**10 November 2021**

MHS Genesis Surgery Tables

for the

MHS Data Repository (MDR)

(Version 1.00.03)

Future Specification

**Revision History**

| **Version** | **Date** | **Originator** | **Para/Tbl/Fig** | **Description of Change** |
| --- | --- | --- | --- | --- |
| 1.00.00 | 9/1/2019 | Casey Kangas | * Initial Document | * Initial Document |
| 1.00.01 | 4/7/2020 | Casey Kangas | * Table 5 | * Added the Case Complete Indicator field |
| 1.00.02 | 2/22/2021 | Casey Kangas | * Table 7 | * Added the CPT field |
| 1.00.03 | 11/10/2021 | Casey Kangas | * Table 5 | * Added the Number of Procedures field |

# MDR Genesis Surgery Tables

1. Background

This specification describes the process required to create the Military Health System (MHS) Data Repository (MDR) GENESIS Surgery tables based on data received from the Cerner PowerInsight Enterprise Data Warehouse (PI-EDW) feeds to the MDR.

1. Sources

The source data files used to create the MDR Surgery files are extracted from the MHS GENESIS PI-EDW. The transfer of the raw source extracts is handled by the Solution Delivery Division (SDD) for loading into the MDR for further processing according to routine MDR operations. The primary source files used to build the tables are identified in Table 1. The format of the raw MHS GENESIS feeds to the MDR is described in the DHMSM Interface Control Document (ICD) ####-####. In order to increase the utility of these files for analysts, they are merged against other tables from Cerner Millennium as well as other files on the MDR, as described below in Section VI.

**Table 1: PI-EDW Source Tables**

| **Raw Source Table** | **Raw Data Feed** | **Feed Description** |
| --- | --- | --- |
| Surgical Cases | wh\_cln\_surgical\_case.txt | Contains surgical case level data. |
| Surgical Procedures | wh\_cln\_surg\_case\_proc.txt | Contains surgical procedure level data. There can be multiple procedures that occur during a given case. |
| Case Attendance | wh\_cln\_case\_attendance.txt | Contains information on all case attendees, such as surgeons, residents, etc. |
| Perioperative Documentation | wh\_cln\_perioperative\_doc.txt | Contains all the information documented in the perioperative document. |
| Surgical Delays | wh\_cln\_surgical\_delay.txt | Contains information when a surgical delay has occurred during a case. |
| Case Cart Pick List | wh\_cln\_case\_cart\_pick\_lst.txt | Contains information about case cart items for each surgical case. |

1. Transmission (Files and Frequency)

Source files are provided according to the frequency described in Table 2 below.

**Table 2: Frequency of Source Files**

| **Source File** | **Frequency** |
| --- | --- |
| MHS Genesis PI-EDW feeds | Weekly |

1. Organization and batching

Source Data: The first step in MDR processing is to batch records received from MHS Genesis. Raw data batches are stored in /mdr/raw/genesis according to routine MDR operating procedures.

Output Products: The MDR Genesis Surgery processor outputs several SAS data sets containing all years of surgical cases recorded in MHS GENESIS. The processor performs merges and field derivations and must incorporate updates to surgical case records across raw data extracts. Table 3 contains the location and name of the output products. The preparation of the output is described in subsequent sections of this document.

**Table 3: MDR Genesis Surgery Processor Output Products**

| **MDR Surgery Processor Outputs** | **MDR Location** | **Table Name** |
| --- | --- | --- |
| MDR Surgery | /mdr/pub/genesis/surgery/ | surgery.sas7bdat |
| MDR Surgery Case Attendance | /mdr/pub/genesis/surgery/ | case\_attendance.sas7bdat |
| MDR Perioperative Documentation | /mdr/pub/genesis/surgery/ | perioperative\_doc.sas7bdat |
| MDR Surgery Cancels | /mdr/pub/genesis/surgery/ | cancels.sas7bdat |
| MDR Surgery Delays | /mdr/pub/genesis/surgery/ | delays.sas7bdat |
| MDR Surgical Case Cart Pick List | /mdr/pub/genesis/surgery/ | case\_cart.sas7bdat |

Archival of files is also required, so that corresponding “apub” and other processing files (i.e. log, aprod, etc) are also loaded into the MDR according to routine operating procedures.

1. Receiving Filters

Remove any surgical records for test patients.

1. Update Process

The primary key for the main Surgery table is the SURG\_CASE\_PROC\_SK field, which is at the procedure level. There can be multiple procedures performed during a single surgical “case”. During the extraction of the raw surgical case and procedure records, de-duplication of records, or anytime a key collision occurs between incoming data and existing master data, the processor de-duplicates data by selecting the record with the most recent value of the update date/time (UPDT\_DT\_TM) for any multiple of records with the same primary key. Similar update processes are applied to the other raw data sets. All of the supporting tables (Case Attendance, Perioperative Documentation, Delays, Case Cart) can be joined to the main Surgery table by the SURG\_CASE\_SK field.

Once the raw data has been updated, the processor combines them as described and assigns many other internally-derived variables as described in Table 5.

1. Field Transformations and Deletions for MDR Core Database

This section of this functional specification describes the data merges that are necessary to append fields in the MDR Genesis Surgery Table. Table 4 describes the reference files that are used in processing.

**Table 4: Data Merges for MDR Genesis Surgery Table**

| **Merge** | **Date Matching** | **Additional Matching** |
| --- | --- | --- |
| MDR Surgical Cases (Basic) | N/A | SURGICAL\_CASE\_SK |
| MDR Genesis Person File | N/A | PERSON\_SK |
| MDR Genesis Personnel File | N/A | PRIMARY\_SURGEON\_PRSNL = PRSNL\_SK; ANESTHESIA\_PRSNL = PRSNL\_SK |
| MDR Genesis Encounter File (Basic) | N/A | ENCOUNTER\_SK |
| MDR Genesis Encounter File (Enhanced) | N/A | ENCOUNTER\_SK |
| Master Person Index (MPI) | N/A | EDIPN |
| Longitudinal VM6 (LVM6) | Encounter date between the begin and end dates associated with the segment | EDIPN, SSN, GENDER\_R, DOB\_R, LAST\_NAME, FIRST\_NAME |
| Omni-CAD | FY | SPONSVC and PATZIP |
| DMISID Index Table | FY | MTF and DEERS Enrollment Site |

Upon matching to the MDR Genesis Person file, MDR Genesis Personnel file, and MDR Genesis Location file, records that meet the following criteria are deleted:

* Records where the test\_person\_ind=1 in the MDR Genesis Person File.
* Records where any of the test\_personnel\_ind fields = 1 in the MDR Genesis Personnel File.
* Records where the encounter date is before the go-live date for the location for the MTF.

Business rules for each of the appended fields are described in the body of the format table in Section VII.

