sent to PRMMIS.

The below process as described in *Figure 5 - PRMMIS Daily Outbound Triggers*, depicts the systematic steps taken by PREE to produce the outbound file that will be sent to PRMMIS.

Once an update to the case has been recorded in PREE that impacts the fields marked as triggers in *Figure 6 - <PRMO-3067><PRMO-1265><PRMO-1524><PRMO-2057><PRMO-1522><PRMO-1489> <CR-177> <CR-214> Daily Outbound File* for the

demographic, eligibility and/or TPL record a new entry will be added in the Interface trigger table.

The Interface trigger table contains all cases that had changes during the day and whose new updated information should be sent to PRMMIS, categorized by Record.

For example, if an application had changes to fields that impacts the Demographic and Eligibility record two entries will be added to this table.

This process will be triggered through a batch file process which means PREE will not immediately send the updated information to PRMMIS; it will be sent once daily via the PRMMIS interface.

The automated Daily Batch job will use the entries in the Interface Trigger Table to populate the staging tables for the demographic, eligibility and/or TPL records according to the record type category that has been used in the entry.

Once this batch job has run successfully it will trigger the IL to transform the data in the staging tables to the pre-defined PRMMIS flat file. This process will also include the header and trailer records in the file.

As the last step, the IL will have a Daily Outbound File following the layout defined as mentioned in section 0 Daily Outbound File Layout available to be sent to PRMMIS.

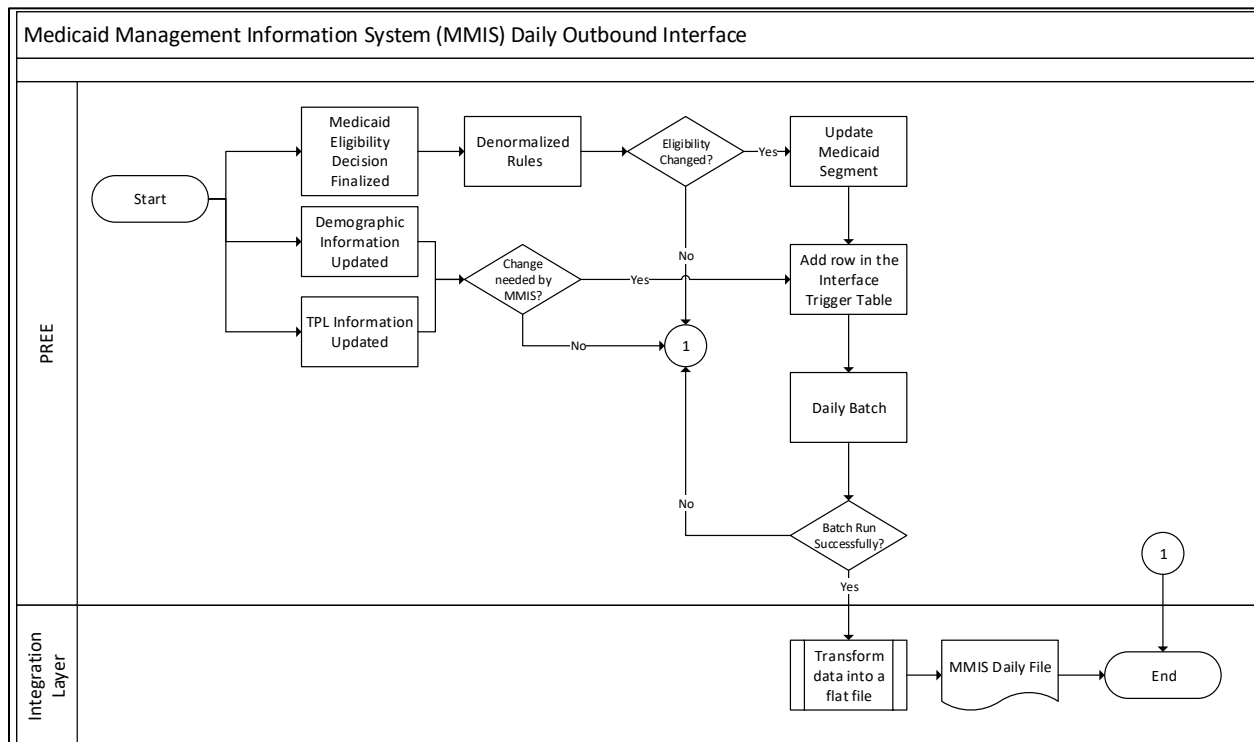


Figure 5 - PRMMIS Daily Outbound Triggers

Daily Outbound Alternate Trigger Point

If the automated scheduled batch job fails to run as expected or loads erroneous data into the Daily Outbound file, then the batch can be manually executed by technical support staff.

General Processing Steps for Daily Outbound (End to End)

The end to end processing steps for the transfer of Daily Outbound file to PRMMIS is displayed in Table 1 below:

Table 4: Daily Outbound Interface General Processing Steps outlines the detailed end to end processing steps for the interface including PREE and other downstream systems. This process will be the same for each day.

