DHSS Program Management

Interface Control Document
Describing CHCS Appointment Data Exchange to MDR
Modification 1

 Version

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ICD Describing CHCS Appointment Data Exchange to MDR

 Version

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ICD Describing CHCS Appointment Data Exchange to MDR

 Version

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Preface

This document describes the interface that provides appointment data from the Composite Health Care System (CHCS) to the Military Health System (MHS) Data Repository (MDR). CHCS is managed by the Defense Health Information Systems (DHIMS) Program Office. The MDR is managed by the Defense Health Services Systems (DHSS) Program Office.

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 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 appointment data exchange with the Composite Health Care System (CHCS). CHCS is managed by the Defense Health Information Management Systems (DHIMS) Program Office.

**Keywords:** Composite Health Care System, Decision Support, Defense Health Information Management Systems, Defense Health Services Systems, Executive Information, Interface Control Document, MHS Data Repository, CHCS, DHIMS, DHSS, DS, EI, ICD, MDR

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# Introduction

## Document Identification

This document describes the interface that provides Composite Health Care System (CHCS) appointment data to the MHS Data Repository (MDR).

## Scope

This document describes and identifies the parameters and specifies the file layout of the Appointment Data that the DHSS Program Office receives from Medical Treatment Facilities (MTFs) via the Composite Health Care System (CHCS). The data is collected and sent to DHSS from contractors supporting the Defense Health Information Management Systems (DHIMS) Program Office.

## System Overview

CHCS is the source system for MHS direct care clinical information. CHCS collects, supports, and processes the following types of information at the MTF level:

* Patient registration
* Patient appointment and scheduling
* Patient administration
* Nursing
* Pharmacy
* Laboratory
* Radiology
* Clinical dietetics
* Quality assurance
* Inpatient/outpatient order entry and results reporting
* Enrollment and eligibility checking

CHCS is an information support tool used by clinicians and providers at the clinic and MTF levels for direct health care services. It is a transactional system that documents and identifies health care services that are rendered.

The CHCS program is managed by DHIMS Program Manager. The current operational version is CHCS I (version 4.603).

This particular ICD describes the specific interface between CHCS MTFs that will be providing the appointment data to the MDR. The MDR receives data at the central host, an IBM RS/6000SP multi-node processor, through the Feed Nodes. Appointment data will be scheduled to be sent to DHIMS West Coast Operations Center via System Electronic Transmission Utility (SY\_ETU) from each CHCS site. Once collected, it will be FTP’d to DHSS around the 11th of each month.

The Feed Nodes send the files to the Tivoli Storage Manager (TSM). The TSM copies and stores the files for back-up purposes. The MDR screens the records for data management purposes and produces fiscal year appointment data files.



Figure ‑ CHCS Appointment Data Interface Flow

## Reference Documents

EIDS Program Office, *Initial Capabilities Document (ICD),* dated March 2006 (pending JROC approval).

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

SAIC, *Interface Control Document – Corporate Executive Information System (D2-SDTD-1017B)*, San Diego, CA, 30 Sep 2001.

SAIC, *PR&DD For GBDW Appointment Extracts,* San Diego, CA, 12 May 2003.

## Operational Agreement

This ICD provides the technical specification for an interface between DHIMS and the DHSS Program Office regarding the CHCS Appointment Data. 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 CHCS Appointment data elements that will be sent to the DHSS Program Office. Should problems with the interface arise, DHSS data production support personnel will immediately contact SAIC West Coast Operations 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 data feed from CHCS sites to the DHIMS West Coast Operations Center to DHSS:

* CHCS Appointment data extract.

DHIMS will continue to enhance CHCS. This ICD will be changed *only* if the interface changes from the interface specified herein.

## Precedence and Criticality of Requirements

Appointment data from the MTFs that is reliable is necessary for the MHS to make knowledge-based decisions. MDR provides this information to MHS decision-makers. A minimum of monthly updates are required for effective performance of the business. An inability to obtain this data for a period of 3 months or greater could have adverse consequences to the business.

## Communications Methods

DHIMS West Coast Operations Center will FTP the collected appointment data records collected during the previous month on a monthly basis. The delivery date is expected to be the 11th of each month.

## Performance Requirements

There are no unique performance requirements for this data. The data needs to be provided according to a regularly scheduled time frame.

## Security and Integrity

The data exchanged in this interface contains protected patient level identifiable information. In addition, because the aggregate data being transmitted via the CHCS appointment data extract to DHSS is becoming part of a database that contains sensitive data, it will be protected in accordance with the C2-level protection standards mandated for all "Sensitive Unclassified Systems" by the requirements of DoD Directive 5200.28. 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)

Protected patient identifiable information is removed as the data is stored in the Appointment Files within MDR. Most of this data is retained and stored in other files.

The DHIMS West Coast Operations Center shall use the built-in Data Encryption Standard (DES) encryption capability of SY\_ETU for encryption of files before transmitting them to DHSS.

### 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 to MDR as defined in the design documentation. When errors are discovered in the data exchange, the DHIMS West Coast Operations Center will be notified immediately by DHSS operations personnel. If there are systemic problems, Interface Working Group (IWG) counterparts will be contacted to work issues.

**Appendix A: CHCS Appointment Data File Layout**

**A.1 File Format**

The Feed Nodes receive the data elements listed in the appendix table on a scheduled basis (i.e., monthly). Additional data processing is accomplished to apply business rules, and condition the data. Ultimately, the resultant files find their way to the MHS Data Repository (MDR).

The DHIMS West Coast Operations Center will FTP the files to DHSS on about the 11th of each month. The file name will be:

APPT\_hostdmis\_MMDDYYYY\_MMDDYYYYhhmm.dat

Where MM + month, DD = day, YYYY = year, and the “MMDDYYYY\_MMDDYYYY” are the from to dates, and hhmm = hours and minutes of the production run date.

**A.2 Record Layout**

Table A‑1 describes the record layout of each CHCS Appointment record. For each record, all fields are variable length and pipe delimited (“|”). Field lengths provided are normal or maximum numbers only. As noted, privacy related fields that are received, are removed from the file.

**A.3 File Operational Context**

Each extract FTP’d to the Feed Nodes from a MTF site will have multiple appointment records. Appointment statuses that are kept, walk-in, sick call, or telecom will be included in the extracts.

Within MDR, the duplicate records are removed with only the most current record being retained. The records are organized into fiscal year files (i.e., fiscal year of the Appointment Date).

Table ‑ CHCS Appointment Data Elements

| Field Name(logical name) | Field Length | Position | Data Type | Data Units | Value Range | Functional Description |
| --- | --- | --- | --- | --- | --- | --- |
| Appointment Date | 8 | Delimited | Date | N/A | None | The date of the appointment. Format: YYYYMMDD. |
| Sponsor SSN | 9 | Delimited | A-numeric | N/A | None | The Social Security Number (SSN) of the sponsor. |
| Patient SSN | 9 | Delimited | A-numeric | N/A | None | The Social Security Number (SSN) of the patient. |
| DEERS Dependent Data Suffix (DDS) | 2 | Delimited | A-numeric | N/A | 01-20, 30-69, 98, 99 | Code that represents the dependent of a sponsor. Prior to E2R2 project, this attribute was known as the DEERS dependent suffix. It is not being deleted yet, even though the DMDC dependent suffix code was created to replace it.01-19 dependent child20 sponsor30-39 spouse of sponsor40-44 mother of sponsor45-49 father of sponsor50-54 mother-in-law of sponsor55-59 father-in-law of sponsor60-69 children where number greater than 1998 service secretary designee99 not classified elsewhere |
| Person Identifier | 10 | Delimited | A-numeric | N/A | None | The identifier that is used to represent a patient within a Department of Defense Electronic Data Interchange. |
| Sex | 1 | Delimited | A-numeric | N/A | M, F, X | Gender of the beneficiary. Codes as follows:F FemaleM MaleX Unknown |
| Date of Birth | 8 | Delimited | Date | N/A | None | The date when a human being was born. (YYYYMMDD) |
| Sponsor Rank | 4 | Delimited | A-numeric | N/A | None | The sponsor’s pay grade, concatenated without blanks. |
| Patient Category | 3 | Delimited | A-numeric | N/A | A11-A15, A21- A29, A31-A33, A41-A45, A47-A49, B11, B26, B31-B33, B41, B43, B45, B47-B49, C11-C14, C22, C24-C29, C31-C33, C41, C43, C45,C47-C49, F11-F15, F21-F29, F31-F33, F41, F43, F45, F47-F49, K51-K59, K61-K69, K71-K79, K82-84, K91, K92, K99,M11-13, M22, M24-M29,M31-M33, M41,M43,M45, M47-M49,N11-N14, N21,N22, N24-N29, N31-N33, N41,N43, N45, N47-N49, P11, P12, P22, P26, P31-P33, P41, P43, P45, P47-P49, R72-R75  | A code that describes the beneficiary’s relationship to uniformed duty status. |
| MEPRS Code | 4 | Delimited | A-numeric | N/A | MEPRS-4 Codes. Source: specific MTF’s CHCS | The clinical code for the clinic service where the patient was seen. MEPRS-4 codes are used. MEPRS-3 codes are standard throughout the MHS. The added character to a MEPRS-3 code to make it a MEPRS-4 code is determined by the facility and coded in the MTF’s CHCS. |
| Patient Status | 1 | Delimited | A-numeric | N/A | I, O, Null | An indicator of that the patient had at the time of the encounter. Codes as follows:I InpatientO OutpatientNull Outpatient |
| DMIS ID Code | 4 | Delimited | A-numeric | N/A | Source of valid values: MTF Master File/CHCS.  | The Defense Medical Information System (DMIS) identification number that identifies the clinic where the patient was treated. |
| Appointment Status | 1 | Delimited | A-numeric | N/A | 1,3,4,6,7,8,9, 10, 12 | Appointment type status. Coded as follows:1 Pending2 Kept3 Cancel4 No show5 Walk-in6 Sick call7 Telephone consult8 Left without being seen9 Admin10 OCC-SVC12 Booked |
| Enrollment DMIS ID | 4 | Delimited | A-numeric | N/A | Source: CHCS. | The DMIS ID for the facility that enrolled the patient. |
| Alternate Care Value (ACV) | 1 | Delimited | A-numeric | N/A | A, B, C, D, E, I, K, N, S, U, V | A DEERS code indicating TRICARE beneficiary enrollment status. Coded as follows:A TRICARE Prime (Active Duty)B CHAMPVA (OCONUS)C CHAMPUSD MedicareE TRICARE Prime (non-active duty; i.e., only CHAMPUS eligible)I FEHBPK Catchment Area ManagementN Direct Care OnlyS CHCBP U USTFV CHAMPVA |
| Family Member Prefix (FMP) | 2 | Delimited | A-numeric | N/A | 01-19,20,30-39,40,45, 50,55,60-69,90-95,97,98, or 99. | The code that represents the prefix that the medical community uses to identify medical records. Coded as follows:01-19 Dependent children of sponsor20 Sponsor30-39 Spouse of sponsor40-44 Mother of sponsor45-49 Father of sponsor50-54 Mother-in-law of sponsor55-59 Father-in-law of sponsor60-69 Other dependents90-95 Beneficiary authorized by statute98 Civilian Humanitarian99 All others not elsewhere classified |
| Medicare Eligibility | 2 | Delimited | A-numeric | N/A | D, E, L, N, O, P, Q, S | A code describing the Medicare eligibility of the patient. Code is followed by a space. Coded as follows:D Eligible (under 65)E Eligible (over 65)L Eligible (under 65)N Not eligibleO Eligible (became eligible after 65)P PurchasedQ Eligible (under 65)S Over 65, not eligible |
| Patient ZIP Code at Time of Visit | 5 | Delimited | A-numeric | N/A | Source: CHCS | The postal zip code for the city where a person is located. For OCONUS locations, the value could be an APO, FPO or country zip code. |
| Appointment IEN | 10 | Delimited | A-numeric | N/A | ADM Generated | The appointment identifier number. The AIN is the system generated unique appointment identifier for that system. The Appointment Prefix and AIN combine to create a unique identifier. |
| Workload Type | 1 | Delimited | A-numeric | N/A | None | Indicates whether or not the workload of the appointment will be counted. |
| Provider ID (Legacy) | 15 | Delimited | A-numeric | N/A | Source: CHCS Provider File | A unique identifying number for a provider of health services. |
| Provider ID (EDI\_PN) | 15 | Delimited | A-numeric | N/A | Source: CCQAS interface with CHCS | A unique identifying number for a provider of health services, using the Electronic Data Interchange (EDI) Person Number (PN). |
| Provider Specialty | 3 | Delimited | A-numeric | N/A | Source: CHCS reference table | The Health Care Professional (HCP) specialty code for the primary provider. |
| HIPAA Provider Specialty | 10 | Delimited | A-numeric | N/A | Source: CHCS reference table | The Health Insurance Portability and Accountability Act (HIPAA) Provider Taxonomy Code for the primary provider. |
| Location Type | 1 | Delimited | A-numeric | N/A | None | Identifies the facility as a hospital or clinic. |
| Zip Code Validity | 1 | Delimited | A-numeric | N/A | O, 1 | Indicates whether or not the zip code is populated based on the patient zip at the time of service, or a more recent zip code entry. Coded as follows:0 Zip code is not based on date of appointment1 Zip code is based on date of appointment |
| Sponsor Last Name | 26 | Delimited | A-numeric | N/A | None | *This field is not retained in MDR.* Last name of the sponsor. |
| Sponsor First Name | 20 | Delimited | A-numeric | N/A | None | *This field is not retained in MDR.* First name of the sponsor. |
| Patient Last Name | 26 | Delimited | A-numeric | N/A | None | *This field is not retained in MDR appointment data file, but is retained elsewhere.* Last name of the patient. |
| Patient First Name | 20 | Delimited | A-numeric | N/A | None | *This field is not retained in MDR appointment data file, but is retained elsewhere.* First name of the patient. |
| Street Address 1 | 40 | Delimited | A-numeric | N/A | None | *This field is not retained in MDR appointment data file, but is retained elsewhere.* First line of the patient’s street address. |
| Street Address 2 | 40 | Delimited | A-numeric | N/A | None | *This field is not retained in MDR appointment data file, but is retained elsewhere.* Second line of the patient’s street address. |
| Street Address 3 | 40 | Delimited | A-numeric | N/A | None | *This field is not retained in MDR appointment data file, but is retained elsewhere.* Third line of the patient’s street address. |
| City | 20 | Delimited | A-numeric | N/A | None | *This field is not retained in MDR appointment data file, but is retained elsewhere.* City where the patient’s residence is located. |
| State | 20 | Delimited | A-numeric | N/A | None | State where the patient’s residence is located. |
| ZIP Code | 5 | Delimited | A-numeric | N/A | None | The ZIP identifier of the patient’s residence. |
| Phone Number | 14 | Delimited | A-numeric | N/A | None | *This field is not retained in MDR appointment data file, but is retained elsewhere.* The home telephone number of the person including area code. |
| Appointment Type | 5 | Delimited | A-numeric | N/A | None | The urgency of the appointment. |
| Health Care Delivery Program (HCDP) Code | 3 | Delimited | A-numeric | N/A | 000-024, 101-151, 201-231, 301-302, 400 | The 3-digit code that represents the plan coverage a family member or sponsor has within a health care delivery program type. Codes are obtained from the New DEERS “Health Care Delivery Program Plan Coverage Code” data element. Examples: “019” is Limited Direct Care with Line of Duty Injuries; “401” is TRICARE Extended Care Health Option (ECHO) program. |
| Date Last Modified | 8 | Delimited | Date | N/A | None | The date the appointment was last modified. Format: YYYYMMDD. |
| Appointment Duration | 3 | Delimited | A-numeric | N/A | None | The time duration of the appointment. Format: MMM. |
| Host Node Seed | 3 | Delimited | A-numeric | N/A | None | Characters of primary node. |

**Appendix B: Acronyms**

|  |  |
| --- | --- |
| **ACV** | Alternate Care Value |
| **APO** | Army/Air Force Post Office |
| **CCB** | Configuration Control Board |
| **CEIS** | Corporate Executive Information System |
| **CHAMPUS** | Civilian Health and Medical Program for the Uniformed Services |
| **CHAMPVA**  | Civilian Health and Medical Program for the Department of Veterans Affairs |
| **CHCBP** | Continuous Health Care Benefit Program |
| **CHCS** | Composite Health Care System |
| **CITPO** | Clinical Information Technology Program Office |
| **CONUS** | Continental United States |
| **DCN** | Document Change Notice |
| **DDS** | DEERS Dependent Suffix |
| **DECC** | Defense Enterprise Computing Center |
| **DEERS** | Defense Enrollment and Eligibility Reporting System |
| **DES** | Data Encryption Standard |
| **DHIMS** | Defense Health Information Management Systems |
| **DHSS** | Defense Health Services Systems |
| **DMIS** | Defense Medical Information System |
| **DoD** | Department of Defense |
| **ECHO** | Extended Care Health Option |
| **EDI\_PN** | Electronic Data Interchange Person Number |
| **EI/DS** | Executive Information/Decision Support |
| **FEHBP** | Federal Employee Health Benefits Program |
| **FMP** | Family Member Prefix |
| **FPO** | Fleet Post Office |
| **FTP** | File Transfer Protocol |
| **GBDW** | Global Business Data Warehouse |
| **HCDP** | Health Care Delivery Program |
| **HCP** | Health Care Professional |
| **HIPAA** | Health Insurance Portability and Accountability Act |
| **ICD** | Initial Capabilities Document |
| **ICD** | Interface Control Document |
| **IEN** | Internal Entry Number |
| **IWG** | Interface Working Group |
| **JROC** | Joint Requirements Oversight Council |
| **MDR** | MHS Data Repository |
| **MEPRS** | Medical Expense and Performance Reporting System |
| **MHS** | Military Health System |
| **MTF** | Medical Treatment Facility |
| **NSLC** | Naval Sea Logistics Command |
| **OCONUS** | Outside Continental United States |
| **ORD** | Operational Requirements Document |
| **PCM** | Primary Care Manager |
| **PR&DD** | Project Requirements and Design Document |
| **SSN** | Social Security Number |
| **SY\_ETU** | System Electronic Transmission Utility |
| **TSM** | Tivoli Storage Manager |
| **USTF** | Uniformed Services Treatment Facility |