**Varian Aria ADT Requirements**

**Version 1.1**

**Prepared By: Lois Whitley & Stephen Mattei**

**Date: 1/9/2017**

[Document Control 3](#_Toc500167969)

[Resources 3](#_Toc500167970)

[Project Distribution List 3](#_Toc500167971)

[Document Version Control 3](#_Toc500167972)

[1. Introduction 4](#_Toc500167973)

[1.1 Purpose 4](#_Toc500167974)

[1.2 Project Scope 4](#_Toc500167975)

[1.3 Terminology Standards 4](#_Toc500167976)

[1.3.1 Acronyms 4](#_Toc500167977)

[1.3.2 Glossary 4](#_Toc500167978)

[1.4 Document References 4](#_Toc500167979)

[*2.* Diagram 5](#_Toc500167980)

[3. Requirements 6](#_Toc500167981)

[3.1 Functional Requirements 6](#_Toc500167982)

[3.2 Non-Functional Requirements 6](#_Toc500167983)

[3.3 Messaging Protocols 7](#_Toc500167984)

[3.3.1 Inbound to the BayCare Cloverleaf From Soarian 7](#_Toc500167985)

[3.3.2 Outbound to Varian Aria 7](#_Toc500167986)

[4. HL7 Messaging 7](#_Toc500167987)

[4.1 Messaging Format 7](#_Toc500167988)

[4.1.1 Segments 7](#_Toc500167989)

[4.1*.*2 Messaging Event Types 8](#_Toc500167990)

[4.1*.*3 Cloverleaf Configuration Files 8](#_Toc500167991)

[4.1.4 Cloverleaf Site Location 8](#_Toc500167992)

[4.2 Data Transformation Requirements 9](#_Toc500167993)

[4.3 Sample Message 11](#_Toc500167994)

[5. Testing 12](#_Toc500167995)

[5.1. Unit Testing Scenarios 12](#_Toc500167996)

[5.2 Integrated Testing Scenarios 12](#_Toc500167997)

[5.3 Testing Approvals 13](#_Toc500167998)

[5.4 Piloting 13](#_Toc500167999)

[5.5 Approvals 13](#_Toc500168000)

[6. Deployment / Implementation Model 13](#_Toc500168001)

[6.1 Alerts 13](#_Toc500168002)

[Appendix A: Risks and Concerns 14](#_Toc500168003)

[Appendix B: Issues List 14](#_Toc500168004)

# **Document Control**

## Resources

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Email** |
| Stephen Mattei | Sr IS Integration Analyst, Enterprise Integration | [Stephen.mattei@baycare.org](mailto:Stephen.mattei@baycare.org) |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 5/18/2016 | Lois Whitley | Originally Created |
| V1.1 | 01/09/2017 | Stephen Mattei | Updated segments, updated diagram, updated message types, and added mapping and functional requirements. |
|  |  |  |  |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

The purpose of this document is to describe the Admission, Discharge and Transfer (ADT) Interface going from Soarian to Varian Aria.

## 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

**ADT** – Admission, Discharge, Transfer

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

### 1.3.2 Glossary

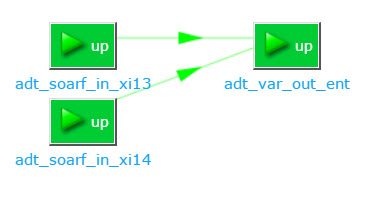
**Aria** – includes Radiation Oncology and Medical Oncology products.

## 1.4 Document References

Information Exchange Manager: Demographics (ADT) 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.2016.1.0 | Filter on contents of PV2:24 | If PV2:24 equals OD then kill the message, don’t sent to Varian |
| FR.2016.1.1 | Filter on contents of PV1:10.0 | Only allow messages with a value of XRT contained in PV1:10.0 |
| FR.2016.1.2 | Insure that only applicable facilities are sent | Leveraging the contents of MSH:4 exclude all facilities not utilizing the Varian product |
| FR.2016.1.3 | Patient Location | Only copy the contents of PV1:3 if the discharge date is null |
| FR.2016.1.4 | Only copy GT1 if true | GT1:12 is not equal to null or GT1:11 is not equal to 1 |

## 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 Soarian

* TCP MLLP Server Connection

### 3.3.2 Outbound to Varian Aria

* 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

[{NK1}]

PV1

[PV2]

[GT1]

[IN1]

[IN2]

*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header*

*EVN – Event Segment*

*PID – Patient ID Segment*

*NK1 – Next of Kin Segment*

*PV1 – Patient Visit segment*

*GTI – Guarantor Information*

*IN1 – Insurance Information*

*IN2 – Additional Insurance Information*

### 4.1*.*2 Messaging Event Types

Below are the messages types necessary for this integration

|  |  |
| --- | --- |
| **Event Type** | **Description** |
| A01 | Admit a Patient |
| A02 | Transfer a Patient |
| A03 | Discharge a Patient |
| A04 | Register Outpatient |
| A05 | Pre-Admit |
| A08 | Update Patient Information |

