MHS GENESIS Surgery
for the MHS Mart (M2)
(Version 1.05.00)

Current Specification

Revision History

Version	Date	Originator	Para/Tbl/Fig	Description of Change
1.00.00	5/20/2020	W. Funk	• Whole document	• New table in M2.
1.01.00	7/7/2020	C. Kangas	• Table 2	• Added several new fields.
1.02.00	9/9/2020	C. Kangas	• Table 2	• Added CPT_6-CPT_13 fields.
1.03.00	9/24/2020	C. Kangas	• Table 2	• Renamed Procedure AORN field.
1.04.00	12/08/2020	C. Kangas	• Table 2	• Updated business rules for Number of Cases and Number of Procedures definitions.
1.04.01	3/31/2021	W. Funk	• Table 2	• Added pseudo MRN
1.05.00	11/10/2021	C. Kangas	• VI Filters, Table 2 & 3	• Changed the filter to include started cases • Added the Case Complete Indicator • Changed the source of the Number of Procedures measure

M2 GENESIS Surgery

I.   Source: The GENESIS Surgery data is provided to M2 by the MDR from the MDR GENESIS Surgery table.

II.   File Format: Regardless of the length specified, all fields are variable length and delimited by a "|". A null field will simply have an end of field delimiter ("|") immediately following the previous field's end of field delimiter.

III.   File Content: Each feed file typically represents an incremental weekly update, although a full file refresh can also be created when needed. The Surgery table is not split by fiscal year, as it represents all surgeries captured in MHS GENESIS for all-time. Two source files are provided to the M2 each week: a "delete" file that is used to remove records, and an "add file" that is used to add new and updated records.

IV.   Organization and Batching: Each feed file consists of all records for all-time that were added, updated, or deleted from the MDR Surgery table. Feeds are not organized by fiscal year.

V.   Frequency of Processing: Weekly updates.

VI.   Filters: Only surgeries with an Actual Start Date (based on start_dt_tm) > 2017-01-01 and records where the patient is not a test patient are provided to the M2.

VII.   Updating the M2 Master Table: The M2 Surgery table is updated by removing records whose Record Key matches what is in the weekly feed "delete file", and then appending the new "add file" feed.

VIII.   Record Layout and Content

Table 1: M2 GENESIS Surgery Delete File Layout

Data Element	SAS Name for GENESIS based data	Format	Transformation
Record Key	surg_case_proc_sk	N(8)	No transformation

Table 2: M2 GENESIS Surgery Add File Layout

Data Element	SAS Name	Format	Transformation
Actual Start Date and Time	start_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Actual Stop Date and Time	stop_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
ACV Group	acvgroup	$15	No transformation
Add On Indicator	add_on_ind	N(8)	No transformation
Age Group	agegrp	$1	No transformation

Data Element	SAS Name	Format	Transformation
Alternate Care Value	acv	$1	No transformation
Anesthesia Begin Date and Time	anesth_induction_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Anesthesia End Date and Time	anesthesia_stop_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Anesthesia Prep Start Date and Time	anesthesia_start_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Anesthesia Provider Stop Date and Time	anesth_prov_stop_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Anesthesia Type	anesthesia_type	$40	No transformation
Anesthesiologist EDIPN	anesthesiologist_edipn	$10	No transformation
Anesthesiologist Name	anesthesiologist	$100	No transformation
Anesthesiologist NPI	anesthesiologist_npi	$10	No transformation
Anesthesiologist Primary HIPAA Taxonomy	anesthesiologist_hipaa_taxonomy	$10	No transformation
ASA Class	asa_class	$20	No transformation
Bencat Common	comben	$1	No transformation. Include description as a detail.
Beneficiary Category	bencat	$3	No transformation. Include description as a detail.
Calendar Month	cm	$2	No transformation
Calendar Year	cy	$4	No transformation
Case Level	case_level	$20	No transformation
Check In Date and Time	check_in_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Closing Start Date and Time	closing_start_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Concurrent Indicator	concurrent_ind	N(8)	No transformation
Date of Birth	patdob	yyyymmdd	No transformation
Department	dept	$40	No transformation
Diagnosis 1	dx1	$7	No transformation
Diagnosis 2	dx2	$7	No transformation
Diagnosis 3	dx3	$7	No transformation
Diagnosis 4	dx4	$7	No transformation
Diagnosis 5	dx5	$7	No transformation
Diagnosis Group	dxgrp	$2	No transformation

