DHSS Program Management

Interface Control Document  
Describing the CDR Data Feeds Exchange from AHLTA to MDR  
Baseline

Approved Version  
  
April 24, 2012



**DHSS Program Executive Office  
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Approval Page

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Preface

This document describes the interface that provides the Armed Forces Health Longitudinal Technology Application (AHLTA) Clinical Data Repository (CDR) clinical data. The files are sent to the Defense Health Services Systems (DHSS) Program Executive Office and loaded into the Military Health System (MHS) Data Repository (MDR).

This document is under DHSS project configuration control. Changes to this document will be made by document change notice (DCN) or by complete revision.

Questions on proposed changes concerning this plan should be addressed to:

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Abstract

The Defense Health Services Systems (DHSS) Program Executive Office manages the Military Health System (MHS) Data Repository (MDR) as the core repository for MHS clinical, beneficiary population, enrollment, costing and workload data. The MDR collects, catalogues, and organizes data files from several systems. This document is the Interface Control Document (ICD) that specifies the Clinical Data Repository (CDR) clinical data. Information and meta data regarding the data feed are detailed in this ICD.

**Keywords:** List key search words relative to the interface (e.g., participating organizations, systems, and acronyms.

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Contents

Preface vii

Abstract ix

Section 1: Introduction 1-1

1.1 Document Identification 1-1

1.2 Scope 1-1

1.3 System Overview 1-1

1.4 Reference Documents 1-2

1.5 Operational Agreement 1-2

Section 2: Data Specification 2-1

2.1 Identification of Data Exchanges 2-1

2.2 Precedence and Criticality of Requirements 2-1

2.3 Communications Methods 2-1

2.4 Performance Requirements 2-1

2.5 Security and Integrity 2-2

2.5.1 Data Integrity and Quality 2-2

Appendix A: *AHLTA CDR Data Feeds Data Records* A-1

A.1 File Format A-1

A.2 Record Layout A-1

A.3 File Operational Context A-2

Appendix B: Acronyms B-1

**Tables**

Table A‑1 AHLTA Appointment Record Data Elements APAPT\*.DAT A-3

Table A‑2 AHLTA Historical Procedures Input Record Data Elements PBHPR\*.DAT A-6

Table A‑3 AHLTA Medication Fills Record Data Elements RXMEF\*.DAT A-7

Table A‑4 AHLTA Medication Order Record Data Elements RXORD\*.DAT A-9

Table A‑5 AHLTA Patient File Data Elements PTGDT\*.DAT A-13

Table A‑6 AHLTA Patient File Data Elements PTPID\*.DAT A-16

Table A‑7 AHLTA Patient File Data Elements PTGID\*.DAT A-21

Table A‑8 AHLTA Vital Record Data Elements VTVTL\*.DAT A-23

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# Introduction

## Document Identification

This document describes the interface that provides the direct care clinical encounter data from the Clinical Data Repository (CDR) to the Military Health System (MHS) Data Repository (MDR).

## Scope

This document describes and identifies the parameters and specifies the file layout of the CDR records that MDR receives. MDR receives the files from the AHLTA sites at each of the Military Treatment Facilities (MTF).

## System Overview

This particular ICD describes the specific interface between DHSS Program Office and the Defense Health Information Management Systems (DHIMS) Program Office providing CDR data to the MDR.

Armed Forces Health Longitudinal Technology Application (AHLTA), previously known as Composite Health Care System II (CHCS II) is the replacement system for CHCS that is currently in use. The AHLTA is the military computer-based patient record that is accessed through a provider-developed graphical user interface. It facilitates outpatient management of health information requirements for the U.S. Armed Forces and provides MHS beneficiaries with a life-long medical record. AHLTA stores its data in the CDR and the extensions to the CDR (CDR+, Health Data Dictionary, etc.)

AHLTA collects medical encounter data as providers enter the data through a workstation. The data is transmitted from the Military Treatment Facilities (MTF) to the CDR. AHLTA functionality includes the following:

|  |  |
| --- | --- |
| Encounter Documentation and Coding  Problem List Generation  Order Entry  Results Retrieval  Consult Tracking | Allergies  Alerts  Immunization  Wellness  Self Reporting Tools  Security |

With the sheer number of medical transactions that occur within the MHS, CDR was built to efficiently collect and store the data. The CDR is an HP Unix multi-node processor located at Defense Enterprise Computing Center (DECC) Montgomery.

## Reference Documents

DHSS Program Office, *EIDS Information Support Plan (ISP),* dated 15 October 2010.

EIDS Program Office, *CEIS Operational Requirements Document (ORD)*, Falls Church, VA, December 1997.

## Operational Agreement

This ICD provides the technical specification for an interface between DHIMS and the DHSS Program Executive Office regarding AHLTA data. It is the responsibility of the source system Program Office (i.e., DHIMS) to notify DHSS of any potential or planned changes to data feed formats or contents as soon as these potential changes are known in order to minimize adverse impacts on DHSS receiving systems. When required, modifications to the ICD will be made by the data receiver (i.e., DHSS Program Office), and a copy of the revised ICD will be sent to the data sender (i.e., DHIMS).

Appendix A delineates the AHLTA data elements that will be sent to the DHSS Program Office.

Should problems occur with the interface, DHSS data production support personnel will immediately contact DHIMS operational personnel. Should there be systemic data problems recognized during MDR processing, DHSS members will coordinate with their counterparts in DHIMS.

# Data Specification

## Identification of Data Exchanges

This ICD addresses the following AHLTA CDR Data types:

* Appointment
* Historical Procedures
* Medications
* Patient
* Vitals

This ICD will be changed *only* if the interface changes from the interface specified herein.

## Precedence and Criticality of Requirements

It is imperative that CDR be able to provide direct care encounter records to operational medical providers for the MHS to deliver the most appropriate and effective medical care to the beneficiaries. A minimum of 24 hour updates are required for effective performance. An inability to obtain this data for a greater period assumes some risk is assumed by the patients and the enterprise.

