



**IHS RPMS
PCC Health Summary System
Version 2.0
(APCH)**

User's Manual

July 1997

Indian Health Service
Resource and Patient Management System (RPMS)

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PCC Health Summary System
(APCH)
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Preface

The Health Summary system provides a means for quickly generating a summary of a patient's demographic and clinical information from the Patient Care Component (PCC) database of the Resource and Patient Management System (RPMS). This user's manual explains in detail the elements that make up health summaries and how to generate health summaries. Also included are instructions for creating locally defined health summaries and components for site- and clinic-specific needs. This manual has been written specifically for health-care providers, Site Managers, and other clinical and administrative staff who generate and use health summaries.

Introduction to This Manual

For ease of use, this manual is organized by sections. The first two sections describe the health summary components and the standard health summary types that are distributed with the package. The remaining sections describe how to generate health summaries and create customized summary types and components.

Throughout the manual, sample components and computer dialogs are presented. They appear as follows. Within the sample dialogs, user responses are indicated by bold, block lettering.

Sample Component

```
----- MINOR SURGERY HISTORY (max 5 years) -----  
09/25/95  GRAU, DAVID      SUTURE HEAD  
10/18/95  GRAU, DAVID      SUTURE REMOVAL
```

Sample Dialog

```
Select HEALTH SUMMARY TYPE NAME: EMERGENCY  
ARE YOU ADDING 'EMERGENCY' AS A NEW HEALTH SUMMARY TYPE (THE 10TH)? YES  
NAME: EMERGENCY// [RETURN]  
LOCK: [RETURN]  
Select SUMMARY ORDER: 10  
SUMMARY ORDER COMPONENT NAME: DEMOGRAPHIC DATA  
COMPONENT NAME: DEMOGRAPHIC DATA// [RETURN]  
ALTERNATE TITLE: [RETURN]
```

Accessing On-Line Documentation

In addition to the material included in this user's guide, help screens are available on-line. To access these help screens, enter a question mark at the prompt of interest and press RETURN. If more help is needed, entering two or three question marks at the prompt generates more detailed help screens, when available.

```
Select health summary type: ADULT REGULAR// ? [RETURN]  
Answer with HEALTH SUMMARY TYPE NAME  
Do you want the entire 15-Entry HEALTH SUMMARY TYPE List? N (NO)
```

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Introduction to the PCC Health Summary

The PCC Health Summary is a clinically oriented, structured report that extracts a variety of data for a single patient from the PCC database and displays it in a standard format. The data displayed for the patient cover a range of health-related information, including demographic data, allergies, current medical problems, health history, and the purposes of previous visits.

Demographic data are entered into the RPMS database through the IHS Registration System at a patient's initial encounter in a clinic or hospital and are updated after subsequent patient visits. Health information is collected during clinic, field, and administrative contacts with patients through the IHS direct, tribal, and contract health-care programs. Data obtained from these contacts are recorded by health-care providers on the PCC Encounter Form and entered into the PCC database by the data entry staff. These types of data are then retrieved from the PCC and printed on the health summary to provide an overview of an individual patient's health and previously received IHS services.

The health summary assists providers with the delivery of comprehensive health care to each patient at every visit. It allows the provider to recognize patient problems other than the presenting complaint and to meet the patient's preventive health-care needs. The summary also offers a means of communication among the various health-care providers that an individual patient might see.

The key elements of the health summary provide:

- ◆ A structured and summarized overview of the health status, health experiences, and preventive health needs of each patient.
- ◆ Health data from sources of care not normally contained in the patient chart.
- ◆ An index to the patient chart through the highlighting of significant events and dates.

A PCC Health Summary is routinely printed whenever a patient is seen by a provider in the emergency room, outpatient clinic, or in the field. The health summary may also be displayed for review on a video terminal.

Note: PCC health summaries are highly confidential documents and should be afforded the same security measures as patient health records.

Health Summary Data Components

Health summaries are composed of a series of data groupings called *components*. These components encompass a wide variety of information regarding a patient's health status. Each component represents a major class of PCC data; for example, active problems or measurements.

The following list contains the components that appear on the health summaries. Many of these components are displayed on the standard health summaries that are distributed with this package. You may use these components for creating customized health summaries that meet the needs of providers at your facility. (Refer to the “Building Health Summaries” section of this manual for detailed instructions on developing customized health summaries.)

Some of these components can be modified to display only certain types and amounts of data; for instance, the last 2 years of only height and weight values in the Measurement Panel. Also, different components may display the same class of data in different ways; for example, the 10 most recent outpatient visits or all outpatient visits during the past 5 years.

Each of the following components is described in detail in this section of the user's guide. A sample printout of each is provided for reference.

- ♦ Allergies
- ♦ CHR
- ♦ Demographic Data
- ♦ Demographics – Brief
- ♦ Dental
- ♦ Diagnostic Procedure
- ♦ Directions to Patient Home
- ♦ Examinations – Most Recent
- ♦ Eye Care
- ♦ Family Medical History
- ♦ Flowsheets
- ♦ Health Factors
- ♦ Health Maintenance Reminders
- ♦ History of Minor Surgery
- ♦ History of Surgery
- ♦ Hospitalization Stays
- ♦ Immunizations
- ♦ In-Hospital Visits
- ♦ Insurance Information
- ♦ Laboratory Data
- ♦ Laboratory Data – Most Recent
- ♦ Measurement Panels
- ♦ Measurements
- ♦ Meds – All
- ♦ Meds – Chronic
- ♦ Meds – Current
- ♦ Meds – Most Recent by Group
- ♦ Meds – Most Recent of Each
- ♦ Meds – Most Recent Short Form
- ♦ Mental Health/Social Services
- ♦ Offspring History
- ♦ Outpatient Visits Screened
- ♦ Outpatient/Field Visits
- ♦ Patient Education
- ♦ Patient Education – Most Recent
- ♦ Personal Medical History
- ♦ Problems – Active
- ♦ Problems – Inactive
- ♦ Public Health Nursing Visits
- ♦ Radiology Studies – Most Recent
- ♦ Referred Care
- ♦ Reproductive History
- ♦ Scheduled Encounters
- ♦ Skin Tests – All
- ♦ Skin Tests – Last 3 of Each
- ♦ Supplements
- ♦ Treatments Provided

Display Format

The separate components of a health summary are delineated by dividing lines that frame the individual component headings. For example:

```
----- DEMOGRAPHIC DATA -----
```

If no data exist for a given component, the component heading will not appear. If data for a component exist but have subsequently fallen outside the component's restrictions of time or number of occurrences, then a heading appears, but no data are displayed. For example, the Most Recent Laboratory Data component displays lab results for the past 2 years only. If the patient had a glucose test taken 3 years ago and no other lab tests since then, this test result would not print on the health summary. Instead, only the component heading would display. However, if a patient has never had any lab tests, no heading will display.

Whether the health summary is printed or displayed on a video terminal, it will have a standard heading (see sample below) that contains the following information on each page:

- ◆ Date and time the summary was produced
- ◆ Initials of the person who requested the report
- ◆ Patient's name
- ◆ Health Record Number
- ◆ Health summary type
- ◆ Page number

```
***** CONFIDENTIAL PATIENT INFORMATION -- MAY 3,1996  1:09 PM  [CKC] *****
***** MILLER,BETTY ANN #108967  (ADULT REGULAR SUMMARY) pg. 1 *****
```

Data Restrictions

It is not always useful to display all of the data that exist for a given component since some of the data may be very old and therefore irrelevant in planning for the care of the individual patient. For instance, a 65-year-old patient who has been receiving services at your facility for 20 years will have had many visits during that time period. You would probably not want all of these visits printed for the Outpatient/Field Visits component on the health summary. For this reason, you will want to place restrictions on the amount of data that will print for each component. For instructions on restricting the data that displays for each component, see the section on Supervisory Functions.

You can restrict the data displayed for each component in the following ways:

1. Specify the maximum number of occurrences to display for a component. For example, the following component is limited to the last 5 recorded visits.

```
----- OUTPATIENT/FIELD VISITS (max 5 visits) -----
```

- Place a time restriction on the component. This restriction may be expressed in days, weeks, months, or years. In the following example, only the visits that occurred within the past year will be printed.

```
----- OUTPATIENT/FIELD VISITS (1 year) -----
```

- Both the number of occurrences and the time period may be specified for a single component. When you have placed these two types of restrictions on a component, only the more restrictive of the two limits applies. In the example below, the Outpatient/Field Visits have been restricted to a maximum of 10 occurrences or to the last 2 years. If the last 10 visits occurred within the past 2 years, all of the visits would print. If only 4 visits occurred in the past 2 years, although the patient had 10 total visits, only 4 visits would print.

```
----- OUTPATIENT/FIELD VISITS (max 10 visits or 2 years) -----
```

Note that for each component the data restriction is displayed, as shown in the previous examples. If no restrictions have been placed on the data to be displayed, no notation will appear in the heading and all data in that class will be displayed, as shown below.

```
----- OUTPATIENT/FIELD VISITS -----
```

The components that are included in the standard health summaries distributed with this package already contain restrictions on the data that will display for each.

Component Descriptions

Allergies

The Allergies component highlights the patient's medication allergies that have been entered into the PCC database. Its position at the beginning of the Adult Regular Health Summary is indicative of the importance of this information in providing care to the patient. Allergy information is obtained from the patient's active problem list. If an allergy has been recorded on the problem list, it will appear in the Allergies component.

```
----- ALLERGIES -----
***** PENICILLIN ALLERGY, ANAPHYLAXIS *****
***** SULFA ALLERGY, 1977 *****
```

This component may also be used to identify patients with no known allergies. If an ICD code of 799.9 **and** a narrative of NKA or No Known Allergy are on the patient's problem list, the message No Allergy Noted is displayed along with the date on which the code and narrative were entered into the PCC, as shown here. If no allergies have been recorded on the patient's problem list, the message None Recorded is displayed. Note that the information that appears in this section is entirely dependent on proper coding and the provider's narrative.

----- ALLERGIES -----

NO ALLERGY NOTED ON JAN 7, 1995

CHR (Community Health Representative)

The CHR component reports information that has been entered into the IHS Community Health Representative Reporting system by Community Health Representatives (CHRs). Only data that has been recorded in this system will appear. For instance, if a CHR did not record the patient's evaluation, no evaluation will appear in the component. Unlike most other health summary components, the data displayed in this component is not retrieved from the PCC database but comes directly from the CHR system.

The component displays the date of service, place of service, CHR's initials, purpose of visit, services provided, activity time, CHR's Service Unit, evaluation, and any referrals that correspond with the visit. These data items are shown in the sample below.

----- CHR (max 10 visits or 2 years) -----

07/14/95 HOME	TS	DIABETES MELLITUS (DM) - MONITOR PATIENT AT: 30 PT experiencing dizziness; referred to doctor Referred BY: MEDICAL Referred TO: CHR
09/24/96 HOME	HC	MOVEMENT PROBLEM (MP) - PATIENT CARE AT: 15 Left leg - limited mobility after fall
10/31/96 COMMUNITY	BD	HYPERTENSION (HY) - HEALTH EDUCATION AT: 50 BP taken: 120/80. PT taking meds EVALUATION: LEVEL OF UNDERSTANDING IMPROVED

Demographic Data

The information that appears in this component is extracted from the RPMS Patient Registration database. The data shown may be used by providers to identify and locate patients, as well as to plan for contract services.

----- DEMOGRAPHIC DATA -----

MILLER, BETTY ANN NAVAJO	DOB: JUN 21, 1957 40 YRS FEMALE A+ SSN: 181-00-9999 MOTHER'S MAIDEN NAME: ESCALANTE, SOPHIA (H) 602-555-0003 (W) 520-295-1111 FATHER'S NAME: MILLER, CLIFFORD SELLS (777 E. 77TH ST., TUCSON, AZ, 87666)
LAST UPDATED: FEB 8, 1995 VETERAN	ELIGIBILITY: DIRECT
HEALTH RECORD NUMBERS: 000256 100004	SELLS HOSPITAL/CLINIC SAN XAVIER HEALTH CENTER
DESIGNATED PROVIDER: SHORR, GREG REMARKS: PATIENT PLANS TO APPLY TO AHCCS.	
ON CMS REGISTER(S): HIGH RISK OB IHS STANDARD DIABETES	

The information displayed in the Demographic Data component is detailed below.

Line Number	Data Items Displayed
1	◆ Patient's name ◆ Date of birth ◆ Age ◆ Sex ◆ Blood type
2	◆ Patient's tribal affiliation ◆ Social security number
3	◆ Mother's maiden name
4	◆ Home phone number ◆ Work phone number ◆ Father's name
5	◆ Patient's community of residence and mailing address
6	◆ Date that registration information was last updated ◆ Information regarding patient's eligibility to receive care: – Ineligible—cannot receive health-care services at this facility – Direct—may receive health-care services at this facility, but is not eligible to receive contract health services – Contract—may receive both direct care and contract care services – Pending verification—eligibility not yet determined
7	◆ Veteran status
8	◆ Patient's health record numbers with facility designation
9	◆ Designated provider, if assigned
10	◆ Remarks that have been entered into the Additional Registration field in the Patient Registration System
11	◆ Any Case Management System registers of which the patient is a member Note: registers classified as confidential will not display

Demographics – Brief

This component is a subset of the data displayed in the Demographic Data component. The information in this component is obtained from the Patient Registration database and includes patient name, date of birth, and the patient's health record number at the facility where the summary is generated. The data is limited in scope and requires minimal space. Often, health-care providers do not require any more detailed demographic information than what is provided in this component. A sample is shown below.

----- BRIEF DEMOGRAPHICS -----
MILLER, BETTY ANN DOB: JUN 21, 1957
SAN XAVIER HEALTH CENTER HEALTH RECORD NUMBER: 54666

Dental

In this component, a detailed dental services history that includes the dental visit date, site of service, ADA procedure code, and procedure description is displayed for encounters that fall within the time and occurrence constraints. The information for this component is extracted from the IHS Dental package.

```

----- DENTAL (max 10 visits or 3 years) -----
<No Failed Appointments>

                ACTIVE DENTAL FOLLOWUP SUMMARY:
02/14/92  ENDODONTIC RECALL LIST

<No Previous Followup>

                SERVICES PROVIDED:
01/21/96  SELLS HOSP --GRAU,DAVID-- (Provider: GRAU,DAVID)
          2335 ( 1) COMPOSITE RESIN-INCISAL ANGLE 8P
12/14/95  SELLS HOSP --GRAU,DAVID-- (Provider: GRAU,DAVID)
          0000 ( 1) FIRST VISIT
          0470 ( 1) STUDY MODELS

```

Diagnostic Procedure

This component displays EKG/ECG summaries within the date and time restrictions specified. The date of the procedure, EKG/ECG summary, and the results display.

```

----- DIAGNOSTIC PROCEDURE (max 10 visits) -----
09/01/90      ECG SUMMARY          RESULT: NORMAL

```

Directions to the Patient's Home

This component prints directions to the patient's home that have been entered in the Patient Registration System.

```

-----Directions to Patient home-----

Take I-23 East to I-11, then take the San Cruces exit.
Turn right at the bottom of the ramp and go to the stop sign.
Turn left and look for a cactus fence around three houses.
The patient's house is the one on the far right.

```

Examinations – Most Recent

In the absence of any time or occurrence restrictions, this component displays each of the patient's most recent examinations. The data for this component comes from exams that have been recorded on the PCC Encounter Form and entered into the PCC database.

```

----- MOST RECENT EXAMINATIONS -----
FOOT EXAM              (01/26/93)  N

```

Eye Care

The Eye Care component displays the patient's last eyeglass prescription that was entered in the PCC database as well as eye care measurements and the dates on which they were recorded. In this component, the heading VU means uncorrected vision and VC means corrected vision.

----- EYE CARE -----						
10/10/96	SELLS	HOSP				
	Sphere	Cyl	Axis	Prism	Add	
R	PLANO	+8.00	100	.50BI	9.99	Reading only: N Pupil near: 40
L	PLANO	-9.00	9	.3BU	9.99	Pupil far: 80
Eye Care Measurements						
	VU			VC		TONOMETRY
10/10/96	5/120-5/120			50/20-50/20		R18/L20
11/22/94	20/20-20/20					
9/27/93				20/-20/10		
7/7/92	20/20-20/20					

Family Medical History

Any family medical history that has been noted on the PCC Encounter Form and entered into the PCC database is displayed in this component. The date that the information was noted on the Encounter Form is shown first, followed by the family medical problem. The family member and the diagnosis date appear only if recorded as part of the Purpose of Visit narrative on the PCC Encounter Form.

