**DWC-25 PDF Results from Millennium to Cerner**

**Version 1.0**

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[Document Control 3](#_Toc505678669)

[Resources: (include Project Team Members, Liaisons, Vendor Contacts, etc.) 3](#_Toc505678670)

[Project Distribution List 3](#_Toc505678671)

[Document Version Control 3](#_Toc505678672)

[1. Introduction 4](#_Toc505678673)

[1.1 Purpose 4](#_Toc505678674)

[1.2 Project Scope 4](#_Toc505678675)

[1.3 Terminology Standards 4](#_Toc505678676)

[1.3.1 Acronyms 4](#_Toc505678677)

[1.3.2 Glossary 4](#_Toc505678678)

[1.4 Document References 4](#_Toc505678679)

[2. Diagram 5](#_Toc505678680)

[3. Requirements 6](#_Toc505678681)

[3.1 Functional Requirements 6](#_Toc505678682)

[3.2 Non-Functional Requirements 6](#_Toc505678683)

[3.3 Messaging Protocols 7](#_Toc505678684)

[3.3.1 Inbound to the BayCare Cloverleaf 7](#_Toc505678685)

[3.3.2 Outbound to the Vendor 7](#_Toc505678686)

[4. HL7 Messaging 8](#_Toc505678687)

[4.1 Messaging Format 8](#_Toc505678688)

[4.1.1 Segments 8](#_Toc505678689)

[4.1*.*2 Messaging Event Types 8](#_Toc505678690)

[4.1*.*3 Cloverleaf Configuration Files 9](#_Toc505678691)

[4.1.4 Cloverleaf Site Location 9](#_Toc505678692)

[4.2 Data Transformation Requirements 9](#_Toc505678693)

[4.3 Sample Message 11](#_Toc505678694)

[5. Alerts 12](#_Toc505678695)

[Appendix A: Risks and Concerns 12](#_Toc505678696)

[Appendix B: Issues List 12](#_Toc505678697)

# **Document Control**

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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 11/12/2018 | Sarah Thies | Originally Created |
| V1.1 |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

The purpose of this document is to describe the result interface requirements from Millennium Power Chart to an output file that is FTP’d to Cloverleaf and sent back to Cerner Millennium. This interface will allow the BayCare Urgent Care offices to complete the Florida State Workers Compensation Form in Cerner.

## 1.2 Project Scope

In addition to processing, the results inbound Cerner; this project will allow the BayCare Employer Portal to display the Florida State Workers Compensation Form.

## 1.3 Terminology Standards

### 1.3.1 Acronyms

ORU– Observation Result/Unsolicited

PDF – Portable Document Format

|  |
| --- |
| DWC-25 -- Florida Workers' Compensation Uniform Medical Treatment/Status Reporting Form |

### 1.3.2 Glossary

Click here to enter text.

## 1.4 Document References

List all documents or Web addresses to which this IDBB refers; provide enough information so that the reader can access a copy of each reference. Include the title, author, version number, date, and source or location.

# 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 | General formatting | Insure that messages conform to Cerner’s expectations. There are certain required fields detailed in the mapping section of the document that are required to successfully upload an ORU with an embedded PDF. |
| FR.2018.1.0 | Only Process PDFs | Insure that the only OBX forwarded on to Cerner is the one containing a PDF \ has a data format value of ED |
| FR.2018.3.0-Cerner | Cerner Source and System | New AMB\_PDF Contributor Source and System built in Cerner |
| FR.2018.4.0-Cerner | Cerner AMB PDF Interface | ORU\_TCP\_AMB\_PDF\_IN *(formerly called ORU\_TCP\_PHREESIA\_IN)*  to process Ambulatory Forms from Phreesia & Millennium to Cerner |
| FR.2018.5.0-Cerner | SCP 247 | These BMG/BUC results must process through the *same* ESIs in order to avoid database locks. The inbound results are load balanced and routed to 7 Openview BMG ESIs by CPI number. From there, the messages are processed by SCP247 to the database. |

