**Interface Specifications**

CernerCP-ORR-to-Epic

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# Purpose

## Contacts

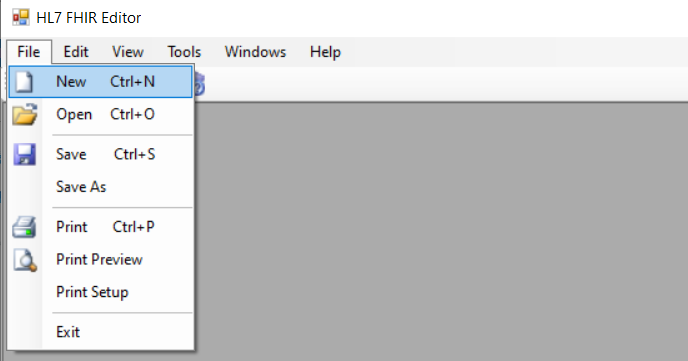
# Application Foundation

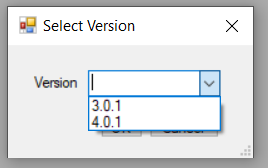
# Outstanding Issues

# Application Functions

## Create New Message

### TCP/IP Details





## Cerner

### TCP/IP Details

*□ If TCP/IP*

|  |  |
| --- | --- |
| **Communication Protocol (TCP/IP.)** |  |
| **Name** |  |
| **Message Format (HL7, X12, fixed, etc.)** |  |
| **Client or Server?** |  |
| **Test DNS Name or IP Address** |  |
| **Test Port or Path** |  |
| **Live/Production DNS Name or IP Address** |  |
| **Live/Production Port or Path** |  |
| **Blackout Periods** |  |

*□ if FTP*

|  |  |
| --- | --- |
| **FTP Login ID/Username** |  |
| **Contact for FTP Login Password** |  |
| **Directory** |  |
| **FileName** |  |
| **Action After Pickup (move, delete, none)** |  |
| **Schedule to run (ex: M-F 8-5)** |  |

# Business Orchestrations

[Sample]

**[End Sample]**

# Impact Analysis:

# Message Structures

|  |
| --- |
| **Cerner Message Structures** |
| ORR, O02 |
| MSH |
| PID |
| PV1 |
| ORC |
| OBR |

|  |
| --- |
| **Epic Message Structures** |
| ORR, O02 |
| MSH |
| MSA |
| [ERR] |
| [ |
| PID |
| [{NTE}] |
| [PV1] |
| [GT1] |
| [{IN1}] |
| { |
| ORC |
| OBR |
| [{NTE}] |
| } |
| ] |

Referenced Documents:

Cerner: ‘Unit 09o - Order Message Processing Outbound-v91-20200506\_224906

Epic: ‘Standard HL7 Outgoing Orders Interface Technical Specification.pdf’,section 1.4 Message Format for Event Type O028. Message Identification

|  |  |
| --- | --- |
| **Input HL7 Element** | **Identification Rules** |
| MSH9.1 | ORR |
| MSH9.2 | O02 |

# Epic to Cerner

Note: Please refer to “CCAD Interface Development guidelines.doc” for development guidelines such as DataType conversion for eg CWE to CE etc”