----- FAMILY MEDICAL HISTORY -----		
02/02/88	TUBERCULOSIS	(FATHER 1966)

Flowsheets

Flowsheets display selected categories of patient information in a tabular format. The information that can be displayed on a flowsheet consists of all or selected items in the following categories:

- ◆ Purpose of Visit
- ◆ Medications
- ◆ Lab Tests
- ◆ Measurements
- ◆ Examinations
- ◆ Patient Education

Because of differences among sites in naming data items, such as lab tests and medications, flowsheets must be created locally in order to print on health summaries. Refer to the section on Constructing Flowsheets for complete instructions.

Instances of the same data class type may appear more than once for a single visit. Each column can include all items of the specified type or be limited to specific instances for clarity. For example, in the Diabetic Flowsheet below, two items in the Measurement class appear twice: weight and blood pressure.

----- FLOWSHEETS (max 1 year) -----									
DIABETIC FLOWSHEET									
	Wt.	DM Labs	BP	Foot Chk.	DM Meds		Pt	Ed	
12/10/95	:200	:BLOOD	:160/88	:DIABETIC	:DIABINESE 250 MG	#1	:DM-FOOT	CA	
	:	:GLUCOSE=	:	:FOOT CHEC	:00 (90 days) TAKE 1		:RE (F)		
	:	:450 H	:	:K	:TABLET DAILY		:		
4/15/96	:198	:CREATINI	:120/80	:	:DIGOXIN 0.25MG TAB	=	:		
	:	:NE=60	:	:	:#15 T1T DY FH		:		

A flowsheet can be automatically generated by the presence of specified ICD codes in the patient's active problem list. For instance, you might create a diabetic flowsheet at your facility that contains the ICD codes for diabetes as the evoking codes. If a patient had an ICD code for diabetes in the active problems list, the Diabetic Flowsheet would be printed on that patient's health summary. For all other patients, the diabetic flowsheet would not display.

Health Factors

The Health Factors component displays information about the patient concerning the following areas:

- ◆ Tobacco use
- ◆ TB treatment status
- ◆ Alcohol/drug use

Only information that has been entered into the database will appear in this component of the health summary. The Health Factors component can be customized to display either all health factors recorded for a patient or only selected categories; for example, only tobacco use information appears in the sample on the below.

----- HEALTH FACTORS -----									
-- Tobacco use --									
10/19/95	CURRENT SMOKELESS								
03/21/93	CURRENT SMOKER (HEAVY/SEVERE)								

Health Maintenance Reminders

The health maintenance reminder system monitors procedures that should be performed periodically for patients depending on their previous diagnoses, age, and sex. These procedures include immunizations, measurements, lab tests, examinations, and skin tests. The display includes procedure name, date last performed, and next due date. Refer to the appendix of this manual for a detailed schedule of the health maintenance reminders.

----- HEALTH MAINTENANCE REMINDERS -----		
	LAST	NEXT
BLOOD PRESSURE	03/04/96	DUE NOW
WEIGHT	03/04/96	03/04/97
PAP SMEAR	11/20/89	Pt had hysterectomy. Pap may be necessary based on individual followup.
PELVIC EXAM	07/16/96	07/16/97
BREAST EXAM	07/16/96	07/16/97
HCT/HGB	07/11/96	07/11/97
PHYSICAL EXAM	07/16/96	07/16/97
INFLUENZA	06/20/96	06/20/97
PNEUMO-VAC	03/02/87	DUE NOW (WAS DUE 02/28/93)
Td-ADULT	02/25/87	02/22/97
REVIEW OF ALCOHOL USE		DUE NOW
REVIEW OF TOBACCO USE	07/03/94	DUE NOW (WAS DUE 07/03/95)
DM CHOLESTEROL	07/11/96	07/11/97
DM CREATININE	07/11/96	07/11/97
DM DENTAL EXAM	02/21/95	DUE NOW (WAS DUE 02/21/96)
DM EYE EXAM	07/11/96	07/11/97
DM FOOT EXAM, COMPLETE	07/10/96	07/10/97
DM TRIGLYCERIDE	07/10/96	07/10/97

History of Minor Surgery

The History of Minor Surgery component displays all of a patient's minor surgeries. Surgeries classified as minor include ICD codes in the 23, 24, and 85 series and code 69.7. The surgery date, provider's name, and a description of the surgery are displayed for this component.

----- MINOR SURGERY HISTORY (max 5 years) -----		
09/25/95	GRAU, DAVID	SUTURE HEAD
10/18/95	GRAU, DAVID	SUTURE REMOVAL

History of Surgery

Past surgical history is displayed in this component. Excluded are surgeries with ICD codes that display for the History of Minor Surgery component (series 23, 24, and 85 and code 69.7). Information regarding the patient's past surgical procedures is documented in the Purpose of Visit section of the PCC Encounter Form by the provider and is then entered into the database.

----- HISTORY OF SURGERY -----		
07/18/84	SMITH, MARTIN	APPENDECTOMY AT PIMC
10/20/81	JONES, PAUL	OPEN REDUCTION/FIXATION L HIP AT AHSC

The date displayed for each procedure refers to the date the procedure was performed and is obtained from the provider's narrative on the PCC Encounter Form. The provider's name is

displayed next followed by the provider's narrative of the surgical procedure. The site where the procedure was performed is displayed only if that information was included in the provider narrative on the Encounter Form and entered into the database.

Hospitalization Stays

This component displays the dates of admission and discharge, site of hospitalization, and a provider narrative of the discharge diagnosis for hospitalizations that fall within the time and occurrence constraints. Data for this component are entered into the database either from the Clinical Record Brief—IHS Inpatient Services Form that is completed when the patient is discharged or from the CHS Hospital Services Form.

```
-----HOSPITALIZATION STAYS (max 5 visits or 5 years)-----
09/08/87 - 09/15/87      SELLS          ACUTE PYELONEPHRITIS
                                PNEUMONIA
```

Immunizations

The Immunizations component displays all immunization data that exist in the PCC database for the patient. Immunizations that are administered in the outpatient clinic, during a field contact, or in the emergency room are documented on a PCC Encounter Form and are entered into the PCC database. Immunizations that are given at outside facilities are entered into the database by documentation of the immunization history on the PCC Encounter Form for entry into the database.

```
----- IMMUNIZATIONS -----
DPT 3      10/10/95   6 MOS   SANTA ROSA
  2      08/08/95   4 MOS   SANTA ROSA
  1      06/06/95   2 MOS   ST MARYS HOSPITAL

OPV 3      10/10/95   6 MOS   SANTA ROSA
  2      08/08/95   4 MOS   SANTA ROSA
  1      06/06/95   2 MOS   ST MARYS HOSPITAL

HEP B VAC 3      10/10/95   6 MOS   SANTA ROSA
          2      05/15/95   1 MOS   SELLS HOSP

MMR 1      04/09/96  12 MOS   SELLS HOSP

HIB PROJ 3      04/09/96  12 MOS   SELLS HOSP

HIBTITER 2      08/08/95   4 MOS   SANTA ROSA
          1      06/06/95   2 MOS   ST MARYS HOSPITAL
```

The type of immunization is displayed first followed by the date and site of administration. The immunizations are grouped by type and presented in date sequence with the most recent immunization appearing first. The series number is printed also. In order for a series number to display on the health summary, it must have been recorded on the PCC Encounter Form.

In-Hospital Visits

This component shows all of the patient's visits that have a service category of In-Hospital. These are visits in which a hospitalized patient was referred to an in-hospital clinic. For instance, the following example shows that the patient was referred to the diabetic clinic and to the physical therapy department during a hospital stay. The date of the encounter displays first, followed by the location of encounter, clinic to which patient was referred, and provider narrative.

```
----- IN-HOSPITAL VISITS (max 10 visits or 5 years) -----
02/19/95  SELLS HOSP    DIABETIC    DM TYPE II
                                HTN
07/01/94  SELLS HOSP    PHYSICAL T  PHYSICAL THERAPY - WALKING EXERCISES
```

Insurance Information

This component displays all insurance information that has been entered into the Patient Registration database. It is updated as necessary by medical records technicians or the site's social worker.

```
----- INSURANCE INFORMATION -----
INSURANCE      NUMBER      SUFF  COV  EL DATE  SIG DATE  END DATE
MEDICARE       123456789  A     A    01/01/91 10/14/91
BC/BS          444-55-5555                      01/18/89
```

The headings that appear in this component are described below:

INSURANCE	The patient's insurance coverage type
NUMBER	The group or individual policy number
SUFF	Medicaid suffixes
COV	Type of coverage
EL DATE	The date that the patient became eligible for coverage by the health insurance plan
SIG DATE	The date that the patient signed Medicaid release forms
END DATE	The eligibility renewal date for those types of insurance policies that have a stated expiration date necessitating renewal of the patient's eligibility status

Laboratory Components

Two types of laboratory components are available for the health summary:

- ◆ Laboratory Data
- ◆ Most Recent Laboratory Data

The link between the Laboratory System and the PCC database allows for retrieval of lab results for the laboratory components of the health summary. All results that have been entered into the Laboratory System may be printed on the health summary.

If you are not using the Laboratory System, lab data may be entered into the PCC database via the Lab Log Data Entry option on the PCC Data Entry menu. The data may then be retrieved for inclusion on the health summary. It is strongly recommended that laboratory personnel enter these results in the PCC database. When using this method, remember that only those lab results that have been entered into the database will be displayed in the laboratory components.

If you construct a customized health summary, you can limit the test results displayed in either laboratory component by the amount and type of data. For example, you might want to develop a custom summary for the renal clinic that displays only electrolyte, BUN, and creatinine test results. You may also want to restrict the data by length of time or number of occurrences.

Laboratory Data. In the absence of any time or occurrence restrictions, the Laboratory Data component displays all of a patient's lab test results. These results appear below the date on which the lab work was done.

----- LABORATORY DATA (max 2 years) -----			
	02/08/88	02/15/88	02/22/88
FBS	310	260	210
HEMATOCRIT	38		

Most Recent Laboratory Data. This laboratory component displays only the most recent occurrence of each different lab test. The type of lab work that was ordered or performed is listed first, followed by the date, results, units, reference range, and an abbreviation indicating whether the test was accessioned (A), ordered (O), or resulted (R). The results in the following sample component have been limited to the last 2 years.

----- MOST RECENT LABORATORY DATA (max 2 years) -----						
			UNITS	REF	RANGE	
CREATININE CLEARANCE	03/18/97					
COLLECTION TIME	03/18/97	24	HRS	-		R
URINE VOLUME	03/18/97	2400	mL	-		R
URINE CREATININE	03/18/97	240 (H)	mg/kg/d	14-26		R
COMPUTED CREATININE CLEARANCE	03/18/97	167 (H)	mL/min	75-125		R
AMYLASE	05/30/97		IU/L	-		A

Measurement Panels

Measurement data that have been recorded on the PCC Encounter Form for the patient and that fall within the Measurement Panel's data restrictions appear in this component.

----- MEASUREMENT PANELS (max 5 visits or 2 years) -----							
	HT	WT	BP	BMI	%RW	VU	VC
12/10/95	66	200	160/88	33.8	149%		
10/27/95		186	140/90			20/40-20/50	20/20-20/20
09/17/94		175	120/80				

The most common Measurement Panels that appear on health summaries are the adult or pediatric standard panels that have been distributed with the Health Summary package. The display may be presented in standard or metric measurements, depending on which type has been selected for use at your facility. The sample shown above is the Adult Standard display. Your site may also develop a customized measurement panel for use in health summaries. (For more information on Measurement Panels, see the Building Custom Health Summaries section of this guide.)

The data displayed for this component example are restricted by number of occurrences and by time. Remember that the more restrictive of the two limits dominates. In this case, data are displayed for five visits. Regardless of the limits specified, the most recent measurement of any type requested will always display. A note will print at the bottom of the component if a measurement falls outside of the time limit restrictions. The date of the encounter on which a measurement has been recorded is shown to the left of the measurements.

The standard format for recording blood pressure is utilized: the systolic reading is noted first, followed by the diastolic reading. The headings VU and VC refer to vision acuity measurements. Measurements appearing under the heading VU are for uncorrected vision; VC refers to corrected vision. These headings will always appear whether or not information of this type exists in the database. No headings that indicate the left eye measurement versus the right eye measurement are included. The left eye measurement is presented first followed by the right eye measurement.

Measurements

The Measurements component displays the same data as the Measurement Panels component but utilizes an unformatted, vertical display. The measurement type is indicated first, followed by the date the measurement was taken and the results. Decimals are used to indicate fractions for height, weight, and head circumference. Head circumference appears only on the Pediatric Health Summary.

----- MEASUREMENTS (max 5 visits or 5 years) -----		
WT	12/10/91	200
	10/27/91	186
	09/17/91	175
BP	12/10/91	160/88
	10/27/91	140/90
	09/17/91	120/80

Medication Components

Six types of medication components are available for display on the health summary:

- ◆ All
- ◆ Chronic
- ◆ Current
- ◆ Most Recent by Group
- ◆ Most Recent of Each
- ◆ Most Recent by Group, Short Form display

Four of the five components display information in the same format, as shown and described here. Time and occurrence display restrictions can be applied to these components. The date indicates the date of the visit at which the medication was dispensed. The name of the medication that was prescribed is displayed next, followed by the quantity dispensed, the number of days the medication is intended to be taken, and an indication of whether the prescription may have run out or been discontinued. The provider's directions for taking the medication (sig) appear on the second line. Long sigs will continue on subsequent lines.

If the number of days specified for taking the medication has elapsed, the notation “Ran out” is displayed for a period of time after the expiration date, unless overridden by a prescription for the same medication. The notation “D/C” indicates that a provider has explicitly discontinued the medication.

```

----- Medications Component Name (data restriction) -----
01/10/96    (C) DIABINESE 250 MG #100 (90 days) -- Ran out 3/10/96
              TAKE 1 TABLET DAILY 2 refills left.
01/10/96    ERYTHROMYCIN 250 MG #40 (10 days) -- Ran out 01/20/96
              TAKE 1 TABLET FOUR TIMES A DAY

```

All Medications. This component displays a patient’s complete medication history for the time frame specified. All instances of prescribed medications are displayed, including current, discontinued, and recently expired medications. Medications with expired prescriptions are displayed for twice the duration of the prescription up to a minimum of 60 days. For example, a medication that was prescribed for 30 days will continue to be displayed for 60 days past its expiration date. Information that is not displayed includes medications that are OTC, starting doses, or acute prescriptions that ran out at least 60 days ago.

Chronic Medications. This component displays an unduplicated list of current, discontinued, and recently expired medications prescribed for the patient in the time frame specified for the component. Only those medications that the pharmacist has indicated as *chronic* when dispensing will display for this component. The data displayed do not include those medications that are over-the-counter (OTC), starting doses, or acute prescription that ran out at least 60 days ago.

Current Medications. The Meds – Current component lists the last instance of each different medication that has been prescribed for the patient during the specified time frame. The purpose of this component is to provide an unduplicated list of medications that have been dispensed within the time frame specified. It does not include those medications that are OTC, starting doses, or acute prescriptions that ran out at least 60 days ago.

Most Recent of Each Medication. This component displays the last instance of each different medication that the patient has been prescribed during the specified time frame.

Most Recent by Group. This component displays medication data in a different format than the other four medication components. As shown in the sample below, the medication name and is displayed first followed by the last fill date and the quantity dispensed. The sig appears on the

second line of each entry. The data that display in this component are grouped into two sections: Last of Each Chronic Medication and Last of Each Other Medication. The first group, chronic medications, list the last fill of every medication designated as chronic with no restrictions for time and number of occurrences. The second group, other medications, restricts the display data by the time and occurrence parameters that you specify when adding this component to the health summary type.

