**WebReg to Soarian ADT Requirements**

**Version 1.0**

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# **Document Control**

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## Project Distribution List

## Document Version Control

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# 1. Introduction

## 1.1 Purpose

The purpose of this document is to provide the HL7 details which support the Web Reg ADT interface to Soarian. The intended audience includes anyone wishing to know more about said integration.

## 1.2 Project Scope

The scope of the integration that is defined in this Integration Development Build Book (IDBB) includes the flat file that is sent from Web Reg to Cloverleaf and is manipulated in Cloverleaf, then sent outbound to Soarian in real time. There are no other integration components for WebReg within Cloverleaf.

## 1.3 Terminology Standards

### 1.3.1 Acronyms –N/A

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

### 1.3.2 Glossary

Web Reg – Web Registration

## 1.4 Document References –N/A

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 -N/A

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 –N/A

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.2018.4.2.0 | WebReg facilities | Using a crosswalk to capture the proper Soarian facility values to populate MSH.4 |
| FR.2018.4.2.1 |  |  |
| FR.2018.4.2.2 |  |  |

## 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.2018.4.2.0 | Patient category | This interface is only utilized for Obstetric patients who complete an online registration on the BayCare website. No other categorirs of patients are sent across this interface. |
| NFR.2018.4.2.1 | Rebounds | These preadmit transactions will remind out of Soarian to any downstream application that is set up to receive A05 events, unless an advance filter has been set up to block these transactions. |

## 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 –N/A

|  |  |
| --- | --- |
| 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 –N/A

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

[{NK1}]

*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** |
| A05 | Preadmit notice |

### 4.1*.*3 Cloverleaf Configuration Files

Cloverleaf Configuration Files:

* Variants: inbound- VRL webreg.vrl and outbound- HL7 2.6 Soarian ADT\_A05
* Xlates: webreg\_soarf\_adt.xlt

### 4.1.4 Cloverleaf Site Location

Cloverleaf site location: soarf\_outbound\_23\_p

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Notes** |
| --- | --- | --- | --- |
| Field Separator | MSH.1 | Y | Hard coding “|” |
| Encoding Characters | MSH.2 | Y | Hard coding “^~\&” |
| Sending Facility | MSH.4 | Y | Sending input value through a table, (webreg\_soarf\_facility.tbl) and populating the outbound table value outbound |
| Receiving Application | MSH.5 | Y | Sending the source value from WebReg outbound |
| Date/Time of Message | MSH.7 | Y | Take the creation date inbound and reformat with a TCL proc in the format YYYYMMDDHHMMSS outbound |
| Message Type – Message Code | MSH.9.0 | Y | Hard coding “ADT” |
| Message Control ID | MSH.10 | Y | Copying the patient’s last name, with the red\_id\_code including some TCL code that takes the currently formatted date and time and concatenates all data elements together outbound |
| Processing ID | MSH.11 | Y | Hard coding “P” |
| Version ID | MSH.12 | Y | Hard coding “2.7” |
| Recoded Date/Time | EVN.2 | Y | Sending @now variable to EVN.2. Copying EVN.2 with TCL proc that converts the date/time to a length of 12. |
| Patient Identifier List | PID.3 | Y | If Patient\_CPI does not = null, copy Patient\_CPI to subfiend 0, hard code “900000” to subfield 3 and hard code “PN” to subfield 4. Else, copy the Reg\_id\_code to subfield 0, hard code “3894” to subfield 3 and hard code “ZPN” to subfield 4. \*3894 is used for production and 3744 is used for test\*  If SSN does not = null, hard code “ssn” to iteration 1 of subfield 0, hard code “900001” to iteration 1 of subfield 3 and hard code “SS” to iteration 1 of subfield 4. |
| Patient Name | PID.5 |  | Copy from patinet\_name\_last with TCL proc that changes lower case to upper case in subfield 0, copy patient\_name\_first with TCL proc that changes lower case to upper case in subfield 1, copy from patient\_name\_mi with TCL proc that changes lower case to upper case in subfield 2 and hard code “L” to subfield 6. |
| Date/Time of Birth | PID.7 |  | Copy from patient\_name\_first with TCL proc that changes lower case to upper case |
| Administrative Sex | PID.8 | Y | Copy from gender |
| Race | PID.10 | Y | Copy race\_code and send through a table (soarf\_inv\_race) and copy the output value outbound |
| Patient Address | PID.11 | Y | Copy patient\_address\_address1 with TCL proc that changes lower case to upper case in subfield 0, copy patient\_address\_address2 with TCL proc that changes lower case to upper case in subfield 1, copy patient\_address\_city with TCL proc that changes lower case to upper case in subfield 2, copy patient\_address\_state with TCL proc that changes lower case to upper case in subfield 3, copy patient\_address\_zipcode with TCL proc that changes lower case to upper case in subfield 4 and hard code “M” in subfield 6. |
| Phone Number – Home | PID.13 | Y | Send patient\_phone to an @area and @phnum variable with TCL proc that splits phone number by area code.  If @phnum variable is not = to null, hard code “PRN” to subfield 1, hard code “1” to subfield 2 and copy 1 with @area and @phnum into subfields 4, 5 and 6.  If e\_mail is not = null, hard code “NET” to iteration 1 subfield 1, hard code “Internet” to iteration 1 subfield 2 and and copy e\_mail to subfield 1 iteration 3. |
| Marital Status | PID.16 | Y | Copy from marital\_status |
| Name | NK1.2 | Y | Copy from primary\_contact\_last with TCL proc that changes lower case to upper case in subfield 0 and copy primary\_contact\_first with TCL proc that changes lower case to upper case in subfield 1 |
| Relationship | NK1.3 | Y | Copy from primary\_contact\_relationship and send through a crosswalk table (webreg\_soarf\_NOK\_relation.tbl) and send output |
| Address | NK1.4 | Y | Copy from patient\_contact\_address\_address1 with TCL proc that changes lower case to upper case in subfield 0, copy patient\_contact\_address\_city with TCL proc that changes lower case to upper case in subfield 2, copy patient\_contact\_address\_state with TCL proc that changes lower case to upper case in subfield 3, copy patient\_contact\_address\_zipcode with TCL proc that changes lower case to upper case in subfield 4 |
| Phone Number | NK1.5 | Y | Copy from primary\_contact\_phone\_number with TCL proc that formats the phone number with parenthesis around area code and dash.  If primary\_contact\_phone\_number does not = null, hard code “PRN” to subfield 1 and hard code “PH” to subfield 2. |
| Contact Role | NK1.7 | Y | Only move emergency contact when there is a primary. If primary\_contact\_last does not = null, hard code “L” in NK1.2.6, hard code “M” in NK1.4.6 and hard code “Emergency Contact 1” outbound |
| Patient Class | PV1.2 | Y | Hard code “O” |
| Varies | varies | Y | Send transaction\_code to an @transcode variable  **\*\*\*Maternity reg logic\*\*\***  If @transcode = P, hard code “WebReg OB” in MSH.3, hard code “A05” in MSH.9.1 and EVN.1, hard code “311” in PV1.7.0, hard code “900000” to PV1.7.8, hard code “DN” to PV1.7.12. If FAC\_id = SJW, hard code “OBO” in PV1.10, else hard code “MAT” in PV1.10. Hard code “311” in PV1.17.0, hard code “900000” in PV1.17.8, hard code “DN” in PV1.17.12, copy from FAC\_id and send through a crosswalk table (webreg\_soarf\_enc\_loc.tbl) to PV1.39, copy from delivery\_date to PV1.44 with TCL proc that formats the date as CCYYMMDD1200, copy Reg\_id\_code to PV1.50.0, hard code “3744” in PV1.50.3, hard code “ZVN” in PV1.50.4, hard code “PREGNANT” in PV2.3.1, hard code “WebReg OB” in PV2.7.2, copy from FAC\_id and send through a crosswalk table (webreg\_soarf\_enc\_prov.tbl) to PV2.23.  **\*\*\*Surgery reg logic\*\*\***  If @transcode = S, hard code “WebReg SURG” in MSH.3, hard code “A08” in MSH.9.1, hard code “A08” in EVN.1.0, hard code “WebReg SURG” in EVN.5, copy from delivery\_date to EVN.6 with TCL proc that formats the date as CCYYMMDD2300, if fin\_number does not = null, copy fin\_number to PID.18.0, hard code “504” to PID.18.3, hard code “VCD” to PID.18.4, copy @null to PV1.10 and hard code “WebReg SURG” in PV2.7.2. |

