**Cerner\_HTWT\_to\_TheraDoc Reqs**

**Version 1.2**

**Prepared By: Rich Allison**

**Date: 7/29/2019**

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# **Document Control**

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

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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 7/23/2018 | Rich Allison | Originally Created |
| V1.1 | 7/12/2019 | Tiffany Bohall | Updated ht/wt section based on changes from Cerner Model project |
| V1.2 | 07/29/2019 | Yitzhak Magoon | Updated requirements to include ht/wt changes from Cerner Model project from FSI |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

This document outlines the contents and logic of deriving Height and Weight messages from Cerner and sending the results to TheraDoc.

## 1.2 Project Scope

Provide patient Height and Weight to TheraDoc from Cerner.

## 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

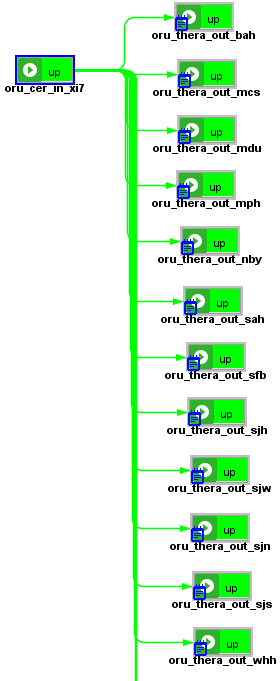
Provide a solution diagram that depicts the integration of components specified in this IDBB. This diagram must include the data flow for the interfaces (source and target).

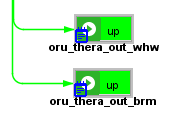
Height/Weight from Cerner on the cerner\_results\_7\_p site…





Height/Weight from the cerner site to the theradoc\_25\_p 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.2019.6.24.1 | Convert ORM messages from Cerner to ORU\_R01 messages going to downstream applications | The Cerner Model project converted height and weight transactions outbound from Cerner, from ORU to ORM transactions. In order to avoid complete rebuild of variants/routes and translates, Cloverleaf added a tpsHL7ChangeData2 proc that converts MSH.8. |
| FR.2019.6.24.2 | tpsCernerHeightWeightUnits | The Cerner Model project required that Cloverleaf add units of measure to height and weight transactions: add ‘cm’ to OBX.6, when OBX.3 = HIEGHT and add ‘kg’ to OBX.6 when OBX.3 = WEIGHT |
| FR.2019.6.24.3 | tpsCernerCommonCode | The Cerner Model project required common coded elements on multiple interfaces: copy PV1.3.7 to MSH.5.1, remove email address from PID.11, only send Home address in PID.11, null SSN if all 999’s, replace & characters with the word ‘and’ in OBR.13, OBR.27 and OBR.31. |
| Cerner |  |  |
| Number | Requirement Name | Requirement Description |
| FR.2019.7.8.1 | Discern Rule | The Cerner Model project required that PowerChart team update their Discern Rules BCC\_DISCERN\_HT\_WT and BCC\_DISCERN\_BIRTH\_HT\_WT. The logic was changed to properly send out the height and weight in an OBX segment as well as add encounter type filtering at the rule level. Encounter type filtering was removed from the global suppression script. |
| FR.2019.7.8.2 | Order Entry Flexing | The Cerner Model Project required that the PowerChart team remove flexing from the Order Entry Format for the two height and weight orders that get triggered from the rule. |
| FR.2019.7.8.3 | ORM\_HT\_WT\_OUT | The Cerner Model Project required a new dedicated height and weight interface to be created. This is a standard TCP/IP interface with no modobj or modorig scripts. |

## 3.2 Non-Functional Requirements –N/A

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.

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| NFR.20XX.1.0 | Click here to enter text. | Click here to enter text. |
| **Cerner** |  |  |
| Number | Requirement Name | Requirement Description |
| NFR.2019.7.8.1 | Encounter type suppression for height and weight | Height and weight is not sent out BMG / BUC patients with one of the following encounter types:  AMBULATORYMATERNITYOFFICE  AMBULATORYOFFICE  WORKERSCOMP  URGENTCARE  URGENTCAREOCCMED |

## 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:

From Cerner to TheraDoc:

MSH

PID

PV1

PV2

ORC

OBR

NTE

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 | Result msg – from Cerner |

### 4.1*.*3 Cloverleaf Configuration Files

Variants:

None

TCL Scripts: Every outbound connection has a filter to only send messages related to that facility.

{ADVFLTR {

{{PATH {MSH:4}} {VALUE {{MPH}}} {MATCHDISP CONTINUE} {NOMATCHDISP KILL}}

}

}

{DEBUG 0}

Xlates:

None

Filters:

None

### 4.1.4 Cloverleaf Site Location

cerner\_results\_7\_p

theradoc\_25\_p

## 4.2 Data Transformation Requirements –N/A

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Notes** |
| --- | --- | --- | --- |
| None |  |  |  |
|  |  |  |  |
|  |  |  |  |

## 4.3 Sample Message

Inbound/Outbound:

MSH|^~\&|HNAM|CERNER|BAH|BAYCARE|20180723104659||ORU^R01|Q4417905581T5798910240||2.3||||||8859/1

PID|1|2006002004^^^BayCare MRN^MRN|2006002004^^^BayCare MRN^MRN||UCTEST^TESTER||20180613|M|||~test@test.com^^^^^^e-mail||^PRN^^test@test.com|||||1006008492^^^BayCare FIN^FIN NBR|||||||0

PV1|1|I|BAH2^0170^D^BAH^^Bed(s)^BAH|||||||||||||||I|||||||||||||||||||||BAH||Active|||20180613051853

PV2|||^TEST|||||||0||||||||||||CONFID|^^1046030

ORC|SN||14468796621^HNAM\_ORDERID||65||||20180723104657|^LQLGSN^Hwuwgajcuxs^^^^^^^Personnel||^LQLGSN^Hwuwgajcuxs^^^^^^^Personnel|||20180723104657|||Discern Expert^Discern Expert|^LQLGSN^Hwuwgajcuxs^^^^^^^Personnel

OBR|1||14468796621^HNAM\_ORDERID|DEHTWT^Discern HT WT||||||||||||^LQLGSN^Hwuwgajcuxs^^^^^^^Personnel||||||20180723104657||Discern Rule Order|||1^^0^20180723104657

NTE|1|ORDCOM|Discern Order entered secondary to height and/or weight being entered on a patient in MedManager, PowerForm, or Direct Flow Sheet Charting.

OBX|1|ST|HEIGHT^DE Height||125.00|cm

OBX|1|ST|WEIGHT^DE Weight||65.00|kg

# 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\_results\_7\_p  theradoc\_25\_p | | 24/7  24/7 | Primary: Cerner Interface on call  Primary: IS - Cerner PharmNet on call group  Secondary: Lori Green, Database Admin  Phone: 727-519-1769  Cell: 727.743.5837 | Cerner Height/Weight to downstream applications  Third: Page vendor for system issues: 888-778-5508 (AFTER HOURS)  Or email: support@theradoc.com during business hours  If NO reponse after 2 pages and an hour has passed from initial page,  please call tier 2 support at: 801 338-2785  INTERFACE DESCRIPTION:  TheraDoc - Infection Control and Decision Support  Lab results from Cerner to TheraDoc (infection control) |

# 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