**ADT\_Soarian\_Optum Reqs**

**1.1**

**Prepared By: Rich Allison**

**Date: 3/12/2019**

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# **Document Control**

## Resources: (include Project Team Members, Liaisons, Vendor Contacts, etc.)

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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 5/23/2018 | Rich Allison | Originally Created |
| V1.1 | 3/12/2019 | Art Schwartz | updated |
|  |  |  |  |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

This document outlines the contents and logic of the Soarian ADT to Optum translation interface.

## 1.2 Project Scope

Develop an interface for Soarian ADT messages to Optum.

## 1.3 Terminology Standards

### 1.3.1 Acronyms

MLLP – Minimum Lower Layer Protocol for messaging framing a HL7 message.

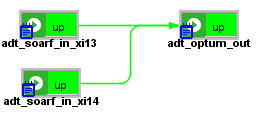
### 1.3.2 Glossary

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

# 2. Diagram

Provide a solution diagram that depicts the integration of components specified in this IDBB. This diagram must include the data flow for the interfaces (source and target).



# 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.20XX.1.0 | Click here to enter text. | Soarian ADT interface to Optum for all facilities  Message filters:  IF PV1.10 contains “ORL” – Kill the message  IF PV1.18 is null – Kill the message |

## 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 | Click here to enter text. | Click here to enter text. |

## 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 to the BayCare Cloverleaf

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

### 3.3.3 Inbound to the Vendor

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

### 3.3.4 Outbound to the Vendor

|  |  |
| --- | --- |
| 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

ZIN

IN1

*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header*

*EVN – Event segment*

*PID – Patient ID segment*

*PV1 – Patient Visit segment*

*ORC – Common Order segment*

*IN1 – 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** |
| A01 | Admit/visit notification |
| A02 | Transfer a Patient |
| A03 | Discharge/end visit |
| A04 | Register a patient |
| A05 | Pre-admit a patient |
| A06 | Change an outpatient to an inpatient |
| A07 | Change an inpatient to an outpatient |
| A08 | Update patient information |
| A10 | Patient arriving - tracking |
| A11 | Cancel admit/visit notification |
| A13 | Cancel discharge/end visit |

### 4.1*.*3 Cloverleaf Configuration Files

For each HL7 interface specified in Section 2 of this document, identify the Cloverleaf Configuration Files: Variants, TCL Scripts, Xlates and Tables, etc.

Variants:

HL7 2.6/Soarian ADT\_A01 – Inbound

HL7 2.4/optum ADT\_A01 – Outbound

TCL Scripts:

{ADVFLTR {

{{PATH {PV1:10}} {VALUE {ORL}} {MATCHDISP KILL} {NOMATCHDISP CONTINUE}}

{{PATH {PID:18}} {VALUE {}} {MATCHDISP KILL} {NOMATCHDISP CONTINUE}}

} } {DEBUG 0

Xlates:

soarf\_optum\_adt.xlt

Tables:

soarf\_inv\_fin\_class.tbl

### 4.1.4 Cloverleaf Site Location

optum\_16\_p

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Notes** |
| --- | --- | --- | --- |
| MSH Segment |  | Y | PATHCOPY the MSH segment |
| Sending Facility | MSH.4 |  | COPY MSH.4 to @fac |
| Version ID | MSH.12 |  | COPY “2.4” to MSH.12 |
| Continuation Pointer | MSH.14 |  | COPY @null to MSH.14 |
| EVN Segment |  | Y | PATHCOPY the EVN segment |
| PID Segment |  | Y |  |
| Set ID | PID.1 |  | COPY “1” to PID.1 |
| Patient ID | PID.2 |  | COPY PID.2.0 to PID.3.0 |
| Patient Name – Family Name | PID.5.0 |  | COPY PID.5.0 to PID.5.0 |
| Patient Name – Given Name | PID.5.1 |  | COPY PID.5.1 to PID.5.1 |
| Patient Name – Second and Further Name | PID.5.2 |  | COPY PID.5.2 to PID.5.2 |
| Date/Time of Birth | PID.7 |  | COPY PID.7 to PID.7 |
| Administrative Sex | PID.8 |  | COPY PID.8 to PID.8 |
| Patient Address – Street address | PID.11.0 |  | COPY PID.11.0 to PID.11.0 |
| Patient Address – Other Designation | PID.11.1 |  | COPY PID.11.1 to PID.11.1 |
| Patient Address – City | PID.11.2 |  | COPY PID.11.2 to PID.11.2 |
| Patient Address – State | PID.11.3 |  | COPY PID.11.3 to PID.11.3 |
| Patient Address – Zip | PID.11.4 |  | COPY PID.11.4 to PID.11.4 |
| Patient Account Number | PID.18 |  | COPY PID.18.0 to PID.18.0 |
| PV1 Segment |  | Y |  |
| Assigned Patient Location – Point of Care | PV1.3.0 |  | COPY PV1.3.0 to PV1.3.0 |
| Assigned Patient Location – Room | PV1.3.1 |  | COPY PV1.3.1 to PV1.3.1 |
| Assigned Patient Location – Bed | PV1.3.2 |  | COPY PV1.3.2 to PV1.3.2 |
| Assigned Patient Location – Facility | PV1.3.3 |  | COPY @fac to PV1.3.3 |
| Attending Doctor – ID Number | PV1.7.0 |  | COPY PV1.7.0 to PV1.7.0  Append “MS” to the front of the ID Number |
| Attending Doctor – Family Name | PV1.7.1 |  | COPY PV1.7.1 to PV1.7.1 |
| Attending Doctor – Given Name | PV1.7.2 |  | COPY PV1.7.2 to PV1.7.2 |
| Attending Doctor – Second and Further Name | PV1.7.3 |  | COPY PV1.7.3 to PV1.7.3 |
| Hospital Service | PV1.10 |  | COPY PV1.10 to PV1.10 |
| Admit Source | PV1.14 |  | COPY PV1.14 to PV1.14 |
| Admitting Doctor – ID Number | PV1.17.0 |  | COPY PV1.17.0 to PV1.17.0  Append “MS” to the front of the ID Number |
| Admitting Doctor – Family Name | PV1.17.1 |  | COPY PV1.17.1 to PV1.17.1 |
| Admitting Doctor – Given Name | PV1.17.2 |  | COPY PV1.17.2 to PV1.17.2 |
| Admitting Doctor – Second and Further Name | PV1.17.3 |  | COPY PV1.17.3 to PV1.17.3 |
| Patient Type | PV1.18 |  | COPY PV1.18 to PV1.18 |
| ZIN Segment |  | Y |  |
| Expanded Insurance Plan ID  Financial Class – Financial Class Code  Financial Class – Effective Date | ZIN.58  PV1.20.0  PV1.20.1 |  | IF 1(0)ZIN.58.4 eq “NHPI”  1(0).ZIN.58.0 🡪 soarf\_inv\_fin\_class.tbl 🡪 PV1.20.0  COPY 1(0).ZIN.58.5 to PV1.20.1 |
| Discharge Disposition | PV1.36 |  | COPY PV1.36 to PV1.36 |
| Servicing Facility | PV1.39 |  | COPY @fac to PV1.39 |
| Admit Date/Time | PV1.44 |  | COPY PV1.44 to PV1.44 |
| Discharge Date/Time | PV1.45 |  | COPY PV1.45 to PV1.45 |
| IN1 Segment |  | Y |  |
| Set ID | IN1.1 |  | IF MSH.9.1 ne “A02” && MSH.9.1 ne “A03” && MSH.9.1 ne “A10”  COPY IN1.1 to IN1.1 |
| Insurance Company Name | IN1.4 |  | COPY IN1.4.0 to IN1.4 |
| Null out Admit Date/Time | PV1.44 |  | IF MSH.9.1 eq “A11”  COPY “” to PV1.44 |
| Null Out Discharge Date/Time | PV1.45 |  | IF MSH.9.1 eq “A01” or MSH.9.1 eq “A13”  COPY “” to PV1.45 |

## 4.3 Sample Message

INBOUND:

MSH|^~\&|SOARF|BRM|||201805241020||ADT^A08|c86af857-4a38-47cf-a6b6-ed2d166c7da9|P|2.7||1

EVN|A08|201805241020||RVE|PMMC|201805241020|PMMC\_EPROB0A5

PID|1|810017967^^^900000^PN|7000017537^^^BCHS^MR||MATNEYTEST^ORLA^^^^^L^^^20180430||19400209|F||White|2995 DREW ST^^Pinellas Park^FL^33782^USA^M^^Pinellas^^^20180430||^PRN^PH^^1^727^2892587||EN|S|Baptist|6000037725^^^BCHS^VCD^^20180521||||Unknown||N|0|||||N|N||201805081410