1. File Layout

The MDR Genesis Surgery table is stored in a SAS data set. Table 5 provides the file layout and processing rules for the primary Surgery table. Tables 6-10 provide the file layouts for the related supporting tables that can be joined back to the Surgery table on the Surgical Case key.

**Table 5: File Layout for MDR Genesis Surgery Table**

| **Field** | **Format** | **SAS Name** | **Source Element** | **Transformation** |
| --- | --- | --- | --- | --- |
| **Surgical Procedures Table** |  |  |  |  |
| Surgical Case Key | $100 | surgical\_case\_sk | surgical\_case\_sk | No transformation |
| Surgical Procedure Key | $100 | surg\_case\_proc\_sk | surg\_case\_proc\_sk | No transformation |
| Scheduled Procedure | $100 | sched\_procedure | sched\_procedure\_ref | Match to code\_value\_ref table where sched\_procedure\_ref matches the code\_value\_ref and code\_set = 200 and health\_system\_id=18635 and retrieve desc\_display. |
| Procedure | $100 | procedure | procedure\_ref | Match to code\_value\_ref table where procedure\_ref matches the code\_value\_ref and code\_set = 200 and health\_system\_id=18635 and retrieve desc\_display. |
| Order ID | $100 | order\_sk | order\_sk | No transformation. |
| Scheduled Primary Procedure Indicator | N(8) | sched\_primary\_proc\_ind | sched\_primary\_proc\_ind | No transformation. |
| Primary Procedure Indicator | N(8) | primary\_proc\_ind | primary\_proc\_ind | No transformation. |
| Scheduled Anesthesia Type | $40 | sched\_anesthesia\_type | sched\_anesthesia\_type\_ref | Match to code\_value\_ref table where sched\_anesthesia\_type\_ref matches the code\_value\_ref and code\_set = 10050 and health\_system\_id=18635 and retrieve desc\_display. |
| Anesthesia Type | $40 | anesthesia\_type | anesthesia\_type\_ref | Match to code\_value\_ref table where anesthesia\_type\_ref matches the code\_value\_ref and code\_set = 10050 and health\_system\_id=18635 and retrieve desc\_display. |
| Surgeon Specialty of Procedure | $100 | proc\_surgeon\_specialty | proc\_surgeon\_specialty\_ref | Match to code\_value\_ref table where proc\_surgeon\_specialty\_ref matches the code\_value\_ref and code\_set = EDW\_6 and health\_system\_id=18635 and retrieve desc\_description. |
| Procedure Start Datetime | N(8) | proc\_start\_dt\_tm | proc\_start\_dt\_tm | Converted to local time. |
| Procedure Stop Datetime | N(8) | proc\_stop\_dt\_tm | proc\_stop\_dt\_tm | Converted to local time. |
| Wound Class Procedure Level | $22 | wound\_class\_proc | wound\_class\_ref | Match to code\_value\_ref table where wound\_class\_ref matches the code\_value\_ref and code\_set = 10038 and health\_system\_id=18635 and retrieve desc\_display. |
| Scheduled Procedure Count | N(8) | sched\_proc\_cnt | sched\_proc\_cnt | No transformation. |
| Scheduled Primary Surgeon Personnel | $100 | sched\_prim\_surgeon\_prsnl | sched\_prim\_surgeon\_prsnl | No transformation. |
| Scheduled Blood Product Required Indicator | N(8) | sched\_blood\_product\_req\_ind | sched\_blood\_product\_req\_ind | No transformation. |
| Scheduled Frozen Section Required Indicator | N(8) | sched\_frozen\_section\_req\_ind | sched\_frozen\_section\_req\_ind | No transformation. |
| Scheduled Specimen Required Indicator | N(8) | sched\_specimen\_req\_ind | sched\_specimen\_req\_ind | No transformation. |
| Scheduled Xray Req Indicator | N(8) | sched\_xray\_req\_ind | sched\_xray\_req\_ind | No transformation. |
| Scheduled Xray Tech Required Indicator | N(8) | sched\_xray\_tech\_req\_ind | sched\_xray\_tech\_req\_ind | No transformation. |
| Scheduled Implant Required Indicator | N(8) | sched\_implant\_req\_ind | sched\_implant\_req\_ind | No transformation. |
| Scheduled Procedure Duration | N(8) | sched\_proc\_duration | sched\_proc\_duration | No transformation. |
| Procedure Text | $255 | proc\_txt | proc\_txt | No transformation. |
| Scheduled Modifier Text | $255 | sched\_modifier\_txt | sched\_modifier\_txt | No transformation. |
| Modifier Text | $255 | modifier\_txt | modifier\_txt | No transformation. |
| Codified Modifier Text | $255 | codified\_modifier\_txt | codified\_modifier\_txt | No transformation. |
| Procedure Complete Indicator | N(8) | complete\_ind | complete\_ind | No transformation. |
| Perioperative Document Type | $40 | perioperative\_doc\_type | perioperative\_doc\_type\_ref | Match to code\_value\_ref table where perioperative\_doc\_type\_ref matches the code\_value\_ref and code\_set = 14258 and health\_system\_id=18635 and retrieve desc\_description. |
| Primary Surgeon ID – Procedure | $100 | prim\_surgeon\_prsnl | prim\_surgeon\_prsnl | No transformation. |
| Concurrent Indicator | N(8) | concurrent\_ind | concurrent\_ind | No transformation. |
| **Surgical Cases Table** |  |  |  |  |
| Surgical Case Number | $100 | surgical\_case\_nbr\_formatted | surgical\_case\_nbr\_formatted | No transformation |
| Encounter Key | $100. | encounter\_sk | encounter\_nk | Substring encounter\_nk from the 1st character to the 6th from the last character. |
| Case Complete Indicator | N(8) | case\_complete\_ind | complete\_ind | No transformation. |
| MHS Genesis Person ID | $100 | person\_sk | person\_sk | No transformation |
| Scheduled Priority | $40 | sched\_priority | sched\_priority\_ref | Match to code\_value\_ref table where sched\_priority\_ref matches the code\_value\_ref and code\_set = 1304 and health\_system\_id=18635 and retrieve desc\_display. |
| Case Level | $20 | case\_level | case\_level\_ref | Match to code\_value\_ref table where case\_level\_ref matches the code\_value\_ref and code\_set = 10036 and health\_system\_id=18635 and retrieve desc\_display. |
| Department | $40 | dept | dept\_ref | Match to code\_value\_ref table where dept\_ref matches the code\_value\_ref and code\_set = 221 and health\_system\_id=18635 and retrieve desc\_display. |
| Scheduled Surgical Area | $40 | sched\_surgical\_area | sched\_surgical\_area\_ref | Match to code\_value\_ref table where sched\_surgical\_area\_ref matches the code\_value\_ref and code\_set = 221 and health\_system\_id=18635 and retrieve desc\_display. |
| Surgical Area | $40 | surgical\_area | surgical\_area\_ref | Match to code\_value\_ref table where surgical\_area\_ref matches the code\_value\_ref and code\_set = 221 and health\_system\_id=18635 and retrieve desc\_display. |
| Scheduled Operating Room (OR) | $40 | sched\_or | sched\_or\_ref | Match to code\_value\_ref table where sched\_or\_ref matches the code\_value\_ref and code\_set = 221 and health\_system\_id=18635 and retrieve desc\_display. |
| Operating Room (OR) | $40 | or | or\_ref | Match to code\_value\_ref table where or\_ref matches the code\_value\_ref and code\_set = 221 and health\_system\_id=18635 and retrieve desc\_display. |
| MHS GENESIS Primary Surgeon ID | $100 | primary\_surgeon\_prsnl | primary\_surgeon\_prsnl | No transformation. |
| MHS GENESIS Anesthesiologist ID | $100 | anesthesia\_prsnl | anesthesia\_prsnl | No transformation. |