----- MOST RECENT MEDICATIONS BY GROUP (max 2 years) -----		
***** LAST OF EACH CHRONIC MEDICATION (no limit on years) ****		
	Last fill date	
CALCIUM CARBONATE 650MG	01/13/93	Qty: 30
Sig: TAKE 1 TABLET EVERY DAY		
IBUPROFEN 400MG TAB	01/01/79	Qty: 120
Sig: TAKE 1 TABLET 4 TIMES A DAY IF NEEDED ARTHRITIS PAIN		
***** LAST OF EACH OTHER MEDICATION (max 2 years) *****		
	Last fill date	
CHLORPROPAMIDE 250MG TAB	04/24/95	Qty: 10
Sig: 1XD		
DIGOXIN 0.25MG TAB	05/24/95	Qty: 15
Sig: TAKE 1 TABLET DAILY FOR HEART		
FLUOXETINE 20MG	10/01/96	Qty: 30
Sig: TAKE EVERY DAY		
PEN-G BENZ/PROC 1.2MU CR	02/05/96	Qty: 30
Sig: TAKE ONE A DAY		

Most Recent by Group – Short Form Display. This component follows the same logic as the most recent by group with the exception that the medication display is a short, abbreviated format. Following is a sample:

----- MEDS - MOST RECENT SHORT FORM (max 2 years) -----		
LAST OF EACH OTHER MEDICATION (max 2 years)	Last fill date	
CLONIDINE 0.2MG TAB t1t po q pm hs fbp # 90 30 days	8/21/96	
CLOTRIMAZOLE 1% CREAM apaa dy (not between toes) ud # 1 3 days	9/22/95	
FERROUS SULFATE 325MG t1t po bid ffe # 90 45 days	9/3/96	
FUROSEMIDE 10MG/ML INJ 10ML 40mg given iv in er # 1 30 days	1/5/97	
LORAZEPAM 1MG TAB take 1 tablet every six hours i~ # 50 30 days	12/30/96	
MINOXIDIL 2.5MG TAB t1t po bid fbp # 60 30 days	12/6/96	

Mental Health/Social Services

This component currently appears in the Mental Health/Social Services Health Summary only (see page 29 for more details) and may not be appropriate for general use. It displays data from a number of files in the Mental Health/Social Services package. The following patient information is included in this component.

```

----- MENTAL HEALTH/SOCIAL SERVICES (max 10 visits or 2 years) -----
Designated Mental Health Provider: MARTINEZ,BILL
Designated Social Services Provider: STANLEY,REBECCA

Case Open Date:      DEC 31, 1994
Case Admit Date:     JAN 02, 1995

      <<< MH/SS ACTIVE PROBLEMS >>>

8   07/25/94  (291.0)  ALCOHOL ABUSE
                        PT IS CURRENTLY ABUSING ALCOHOL
8-1   LTP 07/25/94 BD  LONG-TERM ALCOHOL ABUSE COUNSELING

      <<< MH/SS INACTIVE PROBLEMS >>>
                        <NONE>

      <<< MH/SS ENCOUNTERS >>>
10/20/95  SELLS HOSP  BD  [ABUSIVE BEHAVIOR (ALLEGED)] SPOUSE ABUSE
                        Stress: MODERATE      Function: 14
12/21/95  SELLS HOSP  ADA [DEPRESSIVE DISORDER NOS] SERIOUS DEPRESSION
                        Stress: MODERATE      Function: 14
1/30/96   SELLS HOSP  LAB [NONCOMPLIANCE WITH TREATM] NONCOMPLIANCE WITH TX
                        Stress: LOW           Function: 14
4/06/96   SANTA ROSA BD  [MAJOR DEPRESSION,SINGLE E] SECONDARY TO OTHER
                        MAJOR MEDICAL PROBLEMS
                        Stress: SEVERE        Function: 14

----- MENTAL HEALTH/SOCIAL SERVICES MEDICATIONS -----
ELAVIL (noted: 10/20/95)
      TAKE AS DIRECTED BY DR. JONES AT SIERRA TUCSON

```

Offspring History

Information about offspring births and deaths can be captured through the data entry process and are displayed in this component of a *female* patient's health summary. The decision to enter offspring data and the convention for recording this information for entry into the database are made at the facility level. The child's birth date, name, sex, birth weight, gestational age, and Apgar scores are displayed in a linear fashion. If the child has died, the date and cause of death are displayed in parentheses following the birth information. Any data recorded for perinatal or neonatal complications are also displayed, as shown in the following sample.

```

----- OFFSPRING HISTORY -----
DOB      NAME      SEX  BWT  EGA  APGAR  DEATH
03/03/83  JOHN      M   6.63  40  7/9
12/17/86  JANE      F   5.75  36  7/8  (04/15/87:PNEUMONIA)
      PERINATAL COMPLICATION: PRE-ECLAMPSIA
                                HEPATIC FAILURE
      NEONATAL COMPLICATION:  MECONIUM ASP.
                                SEPSIS

```

Outpatient/Field Visits

The Outpatient/Field Visits component displays visits (encounters) that have been entered into the PCC database. These data are extracted from the information that has been recorded in the Purpose of Visit section on the PCC Encounter Form. Although the component heading states that the data displayed are either outpatient or field visits, data in this component may also include visits in the following service categories:

- ◆ Ambulatory
- ◆ Nursing Home
- ◆ Day Surgery
- ◆ Chart Review
- ◆ Observation
- ◆ Telecommunications

----- OUTPATIENT/FIELD VISITS (max 10 visits or 2 years) -----			
01/23/96	SAN XAVIER	DIABETES	DIABETES
12/10/95	SELLS HOSP	EMERGENCY	ELEVATED BLOOD PRESSURE
			LEFT OTITIS MEDIA
10/27/95	SAN XAVIER	GENERAL	DYSFUNCTIONAL UTERINE BLEEDING
09/17/95	SAN XAVIER	GENERAL	PENICILLIN ALLERGY, ANAPHYLAXIS
			VIRAL INFECTION
09/08/95	SELLS HOSP	OTHER	ACUTE PYELONEPHRITIS
			PNEUMONIA
08/30/95	SAN XAVIER	DENTAL	MULTIPLE EXTRACTIONS/ALVEOLOPLASTY
			PERIODONTAL DISEASE
08/23/95	SELLS HOSP	DIABETES	DIABETES

The date the encounter took place displays first, followed by the location of the encounter. The clinic location might also be included if the site has elected to have it displayed.

The provider's narrative is displayed in the last column. This narrative is either the provider's verbatim narrative or an ICD narrative with or without the ICD code, depending on which type of display has been chosen by the site. The standard PCC distribution displays the provider narrative only. During data entry, the narrative is coded to an ICD-9 code and the code is retained for retrieval purposes, even though only the provider narrative may be displayed. (See the Building Custom Health Summaries section for details on selecting the form of the data to display in this component.)

Outpatient Visits (Screened)

The Outpatient Visits (Screened) component displays exactly the same information as the Outpatient/Field Visits component described above, except that it allows the user to screen out certain visits from the component by provider class or clinic. For example, you could choose to exclude all visits to the Employee Health clinic.

Patient Education

This component displays all instances of patient education provided within the date or visit constraints specified. The development of a standardized set of patient education topics and their

entry into the PCC is a local option. The types of education provided must be determined by each site and then entered into the Education Topic file before any data will display in this component. The types of information that can be displayed are illustrated in the example below. The date of the patient encounter, the site, the type of patient education provided, and if supplied, the patient's level of understanding of the education provided is displayed on a single line.

----- PATIENT EDUCATION -----		
10/11/90	SELLS HOSP	HTN-COMPLICATIONS - GOOD UNDERSTANDING
08/06/91	SELLS HOSP	WL-SAFETY - GOOD UNDERSTANDING
05/04/90	SAN XAVIER	WL-SAFETY - FAIR UNDERSTANDING

Most Recent Patient Education

In the absence of any time or occurrence restrictions, this component displays the most recent instance of every type of patient education that has been provided. (See the description of the previous component for more details.)

----- MOST RECENT PATIENT EDUCATION (max 5 visits or 2 years) -----		
12/10/95	SELLS HOSP	DM-DISEASE PROCESS - FAIR UNDERSTANDING
08/23/95	SAN XAVIER	DM-DIET - GOOD UNDERSTANDING

Personal Medical History

Past medical information that is not included in the patient's active and inactive problem list but warrants documentation on the health summary is displayed in this component. Personal medical history is retrieved from data that are recorded in the Purpose of Visit section of the PCC Encounter Form and entered into the PCC database. The date the information was entered, the historical information, and the onset date are displayed.

----- PERSONAL MEDICAL HISTORY -----	
10/02/86	HX HTN
10/23/96	HYSTERECTOMY (onset: 01/95)

Problem List Data

Two Problem List components are available for inclusion on the health summary:

- ◆ Active Problems
- ◆ Inactive Problems

No time or visit restrictions can be placed on these components. Instead, the information displayed is controlled by provider instructions that are recorded on the PCC Encounter Form. By using the Purpose of Visit section of the form, the provider may maintain the active problem list by adding, updating, modifying, or appending data. Each data item that is printed in these components is described here.

Identification Number and Problem. Each problem is identified by a number that displays in the first column of the component. This number is assigned by the computer when the problem is entered into the database for the first time. The identification number is formed from an

abbreviation of the site name at which the problem was entered and a sequence number specific to the individual patient at that facility. No two problems will ever have the same number, although two different numbers may have the same problem narrative. The date on which the problem was initially entered and the date of the most recent modification to the problem display after the problem identification number.

In the Active Problems example shown here, the problem Diabetes Mellitus is identified as number SX1. This problem was entered into the database at the San Xavier Health Center (SX) and was the first problem entered at that facility for the patient. Problem SX1 will always be Diabetes Mellitus. If Diabetes Mellitus were entered for this patient at a different facility (e.g., Sells), the problem would be assigned a number that identifies that facility and the sequence in which the problem was entered (e.g., SE3 Diabetes Mellitus). The dates shown in the two columns to the right of the problem number indicate when the problem was first entered and when it was last modified.

Problem Narrative. The problem narrative is displayed in the column on the right side of the component. The printed narrative appears in one of the following formats: (1) verbatim, (2) a long or short standard narrative based on ICD code, or (3) a combination of provider narrative and ICD narrative. The type of narrative that is displayed is designated locally by each site. The standard PCC component displays the provider narrative only; however, it may be modified by each site as needed.

Problem Notes. The active problems narrative may be enhanced by appending additional information in the form of notes. The second line in the Active Problems component sample (identification number SX1SX1) is a problem note. In this case, it is a note to problem SX1, Diabetes Mellitus. Identification numbers of notes differ from problem numbers in that they have more characters and identify not only the note, but the problem to which they are appended. The first site prefix and sequence number (e.g., SX1) refer to the problem to which the note is appended. The second site prefix and sequence number refer to the site and sequence of the addition of this note to the problem. Although this number represents the combination of two numbers, it should be thought of as a single number that identifies the note.

Notes are displayed just below the narrative of the corresponding problem and are indented to help highlight them and set them apart from problem narratives. Notes have several functions:

- ◆ to communicate treatment plans associated with the problem; for example, NEEDS FBS MONTHLY or STARTED INH 4/1/95
- ◆ to provide additional information about the problem that is not contained in the limited problem narrative, such as encounter date of the initial problem work-up or the precipitating factors that led to a disability

If the provider who is modifying the patient's problem list uses a special numbering convention on the PCC Encounter Form, problems that share the same basic etiology may be displayed in diagnostically related groups on the health summary. These related diagnoses are grouped together under the primary diagnosis and their relationship to the primary diagnosis is indicated by the format of their identification numbers. In this example, the third and fourth lines (identification

numbers SX1.1 and SX1.2) show the special numbering sequence that the provider has indicated on the PCC Encounter Form. The primary diagnosis identification number (e.g., SX1) is displayed first, followed by a decimal point and a separate number that identifies the related problem (e.g., SX1.1). This number, similar to the note identification number, is the complete identification number of the related diagnosis.

Active Problems. This component provides a comprehensive listing of the patient's active medical, social, and psychological problems. Active problems are those that currently affect the patient's health or, if presently quiescent, are at high risk for recurrence.

----- ACTIVE PROBLEMS -----			
	ENT	MODIFIED	
SX1	05/80	07/06/93	DIABETES MELLITUS (diagnosed 06/07/75)
SX1SX1			07/06/91 - DIABINESE 250 MG
SX1.1	07/91	08/30/95	NEUROPATHY
SX1.2	08/91	08/30/95	PERIODONTAL DISEASE
SX2	09/91	09/17/95	PENICILLIN ALLERGY, ANAPHYLAXIS
SX5	10/91	10/27/93	DYSFUNCTIONAL UTERINE BLEEDING
SX8	09/92	01/23/94	HYPERTENSION

Inactive Problems. The Inactive Problems component displays a patient's inactive medical, social, and psychological problems. Inactive problems are those that have been resolved but may recur in the future. These recurring problems may have placed the patient at increased risk (e.g., asbestos exposure) or may have left residual physical findings. Note that conditions that have been resolved by surgery are displayed in the History of Surgery component.

----- INACTIVE PROBLEMS -----			
	ENT.	MODIFIED	
SX6	08/14/90	06/16/95	PYELONEPHRITIS
SX7	06/29/95	09/23/95	NX LEFT HIP FRACTURE

Public Health Nursing Visits

The public health nursing component displays all visits for which a public health nurse was the primary provider. This component display is very similar to the outpatient visits component.

The following additional data items are displayed in this component:

- ◆ Level of Intervention
- ◆ Type of Decision Making
- ◆ Psycho/Social/Environmental Factors
- ◆ Nsg Dx
- ◆ Short-Term Goals
- ◆ Long-Term Goals

These data items are captured on the Public Health Nursing PCC form. If entered into the PCC database they will appear on the health summary. Below is a sample of the output:

```

----- PUBLIC HEALTH NURSING VISITS -----
05/03/97  SELLS HOSP      DIABETES MELLITUS
                        Intervention: PRIMARY
                        Complexity: STRAIGHTFORWARD
                        Psycho/Soc/Env: Patient is depressed secondary to
                        other medical problems.
                        NSG Dx: Depression. Diabetes. Hypertension.
                        Short Term Goals: Continue to monitor medications.
                        Long Term Goals: Nursing home admission.

```

Radiology Studies – Most Recent

In the absence of any time or occurrence restrictions, this component displays the most recent result for each radiology study taken for the patient. The PCC linkage with the Radiology system provides the data for this component.

```

----- MOST RECENT RADIOLOGY STUDIES -----
MAMMOGRAM BILAT(02/20/96) 1.5CM HYPERDENSITY IN LUQ L BREAST (ABNRML)

```

The type of radiology study is listed first, followed by the date it was performed in parentheses. The results and the clinical impression also display in the component.

Referred Care

The Referred Care component lists the patient's referral record within the date and occurrence restrictions specified. This component is available only at sites that are using the Referred Care Information System (RCIS) with the PCC link enabled. Each time a patient is referred to an outside facility for care, the referral information is entered into the RCIS. The data items that are included in the Referred Care component of the health summary include:

- ◆ Beginning date of service
- ◆ Whether the visit was for inpatient or outpatient services
- ◆ Referral status
- ◆ Initials of the referring provider
- ◆ Facility to which the patient was referred
- ◆ Diagnostic category
- ◆ Service category

```

----- REFERRED CARE (max 1 year) -----
BEGIN DOS: 03/06/96   OUTPATIENT   STATUS: ACTIVE
REFERRED BY: EDE      REFERRED TO: UNIVERSITY MEDICAL CENTER
      DIAGNOSTIC CATEGORY:   OBSTETRICAL CARE
      CPT SERVICE CATEGORY:  OPERATIONS/SURGERY

BEGIN DOS: 02/05/96   OUTPATIENT   STATUS: CLOSED - TREATMENT COMPLETED
REFERRED BY: EDE      REFERRED TO: TMC FAMILY MEDICAL CENTER
      DIAGNOSTIC CATEGORY:   RESPIRATORY DISORDERS
      CPT CATEGORY:         EVALUATION AND/OR MANAGEMENT

```

Reproductive History

This component will appear only if data regarding the woman's gravidity, parity, number of children, history of abortion, last menstrual period (LMP), or contraceptive method have been entered in the PCC database. The Reproductive History will display only the information stored in the database; therefore, an incomplete history may display. The date that each data item was obtained is shown as an aid in reviewing the patient's chart for the timeliness of the data. If there is an item for which no data has been recorded, the notation Not Recorded follows the subheading. Subsequent reproductive information noted by the provider on the PCC Encounter Form replaces the previous data.

```
----- REPRODUCTIVE HISTORY -----
G3P3LC3SA0TA0 (obtained 12/7/95)  LMP 11/23/95 (obtained 12/7/95)
CONTRACEPTIVE METHOD: NATURAL TECHNIQUES, EFFECTIVE 10/1/90 (obtained 12/7/95)
```

The full display for the patient's reproductive history includes gravidity (G), parity (P), living children (LC), spontaneous abortions (SA), and therapeutic abortions (TA). The full code set appears in this order on the health summary.