PD1||||||||N

PV1|1|I|ACB^0220^01^BRM|Urgent|||056095^Garas^Tarek^G^^PRN^1295707230^NPI^056095^PRDOC^BRM|||MED|||N|RP|||056095^Garas^Tarek^G^^PRN^1295707230^NPI^056095^PRDOC^BRM|I|5103808337^^^504^VN^^20180521|HMO||||||||||||||||AHR|||20874|||||201805180841|201805221341||||||V

PV2|||^TEST||||~~~~false||||||0||N||||||N||BR Inpatient^L^64842^^^900000^XX~^^1558734095^^^900004^NPI~^^BARTOW REGIONAL MEDICAL CENTER^^^439^NOAName|Checked out|||||||N|||||N||||Acute

ROL||UC|PP|070859^D'Altilio^Colette^Tara^^PRN^1740251008^NPI|201805081412||||Podiatrist|||^WPN^PH^^0^954^9339033~^ORN^FX^^0^954^9340060

ROL||UC|AT|056095^Garas^Tarek^G^^^MD^^183^L^^^PRN^^^^20171011~13774^^^^^^^^900000^^^^DN~ME82428^^^^^^^^195^^^^LN~1295707230^^^^^^^^900004^^^^NPI~81672^^^^^^^^769^^^^PRN~81672^^^^^^^^777^^^^PRN~81672^^^^^^^^745^^^^PRN~81672^^^^^^^^779^^^^PRN~81672^^^^^^^^2127^^^^PRN~81672^^^^^^^^781^^^^PRN~81672^^^^^^^^748^^^^PRN~81672^^^^^^^^771^^^^PRN~81672^^^^^^^^783^^^^PRN~81672^^^^^^^^772^^^^PRN~81672^^^^^^^^775^^^^PRN~81672^^^^^^^^757^^^^PRN~81672^^^^^^^^737^^^^PRN~81672^^^^^^^^684^^^^PRN~81672^^^^^^^^1316^^^^PRN~81672^^^^^^^^1325^^^^PRN~81672^^^^^^^^2077^^^^PRN~81672^^^^^^^^2075^^^^PRN~81672^^^^^^^^2076^^^^PRN~81672^^^^^^^^581^^^^PRN~81672^^^^^^^^1505^^^^PRN~81672^^^^^^^^2078^^^^PRN~056095^^^^^^^^13280^^^^PRN~056095^^^^^^^^13281^^^^PRN~056095^^^^^^^^64837^^^^PRN|201805180841|201805221341|||Phys|||^WPN^PH^^0^863^6807744~^ORN^FX^^0^866^7118587

ROL||UC|AD|056095^Garas^Tarek^G^^^MD^^183^L^^^PRN^^^^20171011~13774^^^^^^^^900000^^^^DN~ME82428^^^^^^^^195^^^^LN~1295707230^^^^^^^^900004^^^^NPI~81672^^^^^^^^769^^^^PRN~81672^^^^^^^^777^^^^PRN~81672^^^^^^^^745^^^^PRN~81672^^^^^^^^779^^^^PRN~81672^^^^^^^^2127^^^^PRN~81672^^^^^^^^781^^^^PRN~81672^^^^^^^^748^^^^PRN~81672^^^^^^^^771^^^^PRN~81672^^^^^^^^783^^^^PRN~81672^^^^^^^^772^^^^PRN~81672^^^^^^^^775^^^^PRN~81672^^^^^^^^757^^^^PRN~81672^^^^^^^^737^^^^PRN~81672^^^^^^^^684^^^^PRN~81672^^^^^^^^1316^^^^PRN~81672^^^^^^^^1325^^^^PRN~81672^^^^^^^^2077^^^^PRN~81672^^^^^^^^2075^^^^PRN~81672^^^^^^^^2076^^^^PRN~81672^^^^^^^^581^^^^PRN~81672^^^^^^^^1505^^^^PRN~81672^^^^^^^^2078^^^^PRN~056095^^^^^^^^13280^^^^PRN~056095^^^^^^^^13281^^^^PRN~056095^^^^^^^^64837^^^^PRN|201805180841|201805221341|||Phys|||^WPN^PH^^0^863^6807744~^ORN^FX^^0^866^7118587