Table 4: Daily Outbound Interface General Processing Steps

Processing Step	Description	Responsible
1	At the end of each weekday (Monday to Friday), the PRMMISDailyOutboundBatch automated batch will be triggered to populate the Staging tables: PRStagingOutMMISDemographics PRStagingOutMMISTPL PRStagingOutMMISEligibility according to the triggers defined in section 0 Daily Outbound Trigger Points. For additional information about the batching process refer to the Interface Design Document (IDD).	PREE
2	Send trigger to Integration layer to begin pulling data from the staging tables for each record staging table in PREE.	PREE
3	Pull the raw Daily Outbound file data from the staging tables for each record in PREE. The batch will only select the entries associated with the most recent run of the batch on the tables. For additional details regarding the staging tables refer to the IDD.	Integration Layer
4	Transform the raw Daily Outbound data from PREE into the format required by PRMMIS. For more details, please refer to section 0 Daily Outbound Technical Transformations.	Integration Layer
5	Create the Daily Outbound file with the appropriate naming convention. For additional detail on the creation of this file see section 0 Create Daily Outbound File.	Integration layer

6	Store a copy of the Daily Outbound file. For more details regarding the storage of files for troubleshooting refer to the IDD.	Integration layer
7	Place the files in the PRMMIS SFTP file location. For additional details regarding the transfer of the Daily Outbound file, refer to section 0 Daily Outbound file transfer to PRMMIS.	Integration Layer
8	Sends an ACK/NACK message as feedback for the uploading process.	PRMMIS
9	Receives the Daily Outbound file and updates the PRMMIS database. The internal processing that occurs is out of scope for this document.	PRMMIS
10	Sends error report back to PREE. For details on the error report, please refer to section 0 Inbound Daily Error .	PRMMIS

Additional follow on processing steps are outlined in Table 8 - Daily Error Interface General Processing Steps.

Daily Outbound Request Pre-Conditions

Prior to the generation of the Daily Outbound file the following pre-conditions must be met:

The data being added into the Daily Outbound file is transformed to meet the standards outlined by PRMMIS. These transformations cover special characters as well as mapping to PRMMIS accepted values. For more information refer to section 0 Daily Outbound File Generation.

Daily Outbound File Generation

The sections below outline specific details for generating the Daily Outbound file, as referenced in the general processing steps.

Daily Outbound Technical Transformations

Details of the transformations that are required for the data in PREE to conform to the PRMMIS request format can be found in *Figure 6 - <PRMO-3067><PRMO-1265><PRMO-1524><PRMO-2057><PRMO-1522><PRMO-1489> <CR-177> <CR-214> Daily Outbound File* under the column "Transformation Details".

Special Character Processing

For PRMMIS to accept and process the Daily Outbound file, all characters must be either alphabetic or numeric characters. PREE will complete the following special character processing on all fields:

Spanish letters such as (ñ, ü, á, é, í, ó, ú) will be translated to English alphabet as follows:

ñ = n,

ü = u,

á = a,

é = e,

í = i,

ó = o,

ú = u

For the following fields all other special characters will be removed and replaced with a space " ".

Table 5 - PRMMIS Transformations

Record	Field Number	Field
DEMO	3	LAST NAME 1
DEMO	4	LAST NAME 2
DEMO	5	FIRST NAME
DEMO	6	MIDDLE INITIAL
DEMO	25	RESIDENTIAL ADDRESS 1
DEMO	26	RESIDENTIAL ADDRESS 2
DEMO	36	POSTAL ADDRESS 1
DEMO	37	POSTAL ADDRESS 2
ELIG	3	LAST NAME 1
ELIG	4	LAST NAME 2
ELIG	5	FIRST NAME
ELIG	6	MIDDLE INITIAL
ELIG	24	CONTACT LAST NAME 1 *
ELIG	25	CONTACT LAST NAME 2 *
ELIG	26	CONTACT FIRST NAME *
TPL	3	LAST NAME 1
TPL	4	LAST NAME 2
TPL	5	FIRST NAME
TPL	6	MIDDLE INITIAL

Create Daily Outbound File

The Integration Layer will create the Daily Outbound file with the following naming convention:

File Name: PREE_MBR_DAILY_YYYYMMDD.csv

PREE_MBR_DAILY_: Will be the same for every file (does not change).

YYYY: Will match the year that the file was generated.

MM: Will match the month that the file was generated.

DD: Will match the day that the file was generated.

Store the Daily Outbound File for Troubleshooting

A compressed version of the Daily Outbound file will be stored to allow for future trouble shooting as required. Further details related to the temporary storage of this file can be found in the IDD.

Daily Outbound file transfer to PRMMIS

The Integration layer will send the Daily Outbound file after establishing a secure connection to PRMMIS's SFTP according to the defined processing time in section 0

Daily Outbound Record Layout and Required Protocols.

Daily Outbound Interface Processing Time Requirements / Service Availability

There are no outage/maintenance windows from PRMMIS that need to be accounted for as part of this transfer.

At the end of each weekday (Monday to Friday), a Daily Outbound file is sent over to PRMMIS by 6.45 PM AST.

If a file could not be sent due to technical issues on any scheduled business day (Monday to Friday) then a notification will be sent to the appropriate technical staff member.

