**Parex to Soarian DFT Requirements**

**Version 1.0**

**Prepared By: Rich Allison**

**Date: 11/28/2018**

[Document Control 3](#_Toc499814796)

[Resources 3](#_Toc499814797)

[Project Distribution List 3](#_Toc499814798)

[Document Version Control 3](#_Toc499814799)

[1. Introduction 4](#_Toc499814800)

[1.1 Purpose 4](#_Toc499814801)

[1.2 Project Scope 4](#_Toc499814802)

[1.3 Terminology Standards 4](#_Toc499814803)

[1.3.1 Acronyms 4](#_Toc499814804)

[1.3.2 Glossary 4](#_Toc499814805)

[1.4 Document References 4](#_Toc499814806)

[2. Diagram 5](#_Toc499814807)

[3. Requirements 6](#_Toc499814808)

[3.1 Functional Requirements 6](#_Toc499814809)

[3.2 Non-Functional Requirements 6](#_Toc499814810)

[3.3 Messaging Protocols 7](#_Toc499814811)

[3.3.1 Inbound to the BayCare Cloverleaf From Cerner 7](#_Toc499814812)

[3.3.2 Outbound to the Soarian 7](#_Toc499814813)

[4. HL7 Messaging 7](#_Toc499814814)

[4.1 Messaging Format 7](#_Toc499814815)

[4.1.1 Segments 7](#_Toc499814816)

[4.1*.*2 Messaging Event Types 8](#_Toc499814817)

[4.1*.*3 Cloverleaf Configuration Files 8](#_Toc499814818)

[4.1.4 Cloverleaf Site Location 9](#_Toc499814819)

[4.2 Data Transformation Requirements 9](#_Toc499814820)

[4.3 Sample Message 12](#_Toc499814821)

[5. Alerts 13](#_Toc499814822)

[Appendix A: Risks and Concerns 13](#_Toc499814823)

[Appendix B: Issues List 13](#_Toc499814824)

# **Document Control**

## Resources

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Email** |
| Rich Allison | Enterprise Integration Team Analyst | [rich.allison@baycare.org](mailto:rich.allison@baycare.org) |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 11/28/2018 | Rich Allison | Originally Created |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

Par Excellence charges to Soarian

## 1.2 Project Scope

Send DFT charge transactions from Parex 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.

**PAREX**– Materials Management supplies for Patients.

**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.

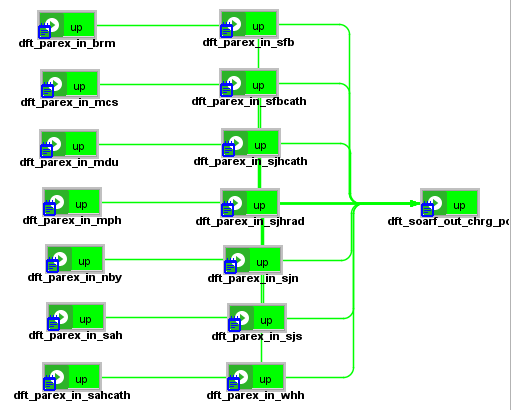
## 

## 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.

|  |  |  |
| --- | --- | --- |
| **Cerner** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
|  |  |  |
| FR.2018.1.0 | dft\_parex\_in\_parexchrg\_pi to dft\_soarf\_out | Par Excellence real time charge Interface to Soarian |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## 

## 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 Par Excellence

* TCP MLLP Server Connection

### 3.3.2 Outbound to the Soarian

* TCP MLLP Server Connection

# 4. HL7 Messaging

## 4.1 Messaging Format

### 4.1.1 Segments

The segments utilized for this interface are:

MSH

EVN

PID

FT1

*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

tpsHl7VenToSoarfDft

### 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** | **Notes** |
| --- | --- | --- | --- |
| Date/Time | MSH.7 |  | Get the message date and time |
| MSH Segment | MSH | Y | Split the data on the field delimiter |
| Encoding Characters | MSH.2 |  | Replace Encoding Characters |
| Sending Application | MSH.3 |  | “PAREX” |
| Sending Facility | MSH.5 |  | “U0A5” |
| Message Header | MSH |  | set nwMsh [string trimright [join [lreplace ${nwMshFlds} 8 8 [string range [lindex ${mshFlds} 8] 0 6]] ${fld\_delim}] "|"]  lappend nSegList ${nwMsh} |
| Sample MSH |  |  | MSH|^~\&|PAREX||S0A5|2075|20181203005759089||DFT^P03|20181203005759089|P|2.2 |
| Event Segment | EVN | Y |  |
| Event Type Code | EVN.1 |  | COPY “P03” |
| Event Date/Time | EVN.2 |  | COPY Date/Time |
| Create new EVN |  |  | lappend nSegList [string trimright ${seg} "|"] |
| Sample EVN |  |  | EVN|P03|201812030057 |
| Patient Identifier Segment | PID | Y | set pidFlds [split ${seg} ${fld\_delim}] |
|  |  |  | regsub -all -- {\"} ${pidFlds} {} pidFlds  regsub -all -- {\\} ${pidFlds} {} pidFlds |
| Patient MRN | PID.3 |  | set patMrn "[lindex [split [lindex ${pidFlds} 3] ${cmp\_delim}] 0]**^^^900000^PN"**  set nwPidFlds [lreplace ${pidFlds} 3 3 ${patMrn}] |
| Patient Account Number | PID.18 |  | set patAct "[string trimleft [lindex [split [lindex ${pidFlds} 18] ${cmp\_delim}] 0] "0"]**^^^504^VCD"**  set nwPid [string trimright [join [lreplace ${nwPidFlds} 18 18 ${patAct}] ${fld\_delim}] "|"]  lappend nSegList ${nwPid} |
| Sample PID |  |  | PID|||210699999^^^900000^PN||HOWARD^MOE|||||||||||||1107848588^^^504^VCD |
| Financial Transaction | FT1 | Y | set ft1Flds [split ${seg} ${fld\_delim}]  set ft1FldsCnt [llength ${ft1Flds}] |
| Transaction ID | FT1.2 |  | set trnsId "[lindex [split [lindex ${ft1Flds} 2] ${cmp\_delim}] 0][clock clicks -milliseconds]" |
| Transaction Type | FT1.6 |  | set trnsType [lindex [split [lindex ${ft1Flds} 6] ${cmp\_delim}] 0]  switch -exact -- ${trnsType} {  Charge - D {set trnsType "CG"}  Credit - C {set trnsType "CD"}  default {}  } |
| Transaction Code | FT1.7 |  | set trnsCde "[lindex [split [lindex ${ft1Flds} 7] ${cmp\_delim}] 0]^^${facId}" |
| Transaction ID | FT1.2 |  | [lreplace ${ft1Flds} 2 2 ${trnsId}] |
| Transaction Batch ID | FT1.3 |  | [lreplace ${nwFt1Flds} 3 3 ""] |
| Transaction Date | FT1.4 |  | set nwFt1Flds [lreplace ${nwFt1Flds} 4 4 [string range [lindex [split [lindex ${ft1Flds} 4] ${cmp\_delim}] 0] 0 11 ]] |
| Transaction Posting Date | FT1.5 |  | set nwFt1Flds [lreplace ${nwFt1Flds} 5 5 [string range [lindex [split [lindex ${ft1Flds} 5] ${cmp\_delim}] 0] 0 11 ]] |
| Transaction Type | FT1.6 |  | set nwFt1Flds [lreplace ${nwFt1Flds} 6 6 ${trnsType}] |
| Transaction Code | FT1.7 |  | set nwFt1Flds [lreplace ${nwFt1Flds} 7 7 ${trnsCde}] |
| Limit nwFt1Flds to 16 |  |  | if {${ft1FldsCnt} >= 16} {set nwFt1Flds [lreplace ${nwFt1Flds} 16 16 {}]} |
| Problem with One Blood Not Sending Quantity |  |  | if {${ft1FldsCnt} >= 11} {set nwFt1Flds [lreplace ${nwFt1Flds} 10 10 [string trimleft [string trimleft [lindex ${ft1Flds} 10] "-"] "0"]]} |
| Varian is sending HL7 Null Values That Need to Be Removed |  |  | regsub -all -- {\"} ${nwFt1Flds} {} nwFt1Flds |
| NewFt1 |  |  | set nwFt1 [string trimright [join ${nwFt1Flds} ${fld\_delim}] "|"]  lappend nSegList ${nwFt1} |
| Create New Message |  |  | set newMsg [join ${nSegList} ${seg\_delim}]  msgset $mh ${newMsg}  lappend dispList "CONTINUE $mh"  return $dispList |
|  |  |  |  |
|  |  |  |  |

## 

## 4.3 Sample Message

**Inbound from Par Ex:**

MSH|^~\&|PAREX||||20181130040107175||DFT^P03|20181130040107175|P|2.2||

EVN|P03|201811300343|

PID|||2104789671||HOWARD^MOE|||||||||||||1107825575|

FT1|1|13831303|PCI31303|20181130034330|20181130034330|D|2421711|AIR TAP SYSTEM||2|||B2 ICU||||||||||||

**Outbound to Soarian:**

MSH|^~\&|PAREX||80A0|1316|20181130040107175||DFT^P03|20181130040107175|P|2.2EVN|P03|201811300343PID|||2104789671^^^900000^PN||HOWARD^MOE|||||||||||||1107825575^^^504^VCDFT1|1|138313031543568467136||201811300343|201811300343|CG|2421711^^1316|AIR TAP SYSTEM||2|||B2 ICU

# 

# 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 | 24/7 | Parex\_Varian\_OneBlood\_Medaptus charges to Soarian | Various Charges |

# 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