**Department of Veterans Affairs (VA)**

**Office of Information & Technology (OIT)**

**Product Development and Office of Innovation**

**Family History (FH) Collection Tool in Computerized**

**Patient Record System (CPRS)**

**Technical Manual**

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**Sep 2015**

**Version 1.1**



**415 North Lee Street, Alexandria, VA 2231**

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Revision** | **Description** | **Project**  **Manager/Author**  **Technical Writer** |
| 1/09/15 | 1.0 | Initial Draft | ProSphere Tek  Charleen Ray  K&R Consulting, Inc. |
| 05/14/15 | 1.1 | Revised | ProSphere Tek  Charleen Ray  K&R Consulting, Inc. |
| 09/14/15 | 1.1 | Revision made on Files | ProSphere Tek  Charleen Ray  K&R Consulting, Inc. |

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# Introduction

The Family History Collection Tool for the Computerized Patient Record System Technical Manual V.01 is designed as a reference manual to provide a technical description of the Family History Collection Tool for the Computerized Patient Record System for the Department of Veterans Affairs Medical Center (VAMC), Information Technology Department, and Clinical Application Coordinators assigned to the outpatient modules.

For more information regarding options and menus, please see the Family History Collection Tool for the Computerized Patient Record System User Manual V 1.0.

# Overview

The Family History Collection Tool for the Computerized Patient Record System V1.0 software package is designed to make it easier for clinicians to share a patient’s Family History in an effort to provide early detection and prevention of heritable diseases.

The display of the Family History data on the CPRS cover sheet and the storage of the designated health information as discrete, searchable data elements are a design specification for this Innovations project. The associated data can also be used to generate clinical reminders that will provide electronic communication of the Veterans familial risk for specified diseases.

The clinical information stored in the VistA database is readily accessible to clinical staff throughout the various service areas and other clinics in the Medical Center. It can also be sent to enterprise storage facilities such as the Austin Information Technology Center (AITC).

# Software and Manual Retrieval

This patch will install 8 new files that will capture Family History and disease groups data for use in the EHR - Electronic Health Record as captured during the treatment process that occurs during outpatient visits. Currently this data is intertwined throughout the clinical documents found in VistA TIU Progress Notes and recorded in CPRS. It will be made available to health providers to influence early detection and prevention of heritable diseases.

Access to the FAM HX CPRS v1.0 templates is through the CPRS software application. The data entry screens use existing CPRS and TIU Progress Note functionalities.

No new functionalities have been created to support this effort.

All new files, templates, and data dictionary changes are reflected in this version 1.0 released and created in the patch installation process. This release contains 9 Mumps Routines created in VISTA under this namespace “KNRFHU” as well as 8 new FileMan files using the “KNR” namespace, 27 Remote Procedure Calls and Delphi Code to support this release in CPRS.

## Related documentation

Online Documentation for this product is available at: [http://www.va.gov/vdl/.](http://www.va.gov/vdl/) This website is the VistA Documentation Library (VDL), which has a listing of all the software manuals for VistA.

The following manuals are available from the VistA Documentation Library (VDL) <http://www.va.gov/vdl>:

|  |  |
| --- | --- |
| Documentation | Documentation file name |
| Family History CPRS v1.0 Installation Guide | FH HX CPRS v1\_0 09152015 IG.docx |
| Family History CPRS v1.0 Technical Manual | FH HX CPRS v1\_0 09152015 tm.docx |
| Family History CPRS v1.0 User Manual | FH HX CPRS v1\_0 09152015 um.docx |
| Family History CPRS v1.0 Release Notes | FH HX CPRS v1\_0 09152015 rn.docx |

## Retrieval of software

The following software and documentation files are exported as part of FAM HX CPRS V.10 patch

FAMHXCPRS\_1.0\_.KIDS (TBD)

FAMHXCPRS\_1.0\_.exe (TBD)

The software files will be available on the following OI& T Innovation Sandbox directories prior to release for IOC testing.

Use the following FTP address to connect to the first available FTP server: **XXX.vista.med.va.gov (TBD)**

|  |  |  |
| --- | --- | --- |
| **OIFO** | **FTP Address** | **Directory** |
| ORLANDO XXX | ftp.fo-ORLANDO.med.va.gov | Anonymous. Software |

# Installation and Implementation

The FAM HX CPRS V 1.0 software installation will provide new data entry fields using CPRS and storing the data in a TIU Progress Note document to capture and save with a signature the data in from the FAM HX tab. The files and new functionality will be created during this patch installation process.

Once the KIDS processes have been completed as outlined in FAM HX CPRS V1.0\_ IG.PDF, the Clinical Application Coordinator (or assigned IT personnel) will proceed to the implementation steps necessary to access the TIU document title to the appropriate clinicians at each site, ie; those involved in the capturing of genetic data.

Access should be given to all clinicians engaged in the care of Outpatients at VHA facilities.

## Installation

The installation of the FAM HX CPRS V 1.0 will be accomplished using the KIDS (Kernel Installation and Distribution System) options.

CPRS and VistA menu trees should be disabled during the installation process.

INSTALL NAME: KNR FAMILY HISTORY 1.0

Select INSTALL NAME: KNR FAMILY HISTORY 1.0 9/9/15@23:32:19

=> KNR FAMILY HISTORY BUILD 9-9-15

This Distribution was loaded on Sep 09, 2015@23:32:19 with header of

KNR FAMILY HISTORY BUILD 9-9-15

It consisted of the following Install(s):

KNR FAMILY HISTORY 1.0

## Implementation & Maintenance

### Pre-Requisites

Before installing FAM HX CPRS V 1.0 in VistA, the following Department of Veterans Affairs (VA) VistA and CPRS software packages, and versions (those listed or higher).applications must be installed:

|  |  |
| --- | --- |
| **Application Name** | **Minimum Version Needed** |
| CPRS | V.28 |
| Kernel | 8.0 |
| RPC Broker | 1.1 |
| PIMS | 5.3 |
| VA FileMan | 22.0 |
| Mailman | 8.0 |

### Routines and Checksums

The Calculate and Show Checksum Values [XTSUMBLD-CHECK] menu option can be used as shown below to display a list of checksums for FAM HX CPRS V.1.0. The FAM HX CPRS V 1.0 routines are in the KNR and KNR\* namespaces.

