**Referral Data
for the
MHS Data Repository (MDR)
(Version 1.04.02)**

Current Specification

Revision History

Version	Date	Para/Tbl/Fig	Originator	Description of Change
1.00.00	08/16/2007		W. Funk	• Baseline specification.
1.01.00	12/10/2007	• Table 3	J. MacLeod	• Updated Record ID format; added Harvest Date and CHCS Host • Added instruction under Receiving Filters
1.02.00	1/5/2011	• Table 1 • Table 2	J. MacLeod	• Added the appointment data set • Added two new variables that are appended to the referral data via a merge to the MDR appointment data
1.02.01	2/8/2012	• Table 2	J. MacLeod	• Corrected many variable names, descriptions and lengths.
1.02.02	4/24/2012	• Table 1	J. MacLeod	• Clarified the business rule for merging the referral data to the appointment data.
1.02.03	4/19/2013	• Section 5 • Table 2	W. Funk	• Changed the date window for the receiving filters to 60 days • Added new data elements.
1.03.00	6/9/2015	• Table 1 • Table 2	J. MacLeod	• Table 1 – Added the MTF Network Referral table • Table 2 – Added ref_to_mcsc, UIN, and harvest_date variables
1.03.01	6/30/2015	• Table 2	J. MacLeod	• Removed harvest_date, because it was duplicative. That field is already in the data set under the name Extract Date.
1.03.02	11/13/2015	• Table 2	C. Kangas	• Changed transformation logic for UIN field.
1.03.03	9/29/2017	• Table 2	W. Funk	• Added fields related to NDAA 2017 and T2017
1.03.04	10/4/2017	• Appendix B	W. Funk	• Corrected a typo in the ACV Group derivation
1.03.05	11/15/2017	• Table 2	W. Funk	• Added enrollment regions
1.04.00	01/31/2020	• Table 2	J. MacLeod	• Added Clinical Priority
1.04.01	2/23/2021	• Table 1 • Tables 2	W. Funk	• Added PCM Identity Table • Added fields from the PCM Identity Table

Version	Date	Para/Tbl/Fig	Originator	Description of Change
1.04.02	4/1/2021	• Table 1 • Table 2	T. Comer for W. Funk	• Added service line format file • Added logic for new fields, including refbyprv_name, refto_svcline, refby_svcline

MDR Referral File

I. **BACKGROUND:**

Referrals are a common way for health care organizations to manage demand, and to ensure that patients get to the providers they need to see, when they need to see them. There are many organizations doing referrals for DHP sponsored care. This data file will initially be fielded with only MTF referrals.

There are two data files prepared from the CHCS referral feeds. One data file is the master referral file; the other is the referral to appointment crosswalk; a mapping of referral number to appointment ID, to be used for processing Standard Ambulatory Data Records or for when users want to link referrals to appointments.

II. **SOURCE:**

The data for the MDR referral table comes from the CHCS MCP Referral File

III. **TRANSMISSION (FORMAT AND FREQUENCY):**

The MTF Referral files are provided as 100+ separate feeds; one for each CHCS Host. These feeds are sent from the CHCS Hosts on a weekly basis. Consult the interface control document for more information.

IV. **ORGANIZATION AND BATCHING**

Data feeds are provided to the MDR for processing. Weekly batches will be generated on Monday and will contain all transmissions received since the previous week.

V. **RECEIVING FILTERS**

Records with a referral date that falls within the 60 days immediately preceding the date the extract is created are included in the raw data submission to the MDR.

VI. **INITIAL FILE PREPARATION**

To prepare the initial referral datasets; all referral feeds should be concatenated together and only the most recent record (freshest harvest date) is retained for each combination of host / referral number (HOST_REFIEN) and host/appointment number (HOST_APTIEN). Once this first phase of de-duplication occurs, a separate file is prepared, containing only the referring provider ID, Referral Number, Treatment DMISID and Appointment IEN. This file is the initial referral to appointment crosswalk table.

After writing out the initial referral to appointment crosswalk table; the data feeds are further de-duplicated; resulting in one record per referral. To do this, for each HOST_REFIEN, the record with the lowest host/appointment number is retained.

After this de-duplication, records are processed according to section VII.

