**ADT\_Soarian\_HillRom Reqs**

**1.0**

**Prepared By: Rich Allison**

**Date: 5/21/2018**

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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 | 5/21/2018 | Rich Allison | Originally Created |
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|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

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

## 1.2 Project Scope

Develop an interface for Soarian ADT messages to HillRom.

## 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 HillRom for NBY |

## 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

MRG

PV1

*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 |
| 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 2.3/sms ADT\_A01 – outbound

TCL Scripts:

{ADVFLTR {

{{PATH {PV1:2}} {VALUE {{I E O}}} {MATCHDISP CONTINUE} {NOMATCHDISP KILL}}

{{PATH {PV1:2 PV1:3}} {VALUE {{O} {{}}}} {LOGICAL {&&}} {MATCHDISP KILL} {NOMATCHDISP CONTINUE}}

}

}

{DEBUG 0}

Xlates:

soarf\_hillromnc\_adt.xlt

Tables:

None

### 4.1.4 Cloverleaf Site Location

soarf\_adt\_fac\_19\_p

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Notes** |
| --- | --- | --- | --- |
| MSH Segment |  | Y | PATHCOPY the MSH segment |
| Version ID | MSH.12 |  | COPY “2.3” to MSH.12 |
| Message Type | MSH.9 |  | If A10 change to A01…  IF MSH.9.1 eq “A10”  COPY “A01” to MSH.9.1  COPY “A01” to EVN.1  If A09 or A32 change to A03…  IF MSH.9.1 eq “A09” or MSH.9.1 eq “A32”  COPY “A03” to MSH.9.1  COPY “A03” to EVN.1  COPY EVN.2 to PV1.45 (discharge date/time)  ELSE  COPY PV1.45 to PV1.45  If Cancel Discharge A13, remove the discharge date…  IF MSH.9.1 eq “A13”  COPY “null” to PV1.45 |
| EVN Segment |  | Y | PATHCOPY the EVN segment |
| PID Segment |  | Y |  |
| Patient ID | PID.2 |  | COPY PID.2 to PID.2 |
| Patient Identifier List – ID Number  Patient Identifier List – ID Type Code | PID.3.0  PID.3.4 |  | COPY PID.3.0 to PID.3.0  COPY “MRN” to PID.3.4 |
| Patient Name | PID.5 |  | COPY PID.5 to PID.5 |
| Patient Account Number | PID.18 |  | COPY PID.18 to PID.18 |
| Patient SSN | PID.19 |  | COPY PID.19 to PID.19 |
| MRG Segment |  | Y | PATHCOPY the MRG segment |
| PV1 Segment |  | Y |  |
| Patient Class | PV1.2 |  | COPY PV1.2.0 to PV1.2.0 |
| Assigned Patient Location | PV1.3 |  | COPY PV1.3 to PV1.3 |
| Prior Patient Location | PV1.6 |  | COPY PV1.6 to PV1.6 |
| Admit Date/Time | PV1.44 |  | COPY PV1.44.0 to PV1.44.0 |

## 4.3 Sample Message

INBOUND:

MSH|^~\&|SOARF|50A0|||201805031058||ADT^A02|52c4821d-4faa-4a45-aa56-3ed7b814c7a7|P|2.7||2

EVN|A02|201805031058||XFR|rxc66472|201805031057|9014

PID|1||7000017556^^^504^MR^^20180503~810018074^^^900000^PN^^20180503||NBOBSVTEST^TESTINGNB^^^^^L^^^20180503||19800101|F||White|4567 MANI STREET^^Tampa^FL^33611^USA^M^^Hillsborough^^^20180503||||EN|S|Catholic|6000037603^^^504^VCD^^20180503||||Non HIS or LAT||N|0|||||N|N

PD1||||||||N

PV1|1|I|NB1OSV^NB1OSVRM^A1OSV30^9014|Elective||NB1OSV^NB1OSVRM^A1OSV29^9014|010796^Smith^Gregory^Scott^^^DO^^183^L^^^PRN^^^^20160113~3009^^^^^^^^900000^^^^DN~OS9422^^^^^^^^195^^^^LN~1629062914^^^^^^^^900004^^^^NPI~11474^^^^^^^^769^^^^PRN~11474^^^^^^^^777^^^^PRN~11474^^^^^^^^745^^^^PRN~11474^^^^^^^^779^^^^PRN~11474^^^^^^^^2127^^^^PRN~11474^^^^^^^^781^^^^PRN~11474^^^^^^^^748^^^^PRN~11474^^^^^^^^771^^^^PRN~11474^^^^^^^^783^^^^PRN~11474^^^^^^^^772^^^^PRN~11474^^^^^^^^737^^^^PRN~11474^^^^^^^^684^^^^PRN~11474^^^^^^^^1316^^^^PRN~11474^^^^^^^^775^^^^PRN~11474^^^^^^^^2077^^^^PRN~11474^^^^^^^^581^^^^PRN~11474^^^^^^^^1505^^^^PRN~11474^^^^^^^^757^^^^PRN~11474^^^^^^^^2078^^^^PRN~11474^^^^^^^^1325^^^^PRN~11474^^^^^^^^2076^^^^PRN|||MED|||N|RP|||010796^Smith^Gregory^Scott^^^DO^^183^L^^^PRN^^^^20160113~3009^^^^^^^^900000^^^^DN~OS9422^^^^^^^^195^^^^LN~1629062914^^^^^^^^900004^^^^NPI~11474^^^^^^^^769^^^^PRN~11474^^^^^^^^777^^^^PRN~11474^^^^^^^^745^^^^PRN~11474^^^^^^^^779^^^^PRN~11474^^^^^^^^2127^^^^PRN~11474^^^^^^^^781^^^^PRN~11474^^^^^^^^748^^^^PRN~11474^^^^^^^^771^^^^PRN~11474^^^^^^^^783^^^^PRN~11474^^^^^^^^772^^^^PRN~11474^^^^^^^^737^^^^PRN~11474^^^^^^^^684^^^^PRN~11474^^^^^^^^1316^^^^PRN~11474^^^^^^^^775^^^^PRN~11474^^^^^^^^2077^^^^PRN~11474^^^^^^^^581^^^^PRN~11474^^^^^^^^1505^^^^PRN~11474^^^^^^^^757^^^^PRN~11474^^^^^^^^2078^^^^PRN~11474^^^^^^^^1325^^^^PRN~11474^^^^^^^^2076^^^^PRN|IP|5103808203^^^504^VN^^20180503||||||||||||||||||||9014|||||201805030943|||||||V