The date of last menstrual period (LMP) is displayed if that information has been entered in the database during a previous encounter.

If the database contains information regarding the patient's method of contraception, it appears on the second line of this component. The date that contraception was begun and the date that the information was obtained are displayed, if available. One of the following types of contraceptive methods will be shown:

- ♦ None
- ♦ Education Only
- ♦ Oral Contraceptives
- ♦ Intrauterine Device
- ♦ Surgical Sterilization
- ♦ Barrier Methods
- ♦ Partner Sterilized
- ♦ Natural Techniques
- ♦ Menopause
- ♦ Hormonal Implant
- ♦ Hormone Injection
- ♦ Other

Scheduled Encounters

This component obtains data from the Clinic Scheduling package. No information will display if the package is not used at your facility or if no scheduling data has been recorded for the patient.

```
----- SCHEDULED ENCOUNTERS (max 3 visits or 2 years) -----
PAST:
  01/23/92      10:00      LEE CHRONIC (30 min.)
  12/27/91      10:00      GRANT CHRONIC (30 min.)
                        MISSED YOUR APPT 1/23, YOUR APPT. RESCHED.
PENDING:
  06/19/92      13:00      WOMEN'S CLINIC (30 min.)
```

Past appointments are displayed according to the date and visit count constraints. All future (pending) appointments are displayed with the length of each appointment and any special comments that have been recorded.

Skin Test Components

Two types of Skin Test components can appear on the health summary: All or Last 3 of Each. Skin test information is entered into the database from the PCC Encounter Form. Each of these components displays the type of skin test that was administered. If multiple skin tests of the same type were given, they are grouped together and displayed in date sequence with the most recent test appearing first. The date that the skin test was read is shown next, followed by the results of the test. The facility at which the test was administered is shown to the right of the test result. A sample component is shown below.

----- SKIN TESTS -----			
PPD	08/01/91	unrep	SAN XAVIER
COCCI	04/25/91	0 mm	SAN XAVIER

All Skin Tests. This component displays all skin tests that have been administered to the patient and the test results.

Last 3 of Each Skin Test. This component limits the data displayed to only the last 3 instances of each skin test type that has been administered.

Supplements

Supplements are specially written additions to the health summary that can be printed each time a health summary is generated. Currently, there are two supplements available. The first supplement is a Diabetic Care summary, which is shown following this text. This supplement is printed on a separate page and is a useful reference when treating patients with diabetes. The second supplement currently available is the Women's Health Profile. This is an output generated by the Women's Health Package. If the women's health package is operational, the profile can be printed as a supplement to the health summary. Additional supplements can be developed as requested.

DIABETES PATIENT CARE SUMMARY		Report Date: Mar 19, 1997
AGE: 64	Sex: F	Date of DM Onset: Jun 23, 1983
Last Height: 66		Sep 21, 1996 BMI: 33.8
Last Weight: 200		Sep 21, 1996
Tobacco Use: YES, USES TOBACCO		HTN documented (Dx): Yes
Last 3 BP: 120/80	Mar 13, 1997	
120/90	Sep 21, 1996	
120/90	Sep 25, 1995	
In past 12 months:		
Diabetic Foot Exam:	No	Aug 24, 1995
Diabetic Eye Exam:	Yes	Jul 06, 1996
Dental Exam:	No	<never recorded>
Rectal Exam (age>40):	No	<never recorded>
(Females Only)		
Pap Smear:	No	Mar 11, 1996
Breast exam:	No	Sep 25, 1995
Last Mammogram:		Mar 25, 1994
Education Provided:		
<none recorded>		
Immunizations:		
Flu vaccine in past year:	No	Dec 28, 1995
Pneumovax ever:	No	<never recorded>
Td in past 10 yrs:	No	Jul 22, 1994
Last PPD Reading:	<never recorded>	
Laboratory (most recent):		
EKG	Sep 11, 1993	
Urinalysis:	Jul 07, 1995	
Note: microalbuminuria testing should be performed, if appropriate)		
HbA1c:	Jan 11, 1993	
Creatinine:	Jun 29, 1995	
Cholesterol:	Jul 24, 1996	
Triglycerides:	Dec 22, 1996	

Treatments Provided

Treatments and procedures that have been performed within the time and occurrence constraints appear in this component. The date of the patient encounter, the site, and the treatment or procedure performed display on a single line. The information that appears in this component is retrieved from the Treatments Provided file. The types of treatments and codes that will be displayed in this component are determined at each site and must be entered into the Treatments Provided file. The data recording and entry conventions also must be developed locally.

-----TREATMENTS PROVIDED (max 5 visits or years)-----		
12/10/87	SELLS HOSP	FOOT CARE
		APPLY/REMOVE BRACE/SLING, CAST

Health Summary Types

Nine predefined standard health summary types are delivered with the PCC Health Summary system distribution. The predefined types are:

- ♦ Adult Regular
- ♦ CHR
- ♦ Dental
- ♦ Diabetes Standard
- ♦ Immunization
- ♦ Mental Health/Social Services
- ♦ Patient Merge
- ♦ Pediatric
- ♦ Problem List

These standard summary types contain the components that health-care providers most commonly rely on to assess a patient's health status and care needs. They differ in terms of primary focus and the data that is displayed. Each of the standard summary types is described in detail below.

The description of each health summary type includes a list of the components that are included and the display restrictions, if any, noted in parentheses following the component name. The restrictions have been abbreviated as follows. The letter X signifies number of occurrences and the letter Y signifies years; for example, 5X/2Y indicates the data is limited to 5 occurrences or 2 years. The provider narrative is set to display in these summaries, as applicable. For more detailed information about these components, refer to the Health Summary Data Components section of this manual.

In addition to the standard health summary types, you can create additional types at your facility that are specific to a site, clinic, or health problem. You will be able to select the components to appear on the summary, their order of appearance, and the date and visit restrictions for each one. The procedures for building customized health summaries are described in detail in the "Building Custom Health Summaries" section of this user's manual.

Adult Regular

The Adult Regular Health Summary is the most frequently used summary type. A sample Adult Regular Health Summary is displayed on pages 32 to 35. The comprehensive overview of the patient's health status provided by the Adult Regular Health Summary maximizes the provider's ability to plan for and provide care to outpatient, emergency room, and home health patients.

The components displayed on the Adult Regular Health Summary are listed on the following page in the order in which they appear on the report.

- ◆ Demographic Data
- ◆ Insurance Information
- ◆ Allergies
- ◆ Measurement Panels—Adult Stand. (5X/2Y)
- ◆ Eye Care
- ◆ Reproductive History
- ◆ Active Problems
- ◆ Inactive Problems
- ◆ History of Surgery
- ◆ Health Factors—All (most recent instance)
- ◆ Current Medications (1Y)
- ◆ Scheduled Encounters (10X/90 days)
- ◆ Hospitalization Stays (5X/5Y)
- ◆ Outpatient/Field Visits (10X/2Y)
- ◆ Referred Care (10X/2Y)
- ◆ In-Hospital Visits (10X/2Y)
- ◆ Treatments Provided (25X)
- ◆ Most Recent Patient Education (5X/2Y)
- ◆ Most Recent Radiology Studies
- ◆ Most Recent Laboratory Data
- ◆ Immunizations
- ◆ All Skin Tests
- ◆ Health Maintenance Reminders
- ◆ Flowsheets (1Y)*

* For flowsheets to display in this health summary type, you must create the flowsheets at your facility and then enter the names of the flowsheets for the Adult Regular summary using the Create/Modify Health Summary Type option.

CHR (Community Health Representative)

The CHR Health Summary displays information that has been entered in the CHR System. Patient-related data from the PCC also display. The following components appear on the CHR Health Summary:

- ◆ Demographic Data
- ◆ Directions to Patient's Home
- ◆ Scheduled Encounters (10X)
- ◆ CHR (10X/2Y)

Dental

The Dental Health Summary is printed prior to a patient's dental visit. Both demographic and clinical information display for use by administrative staff and health-care providers. Below are the components that appear on this health summary type:

- ◆ Demographic Data
- ◆ Allergies
- ◆ Measurement Panel—Adult Stand. (5X/2Y)
- ◆ Active Problems
- ◆ Inactive Problems
- ◆ Current Medications (1Y)
- ◆ Referred Care (10X/2Y)
- ◆ Outpatient/Field Visits (10X/2Y)
- ◆ Dental (10X/2Y)

Diabetes Standard

The Diabetes Standard Health Summary is similar to the Adult Regular summary, but more detailed information is provided for assisting with the health-care of the diabetic patient.

- ◆ Demographic Data
- ◆ Insurance Information
- ◆ Allergies
- ◆ Measurement Panels—Adult Stand. (5X/2Y)
- ◆ Eyeglass Prescription
- ◆ Reproductive History
- ◆ Active Problems
- ◆ Inactive Problems
- ◆ History of Surgery
- ◆ Health Factors (most recent instance)
- ◆ Current Medications (1Y)
- ◆ Scheduled Encounters (5X/30 days)
- ◆ Hospitalization Stays (5X/5Y)
- ◆ In-Hospital Visits (10X/2Y)
- ◆ Outpatient/Field Visits (10X/2Y)
- ◆ Referred Care (10X/2Y)
- ◆ Most Recent Patient Education (5X/2Y)
- ◆ Most Recent Laboratory Data (2Y)
- ◆ Immunizations
- ◆ All Skin Tests
- ◆ Health Maintenance Reminders
- ◆ Diabetic Flowsheet (1Y)*

* For the Diabetic Flowsheet to display in this health summary type, you must create this flowsheet at your facility and then enter the name of the flowsheet for the Diabetes Standard summary using the Create/Modify Health Summary Type option.

Immunization

The Immunization Health Summary displays three components that pertain to the patient's immunization history:

- ◆ Brief Demographics
- ◆ Immunizations
- ◆ All Skin Tests

Mental Health/Social Services

The Mental Health/Social Services Health Summary displays detailed information from the RPMS Mental Health/Social Services System. Due to the sensitive nature of this data, this health summary requires a security key that must be assigned to a user in order to generate it.

- ◆ Demographic Data
- ◆ Insurance Information
- ◆ Allergies
- ◆ Scheduled Encounters (5X/1Y)
- ◆ Active Problems
- ◆ Inactive Problems
- ◆ Hospitalization Stays (5X/5Y)
- ◆ In-Hospital Visits (10X/2Y)
- ◆ Outpatient/Field Visits (10X/2Y)
- ◆ Referred Care (10X/2Y)
- ◆ Current Medications (1Y)
- ◆ Laboratory Data (5X)
- ◆ Most Recent Laboratory Data (1Y)
- ◆ Mental Health/Social Services
- ◆ Most Recent Examinations (3X/2Y)
- ◆ Measurement Panel—Adult Stand. (3X/2Y)
- ◆ Health Factors
- ◆ Treatments Provided (3X/2Y)
- ◆ Personal Medical History
- ◆ Most Recent Patient Education
- ◆ Family Medical History
- ◆ Reproductive History
- ◆ Offspring History

Patient Merge

The Patient Merge (Complete), is included for use by PCC data entry staff to assist with record-keeping responsibilities.

- ◆ Demographic Data
- ◆ Active Problems
- ◆ Allergies
- ◆ Dental
- ◆ Directions to Patient Home
- ◆ Eye Care
- ◆ Family Medical History
- ◆ Flowsheets
- ◆ Health Factors
- ◆ Health Maintenance Reminders
- ◆ History of Surgery
- ◆ Immunizations
- ◆ Inactive Problems
- ◆ Hospitalization Stays
- ◆ In-Hospital Visits
- ◆ Insurance Information
- ◆ Laboratory Data
- ◆ Measurement Panel--Adult Standard
- ◆ Measurements
- ◆ All Medications
- ◆ Most Recent Examinations
- ◆ Most Recent Laboratory Data
- ◆ Most Recent Patient Education
- ◆ Most Recent Radiology Studies
- ◆ Offspring History
- ◆ Outpatient/Field Visits
- ◆ Referred Care
- ◆ Patient Education
- ◆ Personal Medical History
- ◆ Reproductive History
- ◆ Scheduled Encounters
- ◆ All Skin Tests
- ◆ Treatments Provided
- ◆ CHR
- ◆ Mental Health/Social Services
- ◆ Diagnostic Procedure
- ◆ History of Minor Surgery

Pediatric

The Pediatric Health Summary has been specifically designed for use by pediatric health-care professionals to assist with providing effective care for their patients. The components that appear on this health summary are listed below.

- ◆ Demographic Data
- ◆ Insurance Information
- ◆ Allergies
- ◆ Measurement Panels--Pediatric (5X/2Y)
- ◆ Active Problems
- ◆ Inactive Problems
- ◆ Current Medications (1Y)
- ◆ Hospitalization Stays (9X/2Y)
- ◆ Outpatient/Field Visits (10X/2Y)
- ◆ In-Hospital Visits (10X/5Y)
- ◆ Referred Care (1Y)
- ◆ History of Surgery
- ◆ Most Recent Patient Education (5X/2Y)
- ◆ Scheduled Encounters (5X/30 days)
- ◆ Most Recent Laboratory Data (1Y)
- ◆ Immunizations
- ◆ All Skin Tests
- ◆ Health Maintenance Reminders

Problem List

The focus of the Problem List Health Summary is the patient's current health problems as well as latent problems that have the potential for affecting the patient's health in the future. This health summary displays four components:

- ◆ Brief Demographics
- ◆ Active Problems
- ◆ Inactive Problems
- ◆ History of Surgery

Sample Adult Regular Health Summary

***** CONFIDENTIAL PATIENT INFORMATION -- OCT 5, 1996 10:29 AM [CKC] *****
 ***** MILLER,BETTY ANN #088888 (ADULT REGULAR SUMMARY) pg. 1 *****

----- DEMOGRAPHIC DATA -----

MILLER,BETTY ANN DOB: JUN 21,1957 40 YRS FEMALE A+
 NAVAJO SSN: 181-00-9999
 MOTHER'S MAIDEN NAME: MILLER,SOPHIA
 (H) 602-555-0003 (W) 602-555-6789 FATHER'S NAME: THATCHER,CLIFFORD
 TUCSON (7777 E. 77TH ST.,TUCSON,AZ,87666)

LAST UPDATED: OCT 8, 1995 ELIGIBILITY: DIRECT
 VETERAN

HEALTH RECORD NUMBERS: 088888 SELLS HOSPITAL/CLINIC
 054666 SAN XAVIER HEALTH CENTER

DESIGNATED PROVIDER: MARTIN,LARRY
 REMARKS: PATIENT PLANS TO APPLY TO ACCCHS
 ON CMS REGISTERS: HIGH RISK OB

----- INSURANCE INFORMATION -----

INSURANCE	NUMBER	SUFF	COV	EL DATE	SIG DATE	END DATE
MEDICARE	123456789	A	A	01/01/91	10/14/91	
BC/BS	444-55-5555					01/18/89

----- ALLERGIES -----

***** PENICILLIN ALLERGY, ANAPHYLAXIS *****
 ***** SULFA ALLERGY, 1977 *****

----- MEASUREMENT PANELS (max 5 visits or 2 years) -----

	HT	WT	BP	BMI	%RW	VU	VC
10/10/96	66	200	160/88	33.8	149%		
10/27/95		186	140/90			20/40-20/50	20/20-
20/20							
09/17/95		175	120/80				

** FLAG MEANS HEIGHT DATA IS OLD.

-----EYE CARE-----

09/10/96 SELLS HOSP
 Sphere Cyl Axis Prism Add
 R +10.00 -9.00 5 .5BI .75 Reading only: - Bridge: 15 Pupil near: 50
 L +10.00 -8.00 3 .3BU .75 Temple: 3.85 Eye size: 27 Pupil far: 50

	Eye Care Measurements		
	VU	VC	TONOMETRY
09/04/96	20/20-20/40	20/20-20/20	
12/27/95	20/20-20/30	20/20-20/20	R18/L20
10/2/93	20/20-20/20		

----- REPRODUCTIVE HISTORY -----

G3P3LC3SA0TA0 (obtained 12/10/91) LMP 11/23/95 (obtained 12/02/95)
 CONTRACEPTIVE METHOD: NATURAL TECHNIQUES (obtained 12/10/91)

***** CONFIDENTIAL PATIENT INFORMATION -- OCT 5, 1996 10:29 AM [CKC] *****
 ***** MILLER,BETTY ANN #088888 (ADULT REGULAR SUMMARY) pg. 2 *****

----- ACTIVE PROBLEMS -----

	ENT	MODIFIED	
SX1	05/14/80	07/06/95	DIABETES MELLITUS (diagnosed 06/07/75)
SX1SX1		07/06/95	- DIABINESE 250 MG
SX1.1	07/02/95	08/30/95	NEUROPATHY
SX1.2	08/30/95	08/30/95	PERIODONTAL DISEASE
SX2	09/17/95	09/17/95	PENICILLIN ALLERGY, ANAPHYLAXIS
SX5	10/27/95	10/27/95	DYSFUNCTIONAL UTERINE BLEEDING
SX8	09/4/93	01/23/96	HYPERTENSION

----- INACTIVE PROBLEMS -----

	ENT	MODIFIED	
SX6	12/10/95	12/10/95	PYELONEPHRITIS
SX7	12/10/95	12/10/95	HX LEFT HIP FRACTURE

----- HISTORY OF SURGERY -----

07/18/84	WILSON, MARK	APPENDECTOMY AT PIMC
10/20/81	SANCHEZ, PAUL	OPEN REDUCTION/FIXATION L HIP AT AHSC

----- HEALTH FACTORS -----

-- Tobacco use --
 07/18/96 CURRENT SMOKELESS
 10/20/94 CURRENT SMOKER

----- CURRENT MEDICATIONS (max 1 year) -----

07/06/96 DIABENESE 250MG TABS #30 (30 days) -- Ran out 08/05/96

----- SCHEDULED ENCOUNTERS (max 10 visits or 90 days) -----

PAST:
 01/23/96 10:00 LEE CHRONIC (30 min.)
 12/27/95 10:00 GRANT CHRONIC (30 min.)
 MISSED YOUR APPT 1/23, YOUR APPT. RESCHED.
 PENDING:
 12/19/96 13:00 WOMEN'S CLINIC (30 min.)