## Communications Methods

The data files produced by the CDR, located in DISA Montgomery, will be transferred to the MDR, located in DISA Oklahoma City (OKC), using SSH Secure File Transfer Protocol (SFTP). SFTP will be configured to utilize FIPS 140-2 compliant encryption.

Data will be transferred over the DISA InterDECC VPN, a secure connection, between the CDR and the DHSS Feed Node UTINIP32. The CDR data files will be initially written to Unix server UGUNHN01 in DISA Montgomery. Another Windows server UGUNDP07 using SSH Secure File Transfer will read from UGUNHN01 via an NFS mount and transfer the files to the Feed Node in DISA OKC.

Upon connection to the DISA OKC Feed Node via SFTP over the InterDECC VPN, authorized service account users will be authenticated using an AIX username and password. The AIX password for the SFTP account will expire every 52 weeks and meet the following security requirements:

* A minimum 15 character password containing 2 uppercase letters, 2 lowercase letters, 2 numbers, and 2 special characters.

The OKC Feed Node and the MDR are both accredited under the DHSS Datamarts ATO.

## Performance Requirements

The data needs to be available to DHSS for ingest into MDR weekly.

## Security and Integrity

The data exchanged in this interface contains Protected Health Information (PHI). In addition, because the aggregate data being transmitted from AHLTA to DHSS is becoming part of a database that does contain sensitive data, it will be protected in accordance with DoD Instruction 8500.2 Information Assurance (IA) controls for Mission Assurance Category (MAC) III sensitive information system. These standards help ensure compliance with the following Federal laws:

* Privacy Act of 1974
* U.S. Code, Title 10, Section 1102, Medical Quality Assurance Records
* U.S. Code, Title 10, Section 1030, Fraud and Related Activity in Connection with Computers
* Computer Security Act of 1987
* Health Insurance Portability and Accountability Act (HIPAA)

To ensure the security and integrity of the data exchanged, files are transferred using SFTP which utilizes a secure FIPS 140-2 compliant encryption algorithm.

### Data Integrity and Quality

Validation checks such as record counts, file formats, source stamps, and date-time stamps will be performed on the data transferred from the CDR to MDR as defined in the design documentation. When errors are discovered in the data exchange, CDR personnel will be notified immediately by DHSS operations.

**Appendix A: AHLTA CDR Data Feeds Data Records**

**A.1 File Format**

The Military Health System (MHS) Data Repository (MDR) receives medical encounter data from the Clinical Data Repository (CDR) weekly in the form of flat data files. The flat files are then transferred from MGM to OKC and ingested into the MDR database utilizing Informatics code.

The following AHLTA CDR Data Type tables are outlined within this ICD:

* Appointment Record Data Elements APAPT\*.DAT
* Historical Procedures Input Record Data Elements PBHPR\*.DAT
* Medication Fills Record Data Elements RXMEF\*.DAT
* Medication Order Record Data Elements RXORD\*.DAT
* Patient PTGDT\*.DAT Record Data Elements
* Patient PTPID\*.DAT Record Data Elements
* Patient PTGID\*.DAT Record Data Elements
* Vital Record Data Elements VTVTL\*.DAT

**A.2 Record Layout**

Tables A-1 to A-8 provide the record layout of each AHLTA CDR Data record. All the CDR output files follow a standard header and footer format. The header is the first four records of the file.

Figure A-1 describes each header record along with an example. The footer is the last two record fields of the file. Figure A-2 describes the footer records.

|  |  |
| --- | --- |
| Record Number | Record Description |
| 1 | A list of the field names in the same order as in the file delimited by the “~” character.  Example:  *ROW\_NUMBER~ACTION~APPT\_ID~HOST\_FACILITY\_ID~APPOINTMENT\_DATE* |
| 2 | The name of the file following the text “Data Container Instance Indicator”.  Example:  *Data Container Instance Indicator: APAPT01T.20030915.0005.001.DAT* |
| 3 | The type of data load following the text “Load Type:”. There are two types of loads, Full and Incremental.  Example:  *Load Type: Incremental Load* |
| 4 | The date and time the file extraction for the file was started following the text “Start Date Time:”. The date format is “DD/MM/YYYY HH:MI:SS AM”.  Example:  *Start Date Time: 09/15/2003 12:01:08 PM* |
| 5 | The data Source ID.  Example:  *Source ID: 1* |

**Figure A‑1 CDR Database Output File Header Structure**

|  |  |
| --- | --- |
| Record Number | Record Description |
| 1 | The date and time the file extraction for the file was completed following the text  “\*\*\*\*\*End Date Time:”. The date format is “DD/MM/YYYY HH:MI:SS AM”.  Example:  *\*\*\*\*\*End Date Time: 09/15/2003 12:01:20 PM* |
| 2 | The count of the total number of records contained in the file, excluding the header and footer records. The count is followed by the text “\*\*\*\*\*Total Records:”.  Example:  *\*\*\*\*\*Total Records: 4867* |

**Figure A‑2 CDR Database Output File Footer Structure**

The main body of the output files, that is everything excluding the header and the footer, is formatted where one row of data contains a single record of information and each field in that record is delimited by the “~” character. Additionally, each record, including the header and footers records, is terminated with the ASCII character 10.

**A.3 File Operational Context**

The CDR Data records represent medical actions taking place in the MTFs under the direct care plan of TRICARE. The records within the data tables of MDR allow providers efficient access to the pertinent medical data that operational providers are seeking to provide the best medical treatment to beneficiaries within the MHS. Data is loaded weekly. Only data resident in the CDR will be moved to the MDR; data held internally in any local cache is not covered by this ICD and thus is not moved to the MDR.

