**GE RIS Soarian DFT Requirements**

**Version 1.0**

**Prepared By: Rich Allison**

**Date: 5/10/2017**

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# **Document Control**

## Resources

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Email** |
| Rich Allison | Enterprise Integration Team Analyst | rich.allison@baycare.org |
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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 5/10/2017 | Rich Allison | Originally Created |
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|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

GE RIS charges to Soarian

## 1.2 Project Scope

Send DFT charge transactions from GE RIS to Soarian.

## 1.3 Terminology Standards

### 1.3.1 Acronyms

**DFT** – Detail Financial Transaction; describes a financial transaction transmitted between the Order Filler and the Charge Processor.

**CG** – Charge message

**CD** – Credit 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

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

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** |

## 3.2 Non-Functional Requirements

Provide concise detail for the below non-functional requirements. 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. Please see the reference document located on the Integration SharePoint server: <insert link to document here>

### 3.3.1 Inbound to the BayCare Cloverleaf From GE RIS

* TCP MLLP Server Connection

### 3.3.2 Outbound to Soarian

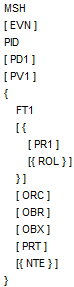
* TCP MLLP Server Connection

# 4. HL7 Messaging

## 4.1 Messaging Format

### 4.1.1 Segments

The segments utilized for this interface are:



*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header*

*EVN – Event segment*

*PID – Patient ID segment*

*PV1 – Patient Visit segment*

*FT1 – Financial Transaction segment*

*PR1 – Procedures segment*

*ROL – Role segment*

*ORC – Common Order segment*

*OBR – Observation Request segment*

*OBX – Observation segment*

*PRT – Participation segment*

*NTE – Notes and Comments 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** |
| DFT^P03 | Post detailed financial transaction(s) |
|  |  |

### 4.1*.*3 Cloverleaf Configuration Files

idxrad\_soarf\_dft.xlt

HL7 2.5.1/Soarian DFT\_P03 – Variant

idxrad\_soarf\_charges.tbl – Provides the Soarian gen org sys ID for each facility