## Mapping Detail Area:

### MSH - Message Header

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cerner**  **Field Name** | **DT** | **Len** | **OPT** | **Epic**  **Field Name** | **Comments** |
| MSH-1-Field Separator |  |  | R | MSH-1-Field Separator | Copy |
| MSH-2-Encoding characters |  |  | R | MSH-2-Encoding characters | Copy |
| MSH-3-Sending application |  |  | O | MSH-3-Sending application | Copy |
| MSH-4-Sending facility |  |  | O | MSH-4-Sending facility | Copy |
| MSH-5-Receiving application |  |  | O | MSH-5-Receiving application | Copy |
| MSH-6-Receiving facility |  |  | O | MSH-6-Receiving facility | Copy |
| MSH-7-date/time of message |  |  |  | MSH-7-date/time of message | Copy Format : (CCYYMMDDHHMM) |
| MSH-8-Security |  |  |  | MSH-8-Security |  |
| MSH-9*-*message type |  |  | R | MSH-9*-*message type | Copy  ORR^O02 |
| MSH-10-message control ID |  |  | O | MSH-10-message control ID | Copy |
| MSH-11*-*processing ID |  |  | R | MSH-11*-*processing ID | Copy |
| MSH-12-version ID |  |  | R | MSH-12-version ID | Copy |
| MSH-13-sequence number |  |  |  | MSH-13-sequence number |  |
| MSH-14-continuation pointer |  |  |  | MSH-14-continuation pointer |  |
| MSH-15-Accept acknowledgment type |  |  |  | MSH-15-Accept acknowledgment type |  |
| MSH-16-Application acknowledgment type |  |  |  | MSH-16-Application acknowledgment type |  |
| MSH-17-Country code |  |  |  | MSH-17-Country code |  |
| MSH-18-Character set |  |  |  | MSH-18-Character set |  |
| MSH-19-Principal language of message |  |  |  | MSH-19-Principal language of message |  |
| MSH-20-Alternate character set handling scheme |  |  |  | MSH-20-Alternate character set handling scheme |  |

### PID - Patient Identification

| **Cerner**  **Field Name** | **DT** | **Len** | **OPT** | **Epic**  **Field Name** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| PID-1-Set ID-PID |  |  |  | PID-1-Set ID-PID |  |
| PID-2-Patient ID |  |  | S/O | PID-2-Patient ID | Copy |
| PID-3-Patient Identifier List |  |  | R | PID-3-Patient Identifier List | Copy PID-3.1 |
| PID-4-Alternate Patient ID-PID |  |  | O | PID-4-Alternate Patient ID-PID | Copy |
| PID-5-Patient Name |  |  | R | PID-5-Patient Name | Copy PID-5.1 through 5.3 |
| PID-6-Mother’s Maiden Name |  |  | O | PID-6-Mother’s Maiden Name | Copy PID-6.1 through 6.3 |
| PID-7-Date/Time of Birth |  |  | R | PID-7-Date/Time of Birth | Copy |
| PID-8-Sex |  |  | R | PID-8-Sex | Copy |
| PID-9-Patient Alias |  |  | O | PID-9-Patient Alias | Copy PID-9.1through 9.3 |
| PID-10-Race |  |  | S | PID-10-Race | Copy  Sunquest to sync with Epic and if any translation required will be done at SAM |
| PID-11-Patient Address |  |  | S | PID-11-Patient Address | Copy PID-11.1through11.5.  Component 1=address line 1  Component 2=address line 2  Component 3=city  Component 4=state  Component 5=zip code |
| PID-12-County Code |  |  | S | PID-12-County Code | Copy |
| PID-13-Phone Number-Home |  |  | S | PID-13-Phone Number-Home | Copy |
| PID-14-Phone Number-Business |  |  | S | PID-14-Phone Number-Business | Copy |
| PID-15-Primary Language |  |  | S | PID-15-Primary Language | Copy |
| PID-16-Marital Status |  |  | S | PID-16-Marital Status | Copy |
| PID-17-Religion |  |  | S | PID-17-Religion | Copy |
| PID-18-Patient Account Number |  |  | R | PID-18-Patient Account Number | Copy |
| PID-19-SSN Number-Patient |  |  | O | PID-19-SSN Number-Patient | Copy |
| PID-20-Driver's License Number-Patient |  |  | S | PID-20-Driver's License Number-Patient | Copy |