Table A‑1 AHLTA Appointment Record Data Elements APAPT\*.DAT

| **Field #** | **Field Name (logical name)** | **Field Length** | **Position** | **Data Type** | **Value Range** | **Functional Description** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | ROW\_NUMBER | 10 | Delimited | Numeric | N/A | Sequential number starting at one for first record in file and incrementing by one for each record that follows. |
| 2 | ACTION | 1 | Delimited | Character | I, U, D | Indication if the record should be inserted, updated, or deleted:  I = Insert  U = Update  D = Delete |
| 3 | APPT\_ID | 20 | Delimited | Numeric | 0 – 99,999,999,999,999,999,999 | CDR unique Identifier for the appointment |
| 4 | HOST\_FACILITY\_ID | 20 | Delimited | Numeric | 0 – 99,999,999,999,999,999,999 | CDR unique Identifier for CHCS Host Facility |
| 5 | APPOINTMENT\_DATE | 14 | Delimited | Numeric | N/A | The date and time of the appointment (YYYYMMDDHHMISS) |
| 6 | APPOINTMENT\_MADE | 14 | Delimited | Numeric | N/A | The date and time the appointment was made (YYYYMMDDHHMISS) |
| 7 | CHECK\_IN | 14 | Delimited | Numeric | N/A | The date and time the patient checked-in for the appointment (YYYYMMDDHHMISS) |
| 8 | CHECK\_OUT | 14 | Delimited | Numeric | N/A | The date and time the patient checked-out from the appointment (YYYYMMDDHHMISS) |
| 9 | CLINIC\_ID | 20 | Delimited | Numeric | 0 – 99,999,999,999,999,999,999 | CDR unique Identifier for the clinic where the appointment was made |
| 10 | UNIT\_NUMBER | 20 | Delimited | Numeric | 0 – 9,999,999,999 | CDR unique patient identifier of the patient assigned to the appointment |
| 11 | APPT\_STATUS | 20 | Delimited | Character | ADMIN, BOOKED,CANCEL, KEPT, LWOBS, NO-SHOW, OCC-SVC, PENDING, S-CALL, TEL-CON, WAITREQ,  WALK-IN | ADMIN = Administrative BOOKED = Booked CANCEL = Cancelled KEPT = Kept LWOBS = Left without being seen NO-SHOW = Did not show up for appointment OCC-SVC = Occupational service PENDING = Appointment pending S-CALL = Sick call TEL-CON = Tele-conference WAITREQ = Waiting for request WALK-IN = Walk-in |
| 12 | APPT\_CLASSIFICATION | 1 | Delimited | Numeric | 0-3 | General Classification of Appointment  0 = Outpatient 1 = Inpatient 2 = Ambulatory Procedure 3 = Teleconference |
| 13 | ENCOUNTER\_STATUS | 3 | Delimited | Numeric | 1-8,100 | Status of the encounter for this appointment  1 = Checked-IN 2 = Waiting 3 = In Progress 4 = Completed 5 = Needs Cosignature 6 = Updated 7 = Updating 8 = Cancel 100 = CHCS Appointment |
| 14 | APPT\_TYPE | 20 | Delimited | Character | N/A | CHCS Indicator of Appointment Type |
| 15 | ENCOUNTER\_NUMBER | 20 | Delimited | Character | N/A | Unique Identifier for the Encounter associated with this Appointment |
| 16 | APPT\_REASON | 80 | Delimited | Character | N/A | Reason given for the appointment by the patient |
| 17 | NO\_COUNT | 1 | Delimited | Character | C, N | C = Count  N = No Count |
| 18 | PROVIDER\_ID | 20 | Delimited | Numeric | 0 – 99,999,999,999,999,999,999 | CDR unique identifier for the provider the patient was to see at the appointment |
| 19 | APPT\_IEN | 10 | Delimited | Numeric | N/A | Appointment IEN |
| 20 | DATE\_SIGNED | 14 | Delimited |  | N/A | The date/time the appointment encounter was signed (YYYYMMDDHHMISS) |
| 21 | APPT\_COMMENT | 200 | Delimited | Character | N/A |  |
| 22 | APPT\_MEPRS\_IEN |  | Delimited | Numeric | N/A |  |
| 23 | COMPLETED\_TIME | 14 | Delimited | Numeric | N/A | The date/time the appointment encounter was completed (YYYYMMDDHHMISS) |
| 24 | DATE\_MODIFIED | 14 | Delimited | Numeric | N/A | The date/time the appointment encounter was modified (YYYYMMDDHHMISS) |
| 25 | EDIT\_VERSION\_USER\_NCID |  | Delimited | Numeric | N/A |  |
| 26 | ENTERED\_STATUS\_TIME | 14 | Delimited | Numeric | N/A |  |
| 27 | ORDER\_NUMBER | 12 | Delimited | Character | N/A |  |
| 28 | PATIENT\_CALL\_BACK\_PHONE | 20 | Delimited | Character | N/A | Phone number to given by the patient. |
| 29 | PATIENT\_STATUS\_ID | 20 | Delimited | Character | N/A |  |
| 30 | RELATED\_TO\_INPATIENT | 5 | Delimited | Character | TRUE / FALSE | Indicates if the appointment was related to another inpatient record. |