Data Element	SAS Name	Format	Transformation
Discharge Disposition	discharge_disposition	$40	No transformation
Person ID	edipn	$10	No transformation. Restricted Universe only
Eligibility Group	elg_grp	$1	No transformation. Include description as a detail.
Encounter Date	encdate	yyyymmdd	No transformation
Encounter Key	encounter_sk	$100	No transformation
Encounter Type	encounter_type	$40	No transformation
Enrollment PCM Type	pcm_type	$1	No transformation
Enrollment Group	enr_grp	$1	No transformation. Include description as a detail.
Enrollment Site	denrsite	$4	No transformation
Ethnic Group	ethnic	$1	No transformation
Financial Number (FIN)	fin	$40	No transformation
Fiscal Month	fm	$2	No transformation
Fiscal Year	fy	$4	No transformation
Gender	gender	$1	No transformation
HCDP - Assigned	hcdp_asgn	$3	No transformation
HCDP – Enrolled	hcdp_enr	$3	No transformation
Institution	institution	$40	No transformation
Major Diagnostic Category (MDC)	mdc	$2	No transformation
Marital Status	marital	$1	No transformation
Medical Service	medical_service	$40	No transformation
Medicare Eligibility Flag	medicare_flag	$1	No transformation
MEPRS Code	meprs_cd	$4	No transformation
MHS GENESIS Anesthesiologist ID	anesthesia_prsnl	$100	No transformation
MHS Genesis Person ID	person_sk	$100	No transformation
MHS GENESIS Primary Surgeon ID	primary_surgeon_prsnl	$100	No transformation
Medical Record Number	mrn	$40	No transformation. Restricted Universe only
Modifier Text	modifier_txt	$255	No transformation
Nurse Unit Location Code	unit_display	$45	No transformation
OR Ready Date and Time	or_ready_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation

Data Element	SAS Name	Format	Transformation
OR Setup Date and Time	or_setup_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Operating Room	or	$40	No transformation
Age	patage	8	No transformation
Patient In OR Date and Time	patient_in_or_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Patient in OR to Surgery Start Time	patient_in_to_surg_start	N(8)	No transformation
Patient In PACU Date and Time	patient_in_pacu_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Patient In Preop Area Date and Time	in_preop_holding_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Patient In SDS Recovery Unit Date and Time	patient_in_pacu_ii_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Patient In to PACU Out Time	patient_in_to_pacu_out	N(8)	No transformation
Patient Out OR Date and Time	patient_out_or_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Patient Out of PACU Date and Time	patient_out_pacu_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Patient Out of Preop Area Date and Time	out_preop_holding_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Patient Out of SDS Recovery Unit Date and Time	patient_out_pacu_ii_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Patient Ready Date and Time	ready_for_surgeon_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Patient ZIP Code	deerszip	$5	No transformation
Beneficiary ID	patssn	$9	No transformation. Restricted Universe only
Order ID	order_sk	$100	No transformation
PCM ID	pcm_id	$18	No transformation
Perioperative Document Type	perioperative_doc_type	$40	No transformation
Person Association Reason Code	parc	$2	No transformation
Preop Antibiotic Date and Time	preop_antibio_admin_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Primary Procedure Indicator	primary_proc_ind	N(8)	No transformation
Primary Case Record Indicator	d_primary_rec	N(8)	No transformation
Primary Surgeon EDIPN	surgeon_edipn	$10	No transformation
Primary Surgeon Name	primary_surgeon	$100	No transformation
Primary Surgeon NPI	surgeon_npi	$10	No transformation
Primary Surgeon Primary HIPAA Taxonomy	surgeon_hipaa_taxonomy	$10	No transformation
Primary Surgeon Skill Type	surgeon_skill_type	$1	No transformation
Privilege Code	privilege	$1	No transformation
Procedure AORN	procedure	$100	No transformation
Procedure Code 1	cpt_1	$5	No transformation
Procedure Code 2	cpt_2	$5	No transformation