### PV1 - Patient Visit

| **Cerner**  **Field Name** | **DT** | **Len** | **OPT** | **Epic**  **Field Name** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| PV1-1-Set ID-PV1 |  |  |  | PV1-1-Set ID-PV1 |  |
| PV1-2-Patient Class |  |  | O | PV1-2-Patient Class | Copy |
| PV1-3-Assigned Patient Location |  |  | R | PV1-3-Assigned Patient Location | Copy |
| PV1-4-Admission Type |  |  |  | PV1-4-Admission Type |  |
| PV1-5-Preadmit Number |  |  |  | PV1-5-Preadmit Number |  |
| PV1-6-Prior Patient Location |  |  |  | PV1-6-Prior Patient Location |  |
| PV1-7-Attending Doctor |  |  | O | PV1-7-Attending Doctor | Copy |
| PV1-8-Referring Doctor |  |  | O | PV1-8-Referring Doctor | Copy |
| PV1-9-Consulting Doctor |  |  | O | PV1-9-Consulting Doctor | Copy |
| PV1-10-Hospital Service |  |  | S | PV1-10-Hospital Service | Copy |
| PV1-11-Temporary Location |  |  | O | PV1-11-Temporary Location | Copy |
| PV1-12-Preadmit Test Indicator |  |  |  | PV1-12-Preadmit Test Indicator |  |
| PV1-13-Re-admission Indicator |  |  |  | PV1-13-Re-admission Indicator |  |
| PV1-14-Admit Source |  |  |  | PV1-14-Admit Source |  |
| PV1-15-Ambulatory Status |  |  |  | PV1-15-Ambulatory Status |  |
| PV1-16-VIP Indicator |  |  | S | PV1-16-VIP Indicator | Copy |
| PV1-17-Admitting Doctor |  |  | O | PV1-17-Admitting Doctor | Copy |
| PV1-18-Patient Type |  |  | O | PV1-18-Patient Type |  |
| PV1-19-Visit Number |  |  | O | PV1-19-Visit Number | Copy |
| PV1-20-Financial Class |  |  | R/O | PV1-20-Financial Class | Copy |
| PV1-21-Charge Price Indicator |  |  |  | PV1-21-Charge Price Indicator |  |
| PV1-22-Courtesy Code |  |  |  | PV1-22-Courtesy Code |  |
| PV1-23-Credit Rating |  |  |  | PV1-23-Credit Rating |  |
| PV1-24-Contract Code |  |  |  | PV1-24-Contract Code |  |
| PV1-25-Contract Effective Date |  |  |  | PV1-25-Contract Effective Date |  |
| PV1-26-Contract Amount |  |  |  | PV1-26-Contract Amount |  |
| PV1-27-Contract Period |  |  |  | PV1-27-Contract Period |  |
| PV1-28-Interest Code |  |  |  | PV1-28-Interest Code |  |
| PV1-29-Transfer to Bad Debt Code |  |  |  | PV1-29-Transfer to Bad Debt Code |  |
| PV1-30-Transfer to Bad Debt Date |  |  |  | PV1-30-Transfer to Bad Debt Date |  |
| PV1-31-Bad Debt Agency Code |  |  |  | PV1-31-Bad Debt Agency Code |  |
| PV1-32-Bad Debt Transfer Amount |  |  |  | PV1-32-Bad Debt Transfer Amount |  |
| PV1-33-Bad Debt Recovery Amount |  |  |  | PV1-33-Bad Debt Recovery Amount |  |
| PV1-34-Delete Account Indicator |  |  |  | PV1-34-Delete Account Indicator |  |
| PV1-35-Delete Account Date |  |  |  | PV1-35-Delete Account Date |  |
| PV1-36-Discharge Disposition |  |  |  | PV1-36-Discharge Disposition |  |
| PV1-37-Discharged to Location |  |  |  | PV1-37-Discharged to Location |  |
| PV1-38-Diet Type |  |  |  | PV1-38-Diet Type |  |
| PV1-39-Servicing Facility |  |  | O | PV1-39-Servicing Facility | Copy |
| PV1-40-Bed Status |  |  |  | PV1-40-Bed Status |  |
| PV1-41-Account Status |  |  |  | PV1-41-Account Status |  |
| PV1-42-Pending Location |  |  |  | PV1-42-Pending Location |  |
| PV1-43-Prior Temporary Location |  |  |  | PV1-43-Prior Temporary Location |  |
| PV1-44-Admit Date/Time |  |  | R | PV1-44-Admit Date/Time | Copy |
| PV1-45-Discharge Date/Time |  |  | R | PV1-45-Discharge Date/Time | Copy |
| PV1-46-Current Patient Balance |  |  |  | PV1-46-Current Patient Balance |  |
| PV1-47-Total Charges |  |  |  | PV1-47-Total Charges |  |
| PV1-48-Total Adjustments |  |  |  | PV1-48-Total Adjustments |  |
| PV1-49-Total Payments |  |  |  | PV1-49-Total Payments |  |
| PV1-50-Alternate Visit ID |  |  |  | PV1-50-Alternate Visit ID |  |
| PV1-51-Visit Indicator |  |  |  | PV1-51-Visit Indicator |  |
| PV1-52-Other Healthcare Provider |  |  |  | PV1-52-Other Healthcare Provider |  |