## 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.

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| NFR.2018.1.0 | Support Hours | This interface would be supported 7 days a week between 7 am and 10 pm. |

## 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.

### 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 Millennium

|  |  |
| --- | --- |
| 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

OBR

OBX

*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header segment*

*PID – Patient ID segment*

*OBR – Observation Request segment*

*OBX – Observation / Result 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 | Unsolicited transmission of an observation |
|  |  |
|  |  |
|  |  |

### 4.1*.*3 Cloverleaf Configuration Files

Tcl proc: tps\_dwc25\_cerner\_oru\_pdf.tcl

There is no Xlate involved. This Tcl proc does all the work of creating the ORU message, base-64 encoding the PDF file and embedding it in OBX.5.

### 4.1.4 Cloverleaf Site Location

cerner\_results\_7\_p

## 4.2 Data Transformation Requirements

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Notes** |
| Field Separator | MSH:1 | R | Standard HL7 | |
| Encoding Characters | MSH:2 | R | Standard HL7 ^~\& |
| Sending Application | MSH:3.1 | Y | “AMB\_PDF” sent in al caps |
| Sending Facility | MSH:4.1 | Y | “MILLENNIUM” sent in al caps |
| Receiving Application | MSH:5.1 | Y | “POSTIMAGE” sent in al caps |
| Receiving Facility | MSH:6.1 | Y | “BAYCARE” sent in al caps |
| Message Type | MSH:9.1 | R | Type ORU |
| Trigger Event | MSH:9.2 | R | Event R01 |
| Message Control ID | MSH:10 | R | Initiator generated unique Message Control ID *Cloverleaf* – CPI *DT TMI* |
| Processing ID | MSH:11 | R | Cerner: T - Training/Testing Environment or P - Production Environment. |
| Version ID | MSH:12 | R | Value will be 2.3 |
| Vendor Created Field, Not HL7 Compliant | MSH:20 | N | Set this field to **blank** because it was causing issues for Cerner |
| Set ID | PID:1 | Y | This is forced to a value of “1” |
| Patient ID External CPI | PID:2.\* | Y | BayCare Health System enterprise identifier \ CPI formatted to Cerner’s specifications: 888888888^^^^BCCPI |
| Patient ID Internal MRN | PID:3.\* | Y | GE generated MRN formatted to Cerner specifications: 999999999^^^^BMGMRN |
| Patient FIN \ Account Number | PID:18.\* | Y | The GE financial number \ account number formatted to Cerner’s expectations: 111111111^^^^BMGFN |
| Patient FIN \ Account Number Type Code | PID:18.5 |  | CCL to pull value BMGFN from ea\_alias\_pool\_disp and Cloverleaf to send in PID-18.5 to Cerner |
| Patient Last Name | PID:5.1 | R | Patient LN |
| Patient First Name | PID:5.2 | R | Patient FN |
| Patient Middle Initial | PID:5.3 | R | Patient MN |
| Patient DOB | PID:7.1 | O | Patient DOB yyyymmdd |
| Patient Gender | PID:8 | O | Patient Gender |
| Visit Number | PV1:19 | N | Insure that this value is not sent to Cerner by setting the contents to **blank** |
| Placer Order Number | OBR:2.1 | Y | Copy value from OBR:1 to this field |
| Unique Filler Order ID | OBR:3.1 | R | Use Cerner **parent event id** on clinical event table  Need **Unique and repeatable** - so if they send an amendment or something you could match to it. |
| Test Code | OBR:4.1 | R | Cerner Inbound **Result Alias**  See Code Set 72, Contributor Source = AMB\_PDF  Per KK, the inbound alias will be **DWC25** |
| Test Code Description | OBR:4.2 | C | Per KK, the display/description will be **Workers Comp**  Used as the document title when OBR-4.5 is not valued. |
| Ordering Provider | OBR:16.\* | **NA** | Insure that the ordering provider is formatted to Cerner’s expectations: MS77777^^^^^^^^^BayCare Dr Number. |
| \*\*Specimen Action Code\*\* | OBR:11 | Y | OUTPUT FILE:  Format and copy the sign date and time (or creation date time)  The format is changed to: ^^^20180117082301 |
| Diagnostic Serv Sect ID | OBR:24 | Y | This value is hard coded to MDOC |
| Set ID | OBX:1 | Y | Insure that this is set to a value of 1. We only received on PDF document per messages so the value is always going to be 1. |
| Value Type | OBX:2 | Y | Hardcode value ED |
| Observation ID | OBX:3.1 | Y | *Same as* OBR:4.1 value  Pass Result Inbound Alias (code set 72) |
| Observation Text | OBX:3.2 | Y | *Same as* OBR:4.2 value  Result display/description |
| Report Name | OBX:3.5 | Y | We must insure that something is valued for this field because it is used at the display name. If it is not valued for some reason we would then default to OBX:3.3 value sent by Millennium |
| Observation Value | OBX:5.1 | N | Insure that this is set to a **blank** field |
| Observation Value | OBX:5.2 | Y | Hardcode Default value to “APPLICATION” |
| Observation Value | OBX:5.3 | Y | Hardcode Default value to “PDF” |
| Observation Value | OBX:5.4 | **Y** | **The base-64 encoded PDF file** |
| Observation Result Status | OBX:11 | Y | Hardcode Default value to “F” (Final) |
| User Defined Access Checks | OBX:13 | Y | Hardcode Default value to “dwc25.pdf”. This will be the file name in the PowerChart hyperlink. |

