**Get Well Network (Edutainment) ORU Requirements**

**Version 1.5**

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# **Document Control**

## Resources

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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 10/15/2015 | Tiffany Bohall | Originally Created /Updated |
| V1.1 | 10/29/15 | Tiffany Bohall | Updated |
| V1.2 | 2/26/16 | Hope Kaczmarczyk | Added original Cerner Results (ORU) documentation |
| V1.3 | 03/07/2017 | Sarah Thies | Added note about killing rebounds in NFR Section |
| V1.4 | 11/9/17 | Lois Whitley | Updated Cloverleaf site |
| V1.5 | 12/14/17 | Hope Kaczmarczyk | Updated Cerner Results (ORU) Info |

# 1. Introduction

## 1.1 Purpose

The purpose of this document is to provide details on the build of the ORU results interface that supports Get Well Network.

## 1.2 Project Scope

The scope of the integration for Get Well network consists of ADT from Soarian, pharmacy and video orders from Cerner, and solicited (video) and unsolicited (pharmacy) results from Get Well Network back to Cerner. This document is only the ORU portion. The ADT and Orders interface requirements documents can be found in the same SharePoint folder as this document.

## 1.4 Terminology Standards

### 1.4.1 Acronyms

**FSI** – Foreign System Interface; used by Cerner Millennium to exchange data with other Health Care Information

Systems.

**ESI –** External Systems Inbound; Cerner’s process for handling interfaced data received from a foreign system.

**ESI Log –**  The ESI log contains queue trace reports for all inbound messages to Cerner along with processing statuses of success, failure, or warning. Failures and Warnings are accompanied by error text which describes the issue. The ESI log is used for Cerner FSI troubleshooting by the Integration Team.

**GWN**: Get Well Network

**ORU** – Observation result / unsolicited HL7 message

### 1.4.2 Glossary

**Alias** - An identifier used to represent an item, such as a location, order, specimen type, or result.

**Contributor System –** External System that sends to and/or receives data from Cerner Millennium. A “Contributor System” is built on Cerner as part of an interface or data feed.

**Contributor Source –** A source created on Cerner used to identify inbound and/or outbound aliases for data sent to and received from Foreign Systems.

**Scripting –** Custom Cerner programs written to modify, format, and filter message transactions for the interfaces. The types of scripts used by FSI are Suppression, Route, Modify Object, Modify Original, Type, and ACK.

**Unsolicited Result** – A result message sent to the receiving system that did not send an order message for

the work that was done.

## 1.5 Document References

Cerner HL7 Specifications: Unit 10i - Result and Document Processing Inbound – Cerner 2016

*2.0 Diagram*



# 3. Requirements

## 3.1 Functional Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Coverleaf** |  |  | | | |
| **Number** | **Relquirement Name** | **Requirement Description** | | | |
| FR.2015.10.9 | Soarian room and bed | For each hospital location, the vendor loaded the nurse’s stations rooms and beds which were set up with the Get Well Network application. Even though they would receive all locations in the ADT does not mean they will post to the Get Well Network database. | | | |
| **Cerner** |  | | |  | |
| **Number** | **Requirement Name** | | | **Requirement Description** | |
| **FR.2015.10.1**  **FR.2017.02.1**  **FR.2015.10.2** | **Scripts:**  **-** standard\_ack  - no Mod Original or Mod Object  scripts needed.  on **ComServer:** ORU\_TCP\_GETWELL\_ IN  **New ESI Servers:**  ORU\_GETWELL\_EMMI\_ESI\_1  ORU\_GETWELL\_EMMI\_ESI\_2  ORU\_GETWELL\_EMMI\_ESI\_3  ORU\_GETWELL\_EMMI\_ESI\_4  **New Cerner Contributor Systems:**  **GETWELL** | | Only the standard Acknowlegement script is needed for Get Well result messages inbound to Cerner.  **-** The ORU\_GETWELL \_EMMI\_ESI servers only process result messages for the GETWELL contributor system.  The GETWELL contributor System is bi-directional:  -Type: Auth (Verified)  - Organization: BayCare Health System  - Contributor Source: Invision  - Alt Contributor Source: None  - Message Format: HL7 Standard V2.x  **Special Configurations:**  - Clinical Event processing done using Event Code.  **ESI Alias Translation:**  **-**ESI Encounter Organization Alias (Type: Encounter organization Alias, Alias Pool: Encounter Organization Alias)  - ORC/OBR-02 Placer Order Id (Type: Internal Order Id, ESI  Assign Auth: HNAM\_ORDERID)  - PID-03 Internal Person Id (Type: Historical CMRN, ESI Assign  Type: CPI, Alias Pool: BayCare EAD CPI)  - PID-18 Patient Account Number (Type: FIN NBR, ESI Assign  Type: BCFN with Alias Pool: BayCare FIN for GETWELL or ESI  Assign Type: BMGFN with Alias Pool: BMGFN for EMMI)  **ESI Ensure Parameters:**  - Person = Exist or Fail Ensure  - Encounter = Exist or Fail Ensure  - Event = Update ensure  - Order = Complete for ORU Message\*  \*This setting causes the BayCare order to auto complete when the Cerner order\_id is returned in ORC/OBR-02 of the ORU result message from Get Well.  Note: Pharmacy video results are unsolicited. Get Well only receives the Pharmacy medication orders; there are no Pharmacy video orders.  **Person Match:**  - Alias of BayCare CMRN = Match Required  - Alias of BayCare EAD CPI = Match Required  **Encounter Match:**  **-** FIN NBR = Match Required on patient’s BayCare or BMG FIN  **Personnel Alias:**  **-** All Personnel = BayCare Dr Number  **Order Match:**  **-** Internal Order Id = Match Required for automatic order completion to occur. | |

