



# **Health Summary**

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## **Technical Manual**

**Version 2.7**

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## Preface

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The Health Summary package integrates clinical data from DHCP ancillary packages into patient health summaries which can be viewed online or printed as reports.

This manual is intended to be used as a technical reference guide for IRM Service, ADPACs, and Clinical Coordinators.

NOTE: This manual has been revised to describe changes that have been made, through patches, to Health Summary V. 2.7 since its release in 1994.

## Revision History

Revision Date	Page or Chapter	Description
July 2011	<a href="#">3</a> Edits throughout manual.	Added description of GMTS*2.7*99, as well as new components and updates to released patches
November 2010	<a href="#">8</a>	Added description of GMTS*2.7*90
December 2002	Edits throughout manual.	Edits per SQA and NVS review.
October 2002	Updates throughout manual. Changes are indicated by a side-bar on the left side of the text.	Added documentation covering functionality exported in patches GMTS*2.7*56 and GMTS*2.7*58.
March 2002	Pages 7-8	Resolved E3R list updated
February 2002	Pgs 22-24	New menu of options enabling managers to control HS types on the reports tab in CPRS
January 2002	Throughout	Changes made by patches to version 2.7 since its release in 1994, and specifically for patches 29, 45, 47, and 49

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# Introduction to Health Summary

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## Definition of a Health Summary

A health summary is a user-customized, clinical summary report consisting of patient information *components*. Each component presents the most currently available summary data from one of the ancillary packages listed below, for a given patient, with optional limits by time, number of occurrences, and selection items. These summaries can be viewed online or printed.

## Packages Providing Data

Automated Med Info Exchange (AMIE)	OE/RR (Order Entry/Results Reporting)
Allergy Tracking System	Outpatient Pharmacy
Clinical Reminders	Patient Care Encounter (PCE)
Consults	Problem List
Dietetics	Progress Notes
Discharge Summary	Radiology
Inpatient Medications	Registration
Lab	Scheduling
Medicine	Social Work
Mental Health	Surgery
Nursing (Vital Signs)	VISTA Imaging

## Components and Types

Components and their behavior are specified by records in the Health Summary Component file (142.1). When a “permanent” Health Summary is created, its *type*, as defined by the owner/creator, is saved in the Health Summary Type file (142).

### *Definitions*

<i>Component</i>	Summarized patient data extracted from various DHCP software packages.
<i>Type</i>	A structure or template containing defined components and unique characteristics.

## **Printing Health Summaries**

Permanent or pre-defined health summaries may be run or printed for a single patient or all patients at a given hospital location (Patient Health Summary and Hospital Location Health Summary options). If a *clinic or operating room location* is selected (instead of a ward) in the Hospital Location Health Summary option, the user will be prompted to enter a beginning and ending visit or surgery date. Only those patients with visits or surgeries scheduled for the specified date will have health summaries generated.

## **PDX Transmission of Health Summaries**

Health Summaries (except components with selection items or unique local components) can be transmitted by PDX—Patient Data Exchange—which transfers patient data between VA facilities using the MailMan electronic mail utility. See PDX V. 1.5 documentation for more information.



## **New Features in Health Summary**

Some of the more recent patches are described below. For complete descriptions of all of the changes in Health Summary since the release of version 2.7 in 1994, please refer to the patches (described briefly on the following pages and in more detail in the Patch module on Forum).

### **GMTS\*2.7\*99 – HIGH RISK MENTAL HEALTH PATIENT – NATIONAL REMINDER AND FLAG**

This patch is in support of the Improve Veteran Mental Health (IVMH) initiative, High Risk Mental Health (HRMH) - National Reminder & Flag. This patch will install four Health Summary Components, two Health Summary Types, a single Health Summary Object, and a single TIU/Health Summary object. The TIU/HS object will be used in the VA-MH HIGH RISK NO SHOW FOLLOW-UP Reminder Dialog distributed in PXR\*2\*18.

### **New Components, Types, and Objects in GMTS\*2.7\*99**

Four new entries are added to HEALTH SUMMARY COMPONENT (#142.1):

1. MAS CONTACTS - This component will display contact phone numbers for the patient along with contact information for emergency and NOK contacts, if available.
2. MAS MH CLINIC VISITS FUTURE - This component uses a Reminder Location List to help find the next appointment for the patient in any mental health clinic.
3. MH HIGH RISK PRF HX - This component will display current assignment status and assignment history of the Category II (local) High Risk for Suicide Patient Record Flag.
4. MH TREATMENT COORDINATOR - This component will display the Mental Health Treatment Coordinator assigned to this patient.

Two new entries are added to HEALTH SUMMARY TYPE (#142):

1. VA-MH HIGH RISK PATIENT - This Type contains the four Health Summary Components mentioned above, and is the basis for creating the VA-MH HIGH RISK PATIENT (TIU) Health Summary Object.
2. REMOTE HIGH RISK MH PATIENT - This Type contains the same components as #1 and allows viewing the aforementioned information from remote sites.

One new entry is added to HEALTH SUMMARY OBJECT (#142.5):

1. VA-MH HIGH RISK PATIENT (TIU) - This object is created from the VA-MH HIGH RISK PATIENT Health Summary Type and allows embedding the aforementioned information into a document. Its primary use here is to allow creation of the VA-MH HIGH RISK PATIENT TIU/HS object for use in the VA-MH HIGH RISK NO SHOW FOLLOW-UP Reminder Dialog.

One new entry is added to TIU DOCUMENT DEFINITION (#8925.1):

1. VA-MH HIGH RISK PATIENT - This object makes the information found in the VA-MH HIGH RISK PATIENT Health Summary Type available for use in Reminder Dialogs and other documents.

### **Pre/Post Installation Overview**

Prior to installing the patch, the HEALTH SUMMARY COMPONENT file (#142.1) needs to be examined for any ABBREVIATION entries that will conflict with the four new components exported with this patch. Each new national component along with its ABBREVIATION is listed here:

<u>NAME</u>	<u>ABBREVIATION</u>
MAS CONTACTS	CON
MAS MH CLINIC VISITS FUTURE	MHFV
MH HIGH RISK PRF HX	MHRF
MH TREATMENT COORIDNATOR	MHTC

The "C" cross-reference for the HEALTH SUMMARY COMPONENT file (#142.1) contains the ABBREVIATION for each component. Examine the global listing for this cross-reference to determine if any local components will need the ABBREVIATION field updated.

If an ABBREVIATION conflict is found, the "Create/Modify Health Summary Components" option of the GMTS IRM MAINTENANCE MENU should be used to edit the local component's ABBREVIATION.

This patch contains an installation routine (GMTSPI99) that will perform an environment check, do any necessary housekeeping, and then install the new Health Summary items.

The environment check will examine the HEALTH SUMMARY COMPONENT file (#142.1) to ensure there will not be any NAME (.01) or NUMBER (.001) collisions with the four new nationally deployed Health Summary Components. If any possible collisions are found, the install will be aborted until the issue is resolved. After the issue has been addressed, local IT staff can re-install the patch.

After the environment check, the PRE section of the routine will delete any previous versions of: the Reminder Exchange file used to deploy portions of the Health Summary items, the Health Summary Components, and the Health Summary Types. PRE will also re-index the HEALTH SUMMARY TYPE and HEALTH SUMMARY COMPONENT files along with rebuilding the Ad Hoc Health Summary.

After PRE, the POST section will create stub entries in file #142 for the remote Health Summary Type, and then call the silent Reminder Exchange install utility to install the remaining Health Summary items. Lastly, the POST routine will re-index the HEALTH SUMMARY TYPE and HEALTH SUMMARY COMPONENT files along with rebuilding the Ad Hoc Health Summary.

## **Other patches and components**

### **GMTS\*2.7\*29 – REMOTE DATA VIEWS**

### **GMTS\*2.7\*48 – REMOTE ONCOLOGY VIEW**

Health Summary patches 29 and 48 export components for using Remote Data Views. With all the proper patches installed, you may view remote patient data through CPRS. Before you can do this, you must have Master Patient Index/Patient Demographics (MPI/PD) and several other patches installed. Once these are in place and the proper parameters have been set, you can access remote data from other VA facilities.

Currently, remote data views are limited to predefined, nationally exported Health Summary Types. Remote data may not be viewed by either the Ad Hoc Health Summary type or locally/user developed Health Summary types.

You can view remote clinical data using any Health Summary Type that has an identically named Health Summary Type installed at both the local and remote sites. However, for non-nationally exported health summary reports, the content of the report is subject to the report structure and configuration defined at the remote site.

Patch 29 (GMTS\*2.7\*29) adds the following Remote Data Views types:

- REMOTE DEMO/VISITS/PCE (3M)
- REMOTE MEDS/LABS/ORDERS (3M)
- REMOTE TEXT REPORTS (3M)
- REMOTE CLINICAL DATA (3M)
- REMOTE CLINICAL DATA (1Y)
- REMOTE DEMO/VISITS/PCE (1Y)
- REMOTE MEDS/LABS/ORDERS (1Y)
- REMOTE TEXT REPORTS (1Y)
- REMOTE CLINICAL DATA (4Y)
- REMOTE LABS LONG VIEW (12Y)
- REMOTE LABS ALL (1Y)

REMOTE LABS ALL (3M)  
REMOTE DIS SUM/SURG/PROD (12Y)  
REMOTE OUTPATIENT MEDS (6M)  
REMOTE ONCOLOGY VIEW

See Chapter 3, section 2 in the Health Summary User Manual for more information on using Remote Data Views.

### **GMTS\*2.7\*45 – INTERDISCIPLINARY PROGRESS NOTES**

The purpose of this patch is to allow the Health Summary components 'Progress Notes' and 'Selected Progress Notes' to display the new interdisciplinary progress notes and all of the entries associated with the interdisciplinary note. The interdisciplinary note and all of the associated entries will be marked in the progress note components as follows:

<u>Note Type</u>	<u>Marked as</u>
Primary Note:	Interdisciplinary Note
Addendum to Primary	Interdisciplinary Note (addendum)
Child Note	Interdisciplinary Note Entry
Addendum to Child	Interdisciplinary Note Entry (addendum)

### **Patch GMTS\*2.7\*47 - CPRS Report Tab/NDBI/Misc Fixes**

A menu of options has been added, CPRS Reports Tab “Health Summary Types List,” that allows users to control the Health Summary Types and the order that the Health Summary Types are listed in the Health Summary Types box on the Reports Tab of CPRS. This menu option has four menu items to edit and display the users’ preferences.

### **Patch GMTS\*2.7\*48 - REMOTE ONCOLOGY VIEW**

This patch exports the REMOTE ONCOLOGY VIEW Health Summary Type and installs it in the HEALTH SUMMARY TYPE file (#142), providing Remote Data Views of Oncology Data. It also conducts a check to make sure the Oncology Component is installed in the Patient Data Exchange's (PDX) VAQ - DATA SEGMENT file (#394.71). This provides two methods for health care providers and cancer registrars to request and view oncology data on a patient seen at multiple sites: Remote Data Views for CPRS (GUI) users and Patient Data Exchange for List Manager users.

### **Patch GMTS\*2.7\*49 - Demographics/HS Types List**

A menu of options has been added, “CPRS Health Summary Display/Edit Site Defaults,” that allows IRM/Managers to control which Health Summary Types are on the reports tab and the order that the Health Summary Types appear in for the site. These site defaults will be used for users who do not have personal preferences set. This menu has four menu items to edit and display defaults for the site.