### 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.

Soarf\_varian\_adt.xlt

tpsAdvHl7Filter.tcl

### 4.1.4 Cloverleaf Site Location

Production = varian\_26\_p

Test = varian\_26

## 4.2 Data Transformation Requirements

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Description** | **HL7 Field Loc.** | **Required Y/N or O** | **Notes** |
| Message Header | MSH | Y | All Data Passed as Received |
| Sending Application | MSH:3 | O | *SOARIAN* |
| Event Segment |  | O | All Data Passed as Received |
| Patient ID (Internal) | PID:3 | Y | Internal Patient ID – Medical Record Number |
| Patient Name | PID:5 | Y |  |
| Birth Date | PID:7 | O |  |
| Sex | PID:8 | O |  |
| Race | PID:10 | O |  |
| Patient Address | PID:11 | O |  |
| Phone Number – Home | PID:13 | O |  |
| Phone Number – Business | PID:14 | O |  |
| Marital Status | PID:16 | O |  |
| Patient Account Number | PID:18 | Y |  |
| Patient SSN | PID:19 | O |  |
| Next of Kin Name | NK1:2 | O |  |
| Phone Number | NK1:5 | O |  |
| Business Phone | NK1:6 | O |  |
| Contact role | NK1:7 | O |  |
| Patient Visit Patient Class | PV1:2 | O |  |
| Patient Location | PV1:3 | O | Only send when no discharge date is present |
| Hospital Service | PV1:10 | O |  |
| Patient Type | PV1:18 | O |  |
| Visit Number | PV1:19 | O |  |
| Expected Admit Date | PV2:8 | O |  |
| Expected Discharge Date | PV2:9 | O |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Description** | **HL7 Field Loc.** | **Required Y/N or O** | **Notes** |
| Admit Reason | PV2:3 | O |  |
| Guarantor Name | GT1:3 |  |  |
| Guarantor Address | GT1:5 |  |  |
| Guarantor Phone – Home | GT1:6 |  |  |
| Guarantor Phone – Business | GT1:7 |  |  |
| Guarantor DOB | GT1:8 |  |  |
| Guarantor Sex | GT1:9 |  |  |
| Guarantor Relationship | GT1:11 |  |  |
| Guarantor SSN | GT1:12 |  |  |
| Guarantor Priority | GT1:15 |  |  |
| Guarantor Employer Name | GT1:16 |  |  |
| Guarantor Employer Address | GT1:17 |  |  |
| Guarantor Employer Phone | GT1:18.0 |  | Concatenate GT1:18.5 & 18.6 |
| Guarantor Employee ID Number | GT1:19 |  |  |
| Guarantor Employment Status | GT1:20 |  |  |
| Set ID | IN1:1 |  |  |
| Insurance Plan | IN1:3 |  | Pulled from IN1:2 |
| Insurance Company Name | IN1:4 |  |  |
| Insurance Company Address | IN1:5 |  |  |
| Insurance Contact Person | IN1:6 |  |  |
| Insurance Company Phone | IN1:7 |  |  |
| Group Name | IN1:9 |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Description** | **HL7 Field Loc.** | **Required Y/N or O** | **Notes** |
| Insured’s Group Emp ID | IN1:10 |  |  |
| Insured’s Group Name | IN1:11 |  |  |
| Plan Effective Date | IN1:12 |  |  |
| Authorization Information | IN1:14 |  |  |
| Plan Type | IN1:15 |  |  |
| Name of Insured | IN1:16 |  |  |
| Insured’s Relationship to Patient | IN1:17 |  |  |
| Assignment of Benefits | IN1:20 |  |  |
| Coord of Ben. Priority | IN1:22 |  |  |
| Release Information Code | IN1:27 |  |  |
| Pre-Admit Cert (PAC) | IN1:28 |  |  |
| Verification By | IN1:30 |  |  |
| Policy Number | IN1:36 |  | Concatenate IN1:36.0 and IN1:8.0 |
| Insured Employment Status | IN1:42 |  |  |
| Insured Employer Address | IN1:44 |  |  |
| Insured’s Employee ID | IN2:1 |  |  |
| Insured Employer Name | IN2:3 |  |  |

## 4.3 Sample Message

Inbound to Cloverleaf from Soarian:

**MSH|^~\&|SOARF|SJH|||201509230654||ADT^A08|3ca1a490-9e85-40bb-8981-7a0ff8fb4812|P|2.7||1**

**EVN|A08|201509230654||RVE|b097409|201509230650|9050**

**PID|1|300666666^^^900000^PN|2105555555^^^BCHS^MR||DOE^JANE^^^^^L^^^20150808||19560418|F||White|9408 FOREST HILLS CIR^^Tampa^FL^33612^USA^M^^Hillsborough^^^20150808| |^PRN^PH^^1^813^9520280~^NET^^NONE||ES|M|Unknown|1101099999^^^BCHS^VCD^^20150922||||HIS||N|0||NEVER|||N|N||201508081743**

**NK1|1|DOE^JOHN^^^^^L|F|~^^^""^^^N|813-952-0280^PRN^PH^^^813^9520280||Emergency Contact 1**

**NK1|2||EMP||||EMP||||||UNEMPLOYED^L^26194^^^900000^XX**

**PV1|1|O|||||062685^Soni^Arvind^Bunty^^PRN^1255307914^NPI^17123^PRDOC^SJH|||XRT|||N|RP|||062685^Soni^Arvind^Bunty^^PRN^1255307914^NPI^17123^PRDOC^SJH|OP|5101999999^^^504^VN^^20150922|Mut Def/Unk|||||||||||||||||||9050|||||201509280930|||||||V**

**PV2|||^EVAL XRT TX||||~~~~false||||||||N||||||N||JH Other Recurring^L^2151^^^900000^XX~^^1881632818^^^900004^NPI|Scheduled|||||||I|||||N**

Outbound from Cloverleaf to Varian Aria:

**MSH|^~\&|SOARIAN|SJH|||201509230654||ADT^A08|3ca1a490-9e85-40bb-8981-7a0ff8fb4812|P|2.6||1**

**EVN|A08|201509230654||RVE|b097409|201509230650|9050**

**PID|||2105436085||DOE^JANE^^^^^L^^^20150808||19560418|F||White|9408 FOREST HILLS CIR^^Tampa^FL^33612^USA^M^^Hillsborough^^^20150808||8139520280|||M||1101155555**

**PV1||O||||||||XRT||||||||OP|5101999999**

**PV2|||EVAL XRT TX**

# **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