**ADT from Soarian to PMMC**

**Version 2.1**

**Prepared By: Stephen Mattei**

**Date: 3/15/2018**

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# **Document Control**

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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 5/20/2015 | Stephen Mattei | Originally Created |
| V2.0 | 12/4/17 | Stephen Mattei | Document updated to reflect Current Setup. |
| V2.1 | 03/15/18 | Tiffany Bohall | Updated the facility table to include the MDC location |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

The Purpose of this document is to define the functional and nonfunctional requirements for the PMMC ADT interface to support the EPRO “Estimator Pro” product.

* Specifies the requirements to be included in the technical design and build of the PMMC ADT interface
* Defines the Cloverleaf mapping requirements to support the solution
* Defines source and destination protocols as well as connectivity data
* Creates a detailed description of the business logic associated with the stored procedure and defines field length, field data types, and order of fields as wells as the stored procedure’s name.

As is true with any requirements specification, this document may be modified, subject to developments in technology, changes to the standards, or new business requirements.

## 1.2 Project Scope

The document is focused on the real time ADT interface between Soarian and PMMC EPRO only. It does not represent the entire body of integration work related to the PMMC product suite.

## 1.3 Terminology Standards

### 1.3.1 Acronyms

Define the acronyms and their associated definitions used in this document. The acronyms should be listed in alphabetical order.

### 1.3.2 Glossary

List the terms that require definition with respect to Cloverleaf and the product whose requirements are defined in this document. The definitions are specific to this document and may not be identical to the definitions of these terms in common use.

## 1.4 Document References

List all documents or Web addresses to which this IDBB refers; provide enough information so that the reader can access a copy of each reference. Include the title, author, version number, date, and source or location.

# 2. Diagram

No diagram because of simple nature of interface.

# 3. Requirements

## 3.1 Functional Requirements

Provide detail for the below functional requirements. The message transformation requirements for the components defined in this specification should be specified in section 4.2 of this document.

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| FR.2015.1.0 | Cloverleaf to route ADT data from Soarian to PMMC | Selected ADT event types will be routed to the vendor system. Please see the event type table in this document for a full listing. |
| FR.2015.2.0 | Filtering | Messages will be filtered when:  OBX:3.0 = 2PAYMENT & OBX:5 = Is a digit [0-9] &  MSH:8 = ADT^A08 |
| FR.2015.2.1 | Filtering | MSH:2 = SOARF &PV2:36 = Y |
| FR.2015.2.3 | Filtering | MSH:3 = ANY (ISU SIP CRC BHO WBH BLM) |
| FR.2015.3.0 | Included Data | Data will be sent for all facilities to PMMC including BOI locations. The only exception is behavioral health i.e. ISU, SIP, CRC, BHO, WBH & BLM. |
| FR.2015.4.0 | Translate Two Character Facility Mnemonics | Some of the two character facility mnemonics are different for PMMC EPRO. This was identified during development but PMMC did not make the needed changes because CPRO, Contract Pro, was already built and a rebuild would have impacted the project timelines. The table created to handle the crosswalk is: soarf\_enctr\_loc\_suffix\_pmmc. This value is sent in MSH:4 but is derived from the encounter location sent in PV1:39. |
| FR.2015.5.0 | Facility Rollup | Certain facilities had to be rolled up under a particular parent while maintaining the original facility in MSH:5. The translated and rolled up value is sent in MSH:4. |
| FR.2015.5.1 | Facility Rollup Details | NI - MI - GI - HI - DI - VI rolled up to "IH"  AR - AC - AP - AN rolled up to "AH"  RI - AI - PI rolled up to "IS"  BI - CI - SI - TI rolled up to "IM"  WH - SH - VH - JO - JR rolled up to "JH"  WW - WR - WO rolled up to "HH"  MH - MB - MV - ML - MO - MR rolled up to "MP"  CC - CH - CE - CB - CR - CP - CM - HL rolled up to "MC"  DP - DH rolled up to "MD"  NH - NM rolled up to "NB"  DC - DD - DM - DN {set pmmcFac "DC"} |
| FR.2015.6.0 | Patient Location | Update the patient location to reflect the PMMC two character mnemonic |