Table A‑2 AHLTA Historical Procedures Input Record Data Elements PBHPR\*.DAT

| **Field #** | **Field Name (Physical)** | **Field Length** | **Position** | **Data Type** | **Value Range** | **Function Description** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | ROW\_NUMBER | 12 | Delimited | Numeric | None | Sequential number starting at one for first record in file and incrementing by one for each record that follows. |
| 2 | ACTION | $1 | Delimited | Character | I, U, D | Indication if the record should be inserted, updated, or deleted: This element is blank for all feeds with procedure dates prior to the 2nd quarter of FY2010. |
| 3 | EVENT\_ID | 12 | Delimited | Numeric | 0 – 99,999,999,999,999,999,999 | Unique Identifier for a historical procedure record |
| 4 | UNIT\_NUMBER | 12 | Delimited | Numeric | 0 – 9,999,999,999 | CDR Identifier for a patient. This is not a unique identifier |
| 5 | STATUS\_ID | 12 | Delimited | Numeric | 662, 1025, 1024, 1797, 000000 | Status of the Procedure record |
| 662 PENDING |
| 1025 INACTIVE |
| 1024 ACTIVE |
| 1797 RESOLVED |
| 205068 DELETED DUE TO AN ENTRY MADE IN ERROR |
| 6 | MEDCIN\_ID | 12 | Delimited | Numeric | 0 – 99,999,999,999,999,999,999 | Medcin Id that identifies the procedure performed on the patient |
| 7 | CPT\_CODE |  | Delimited | A-numeric | None | Current Procedural Terminology (CPT) Code for the procedure |
| 8 | PROCEDURE\_DATE | $14 | Delimited | Numeric | None | Date of the procedure (YYYYMMDDHH24MISS) |
| 9 | COMMENTS | $1,000 | Delimited | Character |  | Text comments and miscellaneous information concerning the procedure entry |
| 10 | END\_NEGATION\_NCID |  | Delimited |  |  | Not in original ICD. Definitions of data not known. |
| 11 | START\_NEGATION\_NCID |  | Delimited |  |  |
| 12 | CODE\_ERR\_TEXT |  | Delimited |  |  |
| 13 | ITEM\_ORDINAL |  | Delimited | Numeric |  |
| 14 | SYSTEM\_OF\_ORIGIN |  | Delimited | Character |  |

Table A‑3 AHLTA Medication Fills Record Data Elements RXMEF\*.DAT

| **Field #** | **Field Name (logical name)** | **Field Length** | **Position** | **Data Type** | **Value Range** | **Functional Description** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | ROW\_NUMBER | 10 | Delimited | Numeric | N/A | Sequential number starting at one for first record in file and incrementing by one for each record that follows. |
| 2 | ACTION | 1 | Delimited | Character | I, U, D | Indication if the record should be inserted, updated, or deleted:  I = Insert  U = Update  D = Delete |
| 3 | HOST\_FACILITY\_ID | 20 | Delimited | Numeric | 0 – 99,999,999,999,999,999,999 | CDR unique Identifier for CHCS Host Facility |
| 4 | MED\_ORDER\_ID | 12 | Delimited | Numeric |  |  |
| 5 | DATE\_DISPENSED | 14 | Delimited | Numeric | N/A | The date and time the medication was dispensed. (YYYYMMDDHH24MISS) |
| 6 | REMAINING\_REFILLS | 20 | Delimited | Numeric |  | The count of remaining refills left for a medication order |
| 7 | RX\_NUMBER | 100 | Delimited | Numeric |  | The number of the medication prescription |
| 8 | PARTITION\_DATE | 14 | Delimited | Numeric | N/A | This date is solely used to partition the Oracle data based on the best guess that the record was originally created. (YYYYMMDDHH24MISS) |

**Table A‑4 AHLTA Medication Order Record Data Elements RXORD\*.DAT**

| **Field #** | **Field Name (logical name)** | **Field Length** | **Position** | **Data Type** | **Value Range** | **Functional Description** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | ROW\_NUMBER | 10 | Delimited | Numeric | N/A | Sequential number starting at one for first record in file and incrementing by one for each record that follows. |
| 2 | ACTION | 1 | Delimited | Character | I, U, D | Indication if the record should be inserted, updated, or deleted:  I = Insert  U = Update  D = Delete |
| 3 | HOST\_FACILITY\_ID | 20 | Delimited | Numeric | 0 – 99,999,999,999,999,999,999 | CDR unique Identifier for CHCS Host Facility |
| 4 | MED\_ORDER\_ID | 12 | Delimited | Character | N/A |  |
| 5 | APPT\_ID | 9 | Delimited | Numeric |  |  |
| 6 | GROUP\_ID | 20 | Delimited | Numeric |  | Unique identifier that indentifies the medication order as part of a collection of other orders. |
| 7 | EVENT\_ID | 8 | Delimited | Numeric |  |  |
| 8 | UNIT\_NUMBER | 8 | Delimited | Numeric |  |  |
| 9 | INTERVAL\_REPEAT\_TEXT |  | Delimited | Character | N/A |  |
| 10 | INTERVAL\_TIME\_TEXT |  | Delimited | Character | N/A |  |
| 11 | DATE\_START | 14 | Delimited | Numeric | N/A | The start date and time of the medication order. (YYYYMMDDHH24MISS) |
| 12 | DATE\_END | 14 | Delimited | Numeric | N/A | The end date and time of the medication order. (YYYYMMDDHH24MISS) |
| 13 | PRIORITY\_TEXT |  | Delimited | Character | N/A |  |
| 14 | PROVIDER\_ID | 8 | Delimited | Numeric | N/A |  |
| 15 | CLINIC\_ID | 7 | Delimited | Numeric |  |  |
| 16 | MEDICATION\_ID | 20 | Delimited | Numeric |  | Unique Identifier of the medication ordered for the patient. |
| 17 | DISPENSE\_LOCATION\_ID |  | Delimited | Character |  |  |
| 18 | ORDER\_COMMENT | 8 | Delimited | Character | N/A |  |
| 19 | COMPONENT | 1 | Delimited | Character | N/A | Indicator if the medication has more than one components. |
| 20 | DISPENSE\_AMOUNT | 10 | Delimited | Numeric |  | Amount of medication that will be dispensed to the patient for each refill |
| 21 | NUMBER\_OF\_REFILLS | 3 | Delimited | Numeric |  | The number refills a patient is allowed to have for the medication order |
| 22 | ORDER\_TYPE\_ID | 10 | Delimited | Numeric | 1 - 19 | Unique identifier for the Order Type. |
| 23 | ORDER\_STATUS\_CODE | 2 | Delimited | Character | N/A | Unique Identifier for the Order Status. |
| 24 | PRIOR\_ORDER\_ID |  | Delimited | Numeric |  |  |
| 25 | CHILD\_RESISTANT | 1 | Delimited | Character |  | NULL = Yes; 1 = No |
| 26 | UNITS\_TEXT |  | Delimited | Character | N/A |  |
| 27 | MED\_FORM\_TEXT | 1 | Delimited | Character | N/A |  |
| 28 | MED\_ROUTE\_TEXT | 8 | Delimited | Character | N/A |  |
| 29 | NDC | 50 | Delimited | Character |  | National Drug Code for the Medication |
| 30 | DURATION | 5 | Delimited | Numeric |  | Duration in days of the medication order. |
| 31 | PARTITION\_DATE | 14 | Delimited | Numeric | N/A | This date is solely used to partition the Oracle data based on the best guess that the record was originally created. (YYYYMMDDHH24MISS) |
| 32 | MED\_ORDER\_DATE | 14 | Delimited | Numeric | N/A | The med order date/time (YYYYMMDDHHMISS) |
| 33 | OERX\_ORDER\_DATE | 14 | Delimited | Numeric | N/A | The oerx order date/time (YYYYMMDDHHMISS) |
| 34 | GIVE\_AMOUNT |  | Delimited | Character | N/A |  |
| 35 | GIVE\_FORM\_CODE | 4 | Delimited | Numeric |  |  |
| 36 | REQUESTED\_GIVE\_TIME\_UNIT |  | Delimited | Character | N/A |  |
| 37 | REQUESTED\_HCP\_NCID |  | Delimited | Numeric |  |  |
| 38 | ROUTE\_CODE |  | Delimited | Numeric |  |  |
| 39 | TOTAL\_DOSES |  | Delimited | Numeric |  |  |
| 40 | VERIFIED\_BY\_NCID |  | Delimited | Numeric |  |  |
| 41 | CHILD\_CAP | 1 | Delimited | Numeric |  |  |
| 42 | ORDER\_IEN |  | Delimited | Numeric |  |  |
| 43 | ORDER\_NAME |  | Delimited | Character | N/A |  |
| 44 | ORDERED\_BY |  | Delimited | Character | N/A |  |
| 45 | PHARMACY\_IEN\_SENT |  | Delimited | Numeric |  |  |
| 46 | PHARMACY\_NAME\_SENT |  | Delimited | Character | N/A |  |
| 47 | PHARMACY\_NPI |  | Delimited | Numeric |  |  |
| 48 | PHARMACY\_NPI\_ENTITY\_TYPE | 1 | Delimited | Numeric |  |  |
| 49 | PROVIDER |  | Delimited | Character | N/A |  |
| 50 | QUANTITY |  | Delimited | Numeric |  |  |
| 51 | REFILLS |  | Delimited | Numeric |  |  |
| 52 | RX\_COMMENT |  | Delimited | Character | N/A |  |
| 53 | SIG\_CODE |  | Delimited | Character | N/A |  |
| 54 | TIME\_ORDERED | 14 | Delimited | Numeric | N/A | The order date/time (YYYYMMDDHHMISS) |
| 55 | ORX\_UNIT\_NUMBER |  | Delimited | Numeric |  |  |