GMTS\*2.7\*50 Spinal Cord Dysfunction Update  
 GMTS\*2.7\*51 Radiology fixes  
 GMTS\*2.7\*52 Problem List HNC/MST Changes  
 GMTS\*2.7\*53 Demographics/Progress Notes Fixes  
 GMTS\*2.7\*54 Oncology ICD-O-3 Implementation  
 GMTS\*2.7\*55 Demographics/Progress Note Fixes  
 GMTS\*2.7\*56 DIVISION PARAMETER/DEMOGRAPHICS AND OTHER FIXES  
 GMTS\*2.7\*57 SURGERY DATA EXTRACTS

**GMTS\*2.7\*58 HS Objects and CNB/ADR/NOK/SII Components**

A menu of options was added, “Health Summary Objects Menu” that allows IRM/Managers to create Health Summary Objects to be used inside other documents. This menu also includes the ability to view, test, and export/import the Health Summary Objects. This patch also exports the new file HEALTH SUMMARY OBJECTS field #142.5, to store the Health Summary Object characteristics.

GMTS\*2.7\*59 BLOOD BANK COMPONENTS  
 GMTS\*2.7\*60 Race and Ethnicity (Demographics)  
 GMTS\*2.7\*61 Remote Medicine Report Fix  
 GMTS\*2.7\*62 MED/RXIV/HF/Miscellaneous  
 GMTS\*2.7\*63 Selection of Individual Health Factors  
 GMTS\*2.7\*64 TWEAK TO STANDARD REMOTE HEALTH SUMMARIES  
 GMTS\*2.7\*65 Non VA Medications  
 GMTS\*2.7\*66 CPRS HS REPORT ALLOCATION ERRORS  
 GMTS\*2.7\*67 NOT USED  
 GMTS\*2.7\*68 TRANSITIONAL PHARMACY HS OBJECT/TYPE  
 GMTS\*2.7\*69 Health Summary Resequencing/Medicine Correction  
 GMTS\*2.7\*70 HS Utilities, MXSTR Error  
 GMTS\*2.7\*70 GMTS SCHEDULING REPLACEMENT UPDATE  
 GMTS\*2.7\*71 CTD - HS Code Text Descriptors  
 GMTS\*2.7\*72 ONCOLOGY FORDS IMPLEMENTATION  
 GMTS\*2.7\*73 CORRECT BRANCH OF SERVICE IN DEMOGRAPHIC DISPLA  
 GMTS\*2.7\*74 HEALTH SUMMARY GAF COMPONENT  
 GMTS\*2.7\*75 RESTORE DISPLAY OF CLINICAL REMINDERS DISCLAIME  
 GMTS\*2.7\*76 ALPHA MODIFIERS NOT SHOWING AND COMMENTS PRINTI  
 GMTS\*2.7\*77 MENTAL HEALTH COMPONENTS  
 GMTS\*2.7\*78 NEW VITALS API AND OUTPATIENT PHARMACY API  
 GMTS\*2.7\*79 CORRECT REFERENCE RANGES ON REPORT TABS  
 GMTS\*2.7\*80 HS - PCE Components  
 GMTS\*2.7\*80 PHARMACY ENCAPSULATION  
 GMTS\*2.7\*81 VHA Enterprise Standard Title Display in Health C

GMETS\*2.7\*82 E-SIG BLOCK/HEALTH FACTORS/CLINICAL REMINDERS F  
GMETS\*2.7\*83 DIETETICS COMPONENT UPDATE  
GMETS\*2.7\*84 ADDING REASON FOR STUDY DISPLAY TO RADIOLOGY RE  
GMETS\*2.7\*85 RESTRICT SENSITIVE DATA ON HEALTH SUMMARY PRINT  
GMETS\*2.7\*87 NATIONAL HEALTH SUMMARY TYPES FOR SKIN RISK ASSMT  
GMETS\*2.7\*89 SUPPORT OF CLINICAL REMINDERS ENHANCEMENTS

### **GMETS\*2.7\*90 - ADD EARLIEST APPROPRIATE DATE TO HS ADHOC REPORT**

Addition of the EARLIEST APPROPRIATE DATE (New Service Request 20051008) to the Health Summary Adhoc CNB - Brief Consults Report.

The EARLIEST APPROPRIATE DATE is the earliest appropriate date that the patient should be seen. This data field was added with CPRS v28.

### **GMETS\*2.7\*91 - MHAL AND MHAS COMPONENTS NOT SHOWING ALL ADMINISTRATIONS**

This patch will correct a defect in the MHAL and MHAS Health Summary components where all Mental Health instruments administered through the CPRS GUI do not display.

### **GMETS\*2.7\*92 – CORRECTIONS TO MEDICATION WORKSHEET -**

Patches PSO\*7\*316 and GMETS\*2.7\*92 correct issues reported with the Tool #2: Medication Worksheet. The Health Summary patch GMETS\*2.7\*92 will require patch PSO\*7\*316 and will create a national entry in the HEALTH SUMMARY COMPONENT file (#142.1) for Tool #2: Medication Worksheet.

### **GMETS\*2.7\*95 – CORRECT B CROSS-REFERENCE**

Currently, the NAME field (.01) of the HEALTH SUMMARY OBJECTS file (#142.5) had a 'B' cross-reference that only stored the first 30 characters of the name. When attempting to install a TIU/HS Object in Clinical Reminder Exchange, a FileMan error: "The update failed, UPDATE^DIE returned the following error message" would occur when the receiving site has multiple Health Summary Object entries that are not unique until after the 30 character length.

This patch corrects this problem by modifying the 'B' cross-reference to store the full 60 characters.

## Released Patches for Health Summary 2.7

Patch #	Description	Release Date
GMTS*2.7*1	Syntax Error in GMTS	12/28/95
GMTS*2.7*2	Visit Dates, Task &	02/29/96
GMTS*2.7*3	LAB Anatomic Path Ac	09/06/96
GMTS*2.7*4	Medicine Data w/ Quo	04/12/96
GMTS*2.7*5	CVP, EADT, Nightly T	05/13/96
GMTS*2.7*6	Patient Selection	06/06/96
GMTS*2.7*7	HS Utilities, MXSTR	11/24/96
GMTS*2.7*8	HS - PCE Components	08/22/96
GMTS*2.7*9	Lab Orders/Surgical	11/08/96
GMTS*2.7*10	PCE Components	03/04/97
GMTS*2.7*11	SURGERY COMPONENT FI	10/23/98
GMTS*2.7*12	TIU-COMPATIBLE COMPO	09/29/97
GMTS*2.7*13	Spinal Cord Dysfunct	01/06/97
GMTS*2.7*14	Updated Rad/Nuc Med	05/15/97
GMTS*2.7*15	Pharmacy & Current O	06/05/98
GMTS*2.7*16	Health Summary Fixes	10/07/97
GMTS*2.7*17	Blood Bank Component	10/07/97
GMTS*2.7*18	Code change to accom	03/27/98
GMTS*2.7*19	Duplicates on CVP co	10/10/97
GMTS*2.7*20	UPDATED COMPONENTS f	06/05/98
GMTS*2.7*21	Report headings and	03/30/98
GMTS*2.7*22	Reminders-historical	11/10/97
GMTS*2.7*23	NEW REMINDER COMPONE	02/05/98
GMTS*2.7*24	Patient selection &	03/30/98
GMTS*2.7*25	Component fixes	09/10/98
GMTS*2.7*26	Imaging Component	09/09/99
GMTS*2.7*27	Y2K COMPLIANCE CHANG	04/17/98
GMTS*2.7*28	Y2K, NKA, LAB, VITAL	03/05/99
GMTS*2.7*29	Remote Data View/Pri	05/17/01
GMTS*2.7*30	HS Type Lookup/Concu	08/06/99
GMTS*2.7*31	Inactive Clinics	10/12/99
GMTS*2.7*32	Fix HS Type Lookup	09/28/99
GMTS*2.7*33	Progress Notes by Vi	10/13/99
GMTS*2.7*34	Clinical Reminder Di	06/21/00
GMTS*2.7*35	Vitals/GAF/Oncology/	05/19/00
GMTS*2.7*36	Oncology/Lab/Ad Hoc	12/06/99
GMTS*2.7*37	CPT Modifiers and RX	07/28/00
GMTS*2.7*40	Undefined Variable D	09/01/00
GMTS*2.7*42	Oncology Component C	12/21/00
GMTS*2.7*43	HFS/Window Print Fix	05/07/01
GMTS*2.7*44	Error in GAF Score	12/27/00
GMTS*2.7*45	Interdisciplinary Pr	04/20/01
GMTS*2.7*46	Consults Brief Component	06/28/01
GMTS*2.7*47	CPRS Report Tab/NDBI	10/04/01
GMTS*2.7*48	Remote Oncology View	09/05/01
GMTS*2.7*50	Spinal Cord Dysfunct	02/01/02
GMTS*2.7*49	Demographics/HS Type	03/05/02

<b>Released Patches for Health Summary 2.7 (cont'd)</b>		
GMTS*2.7*51	Radiology fixes	04/25/02
GMTS*2.7*54	Oncology ICD-O-3 Impleme	05/07/02
GMTS*2.7*55	Demographics/Progress No	05/23/02
GMTS*2.7*52	Problem List HNC/MST Cha	05/24/02
GMTS*2.7*56	Division Parameter/Demog	09/10/02
GMTS*2.7*57	Surgery Data Extracts	9/7/04
GMTS*2.7*58	HS Objects and Components	1/03
GMTS*2.7*59	BLOOD BANK COMPONENTS	12/6/02
GMTS*2.7*60	Race and Ethnicity (Demographics)	1/15/03
GMTS*2.7*61	Remote Medicine Report Fix	12/10 /02
GMTS*2.7*62	MED/RXIV/HF/Miscellaneous	9/23/03
GMTS*2.7*63	Selection of Individual Health Factors	2/15/05
GMTS*2.7*64	TWEAK TO STANDARD REMOTE HEALTH SUMMARIES	10/7/03
GMTS*2.7*65	Non VA Medications	5/20/04
GMTS*2.7*66	CPRS HS REPORT ALLOCATION ERRORS	7/29/04
GMTS*2.7*67	NOT USED	
GMTS*2.7*68	TRANSITIONAL PHARMACY HS OBJECT/TYPE	9/12/03
GMTS*2.7*69	Health Summary Resequencing/Medicine Correction	2/23/04
GMTS*2.7*70	GMTS SCHEDULING REPLACEMENT UPDATE	12/27/06
GMTS*2.7*71	CTD - HS Code Text Descriptors	12/08/04
GMTS*2.7*72	ONCOLOGY FORDS IMPLEMENTATION	4/01/05
GMTS*2.7*73	CORRECT BRANCH OF SERVICE IN DEMOGRAPHIC DISPLAY	7/18/05
GMTS*2.7*74	HEALTH SUMMARY GAF COMPONENT	11/21/05
GMTS*2.7*75	RESTORE DISPLAY OF CLINICAL REMINDERS DISCLAIMER	10/24/06
GMTS*2.7*76	ALPHA MODIFIERS NOT SHOWING AND COMMENTS PRINTI	5/04/06
GMTS*2.7*77	MENTAL HEALTH COMPONENTS	1/07/08
GMTS*2.7*78	NEW VITALS API AND OUTPATIENT PHARMACY API	4/24/06
GMTS*2.7*79	CORRECT REFERENCE RANGES ON REPORT TABS	12/22/05
GMTS*2.7*80	PHARMACY ENCAPSULATION	8/20/08
GMTS*2.7*81	VHA Enterprise Standard Title Display in Health	5/08/06
GMTS*2.7*82	E-SIG BLOCK/HEALTH FACTORS/CLINICAL REMINDERS F	9/19/08
GMTS*2.7*83	DIETETICS COMPONENT UPDATE	9/28/07
GMTS*2.7*84	ADDING REASON FOR STUDY DISPLAY TO RADIOLOGY RE	8/20/08
GMTS*2.7*85	RESTRICT SENSITIVE DATA ON HEALTH SUMMARY PRINT	3/19/08
GMTS*2.7*87	NATIONAL HEALTH SUMMARY TYPES FOR SKIN RISK ASSESSMENT	10/30/07
GMTS*2.7*89	SUPPORT OF CLINICAL REMINDERS ENHANCEMENTS	9/16/09
GMTS*2.7*90	ADD EARLIEST APPROPRIATE DATE TO HS ADHOC REPORT	3/11



GMTS*2.7*91	MHAL AND MHAS COMPONENTS NOT SHOWING ALL ADMINISTRATIONS	6/26/09
GMTS*2.7*92	CORRECTIONS TO MEDICATION WORKSHEET (TOOL #2)	4/28/11
GMTS*2.7*93	COMBINE UNITS ON TRANSFUSION REPORT	6/22/10
GMTS*2.7*95	CORRECT B CROSS-REFERENCE	7/5/11
GMTS*2.7*99	HIGH RISK MENTAL HEALTH PATIENT – NATIONAL REMINDER AND FLAG	1/12



## Health Summary Implementation & Maintenance

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The Health Summary Maintenance Menu contains the following options for implementing and maintaining Health Summary.