PRMMIS will process the file that same day only if it is received by 7 PM AST. Otherwise it gets processed the next day.

When a Holiday is schedule for a day in the middle of the week (Monday to Friday) then on that day a file will be sent as well. If there are no changes a blank file will be sent with a Header and a Trailer.

Daily Outbound Record Layout and Required Protocols

Daily Outbound File Layout

The Daily Outbound file consists of 5 types of records. They are as follows:

Header record – The Header record is the first record in the file, containing metadata about the file; there is only 1 header record per file.

Demographics record – The Demographics record is the second record type in the file, containing demographic information about the individual; there is only 1 demographics record per individual.

Eligibility record – The Eligibility record is the third record type in the file, containing eligibility data about the individual; there could be multiple eligibility records per demographic record on the Daily File. However, on the Monthly Reconciliation file there shall only be one Eligibility record sent.

TPL record – The TPL record is the fourth record type in the file, containing information about any third-party liability (or insurance) data that the individual may have; there could be multiple TPL record per individual.

Trailer record – The Trailer record is the last record in the file, containing metadata about the file; there is only 1 trailer record per file.

Daily Outbound File Special Considerations

The file will comprise of only the record that has updates and does not need to send the other records. For example, if there is a change in address, only the Demographics record should be sent and the Eligibility and TPL records are not required.

<CR-153> Daily Outbound Field/Element Definition

The Daily Outbound file is a CSV (Comma-Separated Values) file format, and the following formatting rules applies:

The first line of the file will contain header information.

The last line of the file will contain trailer information.

Each field within a record will be separated by a comma as the delimiter.

If a field value contains a comma as part of the value, the field will be surrounded with quotation marks.

If a field contains a quotation mark, it will be escaped by preceding it with a quotation mark.

A field that does not have a value does not need to contain a single space.

The attached Daily Outbound file layout outlines the composition of the request file, the data elements that are required by PRMMIS, how PREE will populate these elements, and where in the PREE system the data is stored.



Figure 6 - <PRMO-3067><PRMO-1265><PRMO-1524><PRMO-2057><PRMO-1522><PRMO-1489><CR-177> <CR-214> Daily Outbound File

Monthly Reconciliation Interface

The sections below describe the end to end processing and interactions that occur for PREE to generate a Monthly Reconciliation file and send it to PRMMIS to compare PREE database and PRMMIS database. This transfer occurs once a month and provides PRMMIS with details on the following:

Demographics

Eligibility

Third Party Liability

for all members that are eligible for Medicaid/Medicare benefits as of the first calendar day of the month. The monthly file will contain all records (Eligibility, Demographics and TPL) for all individuals who are eligible on that day.

This service will follow the pre-conditions established as well as the proposed processing steps. If all these steps are successful, the client will have received the

data for all individuals who are eligible for Medicaid in PREE system as of the first business day of the month.

Requirements for Monthly Reconciliation

The PRMMIS Monthly Reconciliation file contains demographics, eligibility and Third-Party Liability information and the purpose of sending it to PRMMIS is to reconcile and detect inconsistencies between PREE database and PRMMIS database. It will be generated and sent the first business day of every month. Full details on this end to end process are outlined in the sections below, including:

- Assumptions that have been applied.
- Constraints that have been identified.
- Requirements for generating and sending the request file (see Table 6: Monthly Reconciliation Interface General Processing Steps).

Monthly Reconciliation Assumptions

The following assumptions are to be considered for the Monthly Reconciliation Interface:

PRMMIS will process the files they receive from PREE in the order that they are sent (The Daily Outbound file and then the Monthly Reconciliation file).

If the Monthly Reconciliation file is unable to be generated on the first business day by PREE then it can be generated on the next business day and passed to PRMMIS as long as all other constraints and pre-conditions are adhered to.

All text fields will have right trim spaces.

Monthly Reconciliation Constraints

The following constraints apply to the interactions between the PREE system and PRMMIS for the Monthly Reconciliation interface:

PRMMIS processes the file according to Interface Service Availability as mentioned in Section 0 **Daily Outbound Interface Processing Time Requirements / Service Availability**.

The SSN field in the Monthly Reconciliation file is mandatory and must be populated with a 9-digit numeric value.

The data fields sent to PRMMIS in the Monthly Reconciliation File must be transformed and mapped to meet the defined file layout requirements.

The PRMMIS Monthly Reconciliation file shall not be used to report updates on active cases.

PRMMIS does not process records where an "Effective Date" on the Eligibility record is missing.

The Monthly Reconciliation file will only be processed by PRMMIS if it is sent to PRMMIS by 6:45pm AST.

If the Monthly Reconciliation file was not generated on the first business day, this file needs to be generated before the next day updates are sent to PRMMIS.

The PRMMIS Monthly Reconciliation file shall be sent after all daily updates have already been successfully sent to PRMMIS for that day.

Monthly Reconciliation Trigger Points

Figure 7 - Monthly Reconciliation Interface illustrates the overall process for creating the Monthly Reconciliation File.

On the first business day of the month the Monthly batch will populate the demographic, eligibility and TPL record staging tables with all cases that are active as in the first calendar day of the month.

