**ADT\_Soarian\_SpaceLabs Reqs**

**1.0**

**Prepared By: Rich Allison**

**Date: 6/4/2018**

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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** |
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|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

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

## 1.2 Project Scope

Develop an interface for Soarian ADT messages to SpaceLabs.

## 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 SpaceLabs for SAH |

## 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

*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 |
| A06 | Change an outpatient to an inpatient |
| A08 | Update patient information |
| A10 | Patient arriving - tracking |

### 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

TCL Scripts:

{ADVFLTR {

{{PATH {MSH:3}} {VALUE {{ISU SIP CRC BHO WBH BLM}}} {MATCHDISP KILL} {NOMATCHDISP CONTINUE}}

}

}

{DEBUG 0}

Xlates:

soarf\_12lead\_adt\_rev2.xlt

Tables:

None

### 4.1.4 Cloverleaf Site Location

soarf\_adt\_ent\_18\_p

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Notes** |
| --- | --- | --- | --- |
| MSH Segment |  | Y | PATHCOPY the MSH segment |
| EVN Segment |  | Y | PATHCOPY the EVN segment |
| MSH Message Type – Trigger Event  EVN – Event Type Code | MSH.9.1  EVN.1 |  | Convert A10 to an A01, spacelabs does not accept an A10…  IF MSH.9.1 eq “A10”  COPY “A01” to MSH.9.1  COPY “A01” to EVN.1 |
| PID Segment |  | Y |  |
| Patient ID – ID Number  Patient Identifier List | PID.2.0  PID.3 |  | Capture CPI Number for use instead of MRN… COPY PID.2.0 to PID.3 |
| Patient Name | PID.5 |  | COPY PID.5 to PID.5 |
| Date/Time of Birth | PID.7 |  | COPY PID.7 to PID.7 |
| Administrative Sex | PID.8 |  | COPY PID.8 to PID.8 |
| Patient Account Number | PID.18 |  | COPY PID.18.0 to PID.18 |
| PV1 Segment |  | Y |  |
| Patient Class | PV1.2 |  | COPY PV1.2 to PV1.2 |
| Assigned Patient Location – Point of Care | PV1.3.0 |  | COPY “ED” to PV1.3.0 |
| Attending Doctor | PV1.7 |  | COPY PV1.7 to PV1.7 (formatted by the FixDoc proc in xlates.tcl) |
| Admitting Doctor | PV1.17 |  | COPY PV1.17 to PV1.17 (formatted by the FixDoc proc in xlates.tcl) |
| Visit Number | PV1.19 |  | The vendor needs to have PV1.19 populated all the time, so I am moving CPI to this field in addition to PID.18…  COPY PID.3 to PV1.19 |
| Discharge Disposition | PV1.36 |  | Vendor requests to hardcode discharge disposition…  COPY “10” to PV1.36 |
| Admit Date/Time | PV1.44 |  | COPY PV1.44 to PV1.44 |
| Discharge Date/Time | PV1.45 |  | COPY PV1.45 to PV1.45 |
|  |  |  |  |

## 4.3 Sample Message

INBOUND:

MSH|^~\&|SOARF|MPH|||201806041027||ADT^A08|759bbefd-4fa2-404f-ae2f-ef0f5fe11337|P|2.7||1

EVN|A08|201806041027||RVE|lxm57363|201806041025|9027

PID|1|810068243^^^900000^PN|7000057655^^^BCHS^MR||MODIFIER^LISA^^^^^L^^^20180604||19631112|F||White|100 MAIN STREET^^Oldsmar^FL^34677^USA^M^^Pinellas^^^20180604||^PRN^PH^^1^727^5844946||EN|M|CAT|6000087796^^^BCHS^VCD^^20180604||||Non HIS or LAT||N|0|||||N|N

