**ADT to Resonance/CommonWell Requirements**

**Version 1.2**

**Prepared By: Jerome Starke & Sailaja Parimi**

**Date: 3/21/2018**

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# **Document Control**

## Resources

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Email** |
| Jerome Starke | BayCare Integration Analyst – FSI | Jerome.starke@baycare.org |
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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 5/31/2017 | Jerome Starke | Originally Created |
| V1.1 | 6/9/2017 | Jerome Starke | Adding CommonWell Auto-Enrollment |
| V1.2 | 3/21/2018 | Sailaja Parimi | Added required config in Cerner, risk in non-prod domains, and a sample message with consent flag. |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

This document will define the communication protocol, message structure, and special business logic for the ADT from Cerner (rebounded from Soarian) to Resonance interfaces. This document will also define the communication protocol, message structure, and special business logic for the ADT from Cerner (rebounded from Soarian) that auto-enrolls patients in Resonance/CommonWell. This document will be used to complete the build and to denote all changes to the initial requirements. The intended audience is developers and business owners.

## 1.2 Project Scope

This interface will facilitate the automation of populating patient demographic data from Soarian into Cerner Resonance/CommonWell.

## 1.3 Terminology Standards

### 1.3.1 Acronyms

ADT Admit Discharge Transfer

PIX Patient Identifier Cross-Referencing

### 1.3.2 Glossary

## 1.4 Document References

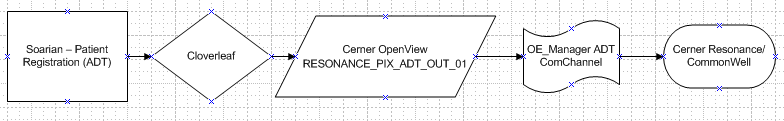
**ADT\_Soarian\_Cerner Reqs** – Has the information regarding the inbound feed from Soarian to Cloverleaf to Cerner  
 <http://bcspapp01:48601/sites/SecurityDataIntegrity/EnterpriseIntegration/team/Shared%20Documents/Applications%20and%20Systems/01-EIT%20Requirements/ADT_Soarian_Cerner%20Reqs.docx>

**CommonWell uCern Group**

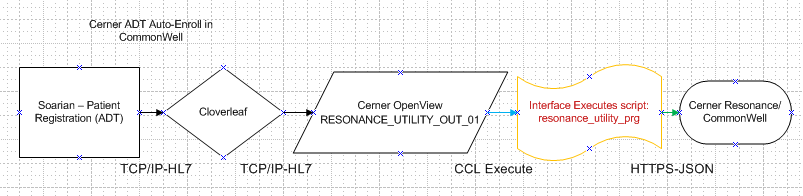
<https://connect.ucern.com/groups/commonwell-health-alliance-collaborative>

# 2. Diagram

**Populating Resonance with ADT:** ADT from Soarian are processed in Millennium and passed back out through the OpenView Resonance ADT interface. The OpenView interface sends the ADT to the OE\_Manager ADT ComChannel which passes the raw message to Resonance.



**CommonWell Auto-Enrollment:** ADT from Soarian are processed in Cerner and passed back out the Resonance Utility interface. The interface acts like an ops job in Cerner with the ADT message being the trigger. Each message passed through the interface ends up being suppressed, but if the message trigger is A01, A04 or A08 then the resonance\_utility\_prg program is executed to attempt to auto-enroll the patient on CommonWell.



# 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.2017.5.0 | Consent Captured and stored in Cerner | Patient must have consented to share data and consent info must be stored in Cerner on the person\_info table to send ADT information to Resonance/CommonWell |
| FR.2017.5.1 | Consent to Share setting on the contributor system for Resonance. | On the XDS\_CONTRIBUTOR\_SYTEM, the flag for Custom\_Script to Consent to Share must be set for ADT messages to Resonance. |
|  |  |  |
|  |  |  |

## 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 ADT\_Soarian\_Cerner Reqs listed in 1.4 for more information on Soarian to Cloverleaf to Cerner.