A trigger is sent to the integration layer to pull this information from the staging tables and transform that data into a single flat file according to the layout and specifications detailed in 0 Monthly Reconciliation File Layout. At this point the header and trailer are added to the file as well.

Once the Monthly Reconciliation file is successfully created it will be available to be uploaded to the PRMMIS SFTP location.

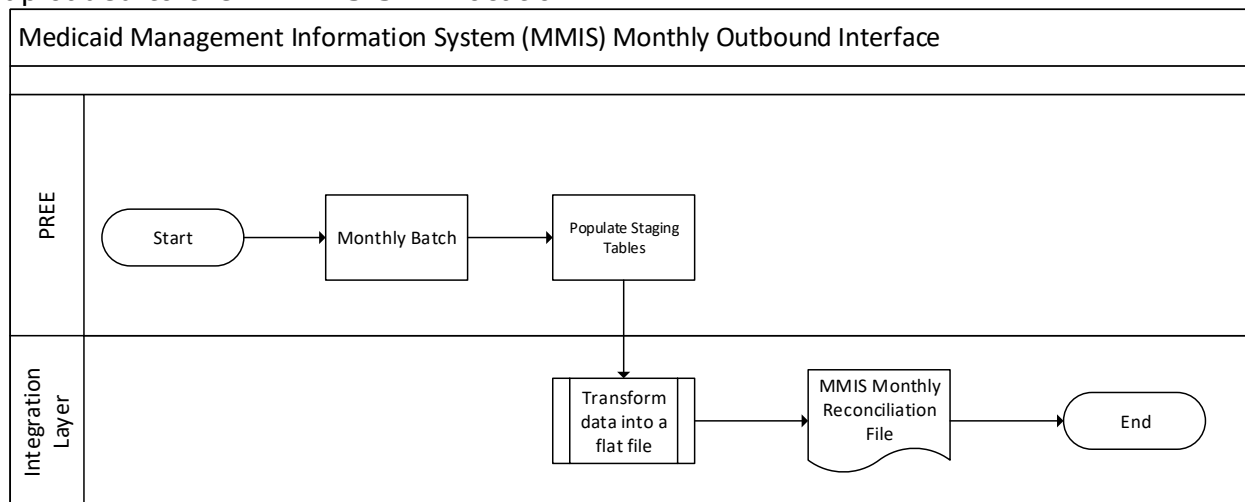


Figure 7 - Monthly Reconciliation Interface

Monthly Reconciliation Alternate Trigger Point

If the scheduled batch job fails to run as expected or loads erroneous data into the Monthly Reconciliation file, the batch can be manually executed by technical support staff.

General Processing Steps for Monthly Reconciliation (End to End)

Table 6: Monthly Reconciliation Interface General Processing Steps outlines the detailed end to end processing steps for the interface including PREE and other downstream systems. This process will be the same for each month it is executed.

Table 6: Monthly Reconciliation Interface General Processing Steps

Processing Step	Description	Responsible
1	<p>On the first business day of the month, the PRMMISMonthlyOutboundBatch automated batch will be triggered to populate the staging tables:</p> <p>PRStagingOutMMISDemographics PRStagingOutMMISTPL PRStagingOutMMISEligibility</p> <p>These will be populated with data for all individuals that are eligible for Medicaid benefits on the first calendar day of the month. For additional information refer to the Interface Design Document (IDD).</p>	PREE
2	Send trigger to Integration Layer indicating that the data is ready to be pulled from the staging table.	PREE
3	Pull the raw Monthly Reconciliation file data from the staging tables in PREE. The batch will only select the records associated with the most recent run of the batch on the table. For additional details regarding the staging table refer to the IDD.	Integration Layer
4	Transform the raw Monthly Reconciliation data from PREE into the format required by PRMMIS. For more details, please refer to section 0 Monthly Reconciliation File Technical Transformations.	Integration Layer
5	Create the Monthly Reconciliation file with the appropriate naming convention. For additional detail on the creation of this file see section 0 Create Monthly Reconciliation File.	Integration layer
6	Store a copy of the Monthly Reconciliation file. For more details regarding the storage of files for troubleshooting refer to the IDD.	Integration layer
7	Upload the Monthly Reconciliation File in the PRMMIS SFTP file location. For additional details regarding the transfer of the Monthly Reconciliation file, please refer section 0 Monthly Reconciliation file transfer to PRMMIS	Integration Layer
8	PRMMIS processing. ACK/NACK message back to PREE	PRMMIS

9	Receive the Monthly Reconciliation file.	PRMMIS
10	Compare the Monthly Reconciliation file to the active eligible members in the PRMMIS database. "Active eligible members" are those members where the reconciliation date falls within the member's eligibility effective and end dates.	PRMMIS
11	Any difference between the file and PRMMIS data will be documented on the Reconciliation Discrepancies Report.	PRMMIS
12	Add errors associated to the processing in the Daily Error response file.	PRMMIS
13	Send error report back to PREE. For details on the error report, please refer to section 0 Inbound Daily Error	PRMMIS
Additional follow on processing steps are outlined in Table 8 - Daily Error Interface General Processing Steps.		