**Table A‑5 AHLTA Patient File Data Elements PTGDT\*.DAT**

| **Subject Area:**  PT- Patient Demographics | | | | | **Table Name:** GDT – MMI\_GENERICDATA | | | **File Name:** PTGDT\*.DAT |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Field Name**  **(Physical)** | **Field**  **Length** | **Position** | **Data Type** | **Data Units** | | **Value Range** | **Function Description** | |
| ROW\_NUMBER | NA | NA | Numeric | NA | | None | Sequential number starting at one for first record in file and incrementing by one for each record that follows. | |
| ACTION | NA | NA | Character | NA | | I, U, D | Indication if the record should be inserted, updated, or deleted:  I Insert  U Update  D Delete | |
| UNIT\_NUMBER | NA | NA | Numeric | NA | | 0 – 9,999,999,999 | Patient Unique Identifier | |
| ORDINAL | NA | NA | Numeric | NA | | 0 - 99,999,999,999,999,999,999 | Key combined with patient unique identifier in order to create a unique record. There is no information derived from this value other than for uniqueness | |
| TYPE\_NCID | NA | NA | Numeric | NA | | 1009,1012,1013,1014,  1015,67549,67581,90546,  90635,186408,186409,204685, 204687, 204689, 204696, 204708, 217201, 217202, 217203, 217204, 217205, 217206, 217208, 217348, 220596, 220597, 220599, 220600, 220601, 220602, 220603, 1481872, 1603677, 1603699, 14501703, 14501714, 14501721, 14501722, 14501723, 14501724, 14501725, 14501728, 14504166, 14504167, 14504168, 14504169, 14516499, 14788559, 14788560, 14788561, 14788562, 14841777, 14863456, 14863457, 14933703, 99960100 | Code that indicates the type of data in the record  217348 Assigning Authority Ncid  14788560 Attached Unit Identification Code  90546 COMMENTS  1015 Champus Rank Grade  1013 Champus Service  1014 Champus Status  204685 Command Interest  204687 Command Security  14841777 Comments  1603677 Contact Lenses Observation  14863456 DEERS Home Phone Number  14863457 DEERS Work Phone Number  14516499 DNA On File  14504167 Deers Eligibility  14504169 Deers Eligibility End Date  14504168 Deers Eligibility Start Date  14501725 Dental Readiness Classification  220599 Direct Care Benefit Type Code  217203 Diving Status  67549 Email  14788562 Email Address Text  186409 Encounter Coding Review  14501723 Enrollment Facility  1603699 Eye Glasses Observation  204708 Family Member Prefix  217201 Flying Status  220600 Health Care Delivery Program Plan Coverage Code  1009 Insurance  90635 Insurance Info  217202 Jumping Status  14501714 Last Dental Exam Date  14501728 Last Dental Readiness Classification Change Date  14933703 Medicare Eligibility  217205 Military Police  217204 On Mobility  204696 Patient Alternate Care Value  14501721 Patient Category  14788559 Patient Loss Date  220596 Patient Loss Reason Code  220597 Pay Plan Code  204689 Personnel Reliability Program  14788561 Pharmacy Health Care Delivery Program Plan Coverage Code  14501724 Primary Care Manager  220602 Primary Care Manager Network Provider Type Code  220601 Primary Care Manager Region Code  14501703 Protective Mask Received Date  14504166 Records Maintained At  220603 Special Operations Code  217206 Submarine  67581 Tertiary Insurance  1012 To Patient Relationship  14501722 Unit Identification code  217208 Veterans Military Status  1481872 Vision Exam Findings Observation | |
| VALUE\_NCID | NA | NA | Numeric | NA | | 0 - 99,999,999,999,999,999,999 | A code within the domain of TYPE\_NCID value for the current patient. This code identifies the specific information for the patient within the domain. | |
| VALUE\_TEXT | NA | NA | A-numeric | NA | | None | A text value that is within the domain of TYPE\_NCID value for the current patient. This information identifies specific information for the patient within the domain. | |