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| FR.2015.7.0 | Insurance Logic for Duplicate Medicare Details | There was an issue where a second segment would be empty and PMMC did not want the second segment. So the engine checks and if there are more than two IN1 segments for a Medicare patient the second IN1 and IN2 segments are not sent.  The following must be met:   * The plan ID, IN1:2, must be 52 * The plan name, IN1:4 must be Medicare * The IN1 set ID must be 2 |
| FR.2015.8.0 |  |  |
| FR.2015.9.0 |  |  |

## 3.2 Non-Functional Requirements

Provide concise detail for the below non-functional requirements. This would include external table ownership, hours of support, etc. The below requirements must be evaluated for every project.

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| NFR.20XX.1.0 | Alerting | An alert will be sent to PMMC distribution group if data backs up on the outbound connection to PMMCAdmin@baycare.org. Cloverleaf will trigger the alert whenever the queue reaches 200. |

## 3.3 Messaging Protocols

Below are listed the details for the messaging protocols that will be leveraged for this integration. This includes: TCP/IP, FTP, Web Services, etc.

### 3.3.1 Inbound to the BayCare Cloverleaf

|  |  |
| --- | --- |
| FTP |  |
| MLLP Socket Connection (TCP/IP) |  |
| Local File Drop by Midrange Team |  |
| Other | Click here to enter text. |

### 3.3.2 Outbound from the BayCare Cloverleaf

|  |  |
| --- | --- |
| FTP |  |
| MLLP Socket Connection (TCP/IP) |  |
| Local File Drop by Midrange Team |  |
| Other | Click here to enter text. |

# 4. HL7 Messaging

## 4.1 Messaging Format

### 4.1.1 Segments

The segments utilized for this interface are:

MSH

EVN

PID

[PV1]

[PV2]

[{

IN1

[IN2]

}]

*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header*

*EVN – Event segment*

*PID – Patient ID segment*

*PV1 – Patient Visit segment\*

*PV2 – Patient Visit Additional Data*

*IN1 – Insurance segment*

*IN2 – Insurance segment*

*[{ – Start of optional, repeatable group*

*}] – End of optional, repeatable group*

### 4.1*.*2 Messaging Event Types

Below are the messages types necessary for this integration

|  |  |
| --- | --- |
| **Event Type** | **Description** |
| ADT^A01 | Admission |
| ADT^A02 | Transfer |
| ADT^A03 | Discharge |
| ADT^A04 | Register |
| ADT^A05 | Pre-admit |
| ADT^A06 | Outpatient to in patient |
| ADT^A07 | In patient to outpatient |
| ADT^A08 | Update patient record |

### 4.1*.*3 Cloverleaf Configuration Files

tpsPmmcPssprtAdtHl7.tcl

soarf\_enctr\_loc\_suffix\_pmmc

### 4.1.4 Cloverleaf Site Location

soarf\_adt\_ent\_18

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Data Type** | **Length** | **Notes** |
| --- | --- | --- | --- | --- | --- |
| Sending Facility | MSH:4 | Y |  | 2 | Some of the two character facility mnemonics are different for PMMC EPRO. This was identified during development but PMMC did not make the needed changes because CPRO, Contract Pro, was already built and a rebuild would have impacted the project timelines. The table created to handle the crosswalk is: soarf\_enctr\_loc\_suffix\_pmmc. This value is sent in MSH:4 but is derived from the encounter location sent in PV1:39. |
| *Original Facility\*\** | MSH:5 | Y |  | 2 | The original two character mnemonic prior to rolling up the facility. |
| Remaining MSH | MSH:\* |  |  |  | All other MSH fields sent as is without modification |
| Patient Location | PV1:3 |  |  |  | Patient location is updated to reflect the PMMC expected two character facility mnemonic |
| Remaining PV1 | PV1:\* |  |  |  | All other PV1 fields sent as is without modification |
| IN1 Segments | IN1:\* |  |  |  | All fields sent as is without modification |
| IN2 Segment | IN2:\* |  |  |  | All fields sent as is without modification |
| PV2 Segment | PV2:\* |  |  |  | All fields sent as is without modification |
| EVN Segment | EVN:\* |  |  |  | All fields sent as is without modification |
| PID Segment | PID:\* |  |  |  | All fields sent as is without modification |