Monthly Reconciliation Request Pre-Conditions

The following conditions must be met before the Monthly Reconciliation file can be generated and sent to PRMMIS:

It is the first business day of the month.

The Daily Outbound file has already been generated and sent to PRMMIS for processing.

Monthly Reconciliation File Generation

The sections below outline specific details for generating the Monthly Reconciliation file, as referenced in the general processing steps for the Monthly Reconciliation Interface.

Monthly Reconciliation File Technical Transformations

Details of the transformations that are required for the data in PREE to conform to the PRMMIS request format can be found in *Figure 6 - <PRMO-3067><PRMO-1265><PRMO-1524><PRMO-2057><PRMO-1522><PRMO-1489> <CR-177> <CR-214> Daily Outbound File* under the column "Transformation Details".

Special Character Processing

For PRMMIS to accept and process the Monthly Reconciliation file, all characters must be either alphabetic or numeric characters. PREE will complete the following special character processing on the PRMMIS data:

Spanish letters such as (ñ, ü, á, é, í, ó, ú) will be translated to English alphabet as follows:

ñ = n,
 ü = u,
 á = a,
 é = e,
 í = i,
 ó = o,
 ú = u

For the following fields all other special characters will be removed and replaced with a space " ".

Table 7 - PRMMIS Transformations

Record	Field Number	Field
DEMO	3	LAST NAME 1
DEMO	4	LAST NAME 2
DEMO	5	FIRST NAME
DEMO	6	MIDDLE INITIAL
DEMO	25	RESIDENTIAL ADDRESS 1
DEMO	26	RESIDENTIAL ADDRESS 2
DEMO	36	POSTAL ADDRESS 1
DEMO	37	POSTAL ADDRESS 2
ELIG	3	LAST NAME 1
ELIG	4	LAST NAME 2
ELIG	5	FIRST NAME
ELIG	6	MIDDLE INITIAL
ELIG	24	CONTACT LAST NAME 1 *
ELIG	25	CONTACT LAST NAME 2 *
ELIG	26	CONTACT FIRST NAME *
TPL	3	LAST NAME 1
TPL	4	LAST NAME 2
TPL	5	FIRST NAME
TPL	6	MIDDLE INITIAL

Create Monthly Reconciliation File

The Integration Layer will create the Monthly Reconciliation file with the following naming convention:

File Name: PREE_MBR_RECON_YYYYMMDD.csv

PREE_MBR_RECON_: Will be the same for every file (does not change).

YYYY: Will match the year that the file was generated.

MM: Will match the month that the file was generated.

DD: Will match the day that the file was generated.

Store the Monthly Reconciliation File for Troubleshooting

A compressed version of the Monthly Reconciliation file will be stored to allow for future trouble shooting as required. Further details related to the temporary storage of this file can be found in the IDD.

Monthly Reconciliation file transfer to PRMMIS

The Monthly Reconciliation file will be transferred in the same manner as the Daily Eligibility file. For additional information please refer to 0 **Daily Outbound file transfer to PRMMIS** and its sub-sections.

Monthly Reconciliation Interface Processing Time Requirements / Service Availability

On the first business day of every month, a Monthly Reconciliation file is sent over to PRMMIS by 6.45 PM AST.

There are no outage/maintenance windows from PRMMIS that need to be accounted for as part of this transfer.

If a file is not sent that day then notifications need to be sent to PRMMIS so that manual update is scheduled as needed.

Monthly Reconciliation Record Layout and Required Protocols

Monthly Reconciliation File Layout

Refer to 0 Daily Outbound File Layout as the Monthly Reconciliation file has the same file structure as the Daily Outbound file.

Monthly Reconciliation Data Assembly Characteristics

See the Monthly Reconciliation Field/Element Definition section.

Monthly Reconciliation Field/Element Definition

The Monthly Reconciliation file follows the same layout and guidelines as the Daily Outbound file. See section 0 **<CR-153> Daily Outbound Field/Element Definition**.

Inbound Daily Error File

The sections below describe in detail the processing that will occur for PREE to receive and process the Daily Error file. This service will follow the pre-conditions established as well as the proposed processing steps. If all these steps are successful, PREE will have received the Daily Error file and generated tasks for case workers to investigate and resolve the errors.

Requirements for the Daily Error File

The PRMMIS Daily Error file contains all errors identified during the processing of the last Daily Outbound File and/or Monthly Reconciliation Outbound file that was sent to PRMMIS.

The purpose of this file is to provide PRMP information that will help correct the source data within PREE. It will be generated and sent daily from PRMMIS. Full details on this end to end process are outlined in the sections below, including:

- Assumptions that have been applied.
- Constraints that have been identified.
- Requirements for generating and sending the request file (see Table 8 - Daily Error Interface General Processing Steps).

Daily Error File Assumptions

The following assumptions are to be considered for the Daily Error File interface with PRMMIS:

On any day where both the Monthly Reconciliation file and Daily Outbound file are sent to PRMMIS, only one Daily error file will be returned containing both the Monthly and the Daily errors.

A Daily Error file will always be sent from Monday through Friday regardless if there are errors included in the file or not.