| Surgeon Specialty of Case | $100 | case\_surgeon\_specialty | case\_surgeon\_specialty\_ref | Match to code\_value\_ref table where case\_surgeon\_specialty\_ref matches the code\_value\_ref and code\_set = EDW\_6 and health\_system\_id=18635 and retrieve desc\_display. |
| ASA Class | $20 | asa\_class | asa\_class\_ref | Match to code\_value\_ref table where asa\_class\_ref matches the code\_value\_ref and code\_set = 10051 and health\_system\_id=18635 and retrieve desc\_display. |
| Add On Indicator | N(8) | add\_on\_ind | add\_on\_ind | No transformation. |
| Wound Class Case Level | $22 | wound\_class\_case | wound\_class\_ref | Match to code\_value\_ref table where wound\_class\_ref matches the code\_value\_ref and code\_set = 10038 and health\_system\_id=18635 and retrieve desc\_display. |
| Institution | $40 | institution | institution\_ref | Match to code\_value\_ref table where institution\_ref matches the code\_value\_ref and code\_set = 221 and health\_system\_id=18635 and retrieve desc\_display. |
| Health System Source ID | N(8) | health\_system\_source\_id | health\_system\_source\_id | No transformation. |
| Patient In O.R. Datetime | N(8) | patient\_in\_or\_dt\_tm | patient\_in\_or\_dt\_tm | Converted to local time. |
| Patient Out O.R. Datetime | N(8) | patient\_out\_or\_dt\_tm | patient\_out\_or\_dt\_tm | Converted to local time. |
| Scheduled Start Datetime | N(8) | sched\_start\_dt\_tm | sched\_start\_dt\_tm | Converted to local time. |
| Actual Start Datetime | N(8) | start\_dt\_tm | start\_dt\_tm | Converted to local time. |
| Patient In PACU Datetime | N(8) | patient\_in\_pacu\_dt\_tm | patient\_in\_pacu\_dt\_tm | Converted to local time. |
| Patient Out of PACU Datetime | N(8) | patient\_out\_pacu\_dt\_tm | patient\_out\_pacu\_dt\_tm | Converted to local time. |
| Patient In SDS Recovery Unit Datetime | N(8) | patient\_in\_pacu\_ii\_dt\_tm | patient\_in\_pacu\_ii\_dt\_tm | Converted to local time. |
| Patient Out of SDS Recovery Unit Datetime | N(8) | patient\_out\_pacu\_ii\_dt\_tm | patient\_out\_pacu\_ii\_dt\_tm | Converted to local time. |
| Check In Datetime | N(8) | check\_in\_dt\_tm | check\_in\_dt\_tm | Converted to local time. |
| Case Cancellation Datetime | N(8) | cancel\_dt\_tm | cancel\_dt\_tm | Converted to local time. |
| Scheduled Stop Datetime | N(8) | sched\_stop\_dt\_tm | sched\_stop\_dt\_tm | Converted to local time. |
| Actual Stop Datetime | N(8) | stop\_dt\_tm | stop\_dt\_tm | Converted to local time. |
| Request Transport Datetime | N(8) | request\_transport\_dt\_tm | request\_transport\_dt\_tm | Converted to local time. |
| Patient In Preop Area Datetime | N(8) | in\_preop\_holding\_dt\_tm | in\_preop\_holding\_dt\_tm | Converted to local time. |
| Patient Out of Preop Area Datetime | N(8) | out\_preop\_holding\_dt\_tm | out\_preop\_holding\_dt\_tm | Converted to local time. |
| Anesthesia Prep Start Datetime | N(8) | anesthesia\_start\_dt\_tm | anesthesia\_start\_dt\_tm | Converted to local time. |
| O.R. Setup Datetime | N(8) | or\_setup\_dt\_tm | or\_setup\_dt\_tm | Converted to local time. |
| O.R. Ready Datetime | N(8) | or\_ready\_dt\_tm | or\_ready\_dt\_tm | Converted to local time. |
| Anesthesia Begin Datetime | N(8) | anesth\_induction\_dt\_tm | anesth\_induction\_dt\_tm | Converted to local time. |
| Surgeon Arrival Datetime | N(8) | surgeon\_in\_room\_dt\_tm | surgeon\_in\_room\_dt\_tm | Converted to local time. |
| Patient Ready Datetime | N(8) | ready\_for\_surgeon\_dt\_tm | ready\_for\_surgeon\_dt\_tm | Converted to local time. |
| Closing Start Datetime | N(8) | closing\_start\_dt\_tm | closing\_start\_dt\_tm | Converted to local time. |
| Anesthesia End Datetime | N(8) | anesthesia\_stop\_dt\_tm | anesthesia\_stop\_dt\_tm | Converted to local time. |
| Anesthesia Provider Stop Datetime | N(8) | anesth\_prov\_stop\_dt\_tm | anesth\_prov\_stop\_dt\_tm | Converted to local time. |
| Preop Antibiotic Datetime | N(8) | preop\_antibio\_admin\_dt\_tm | preop\_antibio\_admin\_dt\_tm | Converted to local time. |
| Time Out Datetime | N(8) | surgical\_time\_out\_dt\_tm | surgical\_time\_out\_dt\_tm | Converted to local time. |
| **Person Table** |  |  |  |  |
| EDIPN | $10. | edipn | N/A | No transformation. |
| Patient SSN | $9. | patssn | N/A | No transformation. |
| MRN | $40. | mrn | N/A | No transformation. |
| Gender of Record | $10. | gender\_r | N/A | No transformation. |
| Date and Time of Birth of Record | N(8) | dob\_r | N/A | No transformation. |
| Race of Record | $41. | race\_r | N/A | No transformation. |
| Ethnic Group of Record | $1. | ethnic\_r | N/A | No transformation. |
| Marital Status of Record | $20. | marital\_r | N/A | No transformation. |
| **Location Table** |  |  |  |  |
| Treatment MTF | $4 | mtf | N/A | No transformation. |
| MEPRS Code | $4 | meprs\_cd | N/A | No transformation. |
| Clinic ZIP Code | $5 | clinzip | N/A | No transformation. |
| Unit Description | $100 | unit\_name | N/A | No transformation. |
| Nurse Unit Location Code (NULC) | $45 | unit\_display | N/A | No transformation. |
| **Encounter (Basic) Table** |  |  |  |  |
| Encounter Type | $40. | encounter\_type | patient\_type\_ref | Match to code\_value\_ref table where patient\_type\_ref matches the code\_value\_ref and code\_set = 71 and health\_system\_id=18635 and retrieve desc\_display. |
| Financial Number (FIN) | $40. | fin | formatted\_financial\_nbr | No transformation. |
| Discharge Disposition | $40. | discharge\_disposition | discharge\_disposition\_ref | Match to code\_value\_ref table where discharge\_disposition\_ref matches the code\_value\_ref and code\_set = 19 and health\_system\_id=18635 and retrieve desc\_display. |
| Medical Service | $40. | medical\_service | medical\_service\_ref | Match to code\_value\_ref table where medical\_service\_ref matches the code\_value\_ref and code\_set = 34 and health\_system\_id=18635 and retrieve desc\_display. |
| Discharge Datetime | N(8) | discharge\_dt\_tm | discharge\_dt\_tm | Converted to local time. |
| **Encounter (Enhanced) Table** |  |  |  |  |
| Diagnosis Code 1–5 | $7 | dx1-dx10 | N/A | No transformation. |
| Procedure Code 1-5 | $5 | cpt\_1-cpt\_13 | N/A | No transformation. |
| Major Diagnostic Category (MDC) | $2 | mdc | N/A | No transformation. |
| Diagnosis Group | $2 | dxgrp | N/A | No transformation. |
| **Personnel Table** |  |  |  |  |
| Primary Surgeon Name | $100 | primary\_surgeon | full\_name | No transformation; merge to Personnel on primary\_surgeon\_prsnl |
| Primary Surgeon NPI | $10 | surgeon\_npi | npi | No transformation; merge to Personnel on primary\_surgeon\_prsnl |
| Primary Surgeon EDIPN | $10 | surgeon\_edipn | prsnl\_edipn | No transformation; merge to Personnel on primary\_surgeon\_prsnl |
| Primary Surgeon Skill Type | $1 | surgeon\_skill\_type | skill\_type | No transformation; merge to Personnel on primary\_surgeon\_prsnl |
| Primary Surgeon Primary HIPAA Taxonomy | $10 | surgeon\_hipaa\_taxonomy | hipaa1 | No transformation; merge to Personnel on primary\_surgeon\_prsnl |
| Anesthesiologist Name | $100 | anesthesiologist | full\_name | No transformation; merge to Personnel on anesthesia\_prsnl |