**Table A‑6 AHLTA Patient File Data Elements PTPID\*.DAT**

| **Subject Area:**  PT- Patient Demographics | | | | | **Table Name:** PID – PATIENT | | **File Name:** PTPID\*.DAT |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Field Name**  **(Physical)** | **Field**  **Length** | **Position** | **Data Type** | **Data Units** | **Value Range** | **Function Description** | |
| ROW\_NUMBER | NA | NA | Numeric | NA | None | Sequential number starting at one for first record in file and incrementing by one for each record that follows. | |
| ACTION | NA | NA | Character | NA | I, U, D | Indication if the record should be inserted, updated, or deleted:  I Insert  U Update  D Delete | |
| UNIT\_NUMBER | NA | NA | Numeric | NA | 0 – 9,999,999,999 | Patient Unique Identifier | |
| DEERS\_PATIENT\_ID | NA | NA | Numeric | NA | 0 – 99,999,999,999,999,999,999 | DEERS Key Identifier for patient | |
| SSN | NA | NA | A-numeric | NA | None | Social Security Number (SSN) for patient | |
| SEX | NA | NA | Character | NA | U, M, F | Sex of patient  U UNKNOWN  M MALE  F FEMALE | |
| BIRTH\_DATE | NA | NA | Numeric | NA | None | Birth date of patient  (YYYYMMDDHH24MISS) | |
| DOB\_ESTIMATED | NA | 1 | A-Numeric | NA | Y, N | A Flag indicating whether Birth date of patient was estimated ‘Y’ or not ‘N’ | |
| DEATH\_DATE | NA | NA | Numeric | NA | None | Death date of patient  (YYYYMMDDHH24MISS) | |
| RACE\_ID | NA | NA | Numeric | NA | 801, 805, 143, 124845, 124846, 802, 142, 124847, 124848, 14863623, 140, 103025, 124849, 807, 180466, 180467, 141, 180468, 14676176, 102705, 14863622, 67392, 124916, 14504160, 14767319, 14736542, 804, 14736543, 14736541, 146, 14736540, 178528, 152963, 144, 183148, 14676177, 124850,  124851, 803, 178529, 808, 152945, 138, 180469, 180470, 180471, 180473, 124852, 124853, 180472, 149290, 14503687, 139, 800, 103024, 124854 | Racial heritage of patient  801 AFRICAN AMERICAN  805 AMERICAN INDIAN  143 AMERICAN INDIAN OR ALASKAN  124845 AMERICAN INDIAN/NAT ALASKAN, HISPANIC  124846 AMERICAN INDIAN/NAT ALASKAN, NON-HISPANIC  802 ASIAN  142 ASIAN OR PACIFIC ISLANDER  124847 ASIAN OR PACIFIC ISLANDER, HISPANIC  124848 ASIAN OR PACIFIC ISLANDER, NON- HISPANIC  14863623 BI-RACIAL  140 BLACK  103025 BLACK HISPANIC  124849 BLACK, NON-HISPANIC  807 FILIPINO  180466 FILIPINO HISPANIC  180467 FILIPINO NON-HISPANIC  141 HISPANIC  180468 HISPANIC NATIVE AMERICAN  14676176 HISPANIC/LATINO  102705 LATIN AMERICAN  14863622 LATINO  67392 MAPPING NOT FOUND  124916 MIDDLE EASTERN  14504160 MONGOLOID  14767319 MULATTO  14736542 MUTUALLY DEFINED  804 NATIVE AMERICAN  14736543 NATIVE HAWAIIAN  14736541 NOT APPLICABLE  146 NOT AVAILABLE  14736540 NOT PROVIDED  178528 ORIENTAL  152963 OTHER  144 OTHER  183148 OTHER AMERICAN INDIAN TRIBE  14676177 OTHER OR UNKNOWN  124850 OTHER, HISPANIC  124851 OTHER, NON-HISPANIC  803 PACIFIC ISLANDER  178529 SCANDINAVIAN  808 SOUTH EAST ASIAN  152945 UNKNOWN  138 UNKNOWN  180469 UNKNOWN, AMERICAN INDIAN  180470 UNKNOWN, ASIAN  180471 UNKNOWN, BLACK  180473 UNKNOWN, FILIPINO  124852 UNKNOWN, HISPANIC  124853 UNKNOWN, NON-HISPANIC  180472 UNKNOWN, OTHER RACE  149290 UNKNOWN, WHITE  14503687 WESTERN HEMISPHERE INDIAN (RED)  139 WHITE  800 WHITE  103024 WHITE HISPANIC  124854 WHITE, NON-HISPANIC | |
| RELIGION\_ID | NA | NA | Numeric | NA | 0 – 99,999,999,999,999,999,999 | Unique Identifier that identifies the religion of the patient | |
| MARITAL\_STATUS\_ID | NA | NA | Numeric | NA | 846, 183, 14778330, 549, 847, 185, 1288, 161567, 67392, 182, 14677455, 144, 152973, 161566, 181, 14503679, 14638675, 152943, 138, 14778331, 184 | Marital Status of the patient  183 DIVORCED  14778330 DOMESTIC PARTNER  549 EXPIRED  847 INTERLOCUTORY  185 LEGALLY SEPARATED  1288 LIFE PARTNER  161567 LIVING TOGETHER  67392 MAPPING NOT FOUND  182 MARRIED  14677455 NOT SPECIFIED  144 OTHER  152973 OTHER MARITAL STATUS  161566 SEPARATED  181 SINGLE  14503679 SINGLE, NEVER MARRIED  14638675 SINGLE/UNKNOWN  152943 UNKNOWN  138 UNKNOWN  14778331 UNREPORTED MARITAL STATUS  184 WIDOWED | |
| ADOPTION\_FLAG | NA | NA | Character | NA | None |  | |
| BIRTH\_DATE\_RESOLUTION | NA | NA | Numeric | NA | None |  | |
| CORRECT\_SSN | NA | NA | Character | NA | None |  | |
| DEACTIVATE\_FLAG | NA | NA | Character | NA | None |  | |
| DEATH\_DATE\_RESOLUTION | NA | NA | Numeric | NA | None |  | |
| EXPIRED\_FLAG | NA | NA | Character | NA | None |  | |
| GOVT\_HEALTH\_NUMBER | NA | NA | A-Numeric | NA | None |  | |
| GUARANTOR\_FLAG | NA | NA | Character | NA | None |  | |
| INSTITUTIONAL\_FLAG | NA | NA | Character | NA | None |  | |
| MAIDEN\_NAME | NA | NA | A-Numeric | NA | None |  | |
| MOTHER\_NAME | NA | NA | A-Numeric | NA | None |  | |
| ORGAN\_DONAR\_FLAG | NA | NA | Character | NA | None |  | |
| PASSPORT\_NUMBER | NA | NA | A-Numeric | NA | None |  | |
| PATIENT\_FLAG | NA | NA | Character | NA | None |  | |
| SSN\_MISSING\_REASON\_CID | NA | NA | Numeric | NA | None |  | |
| UNIDENTIFIED\_FLAG | NA | NA | Character | NA | None |  | |

