**Varian Aria DFT Requirements**

**Version 1.1**

**Prepared By: Stephen Mattei**

**Date: 5/19/2016**

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# **Document Control**

## Resources

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## Project Distribution List

## Document Version Control

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| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 5/18/2016 | Lois Whitley | Originally Created |
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|  |  |  |  |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

The purpose of this document is to describe the Detail financial Transaction (DFT) Interface going from Varian Aria to the external billing system (Soarian Financials).

## 1.2 Project Scope

The scope of this project was to add Morton Plant Hospital to the existing ADT and DFT interfaces.

## 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.

**IEM** – Interface Exchange Manager; interface engine

### 1.3.2 Glossary

**Aria** – includes Radiation Oncology and Medical Oncology products.

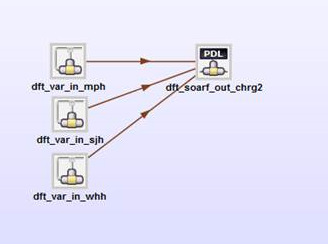
**P03 Event** – Trigger event associated with the DFT message; Post Detail Financial Transaction

## 1.4 Document References

Information Exchange Manager: Financial (DFT) Interface Guide – IEM10 (August 2010)

# *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.2015.1.0 | Remove HL7 Nulls | Whenever the vendor sends a HL7 null convert it to a blank. This is done so that Soarain will not eliminate the data from the patient database. |
| FR.2015.2.0 | Insure Soarian Vendor Mnemonic is used | Insure that the correct mnemonic for the vendor is passed in the MSH sending application field. (Vendor mnemonic is passed as an argument to the translation script and not hard coded) |
| FR.2015.3.0 | Insure Correct Soarian Facility Mnemonic is Sent | Insure that the Soarian mnemonic is passed instead of the facility mnemonic the vendor is sending. (The facility mnemonic is passed as an argument to the translation and not hard coded) |
| FR.2015.4.0 | Format Patient IDs to Soarian standards | Insure that the correct assigning authority is utilized  2444444443^^^900000^PN and 1102354770^^^504^VCD |
| FR2015.5.0 | Remove all leading zeros from identifiers if they are sent | The MRN, ECD, Trans ID, etc… |
| FR2015.6.0 | Unique Transaction ID | Insure that the transaction ID is unique to a particular message (Created coding to append the trans ID with epoch time stamp with an accuracy down to milliseconds) |
| FR2015.7.0 | Insure Soarain transaction type values comply with expectations | Need to insure that transaction type values are either CG (Charge) or CD (Credit) as expected by Soarian |
| FR2015.8.0 | Remove Dashes from quantity values | Removed dashes if they exist and replace them with nothing |
| FR2015.9.0 | Remove patient location | Patient location is blanked out from the Pv1 |
| FR2015.10.0 | Truncate FT1 to length of 16 fields | Fields outside of this range cause issues with 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 Varian

* 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

[PV1]

[PV2]

{FT1}

*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header*

*EVN – Event segment*

*PID – Patient ID segment*

*PV1 – Patient Visit segment*

*PV2 – Additional Demographics*

*FT1 – Financial Transaction*

### 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

For each HL7 interface specified in Section 2 of this document, identify the Cloverleaf Configuration Files: Variants, TCL Scripts, Xlates, etc.

tpsHL7VenToSoarfDft.tcl

- uses utilities1.1 and soarfFunctions1.0 packages

### 4.1.4 Cloverleaf Site Location

Production = soarf\_chrg\_prod

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 |
| Receiving Application | MSH.5 |  |  |  | Vendor mnemonic: Z085 |
| Receiving Facility | MSH.6 |  |  |  | Facility mnemonic |
| Event Segment |  |  |  |  | All Data Passed as Received |
| Patient Identifier Segment |  |  |  |  | All Data Passed as Received with the following exceptions:   * Remove all HL7 nulls |
| Patient ID (Internal) | PID.3 |  |  |  | Patient ID (Internal) – Medical Record number formatted so Soarian can accept it |
| Patient Account Number | PID.18 |  |  |  | Patient Account Number (Visit/FIN Number - formatted so Soarian can accept it |
| Financial Transaction |  |  |  |  | Pass only what is needed   * Remove leading zeroes * Remove all HL7 nulls |
| Transaction ID | FT1.2 |  |  |  | Transaction ID – has to be unique; append unique number so it never repeats |
| Transaction Date | FT1.4 |  |  |  | Transaction Date – only passing time and date |
| Transaction Posting Date | FT1.5 |  |  |  | Transaction Posting Date – only passing time and date |
| Transaction Type (CREDIT or DEBIT) | FT1.6 |  |  |  | Transaction Type: Charge Type Code   * Charge = CG * Credit = CD |
| Transaction Code | FT1.7 |  |  |  | Transaction Code   * Facility ID added in subcomponent 3 |
| Transaction Quantity | FT1.10 |  |  |  | Transaction Quantity (if there is a dash, remove it) |
| Assigned Patient Location | FT1.16 |  |  |  | Assigned Patient Location (blank out if it’s passed) |

## 4.3 Sample Message

Inbound to Cloverleaf from Varian:

**MSH|^~\&|VARIAN||SOARF||201509232100||DFT^P03|000208291|P|2.3|||AL|NE|||**

**EVN|P03|201509232100^S||||**

**PID|1||210888888||Doe^Jane^""|""|19600617|Female|""|White|4111 W Henry Ave^""^Dade City^Florida^33614^United States^Home^^""^||8138102417^^^""|""|""|Divorced|""|1101099999||||""|||||||""|""**

**PV1|1|0||||||||||||||||||||||||||||||||||||||||||||||||||**

**FT1|1|439552|00096RK7K2|201509231537^S|20150923^D|Charge|3610025^Physics QA^77336^""|||1||||||||||||||||""**

Outbound from Cloverleaf to Soarian:

**MSH|^~\&|VARIAN||Z085|2078|201509232100||DFT^P03|000208291|P|2.3|||AL|NE**

**EVN|P03|201509232100^S**

**PID|1||2108888888^^^900000^PN||Doe^Jane^||19600617|Female||White|4111 W Henry Ave^^Dade Cirty^Florida^33614^United States^Home^^^||8138102417^^^|||Divorced||1101099999^^^504^VCD**

**FT1|1|439552-52578477||201509231537|20150923|CG|3610025^^2078|||1**

# **5. Testing**

## 5.1. Unit Testing Scenarios

|  |  |
| --- | --- |
| **Scenario** | **Expected Result** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## 5.2 Integrated Testing Scenarios

|  |  |
| --- | --- |
| **Scenario** | **Expected Result** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## 5.3 Testing Approvals

|  |  |  |  |
| --- | --- | --- | --- |
| **Testing Phase** | **Date** | **Department** | **Team Member** |
| PH1.UNIT |  |  |  |
| PH1.INTEGRATED |  |  |  |

### 

## 5.4 Piloting

List the facilities and associated networks in scope for pilot testing.

## 5.5 Approvals

|  |  |  |  |
| --- | --- | --- | --- |
| **Testing Phase** | **Date** | **Department** | **Team Member** |
| PH1.0 |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 6. Deployment / Implementation Model

Provide the detail as to how to deploy the solution defined in the IDBB from both the BAYCARE and vendor perspective.

## 6.1 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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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