| Anesthesiologist NPI | $10 | anesthesiologist\_npi | Npi | No transformation; merge to Personnel on anesthesia\_prsnl |
| Anesthesiologist EDIPN | $10 | anesthesiologist\_edipn | prsnl\_edipn | No transformation; merge to Personnel on anesthesia\_prsnl |
| Anesthesiologist Primary HIPAA Taxonomy | $10 | anesthesiologist\_hipaa\_taxonomy | hipaa1 | No transformation; merge to Personnel on anesthesia\_prsnl |
| **MPI Table** |  |  |  |  |
| Sponsor SSN | $9. | sponssn | N/A | If a record is found in the MPI with matching EDIPN or Patient SSN, fill with the Sponsor SSN from the MPI. |
| Person Association Reason Code | $2. | parc | N/A | If a record is found in the MPI with matching EDIPN or Patient SSN, fill with the PARC for the relationship between this patient and the sponsor on that record. |
| **LVM6 Table** |  |  |  |  |
| Gender | $1. | gender | N/A | Fill with gender associated with this EDIPN. If not found and gender\_r = F or M, set to gender\_r. |
| Date of Birth | SAS Date | patdob | N/A | Fill with date of birth associated with this EDIPN |
| Race | $1. | race | N/A | Fill with race associated with this EDIPN. If there is no match for this patient in the LVM, set to Z. |
| Ethnic Group | $1. | ethnic | N/A | Fill with ethnicity associated with this EDIPN. . If there is no match for this patient in the LVM, set to Z. |
| DEERS ZIP Code | $5. | deerszip | N/A | Fill with ZIP Code if the begin date on the appointment record is between the begin and end date associated with the ZIP Code. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Marital Status | $1. | marital | N/A | Fill with Marital Status if the begin date on the appointment record is between the begin and end date associated with the Marital Status. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| DEERS Beneficiary Category | $3. | bencat | N/A | Fill with Beneficiary Category if the begin date on the appointment record is between the begin and end date associated with the Beneficiary Category. If the appointment date is outside of the dates associated with the Beneficiary Category, or there is no match for this patient in the LVM, or if the LVM segment returns “Z”, set to UNK. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| DEERS Common Beneficiary Category | $1. | comben | N/A | Derived from Beneficiary Category during LVM merge. See VM6 Specification, section A.1.12 for derivation. |
| DEERS Sponsor Service | $1. | dsponsvc | N/A | Fill with Sponsor Service Aggregated if the begin date on the appointment record is between the begin and end date associated with the Sponsor Service Aggregated. If the appointment date is outside of the dates associated with the Sponsor Service, or there is no match for this patient in the LVM, set to Z. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| DEERS Sponsor Service Aggregate | $1. | dsvcagg | N/A | Fill with Sponsor Service Aggregated if the begin date on the appointment record is between the begin and end date associated with the Sponsor Service Aggregated. If the appointment date is outside of the dates associated with the Sponsor Service, or there is no match for this patient in the LVM, set to Z. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Privilege Code | $1. | privilege | N/A | Fill with Medical Privilege Code if the begin date on the appointment record is between the begin and end date associated with the Medical Privilege Code. If the appointment date is outside of the dates associated with the Privilege Code, or there is no match for this patient in the LVM, set to 9. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Medicare Eligibility Flag | $1. | medicare\_flag | N/A | Fill with Medicare Eligibility Code if the begin date on the appointment record is between the begin and end date associated with the Medicare Eligibility Code. If the appointment date is outside of the dates associated with the Medicare Flag, or there is no match for this patient in the LVM, set to N. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| DEERS Alternate Care Value | $1. | acv | N/A | Fill with ACV if the begin date on the appointment record is between the begin and end date associated with the ACV. If the appointment date is before 1/1/18 and the appointment date is outside of the dates associated with the ACV, or there is no match for this patient in the LVM, set to Z. If the appointment date is on or after 1/1/18, set to blank. See VM6 Specification, Exhibit G-18 for segment and field positions. Note that the ACV will be blank filled starting in CY18. |
| ACV Group | $2. | acvgroup | N/A | Derived from ACV and comben (before 1/1/18) or enrollment group, PCM type, eligibility group, and comben (after 1/1/18). If there is no match for this patient in the LVM, set to O. See VM6 Specification, section G.3 for derivation. |
| PCM ID | $18. | pcm\_id | N/A | Fill with PCM ID if the begin date on the appointment record is between the begin and end dates associated with the PCM ID. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| PCM Type | $1. | pcm\_type | N/A | Fill with Enrollment PCM Type if the begin date on the appointment record is between the begin and end date associated with the Enrollment PCM Type. If the appointment date is on or after 1/1/18 and the appointment date is outside of the dates associated with the Enrollment Group, or there is no match for this patient in the LVM, set to Z. If the appointment date is before 1/1/18, set to blank. See VM6 Specification, Exhibit G-19 for segment and field positions. |
| DEERS Enrollment DMIS ID | $4. | denrsite | N/A | Fill with enrollment DMIS ID, if the begin date on the appointment record is between the begin and end date associated with the enrollment DMIS ID. If the appointment date is outside of the dates associated with the enrollment site, or there is no match for this patient in the LVM, set to “NONE”. See VM6 specification, Exhibits G-18 and 19 for segment and field position. |
| DEERS Health Care Delivery Program Code – Enrolled | $3. | hcdp\_enr | N/A | Fill with enrollment HCDP code if the begin date of the appt is between the begin and end date associated with the enrollment HCDP code. See VM6 Specification, Exhibits G-18 and 19 for segment and field positions. |
| Eligibility Group | $1. | elg\_grp | N/A | Fill with Eligibility Group if the begin date on the appointment record is between the begin and end date associated with the Eligibility Group. If the appointment date is on or after 1/1/18 and the appointment date is outside of the dates associated with the Eligibility Group, or there is no match for this patient in the LVM, set to Z. If the appointment date is before 1/1/18, set to blank. See VM6 Specification, Exhibit G-19 for segment and field positions. |
| Enrollment Group | $1. | enr\_grp | N/A | Fill with Enrollment Group if the begin date on the appointment record is between the begin and end date associated with the Enrollment Group. If the appointment date is on or after 1/1/18 and the appointment date is outside of the dates associated with the Enrollment Group, or there is no match for this patient in the LVM, set to Z. If the appointment date is before 1/1/18, set to blank. See VM6 Specification, Exhibit G-19 for segment and field positions. |