Option	Description
<b>Disable/Enable Health Summary Component</b>	Selectively enable or disable Health Summary Components. A disable action may be identified as either temporary or permanent. When a component is temporarily disabled, an “OUT OF ORDER MESSAGE” may be entered and displayed with the component. When permanently disabled, the component is not displayed.
<b>Create/Modify Health Summary Components</b>	Create/modify new Health Summary components, either by duplication and renaming of existing components or by entering all appropriate fields for a component created on-site.
<b>Edit Ad Hoc Health Summary Type</b>	Enter/edit a component's default parameters (Time and Occurrence limits, Selection Items, Hospital Location Displayed, ICD Text Displayed, Provider Narrative Displayed, Header names, and whether to print component headers if no data is available), or delete components of the Ad Hoc Health Summary Type.
<b>Rebuild Ad Hoc Health Summary Type</b>	Reloads the Ad Hoc Health Summary Type with ALL (previously defined) components, including any defined by the site, and, optionally, all DISABLED components sequenced alphabetically by name. Disabled components will not be displayed, but when they are re-enabled will automatically show up in the Ad Hoc Health Summary if they are included in the rebuild.
<b>Resequence a Health Summary Type</b>	Resequence the components of a given Health Summary Type from 5, in increments of 5 (e.g., 5, 10, 15, 20,...,5 <i>n</i> where <i>n</i> is the total number of components).

<b>Option</b>	<b>Description</b>
<b>Create/Modify Health Summary Type</b>	Create a new or modify an existing health summary type. New types created by this option automatically define the type's owner as the creator, unless the creator holds the GMTSMGR security key. If the creator has this key, the GMTSMGR holder may designate anyone as the owner.
<b>Health Summary Objects Menu</b>	Use this option to access utilities to add/edit a Health Summary Object, display the characteristics of a Health Summary Object, test a Health Summary Object, or export/import a Health Summary Object.
<b>Edit Health Summary Site Parameters</b>	Edit four Health Summary parameters to local specifications: 1) PROMPT FOR ACTION PROFILE; editing this parameter to YES allows users to be prompted for printing a patient's Outpatient Pharmacy Action Profile in tandem with a health summary. 2) INCLUDE BAR CODE ON ACTION PROFILES; editing this parameter to YES allows bar codes to be printed with Action Profiles. 3) INCLUDE COMMENTS ON LABS; editing this parameter to YES causes comments to be printed in the Chemistry and Hematology, the Lab Test Selected, and the Lab Cumulative components. 4) SPOOL DEVICE; specify spool device name to which Health Summary output can be directed during a PDX request.

## Set Up Site Parameters

Use the Edit Health Summary Site Parameters option in the Health Summary Maintenance Menu [GMTS IRM/ADPAC MAINT MENU] to review and set up the site parameters. These parameters allow users to:

- Print an Outpatient Pharmacy Action Profile in tandem with a Health Summary.
- Print bar codes when Action Profiles are printed.
- Present Lab comments at display indicating comments are available for the Lab Chemistry and Hematology, the Lab Cumulative Selected, and the Lab Tests Selected components, or present the !! symbol to indicate comments are available for the Chemistry and Hematology and Lab Tests Selected components.
- Specify a spool device where PDX requests will be stored .

See example on next page.

## Example

```
Select Health Summary Maintenance Menu Option: 7 Edit Health Summary Site
Parameters
Select HEALTH SUMMARY PARAMETERS: ?
ANSWER WITH HEALTH SUMMARY PARAMETERS NAME:
HOSPITAL

        YOU MAY ENTER A NEW HEALTH SUMMARY PARAMETERS, IF YOU WISH
        NAME MUST BE HOSPITAL
Select HEALTH SUMMARY PARAMETERS: HOSPITAL
PROMPT FOR ACTION PROFILE: YES// ??
        If this parameter is set to Y or YES, the user will be prompted to
        include the Outpatient Pharmacy Action Profile when printing Health
        Summaries by location (both interactive and batch mode) and by patient.
        CHOOSE FROM:
                Y          yes
                N          no
PROMPT FOR ACTION PROFILE: YES// Y YES
INCLUDE BAR CODES ON ACTION PROFILES: ?
        Enter YES to include bar codes when Action Profiles are printed by
        Health Summary
        Choose from:
                Y          yes
                N          no
INCLUDE BAR CODES ON ACTION PROFILES: YES// <RET> YES
INCLUDE COMMENTS FOR LABS: YES// ??
        If this parameter is set to Y or YES, the Chemistry & Hematology, the
        Lab Tests Selected, and the Lab Cumulative Selected components will
        present comments for results. For the Chemistry & Hematology and the
        Lab Tests Selected components, the comments will be displayed
        immediately following the results. For the Lab Cumulative Selected
        components, a lower-case letter will be displayed to the left of the
        date for entries with comments. Comments will be displayed after all
        the results are displayed , with the comments linked by the lower-case
        letter. Up to 26 comments can be included.

        If blank, N or NO, the Chemistry & Hematology and the Lab Tests
        components will present the symbol "!!" next to tests which include
        comments, and a footnote referring the user to the Lab Interim Report.
        CHOOSE FROM:
                Y          yes
                N          no
INCLUDE COMMENTS FOR LABS: YES// <RET> YES
SPOOL DEVICE: SPOOL// ??
        This is the SPOOL DEVICE to which Health Summary output can be directed
        during a PDX request for one or more Health Summary components.
        Choose from:
                SPOOL          SPOOL TO VMS          DSAB:[MUMPS,DEV MGR]

SPOOL DEVICE : SPOOL

Select HEALTH SUMMARY PARAMETERS: <RET>
```

## Ad Hoc Health Summaries

Temporary (ad hoc) health summaries can be created “on-the-fly” and run for individual patients, as follows:

1. First, select a combination of components from a menu of all available components.
2. Next, (if applicable) specify time limits, occurrence limits, hospital location, ICD text display, provider narrative display, and selection items for any of the components, or accept site-defined defaults.
3. Then, select a patient and run the resulting health summary.

Both pre-defined and ad hoc health summaries may be run interactively on your terminal, or directed to any printer. Pre-defined health summary types can also be queued to run nightly for all patients at any specified location(s). Either interactive or batch-mode print-by-location health summaries may also be printed “in tandem” with the Outpatient Pharmacy Action Profile (including bar codes) for each of the patients at the selected location.

## CPRS Interface

Health Summary V. 2.7 interfaces with the Computerized Patient Record System (CPRS) to provide Order Entry users with an integrated view of both *orders* (from CPRS) and *results* (from Health Summary). This interface, in turn, enhances Health Summary by allowing Health Summary users:

- *Multiple Patient Selection.*  
You can select multiple patients from ward, clinic, treating specialty, attending physicians, personal or team lists. Health Summary uses enhanced patient look-up routines in CPRS for reporting results.

## Relationship to Integrated Billing’s Encounter Form Utilities

The Integrated Billing package (Encounter Form Utilities) includes a Print Manager that allows sites to define reports that should print along with encounter forms for a specific clinic or division and for specified appointments. One of the options, “Define Available Health Summary,” allows a health summary to be made available for use by the print manager. See the *IB Encounter Form Utilities User Manual* for further information.

## Nightly Batch Processing

The Health Summary package allows coordinators to schedule batch processing of health summaries for patients in a particular ward, or to schedule batch processing of health summaries a specified number of days before patients are scheduled for clinic visits or operating rooms. The benefits of batch processing are:

- 1) It enables the clinic to have the most currently available clinical information when the patient arrives for the appointment, and
- 2) Processing of the prints takes place during non-peak computer hours.

To use this feature the IRM Service must first use the option Schedule/Unschedule Options on the the TaskMan menu, and schedule the GMTS TASK STARTUP option to initiate nightly batch printing. (See page 31 in the *Health Summary Installation Guide*.) Each time this option runs, it uses the parameters set up by the Health Summary Coordinator in the Set up Batch Print Locations option. For Version 2.7 of Health Summary, this option has been updated to recognize non-workdays. For clinics and operating rooms, if it is set up to print two days in advance, Tuesday's clinics will print on Friday rather than on Sunday. If Tuesday happens to be a holiday, the Wednesday clinics will print on Friday.

## Health Summary Components Headers and Abbreviations

Use the Information Menu option (available in all three Health Summary user menus) to get an online listing of the information contained in each health summary component or health summary type.

## Customized Health Summary Types

A user with access to the Coordinator's or Enhanced menu can create a customized health summary type. Use the Create/Modify Health Summary Type menu option located on the Health Summary Enhanced Menu or the Build Health Summary Type submenu of the Health Summary Coordinator's menu. Select the desired components, and (depending on the data required by the selected components) apply time limits or maximum occurrence limits to components which are date-sensitive. You may also apply ICD text, provider narrative, selection items, and header names for components that allow these to be specified.

Users who do not have access to the enhanced or coordinator's menus can request a customized health summary type from their IRMS or Health Summary coordinator. The form entitled "Request for Health Summary Type," located in



Appendix A of the *Health Summary User Manual*, is a convenient way to submit such requests.

### Customizing the Ad Hoc Health Summary Type

You can also customize the Ad Hoc Health Summary Type with the Edit Ad Hoc Health Summary Type option on the Maintenance Menu. This option lets you modify time and/or occurrence limits, hospital location displayed, ICD text displayed, provider narrative displayed, header names, or assign selection items (tests like WBC, Glucose) to the *selected* health summary components (Lab Cumulative Selected, Lab Cumulative Selected 1-4, Lab Tests Selected, Measurement Selected, Vital Signs Selected, and Radiology Impression Selected, etc.). Consult with your clinical coordinator and/or users about which selection items they would like to have on their Health Summaries.

You may select individual components and edit their default parameters, or use the ^LOOP feature at the Select COMPONENT: prompt to loop through all of the components, editing the default values as you go.

**NOTE:** When selecting components from the Ad Hoc Health Summary menu, entering “ALL” allows all components to be selected. If the first three characters of a HEADER NAME for a component are designated as “All,” however, then only the defined component will be selected. Avoid conflicts and loss of functionality by not using “all” at the front of new header names.

### Edit Ad Hoc Health Summary Type Example

**NOTE:** Bold-faced text indicates user entries.

```
Select Health Summary Overall Menu Option Name: Health Summary Maintenance Menu
 1   Disable/Enable Health Summary Component
 2   Create/Modify Health Summary Components
 3   Edit Ad Hoc Health Summary Type
 4   Rebuild Ad Hoc Health Summary Type
 5   Resequence a Health Summary Type
 6   Create/Modify Health Summary Type
 7   Edit Health Summary Site Parameters

Select Health Summary Maintenance Menu Option: Edit Ad Hoc Health Summary Type
|
Edit Ad Hoc Health Summary Type

>>> EDITING the GMTS HS ADHOC OPTION Health Summary Type
SUPPRESS PRINT OF COMPONENTS WITHOUT DATA:

Do you wish to review the Summary Type structure before continuing? NO// <RET>
Select COMPONENT: PROB
 1   PROBLEM LIST ACTIVE           PLA
 2   PROBLEM LIST ALL             PLL
 3   PROBLEM LIST INACTIVE        PLI
CHOOSE 1-3: 1
SUMMARY ORDER: 5//<RET> 5
ICD TEXT DISPLAYED: ??
    This field controls hows ICD text is displayed in components where ICD
    Text applies (e.g., PCE Outpatient Encounters, PCE Outpatient Diagnosis
    and Problem List All). The applicable component display/print can be
    customized to include ICD Text in the following format: code and long
```

description, code and short description, code only, long description only or nothing. This control is independent of whether provider narrative is displayed -- either or both may be specified.