**Table A‑7 AHLTA Patient File Data Elements PTGID\*.DAT**

| **Subject Area:**  PT- Patient Demographics | | | | | **Table Name:** GID – MMI\_GENERICDATA | | | **File Name:** PTGID\*.DAT |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Field Name**  **(Physical)** | **Field**  **Length** | **Position** | **Data Type** | **Data Units** | | **Value Range** | **Function Description** | |
| ROW\_NUMBER | NA | NA | Numeric | NA | | None | Sequential number starting at one for first record in file and incrementing by one for each record that follows. | |
| ACTION | NA | NA | Character | NA | | I, U, D | Indication if the record should be inserted, updated, or deleted:  I Insert  U Update  D Delete | |
| UNIT\_NUMBER | NA | NA | Numeric | NA | | 0 – 9,999,999,999 | Patient Unique Identifier | |
| ORDINAL | NA | NA |  | NA | |  | Key combined with patient unique identifier in order to create a unique record. There is no information derived from this value other than for uniqueness | |
| TYPE\_NCID | NA | NA | Numeric | NA | | 186073,186334,204708,  14501719,14501721,  14501722,14501724,  14501726,14501727,  14511309,14787202,  14787203,14787204,  14787205,14787206,  14787711,14787712,  14787713,14788563,  14788564,14788565 | Code that indicates the type of data in the record  14501722 Assigned Unit Identification Code  14788563 Drug Enforcement Agency (DEA) Number  204708 Family Member Prefix  14511309 Family Member Prefix Plus Sponsor SSN  14501726 First Letter of Last Name Plus Last 4 Digits of Patient SSN  14501727 First Letter of Last Name Plus Last 4 Digits of Sponsor SSN  14787712 Health Insurance Portability and Accountability Act (HIPAA) Provider Identifier  14787713 Legacy Value  14787711 MCSC Internal Provider Identifier  14501724 Primary Care Manager  186073 Social Security Number  14787203 Special 9-Digit Code Created for Foreign Military and Nationals  14787202 Special 9-Digit Code Created for Individuals (i.e. Babies) Who Do Not Have or Have Not Provided a SSN When the Record is Added to DEERS (Dependents Only)  14787204 Special 9-Digit Code Created for U.S. Military Personnel from Service Numbers Before the Switch to SSN  14787205 Special 9-Digit Code Created for a DoD Contractor Who Refused to Give His or Her SSN to Rapids. The Associated PN\_ID will Begin with 99.  14788565 Sponsor Patient Identifier  186334 Sponsor SSN  14788564 Tax Identifier  14787206 Test (858 Series)  14501719 VIP | |
| VALUE\_NCID | NA | NA | Numeric | NA | | 0 - 99,999,999,999,999,999,999 | A code within the domain of TYPE\_NCID value for the current patient. This code identifies the specific information for the patient within the domain. | |
| VALUE\_TEXT | NA | NA | A-numeric | NA | | None | A text value that is within the domain of TYPE\_NCID value for the current patient. This information identifies specific information for the patient within the domain. | |