PV2|||^TEST||||~~~~false||||||0||N||||||N||NB Inpatient^L^1318^^^900000^XX~^^1437135811^^^900004^NPI~^^MORTON PLANT NORTH BAY HOSP^^^439^NOAName|Checked in|||||||N|||||N||||Acute

ROL||UC|PP|301^No^PCP per pt^^^^MD^^900000^L^^^DN^^^^20140619~555555^^^^^^^^183^^^^PRN~55555^^^^^^^^1316^^^^PRN~55555^^^^^^^^1325^^^^PRN~55555^^^^^^^^581^^^^PRN~55555^^^^^^^^2077^^^^PRN~55555^^^^^^^^2076^^^^PRN~55555^^^^^^^^1505^^^^PRN~55555^^^^^^^^2078^^^^PRN~55555^^^^^^^^684^^^^PRN~55555^^^^^^^^737^^^^PRN|201805030946||||Phys

ROL||UC|AT|010796^Smith^Gregory^Scott^^^DO^^183^L^^^PRN^^^^20160113~3009^^^^^^^^900000^^^^DN~OS9422^^^^^^^^195^^^^LN~1629062914^^^^^^^^900004^^^^NPI~11474^^^^^^^^769^^^^PRN~11474^^^^^^^^777^^^^PRN~11474^^^^^^^^745^^^^PRN~11474^^^^^^^^779^^^^PRN~11474^^^^^^^^2127^^^^PRN~11474^^^^^^^^781^^^^PRN~11474^^^^^^^^748^^^^PRN~11474^^^^^^^^771^^^^PRN~11474^^^^^^^^783^^^^PRN~11474^^^^^^^^772^^^^PRN~11474^^^^^^^^737^^^^PRN~11474^^^^^^^^684^^^^PRN~11474^^^^^^^^1316^^^^PRN~11474^^^^^^^^775^^^^PRN~11474^^^^^^^^2077^^^^PRN~11474^^^^^^^^581^^^^PRN~11474^^^^^^^^1505^^^^PRN~11474^^^^^^^^757^^^^PRN~11474^^^^^^^^2078^^^^PRN~11474^^^^^^^^1325^^^^PRN~11474^^^^^^^^2076^^^^PRN|201805030943||||Phys|||^WPN^PH^^0^727^2986612~^ORN^FX^^0^727^4618085

ROL||UC|AD|010796^Smith^Gregory^Scott^^^DO^^183^L^^^PRN^^^^20160113~3009^^^^^^^^900000^^^^DN~OS9422^^^^^^^^195^^^^LN~1629062914^^^^^^^^900004^^^^NPI~11474^^^^^^^^769^^^^PRN~11474^^^^^^^^777^^^^PRN~11474^^^^^^^^745^^^^PRN~11474^^^^^^^^779^^^^PRN~11474^^^^^^^^2127^^^^PRN~11474^^^^^^^^781^^^^PRN~11474^^^^^^^^748^^^^PRN~11474^^^^^^^^771^^^^PRN~11474^^^^^^^^783^^^^PRN~11474^^^^^^^^772^^^^PRN~11474^^^^^^^^737^^^^PRN~11474^^^^^^^^684^^^^PRN~11474^^^^^^^^1316^^^^PRN~11474^^^^^^^^775^^^^PRN~11474^^^^^^^^2077^^^^PRN~11474^^^^^^^^581^^^^PRN~11474^^^^^^^^1505^^^^PRN~11474^^^^^^^^757^^^^PRN~11474^^^^^^^^2078^^^^PRN~11474^^^^^^^^1325^^^^PRN~11474^^^^^^^^2076^^^^PRN|201805030943||||Phys|||^WPN^PH^^0^727^2986612~^ORN^FX^^0^727^4618085

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

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

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

ZPV|||||||||||||||||||||||||||||||||||||||||||||||||""|BCBCE2REV1015LK|||||||||||^^mostCurrEncTypeCd^mostCurrEncTypeCd^IP||||||||5103808203^^No SCD^504^ZAVN^^20180503||201805030943

OUTBOUND:

MSH|^~\&|SOARF|NBY|||201802221030||ADT^A02|8542ff82-98b9-4da0-8|P|2.3||2EVN|A02|201802221030||XFR|rxc66472|201802221029PID||810017149^^^900000^PN|7000017166^^^^MRN||NBOBSVTEST^TESTINGNB ^^^^^L||||||||

|||||6000036880^^^BCHS^VCDPV1||E|ERHN^H06^01^NBY|||ERHN^H05^01^NBY||||||||||||||||||||||||||||||||||||||201802221017

# 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\_fac\_19\_p | 24/7 | SUPPORT:  Primary: Medical Device Integration Services 727-467-4000, open a critical ticket  Secondary: 800-445-3720, option 3, option 1  account #: 607706 | INTERFACE DESCRIPTION:  ADT (Admission, discharges and Transfers) from Soarian to HillRom (nurse call application) |

# 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