Choose from:

L long text  
S short text  
C code only  
T text only  
N none

ICD TEXT DISPLAYED: **S** short text

PROVIDER NARRATIVE DISPLAYED: **??**

This field controls whether provider narrative is displayed or not. It applies to components where provider narrative is applicable (e.g., PCE Outpatient Encounters, PCE Outpatient Diagnosis, Problem List All). This control is independent of whether or not ICD text is displayed -- either or both may be specified. If not specified, provider narrative will be displayed by default.

Choose from:

Y yes  
N no

PROVIDER NARRATIVE DISPLAYED: **Y** yes

HEADER NAME: Active Problems// **<RET>**

Select COMPONENT: **<RET>**

Do you wish to review the Summary Type structure before continuing? NO// **<RET>YES**  
HEALTH SUMMARY TYPE INQUIRY

Type Name: GMTS HS ADHOC OPTION  
Title: Ad Hoc Health Summary Type  
Owner: LOCK: GMTSMGR

SUPPRESS PRINT OF COMPONENTS WITHOUT DATA:

Abb.	Order	Component Name	Max Occ	Hosp Time	ICD Loc	ICD Text	Prov Narr	Selection
PLA	5	Active Problems				short	yes	

\* = Disabled Components

Select COMPONENT:<RET>

## Routine Descriptions

---

**Namespace:** *GMTS*

XUPRROU (List Routines) prints a list of any or all of the Health Summary routines. This option is found on the XUPR-ROUTINE-TOOLS menu on the XUPROG (Programmer Options) menu, which is a sub-menu of the EVE (Systems Manager Menu) option.

```
Select Systems Manager Menu Option: programmer Options
Select Programmer Options Option: routine Tools
Select Routine Tools Option: list Routines
Routine Print
Want to start each routine on a new page: No// [ENTER]

routine(s) ? > GMTS*
```

The first line of each routine contains a brief description of the general function of the routine. Use the Kernel option XU FIRST LINE PRINT (First Line Routine Print) to print a list of just the first line of each GMTS subset routine.

```
Select Systems Manager Menu Option: programmer Options
Select Programmer Options Option: routine Tools
Select Routine Tools Option: First Line Routine Print
PRINTS FIRST LINES

routine(s) ? >GMTS*
```



## Files and Globals List

---

The following is a list of the files contained in the Health Summary package, including file number, name, global location, and an indicator if data comes with the file.

<u>Number</u>	<u>Name</u>	<u>Global</u>	<u>Data</u>
142	HEALTH SUMMARY TYPE	^GMT(142,	YES

### Description

This file contains the structure of a health summary. Components from the Health Summary Components file (142.1) may be selected and restricted by number of occurrences or time limits. The original creator of a type of Health Summary is the owner of that type. Health summaries that are “owned” may not be modified or deleted by anyone except the Clinical Coordinator. “Owned” Health Summaries may be used by other users to print patient information.

142.1	HEALTH SUMMARY COMPONENT	^GMT(142.1,	YES
-------	--------------------------	-------------	-----

### Description

This file contains all components which may be used to create a Health Summary. These entries are typically defined by a programmer. Components which represent packages that are not in use may be disabled, so they will not be selected by users to build new types of health summary reports.

142.5	HEALTH SUMMARY OBJECTS	^GMT(142.5,	NO
-------	------------------------	-------------	----

### Description

This file contains Health Summary Types that are to be embedded into another document as an object. The bulk of this file is made up of display flags which control how the object is to be embedded into the other document.

142.98	HEALTH SUMMARY USER PREFERENCES	^GMT(142.98,	YES
--------	---------------------------------	--------------	-----

### Description

This file determines how the list of Health Summary Types for the CPRS GUI report tab is to be organized (APPEND or OVERWRITE) for user selection. There are three major classes of Health Summary types, National (remote data view), user defined and system defined. User and system Health Summary Types are defined in the Kernel Parameters file. Append creates a single list, removing duplicates, and keeps the National Health Summary types group together. Overwrite stops building the list once a single group of Health Summary Types (User or System) is added to the list.

**142.99** HEALTH SUMMARY PARAMETERS ^GMT(142.99, NO

**Description**

This file contains any site parameters that apply to the Health Summary package. Currently there are four site parameters: 1) PROMPT FOR ACTION PROFILE; 2) INCLUDE BAR CODE ON ACTION PROFILES; 3) INCLUDE COMMENTS ON LABS; 4) SPOOL DEVICE



## Exported Menus, Options, and Function

---

The Health Summary Overall Menu [GMTS MANAGER] contains four menus:

1. Health Summary Menu [GMTS USER]
2. Health Summary Enhanced Menu [GMTS ENHANCED USER]
3. Health Summary Coordinator's Menu [GMTS COORDINATOR]
4. Health Summary Maintenance Menu [GMTS IRM/ADPAC MAINT MENU]

Assign these menus as follows:

1. Give the Health Summary Menu [GMTS USER] menu to users who only need to print or display health summaries.
2. Give the Health Summary Enhanced Menu [GMTS ENHANCED USER] menu to users who need to create, modify, or delete their *own* health summary types, in addition to printing health summaries.
3. Give the Health Summary Coordinator's Menu [GMTS COORDINATOR] menu to users who need to print or display health summaries, and who will also need to create, modify, or delete health summary types, and set up nightly batch printing at specified locations.
4. Give the Health Summary Maintenance Menu [GMTS IRM/ADPAC MAINT MENU] to IRM staff or the Clinical Coordinator for any implementation and maintenance issues in Health Summary. This menu contains options to disable/enable health summary components for selection/display, create/modify new health summary components, edit and rebuild the Ad Hoc Health Summary Type, resequence the components in a health summary type, create/modify a health summary type, delete a health summary type, and edit health summary site parameters.
5. If an IRM staff member or the Clinical Coordinator needs access to all menus, give the Health Summary Overall Menu [GMTS MANAGER] to those users rather than assigning each menu option separately.



## Health Summary Overall Menu [GMTS MANAGER]

**NOTE:** New menus and options (since the original release of v2.7) are highlighted in blue.

### 1. Health Summary Coordinator's Menu [GMTS COORDINATOR]

- 1 Print Health Summary Menu ... [GMTS HS MENU]
  - 1 Patient Health Summary [GMTS HS BY PATIENT]
  - 2 Ad Hoc Health Summary [GMTS HS ADHOC]
  - 3 Range of Dates Patient Health Summary [GMTS HS BY PATIENT & DATE RANG]
  - 4 Visit Patient Health Summary [GMTS HS BY PATIENT & VISIT]
  - 5 Hospital Location Health Summary [GMTS HS BY LOC]
  - 6 Batch Print of All Clinics by Visit Date [GMTS HS FOR ALL CLINICS]
- 2 Build Health Summary Type Menu ... [GMTS BUILD MENU]
  - 1 Create/Modify Health Summary Type [GMTS TYPE ENTER/EDIT]
  - 2 Delete Health Summary Type [GMTS TYPE DELETE]
- 3 Information Menu ... [GMTS INFO ONLY MENU]
  - 1 Inquire about a Health Summary Type [GMTS TYPE INQ]
  - 2 List Health Summary Types [GMTS TYPE LIST]
  - 3 Inquire about a Health Summary Component [GMTS COMP INQ]
  - 4 List Health Summary Components [GMTS COMP LIST]
  - 5 List Health Summary Component Descriptions [GMTS COMP DESC LIST]
- 4 Print Health Summary Menu ... [GMTS HS MENU]
  - 1 Patient Health Summary [GMTS HS BY PATIENT]
  - 2 Ad Hoc Health Summary [GMTS HS ADHOC]
  - 3 Range of Dates Patient Health Summary [GMTS HS BY PATIENT & DATE RANG]
  - 4 Visit Patient Health Summary [GMTS HS BY PATIENT & VISIT]
  - 5 Hospital Location Health Summary [GMTS HS BY LOC]
  - 6 Batch Print of All Clinics by Visit Date [GMTS HS FOR ALL CLINICS]
- 3 Set-up Batch Print Locations [GMTS HS BY LOC PARAMETERS]
- 4 List Batch Health Summary Locations [GMTS TASK LOCATIONS LIST]
- 5 CPRS Reports Tab 'Health Summary Types List' Menu [GMTS GUI REPORTS LIST MENU]
  - 1 Display 'Health Summary Types List' Defaults [GMTS GUI HS LIST DEFAULTS]
  - 2 Precedence of 'Health Summary Types List' [GMTS GUI HS LIST PRECEDENCE]
  - 3 Method of compiling 'Health Summary Types List' [GMTS GUI HS LIST METHOD]
  - 4 Edit 'Health Summary Types List' Parameters [GMTS GUI HS LIST PARAMETERS]

### 2. Health Summary Enhanced Menu [GMTS ENHANCED USER]

- 1 Patient Health Summary [GMTS HS BY PATIENT]
- 2 Ad Hoc Health Summary [GMTS HS ADHOC]
- 3 Range of Dates Patient Health Summary [GMTS HS BY PATIENT & DATE RANG]
- 4 Visit Patient Health Summary [GMTS HS BY PATIENT & VISIT]
- 5 Hospital Location Health Summary [GMTS HS BY LOC]
- 6 Information Menu ... [GMTS INFO ONLY MENU]
  - 1 Inquire about a Health Summary Type [GMTS TYPE INQ]
  - 2 List Health Summary Types [GMTS TYPE LIST]
  - 3 Inquire about a Health Summary Component [GMTS COMP INQ]
  - 4 List Health Summary Components [GMTS COMP LIST]
  - 5 List Health Summary Component Descriptions [GMTS COMP DESC LIST]
- 7 Create/Modify Health Summary Type [GMTS TYPE ENTER/EDIT]

- 8 Delete Health Summary Type [GMTS TYPE DELETE]
- 9 CPRS Reports Tab 'Health Summary Types List' Menu [GMTS GUI REPORTS LIST MENU]
  - 1 Display 'Health Summary Types List' Defaults [GMTS GUI HS LIST DEFAULTS]
  - 2 Precedence of 'Health Summary Types List' [GMTS GUI HS LIST PRECEDENCE]
  - 3 Method of compiling 'Health Summary Types List' [GMTS GUI HS LIST METHOD]
  - 4 Edit 'Health Summary Types List' Parameters [GMTS GUI HS LIST PARAMETERS]

### **3. Health Summary Menu [GMTS USER]**

- 1 Patient Health Summary [GMTS HS BY PATIENT]
- 2 Ad Hoc Health Summary [GMTS HS ADHOC]
- 3 Range of Dates Patient Health Summary [GMTS HS BY PATIENT & DATE RANG]
- 4 Visit Patient Health Summary [GMTS HS BY PATIENT & VISIT]
- 5 Hospital Location Health Summary [GMTS HS BY LOC]
- 6 Information Menu ... [GMTS INFO ONLY MENU]
  - 1 Inquire about a Health Summary Type [GMTS TYPE INQ]
  - 2 List Health Summary Types [GMTS TYPE LIST]
  - 3 Inquire about a Health Summary Component [GMTS COMP INQ]
  - 4 List Health Summary Components [GMTS COMP LIST]
- 7 CPRS Reports Tab 'Health Summary Types List' Menu [GMTS GUI REPORTS LIST MENU]
  - 1 Display 'Health Summary Types List' Defaults [GMTS GUI HS LIST DEFAULTS]
  - 2 Precedence of 'Health Summary Types List' [GMTS GUI HS LIST PRECEDENCE]
  - 3 Method of compiling 'Health Summary Types List' [GMTS GUI HS LIST METHOD]
  - 4 Edit 'Health Summary Types List' Parameters [GMTS GUI HS LIST PARAMETERS]