Data Element	SAS Name	Format	Transformation
Procedure Code 3	cpt_3	$5	No transformation
Procedure Code 4	cpt_4	$5	No transformation
Procedure Code 5	cpt_5	$5	No transformation
Procedure Code 6	cpt_6	$5	No transformation
Procedure Code 7	cpt_7	$5	No transformation
Procedure Code 8	cpt_8	$5	No transformation
Procedure Code 9	cpt_9	$5	No transformation
Procedure Code 10	cpt_10	$5	No transformation
Procedure Code 11	cpt_11	$5	No transformation
Procedure Code 12	cpt_12	$5	No transformation
Procedure Code 13	cpt_13	$5	No transformation
Procedure Start Datetime	proc_start_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Procedure Stop Datetime	proc_stop_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Procedure Duration (Minutes)	proc_start_to_stop	N(8)	No transformation
Race	race	$1	No transformation
Record ID	surg_case_proc_sk	N(8)	No transformation
Request Transport Date and Time	request_transport_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Scheduled Anesthesia Type	sched_anesthesia_type	$40	No transformation
Scheduled Modifier Text	sched_modifier_txt	$255	No transformation
Scheduled Operating Room	sched_or	$40	No transformation
Scheduled Priority	sched_priority	$40	No transformation
Scheduled Procedure	sched_procedure	$100	No transformation
Scheduled Procedure Count	sched_proc_cnt	N(8)	No transformation
Scheduled Procedure Duration	sched_proc_duration	N(8)	No transformation
Scheduled Primary Procedure Indicator	sched_primary_proc_ind	N(8)	No transformation
Scheduled Start Date and Time	sched_start_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Scheduled Start to Patient in OR Time	sched_start_to_patient_in	N(8)	No transformation
Scheduled Stop Date and Time	sched_stop_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Scheduled Surgical Area	sched_surgical_area	$40	No transformation
Sponsor Service	dsponsvc	$1	No transformation
Sponsor Service Aggregate	dsvcagg	$1	No transformation
Sponsor ID	sponssn	$9	No transformation. Restricted Universe only
Surgeon Arrival Date and Time	surgeon_in_room_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Surgeon Specialty of Case	case_surgeon_specialty	$100	No transformation
Surgeon Specialty of Procedure	proc_surgeon_specialty	$100	No transformation
Surgery Start to PACU Time	surg_start_to_pacu	N(8)	No transformation
Surgical Area	surgical_area	$40	No transformation

Data Element	SAS Name	Format	Transformation
Surgical Case Key (Millennium)	surgical_case_sk	N(8)	No transformation
Surgical Case Number	surgical_case_nbr_formatted	$100	No transformation
Time in PACU	time_in_pacu	N(8)	No transformation
Time in PACU 1	time_in_pacu_1	N(8)	No transformation
Time in PACU 2	time_in_pacu_2	N(8)	No transformation
Time Out Date and Time	surgical_time_out_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Treatment MTF	mtf	$4	No transformation
Unit Description	unit_name	$100	No transformation
Wound Class Case Level	wound_class_case	$22	No transformation
Wound Class Procedure Level	wound_class_proc	$22	No transformation
Admit Date and Time	admit_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Pre Admit Date and Time	pre_admit_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Arrive Date and Time	arrive_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Discharge Date and Time	discharge_dt_tm	yyyy-mm-ddThh:mm:ss	No transformation
Patient Minutes in OR	time_in_or	N(8)	No transformation
Anesthesia Duration (Minutes)	anesthesia_duration	N(8)	No transformation
Number of Procedures	num_procedures	N(8)	No transformation
Case Complete Indicator	case_complete_ind	N(8)	No transformation

IX.   M2 Appended Fields: The M2 Surgery table as viewed in the M2 contains some inferred fields that are results from "joins" to other tables or other inference or some additional math. The table below contains those fields and the rules for applying.

Table 3. M2 Appended Fields

Data Element	Format	Transformation
Beneficiary First Name	$	Join to MPI table by Person ID. Restricted universe only.
Beneficiary Last Name	$	Join to MPI table by Person ID. Restricted universe only.
Beneficiary Name	$	Last Name, First Name (e.g., DOE, JOHN). Restricted universe only.
Beneficiary T3 Region	$2	See M2 Omni-CAD specification for business rules
Beneficiary T17 Region	$2	See M2 Omni-CAD specification for business rules.
Catchment Area ID	$4	See M2 Omni-CAD specification for business rules.
Catchment Area Name	$	Match to DMIS ID table by FY and Catchment Area DMIS ID = DMIS ID from DMIS ID table and retrieve name