### 3.3.1 Cerner outbound to OE\_MGR ADT comchannel

* TCP IP
* 

### 3.3.2 OE\_MGR ADT comchannel to Resonance

* HTTPS
* 

### 3.3.3 Cerner outbound CommonWell Auto-Enroll (all messages suppressed)

* 

# 4. HL7 Messaging

## 4.1 Messaging Format

### 4.1.1 Segments

The segments utilized for this interface are:

MSH

EVN

PID

*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header*

*EVN – Event segment*

*PID – Patient ID segment*

### 4.1.2 Messaging Event Types

Below are the messages types necessary for this integration

|  |  |
| --- | --- |
| **Event Type** | **Description** |
| ADT^A01 | Admit |
| ADT^A04 | Register |
| ADT^ A08 | Update |

### 4.1*.*3 Cloverleaf Configuration Files

NA

### 4.1.4 Cloverleaf Site Location

NA

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Data Type** | **Length** | **Notes** |
| --- | --- | --- | --- | --- | --- |
| Sending App Universal ID | MSH3.2 | Y |  |  | Hardcoded to 2.16.840.1.113883.3.13.2 |
| Sending App Universal ID Type | MSH3.3 | Y |  |  | Hardcoded to ISO |
| Sending Facility Universal ID | MSH4.2 | Y |  |  | MSH6.2 value + .999482 added |
| Sending Facility Universal ID Type | MSH4.3 | Y |  |  | Hardcoded to ISO |
| Receiving App Universal ID | MSH5.2 | Y |  |  | Hardcoded to 2.16.840.1.113883.3.13.3 |
| Receiving App Universal ID Type | MSH5.3 | Y |  |  | Hardcoded to ISO |
| Receiving Facility Universal ID | MSH6.2 | Y |  |  | Query to pull OID for the organization. |
| Receiving Facility Universal ID Type | MSH6.3 | Y |  |  | Hardcoded to ISO |
| Patient Identifier | PID3.1 | Y |  |  | Skip message if empty. Query pulls the CPI from CMRN pool for patient. |
| Patient Identifier Universal ID | PID3.4.2 | Y |  |  | Query pulls in CMRN OID |
| Patient Identifier Universal ID Type | PID3.4.3 | Y |  |  | Hardcoded to ISO |
| Patient Last Name | PID5.1 | Y |  |  | Skip message if empty |
| Patient First Name | PID5.2 | Y |  |  | Skip message if empty |
| Patient DOB | PID7 | Y |  | 8 | Skip message if empty. Modified to 8 digits. |
| Patient Gender | PID8 | Y |  |  | Skip message if empty |
| Patient Address | PID11 | Y |  |  | Removing all but home address, only sends 5 digit zip. |

## 4.3 Sample Message

**ADT inbound message from Soarian to Cerner with consent flag in OBX segment.**

MSH|^~\&|SOARIAN|BAYCARE|HNAM|SJH|201803191441||ADT^A04|4fa89493-7131-4430-ab9d-c2ea6b6c1f20|P|2.6

EVN|A04|201803191441|||b087991

PID|1|810017416^^^^BCCPI|810017416^^^^CPI~7000017319^^^^BCMRN||EVENTONE^TWENTYONE||19690325|M||PcfIs|123 FSI TEST STREET^""^Safety Harbor^FL^34695||(631)555-8989^^PRN~(631)555-8989^^PREF||DE|S|Apostolic|6000037212^^^^BCFN|232222222|||Non HIS or LAT

NTE|1|2|Patient Employer: PINELLAS COUNTY FORENSIC LAB

NTE|2|2|Patient Employer Number: (727)582-6800

NTE|3|3|Guarantor Employer: PINELLAS COUNTY FORENSIC LAB

NK1|1|EVENTONE^MOMMATWENTYONE|F||(258)888-5684||Emergency Contact 1

PV1|1|E|ERDJH^^^SJH^^^SJH||||MS666666^Unassigned^ER Doctor|||ERD||||||N||E|5103807573||||||||||||||||||||ERDJH|||||201803191440||||||||MS009852^Held^Jeffrey^A^^^^^^^^^PCPE

PV2|||^HYPERTENSION|||||||||||||||||||CONFID

ZVI|||||||||A

OBX|1|CE|CIE||Y

GT1|1||EVENTONE^TWENTYONE||123 FSI TEST STREET^^Safety Harbor^FL^34695|(631)555-8989|||||6|232222222

**Cerner Outbound Message to OE\_MGR ADT Comchannel:**

MSH|^~\&|^2.16.840.1.113883.3.13.2^ISO|^2.16.840.1.113883.3.1106.10000.999482^ISO|^2.16.840.1.113883.3.13.3.3^ISO|^2.16.840.1.113883.3.1106.10000^ISO|20170531135602||ADT^A08|Q3315022557T4201090631||2.3||||||8859/1