### **4. Health Summary Maintenance Menu [GMTS IRM/ADPAC MAINT MENU]**

- 1 Disable/Enable Health Summary Component [GMTS IRM/ADPAC ENABLE/DISABLE]
- 2 Create/Modify Health Summary Components [GMTS IRM/ADPAC COMP EDIT]
- 3 Edit Ad Hoc Health Summary Type [GMTS IRM/ADPAC ADHOC EDIT]
- 4 Rebuild Ad Hoc Health Summary Type [GMTS IRM/ADPAC ADHOC LOAD]
- 5 Resequence a Health Summary Type [GMTS IRM/ADPAC TYPE RESEQUENCE]
- 6 Create/Modify Health Summary Type [GMTS TYPE ENTER/EDIT]
- 7 Edit Health Summary Site Parameters [GMTS IRM/ADPAC PARAMETER EDIT]
- 8 Health Summary Objects Menu [GMTS OBJ MENU]
  - 1 Create/Modify Health Summary Object [GMTS OBJ ENTER/EDIT]
  - 2 Inquire about a Health Summary Object [GMTS OBJ INQ]
  - 3 Test a Health Summary Object [GMTS OBJ TEST]
  - 4 Delete Health Summary Object [GMTS OBJ DELETE]
  - 5 Export/Import a Health Summary Object [GMTS OBJ EXPORT/IMPORT]
    - 1 Export a Health Summary Object [GMTS OBJ EXPORT]
    - 2 Import/Install a Health Summary Object [GMTS OBJ IMPORT/INSTALL]

- 9 CPRS Reports Tab 'Health Summary Types List' Menu [GMTS GUI REPORTS LIST MENU]

- 1 Display 'Health Summary Types List' Defaults [GMTS GUI HS LIST DEFAULTS]
- 2 Precedence of 'Health Summary Types List' [GMTS GUI HS LIST PRECEDENCE]
- 3 Method of compiling 'Health Summary Types List' [GMTS GUI HS LIST METHOD]
- 4 Edit 'Health Summary Types List' Parameters [GMTS GUI HS LIST PARAMETERS]
- 10 CPRS Health Summary Display/Edit Site Defaults [GMTS GUI SITE DEFAULTS]
  - 1 Display Site Health Summary List Defaults [GMTS GUI SITE DISPLAY DEFAULTS]
  - 2 Edit 'Health Summary Types List' Parameters [GMTS GUI SITE ADD/EDIT LIST]
  - 3 Edit Default HS Type List Compile Method [GMTS GUI SITE COMPILE METHOD]
  - 4 Add/Edit Allowable Entities for HS List [GMTS GUI SITE PRECEDENCE]
  - 5 Resequence Allowable Entities for HS List [GMTS GUI SITE RESEQUENCE]

### **Function**

Health Summary exports a function called GMTS COMPONENT NAME. It is used for writing the HEADER NAME, DEFAULT HEADER NAME, or COMPONENT NAME in Health Summary reports.

## Cross-References

---

The number-space for Health Summary files is 142\*. Use the VA FileMan DATA DICTIONARY UTILITIES, option #8 ( DILIST, List File Attributes), to print a list of these files. Depending on the FileMan template used to print the list, this option will print out all or part of the data dictionary for the GMTS files. If you choose the “Standard” format, you can see cross-reference information for a specified file(s):

# Purging and Archiving

---

## **Archiving**

The Health Summary package does not provide archiving functionality because data is only stored for the Health Summary Type (#142), Health Summary Component (#142.1), and Health Summary Parameters (#142.99) files.

The Health Summary package does not duplicate storage of VISTA ancillary package data. Data is extracted as needed from the ancillary packages, is temporarily stored in ^TMP(<namespace>,\$J, or ^UTILITY(\$J, and is deleted after the component has been printed or displayed.

## **Purging**

The Delete Health Summary Type option [GMTS TYPE DELETE] is available on both the Coordinator's and the Enhanced menus. The owner of a health summary type may delete it.

Privacy Act laws specifically state that patient information in VISTA which is retrievable by patient identifier is part of the patient medical record. Printed Health Summary information is patient information that is retrievable by patient identifier, and is considered part of the patient record. However, since the information on the Health Summary can be found elsewhere in the patient record, administrators in a Medical Center can choose whether or not to file hard copies of health summaries in the medical record. If you choose to file copies in the medical record, be aware that *information in a health summary is only a summary and may not be complete in many cases.*



## Callable Routines

---

Health Summary does not provide any publicly supported entry points. Included below is a list of entry points that are used by the Health Summary package. Use of these entry points by other packages requires a private Data Base Integration Agreement (DBIA) with Health Summary.

### **Routine: GMTS:** *Health Summary Main Routine*

Entry Point	Comments
ENCWA	<p>Entry point for printing without going through Health Summary print options and a pre-defined health summary type.</p> <p>Receives:           DFN as valid patient internal entry number                                      GMTSPRM = "CD, CN,CW,ADR". These are valid component abbreviations from the "C" cross reference of File 142.1. Does not support components that require selection items.                                      GMTSTITL="Text of Title"</p> <p>GMTSPX1 - Optional internal FM date for range ending date            GMTSPX2 - Optional internal FM date for range beginning date</p> <p>NOTE:                Optional date range variables are both required if a date range is desired.</p> <p>Returns:             Health Summary report for a patient and the specific components defined in GMTSPRM.</p>

**Routine: GMTSADOR: Ad Hoc Summary Driver**

Entry Point	Comments
MAIN	<p>Entry point to allowing the user to define components and defaults through the Ad Hoc menu interface and print health summaries for a programmer-specified patient and device.</p> <p>Receives: DFN as valid patient internal entry number. If DFN is not defined but the ORVP variable is, DFN will be set to the DFN in this variable. This is done to allow this entry point to be called through a protocol in support of OE/RR. If DFN and ORVP don't exist, the user will be prompted to enter a patient.</p>

**Routine: GMTSDVR: Health Summary Alternate Driver (OE/RR V2.5 compatible)**

Entry Point	Comments
ENX(DFN, GMTSTYP, GMTSPX2, GMTSPX1)	<p>Entry point, with parameters, for printing a health summary for a programmer-specified patient and device, without prompting for additional information.</p> <p>Receives: DFN as valid patient internal entry number</p> <p>GMTSTYP as a valid health summary type internal entry number.</p> <p>GMTSPX1 and GMTSPX2 are optional Date and Range variables. They allow the time limits to be overridden for components that use time limits. Thus, beginning and ending dates can be specified in order to get only data within that time range.</p> <p>GMTSPX2 - Internal FileMan date for beginning date range            GMTSPX1 - Internal FileMan date for ending date range</p>



**Routine: GMTSDVR: Health Summary Alternate Driver (OE/RR V2.5 compatible)**  
*cont'd*

Entry Point	Comments
ENXQ	External call for tasked Health Summary printing.  Receives:           DFN as valid patient internal entry number  GMTSTYP as a valid health summary type IEN  GMTSPX1 - Optional internal FM date for ending date  GMTSPX2 - Optional FM date for beginning date  NOTE: Optional date range variables are both required if a date range is used

**Routine: GMTSOBJ: Health Summary Objects**

Entry Point	Comments
OBJ	Create/Modify Health Summary Object - GMTS OBJ ENTER/EDIT
INQ	Inquire to Health Summary Object - GMTS OBJ INQ
DEL	Delete Health Summary Object - GMTS OBJ DELETE
TEST	Test Health Summary Object - GMTS OBJ TEST
GET(DFN,OBJ)	Get Health Summary Object Input: DFN IEN for Patient (file #2) OBJ IEN for Health Summary Object (file #142.5)  Output Returns global array of Health Summary data ^TMP("GMTSOBJ", \$J, DFN, #)
TIU(DFN,OBJ)	Get Health Summary Object (Entry Point for TIU) Input DFN IEN for Patient (file #2) OBJ IEN for Health Summary Object (file #142.5)  Output Returns global array of Health Summary data ^TMP("TIUHSOBJ", \$J, "FGBL", 0) ^TMP("TIUHSOBJ", \$J, "FGBL", #)
DIS(DFN,OBJ)	Display Object Input DFN IEN for Patient (file #2) OBJ IEN for Health Summary Object (file #142.5)

**Routine: GMTSU: Health Summary Utilities routine**

Entry Point	Comments
MTIM	Converts time from an internal format to a display format. Receives: X=internal format Date/time as 2900310.1300 Returns: X=printable time as 13:00
REGDT	Gets internal date and formats as MM/DD//YY Receives: X=internal format Date/time as 2900310.1300 Returns: X=03/10/90
REGDTM	Gets regular date and formats with time. Receives: X=internal format Date/time as 2900310.1300 Returns: X=03/10/90 13:00
SIDT	Gets date in SI format as DD MMM YY Receives: X as internal FM date/time, e.g., 2890630.1650 Returns: X=30 JUN 89
FMHL7DTM	Gets HL7 format date/time as CCYYMMDDHHMM Receives: X=internal format 2900310.1300 as Date/time Returns: X=29003101300

**Routine: GMTSU: Health Summary Utilities routine cont'd**

Entry Point	Comments
DEM	Gets Demographic data from VADPT Receives: DFN Returns: GMTSPNM,GMTSSN,GMTSDOB,SEX, GMTSWARD,GMTSRB,GMTSAGE
NAME	Formats names. Receives: FILE=(200) IFN=(internal file number for above file), NML=(desired length for name to be returned) FNF=0 for FI, 1 for FN (flag to specify first name format)
GETRANGE (Fromdate, Todate)	Returns: NM=Lastname,First(name/initial) to specified length.  Receives: Fromdate and Todate which are variables (passed by reference) that will return the From date and the To date in inverted order.  Fromdate Inverted date to be used as stop date for displaying most recent data first. Todate Inverted date to be used as start date for displaying most recent data first.

**Routine: GMTSUP: Pagination Utilities**

Entry Point	Comments
CKP	Called from all component print routines; before printing each line checks \$Y and flags form feeds. Receives: DFN as valid patient internal entry number Returns: GMTSNPG=0; No form feed has been forced GMTSNPG=1; Form feed has been forced GMTSQIT=defined when an up-arrow (^) has been entered to quit summary
CKP1	Help display of the optional components for navigation.
BREAK	Called from CKP before printing the component data and when form feeds are forced. Writes the delimiter of each component.
HEADER	Called from the driver at the beginning of the summary, and from CKP when form feeds are forced. Writes the running head of the summary report.



## **External Relations**

---

Non-destructive, read-only component routines have been written to present VISTA ancillary package data.

### **Database Integration Agreements**

The Health Summary package interacts with, and extracts data from many other VISTA software packages. Permission for Health Summary to use data from the other packages is obtained by completing a written integration agreement with each of the other packages. Complete integration agreements are under the DBA menu on Forum.

## Internal Relations

---

All Health Summary options are independently invocable.