## 3.2 Non-Functional Requirements

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| NFR.2015.10.15 | Keep Alive | The vendor sends an ACK to the inbound connection every 15 minutes in production, which “keeps alive” the connection. Previously, after a period of no activity, the connection would go to sleep so this prevents that action from happening. I suppress the “keep alive” ACK’s from then being passed to Cerner. |
| NFR.2015.10.29 | Cerner’s Contributor Source | The Get Well Network results interface used to be raw. When Soarian was rolled out Enterprise wide, Cerner required some tags to be sent in certain fields so the correct contributor source would be recognized. As a result, there is a small translation file added for this interface that just hard codes 2 values and path copy’s all else. |
| NFR.2017.1 | GWN Activity Type | Cloverleaf will kill results rebounding out of Cerner when OBR-24 contains Edutainment (The GWN Activity Type). |

## 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 –N/A

Click here to enter text.

### 3.3.2 Outbound to the BayCare Cloverleaf –N/A

* Click here to enter text.

### 3.3.3 Inbound from Get Well Network

**Test**

Port Number: 12184

IP Address: cannot access

**Prod**

Port Number: 12066

IP Address: cannot access

### 3.3.4 Outbound to Get Well Network –N/A

Click here to enter text.

### 3.3.5 Inbound to the BayCare Cerner –N/A

Click here to enter text.

### 3.3.6 Outbound to BayCare Cerner

**M30 Test**

Port Number: 10020

IP Address: BAYCFLAPP7

**C30 Test**

Port Number: 10056

IP Address: BAYCFLAPP5

**Prod**

Port Number: 10056

IP Address: 159.140.43.191

# 4. HL7 Messaging

## 4.1 Messaging Format

HL7 v. 2.3, cerner\_emr ORU\_R01

### 4.1.1 Segments

The segments utilized for this interface are:

PID

*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header*

*EVN – Event segment*

*PID – Patient ID segment*

*PV1 – Patient Visit segment*

*ORC – Common Order segment*

*IN1 – Insurance 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** |
| ORU\_R01 | Result |

### 4.1*.*3 Cloverleaf Configuration Files

gwnet\_cerner\_oru\_soar translation file

### 4.1.4 Cloverleaf Site Location

Patient\_ed

## 4.2 Data Transformation Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Data Type** | **Length** | **Notes** |
| Patient ID (Internal), Assigning Authority | PID.3.4 | Y |  |  | Hard coding “BCCPI” |
| Patient Account Number, Assigning Authority | PID.18.3 | N |  |  | @nulling this field |
| Patient Account Number, ID type code | PID.18.4 | N |  |  | Hard coding “BCFN” |

## 4.3 Sample Message

**Pre-CloverLeaf Manipulation:**

MSH|^~\&|GWN|GWN|HNAM||201510061044||ORU^R01|1442427313731|P|2.3

PID|1||300126101^^^^CPI||WORLDSTEST^FLORIDA||19561118|F||||||||||6000008584^^^SJH FIN

ORC|RE|4422522827^HNAM\_ORDERID|GWN115677||F||||201510061042||||||201510061044

OBR|1|4422522827^HNAM\_ORDERID|GWN115677|EDUVID|||201510061042||||||||||||||||||F

OBX|1|TX|EDUVID||The patient was discharged prior to completing the video

Diabetes Choosing Proper Footwear ordered from order number 4422522827. ||||||F|||201510061044

**Post-CloverLeaf Manipulation:**

MSH|^~\&|GWN|GWN|HNAM||201510061044||ORU^R01|1442427313731|P|2.3

PID|1||300126101^^^^BCCPI||WORLDSTEST^FLORIDA||19561118|F||||||||||6000008584^^^^BCFN

ORC|RE|4422522827^HNAM\_ORDERID|GWN115677||F||||201510061042||||||201510061044

OBR|1|4422522827^HNAM\_ORDERID|GWN115677|EDUVID|||201510061042||||||||||||||||||F

OBX|1|TX|EDUVID||The patient was discharged prior to completing the video

Diabetes Choosing Proper Footwear ordered from order number 4422522827. ||||||F|||201510061044

# **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 |  |  |  |

### 

## 5.3 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

Completion Dates of Successful Go-Lives

SJWH and SJCH on November 20, 2013

SJHN on December 4, 2013

SJH on December 18, 2013

SAH on September 3, 2014

SFBH on October 22, 2014

MPNBH on December 17, 2014

SJHS on February 2, 2015

MDH on July 15, 2015

MCH on September 9, 2015

MPH on October 7, 2015

# 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