| DEERS Health Care Delivery Program Code - Assigned | $3. | hcdp\_asgn | N/A | Fill with assigned HCDP code if the begin date on the appointment record is between the begin and end date associated with the assigned HCDP code. See VM6 Specification, Exhibit G-19 for segment and field positions. |
| **DMIS ID Table** |  |  |  |  |
| Treatment Service | $1. | txsvc | N/A | After matching on FY and mtf, set to ubu\_svc |
| Treatment Parent DMIS ID | $4. | mtf\_parent | N/A | After matching on FY and mtf, set to ubu\_par |
| Treatment T3 Region | $2. | mtf\_t3\_reg | N/A | After matching on FY and mtf, set to t3\_reg |
| Treatment T17 Region | $2. | mtf\_t17\_reg | N/A | After matching on FY and mtf, set to t17\_reg |
| Treatment Major Command | $8. | txcmnd | N/A | After matching on FY and mtf, set to majcmnd |
| Treatment MSM Area ID | $3. | txmsma | N/A | After matching on FY and mtf, set to msm\_id |
| Enrollment Service | $1. | enrsvc | N/A | After matching on FY and denrsite, set to ubu\_svc |
| Enrollment Site Parent DMIS ID | $4. | enr\_parent | N/A | After matching on FY and denrsite, set to ubu\_par |
| Enrollment T3 Region | $2. | enr\_t3\_reg | N/A | After matching on FY and denrsite, set to t3\_reg |
| Enrollment T17 Region | $2. | enr\_t17\_reg | N/A | After matching on FY and denrsite, set to t17\_reg |
| **Omni-CAD Table** |  |  |  |  |
| Catchment Area ID | $4. | catch | N/A | Based on matching FY, FM and patzip; if sponsvc = A then set equal to AWORLD, if sponsvc = F then set equal to FWORLD; if sponsvc in (M, N, V) then set equal to NWORLD, otherwise set equal to OWORLD. If zip code not found in MDR Omni-CAD, set equal to ‘0999’ |
| PRISM Area ID | $4. | prism | N/A | Based on matching FY, FM and patzip; if sponsvc = A then set equal to APRISM, if sponsvc = F then set equal to FPRISM; if sponsvc in (M, N, V) then set equal to NPRISM, otherwise set equal to OPRISM. If zip code not found in MDR Omni-CAD, set equal to ‘0999’ |
| MTF Service Area ID | $4. | mtfsvcarea | N/A | Based on matching FY, FM and patzip; if sponsvc = A then set equal to ABPA, if sponsvc = F then set equal to FBPA; if sponsvc in (M, N, V) then set equal to NBPA, otherwise set equal to OPRISM. If zip code not found in MDR Omni-CAD, set equal to ‘0999’ |
| T3 Residence Region | $2. | ben\_t3\_reg | N/A | Based on matching FY, FM and patzip; Set equal to T3\_REG. If zip code not found in MDR Omni-CAD, leave blank. |
| T17 Residence Region | $2. | ben\_t17\_reg | N/A | Based on matching FY, FM and patzip; Set equal to T17\_REG. If zip code not found in MDR Omni-CAD, leave blank. |
| **Derived Fields** |  |  |  |  |
| Encounter Date | N(8) | encdate | ADMIT\_DT\_TM PRE\_ADMIT\_DT\_TM ARRIVE\_DT\_TM  START\_DT\_TM  SCHED\_START\_DT\_TM | Use ADMIT\_DT\_TM unless blank.  Else If blank, use ARRIVE\_DT\_TM Else If blank, use START\_DT\_TM Else If blank, use SCHED\_START\_DT\_TM Else If blank, use PRE\_ADMIT\_DT\_TM |
| Encounter Date – Character | $8. | encdate\_c | encdate | Character format (YYYYMMDD) of the Encounter Date |
| Calendar Year | $4. | cy | N/A | CY of the Encounter date |
| Calendar Month | $2. | cm | N/A | CM of the Encounter date |
| Fiscal Year | $4. | fy | N/A | FY of the Encounter date |
| Fiscal Month | $2. | fm | N/A | FM of the Encounter date |
| Patient Age | 8. | patage | N/A | Age in years from date of birth (from DEERS) to appointment date. If date of birth from DEERS is not available, use dob\_r. |
| Age Group | $1. | agegrp | N/A | If Patient Age is 0-4, set to A; if 5-14, B; if 18-24, C; if 25-34, D; if 35-44, F; if 45-64, G; if 65+, H; else X. |
| Primary Record Indicator | N(8) | d\_primary\_rec | N/A | Set to 1 for first procedure record for each case, based on sorting by SURGICAL\_CASE\_SK, PRIMARY\_PROC\_IND, and SCHED\_PRIMARY\_PROC\_IND. |
| Scheduled Start to Patient in OR Time (in minutes) | N(8) | sched\_start\_to\_patient\_in | PATIENT\_IN\_OR\_DT\_TM SCHED\_START\_DT\_TM | Calculate as (PATIENT\_IN\_OR\_DT\_TM - SCHED\_START\_DT\_TM) / 60.  Result is in minutes.  If resulting value more than 24 hours in advance (-1,440 minutes), then cap result at -1,440.  If resulting value is more than 48 hours behind (2,880 minutes) schedule, cap the result at 2,880. |
| Patient in OR to Surgery Start Time (in minutes) | N(8) | patient\_in\_to\_surg\_start | START\_DT\_TM PATIENT\_IN\_OR\_DT\_TM | Calculate as (START\_DT\_TM - PATIENT\_IN\_OR\_DT\_TM) / 60.  Result is in minutes.  If resulting value is less than zero, then derive result as 0. |
| Surgery Start to PACU Time (minutes) | N(8) | surg\_start\_to\_pacu | PATIENT\_IN\_PACU\_DT\_TM  START\_DT\_TM | Calculate as (PATIENT\_IN\_PACU\_DT\_TM - START\_DT\_TM) / 60.  Result is in minutes.  If resulting value is less than zero, then derive result as null.  If resulting value is more than 48 hours, cap the result at 2,880. |
| Time in PACU | N(8) | time\_in\_pacu | PATIENT\_OUT\_PACU\_II\_DT\_TM PATIENT\_IN\_PACU\_DT\_TM | Calculate as PATIENT\_OUT\_PACU\_II\_DT\_TM - PATIENT\_IN\_PACU\_DT\_TM) / 60.  Result is in minutes.  If resulting value is less than zero, then derive result as 0.  If resulting value is more than 48 hours, then set to null.  If resulting value is null and time\_in\_pacu\_1 is not null, then set to time\_in\_pacu\_1.  If resulting value is null and time\_in\_pacu\_2 is not null, then set to time\_in\_pacu\_2. |
| Time in PACU 1 | N(8) | time\_in\_pacu\_1 | PATIENT\_OUT\_PACU\_DT\_TM PATIENT\_IN\_PACU\_DT\_TM | Calculate as (PATIENT\_OUT\_PACU\_DT\_TM - PATIENT\_IN\_PACU\_DT\_TM) / 60.  Result is in minutes.  If resulting value is less than zero, then derive result as 0.  If resulting value is more than 48 hours, then set to null. |
| Time in PACU 2 | N(8) | time\_in\_pacu\_2 | PATIENT\_OUT\_PACU\_II\_DT\_TM PATIENT\_IN\_PACU\_II\_DT\_TM | Calculate as (PATIENT\_OUT\_PACU\_II\_DT\_TM - PATIENT\_IN\_PACU\_II\_DT\_TM) / 60.  Result is in minutes.  If resulting value is less than zero, then derive result as 0.  If resulting value is more than 48 hours, then set to null. |
| Patient In to PACU Out Time (in minutes) | N(8) | patient\_in\_to\_pacu\_out | PATIENT\_OUT\_PACU\_II\_DT\_TM  PATIENT\_OUT\_PACU\_DT\_TM PATIENT\_IN\_OR\_DT\_TM | Calculate as (PATIENT\_OUT\_PACU\_II\_DT\_TM - PATIENT\_IN\_OR\_DT\_TM) / 60.  If null, then calculate as (PATIENT\_OUT\_PACU\_DT\_TM - PATIENT\_IN\_OR\_DT\_TM) / 60.  Result is in minutes.  If resulting value is less than zero, then derive result as null.  If resulting value is more than 48 hours, then set to null. |
| Anesthesia Duration | N(8) | anesthesia\_duration | ANESTHESIA\_INDUCTION\_DT\_TM  ANESTHESIA\_STOP\_DT\_TM | Calculate as (anesthesia\_stop\_dt\_tm - anesth\_induction\_dt\_tm) / 60 |
| Time in OR | N(8) | time\_in\_or | PATIENT\_IN\_OR\_DT\_TM  PATIENT\_OUT\_OR\_DT\_TM | Calculate as (patient\_out\_or\_dt\_tm - patient\_in\_or\_dt\_tm) / 60 |
| Number of Procedures | N(8) | num\_procedures | N/A | Set to 1 for every record. |