PD1||||||||N

PV1|1|I|BAR3^B378^01^MPH|Elective|||007140^Francis^Erika^McFarland^^PRN^1558397448^NPI^02636^PRDOC^MPH|||MED|||N|RP|||007140^Francis^Erika^McFarland^^PRN^1558397448^NPI^02636^PRDOC^MPH|I|5400000042^^^504^VN^^20180604|Mcare A||||||||||||||||AHR|||9027|||||201806010851|201806040858||||||V

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

ROL||UC|PP|073654^Goldstein^Andrew^H^^PRN^1518951284^NPI|201806040852||||Phys|||^WPN^PH^^0^623^2073000~^ORN^FX^^0^623^2073921

ROL||UC|AT|007140^Francis^Erika^McFarland^^^MD^^183^L^^^PRN^^^^20170217~2277^^^^^^^^900000^^^^DN~ME85472^^^^^^^^195^^^^LN~1558397448^^^^^^^^900004^^^^NPI~02636^^^^^^^^769^^^^PRN~02636^^^^^^^^777^^^^PRN~02636^^^^^^^^745^^^^PRN~02636^^^^^^^^779^^^^PRN~02636^^^^^^^^2127^^^^PRN~02636^^^^^^^^781^^^^PRN~02636^^^^^^^^748^^^^PRN~02636^^^^^^^^771^^^^PRN~02636^^^^^^^^783^^^^PRN~02636^^^^^^^^772^^^^PRN~02636^^^^^^^^737^^^^PRN~02636^^^^^^^^684^^^^PRN~02636^^^^^^^^1316^^^^PRN~02636^^^^^^^^775^^^^PRN~02636^^^^^^^^2077^^^^PRN~02636^^^^^^^^581^^^^PRN~02636^^^^^^^^1505^^^^PRN~02636^^^^^^^^757^^^^PRN~02636^^^^^^^^2078^^^^PRN~02636^^^^^^^^1325^^^^PRN~02636^^^^^^^^2076^^^^PRN|201806010851|201806040858|||Phys|||^WPN^PH^^0^727^2986612~^ORN^FX^^0^727^4618085

ROL||UC|AD|007140^Francis^Erika^McFarland^^^MD^^183^L^^^PRN^^^^20170217~2277^^^^^^^^900000^^^^DN~ME85472^^^^^^^^195^^^^LN~1558397448^^^^^^^^900004^^^^NPI~02636^^^^^^^^769^^^^PRN~02636^^^^^^^^777^^^^PRN~02636^^^^^^^^745^^^^PRN~02636^^^^^^^^779^^^^PRN~02636^^^^^^^^2127^^^^PRN~02636^^^^^^^^781^^^^PRN~02636^^^^^^^^748^^^^PRN~02636^^^^^^^^771^^^^PRN~02636^^^^^^^^783^^^^PRN~02636^^^^^^^^772^^^^PRN~02636^^^^^^^^737^^^^PRN~02636^^^^^^^^684^^^^PRN~02636^^^^^^^^1316^^^^PRN~02636^^^^^^^^775^^^^PRN~02636^^^^^^^^2077^^^^PRN~02636^^^^^^^^581^^^^PRN~02636^^^^^^^^1505^^^^PRN~02636^^^^^^^^757^^^^PRN~02636^^^^^^^^2078^^^^PRN~02636^^^^^^^^1325^^^^PRN~02636^^^^^^^^2076^^^^PRN|201806010851|201806040858|||Phys|||^WPN^PH^^0^727^2986612~^ORN^FX^^0^727^4618085

OBX|1|CE|AdditionalData1^^LSFUSERDATAE||N||||||R

OBX|2|NM|9272-6^Apgar 1^LN||0

OBX|3|NM|9274-2^Apgar 5^LN||0

OBX|4|CE|1ESTATE^^LSFUSERDATAP||N||||||R

GT1|1|7000057655^^^504^MR^^20180604~810068243^^^900000^PN^^20180604|MODIFIER^LISA^^^^^L^^^20180604||100 MAIN STREET^^Oldsmar^FL^34677^USA^M^^Pinellas^^^20180604|^PRN^PH^^1^727^5844946||19631112|F|P|6||||||||||||||N|||||M||||||EN|||||CAT|||Non HIS or LAT|||||||||||White