# Generating Online Documentation

## KIDS Build and Install Print Options

### Print a list of package components

Use the KIDS Build File Print option if you would like a complete listing of package components (e.g., routines and options) exported with this software.

```
>D ^XUP
Setting up programmer environment
Terminal Type set to: C-VT100

Select OPTION NAME: XPD MAIN      Kernel Installation & Distribution System menu
Select Kernel Installation & Distribution System Option: Utilities
Select Utilities Option: Build File Print

Select BUILD NAME: GMTS*2.7*58      HEALTH SUMMARY
DEVICE: HOME// ;;999 ANYWHERE

PACKAGE: GMTS*2.7*58      Dec 30, 2002 8:57 am      PAGE 1
-----
TYPE: SINGLE PACKAGE
TRACK NATIONALLY: YES
NATIONAL PACKAGE: HEALTH SUMMARY
DESCRIPTION:
The description of this build is found in the National Patch Module under
patch GMTS*2.7*58.

ENVIRONMENT CHECK :
  PRE-INIT ROUTINE :
POST-INIT ROUTINE : POST^GMTSP58
PRE-TRANSPORT RTN :

                                UP   SEND  DATA      USER
                                DATE SEC.  COMES  SITE      RSLV  OVER
                                DD   CODE W/FILE DATA  PTS   RIDE
-----
142.5      HEALTH SUMMARY OBJECTS      YES  YES  NO

INPUT TEMPLATE:
  GMTS DELETE HLTH SUM TYPE      FILE #142      SEND TO SITE
  GMTS EDIT EXIST HS TYPE      FILE #142      SEND TO SITE
  GMTS EDIT HLTH SUM TYPE      FILE #142      SEND TO SITE

ROUTINE:
  GMTS1      SEND TO SITE
  GMTS2      SEND TO SITE
  GMTSALG    SEND TO SITE
  GMTSCNB    SEND TO SITE
  GMTSDEM2   SEND TO SITE
  GMTSLRC    SEND TO SITE
  GMTSLROB   SEND TO SITE
  GMTSLRS    SEND TO SITE
  GMTSLRS7   SEND TO SITE
```

GMTSLRSC	SEND TO SITE
GMTSLRTE	SEND TO SITE
GMTSOBA	SEND TO SITE
GMTSOBA2	SEND TO SITE
GMTSOBD	SEND TO SITE
GMTSOBE	SEND TO SITE
GMTSOBH	SEND TO SITE
GMTSOBI	SEND TO SITE
GMTSOBJ	SEND TO SITE
GMTSOBL	SEND TO SITE
GMTSOBL2	SEND TO SITE
GMTSOBS	SEND TO SITE
GMTSOBS2	SEND TO SITE
GMTSOBT	SEND TO SITE
GMTSOBU	SEND TO SITE
GMTSOBV	SEND TO SITE
GMTSPXFP	SEND TO SITE
GMTSRASP	SEND TO SITE
GMTSRM	SEND TO SITE
GMTSULT	SEND TO SITE
GMTSULT5	SEND TO SITE
GMTSUP	SEND TO SITE
GMTSVSD	SEND TO SITE
GMTSXAB	SEND TO SITE
OPTION:	
GMTS BUILD MENU	USE AS LINK FOR MENU ITEMS
GMTS GUI HS LIST DEFAULTS	SEND TO SITE
GMTS GUI HS LIST METHOD	SEND TO SITE
GMTS GUI HS LIST PARAMETERS	SEND TO SITE
GMTS GUI HS LIST PRECEDENCE	SEND TO SITE
GMTS GUI REPORTS LIST MENU	SEND TO SITE
GMTS GUI SITE ADD/EDIT LIST	SEND TO SITE
GMTS GUI SITE COMPILE METHOD	SEND TO SITE
GMTS GUI SITE DEFAULTS	SEND TO SITE
GMTS GUI SITE DISPLAY DEFAULTS	SEND TO SITE
GMTS GUI SITE PRECEDENCE	SEND TO SITE
GMTS GUI SITE RESEQUENCE	SEND TO SITE
GMTS IRM/ADPAC MAINT MENU	USE AS LINK FOR MENU ITEMS
GMTS OBJ DELETE	SEND TO SITE
GMTS OBJ ENTER/EDIT	SEND TO SITE
GMTS OBJ EXPORT	SEND TO SITE
GMTS OBJ EXPORT/IMPORT	SEND TO SITE
GMTS OBJ IMPORT/INSTALL	SEND TO SITE
GMTS OBJ INQ	SEND TO SITE
GMTS OBJ MENU	SEND TO SITE
GMTS OBJ TEST	SEND TO SITE
GMTS TYPE DELETE	SEND TO SITE
REQUIRED BUILDS:	ACTION:
GMTS*2.7*49	Don't install, leave global
GMTS*2.7*56	Don't install, leave global



## Print Results of the Installation Process

Use the KIDS Install File Print option if you'd like to print out the results of the installation process.

```
Select Utilities Option: Install File Print
Select INSTALL NAME: GMTS*2.7*58      Install Completed  2/26/02@09:06:39
=> GMTS*2.7*49 TEST v5
DEVICE: HOME// ;;999 ANYWHERE

PACKAGE: GMTS*2.7*58      Dec 26, 2002 11:09 am                PAGE 1
                                COMPLETED                    ELAPSED
-----
STATUS: Install Completed          DATE LOADED: DEC 25, 2002@12:51:45
INSTALLED BY: MERRILL,DAVID
NATIONAL PACKAGE: HEALTH SUMMARY

INSTALL STARTED: DEC 26, 2002@09:06:33      09:06:39      0:00:06
ROUTINES:                                09:06:34      0:00:01
PRE-INIT CHECK POINTS:
XPD PREINSTALL STARTED                    09:06:35      0:00:01
XPD PREINSTALL COMPLETED                  09:06:35
PRINT TEMPLATE                             09:06:35
OPTION                                     09:06:37      0:00:02
POST-INIT CHECK POINTS:
XPD POSTINSTALL STARTED                    09:06:38      0:00:01
XPD POSTINSTALL COMPLETED                  09:06:38

INSTALL QUESTION PROMPT                                ANSWER
XPO1  Want KIDS to Rebuild Menu Trees Upon Completion of Install      YES
XPI1  Want KIDS to INHIBIT LOGONs during the install                    NO
XPZ1  Want to DISABLE Scheduled Options, Menu Options, and Protocols  NO
MESSAGES:

  Install Started for GMTS*2.7*58 :
        Dec 26, 2002@09:06:33

Build Distribution Date: Mar 14, 2002

Installing Routines:
        Dec 26, 2002@09:06:34

Installing PACKAGE COMPONENTS:

Installing PRINT TEMPLATE

Installing OPTION
        Dec 26, 2002@09:06:37

Running Post-Install Routine: POST^GMTSP58
  Updating Routine file...
  Updating KIDS files...
  GMTS*2.7*58 Installed.
        Dec 26, 2002@09:06:39
  Not a production UCI
  NO Install Message sent
  Call MENU rebuild
```

## Other Kernel Print Options

Besides using the Kernel Installation & Distribution (KIDS) options to get lists of routines, files, etc., you can also use other Kernel options to print online technical information.

### Routines

The namespace for the Health Summary package is GMTS. Use the Kernel option, List Routines [XUPRROU], to print a list of any or all of the Health summary routines. This option is found on the Routine Tools [XUPR-ROUTINE-TOOLS] menu on the Programmer Options [XUPROG] menu, which is a sub-menu of the Systems Manager Menu [EVE] option.

#### Example:

```
Select Systems Manager Menu Option: programmer Options
Select Programmer Options Option: routine Tools
Select Routine Tools Option: list Routines
Routine Print
Want to start each routine on a new page: No// <RET>
routine(s) ? > GMTS*
```

The first line of each routine contains a brief description of the general function of the routine. Use the Kernel option, First Line Routine Print [XU FIRST LINE PRINT], to print a list of just the first line of each Health Summary subset routine.

#### Example:

```
Select Systems Manager Menu Option: programmer Options
Select Programmer Options Option: routine Tools
Select Routine Tools Option: First Line Routine Print
PRINTS FIRST LINES
routine(s) ? > GMTS*
```

## Globals

The globals used in the Health Summary package are:

```
^GMT(142,  
^GMT(142.1  
^GMT(142.5,  
^GMT(142.98,  
^GMT(142.99,
```

Use the Kernel option, List Global [XUPRGL], to print a list of any of these globals. This option is found on the Programmer Options menu [XUPROG], which is a sub-menu of the Systems Manager Menu [EVE] option.

### Example:

```
Select Systems Manager Menu Option: programmer Options  
  
Select Programmer Options Option: LIST Global  
Global ^GMT*
```

## Inquire To Option File

The Kernel Inquire option [XUINQUIRE] provides the following information about a specified option(s):

- Option name.
- Menu text.
- Option description.
- Type of option.
- Lock (if any).

In addition, all items on the menu are listed for each menu option.

## XINDEX

XINDEX is a routine that produces a report called the VA Cross-Referencer. This report is a technical and cross-reference listing of one routine or a group of routines. XINDEX provides a summary of errors and warnings for routines that do not comply with VA programming standards and conventions, a list of local and global variables and what routines they are referenced in, and a list of internal and external routine calls.

XINDEX is invoked from programmer mode: D ^XINDEX.

When selecting routines, select GMTS\* and exclude the routines GMTSI\* (the inits), GMTSON\* and GMTSOO\* (the onits) .

## Data Dictionaries/ Files

The number-spaces for Health Summary files are 142-. Use the VA FileMan DATA DICTIONARY UTILITIES, option #8 ( DILIST, List File Attributes), to print a list of these files. Depending on the FileMan template used to print the list, this option will print out all or part of the data dictionary for the GMTS files.

### List File Attributes

The FileMan List File Attributes option [DILIST] lets you generate documentation about files and file structure. If you choose the “Standard” format, you can see the following Data Dictionary information for a specified file(s):

- File name and description.
- Identifiers.
- Cross-references.
- Files pointed to by the file specified.
- Files that point to the file specified.
- Input templates.
- Print templates.
- Sort templates.

### Example:

```
>D P^DI
VA FileMan 21.0
Select OPTION: DATA DICTIONARY UTILITIES
Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES
  START WITH WHAT FILE: 8925
                                (1 entry)
      GO TO WHAT FILE: 8925// 8926*
Select LISTING FORMAT: STANDARD// [Enter]
DEVICE: PRINTER
```

In addition, the following applicable data is supplied for each field in the file: field name, number, title, global location, description, help prompt, cross-reference(s), input transform, date last edited, and notes.

The “Global Map” format of this option generates an output that lists all cross-references for the file selected, global location of each field in the file, input templates, print templates, and sort templates.

### **?, ??, and ??? Online Help**

- ?** Enter one question mark to see helpful information about the components of the health summary type used in the health summary and the options available.
- ??** Enter two question marks to see a list of available health summary components.
- ???** Enter three question marks for detailed help, if available.



# Glossary

---

<b>Ad Hoc Summary</b>	This is a temporary health summary that allows you to select health summary components, time and occurrence limits, and selection items for a particular patient.
<b>Components</b>	Elements of data from DHCP packages that make up the health summary report (e.g., Demographics).
<b>DHCP</b>	Decentralized Hospital Computer Program—previously the name for the VA program responsible for installing an integrated computer system in all DVA medical facilities. Now known as VISTA.
<b>Default</b>	Prompts that have an answer followed by double slashes (//) are called defaults; this means a response has been pre-selected, based on the most likely response or the previous response to this prompt. For example, the prompt “Time Limit:” may have a default of 1 year for Lab Orders, and would appear as: Time Limit: 1Y//. Defaults save you time by allowing you to just hit return rather than typing an answer.
<b>Device</b>	A printer or a computer terminal screen. See the <i>DHCP Users Guide to Computing</i> for basic DHCP computer skills, including printing information.
<b>Hospital Location Displayed</b>	For some PCE components, when this flag is enabled, the Hospital Location abbreviation will be displayed.
<b>ICD Text Displayed</b>	For some components, Diagnosis Text can be customized (e. g., long form, short form, code only, or no form of ICD Diagnosis).
<b>IB Encounter Form Utilities</b>	The Integrated Billing Package (Encounter Form Utilities) includes a Print Manager that allows sites to define reports that should print along with the encounter forms for a specific clinic or division and for specified appointments. One of the options,

“Define Available Health Summary,” allows a Health Summary to be made available for use by the print manager. See the *IB Encounter Form Utilities User Manual* for further information.