VII. UPDATE PROCESS

The update process is similar to the initial file preparation. The first step is to concatenate the weekly data feeds from each CHCS Host into one dataset and append to the existing crosswalk table, deriving fields as necessary first. Once this is complete, the crosswalk table is recreated by keeping the record with the most recent harvest date.

To update the master dataset, the concatenated weekly feeds are appended to the existing master referral dataset. For each host/referral number, only the record with the lowest host/appointment number is retained. After completing this step, records are processed according to section VIII.

VIII. DATA PROCESSING, FIELD TRANSFORMATIONS AND DELETIONS FOR MDR CORE DATABASE

This section of this functional specification describes the processing used to create the referral file for the MDR. No further processing is done on the crosswalk table.

The basic process for preparing the MDR Referral File involves archiving of auto-generated referral records, de-duplication and application of updates, merging to external reference files, and deriving data elements resulting from merges or other math.

Table 1 below describes the merge data files and associated matching rules.

Table 1: Merge Rules for MDR Referral File Processing

Merge	Merge basis	Additional Rules
MPI	Social Security Number and other demographics	This process uses the existing MPI code, and must be done prior to any other merging. See DEERS VM6 specification for more details.
DEERS VM6	DEERS Person ID if available, otherwise use sponsor social security number where the relationship code is sponsor.	Use most recent VM6 file with no limits applied
DEERS LVM	DEERS Person ID where the FMP indicates the relationship.	Date matching is based on the referral date and matching segment.
Omni-CAD Format File	Referral FY and FM, FY/FM of MDR Omni CAD format file	Zip code and sponsor service aggregate, grouped into A, F, N (N, M and V) and O for all others.
DMISID Format File	Referral FY	
Appointment Data	CHCS Host DMIS ID and Appointment IEN	There can be multiple appointments generated by a single referral. The processor should retain the data for the first appointment record associated with the referral. For each unique combination of CHCS Host DMIS ID and Appointment IEN, keep the first record by appointment date.
MTF Network Referrals	UIN	
PCM Identity Lookup	End Date of Care is between the start and stop date of the PCM Identifier segment	Match of EDIPN
MEPR3_SL_fmt.txt file /mdr/genesis/aprod/util		Apply format file to cln3 and refto3

Business rules for each of the appended fields that result from the merges above, are described in the body of table 2, or in an appendix, referenced in that table. Additional derived fields are also described in this table.

IX. RECORD LAYOUT AND CONTENT

The MDR Referral file is a SAS Dataset, with two members. The master dataset is contained in the member called "Referral". Table 2 describes the format, file layout and field derivation rules for the MDR Referral data file.

Table 2: MDR Referral SAS Dataset

MDR Referral File Data Element	MDR SAS Name	Format	Source Element	Business Rule
Record ID	refnum	$11	HOST_REFIEN	Position 6-16 of the host concatenated with the referral internal entry number
Person ID	edi_pn	$10	PID (EDI_PN)	If person ID is blank, fill with a space.
Treatment DMISID Host	apptdmisid	$4	APTCLNDMIS	
Patient Category Code	patcat	$3	PATCATCD	
Referral Date	refdate	$8	RDT (Ref Date & Time)	Put into YYYYMMDD format based on the first 8 characters of the Referral date and time. 03/01/07 08:57
Referral Time	reftime	$5	RDT (Ref Date & Time)	Position 10-14 of the referral date and time.
CHCS HCDP	chcshcdp	$5	HCDP	
Order Number	ordnum	$12	HOST_ORDER #	Postion 6-17 of the host concatenated with the CHCS order #
Referral Start Date	begdate	$8	START	YYYYMMDD
Referral End Date	enddate	$8	STOP	YYYYMMDD
Number of Visits Authorized	visits	2	VST (# of Visits)	
Access to Care Category	atc_cat	$1	ATC (Access to Care Category)	
Referring from provider ID	refbyprv_id	$9	REFBY (CHCS Provider ID)	
Referring from provider EDI_PN	refbyprv_edipn	$10	REFBYEDIPN	
MEPRS Code of Referring from Provider	refbyprv_meprs	$4	REFBYMEPRS	
Referring from Provider Name	refbyprv_name	$61	REFBYPRV_NAME	
Referring from Clinic (MEPRS 4 Code)	cln	$4	CLN	
Clinical Priority	priority	$20	PRIORITY	
Referring from Host DMIS ID	chcshost	$4	HOST(DMIS ID)	
Referring to provider ID	reftoprv_id	$9	REFTO (CHCS Provider ID)	
Referring to provider EDI_PN	reftoprv_edipn	$10	REFtoEDIPN	
MEPRS Code of Referring to Provider	reftoprv_meprs	$4	REFtoMEPRS	
Referring to Clinic MEPRS	poc	$4	POC	
Referring to Clinic DMIS ID	poc_dmis	$4	POCDMIS	