**Table 6: File Layout for MDR Genesis Surgery Case Attendance Table**

| **Field** | **Format** | **SAS Name** | **Source Element** | **Transformation** |
| --- | --- | --- | --- | --- |
| Surgical Case Key | $100 | surgical\_case\_sk | surgical\_case\_sk | No transformation. |
| Surgical Procedure Key | $100 | surg\_case\_proc\_sk | surg\_case\_proc\_sk | No transformation. |
| Case Attendance Key | $100 | case\_attendance\_sk | case\_attendance\_sk | No transformation. |
| Attendee Key | $100 | attendee\_prsnl | attendee\_prsnl | No transformation. |
| Role Performed | $40 | role\_performed | role\_perform\_ref | Match to code\_value\_ref table where role\_perform\_ref matches the code\_value\_ref and code\_set = 10170 and health\_system\_id=18635 and retrieve desc\_description. |
| Perioperative Document Type | $40 | perioperative\_doc\_type | perioperative\_doc\_type\_ref | Match to code\_value\_ref table where perioperative\_doc\_type\_ref matches the code\_value\_ref and code\_set = 14258 and health\_system\_id=18635 and retrieve desc\_description. |
| Document Terminated Reason | $40 | doc\_terminated\_reason | doc\_terminated\_reason\_ref | Match to code\_value\_ref table where doc\_terminated\_reason\_ref matches the code\_value\_ref and code\_set = 10031 and health\_system\_id=18635 and retrieve desc\_description. |
| Segment | $40 | segment | segment\_ref | Match to code\_value\_ref table where segment\_ref matches the code\_value\_ref and code\_set = 10003 and health\_system\_id=18635 and retrieve desc\_description. |
| Free Text Attendee | $100 | ft\_attendee | ft\_attendee | No transformation. |
| In OR Datetime | N(8) | in\_or\_dt\_tm | in\_or\_dt\_tm | Converted to local time. |
| Out OR Datetime | N(8) | out\_or\_dt\_tm | out\_or\_dt\_tm | Converted to local time. |
| Reason for Relief | $40 | reason\_for\_relief | reason\_for\_relief\_ref | Match to code\_value\_ref table where reason\_for\_relief\_ref matches the code\_value\_ref and code\_set = 100004 and health\_system\_id=18635 and retrieve desc\_description. |
| Signing Attendee Indicator | N(8) | signing\_attendee\_ind | signing\_attendee\_ind | No transformation. |
| **Personnel Table (join on attendee\_prsnl = prsnl\_sk)** |  |  |  |  |
| Personnel Name | $100 | personnel\_name | full\_name | No transformation. |
| Personnel NPI | $10 | personnel\_npi | npi | No transformation. |
| Personnel EDIPN | $10 | personnel\_edipn | prsnl\_edipn | No transformation. |
| Personnel Skill Type | $1 | personnel\_skill\_type | skill\_type | No transformation. |