If there is ever a situation where the Daily Error Inbound file is returned without the Daily Outbound file being sent a technical support staff member will be able to manually trigger the PRINPRMMISERRORBATCH.

PRMMIS will inform PRMP of any changes to the Daily Error file structure and associated error codes.

Daily Error Constraints

The following constraints apply to the interactions between the PREE system and PRMMIS for the Daily Error File interface:

The Daily Error file only contains errors associated with the processing of the latest daily/monthly file. It does not contain cumulative errors that have not been resolved yet.

General Processing Steps for the Daily Error File

The Daily Error Interface Processing Steps table below outlines the full process that is completed to receive and process the Daily Error file from PRMMIS. The processing and interactions among component systems will be the same every time that the Daily Error file is received from PRMMIS.

Table 8 - Daily Error Interface General Processing Steps

Processing Step	Description	Responsible
The processing steps outlined in Table 4: Daily Outbound Interface General Processing Steps have been completed.		
1	Trigger the integration layer to begin polling the PRMMIS SFTP for the Daily Error file.	Integration Layer
2	Collect the Daily Error inbound file from the PRMMIS SFTP.	Integration Layer
3	Store a copy of the Daily Error file. For more details regarding the storage of files for troubleshooting refer to the IDD.	Integration layer
4	Transform the raw Daily Error data into a format compatible by PREE. for details, refer section 0 Daily Error Response Technical Transformations	Integration Layer
5	Populate the Daily Error file inbound staging table in PREE with the transformed error data, with a BatchStatus of "Unprocessed".	Integration layer
6	Complete processing and create tasks for case workers to follow up on the errors reported by PRMMIS in the Daily Outbound and Monthly Reconciliation files.	PREE
Any updates made to the data in PREE from Case workers resolving the identified errors will be sent back to PRMMIS through the regular Daily Outbound Interface process.		

Daily Error File Trigger Points

The Daily Error interface is a continuation of the Daily Outbound interface. After completing the transfer of the Daily Outbound file to PRMMIS the Integration layer will trigger PRINPRMMISERRORBATCH batch. This will trigger the Integration layer to poll the PRMMIS SFTP hourly looking for the inbound Daily Error file.

Alternate Trigger Points

If the PRINPRMMISERRORBATCH fails to run as expected or if it needs to be ran independently of the identified process, then the PRINPRMMISERRORBATCH batch can be manually executed by technical support staff.

Daily Error File Pre-Conditions

Prior to the collection and processing of the inbound daily error file the following pre-conditions must be met:

The Integration layer will have completed the processing steps outlined in Table 4: Daily Outbound Interface General Processing Steps to send a Daily Outbound File to PRMMIS.

Retrieving the Daily Error File

After being triggered by the PRINPRMMISERRORBATCH job the integration layer will poll the PRMMIS SFTP hourly looking for a file with the expected naming convention. When it identifies the file, it will reach out and collect the file from the location. Once triggered the integration layer will continue to poll the PRMMIS SFTP hourly until:

The Daily Error file has been collected from the SFTP location, at which point the Integration Layer will stop polling the SFTP looking for the file.

12 hours have passed, and the integration layer has not collected the Daily Error file, at which point the Integration Layer will stop polling the SFTP looking for the file and a technical support staff member will be notified to investigate.

Expected File Name

The expected Daily Error file that the Integration Layer is looking for has the following naming convention:

File Name: PREE_ERROR_YYYYMMDD.csv

PREE_ERROR_: Will be the same for every file (does not change).

YYYY: Will match the year that the file was generated.

MM: Will match the month that the file was generated.

DD: Will match the day that the file was generated.

Daily Error File Processing

The sections below outline specific details for processing the Daily Error file as referenced in the general processing steps above.

Store the Daily Error File for Troubleshooting

A compressed version of the Daily Error File will be stored to allow for future troubleshooting as required. Further details related to the temporary storage of this file can be found in the IDD.

Daily Error Response Technical Transformations

The data received will then be transformed by the integration layer to convert it from the format returned in the Daily Error File into the PREE format to make the data usable within PREE. Details of the transformations can be found below:

Table 9- Daily Error Response Technical Transformations

Data element	Transformation required
Process Date	Change YYYYMMDD to DDMMYYYY

Daily Error Populate the Response Staging Table

After the response file contents have been validated and the appropriate technical transformations specified above have been applied, the integration layer will push the data to the response staging table (PRSTAGINGERROR) for further processing.

Daily Error Matching PREE Members Against the Daily Error

PREE will use the members MPI (RECIP ID field) in the returning Daily Error File to identify the corresponding members in PREE. Following this match, the processing steps outlined in the detailed scenarios below will be completed. If PREE is unable to match a record against a member in the system, then it will ignore the record and continue processing the next record. This is because it indicates a change in MPI within PREE and the match will occur in the next Daily Response file.

Daily Error Detailed Processing Scenarios

The Daily Error rules table below outlines the Daily Error scenarios that can occur, and the processing steps that the PREE system will take for each of those scenarios. This processing is based on the value returned for the "ACT" data element in the Daily Error response file.

There are three categories where an error can be identified based on the daily/monthly update:

Field: these errors are associated with a specific field having misinformation. For example, an error identified under this category could be a missing or invalid city name.