<b>Lock</b>	Restricts edit access for a given health summary type to the holders of any valid security key. For example, the GMTSMGR key is required to edit summary types that are locked by the GMTSMGR lock.
<b>Non-destructive</b>	Health Summary components are non-destructive, meaning that the Health Summary package does not edit the data from the DHCP package where it extracts its information.
<b>Occurrence Limits</b>	The number of past occurrences that will be reported on a health summary (e.g., the last five occurrences).
<b>Owner</b>	The creator of a health summary type. Owners and holders of the GMTSMGR security key have sole access to modify their health summary type(s).
<b>Provider Narrative Displayed</b>	For some components, when this flag is enabled and a provider enters narrative text, the text will be displayed.
<b>Summary Order</b>	The order in which components appear in a health summary, as defined by the creator of a Summary Type.
<b>Summary Type</b>	The structure or template containing defined components and the unique characteristics with occurrence and time limits, and selection items. Used to print health summaries for patients.
<b>Time Limits</b>	The time period of reference included on a health summary for a particular component (e.g., 2D, 1M, 1Y for two days, one month and one year).
<b>VISTA</b>	The name for the VHA program responsible for installing an integrated computer system in all VHA medical facilities.



## Appendix A—Defining New Components

---

Sites have the option to create new components for Health Summary to provide for their site-specific needs. This may be an enhancement to one of the components that Health Summary provides, it can be a totally new one that accesses DHCP data that Health Summary currently doesn't provide a component for, or it can be one to access non-DHCP supported (Class III software) packages.

**NOTE:** Please be aware that locally created components are not supported by National VISTA Service (NVS) or Systems Design and Development (SD&D).

A Health Summary basket has been set up on SHOP,ALL where sites can put their locally developed component routines, in order to share this information with the rest of the DHCP community. We encourage you to take a look at what has already been done, as this may save you some time.

*To access SHOP,ALL from FORUM:*

1. Enter SHOP,ALL at your menu prompt and you'll be "logged" on to SHOP,ALL
2. Enter SURROGATE NAME: **SHOP,ALL**
3. Select Mailman Option: **Read Mail**
4. Enter the Health Summary mail basket.

We would also like you to add any components you have created locally to SHOP,ALL .

## **Format for Adding Components to SHOP,ALL**

If you have components you would like to share, please use the following instructions/format:

1. Start the subject of the message with:

HS Vx.x -- brief subject/component name, where x.x will be the version

2. Include a description, sample of the report, and the routines to produce the report. The routine should be under the name-space assigned to your station; e.g., Madison=ALW, Cincinnati=AFR. Send to:  
SHOP,ALL@ISC-CHICAGO.VA.GOV
3. The message will go to the IN Basket at SHOP,ALL. The SHOP,ALL administrators will read the IN basket daily and save the message to a basket called Health Summary.

### **Hints for Developing local site components:**

Before writing your own components, review some of the existing routines that have been written. Some good examples are the Patient Care Encounter, the Discharge Summary, or the Compensation and Pension components with the display routines in the Health Summary name space and the extract routines in the custodial package's name-space. We suggest that when creating new components you write two separate routines, one to extract the data and one to display the data. The display routine will call the extract routine and then display the data that was extracted.

Put any local routines you develop in your site's routine name-space.

Local site components will be entered into the Health Summary Component (File #142.1) file with an internal file number beginning with your site number plus an additional 3 digits (e.g. At Salt Lake VAMC the first number would be 660001). This is to assure that nationally developed components are not overlaid by local site-developed components or vice versa. You will be prompted with a valid number when you enter a new component via the Create/Modify Health Summary Components option on the Health Summary Maintenance Menu.

For the extract routine, we recommend that you set the data to the ^TMP("name", \$J) global. The display routine will get the data from this global and display/print it. For the extract routine, you call it with the DFN (Patient Internal File Number) variable. Optionally, you could set it up for time and occurrence limits. GMTSEND (Fileman date to be used as the ending date for displaying data, GMTSBEG (Fileman date to be used as the beginning date for

displaying data, and GMTSNDM (Maximum number of occurrences to display) are the variables to use to allow for time and occurrence limits. In your extract routine, make sure the date of the data is between the dates in the GMTSBEG and GMTSEND variables. Use the GMTSNDM variable to make sure you only get the maximum number of records that were entered for the occurrence limits.

Depending on how the cross-references are set up in the file you are extracting data from, you may want to use the reverse \$ORDER M command or a cross-reference with an inverted Fileman date to get the most recent data first. When putting the data into the ^TMP global, you can invert the date (9999999-Date) as one of the subscripts. Or you can just include the date. When displaying the data, you will need to use the Reverse \$ORDER M command to get the most recent data to display first, if you don't use an inverted date subscript.

**NOTE:** Inverted Fileman dates mean that the date (e.g. 2950630) will be subtracted from 9999999. This would give you 7049369. Inverted Fileman dates are used to order the data from most recent data to oldest data. With the Reverse \$ORDER command, this convention won't necessarily need to be followed in the future. Prior to the Reverse \$ORDER M command, it was necessary to put the retrieved data in the ^TMP array with a subscript in Inverted Fileman Date/time in order that the user would see the most current data first in the Health Summary display.

Once you have extracted the data, you can print or display it. To allow for page breaks (and in the interactive display the capability to terminate or jump to another component), it is important that you issue the following commands before printing a line of data:

```
D CKP^GMTSUP Q:$D(GMTSQIT)
```

If this isn't done before each line is written, the length of the document may exceed the length of the page or screen. You also will not get the component header to display before displaying the data. It is important that no lines are written and the above commands are not issued if there is no data. For version 2.7 of Health Summary we implemented the capability to suppress component headers and "No Data Available" messages for Health Summary Types. In order to make this work, the CKP^GMTSUP routine was updated to set a flag that data was printed for a component. After the Health Summary driver processes each component for a Health Summary Type, the system checks to see if data was displayed for the component. If no data was displayed, the driver determines whether or not to display the component header and "No Data Available" messages.

**NOTE:** For any local site components that were written prior to version 2.7, if you want to be able to suppress component headers and "No Data Available" messages, you will need to evaluate them and remove calls to BREAK^GMTSUP. This command should not be executed within your routines and you should not display the message that there was

no data available. You also want to be sure not to execute CKP^GMTSUP until you have data to display.

***Setting up a component to allow selection of specific items:***

If you want to set up a component to allow selection of specific items, review one of the existing components that allows this capability, then follow these steps:

1. Add “GMTS” to the Application Group field for the file you want to select items from. You can do this through Fileman with the Edit File option under the Utility Functions option.
2. Add the pointed to file to the variable pointer Selection Item (field #4) sub-field in the multiple Structure (Field #1) field in the Health Summary Type (file #142) file. Do this through Fileman with the Modify File Attributes option.
3. When entering a new component to the Health Summary Component (file #142.1), be sure to enter the File to the Selection Item field. This can be done through the Create/Modify Health Summary Components option on the Health Summary Maintenance Menu.
4. In your application code, access the GMTSEG variable to determine the Selection Items for the file. The format of this array is GMTSEG(GMTSEGN,file number,Selection Item internal file number). GMTSEGN is the internal file number for the component. You can \$ORDER on the third subscript of the array and get the Selection Item’s internal file number. In your extract routine you will then limit the extract to only retrieve records for the specified Selection Items.

**NOTE:** Typically, users at sites should not modify files. However, in order to include new components with selection items, it is necessary to modify a file’s structure. Therefore, we recommend extreme caution while following the procedures above.

## Create/Modify Health Summary Components

The following sample dialogue can assist you in creating your own local health summary components.

**NOTE:** When selecting components from the Ad Hoc Health Summary menu, entering “ALL” allows all components to be selected. If the first three characters of a HEADER NAME for a component are designated as “All,” however, then only the defined component will be selected. Avoid conflicts and loss of functionality by not using “all” at the front of new header names.

```

Select Health Summary Maintenance Menu Option: 2 Create/Modify Health
Summary Components

Select COMPONENT: CHEM 7
Are you adding 'CHEM 7' as a new HEALTH SUMMARY COMPONENT? Y (Yes)
HEALTH SUMMARY COMPONENT NUMBER: 5000001//
Do you wish to duplicate an existing COMPONENT? YES//

CD Advance Directive SCL4 Lab Cum Selected 4 MHVS Summary Display
BADR Brief Adv React/All CY Cytopathology NOK Next of Kin
ADR Adv React/Allerg EM Electron Microscopy RXNV Non VA Meds
AGP TEST MIC Microbiology ONC Oncology
BMIC Brief Microbiology ORC Current Orders
CLINICAL MAINTENANC LO Lab Orders ED Education
CMB Reminder Brief BLO Brief Lab Orders EDL Education Latest
CR Reminders Due SP Surgical Pathology EXAM Exams Latest
CF Reminders Findings SLT Lab Tests Selected HF Health Factors
CLD Reminders Last Done MAGI MAG Imaging SHF Health Factor Select
CM Reminder MaintenanceADC Admission/Discharge IM Immunizations
CRS Reminders Summary EADT ADT History ExpandedOD Outpatient Diagnosis
CW Clinical Warnings CVP Fut Clinic Visits OE Outpatient Encounter
CP Comp. & Pen. Exams CVP Past Clinic Visits ST Skin Tests
CNB Brief Consults CON Patient Contacts RXIV IV Pharmacy
CN Crisis Notes DEM Demographics RXOP Outpatient Pharmacy
DI Dietetics BDEM Brief Demographics RXUD Unit Dose Pharmacy
DCS Discharge Summary DS Disabilities PLA Active Problems
BDS Brief Disch Summary DD Discharge Diagnosis PLL All Problems
FR Fred DC Discharges PLI Inactive Problems
GECC Referral Count MHFV MH Clinic Fut VisitsPN Progress Notes

Press RETURN to continue or '^' to exit:

GECH Referral Categories PRC ICD Procedures BPN Brief Progress Notes
GAF Global Assess Funct OPC ICD Surgeries SPN Selected Prog Notes
ENV HS Environment TR Transfers SW Social Work
HALT TS Treating Specialty SCD Spinal Cord Dysfunct
II Imaging Impression MEDA Med Abnormal NSR NON OR Procedures
SII Sel Image ImpressionMEDB Med Brief Report SRO Surgery Only Reports
IP Imaging Profile MEDC Med Full Captioned SR Surgery Rpt (OR/NON)
IS Imaging Status MEDF Med Full Report BSR Brief Surgery Rpts
BA Blood Availability MEDS Med (1 line) SummarySNSR Selected NON OR Proc
BT Blood Transfusions MHPE MH Physical Exam URIN URINALYSIS
CH Chem & Hematology MHRF MH Suicide PRF Hx VS Vital Signs
SCLU Lab Cum Selected MHTC MH Treatment Coor VSD Detailed Vitals
SCL1 Lab Cum Selected 1 MHAL MHA Admin List VSO Vital Signs Outpat.
SCL2 Lab Cum Selected 2 MHAS MHA Score SVS Vital Signs Selected
SCL3 Lab Cum Selected 3 MHVD Detail Display SVSO Vital Select Outpat.
Enter COMPONENT to Duplicate: SCLU Lab Cum Selected
NAME: CHEM 7// <RET>
ABBREVIATION: CH7
DESCRIPTION: . . .
1>This component contains information extracted from the Lab package. Not
  
```

```

2>only do time and maximum occurrence limits apply to this component, but
3>the user is allowed to select any number of atomic Lab tests. Data
4>presented include: collection date/time, specimen, test names with
5>results and reference flags in columnar (horizontal) format. Comments will
6>also be conditionally displayed, depending on the value of the DISPLAY
7>COMMENTS ON LABS Health Summary Site Parameter. When comments are
8>displayed, a lower case letter will be displayed to the left of the date
9>for entries with comments. Comments will be displayed after all the
10>results are displayed with comments being linked by the lower case letter.
11>Up to 26 comments can be included.
EDIT Option: <RET>
PRINT ROUTINE: MAIN;GMTSLRSC// ??
    This is the entry point and routine to be called when the component is
    run for a given health summary type. Enter the line label, followed by
    a semi-colon, followed by the routine name (e.g., MAIN;GMTSLRSC).
PRINT ROUTINE: MAIN;GMTSLRSC// <RET>
TIME LIMITS APPLICABLE: yes// ??
    This field is set up by the programmer to indicate whether the routine to
    print this component will allow a time range to be applied to the data
    to be displayed in the Health Summary.
    Choose from:
        Y          yes
TIME LIMITS APPLICABLE: yes// <RET>
MAXIMUM OCCURRENCES APPLICABLE: yes// ??
    This field is used by the programmer to indicate whether the routine
    which prints this component is set up to handle maximum occurrence limits
    on the Health Summary.
    Choose from:
        Y          yes
MAXIMUM OCCURRENCES APPLICABLE: yes// <RET>
HOSPITAL LOCATION APPLICABLE: ??
    This field is used by the programmer to indicate whether the routine
    which prints this component is set up to handle the display of the
    hospital location abbreviation on the Health Summary.
    Choose from:
        Y          yes
HOSPITAL LOCATION APPLICABLE: <RET>
ICD TEXT APPLICABLE: ??
    This field is used by the programmer to indicate whether the routine
    which prints this component is set up to handle the display of
    standardized ICD text on the Health Summary.
    Choose from:
        Y          yes
ICD TEXT APPLICABLE:<RET>
PROVIDER NARRATIVE APPLICABLE: ??
    This field is used by the programmer to indicate whether the routine
    which prints this component is set up to handle the display of the
    provider narrative on the Health Summary.
    Choose from:
        Y          yes
PROVIDER NARRATIVE APPLICABLE: <RET>
LOCK: ??
    To be used for components such as psychology test results
    Restricts viewing access under Print Health Summary Menu
LOCK: <RET>
DEFAULT HEADER NAME: ??
    The DEFAULT HEADER NAME will appear in menus and component headers in
    preference to the COMPONENT NAME, but NOT in preference to the local
    HEADER NAME, if it is defined for that component within a given Health
    Summary Type. If defined the local HEADER NAME will have precedence
    within a given Health Summary Type.
DEFAULT HEADER NAME: Chem 7
Select SELECTION FILE: ??

Choose from:
    LABORATORY TEST

```

Enter the names or numbers of the files from which selection items (e.g., lab tests (file 60), radiology procedures (file 71), or vital signs (file 120.51)) may be chosen for this component.

```

Choose from:
  60          LABORATORY TEST
  71          RADIOLOGY PROCEDURES
 120.51      VITAL TYPE
  811.9      PCE REMINDER/MAINTENANCE ITEM
 9001017     HEALTH SUMMARY MEAS PANEL
 9999999.64 HEALTH FACTORS

Select SELECTION FILE: 60 LABORATORY TEST
...OK? Yes// <RET> (Yes)

SELECTION FILE: LABORATORY TEST// <RET>
SELECTION COUNT LIMIT: ??
  Enter the MAXIMUM number of selection items which may be selected for
  any single appearance of this component in a given health summary type.
  That is, a value of 7 will allow the user to select as many as seven
  items, etc.
SELECTION COUNT LIMIT: 7
Select SELECTION FILE: <RET>

ADD new Component to the AD HOC Health Summary? NO// y YES

>>> EDITING the GMTS HS ADHOC OPTION Health Summary Type
SUPPRESS PRINT OF COMPONENTS WITHOUT DATA: ??
  This field allows health summary types to be set up to suppress printing
  of components that contain no data when health summaries are printed from
  a device. When health summary types are displayed on the screen,
  components that contain no data will still be displayed with a "No data
  available" message. This is done to eliminate any confusion that may
  occur when jumping between components.
  Choose from:
    Y          yes
    N          no
SUPPRESS PRINT OF COMPONENTS WITHOUT DATA: y yes

Do you wish to review the Summary Type structure before continuing? NO// <RET>
Select COMPONENT: CHEM 7// <RET> CH7
SUMMARY ORDER: 395// 395
OCCURRENCE LIMIT: 5
TIME LIMIT: 21d
HOSPITAL LOCATION DISPLAYED: y yes
ICD TEXT DISPLAYED: ??
  Indicate whether the long form, short form, code only, text only, or no
  form of ICD diagnosis text should appear in applicable components.
  Choose from:
    L          long text
    S          short text
    C          code only
    T          text only
    N          none
ICD TEXT DISPLAYED: c code only
PROVIDER NARRATIVE DISPLAYED: y yes
HEADER NAME: Chem 7// <RET>

No selection items chosen.

Select new items one at a time in the sequence you want them displayed.
You may select up to 7 items.

Select SELECTION ITEM: CHEM 7

  Searching for a LABORATORY TEST CHEM 7
  ...OK? Yes// <RET> (Yes)

  Select the tests which you wish to include, in the
  sequence in which you wish them to appear.
  
```



```

-- CHEM 7 --

1   CREATININE           5   CHLORIDE
2   UREA NITROGEN       6   CO2
3   SODIUM              7   GLUCOSE
4   POTASSIUM           8   ANION GAP

Select 1 - 7 LAB TEST(s): 1-7// 1-5,8   CREATININE   UREA NITROGEN   SODIUM
                                         POTASSIUM   CHLORIDE   ANION GAP

Select SELECTION ITEM:
Please hold on while I resequence the summary order.....
.....

>>> Returning to Create/Modify Health Summary Component Option.

Select COMPONENT: <RET>

```

*Next, we'll illustrate the case where a Nuclear Medicine component, created on site, is to be added to the component file and Ad Hoc Summary Type.*

```

Select Health Summary Maintenance Menu Option: 2 Create/Modify Health Summary
Components

Create/Modify Health Summary Components
Select COMPONENT: NUCLEAR MEDICINE
  Are you adding 'NUCLEAR MEDICINE' as
  a new HEALTH SUMMARY COMPONENT? Y (Yes)
  HEALTH SUMMARY COMPONENT NUMBER: 5000002// <RET>
Do you wish to duplicate an existing COMPONENT? YES// NO
NAME: NUCLEAR MEDICINE// <RET>
PRINT ROUTINE: ??
  This is the entry point and routine to be called when the component is
  run for a given health summary type. Enter the line label, followed by
  a semi-colon, followed by the routine name (e.g., MAIN;GMTSLRC).
PRINT ROUTINE: NUC;A5AMED
ABBREVIATION: NUC
DESCRIPTION:
  1>This component, created at <site name>, prints nuclear medicine
  2>report data, including: Study date time, Radiologist, Report Status,
  3>Impression, and Report text.
  4> <RET>
EDIT Option: <RET>
TIME LIMITS APPLICABLE: y yes
MAXIMUM OCCURRENCES APPLICABLE: y yes
HOSPITAL LOCATION APPLICABLE: <RET>
ICD TEXT APPLICABLE:<RET>
PROVIDER NARRATIVE APPLICABLE: <RET>
LOCK: <RET>
DEFAULT HEADER NAME: Nuclear Medicine
Select SELECTION FILE: <RET>

ADD new Component to the AD HOC Health Summary? NO// y YES

>>> EDITING the GMTS HS ADHOC OPTION Health Summary Type
SUPPRESS PRINT OF COMPONENTS WITHOUT DATA: yes// <RET>

Do you wish to review the Summary Type structure before continuing? NO//<RET>
Select COMPONENT: NUCLEAR MEDICINE// <RET> NUC
SUMMARY ORDER: 400// 400
OCCURRENCE LIMIT: 5
TIME LIMIT: 21d
HOSPITAL LOCATION DISPLAYED: y yes

```

## Appendices

```
ICD TEXT DISPLAYED: ??
  Indicate whether the long form, short form, code only, text only, or no
  form of ICD diagnosis text should appear in applicable components.
  Choose from:
    L      long text
    S      short text
    C      code only
    T      text only
    N      none
ICD TEXT DISPLAYED: c  code only
PROVIDER NARRATIVE DISPLAYED: y  yes
HEADER NAME: Nuclear Medicine// <RET>
Please hold on while I resequence the summary order.....
.....

>>> Returning to Create/Modify Health Summary Component Option.
Select COMPONENT: <RET>
```

## Appendix B—Health Summary Security

---

Health summaries produced by this package are highly confidential and should be treated with the same security precautions as a patient's medical record.

### Menu Access

The Health Summary Overall Menu [GMTS MANAGER] contains four menus:

1. GMTS USER
2. GMTS ENHANCED USER
3. GMTS COORDINATOR
4. GMTS IRM/ADPAC MAINT MENU

Assign these menus as follows. (See the *Health Summary User Manual* for complete user descriptions of menus and options):

1. Give the Health Summary Menu [GMTS USER] menu to users who only need to print or display health summaries.
2. Give the Health Summary Enhanced Menu [GMTS ENHANCED USER] menu to users who need to create, modify, or delete their *own* health summary types, in addition to printing health summaries.
3. Give the Health Summary Coordinator's Menu [GMTS COORDINATOR] menu to users who need to print or display health summaries, and who will also need to create, modify, or delete health summary types, and set up nightly batch printing at specified locations.
4. Give the Health Summary Maintenance Menu [GMTS IRM/ADPAC MAINT MENU] to IRM staff or the Clinical Coordinator for any implementation and maintenance issues in Health Summary. This menu contains options to disable/enable health summary components for selection/display, create/modify new health summary components, edit and rebuild the Ad Hoc Health Summary Type, resequence the components in a health summary type, create/modify a health summary type, delete a health summary type, and edit health summary site parameters.

## Security

Security is established via a combination of the GMTSMGR and GMTS VIEW ONLY security keys and the OWNER and LOCK fields in File 142 (Health Summary Type file).

### GMTSMGR Security Key:

The GMTSMGR security key allows holders to override the LOCK and OWNER access restrictions for editing health summary types. The IRM Chief and Health Summary Coordinators are likely holders of this key.

This security key allows the holder to edit general usage health summary types which are locked with the GMTSMGR key. It also provides master edit access to all other health summary types.

### GMTS VIEW ONLY Security Key:

The GMTS VIEW ONLY key allows holders to view a health summary on the CRT. Holders may use all of the familiar Health Summary options but will not be prompted for a device for printing paper copies of the health summary.

## Health Summary Type File

### Owner

Owners of health summary types have edit access to health summary types they have created. The owner is designated when a health summary type is created. Usually the creator of a health summary type is automatically designated as its owner. However, if creators of health summary types hold the GMTSMGR key, they may designate another person as the owner. If you are assigned the GMTSMGR key, you are *not* automatically designated as the owner. You may, however, enter your name as the “owner.”

### Lock

This field can be used to specify a security key and is designated when the health summary type is created. This lock gives edit access for that health summary type to anyone who holds the matching security key. For example, someone creating a Pathology Health Summary Type may want to enter LRSUPER as the lock, thereby giving edit access to any holder of the LRSUPER security key. The four health summary types exported with the Health Summary package have the GMTSMGR lock.

A lock does not restrict an owner—the lock gives permission. If a health summary type is locked, the owner of the health summary type is not required to have the key to access it; however, all other users must have the key.

## Health Summary Object File

### Creator

Creators of health summary objects have edit access to health summary objects they have created. The creator is designated when a health summary object is created.

## Health Summary Component File

### Lock

You may restrict any component from view by entering the name of a valid security key in the LOCK field for a given component. For example, if your site decides that only holders of the LRSPUSER key should be allowed to view the Surgical Pathology Health Summary component, then entering the name of that security key in the LOCK field of that component's record will enforce that policy.

## VA FileMan File Protection

The Health Summary package files are exported with the following file protection provided by VA FileMan:

File Number	Name	DD	RD	WR	DEL	LAYGO	AUDIT
File 142	Health Summary Type	@				@	@
File 142.1	Health Summary Components	@		@	@	@	@
File 142.5	Health Summary Objects	@	@	@	@	@	@
File 142.98	Health Summary User Preferences	@	@	@	@	@	@
File 142.99	Health Summary Parameters	@	@	@	@	@	@



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