**Table A‑8 AHLTA Vital Record Data Elements VTVTL\*.DAT**

| **Field #** | **Field Name (logical name)** | **Field Length** | **Position** | **Data Type** | **Value Range** | **Functional Description** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | ACTION | 1 | Delimited | Character | I, U, D | Indication if the record should be inserted, updated, or deleted: I Insert U Update D Delete |
| 2 | EVENT\_ID | 12 | Delimited | Numeric | 0 – 99,999,999,999,999,999,999 | This value combined with the observation sequence value is used to uniquely identify this record |
| 3 | APPT\_ID | 20 | Delimited | Numeric | 0 – 99,999,999,999,999,999,999 | Unique Identifier for the appointment the vital information is related |
| 4 | UNIT\_NUMBER | 12 | Delimited | Numeric | 0 – 9,999,999,999 | Patient Unique Identifier |
| 5 | OBSERVATION\_NCID | 12 | Delimited | Numeric | 0 - 99,999,999,999,999,999,999 | Identifies the type of vital entry for this record |
| 6 | OBSERVATION\_SEQ | 12 | Delimited | Numeric | 0 - 99,999,999,999,999,999,999 | This value combined with the event\_id value is used to uniquely identify this record |
| 7 | VALUE\_NCID | 12 | Delimited | Numeric | 0 - 99,999,999,999,999,999,999 | Code that identifies the vital value selected |
| 8 | AGGOBS\_NCID | 12 | Delimited | Numeric | 0 - 99,999,999,999,999,999,999 | Identifier that indicates the site blood pressure was measured |
| 9 | UNITS\_NCID | 12 | Delimited | Numeric | 0 - 99,999,999,999,999,999,999 | Identifies the units of measure |
| 10 | VALUE\_NUMBER | 12 | Delimited | Numeric | 0 - 99,999,999,999,999,999,999 | Result value of vital measurement |
| 11 | VALUE\_STRING | 256 | Delimited | A-Numeric | None | Text comments and miscellaneous information concerning the vital entry |
| 12 | ENTRY\_DATE | 8 | Delimited | Numeric | None | Date vital value was saved to system |
| 13 | APPOINTMENT\_DATE | 8 | Delimited | Numeric | None | Date of the appointment |
| 14 | WRITTEN\_BY | 50 | Delimited | A-Numeric | None | The user who entered the Vitals |
| 15 | DATE\_TIME\_WRITTEN | 8 | Delimited | A-Numeric | None | System Date/Time when the Vital record was written (YYYYMMDDHH24MISS) |
| 16 | LOCATION\_NCID | 12 | Delimited | Numeric | 76313 - 15156749 | Seems to represent the CHCS host on which the Vitals were recorded. Not sure what the mapping is for these NCIDs |
| 17 | UPDATE\_APPLICATION\_NCID |  | Delimited |  |  |  |
| 18 | MACHINE\_PROBABILITY |  | Delimited |  |  |  |
| 19 | MCODED\_ORDINAL | 12 | Delimited | Numeric | 1 |  |
| 20 | MODIFIER\_NCID |  | Delimited |  |  |  |
| 21 | UNCERT\_NCID |  | Delimited |  |  |  |
| 22 | USER\_PROBABILITY |  | Delimited |  |  |  |
| 23 | VALUE\_DATETIME |  | Delimited |  |  |  |
| 24 | VALUE\_ERR\_TEXT |  | Delimited |  |  |  |
| 25 | VALUE\_TYPE\_NCID | 12 | Delimited | Numeric | 90511 |  |
| 26 | ABNORMAL\_FLAG\_ERR\_TEXT |  | Delimited |  |  |  |
| 27 | ABNORMAL\_FLAG\_NCID |  | Delimited |  |  |  |
| 28 | AGGOBS\_ERR\_TEXT |  | Delimited |  |  |  |
| 29 | OBSERVATION\_ERR\_TEXT |  | Delimited |  |  |  |
| 30 | REFERENCE\_RANGE |  | Delimited |  |  |  |
| 31 | STATUS\_ERR\_TEXT |  | Delimited |  |  |  |
| 32 | STATUS\_NCID |  | Delimited |  |  |  |
| 33 | CO\_VALUE\_TYPE\_NCID | 12 | Delimited | Numeric | 90511 |  |
| 34 | ENCOUNTER\_NUMBER | 20 | Delimited | A-Numeric |  | This seems to represent the encounter at which the vitals were taken, but it's not clear if it can be linked to anything. When this starts with "CDR-", APPT\_ID is generally equivalent to this. Also, these appointments usually cannot be found in the appointment feed. |

**Appendix B: Acronyms**

|  |  |
| --- | --- |
| **ADS** | Ambulatory Data System |
| **AHLTA** | Armed Forces Health Longitudinal Technology Application |
| **BEA** | Business Economic Analysis |
| **CAPER** | Comprehensive Ambulatory/Professional Encounter Record |
| **CCB** | Configuration Control Board |
| **CCE** | Coding Compliance Editor |
| **CEIS** | Corporate Executive Information System |
| **CHCS** | Composite Health Care System |
| **CIW** | Clinical Information Workstation |
| **DCN** | Document Change Notice |
| **DDS** | DEERS Dependent Suffix |
| **DECC** | Defense Enterprise Computing Center |
| **DEERS** | Defense Enrollment & Eligibility Reporting System |
| **DHIMS** | Defense Health Information Management Systems |
| **DHSS** | Defense Health Services Systems |
| **DMDC** | Defense Manpower Data Center |
| **DMIS** | Defense Medical Information System |
| **DOB** | Date Of Birth |
| **DoD** | Department of Defense |
| **EDI\_PN** | Electronic Data Interchange Person Number |
| **EIDS** | Executive Information Decision Support |
| **EOR** | End Of Record |
| **FMP** | Family Member Prefix |
| **HCDP** | Health Care Delivery Program |
| **HCPCS** | Healthcare Common Procedure Coding System |
| **HIPAA** | Health Insurance Portability and Accountability Act |
| **IA** | Information Assurance |
| **ICD** | Initial Capabilities Document |
| **ICD** | Interface Control Document |
| **IEN** | Internal Entry Number |
| **IIWW** | Ill, Injured, Wounded Warrior |
| **IWG** | Interface Working Group |
| **JROC** | Joint Requirements Oversight Council |
| **LWOBS** | Leave Without Being Seen |
| **MAC** | Mission Assurance Category |
| **MDR** | MHS Data Repository |
| **MEPRS** | Medical Expense and Performance Reporting System |
| **MHS** | Military Health System |
| **MTF** | Military Treatment Facilities |
| **OKC** | Oklahoma City |
| **ORD** | Operational Requirements Document |
| **PCM** | Primary Care Manager |
| **PGUI** | Provider Graphical User Interface |
| **PHI** | Protected Health Information |
| **SADR** | Standard Ambulatory data Record |
| **SAS** | Statistical Analysis System |
| **SFTP** | Secure File Transfer Protocol |
| **SSN** | Social Security Number |
| **TSM** | Tivoli Storage Manager |