## 4.3 Sample Message

MSH|^~\&|SOARF|MP|MP||201712041208||ADT^A03|3e244b27-a3a5-4b64-9968-b09fe4eba997|P|2.7||1

PID|1|810007003^^^900000^PN|7000009587^^^BCHS^MR||SCHNUR^BERT^^^^^L^^^20161010||19450419|M||White|312 HILL ROAD^^Hillsboro^MO^63050^USA^M^^Jefferson^^^20161010||||EN|M|Christian|6000023031^^^BCHS^VCD^^20161010||||Non HIS or LAT||N|0|||||N|N

PV1|1|I|WIT7^0701^02^MP|Elective|||003976^Abdo^Richard^Victor^^PRN^1063472108^NPI^00760^PRDOC^MPH^^^^onecall^80A0|||MED|||N|RP|||003976^Abdo^Richard^Victor^^PRN^1063472108^NPI^00760^PRDOC^MPH|I|5103790279^^^504^VN^^20161010|Mut Def/Unk||||||||||||||||AHR|||9027|||||201610101449|201712041208||||||V

PV2|||^ESCRIPTION||||~~~~false||||||0||N||||||N||MP Inpatient^L^1185^^^900000^XX~^^1376529743^^^900004^NPI~^^MORTON PLANT HOSPITAL^^^439^NOAName|Checked out|||||||N|||||N||||Acute

IN1|1|1394^Homeless Uninsured|433^^^900000^XX^^20120228|Uninsured^L^433^^^900000^XX|3986 Tampa Rd^^Oldsmar^FL^34677^USA^M^^^^HCS-M~2995 Drew Street^ATTN: CBO^Clearwater^FL^33759^USA^M^^^^HCS-M|^^^^^^^HCS-M|^NET^^^^^^^HCS-M||Homeless Uninsured||||||Health|SCHNUR^BERT^^^^^L^^^20161010|6|19450419|312 HILL ROAD^^Hillsboro^MO^63050^USA^M^^Jefferson|||1||||||||||||||NONE|||||||M||false||||7000009587^^^504^MR^^20161010~810007003^^^900000^PN^^20161010

IN2|||||||||||||||||||||||||99999|GENE||||||||EN|||||Christian|||Non HIS or LAT|M||||||||||||||||||||||||||||White|6

# 5. Alerts

Are you going to need alerting on this connection?

|  |  |
| --- | --- |
| Yes |  |
| No |  |

If the answer is yes, please complete the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Site Name** | **Hours of Support** | **Distribution Group** | **Comments** |
|  |  |  |  |
| Soarf\_adt\_ent\_18 | M-F 8:00 – 17:00 | PMMCAdmin@baycare.org. | Triggered when queue reaches 200 |

# Appendix A: Risks and Concerns

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Name** |  |  | | |  |  |  |  |
| **Number** | **Risk / Concern** | **Comment** | **Mitigation** | | |  |  |  |
| RC.2013.1.0 | Facility Mnemonic | Not syncing up the facility codes could lead to production issues resulting from library mismatches between Soarian and PMMC | | Table introduced to map codes | |  |  |  |

# Appendix B: Issues List

This is a dynamic list of the open issues related to the IDBB that remain to be solved, including but not limited to TBDs, pending decisions, information needed, conflict awaiting resolution, and the like.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Name** |  |  | | |  |  |  |  |
| **Number** | **Issue** | **Comment** | **Fix** | | |  |  |  |
| I.2013.1.0 |  |  | |  | |  |  |  |

* End of document