Data Element	Format	Transformation
Catchment Area Command	$	Match to DMIS ID table by FY and Catchment Area DMIS ID = DMIS ID from DMIS ID table and retrieve command
Catchment Area Military Service	$1	Match to DMIS ID table by FY and Catchment Area DMIS ID = DMIS ID from DMIS ID table and retrieve service
Catchment Area MSMA	$3	Match to DMIS ID table by FY and Catchment Area DMIS ID = DMIS ID from DMIS ID table and retrieve MSMA
Catchment Area Expanded Market	$8	Match to DMIS ID table by FY and Catchment Area DMIS ID = DMIS ID from DMIS ID table and retrieve the expanded market
Catchment Area Reporting Market	$8	Match to DMIS ID table by FY and Catchment Area DMIS ID = DMIS ID from DMIS ID table and retrieve reporting market
Catchment Area Readiness Command		Match to DMIS ID table by FY and Catchment Area DMIS ID = DMIS ID from DMIS ID table and retrieve readiness command
Enrollment Site Name	$	Match to DMIS ID table by FY and Enrollment DMIS ID = DMIS ID from DMIS ID table and retrieve name
Enrollment Site Command	$	Match to DMIS ID table by FY and Enrollment DMIS ID = DMIS ID from DMIS ID table and retrieve command
Enrollment Site Readiness Command	4	Match to DMIS ID table by FY and Enrollment DMIS ID = DMIS ID from DMIS ID table and retrieve readiness command
Enrollment Site Military Service	$1	Match to DMIS ID table by FY and Enrollment DMIS ID = DMIS ID from DMIS ID table and retrieve service
Enrollment Site MSMA	$3	Match to DMIS ID table by FY and Enrollment DMIS ID = DMIS ID from DMIS ID table and retrieve MSMA
Enrollment Site DHP Code	$1	Match to DMIS ID table by FY and Enrollment DMIS ID = DMIS ID from DMIS ID table and retrieve DHP Code
Enrollment Site Parent ID	$4	Match to DMIS ID table by FY and Enrollment DMIS ID = DMIS ID from DMIS ID table and retrieve parent
Enrollment Site Parent Name	$	Match to DMIS ID table by FY and Enrollment Parent = DMIS ID from DMIS ID table and retrieve name
Enrollment Site Expanded Market		Match to DMIS ID table by FY and Enrollment Site = DMIS ID from DMIS ID table and retrieve the expanded market
Enrollment Site Reporting Market		Match to DMIS ID table by FY and Enrollment Site = DMIS ID from DMIS ID table and retrieve the reporting market

Data Element	Format	Transformation
Enrollment Site T3 Region	$2	Match to DMIS ID table by FY and Enrollment Site = DMIS ID from DMIS ID table and retrieve the T3 region
Enrollment Site T17 Region	$2	Match to DMIS ID table by FY and Enrollment Site = DMIS ID from DMIS ID table and retrieve the T17 region
Enrollment Site Financial Parent	$4	Match to DMIS ID table by FY and Enrollment Site = DMIS ID from DMIS ID table and retrieve the financial parent
Enrollment Site Financial Parent Name		Match to DMIS ID table by FY and Enrollment Site Financial Parent = DMIS ID from DMIS ID table and retrieve the Financial Parent
IIW Flag	$1	If the beneficiary is in the IIW file, set to Y, else N
Market Area ID	$3	Match by FY, FM and beneficiary zip code = zip code from CAD and retrieve MTF Service Area
MTF Service Area	$4	See M2 Omni-CAD specification for business rules.
MTF Service Area Name	$	Match to DMIS ID table by FY and MTF Service Area = DMIS ID from DMIS ID table and retrieve name
MTF Service Area Expanded Market		Match to DMIS ID table by FY where MTF Service Area = DMIS ID from the DMIS ID table and retrieve expanded market.
MTF Service Area Reporting Market		Match to DMIS ID table by FY where MTF Service Area = DMIS ID from the DMIS ID table and retrieve reporting market
~~Number of Procedures~~	-	~~Count of 'Record ID' field~~
Number of Cases		Sum of 'Primary Case Record Indicator' field
Prime Service Area	$1	See M2 Omni-CAD specification for business rules.
PRISM Area ID	$4	See M2 Omni-CAD specification for business rules.
PRISM Area Name	$	Match to DMIS ID table by FY and PRISM Area DMIS ID = DMIS ID from DMIS ID table and retrieve name
PRISM Area Command	$	Match to DMIS ID table by FY and PRISM Area DMIS ID = DMIS ID from DMIS ID table and retrieve command
PRISM Area Military Service	$	Match to DMIS ID table by FY and PRISM Area DMIS ID = DMIS ID from DMIS ID table and retrieve service
PRISM Area MSMA	$3	Match to DMIS ID table by FY and PRISM Area DMIS ID = DMIS ID from DMIS ID table and retrieve MSMA
PRISM Area Reporting Market		Match to DMIS ID table by FY and PRISM Area DMIS ID = DMIS ID from DMIS ID table and retrieve reporting market