EVN|A08|20170531135602

PID|1||810011752^^^&2.16.840.1.113883.3.1106.21&ISO||POTTER^HARRY^^^^^L||19820731|M|||123 GRYFFINDOR LANE^^GODRICS HOLLOW^MO^64118^^H|||||||||||2135-2

**OE\_MGR ADT Comchannel Outbound to Resonance (Raw pass-thru):**

MSH|^~\&|^2.16.840.1.113883.3.13.2^ISO|^2.16.840.1.113883.3.1106.10000.999482^ISO|^2.16.840.1.113883.3.13.3.3^ISO|^2.16.840.1.113883.3.1106.10000^ISO|20170531135602||ADT^A08|Q3315022557T4201090631||2.3||||||8859/1

EVN|A08|20170531135602

PID|1||810011752^^^&2.16.840.1.113883.3.1106.21&ISO||POTTER^HARRY^^^^^L||19820731|M|||123 GRYFFINDOR LANE^^GODRICS HOLLOW^MO^64118^^H|||||||||||2135-2

ADT inbound message from Soarian to Cerner with consent flag:

MSH|^~\&|SOARIAN|BAYCARE|HNAM|SJH|201803191441||ADT^A04|4fa89493-7131-4430-ab9d-c2ea6b6c1f20|P|2.6

EVN|A04|201803191441|||b087991

PID|1|810017416^^^^BCCPI|810017416^^^^CPI~7000017319^^^^BCMRN||EVENTONE^TWENTYONE||19690325|M||PcfIs|123 FSI TEST STREET^""^Safety Harbor^FL^34695||(631)555-8989^^PRN~(631)555-8989^^PREF||DE|S|Apostolic|6000037212^^^^BCFN|232222222|||Non HIS or LAT

NTE|1|2|Patient Employer: PINELLAS COUNTY FORENSIC LAB

NTE|2|2|Patient Employer Number: (727)582-6800

NTE|3|3|Guarantor Employer: PINELLAS COUNTY FORENSIC LAB

NK1|1|EVENTONE^MOMMATWENTYONE|F||(258)888-5684||Emergency Contact 1

PV1|1|E|ERDJH^^^SJH^^^SJH||||MS666666^Unassigned^ER Doctor|||ERD||||||N||E|5103807573||||||||||||||||||||ERDJH|||||201803191440||||||||MS009852^Held^Jeffrey^A^^^^^^^^^PCPE

PV2|||^HYPERTENSION|||||||||||||||||||CONFID

ZVI|||||||||A

OBX|1|CE|CIE||Y

GT1|1||EVENTONE^TWENTYONE||123 FSI TEST STREET^^Safety Harbor^FL^34695|(631)555-8989|||||6|232222222

**Resonance Successful Response message Inbound to OE\_MGR ADT Comchannel:**

MSH|^~\&|^2.16.840.1.113883.3.13.3.3|^2.16.840.1.113883.3.1106.10000|^2.16.840.1.113883.3.13.2|^2.16.840.1.113883.3.1106.10000.999482|20170531125603-0500||ACK^A08|4999f7de-a285-48c3-8aff-a0e4c437210a|P|2.3

MSA|AA|Q3315022557T4201090631

**Cerner Outbound for CommonWell Auto-Enrollment:**

All messages are suppressed but are used as a trigger to call a script in Millennium that attempts to auto-enroll the patient in CommonWell.

# 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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Name** |  |  | | |  |  |  |  |
| **Number** | **Risk / Concern** | **Comment** | **Mitigation** | | |  |  |  |
| RC.2013.1.0 | Consent messages to Commonwell may not work in non-prod domains | Millennium Certificate is required in non-prod domains in order for consent messages to send to commonwell for a patient to enroll into commonwell. | | This certificate will need to be renewed and handled by Cerner once a year. It is renewed on 3/20/2018 to make the non-prod domains C30 and M30 to work. | |  |  |  |

# 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 |  |  | |  | |  |  |  |

NOTE:

**Cerner Support SRs**

* For consistent support, please log a Cerner service request with the below information and it will be triaged as necessary.
* For interface (comchannels / comservers/ OEManager / si\_manager/Provide and Register ops job) issues:
  + Solution: Foreign Systems Interface
* End of document