**Cerner ORM to Soarian ADT Requirements**

**Version 1.1**

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**Date: 7/24/2019**

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# **Document Control**

## Resources

|  |  |  |
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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 8/2/2018 | Lois Whitley | Original document |
| V1.1 | 07/24/2019 | Tiffany Bohall | Updated to include filter changes from the Cerner Model interface consolidateion project |
|  |  |  |  |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

The purpose of this document is to describe the Orders (ORM) Interface going from Cerner Millennium to Soarian as an Admission, Discharge, Transfer (ADT) message.

The ultimate goal of this interface is to change the attending doctor for a patient in Soarian and in Cerner. When an order to change the attending doctor is entered in Cerner on a given patient, the Cloverleaf engine receives the ORM message and transforms it into an ADT message that is sent to Soarian. Upon receiving this specific ADT message, Soarian will update the patient’s record in the application with the new attending doctor.

## 1.2 Project Scope

The scope of this project is to create an ORM interface from Cerner to Soarian that will transform the ORM messages into ADT by Cloverleaf.

## 1.3 Terminology Standards

### 1.3.1 Acronyms

**ADT** – Admission, Discharge, Transfer: mainly demographic and patient location data

**ORM** – Order Message

### 1.3.2 Glossary

**ADT Event** – Trigger event associated with a patient event: registration, admission, discharge, transfer, update…

## 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).

# 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.2018.1.0 | . Admit date and time | In EVN put Admit date and time not date of message |
| FR.2019.7.12.1 | tpsAdvHL7Filter | Continue messages where OBR.4 = ‘Consult to Physician’ for 1st route |
| FR.2019.7.12.2 | tpsAdvHL7Filter | Continue messages where OBR.4 = ‘Change Attending Physician’ for 2nd route |

No FSI Component

## 3.2 Non-Functional Requirements

Provide concise detail for the below non-functional requirements. The below requirements must be evaluated for every project.

|  |  |  |
| --- | --- | --- |
| **Cerner** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| NFR.2018.1.0 | 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 Cerner

* TCP MLLP Server Connection

### 3.3.2 Outbound to MARBELLA

* TCP MLLP Client Connection (using the same outbound connection as the Soarian ADT interface)

# 4. HL7 Messaging

## 4.1 Messaging Format

### 4.1.1 Segments

The segments utilized for this interface are:

MSH

EVN

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*

*PV2 – Patient Visit segment additional information*

*ORC – Common Order segment*

*OBR – Observation Request segment*

### 

### 4.1*.*2 Messaging Event Types

Below are the messages types necessary for this integration

Supported Events

|  |  |
| --- | --- |
| Event Type | Description |
| ORM\_O01 | Order Message |
| ADT\_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.

HL7 Variants:

Xlate:

TCL Script: tpsCerToSoarfAtt – this script serves as the translate from cerner order to an ADT message for Soarian for changing attending providers

TCL Script: tpsCerToSoarfConsult – this script serves as the translate from cerner order to an ADT message for Soarian for consulting providers

### 4.1.4 Cloverleaf Site Location

Production = cerner\_orders\_6

soarf\_outbound\_23

Test = cerner\_orders\_6

soarf\_outbound\_23

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required R/O/C** | **Data Type** | **Length** | **Notes** |
| --- | --- | --- | --- | --- | --- |
| **Message Header Segment** | MSH | R |  |  | PathCopy |
| Sending Application | MSH.3 | C |  |  | Hardcode “CERNER” |
| Sending Facility | MSH.4 | R |  |  |  |
| Receiving Application | MSH.5 | O |  |  | Hardcode “SOARF” |
| Date/Time of Message | MSH.7 | R |  |  | Copy |
| Message Type | MSH.9 | R |  |  | Change to “**ADT^A08**”. |
| Message Control ID | MSH.10 | R |  |  | Copy |
| Processing ID | MSH.11 | ? |  |  | Copy |
| **Version** | MSH.12 |  |  |  | Hardcode 2.7 |
| **Event Segment** | EVN | C |  |  |  |
| Event Type Code | EVN.1 | R |  |  | Change to “**A08**”. |
| Recorded Date/Time | EVN.2 | R |  |  | Copy incoming MSH.7 |
| Operator ID | EVN.5 |  |  |  |  |
| Event Occurred | EVN.6 |  |  |  | Admit date and time |
| **Patient Identifier Segment** | PID | R |  |  |  |
| Patient ID (Internal) | PID.3 | R |  |  | $CPI^^^900000^PN |
| DOB | PID.7 |  |  |  | Copy |
| Gender | PID.8 |  |  |  | Copy |
| Patient Account Number | PID.18 | R |  |  | $PTACCT^^^504^VCD |
| **Patient Visit Segment** | PV1 | R |  |  |  |
| Attending Physician | PV1.7 | O |  |  | $attProvMSNum^^^^^^^^183^^^^PRN |

## 4.3 Sample Message

**CHANGE ATTENDING**

Inbound to Cloverleaf from Cerner:

MSH|^~\&|HNAM|CERNER|WHH|BAYCARE|20180725115453||ORM^O01|Q4160965525T5406748712|T|2.3||||||8859/1

PID|1|7000057627^^^BayCare MRN^MRN^SOARIAN|7000057627^^^BayCare MRN^MRN^SOARIAN~810068204^^^BayCare CMRN^Community Medical Record Number^SOARIAN||HEIDITEST^ERTEST^^^^^Current||19850521|F||W|2323 RED ST^^Saint Petersburg^FL^33707^^Home||(727)855-4545^PRN||ENG|S|Catholic|6000088465^^^BayCare FIN^FIN NBR^SOARIAN||||NOH|||0

PV1|1|I|MSU^548^01^WHH^^Bed(s)^WHH|R|||MS055144|||MED||||RP||N||I||M|||||||||||||||||||WHH||Active|||20180724145200

PV2||Acute|^test|||||||0||||||||||||CONFID|^^6134996

ORC|SN|13547772519^HNAM\_ORDERID|||20||||20180725115349|^Barone^Cindy^^^^^^^Personnel|||||20180725115452|||Written^Written/Paper/Fax|^Barone^Cindy^^^^^^^Personnel

OBR|1|13547772519^HNAM\_ORDERID||Change Attending Physician^Change Attending Physician||||||||||||||||||20180725115452||CD:3108736843|||1^^0^20180725115300

Outbound from Cloverleaf to Soarian:

MSH|^~\&|CERNER|H0A5|SOARF||20180724145200||ADT^A08|Q4160965525T5406748712|T|2.7||||||8859/1

EVN|A08|20180724145200|||CERNER|20180724145200||||

PID|||810068204^^^900000^PN|||||||||||||||6000088465^^^504^VCD

PV1|||||||055144^^^^^^^^183^^^^PRN

# Appendix A: Risks and Concerns

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Name** |  |  | | |  |  |  |  |
| **Number** | **Risk / Concern** | **Comment** | **Mitigation** | | |  |  |  |
| RC.2017.1.0 |  |  | |  | |  |  |  |

# 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** | | |  |  |  |
|  |  |  | |  | |  |  |  |

* End of document