OBX|1|ST|2ACSTCOI^^LSFUSERDATAE||1305||||||R

OBX|2|ST|2ACSTCOP^^LSFUSERDATAE||20||||||R

OBX|3|ST|2ACSTDED^^LSFUSERDATAE||500||||||R

OBX|4|ST|2ACSTMAX^^LSFUSERDATAE||5000||||||R

OBX|5|ST|2ACSTPER^^LSFUSERDATAE||10||||||R

OBX|6|ST|2BALADUE^^LSFUSERDATAE||1825||||||R

OBX|7|CE|2COPAYTY^^LSFUSERDATAE||EPRO Calc||||||R

OBX|8|ST|2PAYMENT^^LSFUSERDATAE||1825||||||R

OBX|9|ST|2PMTRECD^^LSFUSERDATAE||0||||||R

OBX|10|CE|AdditionalData1^^LSFUSERDATAE||N||||||R

OBX|11|NM|9272-6^Apgar 1^LN||0

OBX|12|NM|9274-2^Apgar 5^LN||0

DG1|1||I10^Essential (primary) hypertension^ICD10-CM||2|Adm|||||||||1

DG1|2||I10^Essential (primary) hypertension^ICD10-CM||2|Fnl|||||||||1

GT1|1|7000017537^^^504^MR^^20180430~810017967^^^900000^PN^^20180430|MATNEYTEST^ORLA^^^^^L^^^20180430||2995 DREW ST^^Pinellas Park^FL^33782^USA^M^^Pinellas^^^20180430|^PRN^PH^^1^727^2892587||19400209|F|P|6||||||||||||||N|||||S||||||EN|||||Baptist|||Unknown|||||||||||White

IN1|1|48^Aetna HMO|410^^^900000^XX^^20120228~NLU00001^^^184^CRI^^20140328~066033492^^^900001^TX^^20140328|Aetna^L^410^^^900000^XX|PO BOX 14079^^LEXINGTON^KY^405124079^USA^M^^^^POLCS-M~PO Box 14079^^Lexington^KY^405124079^USA^M^^^^HRefund|^^^^^^^POLCS-M~Aetna^^^^^^^HRefund|^WPN^PH^^0^800^6240756^^POLCS-M~^WPN^PH^^0^800^6240756^^HRefund||Aetna HMO||||||Health|MATNEYTEST^ORLA^^^^^L^^^20180430|6|19400209|2995 DREW ST^^Pinellas Park^FL^33782^USA^M^^Pinellas|||1|||||||20180521|||||||154698769|||||||F||true||||7000017537^^^504^MR^^20180430~810017967^^^900000^PN^^20180430

IN2|||||||||||||||||||||||||60054|NOCD||||||||EN|||||Baptist|||Unknown|S||||||||||||||||||||^PRN^PH^^1^727^2892587||||||||White|6

ZIN||||||||||||||||||||||||||||||||||||||||||||||||||||^^policyPlanName^policyPlanName^Aetna HMO||||||48^^^900000^HPI^20000101~HMO^^^183^NHPI^20140313

PDA||||||N|||N

ZPV|||||||||||||||||||||||||||||||||||||||||||||||||""|UNKNOWN|||||||||||^^mostCurrEncTypeCd^mostCurrEncTypeCd^IP||||||||5103808337^^No SCD^504^ZAVN^^20180521||201805180841||||Cmplt

ZID|7000017537^^^504^MR^^20180430~810017967^^^900000^PN^^20180430

OUTBOUND:

MSH|^~\&|SOARF|BRM|||201805241020||ADT^A08|c86af857-4a38-47cf-a|P|2.4

EVN|A08|201805241020||RVE|PMMC|201805241020|PMMC\_EPROB0A5

PID|1||810017967||MATNEYTEST^ORLA||19400209|F|||2995 DREW ST^^Pinellas Park^FL^33782|||||||6000037725

PV1|||ACB^0220^01^BRM||||MS056095^Garas^Tarek^G|||MED||||RP|||MS056095^Garas^Tarek^G|I||H^20140313||||||||||||||||AHR|||BRM|||||201805180841|201805221341

IN1|1|||Aetna

# 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** |
|  |  |  |  |
| optum\_16\_p | 24/7 | SUPPORT:  Primary: Cerner Core/HIM support on call group  Secondary: For Severity 1 (System Up - Critical or Entire System Down) issues, call phone: 888.224.6300 ext 2  Support portal: https://support.alifemedical.com Identify the issue as "support break/fix" via an HL7 interface that is DOWN. | Computer Assisted Coding |

# Appendix A: Risks and Concerns

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Name** |  |  | | |  |  |  |  |
| **Number** | **Risk / Concern** | **Comment** | **Mitigation** | | |  |  |  |
| RC.2013.1.0 |  |  | |  | |  |  |  |

# 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