### ORC - Order Common

| **Cerner**  **Field Name** | **DT** | **Len** | **OPT** | **Epic**  **Field Name** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| ORC-1-Order Control |  |  | R | ORC-1-Order Control | Copy  Epic will have SN as the value  NA – Placer number assigned in response to LIS generated order. |
| ORC-2-Placer number |  |  |  | ORC-2-Placer number | Copy  This is the unique identifier for the order.  Epic will send a Placer Order number that is up to **??** digits in length and will be unique per instance. |
| ORC-3-Filler number |  |  |  | ORC-3-Filler number |  |
| ORC-4-Placer Group Number |  |  |  | ORC-4-Placer Group Number |  |
| ORC-5-Order Status |  |  |  | ORC-5-Order Status |  |
| ORC-6-Response Flag |  |  |  | ORC-6-Response Flag |  |
| ORC-7-Quantity/Timing |  |  |  | ORC-7-Quantity/Timing | OBR;27 is used for priority/timing. |
| ORC-8-Parent |  |  |  | ORC-8-Parent |  |
| ORC-9-Date/Time of transaction |  |  |  | ORC-9-Date/Time of transaction | Date/time of transaction is expected in the MSH;7. |
| ORC-10-Entered By |  |  | S | ORC-10-Entered By | Copy |
| ORC-11-Verified By |  |  |  | ORC-11-Verified By |  |
| ORC-12-Ordering Provider |  |  |  | ORC-12-Ordering Provider |  |
| ORC-13-Enterer's Location |  |  | O | ORC-13-Enterer's Location | Copy |
| ORC-14-Call Back Phone number |  |  |  | ORC-14-Call Back Phone number |  |
| ORC-15-Order Effective Date/Time |  |  |  | ORC-15-Order Effective Date/Time |  |
| ORC-16-Order Control Code Reason |  |  | O | ORC-16-Order Control Code Reason |  |
| ORC-17-Ordering Organization |  |  | O | ORC-17-Ordering Organization |  |
| ORC-18-Entering Device |  |  |  | ORC-18-Entering Device |  |
| ORC-19-Action By |  |  |  | ORC-19-Action By |  |

