DHSS Program Management

Interface Control Document  
Describing the U.S. Army and Air Force ADSM Dental Data Exchange between MDR and U.S. Army DENCOM  
Baseline

Version



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ICD Describing the U.S. Army and Air Force ADSM Dental Data Exchange between MDR and U.S. Army DENCOM

Approval Version

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ICD Describing the U.S. Army and Air Force ADSM Dental Data Exchange between MDR and the U.S. Army DENCOM

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Preface

This document describes the U.S. Army and Air Force active duty service member (ADSM) Dental data exchange between the Military Health System (MHS) Data Repository (MDR) and the U.S. Army Dental Command’s (DENCOM) Corporate Dental System (CDS).

This document is under Defense Health Services Systems (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 DHSS Program Executive Office manages the 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. U.S. Army DENCOM is responsible for the design and operation of CDS. The Corporate Dental Application (CDA), a Web-based application of CDS, is used to collect, process, present, and archive all dental workload, readiness, and patient scheduling for all active duty service members (ADSM) treated at Army and Air Force Dental Treatment Facilities.

**Keywords:** active duty service member, Corporate Dental Application, Corporate Dental System, Defense Health Services Systems, Interface Control Document, Military Health System, MHS Data Repository, U.S. Army Dental Command, ADSM, CDA, CDS, DENCOM, DHSS, ICD, MDR, MHS.

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# Introduction

## Document Identification

This document describes the U.S. Army and Air Force ADSM Dental workload and readiness data exchange between MDR and DENCOM’s CDS.

## Scope

This document describes and identifies U.S. Army and Air Force ADSM Dental parameters. It also specifies the U.S. Army and Air Force ADSM Dental file layout MDR receives from CDS, as well as the data MDR will provide to CDS.

## System Overview

U.S. Army DENCOM is responsible for the design and operation of CDS. The Corporate Dental Application (CDA), a Web-based application of CDS, is used to collect, process, present, and archive all dental workload, readiness, and patient scheduling for all active duty service members (ADSM) treated at Army and Air Force Dental Treatment Facilities.

The MDR contains data for the Active Duty Dental Program (ADDP). Under this program, civilian dentists provide private sector dental care to active duty service members and then input workload and readiness data into ADDP for incorporation into the MDR. This data will be sent to CDS to update dental readiness and treatment information for all service members treated under ADDP.

The CDS acquires workload and readiness data from input through the Corporate Dental Application (CDA) and data interfaces with other MHS systems. CDS workload and readiness data will be sent to the MDR for incorporation into the Tri-Service MDR dental files.

## 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 U.S. Army DENCOM and the DHSS Program Executive Office regarding the monthly U.S. Army and Air Force ADSM Dental data files.

It is the responsibility of both DHSS and U.S. Army DENCOM representatives to coordinate on systems operations, requirements, specifications, and all future enhancements of the CDS-MDR interface. Representatives will be notified of changes to established hours of availability, scheduled downtimes or other restrictions to availability, hardware or software upgrades, releases, and changes that may impact the CDS-MDR interface.

# Data Specification

## Identification of Data Exchanges

This ICD addresses the following data feed between U.S. Army DENCOM and DHSS:

* U.S. Army and Air Force ADSM Dental records file.

This ICD will be changed *only* if the interface changes from the interface file format or file content specified herein.

## Precedence and Criticality of Requirements

Previously, providers at Army and Air Force Dental Treatment Facilities that require dental readiness or treatment information for patients who have been treated under ADDP needed to access this information via the ADDP Web portal. The data exchange outlined in this ICD will provide U.S. Army DENCOM the necessary ADDP information from the MDR. This data will be used to generate reports and system tools which will evaluate active duty service member deployability. An inability to obtain this information can affect the deployment status of service members, and also disconnects dental providers from a valuable repository of dental treatment information that is only available within ADDP.

## Communications Methods

All CDS and MDR data records will be transferred using SFTP via the Military Health System (MHS) Virtual Private Network (VPN) Mesh to/from the MDR Feed Node. The SFTP software utilizes FIPS 140-2 compliant encryption.

The collected set of data transmitted from the MDR to CDS will be placed on the MDR Feed Node for U.S. Army DENCOM personnel to pull on a monthly basis. DHSS personnel will notify U.S. Army DENCOM personnel when the files have been uploaded to the DHSS Feed Node. The data will be loaded into the CDS database by automated scripts.

The collected set of data transmitted from CDS to the MDR will be placed on the MDR Feed Node by U.S. Army DENCOM personnel on a monthly basis. The data will be placed on the MDR Feed Node by U.S. Army DENCOM personnel on the 10th day of each month.

Upon connection to the OKC Feed Node via SFTP over the MHS VPN Mesh, U.S. Army DENCOM will be authenticated using an AIX username and password. The AIX password for the SFTP account will expire every 52 weeks and meets the following security requirements:

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

## 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 MDR and the CDS both maintain active ATO accreditations under the DHSS Datamarts System (DDS) and USAMITC accreditation boundaries respectively.

The data exchanged in this interface contains Protected Health Information (PHI). In addition, because the aggregate data being transmitted from DHSS is becoming part of a database that does contain sensitive data, it will be protected in accordance with the protection standards mandated for all "Sensitive Unclassified Systems" by the requirements of DoD Directive 8500.1 and DoD Instruction 8500.2. 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)

### Data Integrity and Quality

Data integrity and quality of raw data files that DHSS receives involve processes that answer the following questions:

1. Did DHSS catch the file?

Answering this question involves automated and accepted assessment methods that have matured over the last 10 years. In the case of U.S. Army and Air Force ADSM Dental extracts, DHSS has implemented the following processes with respect to the questions:

1. DHSS validates that it receives at least one U.S. Army and Air Force ADSM Dental file from CDS each month; in the event a transmission is missed, DHSS Operations will request a re-harvest from CDS.

In the case of U.S. Army and Air Force ADSM Dental data, users accept the data field values for what they are. There is no requirement at this point to “improve” the reliability of the data.

**Appendix A: U.S. Army and Air Force ADSM Dental File Layout**

**A.1 File Format**

ADDP data transmitted from the MDR to CDS will be placed on the MDR Feed Node for U.S. Army DENCOM personnel to pull on a monthly basis. The data will be loaded into the CDS database by automated scripts. The ADDP data provided from the MDR to the CDS will be a pipe ("|") delimited text file.

U.S. Army and Air Force workload and readiness data transmitted from CDS to the MDR will be placed on the MDR Feed Node by U.S. Army DENCOM personnel on a monthly basis. The CDS data provided to the MDR will be a pipe ("|") delimited text file.

**A.2 Record Layout**

Table A-1 describes the ADDP record layout of data from the MDR provided to CDS.

Table A-2 describes the U.S. Army and Air Force workload and readiness record layout of data from CDS provided to the MDR.

**A.3 File Operational Context**

The MDR will transmit U.S. Army and Air Force ADSM Dental treatment and readiness data from ADDP to CDS in a single file.

CDS will transmit workload and readiness data to the MDR in a single file.

Table A‑1 ADDP Data from the MDR provided to CDS

| Field # | Field Name | Field Length | Data Type | Value Range | Functional Description |
| --- | --- | --- | --- | --- | --- |
| 1 | PatientName | 100 | Character | N/A | Name of the Patient (last Name, First Name, Middle Name) |
| 2 | SponsorSSN | 9 | Character | N/A | SSN of the sponsor |
| 3 | PatientType | 5 | Character | N/A | Patient type (Army, Air Force, Army National Guard, etc.) |
| 4 | BirthDate | 8 | Number | N/A | Date of birth for service member in format of YYYYMMDD |
| 5 | EDI | 10 | Number | N/A | DEERS Electronic Personal Identifier number |
| 6 | TreatmentDateTime | 17 | YYYYMMDD HH:MM:SS | N/A | Time and date that treatment occurred |
| 7 | CDTCode | 5 | Character | N/A | Current Dental Terminology (CDT) |
| 8 | DRC | 1 | Character | 1, 2, 3, 4 | Dental Readiness Classification. DRC must be 1, 2, 3, or 4 |
| 9 | DTF | 100 | Character | N/A | Dental Treatment Facility Name |
| 10 | DMISID | 10 | Character | N/A | Defense Medical Information System (DMIS) Identifier (ID) |

*Notes:*

1. The ADDP data provided from the MDR to the CDS will be a pipe ("|") delimited text file.

Table A‑2 CDS Data Provided to the MDR

| Field # | Field Name | Field Length | Data Type | Value Range | Functional Description |
| --- | --- | --- | --- | --- | --- |
| 1 | PatientName | 100 | Character | N/A | Name of the Patient (last Name, First Name, Middle Name) |
| 2 | SponsorSSN | 9 | Character | N/A | SSN of the sponsor |
| 3 | PatientType | 3 | Character | N/A | Patient type (Army, Air Force, Army National Guard, etc.) |
| 4 | LastExamDate | 10 | YYYY-MM-DD | N/A | Date of patient’s last annual exam |
| 5 | TreatmentDate | 10 | YYYY-MM-DD | N/A | Time and date that treatment occurred |
| 6 | CDTCodes | Var | Character | N/A | CDT codes and number of procedures performed where number of procedures is in parenthesis.  e.g. :  Record #1: 09999(1), D0140(1), D1351(3)  Record #2: 09999(1), D1206(1) |
| 7 | DRC | 1 | Character | 1, 2, 3, 4 | Dental Readiness Classification. DRC must be 1, 2, 3, or 4 |
| 8 | DTF | 100 | Character | N/A | Dental Treatment Facility Name |
| 9 | DMISID | 10 | Character | N/A | Defense Medical Information System (DMIS) Identifier (ID) |
| 10 | ProviderSSN | 9 | Character | N/A | Provider Social Security Number |

*Notes:*

1. The CDS data provided to the MDR will be a pipe ("|") delimited text file.

**Appendix B: Acronyms**

|  |  |
| --- | --- |
| ADDP | Active Duty Dental Program |
| ADSM | Active Duty Service Members |
| CCB | Configuration Control Board |
| CDA | DENCOM’s Corporate Dental Application |
| CDS | DENCOM’s Corporate Dental System |
| DCN | Document Change Notice |
| DENCOM | U.S. Army Dental Command |
| DHSS | Defense Health Services Systems |
| DoD | Department of Defense |
| ICD | Interface Control Document |
| FIPS | Federal Information Processing Standard |
| MDR | MHS Data Repository |
| MHS | Military Health System |
| PHI | Protected Health Information |
| SFTP | Secure File Transfer Protocol |
| VPN | Virtual Private Network |
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