IN1|1|53^Medicare A|430^^^900000^XX^^20120228~593514335^^^900001^TX^^20140328|Medicare^L^430^^^900000^XX|PO BOX 2711^^JACKSONVILLE^FL^32231^USA^M^^^^POLCS-M~PO Box 2711^^Jacksonville^FL^32231^USA^M^^^^HRefund|^^^^^^^POLCS-M|^WPN^PH^^0^800^7721213^^POLCS-M||Medicare A||||||Mcare A|MODIFIER^LISA^^^^^L^^^20180604|6|19631112|100 MAIN STREET^^Oldsmar^FL^34677^USA^M^^Pinellas|||1|||||||20180604|||||||951357456A|||||||F||true||||7000057655^^^504^MR^^20180604~810068243^^^900000^PN^^20180604

IN2||||||951357456A|||||||||||||||||||99999|0001||||||||EN|||||CAT|||Non HIS or LAT|M||||||||||||||||||||^PRN^PH^^1^727^5844946||||||||White|6

ZIN||||||||||||||||||||||||||||||||||||||||||||||||||||^^policyPlanName^policyPlanName^Medicare A||||||53^^^900000^HPI^20000101~Mcare^^^183^NHPI^20140314~FLA00000^^^184^CRI^20140407

IN1|2|52^Medicare B|430^^^900000^XX^^20120228~593514335^^^900001^TX^^20140328|Medicare^L^430^^^900000^XX|PO BOX 2711^^JACKSONVILLE^FL^32231^USA^M^^^^POLCS-M~PO BOX 44141^^JACKSONVILLE^FL^32231^USA^M^^^^HRefund|^^^^^^^POLCS-M|^WPN^PH^^0^800^7721213^^POLCS-M~^WPN^PH^^0^877^8474992^^HRefund||Medicare B||||||Mcare B|MODIFIER^LISA^^^^^L^^^20180604|6|19631112|100 MAIN STREET^^Oldsmar^FL^34677^USA^M^^Pinellas|||2|||||||20180604|||||||951357456A|||||||F||true||||7000057655^^^504^MR^^20180604~810068243^^^900000^PN^^20180604

IN2||||||951357456A|||||||||||||||||||99999|0114||||||||EN|||||CAT|||Non HIS or LAT|M||||||||||||||||||||^PRN^PH^^1^727^5844946||||||||White|6

ZIN||||||||||||||||||||||||||||||||||||||||||||||||||||^^policyPlanName^policyPlanName^Medicare B||||||52^^^900000^HPI^20000101~Mcare^^^183^NHPI^20140314~FLB00000^^^184^CRI^20140407

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

ZPV|||||||||||||||||||||||||||||||||||||||||||||||||""|BCBCE2MMS1001LK|||||||||||^^mostCurrEncTypeCd^mostCurrEncTypeCd^IP||||||||5400000042^^No SCD^504^ZAVN^^20180604||201806010851

ZID|7000057655^^^504^MR^^20180604~810068243^^^900000^PN^^20180604

OUTBOUND:

MSH|^~\&|SOARF|MPH|||201806041027||ADT^A08|759bbefd-4fa2-404f-ae2f-ef0f5fe11337|P|2.7|

EVN|A08|201806041027||RVE|lxm57363|201806041025|9027\x0dPID|||810068243||MODIFIER^LISA^^^^^L^^^20180604||19631112|F||||||||||6000087796

PV1||I|ED||||007140^Francis||||||||||007140^Francis||810068243|||||||||||||||||10||||||||201806010851|201806040858

# 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\_p | 24/7 | SUPPORT:  Primary: IS-Medical Device Integration on call support  Secondary: Spacelab support  1-800-522-7025 Option 2  site name: BayCare | ADT (Admission, discharges and Transfers) from SOARIAN to SpaceLabs (vital sign monitoring) |

# 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