### OBR - Observation Reports

| **Cerner**  **Field Name** | **DT** | **Len** | **OPT** | **Epic**  **Field Name** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| OBR-1-Set ID |  |  |  | OBR-1-Set ID |  |
| OBR-2-Placer number |  |  | R | OBR-2-Placer number | Copy  Will this be the same value sent in ORC-2 sent here as well?  Epic placer number. The value is stored as sent by the Epic and is returned by the LIS in all related messages. |
| OBR-3-Filler number |  |  |  | OBR-3-Filler number | Copy  Epic will return the unique filler number from the Laboratory-initiated order.  Does Sunquest require this Field? |
| OBR-4-Universal service Id |  |  | R | OBR-4-Universal service Id | Copy  The order code. The HIS order code or the Sunquest order code may be sent. Which one will be sent?  123^SODIUM  NA^SODIUM |
| OBR-5-Priority |  |  |  | OBR-5-Priority | Priority is extracted from OBR;27 |
| OBR-6-Requested date/time |  |  |  | OBR-6-Requested date/time | See OBR;7, Observation date/time |
| OBR-7-Observation date/time |  |  | O | OBR-7-Observation date/time | Copy  Specimen Collection Date and Time |
| OBR-8-Observation End Date/Time |  |  |  | OBR-8-Observation End Date/Time |  |
| OBR-9-Collection Volume |  |  |  | OBR-9-Collection Volume |  |
| OBR-10-Collector Identifier |  |  | S | OBR-10-Collector Identifier | Copy |
| OBR-11-Specimen Action Code |  |  | R | OBR-11-Specimen Action Code | Copy  The collecting department that is used by the LIS interface logic to distinguish between lab collectible specimens and nursing collectible specimens usually designated with an L or N respectively |
| OBR-12-Danger Code |  |  |  | OBR-12-Danger Code |  |
| OBR-13-Relevant Clinical Info |  |  | O | OBR-13-Relevant Clinical Info | Copy |
| OBR-14-Specimen Received Date/Time |  |  |  | OBR-14-Specimen Received Date/Time |  |
| OBR-15-Specimen Source |  |  | O | OBR-15-Specimen Source | Copy |
| OBR-16-Ordering Provider |  |  | O | OBR-16-Ordering Provider | Copy |
| OBR-17-Order Callback Phone Number |  |  |  | OBR-17-Order Callback Phone Number |  |
| OBR-18-Placer Field 1 |  |  | S | OBR-18-Placer Field 1 | Copy |
| OBR-19-Placer Field 2 |  |  | S | OBR-19-Placer Field 2 | Copy |
| OBR-20-Filler Field 1+ |  |  | O/R\* | OBR-20-Filler Field 1+ | Copy  *\**Required for messages with NA order control code-must be populated with Sunquest accession number.  Does Epic returns the accession number from the Laboratory-initiated order? |
| OBR-21-Filler Field 2+ |  |  | S | OBR-21-Filler Field 2+ | Copy |
| OBR-22-Results Rpt/Status Change-Date/Time+ |  |  |  | OBR-22-Results Rpt/Status Change-Date/Time+ |  |
| OBR-23-Charge To Practice + |  |  |  | OBR-23-Charge To Practice + |  |
| OBR-24-Diagnostic Serv Sect ID |  |  |  | OBR-24-Diagnostic Serv Sect ID |  |
| OBR-25-Result Status+ |  |  |  | OBR-25-Result Status+ |  |
| OBR-26-Parent Result |  |  |  | OBR-26-Parent Result |  |
| OBR-27-Quantity/Timing |  |  | O | OBR-27-Quantity/Timing | Copy  SQ: There is a translation table available in the lab for priority codes. Do not send units ordered in OBR;27.1 if it is being sent in OBX;5. Sending the result in two fields causes concatenation of the results.  Priority (STAT,ASAP,etc) is extracted from the 6th component of this field.  Quantity OBR-27.1  Interval OBR-27.2  Start Date OBR-27.4  End Date OBR-27.5 |
| OBR-28-Result Copies To |  |  | O | OBR-28-Result Copies To | Copy  Does Epic sends that these providers should receive a copy of the result? |
| OBR-29-Parent Number |  |  |  | OBR-29-Parent Number |  |
| OBR-30-Transportation Mode |  |  |  | OBR-30-Transportation Mode |  |
| OBR-31-Reason for Study |  |  | O | OBR-31-Reason for Study |  |
| OBR-32-Principal Result Interpreter |  |  |  | OBR-32-Principal Result Interpreter |  |
| OBR-33Assistant Result Interpreter |  |  |  | OBR-33Assistant Result Interpreter |  |
| OBR-34-Technician |  |  |  | OBR-34-Technician |  |
| OBR-35-Transcriptionist |  |  |  | OBR-35-Transcriptionist |  |
| OBR-36-Scheduled Date/Time |  |  |  | OBR-36-Scheduled Date/Time |  |
| OBR-37-Number of Sample Containers |  |  |  | OBR-37-Number of Sample Containers |  |
| OBR-38-Transport Logistics of Collected |  |  |  | OBR-38-Transport Logistics of Collected |  |
| OBR-39-Collector's Comment |  |  |  | OBR-39-Collector's Comment |  |
| OBR-40-Transport Arrangement Responsibility |  |  |  | OBR-40-Transport Arrangement Responsibility |  |
| OBR-41-Transport Arranged |  |  |  | OBR-41-Transport Arranged |  |
| OBR-42-Transport Arranged |  |  |  | OBR-42-Transport Arranged |  |
| OBR-43-Planned Patient Transport Comment |  |  |  | OBR-43-Planned Patient Transport Comment |  |
| OBR-44-Procedure Code |  |  |  | OBR-44-Procedure Code |  |
| OBR-45-Procedure Code Modifier |  |  |  | OBR-45-Procedure Code Modifier |  |
| OBR-46-Placer Supplemental Service Information |  |  |  | OBR-46-Placer Supplemental Service Information |  |
| OBR-47-Filler Supplemental Service Information |  |  |  | OBR-47-Filler Supplemental Service Information |  |
| OBR-48-Medically Necessary Duplicate Procedure Reason |  |  |  | OBR-48-Medically Necessary Duplicate Procedure Reason |  |
| OBR-49-Result Handling |  |  |  | OBR-49-Result Handling |  |
| OBR-50-Parent Procedure |  |  |  | OBR-50-Parent Procedure |  |

