**ORM Cerner OTObase Reqs**

**Version 1.2**

**Prepared By: Rich Allison, Sailaja Parimi**

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# **Document Control**

## Resources: (include Project Team Members, Liaisons, Vendor Contacts, etc.)

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Email** |
| Cheri Krampert | Baycare – Manager, Hlth Info Exchange & Enterprise Integration | Cheri.krampert@baycare.org |
| Rich Allison | BayCare Integration Developer - Cloverleaf | rich.allison@baycare.org |
| Hope Kaczmarczyk | Baycare Cerner Sr Integration Analyst - Cerner | Hope.kaczmarczyk@baycare.org |
| Sailaja Parimi | BayCare Integration Analyst – Cerner | Sailaja.parimi@baycare.org |
| Shelly Martin | Baycare Sr Systems Analyst | Shelly.martin@baycare.org |
| Reginah Musyoki-Howell | Sr. Project Manager, BayCare IS/PMO | Reginah.musyoki-howell@baycare.org |
| Lance Brown | Director, Otometrics/Audiology Systems | Lance.brown@natus.com |
|  |  |  |
|  |  |  |
|  |  |  |

## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 4/17/2018 | Rich Allison | Originally Created |
| V1.1 | 10/24/18 | Sailaja Parimi | Implementation of Orders interface  RFC # 14782 |
| V1.2 | 2/26/2019 | Rich Allison | Revised |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

This document outlines the contents and logic of the Cerner orders to OTObase Audiology translation interface.

## 1.2 Project Scope

Develop a Cerner to OTObase Orders interface. This interface will be implemented at two sites SJH & MPH effective 11/5/2018 for both inpatient and outpatients registered in Soarian.

This application wasn’t live until 3/4/19.

## 1.3 Terminology Standards

### 1.3.1 Acronyms

MLLP – Minimum Lower Layer Protocol for messaging framing a HL7 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.

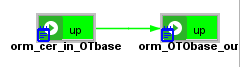
## 1.4 Document References

# 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).

These connections send Cerner Orders to OTObase Audiology.

They are on the cerner\_orders\_6 site.



# 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.20XX.1.0 | Cerner Order interface to OTOBase Audiology | Develop an Orders interface for the OTOBase Audiology application for Audiologists. |

Only send MSH PID PV1 PV2 ORC OBR segments.

## 3.2 Non-Functional Requirements

Provide concise detail for the below non-functional requirements. This would include external table ownership, hours of support, etc. The below requirements must be evaluated for every project.

|  |  |  |
| --- | --- | --- |
| **Cerner** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| FR.2018.1.0 | Outbound Orders Comserver | ORM\_TCP\_AUDIOLOGY\_OUT |
| FR.2018.1.1 | Route script | Update it to allow Audiology orders outbound |
| FR.2018.1.2 | Global script for orders | Update to allow orders with an activity type of AUDIOLOGY |

## 3.3 Messaging Protocols

Below are listed the details for the messaging protocols that will be leveraged for this integration. This includes: TCP/IP, FTP, Web Services, etc.

TCP/IP

### 

### 3.3.1 Inbound to the BayCare Cloverleaf

|  |  |
| --- | --- |
| FTP |  |
| MLLP Socket Connection (TCP/IP) |  |
| Local File Drop by Midrange Team |  |
| Other | Click here to enter text. |

### 3.3.2 Outbound to the BayCare Cloverleaf

|  |  |
| --- | --- |
| FTP |  |
| MLLP Socket Connection (TCP/IP) |  |
| Local File Drop by Midrange Team |  |
| Other | Click here to enter text. |

### 3.3.3 Inbound to the Vendor

|  |  |
| --- | --- |
| FTP |  |
| MLLP Socket Connection (TCP/IP) |  |
| Local File Drop by Midrange Team |  |
| Other | Click here to enter text. |

### 3.3.4 Outbound to the Vendor

|  |  |
| --- | --- |
| FTP |  |
| MLLP Socket Connection (TCP/IP) |  |
| Local File Drop by Midrange Team |  |
| Other | Click here to enter text. |

# 

# 4. HL7 Messaging

## 4.1 Messaging Format

### 4.1.1 Segments

The segments utilized for this interface are:

MSH

PID

PV1

PV2

ORC

OBR

*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** |
| ORM\_O01 | Order |

### 

### 4.1*.*3 Cloverleaf Configuration Files

Variants:

HL7 2.3/cerner\_emr ORM\_O01

TCL Scripts:

none

Xlates:

cerner\_OTObase\_orm.xlt

Filters:

none

### 4.1.4 Cloverleaf Site Location

cerner\_orders\_6\_p

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Notes** |
| --- | --- | --- | --- |
| Message Header Segment | MSH | Y |  |
| Encoding Characters | MSH.2 |  | =^~\& |
| Sending Facility | MSH.4 |  | COPY MSH.5 to MSH.4 |
| Receiving Application | MSH.5 |  | COPY “OTObase” to MSH.5 |
| Receiving Application | MSH.6 |  | COPY MSH.5 to MSH.6 |
| Patient Identification Segment | PID | Y |  |
| Patient Identifier | PID.2 | Y | ITERATE  IF 1(0).0(0).PID.#2(%f1).[3] eq =BayCare MRN  COPY 1(0).0(0).PID.#2(%f1).[0] to  1(0).0(0).PID.#2.[0]  COPY “BCMRN” to 1(0).0(0).PID.#2.[4] |
| Patient Identifier List | PID.3 | Y | IF 1(0).0(0).PID.#3(%f1).[3] eq =BayCare CMRN  COPY 1(0).0(0).PID.#3(%f1).[0] to  1(0).0(0).PID.#3.[0]  COPY “BCCPI” to 1(0).0(0).PID.#3.[4] |
| Patient Name | PID.5 | Y | COPY the Patient Name  Extract the patient last, first, middle, suffix and prefix. |
| Date/Time of Birth | PID.7 |  | COPY the DOB |
| Administrative Sex | PID.8 |  | COPY the Sex |
| Patient Address | PID.11 |  | COPY the Patient Address  Extract the Street 1, Street 2, City, State, Zip and Country |
| Phone Number – Home | PID.13 |  | COPY the Patient Home Phone  Extract the Phone and Use Code |
| Phone Number – Business | PID.14 |  | COPY the Patient Business Phone |
| Primary Language | PID.15 |  | COPY the Patient Primary Language |
| Patient Account Number | PID.18 |  | COPY the Patient Account Number  COPY “BCHS” to PID.18.3, Assigning Authority  COPY “FIN” to PID.18.4, ID Type Code |
| SSN Number - Patient | PID.19 |  | IF 1(0).0(0).PID.#19 eq =999999999  COPY “” to 1(0).0(0).PID.#19 |
| Patient Visit Segment | PV1 | Y |  |
| Patient Class | PV1.2 |  | COPY the Patient Class |
| Assigned Patient Location | PV1.3 |  | PATHCOPY the Assigned Patient Location |
| Admission Type | PV1.4 |  | COPY the Admission Type |
| Attending Dr. | PV1.7 |  | COPY the Attending Dr. |
| Hospital Service | PV1.10.0 |  | COPY the Hospital Service |
| Admit Source | PV1.14.0 |  | COPY the Admit Source |
| Admitting Dr. | PV1.17 |  | PATHCOPY the Admitting Dr. |
| Patient Type | PV1.18.0 |  | COPY the Patient Type |
| Financial Class | PV1.20 |  | COPY the Financial Class |
| Servicing Facility | PV1.39.0 |  | COPY the Servicing Facility |
| Account Status | PV1.41 |  | COPY the Account Status |
| Admit Date/Time | PV1.44.0 |  | COPY the Admit Date/Time |
| Patient Visit – additional information Segment | PV2 | Y |  |
| Accommodation Code | PV2.2.0 |  | COPY the Accommodation Code |
| Admit Reason | PV2.3.1 |  | COPY the Admit Reason |
| Estimate Length of Inpatient Stay | PV2.10.0 |  | COPY the Estimated Length of Inptnt Stay |
| Visit Protection Indicator | PV2.22.0 |  | COPY the Visit Protection Indicator |
| Clinic Organization Name | PV2.23 |  | COPY the Clinic Organization Name |
| Common Order Segment | ORC | Y | PATHCOPY the ORC segment |
| Observation Request Segment | OBR | Y | PATHCOPY the OBR segment |
|  |  |  |  |
|  |  |  |  |