## 4.3 Sample Message

Due to lack of TEST transactions, I had to use a PROD message but have removed PHI.

**INBOUND:**

Facility;67133;FirstName;LastName;M;Address;;City;State;ZipCode;;County;FirstName;LastName;M;SSN;;DOB;F;(727)123-4567;email@gmail.com;M;W;Rel;LastName, FirstName;Due Date;LastName;FirstName;L;Address;;City;State;ZipCode;;(727)123-4567;H;LastName;FirstName;mi;Address;;City;State;ZipCode;;(727)123-4567;M;F;Business;Address;;City;State;ZipCode;;(888)999-9999;;Y;Insurnace Co;PO Box 99999;;City;State;ZipCode;;(888)999-9999;;768300;Patient’s Full Name;Y;01;FirstName;LastName;Mi;Address;;City;State;ZipCode;;(727)123-4567;DOB;SSN;F;Business;Address;;City;State;ZipCode;;(888)999-9999;;N;;;;;;;;;;;;N;;;;;;;;;;;;;;;;;;;;;;;;;Reg Date;;P;;;;;;;;;;;;;;;;;;;;;;;;;;;;;Occupation;BayCare CPI Number;

**OUTBOUND:**

MSH|^~\&|WebReg OB|A080|MPH||20180330000000||ADT^A05|LastName-67133-20180402115937756691|P|2.7

EVN|A05|201804021159

PID||| BayCare CPI Number ^^^900000^PN~SSN^^^900001^SS||LastName^FirstName ^Mi^^^^L||DOB|F||Race|Address^^City^State^ZipCode^^M||^PRN^PH^^1^727^1234567~^NET^Internet^email@gmail.com|||M

NK1||LastName^FirstName^^^^^L|W|Address^^City^State^ZipCode^^M|(727)123-4567^PRN^PH||Emergency Contact 1

PV1||O|||||311^^^^^^^^900000^^^^DN|||MAT|||||||311^^^^^^^^900000^^^^DN||||||||||||||||||||||Morton Plant Hosp|||||Due date1200||||||67133^^^3894^ZVN

PV2|||^PREGNANT||||~~WebReg OB||||||||||||||||MP SDS

# 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** |
|  |  |  |  |
|  |  |  |  |

# Appendix A: Risks and Concerns –N/A

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

# Appendix B: Issues List –N/A

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