# Sample Interface Data:

MSH|^~\&|CernerCP|ccad|Epic|Epic|20200601151321|EDILABIH|ORR^O02|5814133|P|2.5  
PID|1||111111111^^^MRN^MRN||UNKNOWN^UNKNOWN^^^^^D||18921231|M|||^^^^^UAE^P||||||||999-9999-9999999-9|||IN||N  
PV1||IP|6HAD^607^607-1^CCHOS^R^^^^^^DEPID||||GD18539^LEMUS^JESUS^^^^^^EPIC^^^^PROVID~GD20650^John^Doe^^^^^^EPIC^^^^PROVID|||NICU|||||||GD24313^BAYRLEE^AHMAD^^^^^^EPIC^^^^PROVID||1008445663|||||||||||||||||||||||||20200531234136  
ORC|NA|31918889^EPC||1008445663|||0^^^20200601151100^^R^^Standing^^^^1||20200601151100|EDILABIH^INTERFACE^LAB^IN^||GD20650^John^Doe^^^^^^EPIC^^^^PROVID|6HAD^^^100001^^^^^6 HAD|^^^^^^^^^^^800 8 2223|||||||||||||||I  
OBR|1|31918889^EPC|M515206\_20200601151200^SUNQUEST|BGAPOC^Blood Gas Arterial, Whole Blood (POCT)^SUNQUEST||20200601151100|20200601151100|||||||20200601151200||GD20650^John^Doe^^^^^^EPIC^^^^PROVID|^^^^^^^^^^^800 8 2223|||M515206||||POCD|||0^^^20200601151100^^R^^Standing^^^^1|||||||||20200601151100

# Out of Scope:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Description** | **Comments** | **Requester Name** |
|  |  |  |  |