----- HOSPITALIZATION STAYS (max 5 visits or 5 years) -----

09/08/89-09/15/89	SELLS HOSP	ACUTE PYELONEPHRITIS PNEUMONIA
-------------------	------------	-----------------------------------

----- OUTPATIENT/FIELD VISITS (max 10 visits or 2 years) -----

01/23/96	SAN XAVIER	DIABETES	DIABETES
12/10/95	SELLS HOSP	EMERGENCY	ELEVATED BLOOD PRESSURE
			LEFT OTITIS MEDIA
10/27/95	SAN XAVIER	GENERAL	DYSFUNCTIONAL UTERINE BLEEDING
			SULFA ALLERGY, 1977
09/17/95	SAN XAVIER	GENERAL	PENICILLIN ALLERGY, ANAPHYLAXIS
			VIRAL INFECTION
09/08/95	SELLS HOSP	GENERAL	ACUTE PYELONEPHRITIS
			PNEUMONIA
08/30/95	SAN XAVIER	DENTAL	MULTIPLE EXTRACTIONS/ALVEOLOPLASTY
			PERIODONTAL DISEASE

***** CONFIDENTIAL PATIENT INFORMATION -- OCT 5, 1996 10:29 AM [CKC] *****
 ***** MILLER, BETTY ANN #088888 (ADULT REGULAR SUMMARY) pg. 3 *****

----- REFERRED CARE (max 10 visits or 2 years) -----

<<< RCIS REFERRALS >>>

BEGIN DOS: 05/13/96 (A) OUTPATIENT STATUS: ACTIVE
 REFERRED BY: EDE REFERRED TO: TMC FAMILY MEDICAL CENTER
 PURPOSE: SURGERY
 DIAGNOSTIC CATEGORY: GASTROINTESTINAL DISORDERS
 CPT SERVICE CATEGORY: OPERATIONS/SURGERY

----- INHOSPITAL VISITS (max 10 visits or 2 years) -----

07/01/94 SELLS HOSP PHYSICAL T PHYSICAL THERAPY - WALKING EXERCISES

----- TREATMENTS PROVIDED (max 25 visits) -----

09/27/95 SELLS HOSP CASTING (1)
 06/12/96 UNDES/UNSP INSTR-DIET (0)
 SELF-ASSISTED EXERCISE (0)
 INSTR-FOOT CARE (0)

----- MOST RECENT PATIENT EDUCATION (max 5 visits or 2 years) -----

10/12/96 SELLS HOSP DM-DISEASE PROCESS - FAIR UNDERSTANDING
 08/23/95 SAN XAVIER DM-DIET - GOOD UNDERSTANDING

----- MOST RECENT RADIOLOGY STUDIES (max 10 visits or 5 years) -----

CISTERNOGRAM POS CONT S&I (04/04/94) DIAGNOSTIC CODE: NORMAL
 IMPRESSION: NORMAL

----- MOST RECENT LABORATORY DATA (max 2 years) -----

			UNITS	REF	RANGE
CREATININE CLEARANCE	03/18/96				
COLLECTION TIME	03/18/96	24	HRS	-	R
URINE VOLUME	03/18/96	2400	mL	-	R
URINE CREATININE	03/18/96	240 (H)	mg/kg/d	14-26	R
COMPUTED CREATININE CLEARANCE	03/18/96	167 (H)	mL/min	75-125	R

----- IMMUNIZATIONS -----

TD-ADULT 12/10/95 38 YRS SAN XAVIER
 PNEUMOVAX 09/17/95 38 YRS SAN XAVIER

----- ALL SKIN TESTS -----

PPD 08/01/95 unrep SAN XAVIER
 COCCI 04/25/95 0 mm SAN XAVIER

----- HEALTH MAINTENANCE REMINDERS -----

	LAST	NEXT
BLOOD PRESSURE	07/19/96	DUE NOW
WEIGHT	07/19/96	DUE NOW
PAP SMEAR	07/19/96	Pt had hysterectomy. Pap may be
necessary		based on individual followup.
PELVIC EXAM	07/19/96	DUE NOW
BREAST EXAM	07/19/96	DUE NOW
RECTAL		DUE NOW

***** CONFIDENTIAL PATIENT INFORMATION -- OCT 5, 1996 10:29 AM [CKC] *****
 ***** MILLER, BETTY ANN #088888 (ADULT REGULAR SUMMARY) pg. 4 *****

BLOOD GLUCOSE	07/23/95	07/23/96
MAMMOGRAM	11/20/95	12/20/96
PHYSICAL EXAM	04/18/93	DUE NOW

INFLUENZA	09/17/95	DUE NOW
PENUMOVAC	09/17/95	DUE NOW
Td-ADULT	12/10/95	12/10/96

REVIEW OF ALCOHOL USE		DUE NOW
REVIEW OF TOBACCO USE	07/18/96	DUE NOW

DM CHOLESTEROL	10/28/95	10/28/96
DM CREATININE	10/28/95	10/28/96
DM DENTAL EXAM	10/28/95	10/28/96
DM EYE EXAM	07/23/95	DUE NOW
DM FOOT EXAM, COMPLETE	10/28/95	10/28/96
DM TRIGLYCERIDE	10/28/95	10/28/96

----- FLOWSHEETS (max 1 year) -----

DIABETIC FLOWSHEET

	Wt.	DM Labs	BP	Foot Chk.	DM Meds	Pt Ed
09/30/96	:200	:BLOOD	:160/88	:DIABETIC	:DIABINESE 250 MG #1	:DM-FOOT CA
	:	:GLUCOSE=	:	:FOOT CHEC	:00 (90 days) TAKE 1	:RE (F)
	:	:190 H	:	:K	:TABLET DAILY	:
06/30/96	:195	:BLOOD	:150/95	:	:DIABINESE 250 MG #1	:
	:	:GLUCOSE=	:	:	:00 (90 days) TAKE 1	:
	:	:200 H	:	:	:TABLET DAILY	:

***** END * CONFIDENTIAL PATIENT INFORMATION -- OCT 5, 1996 10:29 AM *****

Generating Health Summaries

Five different options for generating health summaries are available on the Health Summary system menu, shown below, or the PCC main menu. Instructions for using these options are provided in this section of the manual.

```
*****
**      IHS Health Summary      **
*****
                        Version 2.0

                        SELLS HOSPITAL/CLINIC

HS      Generate Health Summary
BRHS    Browse Health Summary
MHS     Generate Multiple Health Summaries
CRHS    Health Summary Displaying CMS Register(s)
INHS    Health Summary for Inactive Patient
BLD     Build Health Summary ...
HSM     Health Summary Maintenance ...
```

The remaining two options on the Health Summary main menu present submenus of options for building customized health summaries and supervisory functions for maintaining the system at your facility. These options are described in detail in the following two sections of this manual.

Generate Health Summary

To generate a health summary for a single patient, choose the Generate Health Summary option from the main menu. You will then be prompted to select a health summary type. You may choose one of the predefined health summary types or one that has been created at your facility. To see a list of the types available, type a question mark (?) at the prompt.

After you have entered a summary type, specify the patient for whom you want to generate the health summary. Select the patient by entering the patient's name or chart number. You can print the report or display the report on the screen.

In the example below, an Adult Regular Health Summary is requested for Betty Ann Miller. The report will display on the screen. A sample of this report is included on pages 32 to 35.

```
Select health summary type: ADULT REGULAR // ADULT REGULAR
Select patient: MILLER,BETTY ANN           F 06-21-57 1810099999   SE 088888
Patient's chart number is 088888
DEVICE: HOME// [Press RETURN to accept default value or enter print device]
```

Browse Health Summary

Another option available for generating health summaries is to browse the report on screen. You can use this option to generate a health summary for an individual patient. This option is not available for use when generating multiple health summaries at the same time. Select the Browse Health Summary option from the main menu and specify the summary type and patient, as described for the Generate Health Summary option above. The report will display on the screen, as shown in the sample below, and you will be able to review the information using the following keys:

- + Next Screen
- Previous Screen
- Q Quit
- ?? More Options

OUTPUT BROWSER	Nov 08, 1996 10:32:15	Page: 1 of 6
PCC Health Summary for THATCHER,BECKY		
***** CONFIDENTIAL PATIENT INFORMATION -- NOV 8,1996 10:32 AM *****		
***** THATCHER,BECKY (ADULT REGULAR SUMMARY) [CKC] pg. 1 *****		
----- DEMOGRAPHIC DATA -----		
THATCHER,BECKY DOB: JAN 1,1933 64 YRS FEMALE O+		
TOHONO O'ODHAM NATION, OF, ARIZON SSN: 000-17-0001		
MOTHER'S MAIDEN NAME: THATCHER,CAROL		
(H) 520-555-0001 (W) 520-295-1111 FATHER'S NAME: THATCHER,CLIFFORD		
SELLS (P.O. BOX 998,SASABE,AZ,88776)		
LAST UPDATED: JUN 14,1996 ELIGIBILITY: PENDING VERIFICATION		
VETERAN		
HEALTH RECORD NUMBERS: 100001 PHOENIX HOSP		
000256 SELLS HOSPITAL/CLINIC		
+ Enter ?? for more actions >>>		
+ NEXT SCREEN	- PREVIOUS SCREEN	Q QUIT
Select Action: +//		

Generate Multiple Health Summaries

You can generate health summaries for more than one patient at a time with the Generate Multiple Health Summaries option. Begin by selecting the Generate Multiple Health Summaries option from the main menu. Following the procedure described above, choose the type of summary you want to run. Then enter the patients for whom you want health summaries. You can enter patients one at a time by name or chart number or you can enter the name of a search template you have created with Q-Man or other RPMS tools. Remember that if you are entering the name of a search template, you must always preface the name with a left square bracket ([), as shown on the next page.

```
Select health summary type: ADULT REGULAR // ADULT REGULAR  
Select patient: [PATIENTS OVER AGE 65  
DEVICE: HOME// [Press RETURN to accept default value or enter print device]
```

Health Summary Displaying CMS Register(s)

If you would like to see if a patient is on any special Case Management system registers, this menu option allows you to first view a list of those registers of which the patient is a member and then generate the appropriate health summary type. After selecting this option, you will choose the patient by name or chart number. Some brief demographic information about the patient will display along with the names of any registers to which the patient belongs. You can then generate the health summary type desired. For instance, if you enter a patient's name and discover that this patient is on the Diabetes register, you can then choose to print the Diabetes Standard Health Summary instead of the Adult Regular, as shown.

```
Select patient: ADAMS,ROSEANNE           F 01-17-48 025090250   SE 100827  
Patient's chart number is 100827  
ON CMS REGISTER(S): DIABETES  
  
Select health summary type: ADULT REGULAR// DIABETES STANDARD
```

Health Summary for Inactive Patient

To generate a health summary for an inactive patient, follow the same procedures described for the Generate Health Summary option.

Health Summary Maintenance Options

In addition to the main menu options already described, a submenu of options is available for locally maintaining the Health Summary system. Select the Health Summary Maintenance option from the main menu to see the Maintenance menu below. Due to the nature of the options on the Maintenance menu, a manager's key is required for access.

```
*****
**           IHS Health Summary           **
** Health Summary Maintenance Menu **
*****
Version 2.0

SELLS HOSPITAL/CLINIC

IS    Inquire About a Health Summary Type
PP    Print Health Maintenance Item Protocols
LS    List Health Summary Types
LC    List Health Summary Components
LM    List Measurement Panel Types
LF    List Health Summary Flowsheets
LI    List Health Summary Flowsheet Items
MS    Create/Modify Health Summary Type
MM    Create/Modify Measurement Panel
MF    Create/Modify Flowsheet
MI    Create/Modify Flowsheet Item
DS    Delete Health Summary Type
DM    Delete Measurement Panel Definition
DF    Delete Health Summary Flowsheet
DI    Delete Health Summary Flowsheet Item
HS    Generate Health Summary
```

This section of the manual provides instructions for using the options that pertain to viewing and deleting elements of the health summaries. The remaining options for creating and modifying portions of the health summaries will be covered in detail in the Building Health Summaries section of this guide.

Reviewing Health Summary Elements

The following options are available for reviewing information about the health summary types, components, panels, and flowsheets that exist locally, as well as those that have been included with the system. This information is helpful for using and building health summaries. Below are descriptions of the options and instructions on using them.

Inquire About a Health Summary Type. This option allows you to view the structure of a specific health summary type. The components that appear in the health summary, the order of the components, the data restrictions, and specifications regarding the display of the clinic name and

ICD text are displayed. You will be prompted to enter the health summary type of interest and the output device.

Print Health Maintenance Item Protocols. Health maintenance reminders are printed on many types of health summaries. The due dates for each of these items are calculated according to a predefined schedule. The Print Health Maintenance Item Protocols option allows you to review this schedule. The schedule is also included in the appendix of this manual. To use this option, select it from the menu and then specify an output device.

List Health Summary Types. This option allows you to view the names of all the health summary types that exist at your facility. This list will include the standard health summary types that were distributed with this package as well as any customized health summaries that have been created locally. Select the option from the Maintenance menu then enter an output device at the prompt.

List Measurement Panel Types. Use this option to view a list of the available measurement panels. Both the standard panels distributed with the Health Summary package and any panels that have been created at your facility will display. Choose this option from the Maintenance menu to see the list of measurement panels.

List Health Summary Flowsheets. The List Health Summary Flowsheets option displays the names of the flowsheets that exist at your facility. Remember that all flowsheets must be created locally. No flowsheets have been distributed with this package. To use the option, select it from the Maintenance menu. The list of flowsheet names will appear on the screen.

List Health Summary Flowsheet Items. This option displays a list of the categories of items that can be included on a flowsheet; for example, examination, lab result, or measurement. To view the list, enter the option at the Maintenance menu prompt.

Deletion Options

These deletion options allow you to delete health summary types, panels, and flowsheets. Caution should be exercised when using these options because once an item has been deleted, it can never be retrieved. Note that deletion is immediate and no verification of intent displays prior to deletion. Also bear in mind that deleting components or measurement panels may have harmful effects on summaries that use them. Similarly, deleting a summary type may mean that a function that makes use of that type may no longer work. When you are making a deletion, please be sure that the item you are deleting will not affect another application or function.

Delete Health Summary Type. This option provides a means for deleting a complete health summary type. For instance, if you created several customized health summaries that are no longer used at your facility, you may want to delete them.

Delete Measurement Panel Definition. Use this option for deleting an entire measurement panel. Prior to deleting a measurement panel, check to make sure that it is not used by any of the health summary types generated at your facility.