MDR Referral File Data Element	MDR SAS Name	Format	Source Element	Business Rule
Refusal Date	refusdate	$8	RFUDTTM (Refusal Date & Time)	Put into YYYYMMDD format based on the first 8 characters of the Refusal date and time. 03/01/07 08:57
Refusal Time	refustime	$5	RFUDTTM (Refusal Date & Time)	Position 10-14 of the refusal date and time.
Refusal Reason #	refusrsn	$2	RFURESIEN (Refusal Reason #)	
Associated Record ID	apptien	$10	HOST_APTIEN	Position 6-15 of the host DMIS ID concatenated with the Appointment ien.
Appointment Type	appttype	$10	APTTYPE	
Appointment Status	apptstat	$15	APTSTATUS	
Appointment Clinic MEPRS	apptmeprs	$4	APTCLNMEPRS	
Referring NPI, Type 1	tbd	$10	Blank Currently	
Referring NPI, Type 2	tbd	$10	Blank Currently	
CHCS Host DMISID	chcshost	$4	HOST (DMISID)	
Extract Date	extrdt	$8	HARVESTDATE	YYYYMMDD Position 1-8 only
Referring DMISID	dmisid	$4	Referring DMISID	No transformation
UIN	uin	$17	UIN	dmisid concatenated with a "-" and concatenated with position 6-17 of the raw UIN value.
Referred by Provider NPI	refbyprv_npi	$10	Referred By Provider NPI	No transformation
Referred by Provider Taxonomy	refbyprv_tax	$10	Referred by Provider Taxonomy	No transformation
Referral NPI	reftoprv_npi	$10	Referred to Provider NPI	No transformation
Referral Provider Taxonomy	reftoprv_tax	$10	Referred to Provider Taxonomy	No transformation
Patient SSN	patssn	$9	Patient SSN	No transformation
Patient SSN Type Code	patssn_type	$1	Patient SSN Type Code	No transformation
Sponsor SSN	sponssn	$9	Sponsor SSN	No transformation
Sponsor SSN Type Code	sponssn_type	$1	Sponsor SSN Type Code	No transformation
Fields returned from MPI Merge				
Sponsor SSN	sponssn	$9		See VM6 Specification.
Person Association Reason Code	parc	$2		See VM6 Specification.
Fields derived from LVM Merge				
DEERS Sponsor Service Aggregate	sponsvc	$1	From LVM4	Fill with DEERS sponsor service (aggregate) from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions. If no match, set to "X"

MDR Referral File Data Element	MDR SAS Name	Format	Source Element	Business Rule
DEERS Health Care Delivery Program Code - Enrolled	deershcdp	$3	From LVM4	Fill with DEERS HCDP (enrolled) from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions
DEERS Alternate Care Value	deersacv	$1		Fill with DEERS Alternate Care Value from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions. BLANK FILL AFTER 1/1/2018
DEERS Enrollment DMIS ID	deersenr	$4		Fill with DEERS Enrollment DMIS ID from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions
DEERS Beneficiary Category	bencatx	$3		Fill with DEERS Beneficiary Category from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions
DEERS Common Beneficiary Category	comben	$1		Fill with DEERS Beneficiary Category Common from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions
DEERS Zip Code	patzip	$5		Fill with DEERS Zip Code from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions

MDR Referral File Data Element	MDR SAS Name	Format	Source Element	Business Rule
Enrollment Group	enr_grp	$2		Fill with enrollment group from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions
Eligibility Group	elg_grp	$2		Fill with Eligibility Group from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions
PCM Type	pcm_type	$1		Fill with PCM_TYPE from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions
HCDP - Assigned	hcdp_assgn	$3		Fill with assigned HCDP from LVM, if the referral date is between the begin and end date associated with the segment. See DEERS VM-6 spec, Sections G18 and G19 for segment and field positions
Fields derived from Omni-CAD Merge				
Catchment Area ID	catch	$4		If sponsvc=A then set equal to ACATCH, if sponsvc = F then set equal to FCATCH; if sponsvc in (M, N, V) then set equal to NCATCH, otherwise set equal to OCATCH. If zip code not found in MDR Omni-CAD, set equal to '0999'
PRISM Area ID	prism	$4		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 to '0999'
Tnex Region	tnexreg	$1		Based on matching FY, FM and zip code If zip code not found in MDR Omni CAD set to blank
Traditional Region	reg	$2		Based on matching FY, FM and zip code If zip code not found in MDR Omni CAD set to 16.

MDR Referral File Data Element	MDR SAS Name	Format	Source Element	Business Rule
MTF Service Area	mtfsvcarea	$4		FY06+; If sponsvc=A then set equal to ACATCH, if sponsvc = F then set equal to FCATCH; if sponsvc in (M, N, V) then set equal to NCATCH, otherwise set equal to OCATCH. If zip code not found in MDR Omni CAD set to blank
Beneficiary T3 Region	ben_t3_reg	$2		T3 region from Omi-CAD merge
Beneficiary T2017 region	ben_t17_reg	$2		T17 Region from Omni CAD merge
Fields derived from DMISID Table Merge				
Enrollment Site Service	enrsvc	$1		UBU_SVC, based on matching FY and enrollment site. Set to "X" if no match found.
Catchment Area MSMA	catchmsma	$3		MSMA, based on matching FY and catchment area. Leave blank if no match found.
PRISM Area MSMA	prismmsma	$3		MSMA, based on matching FY and PRISM area. Leave blank if no match found.
Referring MTF T3 Region	mtf_t3_reg	$2		T3_REG, based on matching FY and Referral MTF.
Referring MTF T17 Region	mtf_t17_reg	$2		T17_REG, based on matching FY and Referral MTF
Enrollment Site T3 Region	enr_t3_reg	$2		No transformation
Enrollment Site T17 Region	enr_t17_reg	$2		No transformation
Fields from the PCM Identity Lookup Merge				
PCM NPI	pcm_npi	$10		PCM NPI
PCM Name	pcm_name	$40		PCM Name
Fields derived from the Appointment Data Merge				
Appointment Date	apptdt	yyyymmdd		
Date Appointment Made	apptmddt	yyyymmdd		
Fields derived from MTF Network Referrals Merge				
MTF Network Referral Flag	ref_to_mcsc	$1		If a match is found in the MTF Network Referral data, set the flag to 1, otherwise set the flag to 0.
Internally Derived Fields				
Referral CY	refcy	$4		Append positions 7-8 to '20'.
Referral CM	refcm	$2		Positions 4-5 of RDT
Referral Day of Week	refwkday	$1		1=Sunday, 2=Monday, 3=Tuesday, 3=Wednesday, 4=Thursday, 5=Friday, 6=Saturday, 7=Sunday
Referral FY	reffy	$4		If refcm is 10, 11, 12 then year=refcy-1; else reffy=refcy
Referral FM	reffm	$2		If refcm is 10, 11, 12 then reffm=refcm-9; else reffm=refcm+3
Referring Clinic (MEPRS 3 Code)	cln3	$3		1st three characters of Referring Clinic (MEPRS 4 Code)
MEPRS 3 Code Referred to	refto3	$3	Refto	1st three characters of the MEPRS Code Referred To (refto).

