EI/DS Program Management

Interface Control Document  
Describing the MDR HCPR Data  
Exchange  
BASELINE

Preliminary Version  
  
May 7, 2004



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Approval Page

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Preface

This document is a deliverable for SRA International as a subcontractor to Irving Burton Associates (IBA) under the Naval Sea Logistics Command (NSLC) contract N65538-03Q-0069 titled "Executive Information/Decision Support (EI/DS) Professional Services Contract." It describes the interface that provides the Health Care Provider Record (HCPR) from the TRICARE Management Activity-Aurora (TMA-Aurora) and the EI/DS Program Office that is loaded into the Military Health System (MHS) Data Repository (MDR).

This document is under EI/DS 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 Executive Information/Decision Support (EI/DS) Program Office is developing the Military Health System (MHS) Data Repository (MDR) as the core repository for MHS clinical, beneficiary population, enrollment, costing and workload data. MDR collects, catalogues and organizes data files from several systems. This Interface Control Document (ICD) specifies the TED-derived Health Care Provider Record (HCPR) data exchange from the TRICARE Management Activity-Aurora (TMA-Aurora) and the EI/DS Program Office that is loaded into the MDR.

**Keywords:** Decision Support, Executive Information, Health Care Provider Record, Interface Configuration Control Board, Interface Control Document, MHS Data Repository, TRICARE Encounter Data, TRICARE Management Activity-Aurora, DS, EI, HCPR, ICD, MDR, TED

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# Introduction

## Document Identification

This document describes the interface that provides the Health Care Provider Record (HCPR) to the MHS Data Repository (MDR). This interface version takes into account the HCPR to TRICARE Encounter Data (TED) conversion.

## Scope

This document describes and identifies the parameters and specifies the file layout of the HCPR that the MDR receives from TRICARE Management Activity-Aurora (TMA-Aurora) and the EI/DS Program Office. The HCPR is a key dataset for MHS EI/DS products. It is the only source of purchased care provider data. There are two HCPR datasets that TMA-Aurora provides to EI/DS – the MDR feed and the MHS Mart (M2). This ICD is concerned with the MDR feed.

## System Overview

The TMA (formerly OCHAMPUS) Purchased Care Warehouse (PCW) captures outpatient and inpatient TRICARE Encounter Data (TED) records from the TRICARE purchased care programs. The TED describes the following types of information:

* Patient demographic information
* Attending provider, other providers and institution of care
* Claim information
* Non Availability Statement (NAS) information
* Patient diagnosis
* Patient treatment

TED data is based on clinical encounters submitted on the UB92 (Uniform Billing Claim Form) and HCFA 1500 (Health Care Financing Administration Professional Fee Billing Claim). These raw purchased health care claims forms are processed and audited by the TRICARE Dual Eligible Fiscal Intermediary Contract (TDEFIC). They provide a data feed to the PCW. PCW processes and audits the data, and develops a HCSR from the TEDs. The PCW has been recently migrated to the IBM RS/6000SP multi-node processor, becoming a part of the EI/DS architectural framework.

This particular ICD describes the HCPR that is sent monthly from PCW to the MDR. The HCPR monthly update is sent via File Transfer Protocol (FTP) to the EI/DS Feed Nodes at the Defense Enterprise Computer Center (DECC) located at Denver. It is received approximately on the 20th day of the month with the additional records and record changes from the previous month. The PCW and the Feed Nodes are part of the EI/DS central host, an IBM RS/6000SP multi-node processor. PCW is functionally managed by the Director, TRICARE Management Activity- Aurora (TMA-A), and technically managed by the EI/DS Program Office.

The Feed Nodes FTP the HCPR files to the Tivoli Storage Manager (TSM). The TSM copies and stores the files for back-up purposes and for follow-on processing by the MHS Data Repository (MDR). The MDR processes the records for data quality purposes, and stores the data in the Operational Data Store (ODS). The ODS is used to provide data extracts for special purpose users.

PCW to Feed Nodes to TSM to MDR to ODS to Extracts.

Figure 1‑1 MDR HCPR Interface Flow

## Reference Documents

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

EI/DS Program Office, *MDR HCPR ICD (ICD-1300-1630-01)*, Falls Church, VA, September 15, 2003.

## Operational Agreement

This ICD provides the technical specification for an interface co-managed by TMA-A and the EI/DS Program Office regarding the HCPR. When required, the ICD will be modified by the data receiver (i.e., EI/DS Program Office), and a copy of the revised ICD will be sent to TMA Aurora.

Appendix A delineates the MDR HCPR data elements that will be sent to the MDR.

Should problems with the interface arise, MDR data production support personnel will immediately contact PCW operational personnel. Should there be systemic data problems recognized during MDR processing, EI/DS members will coordinate with their counterparts in the TMA-A.

# Data Specification

## Identification of Data Exchanges

This ICD addresses the following data feed from PCW to MDR:

* HCPR monthly data extract for the MDR. The HCPR extract is an update to the baseline plus previous updates. It provides new records as well as updates to previous records back to FY 1994.

TMA-A and EI/DS will continue to enhance PCW. This ICD will be changed *only* if the interface changes from the interface specified herein.

## Precedence and Criticality of Requirements

Purchased care provider information from the HSSCs 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 2 months or greater could have adverse consequences to the business.

## Communications Methods

TMA-A will FTP the HCPR extract to the EI/DS Feed Nodes on a monthly basis. This should be received by the 20th of the month following a data production cycle.

## 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 HCPR from PCW to MDR is becoming part of a database that does contain 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)

EI/DS security policies help ensure EI/DS products remain compliant with security requirements such as:

* Unique identification of all users or operational personnel to the system (through identification and authentication)
* Restriction of access by users or operational personnel to data and access levels necessary to do their work (through discretionary access control)
* Accountability of all users and operational personnel for their system usage (through auditing)
* Training of all users and operational personnel on “Security Awareness” as well as the use of the system
* Properly identifying and marking sensitive data generated by the system, in any form, i.e., with “For Official Use Only (FOUO)” markings on data tapes and printed reports

### 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 PCW to MDR as defined in the design documentation. When errors are discovered in the data exchange, PCW operations personnel will be notified immediately by EI/DS operations personnel. If there are systemic problems, Interface Working Group (IWG) counterparts will be contacted to work issues.

**Appendix A: MDR HCPR File Layout**

**A.1 File Format**

The Feed Nodes receive the TED-derived Health Care Provider Record (HCPR) data elements listed on a monthly scheduled basis.

The HCPR extract consists of a series of provider records that support the purchased care option for the MHS.

This ICD represents the interface from HCPR records generated from TED records. The major change between this version and the previous version is:

1. Allows for TED-derived HCSR or legacy derived HCSR. Difference is noted in “Ted Flag” (position 270).

**A.2 Record Layout**

Appendix tables describe record layouts for the HCPR Record. The file is a fixed length non-delimited ASCII flat file. Each record is terminated by a new-line character.

**A.3 File Operational Context**

MDR accepts and loads the HCPR data as is. The data is used as a reference for HCSR claims. The record key is composed of the following fields:

* Provider Taxpayer Number
* Provider Sub-Identifier
* Provider Zip Code
* Institution/Non-Institution Indicator
* Provider Major Specialty or Type of Institution

Table A‑1 MDR HCPR File Layout

| Table A-1  Field Name  (logical name) | Field Length | Position | Data Type | Data Units | Value Range | Functional Description |
| --- | --- | --- | --- | --- | --- | --- |
| Provider Taxpayer Number | 9 | 1-9 | A-Numeric | NA | None | The IRS taxpayer identification number (TIN) assigned to the institution/provider supplying the care. For institutions, it must be the employer identification number (EIN). For individual providers it must be the EIN or SSN, if available. If not available, the contractor will report the contractor-assigned number. On HCSRs all nines are used for transportation services under program for the handicapped and for the drug program when the services are from a non-participating pharmacy. |
| Provider Sub Identifier | 4 | 10-13 | A-Numeric | NA | None | Identification number that uniquely identifies multiple providers using the same TIN. |
| Provider Taxpayer Number Identifier | 1 | 14 | A-Numeric | NA | None | Code to identify the Provider TIN as being an EIN or SSN or contractor assigned. |
| Contractor Number | 2 | 15-16 | A-Numeric | NA | None | Identification code for the contractor. Used to identify each contractor submitting Provider File Records. |
| Provider Contract Affiliation Code | 1 | 17 | A-Numeric | NA | 0, 1, 2, 3, 4 | Code indicating whether the provider is under contract with the contractor. All codes are irrespective of any partnership agreements. For provider records:  0 not applicable  1 contracted  2 not contracted  3 contracted/not contracted  4 active duty GSU |
| Institutional/ Non-Institutional Indicator | 1 | 18 | A-Numeric | NA | I, N | Code used to identify a provider as an institution or non-institution. Coded as follows:  I Institution  N Non-institution |
| Provider Name | 40 | 19-58 | A-Numeric | NA | None | The name of the provider. |
| *Provider Address* | | | | | | |
| Provider Street Address | 30 | 59-88 | A-Numeric | NA | None | Street address of the TMA provider’s location. |
| Provider City | 18 | 89-106 | A-Numeric | NA | None | The city in which the provider of medical care is located. |
| Provider State or Country Code | 2 | 107-108 | A-Numeric | NA | Standard two-character state and country code abbreviations. Source: MTF Master File/CHCS. | Code assigned to identify the state or foreign country in which the provider is physically located. |
| Provider Zip Code | 5 | 109-113 | A-Numeric | NA | None | The zip code for provider’s health care business location where the care was provided. The first 5 digits are used along with other ‘key’ elements to uniquely identify multiple providers using the same Provider Taxpayer Number. |
| *Provider Billing Address* | | | | | | |
| Provider Billing Street/P.O. Box | 30 | 114-143 | A-Numeric | NA | None | The street address for submitting bill transactions for services rendered by the provider. |
| Provider Billing City | 18 | 144-161 | A-Numeric | NA | None | The city for submitting bill transactions for services rendered by the provider. |
| Provider Billing State or Country Code | 2 | 162-163 | A-Numeric | NA | Standard two-character state and country code abbreviations. Source: MTF Master File/CHCS. | The state or country code for submitting bill transactions for services rendered by the provider. |
| Provider Billing Zip Code | 5 | 164-168 | A-Numeric | NA | None | The zip code of the location where bill transactions are submitted for provider services. Must be a valid zip code or blanks if a foreign country. |
| Provider Major Specialty/Type of Institution | 2 | 169-170 | A-Numeric | NA | HCSR codes. Source: SDCS | Code describing a provider’s major specialty for non-institutional HCSRs or a code describing the type of institution for institutional HCSRs. |
| Type of Institution Code | 1 | 171 | A-Numeric | NA | S, L | Code used to identify type of institution as short or long term. Coded as follows:  S Short term  L Long term |
| AHA ID Number | 9 | 172-180 | A-Numeric | NA | Standard AHA tables. Source: SDCS. | The identification number assigned by the American Hospital Association (AHA). |
| AHA Multi-Hospital System Code | 4 | 181-184 | A-Numeric | NA | AHA codes. Source: SDCS. | Code assigned by AHA to identify multi-hospital systems. |
| Medicare Number | 8 | 185-192 | A-Numeric | NA | Medicare tables. | Number assigned to an institution by Medicare. |
| Provider Acceptance Date | 8 | 193-200 | Numeric | NA | None | Date a provider met criteria to provide services. If the provider was never qualified to provide services zero fill. Format YYYYMMDD. |
| Provider Termination Date | 8 | 201-208 | Numeric | NA | None | Date a provider is either suspended or terminated as a valid TRICARE provider (not to be used as the date a change was made to the file). If the provider was never qualified to provide services zero fill. Format YYYYMMDD. |
| Rural/Urban Indicator | 1 | 209 | A-Numeric | NA | L, R, U, blank | Indicates for DRG amount calculation whether the institution is located in a rural or urban area. Coded as follows:  L Large urban  R Rural  U Urban  blank Not applicable |
| IDME Ratio | 5 | 210-214 | Numeric | NA | None | The ratio used on a hospital-specific basis to standardize the charges for the cost effects or Indirect Medical Education (IDME) factors for teaching hospitals. |
| IDME Ratio Effective Date | 8 | 215-222 | Numeric | NA | None | Date the IDME ratio or change to the IDME ratio became effective. Format YYYYMMDD. |
| Area Wage Index | 5 | 223-227 | A-Numeric | NA | None | Adjustment factored to the labor-related portion of the Adjusted Standardize Amount (ASA) to account for the differences in wages among geographic areas, based on the hospital’s physical address, not billing address. |
| Area Wage Index Effective Date | 8 | 228-235 | Numeric | NA | None | Date the Area Wage Index or a change to the index became effective. Format YYYYMMDD. |
| DRG Exempt/ Nonexempt Indicator | 1 | 236 | A-Numeric | NA | C, E, N, blank | Indicates whether the institution provider is exempted from the TRICARE/CHAMPUS-DRG based payment system. Coded as follows:  C DRG non-exempt/contracted reimbursement arrangement  E DRG exempt  N DRG non-exempt  blank not applicable |
| DRG Exempt/ Nonexempt Effective Date | 8 | 237-244 | Numeric | NA | None | Date the exempt/none-exempt status of the institutional provider became effective or a status change became effective. Format YYYYMMDD. |
| Transaction Code | 1 | 245 | A-Numeric | NA | A, I, M | Code to identify type of processing to be done on the record. Coded as follows:  A Add record  I Inactivate record  M Modify record |
| Record Effective Date | 8 | 246-253 | Numeric | NA | None | Date to indicate the effective date of the data on this record. Format YYYYMMDD. |
| Provider Status Code | 1 | 254 | A-Numeric | NA | None | Code to identify type of processing to be done on the record. |
| Provider History Code | 1 | 255 | A-Numeric | NA | None | Indicates whether this record is a Provider Record or a Provider History Record. |
| Multiple Provider Flag | 1 | 256 | A-Numeric | NA | Blank | Indicates that multi providers exist for specific index built to find multiple providers within in-house written systems. This field is currently populated with blank. |
| Batch Process Date | 8 | 257-264 | Numeric | NA | None | System Date of when the record was processed. |
| Health Service Region Code | 2 | 265-266 | A-Numeric | NA | Blanks | Derived Health Services Region Code. This field is currently populated with blanks. |
| MTF Code | 3 | 267-269 | A-Numeric | NA | Blanks | Derived Medical Treatment Facility Code. This field is currently populated with blanks. |
| **TED Flag** | **1** | **270** | **A-Numeric** | **NA** | **T, blank** | Identifies the source of the record. Coded as follows:  T TED  Blank HCSR |

**Appendix B: Acronyms**

|  |  |
| --- | --- |
| **AHA** | American Hospital Association |
| **ASCII** | American Standard Code for Information Interchange |
| **CHAMPUS** | Civilian Health and Medical Program for the Uniformed Services |
| **DCN** | Document Change Notice |
| **DECC** | Defense Enterprise Computer Center |
| **DMIS** | Defense Medical Information System |
| **DRG** | Diagnosis Related Group |
| **EI/DS** | Executive Information/Decision Support |
| **EIN** | Employer Identification Number |
| **FI** | Financial Intermediary |
| **FTP** | File Transfer Protocol |
| **FOUO** | For Official Use Only |
| **FY** | Fiscal Year |
| **HCFA 1500** | Health Care Financing Administration Professional Fee Billing Claim |
| **HCPR** | Health Care Provider Record |
| **HCSR** | Health Care Service Record |
| **HIPAA** | Health Insurance Portability and Accountability Act |
| **ICD** | Interface Control Document |
| **IDME** | Indirect Medical Education |
| **IMT&R** | Information Management Technology and Reengineering |
| **IWG** | Interface Working Group |
| **HSSC** | Health Services Support Contractor |
| **MDR** | MHS Data Repository |
| **MHS** | Military Health System |
| **MTF** | Medical Treatment Facility |
| **NAS** | Non Availability Statement |
| **OCHAMPUS** | Office of Civilian Health and Medical Program of the Uniformed Services |
| **ODS** | Operational Data Store |
| **ORD** | Operational Requirements Document |
| **PCW** | Purchased Care Warehouse |
| **POC** | Points of Contact |
| **TDEFIC** | TRICARE Dual Eligible Fiscal Intermediary Contract |
| **TED** | TRICARE Encounter Data |
| **TIN** | Taxpayer Identification Number |
| **TMA** | TRICARE Management Activity |
| **TMA-A** | TMA Aurora |
| **TSM** | Tivoli Storage Manager |
| **UB92** | Uniform Billing Claim Form |