Delete Health Summary Flowsheet. This option allows you to delete a flowsheet. Keep in mind that once the flowsheet is deleted, it will not appear on any health summaries that reference it. Review the health summaries in use at your facility to ensure that the deletion will not have any adverse effects.

Delete Health Summary Flowsheet Item. The Delete Health Summary Flowsheet Item option allows you to delete a class of items that are used for creating flowsheets. Once a class of items has been deleted, it cannot be recovered.

Building Custom Health Summaries

The Health Summary system provides options that allow you to create custom health summaries for use at your facility. These site-specific health summaries can be tailored to highlight the particular health needs of the patients in your area or to focus on a particular diagnosis. For example, you might want to create an obstetrics health summary to provide a detailed printout of patients' prenatal visits and lab tests or a geriatrics health summary that focuses on the special needs of elderly patients.

The options needed for creating a custom health summary type or building site-specific measurement panels and flowsheets are accessible from the Build Health Summary menu shown below. To access this menu, select Build Health Summary from the Health Summary main menu.

```
*****
**          IHS Health Summary          **
**      Build Health Summary Menu      **
*****
Version 2.0

SELLS HOSPITAL/CLINIC

IS      Inquire About a Health Summary Type
PP      Print Health Maintenance Item Protocols
LS      List Health Summary Types
LC      List Health Summary Components
LM      List Measurement Panel Types
LF      List Health Summary Flowsheets
LI      List Health Summary Flowsheet Items
MS      Create/Modify Health Summary Type
MM      Create/Modify Measurement Panel
MF      Create/Modify Flowsheet
HS      Generate Health Summary
BRHS    Browse Health Summary
```

This section of the user's guide provides information and instructions on only three of the menu options presented on the Build Health Summary menu:

- Create/Modify Health Summary Type
- Create/Modify Measurement Panel
- Create/Modify Flowsheet

Please refer to the previous sections of this manual for descriptions of the other options available on the Build Health Summary menu.

The various tasks necessary to build new health summary types differ depending on the components you select. The process is presented here in stages, so it is important to read this entire section of the manual prior to attempting to construct a custom health summary type.

The Building Process

Before you begin the process of constructing a new health summary type, you should carefully outline the details desired in the new summary, keeping in mind its intended purpose and use. For example, you will need to decide which components to include, the data restrictions to be applied to the components, the order in which the components will print, whether any custom measurement panels or flowsheets will be needed, and the name for the health summary. This planning step in the process is very important as it will greatly facilitate the construction of the health summary. A Request for New Health Summary form is provided in Appendix B. You can copy this form and use it to help you with the planning process or fill it out and give it to your Site Manager if you do not feel comfortable with the mechanics of creating your own. Refer to the Health Summary Data Components section of this manual for detailed information on the available components and the data that display for each one.

The process of constructing a custom health summary is presented in two separate sample sessions to assist you with understanding the complexities of the process. The process may be very simple or more complex, depending on the components you choose to include in the new health summary. This presentation allows you to become familiar with the basic process first and then learn about the additional steps required when you use components that necessitate specification of the particular data to display for each one.

Session 1: Basic Process

Below are the basic steps for building a custom health summary followed by a sample dialog illustrating these steps. This overview serves as an introduction to the process and **does not** include instructions for using the Measurement Panels, Flowsheets, Health Maintenance Reminders, Health Factors, Lab Test, or Supplements components.

1. Outline the details of the new health summary you want to create; for example, the component names, data restrictions, and the order in which you want them presented.
2. From the Build Health Summary menu, select Create/Modify Health Summary Type.
3. The following prompts will appear on the screen. The instructions provided here will assist you with responding appropriately to the prompts. Remember that you can use the RETURN key to bypass a prompt and the up-hat key (^) to exit the process at any time. Also, on-line help is available by typing a question mark (?) at the prompt and then pressing RETURN to view information on how to respond. Entering two or three question marks displays extended help.
 - a) At the first prompt, enter the name for the new health summary type and press RETURN. You will then be prompted to confirm that you are adding a new type. Press RETURN to confirm the name or enter new text to modify the name, if needed.
 - b) Next, you are presented with the option of adding a security key to the health summary. If you add a security key, only users who have the key will be able to modify this health summary type. Enter the name of the key or press RETURN to bypass the prompt.

- c) At the Select Summary Order prompt, enter a number to indicate the order in which you want a particular component to appear. It is recommended that you enter numbers in increments of 10 to make later modification of the health summary easier. For instance, if you assigned the order of components as 10, 20, 30, and 40, you could easily insert a new component at a later time as 15 without re-creating the entire summary. The inserted component would display second in the summary.
- d) Enter the name of the component that corresponds with the summary order that you specified in step c. Then confirm your selection by pressing RETURN at the next prompt or correcting the name by typing in the correct one. You must enter the component name as it is identified in the system; for instance, you will need to type PROBLEMS – ACTIVE for the Active Problems component. All of the component names are listed on page 3 or you can type a question mark (?) at the prompt to view a list of the component names on the screen.
- e) For components that allow data display restrictions, you will be prompted in two separate steps to enter the limitations for the number of occurrences and the time frame. For instance, you may want to limit a component to display data for 5 occurrences or 1 year. If the component you entered does not allow restrictions, these prompts will be skipped and you will see the prompt described in the step below instead. To enter the restriction for number of occurrences, type the number and press RETURN. To enter a time limit restriction, type the number followed by the abbreviation for the units and press RETURN. The abbreviations are: days (D), months (M), and years (Y). Do not put a space between the number and the units; for example, you could enter 90D (90 days), 12M (12 months), or 5Y (5 years). You can specify both, one, or no restrictions on the data to display. See the first section of this manual for further information on data display restrictions.
- f) The Alternate Title prompt that appears next allows you to assign a custom label to the component that will print on the health summary. The alternate title can be any name that you want to designate. For example, if you are using the Outpatient/Field Visits component and assign the alternate title Patient Encounters, the component heading that appears on the health summary will be Patient Encounters. The alternate title does not change the contents of the component in any way. Only the heading is changed.
- g) After you have entered responses to the prompts described above, the Select Summary Order prompt will appear again. Continue adding components to the health summary by repeating the previous steps. When you have finished adding components, press RETURN at the next Select Summary Order prompt that appears to continue with the process.
- h) Next you will be prompted to choose whether the clinic name displays with the visit data for any components utilizing this type of data. Enter yes or no, or press RETURN to bypass the prompt if you are not using any applicable components.

- i) You will see the ICD Text Display prompt next. For components that contain ICD-coded diagnosis or procedural data, you have several choices for displaying the ICD text. Enter one of the following or press RETURN to bypass the prompt if you have not selected components that contain ICD-coded data.
 - ◆ long text ◆ short text
 - ◆ code only ◆ none
- j) The Provider Narrative prompt lets you specify whether the provider's narrative displays in the Purpose of Visit field for any component that contains this data item. Enter yes or no to make your selection or press RETURN to bypass the prompt.
- k) Type the up-hat character (^) at the next prompt (Select Measurement Panel Sequence) to complete and exit the process for Session 1.

Considerations for Display of Provider Narrative and ICD Text. Sample session 1 contains options for displaying the provider narrative and ICD text for components that include diagnoses, procedures, and purposes of visits, such as Active and Inactive Problems, Personal Medical History, Outpatient/Field Visits, and History of Surgery. In order for the provider's narrative to be displayed, you must respond yes to the Provider Narrative prompt. Note that your response to this prompt affects the entire summary; that is, all fields with ICD-coded data. You can also elect to display some form of the standardized text associated with the ICD code. See the process steps above for the available options.

These options allow you to display various combinations of the ICD text and provider's narrative. If you bypass these options and do not indicate any choice, the default value is the provider narrative only. Any choice that you make with regard to this display has potential problems. If only the provider's narrative is displayed, the summary contains exactly what the provider wrote, but providers receive no feedback on the effect of coding their narrative. On the other hand, displaying the ICD text may clutter the health summary unacceptably. You will want to consider the results of the various display combinations and their potential problems as well as the specific needs of your facility when determining responses to these prompts.

Sample Dialog for Session 1

```
Select HEALTH SUMMARY TYPE NAME: EMERGENCY
ARE YOU ADDING 'EMERGENCY' AS A NEW HEALTH SUMMARY TYPE (THE 10TH)? YES
NAME: EMERGENCY// [RETURN]
LOCK: [RETURN]
Select SUMMARY ORDER: 10
SUMMARY ORDER COMPONENT NAME: DEMOGRAPHIC DATA
COMPONENT NAME: DEMOGRAPHIC DATA// [RETURN]
ALTERNATE TITLE: [RETURN]
Select SUMMARY ORDER: 20
SUMMARY ORDER COMPONENT NAME: ALLERGIES
COMPONENT NAME: ALLERGIES// [RETURN]
ALTERNATE TITLE: [RETURN]
Select SUMMARY ORDER: 30
```

SUMMARY ORDER COMPONENT NAME: **PROBLEMS – ACTIVE**
 COMPONENT NAME: PROBLEMS – ACTIVE // **[RETURN]**

ALTERNATE TITLE: **CURRENT HEALTH PROBLEMS**

Select SUMMARY ORDER: **40**

SUMMARY ORDER COMPONENT NAME: **MEDS – ALL**

COMPONENT NAME: MEDS – ALL// **[RETURN]**

MAXIMUM OCCURRENCES: **10**

TIME LIMIT: **1Y**

ALTERNATE TITLE: **ALL MEDICATIONS**

Select SUMMARY ORDER: **[RETURN]**

CLINIC DISPLAYED: **YES**

ICD TEXT DISPLAYED: **NONE**

PROVIDER NARRATIVE: **YES**

Select MEASUREMENT PANEL SEQUENCE: **^**

Session 2: Adding Custom Components

This sample session focuses on adding components to the health summary that require more specification than just the occurrence and time display restrictions. For the components listed below, you will need to specify the particular data items to appear in each.

- ◆ Measurement Panels
- ◆ Lab Tests
- ◆ Health Maintenance Reminders
- ◆ Flowsheets
- ◆ Health Factors

Considerations for the data to be displayed in these components are discussed here, followed by step-by-step instructions for adding the components to your custom health summary and a sample dialog to illustrate the process.

Measurement Panels. The four standard Measurement Panels outlined below have been included with this distribution of the Health Summary package. When building a custom health summary, you can use one of these types or create your own site-specific measurement panels.

Adult Standard/Adult Standard Metric

- ◆ Height
- ◆ Blood Pressure
- ◆ Weight Percentile
- ◆ Vision Corrected
- ◆ Weight
- ◆ BMI
- ◆ Vision Uncorrected

Pediatric Standard/Pediatric Standard Metric

- ◆ Height
- ◆ Weight
- ◆ Blood Pressure
- ◆ Vision Uncorrected
- ◆ Height Percentile
- ◆ Weight Percentile
- ◆ Head Circumference
- ◆ Vision Corrected

More than one measurement panel can appear in the Measurement Panels component. During the health summary creation process, you will be prompted to specify the sequence of display for the panel within the component and then the name of the panel type. If you are using a custom measurement panel, the panel **must** be created prior to its insertion in a health summary. (See pages 56 to 58 for instructions on creating a custom measurement panel.)

Laboratory Tests. If you are utilizing either of the Lab Test components in the custom health summary, you must specify the individual lab tests to appear in the component and their sequence of display. You will enter the lab tests one at a time, rather than as a panel as with the measurement data. Prompts for the lab test sequence and type will guide you in adding these tests when building the new health summary. If you do not enter the individual lab tests, no data will display for the Laboratory Tests component in the health summary.

Health Maintenance Reminders. If you are using the Health Maintenance Reminders component, you will need to enter the individual health surveillance items to appear in the component. As with the laboratory tests, you will enter the items one at a time and specify the order in which they are to appear. You can choose one or more of the following items to display in this component. If you do not enter any surveillance items, no data will appear in the Health Maintenance Reminders component.

- | | | |
|-------------------|-----------------------|-------------------------|
| ◆ Blood Glucose | ◆ Fecal Occult Blood | ◆ Pelvic Exam |
| ◆ Blood Pressure | ◆ Flu | ◆ Physical Exam |
| ◆ Breast Exam | ◆ Hct/Hgb | ◆ Pneumovax |
| ◆ Cholesterol | ◆ Head Circumference | ◆ Rectal |
| ◆ DM Cholesterol | ◆ Hearing Test | ◆ Review of Alcohol Use |
| ◆ DM Creatinine | ◆ Hearing Test Annual | ◆ Review of Tobacco Use |
| ◆ DM Dental Exam | ◆ Height | ◆ Td-Adult |
| ◆ DM Eye Exam | ◆ Immunizations | ◆ Tonometry |
| ◆ DM Foot Exam | ◆ Mammogram | ◆ Urinalysis |
| ◆ DM Triglyceride | ◆ Non-Endemic Tb | ◆ Vision Exam |
| ◆ Endemic Tb | ◆ Pap Smear | ◆ Weight |

Flowsheets. You can specify one or more flowsheets to display in the Flowsheets component. You must create all flowsheets locally prior to using them in a health summary. You will indicate the names of flowsheets and their order of appearance at the corresponding prompts when using a flowsheet in a new health summary type.

Health Factors. If you are using the Health Factors components, you will need to decide which factors appear in the component. You can choose one or more of the following factors for inclusion in the component:

- ◆ Alcohol/Drug Use
- ◆ Tb Treatment Status
- ◆ Tobacco Use

You will also be prompted to indicate whether only the most recent instance or all instances of the factor display. Enter yes or no at the prompt to select one of the following choices:

- ◆ Yes – Most Recent Only Displayed
- ◆ No – All Occurrences Displayed

Note: Please keep in mind when building new health summary types utilizing flowsheets or custom measurement panels, you must define these elements prior to using them in a new summary type. Follow the instructions on pages 56 to 58 for building custom measurement panels and flowsheets. Once they are created, they may be used in any health summary type.

Instructions

1. As shown in sample dialog A below, first enter the components to include in the new health summary type. Instructions for this part of the process are provided in Session 1. For demonstration purposes, only the special components discussed in Session 2 have been included in this sample. Sample B begins the portion of the dialog in which you will specify the data to appear in each of the special components discussed above. (In Session 1, the up-hat character was used to exit the process at this point.)
2. At the Select Measurement Panel Sequence prompt, enter a number to indicate the order in which you want a particular measurement panel to appear in the Measurement Panels component.
3. Next you will be prompted for the name of the measurement panel to display. You can select from the panels distributed with the Health Summary package or panels that have been created at your facility.
4. The Measurement Panel Sequence prompt will appear again. If you want to display another panel in this component, enter a sequence number; otherwise, press RETURN to bypass the prompt and continue building the health summary.
5. Next, the Select Lab Test Sequence prompt appears. Enter a number to indicate the order in which you want a particular lab test to appear in the Laboratory component. Since you will probably be entering numerous lab tests, it is recommended that you enter nonsequential numbers for the sequence of the tests to make later changes to the list easier. For instance, you might enter sequence numbers in increments of 5, as shown in the sample dialog. Later, if you wanted to add another lab test to appear in the middle of the sequence, you would not have to rebuild the entire list.
6. You will then be prompted to enter the name of the particular lab test and then confirm your entry. When you enter a lab test, a list may appear that provides several choices. For instance, if you entered creatinine, you would see a list of several different types of creatinine tests. Select the one you want by entering its corresponding number. You will then confirm your selection.
7. The lab test sequence prompt will appear again. Enter a new sequence number to add a lab test or press RETURN to bypass the prompt and continue.

8. The Surveillance Item Sequence prompt appears next. Enter a number to indicate the order in which a selected surveillance item will appear in the Health Maintenance Reminders component. Again, it is recommended that you use nonsequential numbers to make later editing easier.
9. At the next prompt, enter the name of the surveillance item type and then confirm your selection. See the previous comments on the Health Maintenance Reminders component for the selection list.
10. The Surveillance Item Sequence prompt appears again. Enter a sequence number for the next item or press RETURN to bypass the prompt and continue.
11. The next prompt asks you to enter a number for the sequence of a flowsheet that will appear in the Flowsheets component.
12. Next, enter the name of the desired flowsheet type and then confirm your response.
13. At the next prompt, Select Flowsheet Item Sequence, enter a number for the sequence order of another flowsheet to display or press RETURN to bypass the prompt and continue.
14. The Health Factor Sequence prompt appears next. Enter a number to indicate the order in which a particular health factor will appear in the Health Factors component.
15. Next, enter the name of the Health Factor Type to appear in the sequence order you have specified. You then have the option of renaming the health factor. Enter the name that you want to appear in the component for the health factor type you have selected.
16. At the Display Most Recent Instance prompt, enter Y (yes) to display only the most recent instance or N (no) to display all instances within the occurrence and date restrictions you have specified for the component.
17. The Health Factor Sequence prompt appears again. Enter a sequence number for another health factor or press RETURN to bypass the prompt and continue.
18. The next prompt, Select Provider Class Screen, is applicable only to the Outpatient Visits Screened component. If you are using this component in the new health summary, enter the provider class you want excluded from the display; for example, dentist or optometrist. You can exclude as many classes as needed by entering them one at a time. If you have not used this component, press RETURN to bypass the prompt and continue.
19. The Select Clinic Screen prompt that appears next is also applicable only to the Outpatient Visits Screened component. If you are using this component and want to exclude visits to a particular clinic, enter the name of the clinic. You can enter as many as needed, one at a time, at this prompt. If you have not used this component in the new health summary, press RETURN to bypass the prompt and continue.