Select Programmer Options Option: Calculate and Show Checksum Values This option determines the current Old (CHECK^XTSUMBLD) or New (CHECK1^XTSUMBLD) logic checksum of selected routine(s).

Select one of the following:

1 Old

2 New

New or Old Checksums: New// 2 New

New CheckSum CHECK1^XTSUMBLD:

This option determines the current checksum of selected routine(s).

The Checksum of the routine is determined as follows:

1. Any comment line with a single semi-colon is presumed to be followed by comments and only the line tag will be included.

2. Line 2 will be excluded from the count.

3. The total value of the routine is determined (excluding exceptions noted above) by multiplying the ASCII value of each character by its position on the line and position of the line in the routine being checked.

Select one of the following:

P Package

B Build

Build from: Package

All Routines? No => <ret> No

Routine: KNRFHU3)

Routine: KNRFHU4)

### Routine Descriptions

To obtain a brief description for all FAM HX CPRS V.1.0 software routines, use the First Line Routine Print [XU FIRST LINE PRINT] menu option. Including the second line in the report will show which patches have made changes to the routine. This menu option is part of Programmer Options [XUPROG] on the Routine Tools [XUPR-ROUTINE-TOOLS] menu.

This release contains 9 Mumps Routines created in VISTA under this namespace “KNRFHU”.

### Files

The following is a listing of the 8 files exported with FAM HX CPRS V1.0:

|  |  |  |
| --- | --- | --- |
| **File Number** | **File Name** | **Global** |
| File #500003 | KNR FAMILY HISTORY FILE |  |
| File #500005 | KNR FH RACE FILE |  |
| File #500007 | KNR FH DISEASE GROUP FILE |  |
| File # 500009 | KNR FH HERITABLE |  |
| File # 500011 | DISEASES/CONDITIONS FILE |  |
| File # 500013 | KNR FH RELATIONSHIP |  |
| File # 500015 | KNR RELATIVE FILE |  |
| File # 500017 | DISEASES/CONDITIONS FILE |  |

### File Descriptions

For a complete description of each file and fields, use the List File Attributes [DILIST] option of the VA File Manager. See the list above for the file names and numbers.

### VA File Manager Access Codes

This following VA File Manager access codes for all files in this release:

DD ACCESS: @

RD ACCESS: @

WR ACCESS: @

DEL ACCESS: @

LAYGO ACCESS: @

AUDIT ACCESS: @

### Pointer Relations

Use the Map Pointer Relations [DI DDMAP] option to create a visual representation of the file pointer relationships.

### Software File Relationships

Files accessed by the FAM HX CPRS V.1.0 software:

|  |  |  |  |
| --- | --- | --- | --- |
| **File #** | **File Name** | **Package** | **Agreement Status** |
| 2 | Patient | PIMS | MAS –Business Office |
| 200 | New Person | Kernel | OI&T |
| 8994 | Remote Procedure | Kernel | OT&T |
| 8925.1 | TIU Document Definition | TIU |  |

### Exported Options

There are no exported options in this release.

### FAM HX CPRS Menu Distributions

There are no VistA options for the FAM HX CPRS V1.0 package. The functionality exists for the collection of the data using CPRS, “Family History” Tab.

### Remote Procedure Calls

There are 27 Remote Procedure Calls (RPC’S) are in the KNR\* namespace in FAM HX CPRS V.1.0 release. The FileMan Print functionality can be used to find and display the full entries in the REMOTE PROCEDURE file (#8994).

### Database Integration Agreements

The current VistA and CPRS DB Integration Agreements are all inclusive as this is an Innovations project and does not require any new DBIA. At such time that the FAM HX TOOL for CPRS is approved for national distribution a new DBIA will be needed to approve the created module and associated new files and data dictionary changes created by this software module.

### External Relations

N/A for this project

### Archiving

Data archiving capabilities are not currently available for the FAM HX CPRS V.1.0 software package.

## Package Security

Security in this package is controlled through FileMan Access and files set to Programmer level for all of the files distributed with this release.

Deletion of entries in many FAM HX CPRS V.1.0 files is prohibited under ordinary conditions

### Security Keys (file #19.1)

Security keys are N/A in this release.

# Glossary

|  |
| --- |
| **Acronym Definition** |
| CAC Clinical Application Coordinator  Clin4 National Customer Support team that supports Clinical Reminders  CPRS Computerized Patient Record System  CR Clinical Reminder  GUI Graphic User Interface  KIDS Kernel Installation and Distribution System  OHI Office of Health Information  OI Office of Information  OIT/OI&T Office of Information Technology  PXRM Clinical Reminder Package Namespace  VHA Veterans Health Administration |

**Approval Signatures**

This section is used to document the initial approval of the Family History (FH) Collection Tool in the CPRS Technical Manual and subsequent updates and modifications of this document.

All members of the governing Management Team are required to sign:

**REVIEW DATE: *<date>***

**SCRIBE: *<name>***

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Signed: Date:

*< Integrated Project Team (IPT) Chair>*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed: Date:

*<Business Sponsor>*

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Signed: Date:

*<IT Program Manager>*

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Signed: Date:

*<Project Manager>*