### 4.1.4 Cloverleaf Site Location

Prod: soarf\_charge\_20\_p

Test: soarf\_charge\_20

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Data Type** | **Length** | **Notes** |
| --- | --- | --- | --- | --- | --- |
| Message Header | MSH | Y |  |  | All Data Passed as Received |
| Sending Facility | MSH.3 |  |  |  | Copy RIS to MSH.3 |
| Event Segment | EVN | N |  |  |  |
| Event Type Code | EVN.1 |  |  |  | Copy P03 to EVN.1 |
| Recorded Date/Time | EVN.2 |  |  |  | Copy MSH.7 (DT/TM of Message) to EVN.2. Trim to 12 digits |
| Patient Identifier Segment | PID | Y |  |  |  |
| Patient Identifier List – Assigning Facility | PID.3.5 |  |  |  | Send the Assigning Facility thru the idxrad\_soarf\_charges.tbl to derive the Soarian gen org sysid and the modifier flag.  Store the sysid in @sysid.  Store the mod flag in @modflag.  Ex. Table output format is 684|Y,  @sysid contains “684” (BCMDH)  @modflag contains “Y” (Yes)) |
| Patient Name | PID.5 |  |  |  | Copy Family, Given, Second and Suffix |
| Date/Time of Birth | PID.7 |  |  |  | Copy |
| Administrative Sex | PID.8 |  |  |  | Copy |
| Patient Account Number | PID.18.0 |  |  |  | Copy |
| Financial Transaction | FT1 | Y |  |  |  |
| Transaction ID | FT1.2 |  |  |  | Copy |
| Transaction ID | FT1.2 |  |  |  | Need a unique charge item ID for charge balancing…  Copy the outbound value of FT1.2 to ORC.2 (Placer Order Number) |
| Transaction Date | FT1.4 |  |  |  | Copy Trim to 12 digits |
| Transaction Type | FT1.6 |  |  |  | IF FT1.6 eq “D” send “CG” for a charge, “CD” for a credit |
| Transaction Code – Identifier | FT1.7.0 |  |  |  | Copy |
| Transaction Code – Name of Coding System | FT1.7.2 |  |  |  | Copy @sysid to FT1.7.2. |
| Transaction Quantity | FT1.10 |  |  |  | Copy |
| Transaction Amount – Extended | FT1.11 |  |  |  | Copy |
| Diagnosis Code – Identifier | FT1.19 |  |  |  | DX codes are sent on BOI locations only…  IF FT1.19.0 ne @null  Copy FT1.19.0 to FT1.19 |
| Performed By Code | FT1.20 |  |  |  |  |
| ID Number | FT1.20.0 |  |  |  | Copy Performed By ID number  (Strip MS number) |
| Assigning Authority | FT1.20.8 |  |  |  | Copy “183” |
| Identifier Type Code | FT1.20.12 |  |  |  | Copy “PRN” |
| Role – ROL | ROL.3.0 |  |  |  | Copy “PP” |
| Role Person – ID Number | ROL.4.0 |  |  |  | Copy “PP” |
| Role Person – Assigning Authority | ROL.4.8 |  |  |  | Copy “183” |
| Role Person – Identifier Type Code | ROL.4.12 |  |  |  | Copy “PRN” |
| Procedure Code Modifiers revision 4 – Initialize the variables |  |  |  |  | Sample:  Inbound: |LT^^^NOMOD~NOMOD~NOMOD~NOMOD  Outbound:  |LT  Copy “0” to @modcnt  Copy “0” to $%f6  Copy “N” to @firstmodsw  Copy @null to @firstmod4  Copy @null to @KillBill |
| Procedure Code Modifiers – extract the modifiers from FT1.26  Only send exam modifiers (first 3) for hospital orgs – If the modify flag is “Y” and the modifier is not “XX”, Copy the modifier to FT1.#26(%f6).[0].  Repeat for the other 2 modifiers.  If the modifier contains “NB” (no bill), kill the charge message. | FT1.26 |  |  |  | Copy “N” or “Y” to @firstmodsw  Copy from to…  FT1.26.[0] to @firstmod1  FT1.26.[1] to @firstmod2  FT1.26.[2] to @firstmod3  FT1.26.[3] to @firstmod4  See TCL code below  IF @modflag eq “Y”  IF @firstmod1 ne “XX”  Copy @firstmod1 to  FT1.#26(%f6).[0]  Add “1” to @modcnt  Add “1” to $%f6  Set up a kill message if one of the charge modifiers is "NB"...  IF @firstmod1 eq “NB”  Copy “Y” to @KillBill |
| Load the rest of the charge modifiers, soarian can take up to 4 modifiers. If @modcnt is less than 4 load the remaining modifier.  If the modifier contains “NB” (no bill), kill the charge message  If @KillBill eq Y, Don’t send the charge message | FT1.26 |  |  |  | IF @modcnt is less than “4”  IF FT1.#26(%f5).[0] ne @null && FT1.#26(%f5).[0] ne “NOMOD” && @firstmodsw eq “N”  Copy FT1.#26(%f5).[0] to  FT1.#26(%f6).[0].  Add “1” to $%f6  Add “1” to @modcnt  Kill the message if one of the charge modifiers is "NB"...  IF @firstmod1 eq NB  Copy Y to @KillBill |

## 4.2.1 Modifier Logic

set sub1 ""

set sub2 ""

set sub3 ""

set sub4 ""

set firstmod1 "XX"

set firstmod2 "XX"

set firstmod3 "XX"

set firstmod4 "XX"

set firstmodsw "N"

### load the subfields of the first modifier and strip the preceeding "/"

set sub1 [lindex $xlateInVals 0]

set sub1 [string trimleft $sub1 "/"]

set sub2 [lindex $xlateInVals 1]

set sub2 [string trimleft $sub2 "/"]

set sub3 [lindex $xlateInVals 2]

set sub3 [string trimleft $sub3 "/"]

set sub4 [lindex $xlateInVals 3]

set sub4 [string trimleft $sub4 "/"]