MDR Referral File Data Element	MDR SAS Name	Format	Source Element	Business Rule
Referral Type	reftype	$1	REFTYPE	Derive value from mapping table in Appendix A
Status	status	$1	STATUS	Derived value from mapping table in Appendix A.
Refusal Status	refusstat	$1	RFUSTAT (Refusal Status)	Set to 0 if MTF DECLINED; 1 if NON-MTF DECLINED and 2 if NETWORK DECLINED
Appointment Request Status	apptreqstat	$2	APTRQSTAT	Derived value from mapping table in Appendix A.
ACV Group	acvgroup	$2		If referral date is >=1/1/2018 then:f enr_grp is "P" then set to "PR" elseif enr_grp is "L" then set to "PL" elseif enr_group="U" then set to "DP" elseif (bencat common=4 and pcm_type=N) then "R" elseif pcm_type="O" then "R" elseif elg_grp in ("R" "S") then "O" else "O". Prior to 1/1/2018 see appendix
Refer from Service Line	refby_svcline	$5		Apply service line format file to cln3 field (i.e. put(cln3,$slfmt.))
Refer to Service Line	refto_svcline	$5		Apply service line format file to refto3 field (i.e. put(refto3,$slfmt.))

The file layout for the referral to appointment crosswalk is described in table 3. The member name for this file is "xwalk".

Table 3: MDR Referral to Crosswalk SAS Dataset

MDR Referral File Data Element	MDR SAS Name	Format	Source Element	Business Rule
Record ID	refnum	$11	HOST_REFIEN	Position 6-16 of the host concatenated with the referral internal entry number
Referring Provider	ref_prov	$9	REFBY (CHCS Provider ID)	Rename refbyprv_id to ref_prov
Treatment DMISID	apptdmisid	$4	APTCLNDMIS	
Associated Record ID	apptien	$10	HOST_APTIEN	Position 6-15 of the host DMIS ID concatenated with the Appointment ien.
Extract Date	extrdt	$8	HARVESTDATE	
Referring from Host DMIS ID	chcshost	$4	HOST (DMISID)	

X. DATA MARTS

Data feeds are prepared in MDR processing and provided to the M2 on a weekly basis, as described in M2 Referral File Specification.

XI. SPECIAL OUTPUTS

None.

XII. QUALITY REVIEW

TBD

XIII. DIRECTORY LOCATION

/mdr/pub/referral
/mdr/apub/referral
/mdr/raw/referral

Referral Type

Type	Description
0	Manual
1	Non-Enrolled Automatic
2	Enrolled Automatic
3	Enrolled/Non-Enrolled Automatic
4	Self-Referral Booking
5	OPS Force Booking
6	EWRAS Referral

Status

Status	Description
1	PENDING
1	KEPT
0	CANCEL
7	NO-SHOW
3	WALK-IN
4	S-CALL
6	TEL-CON
L	LWOBS
A	ADMIN
1	OCC-SVC
1	BOOKED NON-MTF
1	BOOKED

Appointment Request Status

Status	Description
1	PENDING REVIEW
2	UNABLE TO APPOINT
3	APPOINTMENT CHANGED
4	APPOINTMENT CANCELLED
5	NO SHOW
6	APPOINTMENT KEPT
7	WAIT LIST
8	APPOINTED
9	APPOINT TO MTF
10	DEFER TO NETWORK
11	SPACE AVAILABLE
12	INFO NEEDED
13	NO APPOINTMENT REQUIRED
14	REFER TO SUBSPECIALTY
15	ADVICE ONLY

Status	Description
16	NOT REVIEWED
17	BOOKED TO REMOTE SITE
18	PATIENT REFUSED APPOINTMENT
19	LEAVE WITHOUT BEING SEEN
20	REFERRAL DELETED
21	ADMIN CLOSURE - 30 DAY AUTO
22	ADMIN CLOSURE - 45 DAY AUTO
23	DEFERRED - RESULTS RECEIVED
24	ADMIN CLOSURE - 90 DAY AUTO
25	ADMIN CLOSURE - NOT RESULTED
26	CANCELLED
27	ADMIN CLOSURE - 60 DAY AUTO

Appendix B: ACV Logic for Referral Dates before 1/1/2018

For FY03 and before:
If ACV = A, D, or E then "PR"
Else if ACV = G or L then "PL"
Else if ACV = U then "DP"
Else if Ben Cat Common = 4 then "R"
Else "O"

For FY04 and after:
If ACV = A, E, H, or J then "PR"
Else if ACV = B or F then "OP"
Else if ACV = G or L then "PL"
Else if ACV = U then "DP"
Else if ACV = R or V then "O"
Else if ACV = M or Q then "R"
Else if Ben Cat Common = 4 then "R"
Else "O"