## 4.3 Sample Message

**CERNER *C30* HL7 MESSAGES:**

MSH|^~&|AMB\_PDF|MILLENNIUM|POSTIMAGE|BAYCARE|20181130112119||ORU^R01|8100707441543594879427|P|2.3|1||NE|NE|US|ASCII|en||

PID|1|810070744^^^^BCCPI|6014735^^^^BMGMRN||TESTDWC^ONE^^^||19810101|M||||||||||6839912^^^^BMGFN||||||||

OBR|1|1|16494619311|DWC25^BUC Workers Comp DWC25|||20181130111735||||^^^20181130111735|||||||||||||MDOC

OBX|1|ED|DWC25^BUC Workers Comp DWC25^||^APPLICATION^PDF^Base64 . . . **etc**

.

.

.

|||||F||dwc25.pdf

MSH|^~&|AMB\_PDF|MILLENNIUM|POSTIMAGE|BAYCARE|20181130132625||ORU^R01|8100707451543602385047|P|2.3|1||NE|NE|US|ASCII|en||

PID|1|810070745^^^^BCCPI|6014736^^^^BMGMRN||TESTDWC^TWO^^^||19820202|F||||||||||6839913^^^^BMGFN||||||||

OBR|1|1|16494619335|DWC25^BUC Workers Comp DWC25|||20181130132302||||^^^20181130132302|||||||||||||MDOC

OBX|1|ED|DWC25^BUC Workers Comp DWC25^||^APPLICATION^PDF^Base64 . . . **etc**

.

.

.

|||||F||dwc25.pdf

MSH|^~&|AMB\_PDF|MILLENNIUM|POSTIMAGE|BAYCARE|20181130133125||ORU^R01|8100707461543602685176|P|2.3|1||NE|NE|US|ASCII|en||

PID|1|810070746^^^^BCCPI|6014737^^^^BMGMRN||TESTDWC^THREE^^^||19830303|M||||||||||6839938^^^^BMGFN||||||||

OBR|1|1|16494619353|DWC25^BUC Workers Comp DWC25|||20181130132654||||^^^20181130132654|||||||||||||MDOC

OBX|1|ED|DWC25^BUC Workers Comp DWC25^||^APPLICATION^PDF^Base64 . . . **etc**

.

.

.

|||||F||dwc25.pdf

# 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