**ORU Cerner SurgiNet**

**HealthGrid Event Requirements**

**Version 1.2**

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**Date: 7/31/2019**

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# **Document Control**

## Resources

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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 6/5/2017 | Tiffany, Dan | Originally Created |
| V1.1 | 6/20/2017 | Tiffany | Included recent sample messages |
| V1.2 | 7/31/2019 | Levy Lazarre | Minor changes related to Cerner Model impl. |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

This document outlines BayCare’s Surgery Case Tracking interfaces from Cerner to Cloverleaf to HealthGrid.

## 1.2 Project Scope

The HealthGrid application interface enables secure transmission of patient information to their chosen cell devices. This is a device-agnostic mobile solution that updates patients and families with real-time information about their important clinical events. Patient’s family members are notified in real-time about the patient’s surgery on their mobile device.

## 1.3 Terminology Standards

### 1.3.1 Acronyms

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

### 1.3.2 Glossary

Click here to enter text.

## 1.4 Document References

[ORU\_Cerner\_HealthGrid\_Reqs](http://bcspapp01:48601/sites/SecurityDataIntegrity/EnterpriseIntegration/team/Shared%20Documents/Applications%20and%20Systems/01-EIT%20Requirements/ORU_Cerner_HealthGrid%20Reqs.docx)

# 2. Diagram

SMS

HL7

HL7

Surgery Patient’s Responsible Party’s Cellphone Message

HealthGrid

Cloverleaf

Cerner Surginet Case Tracking Event

# 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.2017.6.7  FR.2019.7.8 | tpsAdvHL7filter in Cloverleaf  tpsCernerCommonCode in Cloverleaf | There is a filter from the Cerner results route outbound to HealthGrid that will continue any transactions where OBR.4 =zzzFormbuilder. Additional parameters within the same filter suppress any results where Edutainment is in OBR.24.  This Tcl proc performs certain reformatting changes to the report. For example, if the patient’s SSN == “999999999”, it will blank it out. If there is an email address in the patient street address field, it will remove the email. It also places some values in the MSH header of the message. |

|  |  |  |
| --- | --- | --- |
| **Cerner** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| NFR.2017.1.1 | Allow Surginet Events Out of Cerner | In the Global Clinical Event Suppression Script we allow the Surginet Events to get sent out of Cerner. Previously these were suppressed.  These are discrete results that trigger out the CE GRP trigger. Their event\_cd starts with “zzzFormbuilder Form\*” |

## 3.2 Non-Functional Requirements

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

|  |  |  |
| --- | --- | --- |
| **Cloverleaf –N/A** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| NFR.20XX.1.0 | Click here to enter text. | Click here to enter text. |

# 4. HL7 Messaging

## 4.1 Messaging Format

HL7 v2.3

### 4.1.1 Segments

The segments utilized for this interface are:

MSH

PID

[PD1]

{PV1}

OBR

{OBX}

*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 | Surginet Event Time – Result Message |
|  |  |
|  |  |

### 4.1*.*3 Cloverleaf Configuration Files

There are no Cloverleaf manipulations taking place for these messages, as Cloverleaf is only a pass-through. No HL7 variants or Xlates are used.

Tcl scripts:

tpsAdvHL7Filter.tcl - used to filter out certain reports, as mentioned in the Functional Requirements section.

tpsCernerCommonCode.tcl - used to perform some formatting changes in the report, as mentioned in the Functional Requirements section.

### 4.1.4 Cloverleaf Site Location

Cloverleaf site location: hlthgrid\_27 (test), hlthgrid\_27\_p (prod)

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Data Type** | **Notes** |
| --- | --- | --- | --- | --- |
| Message Header Location Add-on | MSH 5 | Y | Cerner | Set MSH 5 to patient’s building location |
| Personal Care Provider for the encounter | PD1:4 | Y | Cerner | Add the PCPE to PD1:4 |
| Provider segment | PD1 | Y | Cerner | Clear all old life time PCP identifiers |
| Patient Name Type | PID;5.7 | Y | Cerner | Blank out Name Type field |
| Patient Address | PID 11 | Y | Cerner | No email addresses get sent outbound |
| Visit information | PV1;19 | Y | Cerner | Blank out visit number information |
| Diagnostic Service | OBR 24 | Y | Cerner | If “Pharmacy” for diagnostic service, ignore message. |
| Order Control Group | ORC 3 | Y | Cerner | Keep Cerner's order\_id in ORC 3 |
| Order Group | OBR 3 | Y | Cerner | Keep Cerner's order\_id in OBR 3 |
| Result Group | OBX | Y | Cerner | If OBX (Result) is blank, ignore message. |

## 4.3 Sample Message

ORU from Cerner

MSH|^~\&|HNAM|CERNER|SJH|BAYCARE|20170613093055||ORU^R01|Q3315986056T4202984123||2.3||||||8859/1

PID|1|7000009205^^^BayCare MRN^MRN^SOARIAN|7000009205^^^BayCare MRN^MRN^SOARIAN~810006502^^^BayCare CMRN^Community Medical Record Number^SOARIAN|810006502^^^BayCare EAD CPI^Historical CMRN^SOARIAN|FROG^JOE^^VI||19650202|M||O|109 Main Street^^Saint Petersburg^FL^33701^^Home||(727)467-4599^PRN~(813)855-8585^PRN~(813)855-8585^PRN||ENG|S|BUD|6000031583^^^BayCare FIN^FIN NBR^SOARIAN|223252121||||||0

PV1|1|O|ASCJH^^^SJH^^Ambulatory(s)^SJH|R|||MS064202^Bhpni^Hhgyuh^V^^^^^BayCare Dr Number^Personnel^^^ORGANIZATION DOCTOR^CACTUS~1992147110^Bhpni^Hhgyuh^V^^^^^NPI Number^Personnel^^^National Provider Identifier^CACTUS|||ASC||||RP||N|MS064202^Bhpni^Hhgyuh^V^^^^^BayCare Dr Number^Personnel^^^ORGANIZATION DOCTOR^CACTUS~1992147110^Bhpni^Hhgyuh^V^^^^^NPI Number^Personnel^^^National Provider Identifier^CACTUS|V|||||||||||||||||||||SJH||Active|||20170613091700

OBR|1|1059447177SN2607224161^HNAM\_CEREF|~12600861301^HNAM\_EVENTID|CD:33002095^zzzFormbuilder Form^^Case Times^Case Times|||20170613093053|20170613093053||||||||||||||20170613093054||GRP|F

OBX|1|TS|CD:32999691^SN - CTm - Patient - In Room Time^^CD:32999691^SN - CTm - Patient - In Room Time^BCLAB||20170613093000||||||F|||20170613093054

# 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 |  |  | |  | |  |  |  |

# 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