### check for any mods in the first occurrance

### the first 3 are exam mods

### the 4th mod is a charge mod

if {(![string equal $sub1 ""]) && (![string equal $sub1 "NOMOD"])} {

set firstmodsw "Y"

set firstmod1 $sub1

}

if {(![string equal $sub2 ""]) && (![string equal $sub2 "NOMOD"])} {

set firstmodsw "Y"

set firstmod2 $sub2

}

if {(![string equal $sub3 ""]) && (![string equal $sub3 "NOMOD"])} {

set firstmodsw "Y"

set firstmod3 $sub3

}

if {(![string equal $sub4 ""]) && (![string equal $sub4 "NOMOD"])} {

set firstmodsw "Y"

set firstmod4 $sub4

}

set xlateOutVals [list $firstmodsw]

lappend xlateOutVals [list $firstmod1]

lappend xlateOutVals [list $firstmod2]

lappend xlateOutVals [list $firstmod3]

lappend xlateOutVals [list $firstmod4]

## 4.3 Sample Message

Inbound from GE RIS:

MSH|^~\&|Centricity RIS-IC||||20170504190518||DFT^P03|109089-25863469-3|T|2.3.1EVN|P03|20170504190518PID|1|810012214|7000013675^^^^^BCSJH||PREPROD^SANDY^^^^||19640330|M|||||^^^|||||6000030223PV1|1|O|^CATJH^^^^^^^||||MS006716^Beattie^Martin^Chandler^^^|||||||||||||||||||||||||||||||||||||20170504073000FT1|1|109089-25863469-3|109089|20170504085400|20170504085600|D^^^T|2430044^BCSJH CT ABDOMEN W/O^^|||1||||||CATJH^CAT SCAN-OP / ST. JOSEPH'S REGION / MAIN HOSPITAL||O^OUTPATIENT||MS007961^Shaw^Michael^Charles^^^M.D. Radiologist^^2078|MS006716^Beattie^Martin^Chandler^^^||25863469|^TEMP^BC^^^^~MS007961^Shaw^Michael^Charles^^^M.D. Radiologist|CAB|^^^NOMOD~NOMOD~NOMOD~NOMOD

MSH|^~\&|Centricity RIS-IC||||20170427121441||DFT^P03|107903-25863158-42|T|2.3.1EVN|P03|20170427121441PID|1|301293946|2106366562^^^^^BCSFB||GUALDARRAMA^CAROLINA^^^^||19700730|F|||3701 SAINT JOHNS AVE APT 25^^Palatka^FL^32177^USA^||^^^|||||1104021296|582-45-7822PV1|1|E|^ERDFH^^^^^^^||||MS666666^UNASSIGNED^ER^DOCTOR^^^|||||||||||||||||||||||||||||||||||||20170319185800FT1|1|107903-25863158-42|107903|20170319203500|20170319211000|D^^^T|2350115^BCSFB DX FOOT COMP 3 VIEW MIN^^|||1||||||ERDFH^ER-OP / SOUTH FLORIDA BAPTIST REGION / MAIN HOSPITAL||E^EMERGENCY|||MS021435^Wooten^Hope^Liberty^^^||25863158|^INGRAM^LOURENA^^^^SFBH Technologist|DFOOT|LT^^^NOMOD~NOMOD~NOMOD~NOMOD

Outbound to Soarian:

MSH|^~\&|RIS||||20170504190518||DFT^P03|109089-25863469-3|T|2.3.1

EVN|P03|201705041905

PID|||||PREPROD^SANDY||19640330|M||||||||||6000030223

FT1||109089-25863469-3||201705040854||CG|2430044^^2078|||1||||||||||007961^^^^^^^^183^^^^PRN

ROL|||PP|PP^^^^^^^^183^^^^PRN

ORC||109089-25863469-3

MSH|^~\&|RIS||||20170427121441||DFT^P03|107903-25863158-42|T|2.3.1

EVN|P03|201704271214

PID|||||GUALDARRAMA^CAROLINA||19700730|F||||||||||1104021296

FT1||107903-25863158-42||201703192035||CG|2350115^^581|||1||||||||||||||||LT

ORC||107903-25863158-42

# 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\_charge\_20\_p | 24 x 7 | Cerner Core on call group |  |

# 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