Data Element	Format	Transformation
PRISM Area Expanded Market		Match to DMIS ID table by FY and PRISM Area DMIS ID = DMIS ID from DMIS ID table and retrieve expanded market
Pseudo Beneficiary ID	$14	Encryption algorithm applied to Person ID.
Pseudo Person ID	$14	Encryption algorithm applied to Person ID.
Pseudo Sponsor ID	$14	Encryption algorithm applied to Sponsor ID.
Pseudo MRN	$14	Encryption algorithm applied to MRN
Reservist Status Code	$1	See M2 Reservist specification for business rules.
Special Operations Code	$2	See M2 Reservist specification for business rules.
Tmt DMIS ID Name	$	Match to DMIS ID table by FY and Treatment DMIS ID = DMIS ID from DMIS ID table and retrieve name
Tmt DMIS ID Command	$	Match to DMIS ID table by FY (Charted) and Treatment DMIS ID = DMIS ID from DMIS ID table and retrieve command
Tmt DMIS ID DHP Code	$1	Match to DMIS ID table by FY (Charted) and Treatment DMIS ID = DMIS ID from DMIS ID table and retrieve DHP Code
Tmt DMIS ID Military Service	$1	Match to DMIS ID table by FY (Charted) and Treatment DMIS ID = DMIS ID from DMIS ID table and retrieve Service
Tmt DMIS ID MSMA	$3	Match to DMIS ID table by FY (Charted) and Treatment DMIS ID = DMIS ID from DMIS ID table and retrieve MSMA
Tmt DMIS ID Expanded Market	$	Match to DMIS ID table by FY (Charted) and Treatment DMIS ID = DMIS ID from DMIS ID table and retrieve expanded market
Tmt DMIS ID Reporting Market	$	Match to DMIS ID table by FY (Charted) and Treatment DMIS ID = DMIS ID from DMIS ID table and retrieve reporting market
Tmt DMIS ID T3 Region	$	Match to DMIS ID table by FY (Charted) and Treatment DMIS ID = DMIS ID from DMIS ID table and retrieve t3 region
Tmt DMIS ID T17 Region	$	Match to DMIS ID table by FY (Charted) and Treatment DMIS ID = DMIS ID from DMIS ID table and retrieve t17 region
Tmt Parent DMIS ID	$4	Match to DMIS ID table by FY (Charted) and Treatment DMIS ID = DMIS ID from DMIS ID table and retrieve parent
Tmt Parent DMIS ID Name	$	Match to DMIS ID table by FY (Charted) and Parent DMIS ID = DMIS ID from DMIS ID table and retrieve name
TPR Flag	$1	Match by FY, FM (Charted) and beneficiary zip code = zip code from CAD and retrieve TPR Flag
Ever Deployed Flag (OCO)	$1	See M2 CTS specification for business rules.

Data Element	Format	Transformation
Days Since Most Recent OCO Depl	Num	See M2 CTS specification for business rules. This is a measure
Days Since Return from OCO Depl	$	See M2 CTS specification for business rules. This is a dimension
Cumulative OCO Deployed Days	Num	See M2 CTS specification for business rules.
OCO Deployed Flag	$1	See M2 CTS specification for business rules.
Case Management DMISID 1	$4	See M2 Case Management specification for business rules.
Case Management Acuity Level	$1	See M2 Case Management specification for business rules.
Case Manager ID 1	$14	See M2 Case Management specification for business rules.
Case Manager ID 2	$14	See M2 Case Management specification for business rules.
Case Manager ID 3	$14	See M2 Case Management specification for business rules.
Enrollment Site Readiness Service	$1	Match to DMIS ID table by FY and Enrollment DMIS ID = DMIS ID from DMIS ID table and retrieve Readiness Service
Enrollment Site Readiness Parent	$4	Match to DMIS ID table by FY and Enrollment DMIS ID = DMIS ID from DMIS ID table and retrieve Readiness Parent
Tmt DMIS ID Readiness Service		Match to DMIS ID table by FY and Tmt DMIS ID = DMIS ID from DMIS ID table and retrieve Readiness Service
Pseudo MRN		Based of a confidential algorithm applied to the Medical Record Number.

X.   Quality Review

- Record counts should match those contained in the transmittal letter representing each feed.
- The first and last 10 records in the files should be visually inspected to ensure proper formatting after loading.

XI.   File Location

Health Care Services / Direct Care / Surgery

XII.   Special Outputs: N/A