**Table 7: File Layout for MDR Perioperative Documentation Table**

| **Field** | **Format** | **SAS Name** | **Source Element** | **Transformation** |
| --- | --- | --- | --- | --- |
| Perioperative Document Key | N(8) | perioperative\_doc\_key | perioperative\_doc\_key | No transformation. |
| Perioperative Document Type | $50 | perioperative\_doc\_type | perioperative\_doc\_type\_ref | Match to code\_value\_ref table where perioperative\_doc\_type\_ref matches the code\_value\_ref and code\_set = 14258 and health\_system\_id=18635 and retrieve desc\_description. |
| Surgical Case Key | $100 | surgical\_case\_sk | surgical\_case\_sk | No transformation. |
| Form Title | $255 | form\_title\_txt | form\_title\_txt | No transformation. |
| Result Title | $255 | result\_title\_txt | result\_title\_txt | No transformation. |
| Response | $255 | response | result\_value\_formatted | No transformation. |
| Result Value (Text) | $255 | result\_value\_txt | result\_value\_txt | No transformation. |
| Specialty | $50 | specialty | specialty\_ref | Match to code\_value\_ref table where specialty\_ref matches the code\_value\_ref and code\_set = EDW\_6 and health\_system\_id=18635 and retrieve desc\_description. |
| Event Key | $100 | event\_sk | event\_sk | No transformation. |
| Perioperative Document Key (Source) | $100 | src\_periop\_doc\_sk | src\_periop\_doc\_sk | No transformation. |
| Perioperative Document Surrogate Key (SK) | $100 | perioperative\_doc\_sk | perioperative\_doc\_sk | No transformation. |
| Group Sequence | N(8) | group\_seq | group\_seq | No transformation. |
| Segment | $40 | segment\_ref | segment\_ref | No transformation. |
| Stage | $50 | stage | stage\_ref | Match to code\_value\_ref table where stage\_ref matches the code\_value\_ref and code\_set = 221 and health\_system\_id=18635 and retrieve desc\_description. |
| Perioperative Document Reference Key | $100 | periop\_doc\_ref\_sk | periop\_doc\_ref\_sk | No transformation. |
| Form Event Key | $100 | form\_event\_sk | form\_event\_sk | No transformation. |
| Result Nomenclature Code | $40 | codified\_result\_nomen | codified\_result\_nomen | No transformation. |
| Result Reference Code | $40 | codified\_result\_ref | codified\_result\_ref | No transformation. |
| Result Code Set | N(8) | codified\_result\_code\_set | codified\_result\_code\_set | No transformation. |
| Result Item | $40 | result\_item | result\_item | No transformation. |
| Result Personnel ID | $100 | result\_prsnl | result\_prsnl | No transformation. |
| Result Value Datetime | N(8) | result\_value\_dt\_tm | result\_value\_dt\_tm | Converted to local time. |
| Result Value (Numeric) | N(8) | result\_value\_numeric | result\_value\_numeric | No transformation. |
| Result (Free Text) | $255 | result\_ft\_item\_txt | result\_ft\_item\_txt | No transformation. |
| Perioperative Document Type Flag | N(8) | periop\_doc\_type\_flg | periop\_doc\_type\_flg | No transformation. |
| CPT | $5 | cpt | codified\_result\_nomen | if result\_title\_txt = 'SN - Proc - Procedure Code' then match codified\_result\_nomen to the Nomenclature\_Ref table where vocabulary\_ref in ('637890','1217','1222','654470','19350056','19350130','1231','4326105','17377005') and retrieve ‘Value’ as CPT. |
| **Personnel Table (join on result\_prsnl = prsnl\_sk)** |  |  |  |  |
| Personnel Name | $100 | personnel\_name | full\_name | No transformation. |
| Personnel NPI | $10 | personnel\_npi | npi | No transformation. |
| Personnel EDIPN | $10 | personnel\_edipn | prsnl\_edipn | No transformation. |
| Personnel Skill Type | $1 | personnel\_skill\_type | skill\_type | No transformation. |