Record: there are 3 records on the daily/monthly update (Demographic, Eligibility, TPL). These errors are associated with a whole record being rejected because there are missing or invalid information on the fields within that record. For example, if there is an invalid TPL Policy number then the TPL record will be rejected.

Segment: these errors are associated with a whole segment being rejected because of specific fields that are identified in the Daily Error File have invalid or missing data. A segment could include various records. Therefore, if a segment is rejected then all the records associated to that segment will not be created or updated in the database. For example, if an eligibility begin date is not valid the eligibility segment will not be created, and it won't be associated to the demographic record.

Table 10 - Daily Error Rules

Processing Response Code	Processing required
--------------------------	---------------------

RF = Rejected Field	If this value is returned notify case worker to follow up with client and verify the error in the Field associated
R = Rejected Record	If this value is returned notify case worker to follow up with client and verify the error in the record associated
RS = Rejected Segment	If this value is returned notify case worker to follow up with client and verify the error in the Segment associated
I = Informational	If this value is returned notify the case worker to follow up with the client.

Notifications if follow up action is required

If the processing scenario in the Daily Error Rules table above has identified that a notification should be generated for follow up action, then PREE will generate a task with details of the actions required. If there is already an existing task from a previous Daily Error response file for that error, then a new task will not be generated. For additional detail refer to the post processing section of the IDD.

Daily Error Inbound Interface Processing Time Requirements / Service Availability

The Daily Error File will be sent to PREE once Monday to Friday directly following the processing of the Daily Eligibility file.

Note - On the first business day of the month, both Daily Eligibility and Monthly Reconciliation files are received by PRMMIS. After processing of both these files, PRMMIS will come up with the Daily Error file containing cumulative errors from both the files (Daily and Monthly).

There are no outage windows from PRMMIS that need to be accounted for as part of this transfer.

Daily Error Inbound Record Layout and Required Protocols

Daily Error Inbound File Layout

The Daily Error file consists of 2 type of records. They are as follows:

Header record – The Header record is the first record in the file, containing metadata about the file; there is only 1 header record per file.

Detail record – One detail record contains information on 1 processing error identified by the PRMMIS system. There can be many detail records in the Daily Error Inbound file.

There is no Trailer Record on the Daily Error Inbound file.

Daily Error Inbound Data Assembly Characteristics

Please refer the sub sections of the Daily Error Inbound Field/Element Definition section.

Daily Error Inbound Field/Element Definition

The attached Daily Error file layout outlines the composition of the response file, the data elements that are required by PREE and where in the PREE system the data is stored.

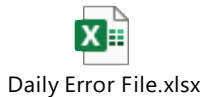


Figure 8 - Daily Error File

Communication Methods

The following subsections outline the communication requirements for all aspects of the communication stack to which the systems participating in the interface shall conform. This includes hand-shake messages, timing of the exchanges, and steps taken to handle errors.

Interface Initiation

This service can be initiated by three separate triggers:

Every day when the Daily Batch starts to collect information from the Interface Trigger Table and populates the staging tables

The first business day of the month when the Monthly Batch collects all active eligible members and populates the staging tables.

Every Day when the Error Batch process pulls the Daily Error response file from PRMMIS SFTP location.

Flow Control

The PREE-PRMMIS file transfer is supported by Acknowledgement, Negative-Acknowledgement, and Ad-hoc emails from both PREE and PRMMIS staff members. Based on the emails that are received if required a technical support member will follow up to investigate any identified issues and resolve them. For additional details on the responsible parties for the below communication see the IDD.

<CR-90>File has been sent

When the file for the Daily and Monthly Reconciliation file has successfully been uploaded to the SFTP folder an Acknowledge email will be automatically sent from the SFTP.

Otherwise, if no ACK is received, this will trigger a follow up from a technical support staff member, who will investigate the issue and implement a resolution.

File will be late or will not be sent

If the Daily and/or the Monthly Reconciliation file is going to be late (past the acceptable time defined), or it will not be sent for any given purpose then an email will be sent to PRMMIS to inform them.

Daily Error file received.

When a Daily Error file is received PRMMIS doesn't expect any ACK or NACK to be sent.

Daily Error file not received

If the Daily Error file has not been received, then a notification will be sent to the technical support staff member to follow up with PRMMIS.

Security Requirements

The Interface will rely on the security of Networks and firewalls configured as per the "I.2.2" system architecture document to protect the files created and transferred by this interface. The files created and transferred by this interface contain Personally Identifiable Information (PII) and will be secured in transit and at rest.

For additional details on the security applied to transfers between the component systems see section 0 **Security and Integrity**.

Qualification Methods

This PRMMIS ICD represents the delivery outcome of the evidence validation and interface analysis that has been gathered. Input from Puerto Rico Medicaid Program Subject Matter Experts was collected during PRMMIS JAD sessions and has been considered for this document as well. This interface will go through the following qualification methods:

Step 1: The Analysis and Inspection phase will be completed by Intervice who will analyze and inspect the documents provided in order to determine if the requirements from CMS are met according to federal guidelines and from the Project Manager Office perspective.