## 

## 4.3 Sample Message

**Order message from Cerner to Cloverleaf:**

MSH|^~\&|HNAM|BAYCARE|MPH|OTObase|20190227115813||ORM^O01|Q5168808793T6968364774||2.3||||||8859/1PID|1|2106415367^^^BayCare MRN^MRN^SOARIAN|3000005^^^SJN^MRN^SJN~937370^^^SJH^MRN^SJH~101604106^^^BayCare CMRN^Community Medical Record Number^SOARIAN~2106415367^^^BayCare MRN^MRN^SOARIAN|101604106^^^BayCare EAD CPI^Historical CMRN^SOARIAN|BAYCARETEN^DONOTUSE^^^^^Current||19440302|F||W|FF^^CLEARWATER^FL^33761^""^Home^^""||(456)456-4555^PRN^""||ENG|M|UNK|1108375256^^^BayCare FIN^FIN NBR^SOARIAN|999999999|||NOH||""|0|""|""|""||""PV1|1|O|^^^MPH^^Building(s)^MPH|R|||MS999999^SYSTEM^UNASSIGNED DOCTOR^^^^^^BayCare Dr Number|||AUD|""|""|""|RP|""|""|MS999999^SYSTEM^UNASSIGNED DOCTOR^^^^^^BayCare Dr Number|O||8||""||||||||||||||AHR|""|""|MPH||Active|||20190221145300PV2||""|^TEST ACCT|""|||""|||0|||""||||||||""|CONFID|^^589743||||""IN1|1|590194^Uninsured^^^Uninsured|6311702|Uninsured|||(813)852-3504^WPN^""||Uninsured|||20190221000000|||O|BAYCARETEN^DONOTUSE^^^^^Current|1|19440302|FF^^CLEARWATER^FL^33761^""^Home|""||1|||||||||||||S||||||||F||""||""||NONEIN2|0|999999999|||||||||||||||||||||||NONE||||||||||||||||||||||||||||||||||||NONE||(456)456-4555^PRN^CD:30508397|||||||||""ORC|F|17331868615^HNAM\_ORDERID|||65||||20190227115813|^SYSTEM^Donotchange^^^^^^^Personnel||MS666666^UNASSIGNED^ER DOCTOR^^^^^^BayCare Dr Number|""||20190227115813|||REBOUND^ESI Default|^SYSTEM^Donotchange^^^^^^^PersonnelOBR|1|17331868615^HNAM\_ORDERID||AUDTEST^Audiology Testing|||||||||testing for OTObase round 4|||MS666666^UNASSIGNED^ER DOCTOR^^^^^^BayCare Dr Number||||||20190227115813||CD:3131185645|||1^^0^20190227115500^^""^testing for OTObase round 4

**Order message from Cloverleaf to Otobase:**

MSH|^~\&||MPH|OTObase|MPH|||ORM^O01||P|2.3

PID||2106415367^^^^BCMRN|101604106^^^^BCCPI||BAYCARETEN^DONOTUSE||19440302|F|||FF^^CLEARWATER^FL^33761^""||(456)456-4555^PRN||ENG|||1108375256^^^BCHS^FIN|""

PV1||O|^^^MPH^^Building(s)^MPH|R|||MS999999^SYSTEM^UNASSIGNED DOCTOR^^^^^^BayCare Dr Number|||AUD||||RP|||MS999999^SYSTEM^UNASSIGNED DOCTOR^^^^^^BayCare Dr Number|O||8|||||||||||||||||||MPH||Active|||20190221145300

PV2||""|^TEST ACCT|||||||0||||||||||||CONFID|^^589743

ORC|F|17331868615^HNAM\_ORDERID|||65||||20190227115813|^SYSTEM^Donotchange^^^^^^^Personnel||MS666666^UNASSIGNED^ER DOCTOR^^^^^^BayCare Dr Number|""||20190227115813|||REBOUND^ESI Default|^SYSTEM^Donotchange^^^^^^^Personnel

OBR|1|17331868615^HNAM\_ORDERID||AUDTEST^Audiology Testing|||||||||testing for OTObase round 4|||MS666666^UNASSIGNED^ER DOCTOR^^^^^^BayCare Dr Number||||||20190227115813||CD:3131185|||1^^0^20190227115500^^""^testing for OTObase round 4

# 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** |
|  |  | |  |  |
| cerner\_orders\_6 | | 7am-7pm | Cerner Orders Clindoc | Orders to OTOBase Audiology |

# 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