**Table 8: File Layout for MDR Surgery Cancels Table**

| **Field** | **Format** | **SAS Name** | **Source Element** | **Transformation** |
| --- | --- | --- | --- | --- |
| Surgical Case Key | $100 | surgical\_case\_sk | surgical\_case\_sk | No transformation. |
| Surgical Case Number | $100 | surgical\_case\_nbr\_formatted | surgical\_case\_nbr\_formatted | No transformation. |
| Financial Number (FIN) | $40 | fin | fin | No transformation. |
| Cancelled Reason | $37 | cancel\_reason | cancel\_reason\_ref | Match to code\_value\_ref table where cancel\_reason\_ref matches the code\_value\_ref and code\_set in '10035','14229', or '14774' and health\_system\_id=18635 and retrieve desc\_description. |
| Cancelled Datetime | N(8) | cancel\_dt\_tm | cancel\_dt\_tm | Converted to local time. |
| Scheduled Surgical Area | $40 | sched\_surgical\_area | sched\_surgical\_area\_ref | Match to code\_value\_ref table where sched\_surgical\_area\_ref matches the code\_value\_ref and code\_set = 221 and health\_system\_id=18635 and retrieve desc\_display. |
| Scheduled Priority | $40 | sched\_priority | sched\_priority\_ref | Match to code\_value\_ref table where sched\_priority\_ref matches the code\_value\_ref and code\_set = 1304 and health\_system\_id=18635 and retrieve desc\_display. |
| Scheduled Patient Type | $26 | sched\_patient\_type | sched\_patient\_type\_ref | Match to code\_value\_ref table where sched\_patient\_type\_ref matches the code\_value\_ref and code\_set = 71 and health\_system\_id=18635 and retrieve desc\_display. |
| Encounter Date | N(8) | encdate | encdate | No transformation. |
| Encounter Datetime | N(8) | enc\_dt\_tm | enc\_dt\_tm | Converted to local time. |
| Medical Service | $40 | medical\_service | medical\_service | No transformation. |
| Calendar Year | $4 | cy | cy | No transformation. |
| Calendar Month | $2 | cm | cm | No transformation. |
| Fiscal Year | $4 | fy | fy | No transformation. |
| Fiscal Month | $2 | fm | fm | No transformation. |
| Case Level | $20 | case\_level | case\_level | No transformation. |
| Department | $40 | dept | dept | No transformation. |
| Scheduled Operating Room | $40 | sched\_or | sched\_or | No transformation. |
| Primary Surgeon | $100 | primary\_surgeon | primary\_surgeon | No transformation. |
| Surgeon Specialty | $100 | case\_surgeon\_specialty | case\_surgeon\_specialty | No transformation. |
| Anesthesiologist | $100 | anesthesiologist | anesthesiologist | No transformation. |
| Surgical Area | $40 | surgical\_area | surgical\_area | No transformation. |
| Would Class | $40 | wound\_class\_case | wound\_class\_case | No transformation. |
| Institution | $40 | institution | institution | No transformation. |
| Primary Surgeon Key | $100 | primary\_surgeon\_prsnl | primary\_surgeon\_prsnl | No transformation. |
| Operating Room | $40 | or | or | No transformation. |
| Patient EDIPN | $10 | edipn | edipn | No transformation. |
| Encounter Key | $40 | encounter\_sk | encounter\_sk | No transformation. |
| Scheduled Start Datetime | N(8) | sched\_start\_dt\_tm | sched\_start\_dt\_tm | Converted to local time. |
| Scheduled End Datetime | N(8) | sched\_stop\_dt\_tm | sched\_stop\_dt\_tm | Converted to local time. |
| Gender | $10 | gender\_r | gender\_r | No transformation. |
| Treatment MTF | $4 | mtf | mtf | No transformation. |
| Treatment Parent MTF | $4 | mtf\_parent | mtf\_parent | No transformation. |
| Unit Description | $100 | unit\_name | unit\_name | No transformation. |
| Nurse Unit Location Code (NULC) | $45 | unit\_display | unit\_display | No transformation. |
| Surgeon NPI | $100 | surgeon\_npi | surgeon\_npi | No transformation. |
| Surgeon HIPAA Taxonomy | $10 | surgeon\_hipaa\_taxonomy | surgeon\_hipaa\_taxonomy | No transformation. |
| Anesthesiologist NPI | $100 | anesthesiologist\_npi | anesthesiologist\_npi | No transformation. |
| Encounter Type | $40 | encounter\_type | encounter\_type | No transformation. |

**Table 9: File Layout for MDR Surgery Delays Table**

| **Field** | **Format** | **SAS Name** | **Source Element** | **Transformation** |
| --- | --- | --- | --- | --- |
| Surgical Case Key | $100 | surgical\_case\_sk | surgical\_case\_sk | No transformation. |
| Surgical Delay Key | $100 | surgical\_delay\_sk | surgical\_delay\_sk | No transformation. |
| Perioperative Document Type | $50 | perioperative\_doc\_type | perioperative\_doc\_type\_ref | Match to code\_value\_ref table where perioperative\_doc\_type\_ref matches the code\_value\_ref and code\_set = 14258 and health\_system\_id=18635 and retrieve desc\_description. |
| Segment Code | $40 | segment\_ref | segment\_ref | No transformation. |
| Delay Reason | $50 | delay\_reason | delay\_reason\_ref | Match to code\_value\_ref table where delay\_reason\_ref matches the code\_value\_ref and code\_set = 10033 and health\_system\_id=18635 and retrieve desc\_description. |
| Sequence | N(8) | display\_seq | display\_seq | No transformation. |
| Delay Description | $255 | delay\_desc | delay\_desc | No transformation. |
| Delay Duration (minutes) | N(8) | delay\_duration | delay\_duration | No transformation. |

**Table 10: File Layout for MDR Surgical Case Cart Pick List Table**

| **Field** | **Format** | **SAS Name** | **Source Element** | **Transformation** |
| --- | --- | --- | --- | --- |
| Surgical Case Key | $100 | surgical\_case\_sk | surgical\_case\_sk | No transformation. |
| Item Description | $255 | item\_desc | description | Match to table WH\_CLN\_ITEM on pick\_list\_item = item\_sk and return description. |
| Perioperative Document Type | $40 | perioperative\_doc\_type | document\_type\_ref | Match to code\_value\_ref table where document\_type\_ref matches the code\_value\_ref and code\_set = 14258 and health\_system\_id=18635 and retrieve desc\_description. |
| Surgical Area | $40 | surgical\_area | surgical\_area\_ref | Match to code\_value\_ref table where surgical\_area\_ref matches the code\_value\_ref and code\_set = 221 and health\_system\_id=18635 and retrieve desc\_display. |
| Fill Location | $40 | fill\_location | fill\_loc | Match to code\_value\_ref table where fill\_loc matches the code\_value\_ref and code\_set = 220 and health\_system\_id=18635 and retrieve desc\_display. |
| Return Location | $40 | return\_location | return\_loc | Match to code\_value\_ref table where return\_loc matches the code\_value\_ref and code\_set = 220 and health\_system\_id=18635 and retrieve desc\_display. |
| Filled Quantity | N(8) | fill\_qty | fill\_qty | No transformation. |
| Hold Quantity | N(8) | hold\_qty | hold\_qty | No transformation. |
| Opened Quantity | N(8) | open\_qty | open\_qty | No transformation. |
| Used Quantity | N(8) | used\_qty | used\_qty | No transformation. |
| Requested Quantity | N(8) | requested\_qty | requested\_qty | No transformation. |
| Returned Quantity | N(8) | return\_qty | return\_qty | No transformation. |
| Wasted Quantity | N(8) | wasted\_qty | wasted\_qty | No transformation. |
| Case Cart Pick List Key | $100 | case\_cart\_pick\_lst\_sk | case\_cart\_pick\_lst\_sk | No transformation. |
| Finalized Datetime | N(8) | case\_cart\_finalized\_dt\_tm | case\_cart\_finalized\_dt\_tm | Converted to local time. |
| Verified Datetime | N(8) | case\_cart\_verfd\_dt\_tm | case\_cart\_verfd\_dt\_tm | Converted to local time. |
| Case Cart Verified By Personnel | $100 | case\_cart\_verfd\_by\_prsnl | case\_cart\_verfd\_by\_prsnl | No transformation. |
| Pick List Item | $40 | pick\_list\_item | pick\_list\_item | No transformation. |
| Item Description (free text) | $200 | ft\_item\_desc | ft\_item\_desc | No transformation. |
| Wasted Reason | $40 | wasted\_reason\_ref | wasted\_reason\_ref | No transformation. |
| Item Type Flag | N(8) | item\_type\_flg | item\_type\_flg | No transformation. |
| Parent Cart Pick List Key | $100 | parent\_case\_cart\_pick\_lst\_sk | parent\_case\_cart\_pick\_lst\_sk | No transformation. |

1. Refresh Frequency

## Weekly

1. Data Marts

N/A.