20. Next, the Select Supplement Panel Sequence appears. If you have used the Supplements component, enter a number to define the sequence in which the first panel will appear. Press RETURN to bypass the prompt if you have not used this component.
21. The next prompt, Supplement Panel Type, is applicable only for the Supplements component. If using this component, enter the name of the panel at the prompt. Keep in mind that the panel must be created prior to building the new health summary. The only supplement panel distributed with this package is the Diabetic Care Summary. All others must be designed individually by a programmer. Press RETURN to bypass this prompt if you are not using the Supplements component.
22. After you have completed all of the preceding steps, you will be returned to the very first prompt: Select Health Summary Type Name. Press RETURN to exit the process and return to the first prompt. Press RETURN again to go to the Build Health Summary menu.

Sample Dialog for Session 2

The sample session below has been divided into two parts for ease of understanding, although they constitute one continuous dialog. Part A shows the basic process that was described in session 1, this time using only the custom components. Part B details the steps needed to specify the data for the custom components discussed in Session 2.

Part A

Select HEALTH SUMMARY TYPE NAME: **GENERAL CLINIC VISIT**
Are you adding 'GENERAL CLINIC VISIT' as a new HEALTH SUMMARY TYPE
(the 15TH)? **YES** (Yes)
NAME: GENERAL CLINIC VISIT// **[RETURN]**
LOCK: **[RETURN]**
Select SUMMARY ORDER: **10**
 SUMMARY ORDER COMPONENT NAME: **MEASUREMENT PANELS**
 COMPONENT NAME: MEASUREMENT PANELS// **[RETURN]**
 MAXIMUM OCCURRENCES: **2**
 TIME LIMIT: **2Y**
 ALTERNATE TITLE: **PATIENT MEASUREMENTS**
Select SUMMARY ORDER: **20**
SUMMARY ORDER COMPONENT NAME: **LABORATORY DATA**
COMPONENT NAME: LABORATORY DATA// **[RETURN]**
 MAXIMUM OCCURRENCES: **2**
 TIME LIMIT: **5Y**
 ALTERNATE TITLE: **LABORATORY TESTS**
Select SUMMARY ORDER: **30**
 SUMMARY ORDER COMPONENT NAME: **HEALTH MAINTENANCE REMINDERS**
 COMPONENT NAME: HEALTH MAINTENANCE REMINDERS// **[RETURN]**
 ALTERNATE TITLE: **[RETURN]**
Select SUMMARY ORDER: **40**
 SUMMARY ORDER COMPONENT NAME: **FLowsheets**
 COMPONENT NAME: FLOWSHEETS// **[RETURN]**
 MAXIMUM OCCURRENCES: **2**
 TIME LIMIT: **1Y**
 ALTERNATE TITLE: **[RETURN]**
Select SUMMARY ORDER: **50**
 SUMMARY ORDER COMPONENT NAME: **HEALTH FACTORS**
 COMPONENT NAME: HEALTH FACTORS// **[RETURN]**
 MAXIMUM OCCURRENCES: **1**
 TIME LIMIT: **5Y**
 ALTERNATE TITLE: **SURVEILLANCE ITEMS**
Select SUMMARY ORDER: **[RETURN]**
CLINIC DISPLAYED: **YES**
ICD TEXT DISPLAYED: **NONE**
PROVIDER NARRATIVE DISPLAYED: **YES**

Part B

```
Select MEASUREMENT PANEL SEQUENCE: 10
MEASUREMENT PANEL SEQUENCE MEASUREMENT PANEL TYPE: ADULT STD
MEASUREMENT PANEL TYPE: ADULT STD// [RETURN]
Select MEASUREMENT PANEL SEQUENCE: [RETURN]
Select LAB TEST SEQUENCE: 5
    LAB TEST PANEL LAB TEST TYPE: GLUCOSE
LAB TEST TYPE: GLUCOSE// [RETURN]
Select LAB TEST SEQUENCE: 10
    LAB TEST PANEL LAB TEST TYPE: CHOLESTEROL
LAB TEST TYPE: CHOLESTEROL// [RETURN]
Select LAB TEST SEQUENCE: [RETURN]
Select SURVEILLANCE ITEM SEQUENCE: 5
SURVEILLANCE ITEM SEQUENCE SURVEILLANCE ITEM TYPE: BLOOD PRESSURE
    SURVEILLANCE ITEM TYPE: BLOOD PRESSURE// [RETURN]
Select SURVEILLANCE ITEM SEQUENCE: 10
    SURVEILLANCE ITEM SEQUENCE SURVEILLANCE ITEM TYPE: HEIGHT
    SURVEILLANCE ITEM TYPE: HEIGHT// [RETURN]
Select SURVEILLANCE ITEM SEQUENCE: 15
    SURVEILLANCE ITEM SEQUENCE SURVEILLANCE ITEM TYPE: WEIGHT
    SURVEILLANCE ITEM TYPE: WEIGHT// [RETURN]
Select SURVEILLANCE ITEM SEQUENCE: [RETURN]
Select FLOWSHEET SEQUENCE: 5
FLOWSHEET SEQUENCE FLOWSHEET TYPE: DIABETIC FLOWSHEET
    FLOWSHEET TYPE: DIABETIC FLOWSHEET// [RETURN]
Select FLOWSHEET SEQUENCE: [RETURN]
Select HEALTH FACTOR SEQUENCE: 5
    HEALTH FACTOR TYPE: TOBACCO
    HEALTH FACTOR TITLE: [RETURN]
DISPLAY MOST RECENT INSTANCE: N ALL OCCURRENCES DISPLAYED
Select HEALTH FACTOR SEQUENCE: 10
    HEALTH FACTOR TYPE: ALCOHOL/DRUG
    HEALTH FACTOR TITLE: USE OF ALCOHOL AND/OR DRUGS
    DISPLAY MOST RECENT INSTANCE: N ALL OCCURRENCES DISPLAYED
Select HEALTH FACTOR SEQUENCE: [RETURN]
Select PROVIDER CLASS SCREEN: [RETURN]
Select CLINIC SCREEN: [RETURN]
Select SUPPLEMENT PANEL SEQUENCE: [RETURN]
Select SUPPLEMENT PANEL TYPE: [RETURN]
```

Note: The last four prompts were bypassed with the RETURN key because the corresponding components were not used in this example (Outpatient Visits Screened and Supplements). Refer to the previous instructions for information on using these components and their related specifications.

Constructing Measurement Panels

The Health Summary package provides an option for constructing custom measurement panels. This option allows you to specify the types of measurements that appear in a single panel. The custom panel may then be used in a health summary type. These panels are useful when you want to display only certain types of measurements on a health summary; for instance, you might want to display one set of measurements on a health summary for a diabetic clinic visit and a different set of measurements on a health summary for an emergency clinic visit. These custom panels must be created prior to incorporating them in a health summary type.

When building a custom measurement panel, you can include one or more of the following measurements. You will need to enter the mnemonic of the measurement types to include in the panel. The mnemonic for each type is shown in parentheses after the item.

- | | |
|---------------------------|---------------------------|
| ◆ Abdominal Girth (AG) | ◆ Presentation (PR) |
| ◆ Audiometry (AUD) | ◆ Pulse (PU) |
| ◆ Blood Pressure (BP) | ◆ Respirations (RS) |
| ◆ Edema (ED) | ◆ Temperature (TMP) |
| ◆ Fetal Heart Tones (FT) | ◆ Tonometry (TON) |
| ◆ Fundal Height (FH) | ◆ Vision Corrected (VC) |
| ◆ Head Circumference (HC) | ◆ Vision Uncorrected (VU) |
| ◆ Hearing (HE) | ◆ Weight (WT) |
| ◆ Height (HT) | |

Building the Panel

Constructing a new measurement panel requires the following steps:

1. Select the Create/Modify Measurement Panel option from the Build Health Summary menu.
2. At the first prompt that appears, enter a name for the new measurement panel.
3. Next, the Select Order in Panel prompt appears. Enter a number to indicate the sequence in which a particular measurement will appear in the panel. You may want to use nonsequential numbers as with other custom components to make later changes to the panel easier.
4. At the next prompt, enter the mnemonic for the measurement type. Refer to the preceding list of measurement types that can be included and their mnemonics.
5. Specify the field width at the corresponding prompt. See the detailed notes regarding field width that follow these instructions.
6. Next, enter a label for the measurement you have selected. You can enter 1 to 30 characters for the label. If you do not enter a label, the mnemonic of the measurement type that you entered will print in the panel.

7. The Transform prompt appears next, but **only** for users who have programmer privileges. All other users will see the Note prompt (see step 8 below). This prompt allows you to calculate a new measurement value based upon existing patient data. For information on defining a transform, see the notes that follow these instructions.
8. At the Note to Display prompt that appears next, you can enter a note of 3 to 75 characters that will display at the bottom of the measurement panel.
9. The Select Order in Panel prompt appears again. Enter a new sequence number to add another measurement or press RETURN to exit the process and return to the first prompt. Press RETURN again to see the Build Health Summary menu.

Specifying the Field Width

You will need to specify a field width for each of the measurement values that you select to include in a custom measurement panel. The measurement values are always displayed right-justified within each field. A field will be filled with asterisks if an attempt is made to display a value that is too large for the field. When you are prompted to enter a field width, you can specify the width using one of the following formats.

An integer. The integer represents the number of column positions for the measurement value field. The integer form does not take into account whether the measurement value contains a decimal point. Regardless of the presence of a decimal point, all values will be aligned on the right. If you enter a field width of 3, for example, the field will hold a number like 123 or 1.5, but **not** 12.3.

A pair of integers separated by a decimal point. In this form, the first integer is the field width and the second integer is the number of decimal places to be displayed. For example, if you enter 6.3, this means 6 column positions with three decimal places. This field will hold a number such as 12.345, but **not** 123.456.

An integer followed by a decimal point and a zero. This form is a special case of the previous one. The integer specifies the number of column positions and the zero indicates that no decimal places are to be displayed, regardless of the presence of a fraction in the measurement value. If nonintegral, the value will be rounded.

Defining a Transform

The ability to transform stored values makes it possible to display measurements other than those contained in the database. In the measurement panels distributed with the Health Summary package, this capability is used to create height and weight percentiles, percent recommended weight, body mass index, metric measurement displays, and separation of measurement data for the left and right eyes.

Transforms can be created by programmers for inclusion in custom measurement panels. Note that **only** users with programming privileges will see the transform prompt when creating a measurement panel. The discussion that follows is oriented to programmers.

A transform is a line of MUMPS code that takes as input a value in the variable X, performs some computation or manipulation, and leaves a value in X to be displayed on the health summary.

Example 1: The display of visual acuity data in the form "20/xx-20/yy" is created via a transform of data representing both eyes, which is stored in the form "xx/yy." The transform is:

```
S X="20/"_$(P(X,"/",1))_"-20/"_$(P(X,"/",2))
```

Example 2: The display of body mass index (BMI) is created via a transform of weight data; the computation is complex and carried out in a routine. The transform is:

```
D BMI^APCHS2A1
```

Sample Dialog for Building a Measurement Panel

The following sample dialog is shown for a user with programmer privileges, which means that the Transform prompt appears.

```
Select HEALTH SUMMARY MEAS PANEL NAME: HYPERTENSION
Are you adding 'HYPERTENSION' as a new HEALTH SUMMARY MEAS PANEL (the 6TH)? Y

-- NOTE: Programmer privileges (FileMan access code of "@") are required to view
and modify the TRANSFORM field.

NAME: HYPERTENSION// [RETURN]
Select ORDER IN PANEL: 5
  ORDER IN PANEL PANEL COMPONENT: WT                WEIGHT
  PANEL COMPONENT: WT// [RETURN]
  FIELD WIDTH: 3.0
  LABEL: WEIGHT
  TRANSFORM: [RETURN]
  NOTE TO DISPLAY: [RETURN]
Select ORDER IN PANEL: 10
  ORDER IN PANEL PANEL COMPONENT: HT                HEIGHT
  PANEL COMPONENT: HT// [RETURN]
  FIELD WIDTH: 4.1
  LABEL: [RETURN]
  TRANSFORM: [RETURN]
  NOTE TO DISPLAY: [RETURN]
Select ORDER IN PANEL: 20
  ORDER IN PANEL PANEL COMPONENT: WT                WEIGHT
  PANEL COMPONENT: WT// [RETURN]
  FIELD WIDTH: 10
  LABEL: BMI
  TRANSFORM: D BMI^APCHS2A1
  NOTE TO DISPLAY: [RETURN]
Select ORDER IN PANEL: 25
  ORDER IN PANEL PANEL COMPONENT: BP                BLOOD PRESSURE
  PANEL COMPONENT: BP// [RETURN]
  FIELD WIDTH: 7
  LABEL: [RETURN]
  TRANSFORM: [RETURN]
  NOTE TO DISPLAY: [RETURN]
Select ORDER IN PANEL: [RETURN]
```

Constructing Flowsheets

The Create/Modify Flowsheet option on the Build Health Summary menu provides a means for constructing flowsheets. This option enables you to build prepackaged tabular displays of specific types of data. The flowsheet you create can then be utilized in a health summary type. Remember that you must create all flowsheets locally.

When building a new flowsheet, you can choose items to display from the following categories:

- ♦ Examination
- ♦ Lab Result
- ♦ Measurement
- ♦ Medication
- ♦ Patient Education
- ♦ Purpose of Visit

Building the Flowsheet

1. At the first prompt, enter the name of your new flowsheet. Respond Y (yes) at the next prompt to verify that you are creating a new flowsheet, then confirm the name you have entered.
2. At the Select Item Order prompt, enter a number to indicate the sequence in which an item will appear in the flowsheet. It is recommended that you use nonsequential numbers to make later editing easier.
3. Next, enter the name of the item type. The classes of data that may be used are listed above.
4. The Item Label prompt appears next, which allows you to enter a label for the class of data that you have specified. Your label may be 1-25 characters in length. If you do not enter text at this prompt, no label will appear.
5. At the Item Width prompt, enter the number of columns preferred for displaying the value. Keep in mind the data that will be displayed and the number of items on the flowsheet when entering this value.
6. If you have programmer privileges, the Transform prompt appears next. All other users will skip to the next prompt. For information on defining a transform, refer to the previous section.
7. At the Select Members prompt, you will need to indicate which members of the selected data class will display in the flowsheet. Press RETURN to display all items in a class or enter items one at a time. For details on how to enter members, refer to the following section.
8. Next, the Item Order prompt appears again. If you are entering another data class, enter a sequence number. If you have finished specifying the data, press RETURN to bypass the prompt and continue.
9. The Evoking Codes prompt appears next. This prompt allows you to specify for which patients this flowsheet prints on the health summary that is generated. To always print the flowsheet, press RETURN. To limit the display of the flowsheet to health summaries for patients with specific diagnoses on their problem list, enter the specific ICD code or range of codes.

10. Finally, you have the option of applying clinic restrictions to the visit data that display. You can restrict the visit data to one or more specific clinics or print data for all clinic visits, as applicable. Enter the clinic names, one at a time, or press RETURN to include all clinics.

11. The first prompt appears again. Press RETURN to go back to the Build Health Summary menu.

Selecting Members of Data Classes

For each of the data classes you select to include in the flowsheet, you must define the specific members of the class to display. To display all items in the data class, press RETURN at the Select Members prompt. To enter specific items, type the class prefix followed by a period and then the item name; for instance, MEA.BP to display the blood pressure measurement. The prefixes are listed below. If you are not familiar with the data items within each class, you can type the prefix followed by a period and a question mark (e.g., MED.?) to see a list of the items within that class. The items within these classes may differ among facilities.