Step 2: Following the acceptance of the ICD and relevant documentation the interface will be developed as per the specifications outlined in this ICD and internal testing will be completed (Unit testing and functional testing) prior to any DXC mandated testing.

Step 3: Testing Phase will commence once Intervice confirms all deliverables and documentation, including processes outlined, are according to the rules and regulations established.

There will be an internal testing phase where PREE functionality will be tested according to the design proposed using internal data. The second step will be system integration testing where there will be joined efforts between DXC and PREE in order to successfully test the interface communication and processes. There are 2 environments that would be tested informal and formal, guidelines for this process will be reviewed by both systems coordinators in order to successfully test the interface and transactions.

Related Documents

Table 11: Related Documents

Document	Reference	Link
Interface Design Document (IDD)	General overview document that contains a list and description of both orchestrated and standalone interfaces.	Pending completion of document
PREE Glossary	Glossary that serves as a reference document for the Puerto Rico Eligibility & Enrollment (PREE). It defines common terms used to describe system components.	link
i.2.2 System Architecture plan	Document that describes the architecture solution implementation.	Pending completion of document
Audit and Quality Plan	Document that describes the requirements and solution for the logging information.	Pending completion of document
PREE Data Verification Summary Report	Description of current processes and state in Puerto Rico Medicaid program eligibility and proposal of new technical sources to be used	Pending completion of document
Daily Interface PRMMIS ICD	ICD written by DXC containing technical information about the daily interface to PRMMIS	Link
Monthly Reconciliation Interface PRMMIS ICD	ICD written by DXC containing technical information about the Monthly Reconciliation interface to PRMMIS	Link
Daily Error Interface PRMMIS ICD	ICD written by DXC containing technical information about the daily error interface to PRMMIS	Link

Requirements Matrix

For requirement traceability purposes, the following requirements are met and mapped to this design document.

Table 12: Requirements Matrix

Requirement Number	Requirement Description	Fit-Gap	Implementation Details
FR-EDT-003	The Solution shall have the ability to transmit new and updated eligibility and case information to PRMMIS, as defined by Puerto Rico.	Gap	Modify system to provide PRMMIS with a daily eligibility file that contain new and updated eligibility and case information.
FR-EDT-004	The Solution shall have the ability to re-transmit eligibility information to PRMMIS for eligibility records designated in the error report.	Gap	Modify system to be able to modify or correct records detected in the error report in order to send them on the next daily eligibility file.
FR-EDT-005	The Solution shall have the ability to receive and process the error report generated by PRMMIS.	Gap	Modify system to be able to receive and process the error report generated by PRMMIS.
FR-EDT-007	The Solution shall have the ability to report on the following reconciliation items: i. All members that were sent to PRMMIS were actually received ii. Member's eligibility start, change or termination date is correct iii. Member's eligibility group is correct	Gap	Modify system to be able to: i. receive ACK and NACK from PRMMIS SFTP in order to determine a file has been successfully received. ii and iii. Receive an error response file to determine if the eligibility data is correct.
FR-CM-042	The solution shall have the ability to daily, at a minimum, interface with the PRMMIS to exchange Medicaid eligibility data.	Gap	Modify the system to provide an interface to send the daily eligibility file to PRMMIS
G7-IL-017	The Solution shall include an interface with PRMMIS.	Gap	Modify the system to include the 3 interfaces for PRMMIS which are daily eligibility, monthly Reconciliation and Daily error report.

Issue Register

Table 13: Issues

Issue #	Issue	Resolution	Resolution Date
EE-R100175	DXC providing required information for PRMMIS ICD		
EE-A101000	Acceptable Values for citizenship verification flag values		

Appendix A – Interface controls

Table 14 - OSI Application Layer

Interface Type	Interface From	Interface To	Description of Interface	Other Information
PREE System	PREE	PRMMIS	SSH and FTP (the two components that make up sftp) both live on the application layer and are responsible for encryption and decryption of information being transferred. All other layers are just a passthrough.	

Table 15 - OSI Presentation Layer

Interface Type	Interface From	Interface To	Description of Interface	Other Information
Translation from network format to application format	PREE	PRMMIS	Passthrough	

Table 16 - OSI Session Layer

Interface Type	Interface From	Interface To	Description of Interface	Other Information
Establishing session	PREE	PRMMIS	Passthrough	

Table 17 - OSI Transport Layer

Interface Type	Interface From	Interface To	Description of Interface	Other Information
Web Service	PREE	PRMMIS	A raw web socket is used by SSH and FTP	

Table 18 - OSI Network Layer

Interface Type	Interface From	Interface To	Description of Interface	Other Information
Web Service	PREE	PRMMIS	Interface communication will use regular internet protocol (TCP/IP) for general purpose	

Table 19 - OSI Data Layer

Interface Type	Interface From	Interface To	Description of Interface	Other Information
Web Service	PREE	PRMMIS	Interface communication will use regular internet protocol (TCP/IP) for general purpose	

Table 20 - OSI Physical Layer

Interface Type	Interface From	Interface To	Description of Interface	Other Information
Web Service	PREE	PRMMIS	Interface communication will use regular internet protocol (TCP/IP) for general purpose	