- ◆ MEA Measurement
- ◆ MED Medication
- ◆ LAB Lab test
- ◆ POV Purpose of visit
- ◆ EXM Examinations
- ◆ PED Patient education

Sample Dialog for Building a Flowsheet

The sample below is shown for a user who has programmer privileges, which means that the Transform prompt appears.

```
Select HEALTH SUMMARY FLOWSHEET NAME: HYPERTENSION
Are you adding 'HYPERTENSION' as a new HEALTH SUMMARY FLOWSHEET (the 4TH)? Y
(Yes)
NAME: HYPERTENSION// [RETURN]
Select ITEM ORDER: 5
  ITEM ORDER ITEM TYPE: LAB RESULT
  ITEM TYPE: LAB RESULT// [RETURN]
  ITEM LABEL: LABS
  ITEM WIDTH: 6
  TRANSFORM: [RETURN]
Select MEMBERS: LAB.CHOLESTEROL CHOLESTEROL
Select MEMBERS: LAB.POTASSIUM POTASSIUM
Select MEMBERS: [RETURN]
Select ITEM ORDER: 10
  ITEM ORDER ITEM TYPE: MEASUREMENT
  ITEM TYPE: MEASUREMENT// [RETURN]
  ITEM LABEL: [RETURN]
  ITEM WIDTH: 7
  TRANSFORM: [RETURN]
Select MEMBERS: MEAS.BP BP BLOOD PRESSURE
Select MEMBERS: MEAS.WT WT WEIGHT
Select MEMBERS: [RETURN]
Select ITEM ORDER: 15
  ITEM ORDER ITEM TYPE: PATIENT EDUCATION
  ITEM TYPE: PATIENT EDUCATION// [RETURN]
  ITEM LABEL: [RETURN]
  ITEM WIDTH: 10
  TRANSFORM: [RETURN]
Select MEMBERS: PED.HTN-EXERCISE
Select MEMBERS: PED.HTN-EXERCISE
Select MEMBERS: [RETURN]
Select ITEM ORDER: 20
  ITEM ORDER ITEM TYPE: EXAMINATION
  ITEM TYPE: EXAMINATION// [RETURN]
  ITEM LABEL: [RETURN]
  ITEM WIDTH: 10
  TRANSFORM: [RETURN]
Select MEMBERS: EX.HEART HEART EXAM 08
Select MEMBERS: [RETURN]
Select ITEM ORDER: [RETURN]
Select EVOKING CODES: HTN
Select EVOKING CODES: [RETURN]
Select CLINIC DISPLAY RESTRICTIONS: INTERNAL MEDICINE 13
Select CLINIC DISPLAY RESTRICTIONS: [RETURN]
```

Sample Flowsheets

Below are specifications for two of the most frequently created types of flowsheets: Prenatal and Diabetic. These are just samples to illustrate the uses of flowsheets and the types of data that you might include. Remember that the names used for the specific data items vary among facilities.

Prenatal

NAME: PRENATAL FLOWSHEET

ITEM ORDER: 10

ITEM TYPE: MEASUREMENT

ITEM LABEL: WT

ITEM WIDTH: 4

MEMBERS: WT

ITEM ORDER: 50

ITEM TYPE: MEASUREMENT

ITEM LABEL: PRES

ITEM WIDTH: 15

MEMBERS: PR

ITEM ORDER: 20

ITEM TYPE: MEASUREMENT

ITEM LABEL: BP

ITEM WIDTH: 6

ITEM ORDER: 60

ITEM TYPE: MEASUREMENT

ITEM LABEL: EDEMA

ITEM WIDTH: 5

MEMBERS: BP

ITEM ORDER: 30

ITEM TYPE: MEASUREMENT

ITEM LABEL: FH

ITEM WIDTH: 4

MEMBERS: FH

ITEM ORDER: 40

ITEM TYPE: MEASUREMENT

ITEM LABEL: FHRT

ITEM WIDTH: 4

MEMBERS: FT

MEMBERS: ED

ITEM ORDER: 80

ITEM TYPE: LAB RESULT

ITEM LABEL: PROTEIN/SUGAR

ITEM WIDTH: 13

MEMBERS: URINE DIPSTICK

EVOKING CODES:

V22.1

V23.4-V23.9

PRENATAL FLOWSHEET

	WT	BP	FH	FHR	PRES	EDEMA	PROTEIN/SUGAR
10/23/96	:150	:135/80	:32	:140	:FRANK BREACH	:+1	:
09/24/96	:140	:130/70	:		:VERTEX		:

Diabetic

NAME: DIABETIC FLOWSHEET

ITEM ORDER: 5

ITEM TYPE: MEASUREMENT

ITEM LABEL: WT

ITEM WIDTH: 3

MEMBERS: WT

ITEM ORDER: 20

ITEM TYPE: EXAMINATION

ITEM LABEL: FOOT CHK

ITEM WIDTH: 9

MEMBERS: DIABETIC FOOT CHECK
DIABETIC FOOT EXAM, COMPLETE

ITEM ORDER: 10

ITEM TYPE: LAB RESULT

ITEM LABEL: DM LABS

ITEM WIDTH: 8

MEMBERS: Enter the DM
lab tests used at your
facility.

ITEM ORDER: 25

ITEM TYPE: MEDICATION

ITEM LABEL: DM MEDS

ITEM WIDTH: 20

MEMBERS: Enter the DM meds
used at your facility.

ITEM ORDER: 15

ITEM TYPE: MEASUREMENT

ITEM LABEL: BP

ITEM WIDTH: 7

MEMBERS: BP

ITEM ORDER: 30

ITEM TYPE: PATIENT EDUCATION

ITEM LABEL: PT ED

ITEM WIDTH: 10

MEMBERS: Enter the DM edu-
cation topics used at your
facility.

EVOKING CODES:

250-250.93

DIABETIC FLOWSHEET							
	WT	DM LABS	BP	FOOT CHK	DM MEDS		PT ED
12/10/95	:200	:BLOOD	:160/88	:DIABETIC	:DIABINESE 250 MG #1	:DM-FOOT CA	
	:	:GLUCOSE=	:	:FOOT CHEC	:00 (90 days) TAKE 1	:RE (F)	
	:	:450 H	:	:K	:TABLET DAILY	:	
4/15/96	:198	:CREATINI	:120/80	:	:DIGOXIN 0.25MG TAB =	:	
	:	:NE=60	:	:	:#15 T1T DY FH	:	

Glossary

Browser	An interactive application that displays text on a terminal that supports scrolling. The user is allowed to navigate freely within the document.
CHR	Community Health Representative. A health-care staff member who provides health-care services within the community.
Component	A segment of the health summary that provides a mechanism for grouping data into sections.
Device	A printer, video terminal, or other type of hardware or equipment associated with a computer. The Health Summary system will prompt you to specify a particular device on which to generate output.
Evoking Codes	ICD codes recorded on a patient's problem list that trigger specific data to print on the health summary. For example, a Diabetic flowsheet will contain evoking codes so that it prints only on the health summary of a patient who has a code for diabetes present in the problem list.
Flowsheet	A tabular format for organizing and displaying data in a special section of the health summary.
Health Summary	A summary of a patient's demographic and clinical information that has been compiled from information in the Patient Care Component (PCC) database of the Resource and Patient Management System (RMPS).
ICD	International Classification of Diseases.
ICD codes	A set of numeric codes used in the health care industry to label and classify various diseases and health problems. (See <i>ICD</i> .)
Key	A means of securing menus to limit accessibility. To use certain functions, such as those on a Manager's menu, you must be assigned the appropriate key by the Site Manager.
Menu	A list of choices (see <i>Option</i>) for computing activity that are presented on the screen to the user for selection.
Mnemonic	Two to four letter designations used for selecting menu options and entering data that facilitate these tasks by reducing the number of required keystrokes.
Option	As an item on a menu, an option provides an opportunity for users to select it, thereby invoking the associated computing activity.
OTC	Over-the-Counter. A reference to medications that may be purchased without a prescription.
Panel	A tabular format for presenting a series of clinical measurements or results in the health summary.

Patient Care Component (PCC)	The central repository for data in the Resource and Patient Management System (RPMS).
Problem List	A list of health problems, related notes, and treatment plans for a patient that are recorded and updated as part of the patient's health record.
Queuing	Requesting that a job be processed at a later time rather than within the current session.
RETURN Key	Also known as the ENTER key. A key on the computer keyboard that tells the computer to execute your command or store the information you have typed.
RPMS	Resource and Patient Management System. The set of computer programs used for managing data at the Indian Health Service.
Submenu	A menu underlying or accessible from a primary menu. (See <i>Menu</i> .) A software program typically contains a single primary menu and many submenus.
Up-Hat (^)	A circumflex, also know as a "hat" or "caret," that is primarily used for exiting a task. The up-hat is denoted as "^" and is typed by pressing Shift+6 on the keyboard.

Appendix A

Health Maintenance Reminder System

The PCC health maintenance reminder system is designed to assist health-care providers with addressing preventive and early detection health-care measures. The system monitors a set of procedures (such as tuberculin skin tests, examinations, and laboratory tests) that should be performed for each member of a population at various stages of life. The recommended timing for these procedures is a function of the patient's age and sex. These standards were developed by IHS senior clinicians and field health groups throughout the Indian Health Service organization. The general criteria used for inclusion of items in the health maintenance reminder system are as follows:

- ◆ Screening is for problems that are prevalent and medically significant among all or certain groups of American Indians and Alaska Natives.
- ◆ The screening tests are considered to be effective.
- ◆ If a problem is detected, treatment can be provided.
- ◆ The tests can be accomplished by the Indian Health Service at current staffing levels without adversely affecting other patient needs, services, or programs at the facility level.
- ◆ For children, the system generally follows the recommendations of the American Academy of Pediatrics.

The criteria for the PCC health maintenance reminder system have been adopted for Service-wide use by the Indian Health Service. For an individual patient at a given visit, the health maintenance reminder procedures should be viewed as recommendations or suggestions to providers of care, not as directives. Often a patient's condition will negate performing certain health maintenance tests or examinations. Also, certain procedures may not be considered appropriate for a specific population group. These items may be removed from the system at the direction of the Area. The procedures suggested by the health maintenance reminder system should in no way constrain a health-care provider from performing additional tests that he/she feels are warranted.

Since patients rarely receive these types of services exactly when they are due, the PCC system attempts to ensure a reasonableness in the application of these standards. For instance, the IHS recommends that children have a urinalysis at age 5. This does not mean that the health summary will prompt the provider for a urinalysis at age 5 if this patient had a urinalysis at age 4 years 11 months. The prompt will appear when the child turns 5 if there is no record of a urinalysis in the database. The lack of this record in the database does not necessarily mean that the child never had a urinalysis, only that the result was never entered into the system. The prompt will also appear if the child's last urinalysis occurred before age 3.

Health Maintenance Reminder Schedule

Tuberculin Skin Tests

- a. Endemic TB
Initial test at age 10 months, then yearly to age 35. Discontinue if diagnosis of TB, positive test, or at age 35. This protocol should be used in areas of high TB incidence.
- b. Non-endemic TB
Initial test at age 12 months plus or minus 3 months, a second test at age 5 (unless given between ages 4 and 5). This protocol may be used in areas of low TB incidence.

Laboratory Tests

- a. Blood Glucose
If no diagnosis of diabetes, take every 2 years starting at age 20. A diagnosis of diabetes cancels this health maintenance reminder prompt.
- b. Cholesterol
Due every 5 years for men age 35 to 65 and women age 45 to 65.
- c. Fecal Occult Blood
Due annually over age 50.
- d. Hematocrit/Hemoglobin
Take at 12 months (unless done between age 9 and 12 months). Take at age 4 years (unless done between ages 3 and 4). Take at age 12 years (unless done between ages 10 and 12). Take annually for females between ages 16 and 45. The prompt is discontinued at age 18 for males and at age 45 for females.
- e. Pap Smear
If no history of hysterectomy, yearly starting at age 18. If a hysterectomy has occurred, the last pap smear date will be displayed on the health summary and text will print under Date Due stating that the patient has had a hysterectomy and that a pap smear may be necessary depending on individual followup.
- f. Urinalysis
At age 5 years unless given between ages 3 and 5. The prompt is discontinued at age 13.

Measurements/Examinations

- a. Blood Pressure
Once between ages 5 and 20. If the blood pressure has not been taken between the ages of 5 and 10 years, the message Due Now will display when the child turns age 10. Take BP each visit if diagnosis of hypertension, obesity, or diabetes; annually if age 20 or older.
- b. Breast Exam
Females only. Perform annually after age 20.
- c. Pelvic Exam
Females only. Perform annually starting at age 18.
- d. Rectal Exam
Perform annually starting at age 45.

- e. Hearing Test
For patient between the ages of 7 and 15 years. Due at age 7 unless given between ages 4 and 7 years.
- f. Vision Exam
Due at age 7 unless given between ages 4 and 7.
- g. Tonometry (OBSOLETE)
Every 3 years ages 40 to 60. Annually after age 60.
- h. Height
0-6 months—every visit, 6-12 months—every two months, 1-6 years—every 3 months, 6-18 years—every 6 months. The prompt is discontinued at age 18.
- i. Weight
0-6 months—every visit, 6-12 months—every two months, 1-6 years—every 3 months, 6-16 years—every 6 months, 16 years and older—annually.
- j. Head Circumference
0-6 months—every visit, 6-14 months—every two months. The prompt is discontinued at age 14 months.
- k. Hearing Test Annual
This item indicates that a yearly hearing exam is due for all patients between the ages of 1 and 18 years. This is the accelerated hearing test schedule.
- l. Immunizations
Calculates immunizations due via the MCH package.
- m. Mammogram
Females age 50 to 69 years every 1 to 2 years. The reminder prompt displays for 2-year intervals.
- n. Physical Exam
This surveillance item prompts for an annual physical exam.

Surveillance Items for Diabetic Patients

The following surveillance items appear in the Health Maintenance Reminders component only if a patient has had a diagnosis of diabetes entered into the PCC database. Each of these items should be performed once annually for the patient with diabetes.

- a. DM Cholesterol
- b. DM Creatinine
- c. DM Dental Exam
- d. DM Eye Exam
- e. DM Foot Exam
- f. DM Triglyceride

Vaccinations

- a. Flu
In Alaska, the influenza vaccine prompt appears if the patient is over 54 years of age. In the rest of the United States, the prompt appears if the patient is over 64 years of age or is any other age and has had a visit for any of the ICD codes in the Surveillance Pneumococcal Risk taxonomy.

b. Pneumovax

In Alaska, the pneumococcal vaccine prompt appears if the patient is over 54 years of age. In the rest of the United States, the prompt appears if the patient is over 64 years of age or is any other age and has had a visit for any of the ICD codes in the Surveillance Pneumococcal Risk taxonomy.

c. TD Adult

This prompt appears for patients age 12 years and older. This immunization is recommended every 10 years for adults.

Health Factors

a. Review of Alcohol Use

A review of alcohol use is recommended annually.

a. Review of Tobacco Use

A review of alcohol use is recommended annually.

Appendix B

Administrative Forms

Request for New Health Summary Type

To: Health Summary Coordinator/Site Manager
From: _____

Please create a health summary type that meets the following specifications.

Instructions for filling out this request form: Please complete **all** of the items below. Identify the order in which the component should appear, the name of the component, any alternate name you would like displayed, the maximum number of occurrences and the time limit for display of data, and any specific items that need to be selected individually. Note that you will need to specify individual items for the lab test, health factors, and health maintenance reminders components. You will also need to indicate the names of any measurement panels or flowsheets, if you have chosen these components.

Health Summary Type Name: _____

Order	Component Name	Component Name to Display	Maximum Occurrences	Time Limit	Selection Items (as applicable)

ICD Text Display: ___ Long ___ Short ___ Code Only ___ None
Provider Narrative Displayed? ___ Yes ___ No
Clinic Name Displayed? ___ Yes ___ No

Feedback Report

Health Summary System and Documentation

Version 2.0

Please note any comments or suggestions about the Health Summary program or documentation on this form and return it to:

Lori Butcher
Indian Health Service/OHPRD
7900 So. J. Stock Rd.
Tucson, AZ 85746
Fax: (520) 295-2564

SYSTEM Comments and Suggestions

DOCUMENTATION Comments and Suggestions

FROM

Name:
Site:
Phone: