



RESOURCE AND PATIENT MANAGEMENT SYSTEM

IHS PCC Suite

(BJPC)

QMan User Manual

Volume II: Exploring the PCC Database

Version 2.0

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Office of Information Technology (OIT)
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Preface

The purpose of this manual is to provide information specific to the QMan by exploring the PCC database.

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1.0 Introduction

In Volume I, we learned about QMan's basic terminology, conventions, and data types. We conducted a few introductory searches and generated reports. If you are comfortable with the concepts presented in Volume I, it is time to move on and do some serious searching. In this volume, we will use QMan to explore the entire PCC database. We will examine lots of different kinds of health information, and the emphasis will be on practice rather than theory.

We have arbitrarily divided the information contained in the PCC into eight functional classes:

- Demographic attributes
- Lab results, measurements, skin tests, and clinical exams
- Diagnoses and problem list entries
- Prescriptions and patient education topics
- Immunizations
- Dental and medical procedures
- Visits and providers
- Hospitalizations and Contract Health Services

For each of these functional classes, we will present a series of scenarios based on "real world" IHS experience. These scenarios will demonstrate how you can use QMan at your facility for patient care, research, epidemiology, quality assurance, planning, and management. We encourage you to try the searches presented below using QMan at your own site.

Before we begin, let's review how we get into QMan from the PCC menu system.

CORE APPLICATIONS

MRG	Patient Duplicate Checker and Merge Menu
PCC	Patient Care Component
MFI	MFI Management System
MORE	OTHER APPLICATIONS (XUCORE CONT.)
DOC	Package Documentation Utilities
QMAN	Q-Man (PCC Query Utility)
RM	ROUTINE MANAGER
TEN	Top Ten Diagnoses

Select Core applications drivers Option: **QMAN** <Enter>

```
***** WELCOME TO Q-MAN: THE PCC QUERY UTILITY *****

*****
**          WARNING...Q-Man produces confidential patient information.          **
**    View only in private.  Keep all printed reports in a secure area.          **
**          Ask your site manager for the current Q-Man Users Guide.            **
*****

Query utility: IHS Q-MAN Ver. 1.33
Current user: DEMO User
Chart numbers will be displayed for: (your facility)
Access to demographic data: PERMITTED
Access to clinical data: PERMITTED

Press RETURN to continue or '^' to exit: <Enter>

***** Q-MAN OPTIONS *****

    Select one of the following:

        1      SEARCH PCC Database (dialogue interface)
        2      FAST Facts (natural language interface)
        3      SCRIPT Utilities (programmers interface)
        4      VIEW Taxonomies and Search Templates
        9      HELP
        0      EXIT

Your choice: SEARCH//
```

Figure 1-1: Screen sample of accessing QMan from the PCC menu

2.0 Release Notes

BJPC v2.0 contains the following modifications and enhancements. The identification number listed in the parentheses (e.g., CR#274) refers to the specific change request (CR) requirement.

2.1 Designated Provider Specialty Management (BDP)

The following modifications apply to the BDP application:

- **Do Not Display Flag:** Added functionality to allow the site to flag a provider category to not display in the Demographic component of the health summary. This was accomplished by adding a new field to the BDP DESG SPEC PROV CATEGORY file called “DISPLAY ON HEALTH SUMMARY?.” The option called Add Local Provider Categories was renamed Add/Edit Provider Categories and this field was added to the list of data elements to update. (CR#295)
- **New Specialty Categories:** Added 3 new categories: HIV Case Manager, HIV Provider and Public Health Nurse. (CRs #274 and #102)
- **Populate New Specialty Categories:** Provided a post-init action that copies the existing HIV Case Manager and HIV Provider from the HIV Management System to this package. (CR#274)

2.2 PCC Data Entry (APCD)

The following changes apply to the APCD application.

2.2.1 Family History Modifications

- Modified the FHX mnemonic to be a list manager-based interface that allows the user to Add, Edit, or Delete Family History entries.(CR#216 and CR#320)
- Modified the entry of family history to stuff the ICD narrative if no provider narrative is entered. (CR #324)

2.2.2 Visit Re-linker Log

Created a log to keep track of all visits that are modified through the visit re-linker process. These visits have had 1 or more V File entries moved or re-linked to another visit. A report will list all visits that were modified by the re-linker process and there is also an option to purge the log. An option is also provided to display a visit by its IEN to make review of the visits easier. This is a prospective change meaning that only visits affected by the re-linker after the date this version (v2.0) of the IHS PCC Suite was installed will be logged and reported on with this option. (CR#013)

2.2.3 Visit Delete/Merge Log

Created a log to keep track of all visits that were deleted or merged. A report will list all of these visits. There is also an option to purge the log. The visit delete option was modified to prompt for a reason for the visit deletion. This prompt is not required. This is a prospective change meaning that only visits deleted or merged after the date this version (v2.0) of the IHS PCC Suite was installed will be logged and reported on with these options.

The above 2 items can be found on the following menu which is under the PCC Supervisor menu: (CR#239)

- VRLR List of Visits Modified by the Visit Re-Linker
- PVRL Purge Visit Re-linker Log
- PVDM List of Visits Deleted/Merged
- PUDM Purge Visit Delete/Merge Log
- VIEN Display a Visit by Visit IEN

2.2.4 3M Present on Admission

Added Present on Admission as a prompt in the 3M coder interface. (CR#254)

2.2.5 Personal History (PHX)

Added 2 new fields: Multiple Birth? and Multiple Birth Type to the PHX mnemonic. (CR#244)

2.2.6 Problem List Note Narrative Length

Expanded the Note Narrative to 160 characters. (CR#323)

2.2.7 Provider Narrative Length

All mnemonics that prompt for provider narrative will accept up to 160 characters for the provider narrative. This has been increased from 80 characters.

2.2.8 Patient Education (PED): Readiness to Learn

Added Readiness to Learn and re-sequenced the prompts per the Education workgroup recommendations. (CR#242)

2.2.9 Asthma Control (ACON)

Added a new mnemonic ACON to update and record a patient's asthma control. (CR#240)

2.2.10 POV Stage

Disabled the stage prompt for asthma severity when an asthma diagnosis is entered; this function has been moved to the new Problem List Classification. (CR#278)

2.2.11 Problem List Classification Field

Added a new field, Classification, that will be prompted for when an asthma diagnosis is entered, defined in taxonomy BGP ASTHMA DXS. The allowable values are 1, 2, 3 or 4 which stand for 1-Intermittent, 2-Mild Persistent, 3-Moderate Persistent and 4-Severe Persistent. The following mnemonics were updated: PL, PO, MP. (CR#207, 276)

2.2.12 Reproductive Factors mnemonics

FP and RF mnemonics have been restructured to prompt for reproductive history with individual fields rather than a string.

2.3 PCC Health Summary (APCH)

The following changes apply to the APCH application.

2.3.1 Patient Wellness Handout Management

Created a new menu for managing Patient Wellness Handouts. The user can now create a customized patient wellness handout and can select from 14 components.

Menu:

- PWH - Generate a Patient Wellness Handout
- DEF - Update Default PWH for a Site
- AAP - Print Asthma Action Plan
- MPWT - Create/Modify Patient Wellness Type
- TPWH - Number of PWHs Given to Patients Report

The following components are available:

ACTIVITY LEVEL
ALLERGIES
ASK ME THREE QUESTIONS
BLOOD PRESSURE
CANCER SCREENING
CHOLESTEROL
DIABETES CARE
HEIGHT/WEIGHT/BMI
HIV SCREENING
IMMUNIZATIONS DUE
IMMUNIZATIONS RECEIVED
MEDICATIONS
PATIENT GOALS
QUALITY OF CARE TRANSPARENCY REPORT CARD

Two standard patient wellness handout types are distributed with this version:

- Adult Regular - contains all 14 components
- Medication Reconciliation - contains Medications, Allergies

A PWH Log has been created that will log each time a PWH is generated. It will log the patient the handout was given to, the date given, the location given and the user who generated the handout. A report has been developed to tally patient wellness handout production.

A site can define the default wellness handout to be used at their site by updating that field in the PCC Master control file using option: DEF Update Default PWH for a Site.

2.3.2 Health Summary Component (New) for Tallying Patient Wellness Handouts

Created a new component to list the Patient Wellness Handouts given to a patient.

2.3.3 Health Summary Component (New) for Patient Wellness Handout

This component will display the full patient wellness handout for a patient.

2.3.4 Health Summary Component (New) for Meds - Controlled Substances

This new component will list all prescriptions for Controlled Substances.

2.3.5 Health Summary Component Modification: Lab

The date and time of the result have been added to both the LAB DATA - MOST RECENT BY DATE and the LABORATORY DATA - MOST RECENT components. (CR#171)

2.3.6 Health Summary Component Modification: Medication

Modified the text “on hold” to “active but not yet dispensed.”

2.3.7 Health Summary Component Modification: Family History

Modified the format to sort by the new relation field, display the new fields, and renamed the component to FAMILY HEALTH HISTORY. The component now displays the following fields: Relationship (to patient), Relation Description, Status (e.g., Living, Deceased, etc.), Diagnosis, Age at Onset; Multiple Birth (Y/N) and Type (e.g., Twin, etc.). If Status is “deceased,” Age at Death and Cause of Death are displayed. (CR#225, CR#325)

2.3.8 Health Summary Component Modification: Reproductive Factors

The prior REPFAC string **display** is G#P#LC#SA#TA# and has been changed to the following string that is a concatenation of the new Reproductive History Component fields, with each field separated by “;” symbol. The entire string will display for **any patient who has at least one value** in any of the Component fields.

Total # of Pregnancies #; Full Term #; Premature #; Abortions, Induced #; Abortions, Spontaneous #; Ectopic Pregnancies #; Multiple Births #; Living Children #.

2.3.9 Reminder (New): Osteoporosis Screening

Added a reminder for Osteoporosis screening in women ages 65 and older; the logic is consistent with the CRS performance measure. The screening is due every 2 years. The reminder is turned off in the default package. If the site wants to see this reminder on their health summary they must activate the reminder and attach it to their summary types. (CR#237)

2.3.10 Reminder (New): Assessment of Function

Added a reminder for Assessment of Function as a annual screening for patients 65 and older. Assessment of function includes assessing ability for toileting, bathing, shopping, etc. This data is captured in PCC using the EL mnemonic and it populates the V Elder file. The reminder is turned off in the default package. If the site wants to see this reminder on their health summary, they must activate the reminder and attach it to their summary types. (CR#188)

2.3.11 Reminder Modification: Pap and Mammogram Reminders

Modified the Pap and Mammogram health maintenance reminders to not use the next due date in Women's Health if it is not as current as the Health Summary reminders due date. (CR#257)

2.3.12 Reminder Modification: Alcohol Screening

Added a check for CPT codes using the BGP ALCOHOL SCREENING CPTS taxonomy: 99408, 99409, G0396, G0397, H0049 in both PCC and the Behavioral Health module; this makes the reminder more consistent with the CRS performance measure. (CR#109)

2.3.13 Reminder Modification: Adult MMR 2-DOSE Version

Fixed this reminder to look for CPT codes, diagnosis codes and procedure codes for the MMRs. (CR#109)

2.3.14 Reminder Modification: Diabetes Screening

Changed Category to General. (CR#109)

2.3.15 Reminder Modification: Colorectal Scope/XRAY

Modified logic to reference BGP COLO PROCS and BGP SIG PROCS taxonomies rather than individual procedure codes. (CR#109)

2.3.16 Asthma Action Plan (New Report)

Added the asthma action plan from the asthma register system to the health summary. This menu option can be found under the new PATIENT WELLNESS HANDOUT menu. The Action Plan has been redesigned per the Asthma Workgroup specifications and includes new fields added in this PCC version as well as the previous version. (CR#281)

2.3.17 Problem List Display

Added classification to the problem list display if it is entered. (CR#277)

2.3.18 Supplement Modifications: Asthma

The asthma supplement has been redesigned per the Asthma workgroup specifications and includes new fields added in this PCC version as well as the previous version.. (CR#289)

2.3.19 Reminders and Best Practice Prompts Text Modifications

Updated the description, logic, display text and tooltips for all reminders and Best Practice prompts.

2.3.20 Best Practice Prompts Modifications

Updated the logic and text for the following Best Practice prompts:

- ASTHMA: ACTION PLAN
- ASTHMA: ADD/INCREASE INHALED STEROIDS
- ASTHMA: CONTROL CLASSIFICATION
- ASTHMA: FLU SHOT
- ASTHMA: INCREASED RISK FOR EXACERBATION
- ASTHMA: PRIMARY CARE PROVIDER
- ASTHMA: SEVERITY CLASSIFICATION

2.4 PCC Management Reports (APCL)

The following changes apply to the APCL application.

2.4.1 Activity Reports

Modified the following reports to prompt the user for 2 additional filters: Location of encounter and Clinic. If the user wants to limit the report to a selected set of locations or clinics they will choose these filters. The following reports were updated: (CR#205)

- Activity Reports by Discipline Group
 - TSPR - Time and Patient Services by Provider
 - TSSU - Time and Patient Services by Service Unit
 - PPPR - Primary Problem by Provider
 - PPLO - Primary Problem by Facility
 - PPSU - Primary Problem by Service Unit
 - INPR - Number of Individuals seen by Provider
 - INSU - Number of Individuals seen by Service Unit
 - AGE - Patient Services by Age and Sex
 - TEN - Top Ten Primary Diagnoses
 - TSCR - Time and Services by Provider for Chart Reviews

2.4.2 DEMO PATIENTS Report Filter

All PCC Management reports have been updated to prompt the user if they want to include their site's DEMO/TEST patients in the report. The site must update the demo patient search template to include all of their sites Test/Demo patients. The option to do so is locked with a key. The security key APCLZ UPDATE DEMO TEMPLATE should be assigned to the user/users that will be assigned to manage this list of patients.

Under the PCC management reports menu option: OTH Other PCC Management Reports/Options is a new option called:

DPST Update the Demo/Test Patient Search Template

By choosing this option you can add the demo/test patients to the list.

When running a management report you will be prompted with this question:

Select one of the following:	
I	Include ALL Patients
E	Exclude DEMO Patients
O	Include ONLY DEMO Patients
Demo Patient Inclusion/Exclusion: E//	

Choosing E will exclude any patient who is on the Demo/Test patient list from the report. Choosing I will include all patients, including the Demo/Test patients and choosing O will only included the Demo/Test patients. (CR#287)

2.4.3 PGEN/VGEN Menus

Allow the user to select one of three menu display options for the Selection, Print and Sort items: 1) in a pre-defined order (the "original" way); 2) in alphabetical order by item title; or 3) in order by category group. (CR#251)

2.4.4 PGEN/VGEN

New Select/Sort/Print Options:

- Date of Last Osteoporosis Screen: added as a PGEN Select, Sort and Print item because it's a new health maintenance reminder. (CR#226)
- Readiness to Learn: removed as a Health Factor PGEN and VGEN Select, Sort and Print item, since this is no longer a Health Factor. (CR#242)

- Upcoming Appointments: added as a PGEN Select and Print and VGEN Print and Sort Item. When used as a selection item, the User can select the appointment date range and the appointment clinics. The report will only list patients who have an appointment in one of those clinics during that date range. The print item will only display upcoming or pending appointments. Walk in and chart requests are excluded from the pending appointment display in the print item. (CR#126)
- Problem List Date of Onset: added as a PGEN and VGEN Selection and Print item. If used as a selection item, the user must enter the beginning and ending date and if they want a particular set of diagnoses. When used as a print item, the system will print all entries from the problem list with the date of onset unless this item was also used as a selection item. In that case only the problem list entries matching the diagnoses entered on selection will be printed. (CR#072)
- Family History-related: Family History Dx, Family Hx and Relation, Family History Relation, Family Hx Narrative and Family Hx Description (diagnosis, narrative, age at onset, relation) were all added as PGEN and VGEN Selection and Print items. (CR# Child315)
- Present on Admission (POA): added as VGENSelect and Print item. (CR#062)
- CPT Modifier: added as VGENSelect and Print item.

2.5 QMan (AMQQ)

The following changes apply to the AMQQ application:

- Added DV as a synonym for IPV.
- Changed attribute text from PRIMARY PROVIDER to PRIMARY CARE PROVIDER
- Added upcoming appointments as a print item when printing a list of patients in QMan
- Corrected the diagnosis display for the IHS Prediabetes Register.
- Added Family History as a search option.
- Updated Health Factor selection to allow the user to enter the category and get a list of the factors.
- Added the ability to create a delimited output of the QMan results. This is done by having the output print to your screen and you can do a screen capture of the delimited output.
- Added the ability to go directly to VGEN or PGEN's print output from QMan. This is accomplished by the user selecting to create a search template in QMan and when the creation of the template is complete they will be transferred to PGEN/VGEN.

2.6 General Database (AUPN)

V Asthma: Added new field #.14 – Asthma Control. (CR#206)

V Lab: Added field 1502 – FINDINGS to the V LAB file. This field will be populated by the Procedure Workflow Tracking System (BTPW) when the software is deployed. (CR#239)

V Patient Education: Added Readiness to Learn as field #1102. (CR#242)

V Radiology: Added field 1502 – FINDINGS to the V RADIOLOGY file. This field will be populated by the Procedure Workflow Tracking System(BTPW) when the software is deployed.. (CR#239)

Personal History: Added field .06 – MULTIPLE BIRTH? to the Personal History File. Patient Multiple Birth?: Yes/No/Unknown (CR#244)

Personal History: Added field .07 – MULTIPLE BIRTH TYPE to the Personal History file Multiple Birth Type: values = Twin, Unspecified (TU); Identical Twin (IT); Fraternal Twin (FT); Triplet (TR); Other Multiple (OTH) (CR#244)

Problem: Expanded Note narrative to 160 characters. (CR#323)

Provider Narrative: Expanded the narrative to 160 characters. (CR#258)

FAMILY HISTORY FAMILY MEMBERS: Created new file with the following fields (CR #199/CR #322):

- .01 RELATIONSHIP
- .02 PATIENT
- .03 RELATION DESCRIPTION
- .04 STATUS
- .05 AGE AT DEATH
- .06 CAUSE OF DEATH
- .07 MULTIPLE BIRTH?
- .08 MULTIPLE BIRTH TYPE

FAMILY HISTORY: modified the existing file(CR #199/CR #322):

- Moved the Status field to the new FAMILY HISTORY FAMILY MEMBER file
- Put a * in front of the STATUS field to alert users that it will be going away.
- Modified the .01 field to only allow ICD9 codes V16-V19 (CR#245)
- Added a new field (#.09) which is a pointer to the Family History Family Member file.
- Inactivated field .07 - Relationship

- Added new MULTIPLE BIRTH and MULTIPLE BIRTH TYPE fields (CR#199)
- Added CAUSE OF DEATH field that displays if the STATUS field is DECEASED (CR#199)
- Added new AGE AT ONSET and AGE AT DEATH fields with the following choices:
 - In Infancy
 - Before age 20
 - At age 20-29
 - At age 30-39
 - At age 40-49
 - At age 50-59
 - 60 and older
 - Age Unknown
- Inactivated the old, numeric Diagnosis Onset Age field
- Changed the .01 field to only allow ICD Diagnosis codes: V16*; V17*; V18*; and V19* (CR#245) [duplicate to above??]

REPRODUCTIVE FACTORS: Implement requested changes to Reproductive Factors fields.

- Add and/or activate the following new fields: Full Term (previous request); Premature Births (previous request for Preterm Births); Ectopic Pregnancies; Multiple Births.
- Inactivate Parity and Abortions/Miscarriages/Ectopic Pregnancies fields.

V Telehealth: Created new file with the following fields:

- .01 Primary Modality
- .02 Patient Name
- .03 Visit
- .04 Originating Date/Time
- .05 Service Date/Time
- .06 Secondary Modality
- .07 Case ID
- .08 Originating Provider
- .09 Requesting Provider
- .11 Service Delivery
- .12 Originating Visit
- .13 Status Field
- .14 Duration
- 1101 Comments
- 1102 Link To Case

2.6.1 Table Changes

PCC RELATIONSHIPS: Created new table to use for Family History.

TELEHEALTH: Created new tables for Modality and Service Category.

EXAM: Inactivated the following Exam Codes: (CR#241)

23 Audiometric Screening
08 Heart Exam
05 Neck Exam

HEALTH FACTORS: Modified the Health Factors file so that the category ill display anytime a lookup is done on the file and so that the user can type in the category name and get a list of the health factors to choose from. (CR#255, CR#256, CR#217)

Changed the name of the following Health Factors: (CR#234)

OLD NAME	NEW NAME
ASTHMA TRIGGER-AIR POLLUTANTS	AIR POLLUTANTS
ASTHMA TRIGGER-ANIMAL	ANIMAL
ASTHMA TRIGGER-COCKROACHES	COCKROACHES
ASTHMA TRIGGER-DUST MITES	DUST MITES
ASTHMA TRIGGER-EXERCISE	EXERCISE
ASTHMA TRIGGER-MOLD	MOLD
ASTHMA TRIGGER-POLLEN	POLLEN
ASTHMA TRIGGER-TOBACCO SMOKE	TOBACCO SMOKE
BARRIERS TO LEARN-BLIND	BLIND
BARRIERS TO LEARN-DEAF	DEAF
BARRIERS TO LEARN-DOESN'T READ ENGLISH	DOESN'T READ ENGLISH
BARRIERS-FINE MOTOR SKILLS DEFICIT	FINE MOTOR SKILLS DEFICIT
BARRIERS TO LEARN-HARD OF HEARING	HARD OF HEARING
BARRIERS TO LEARNING-INTERPRETER NEEDED	INTERPRETER NEEDED
BARRIERS TO LEARNING-NO BARRIERS	NO BARRIERS
BARRIERS TO LEARNING-VALUES/BELIEFS	VALUES/BELIEFS
BARRIERS TO LEARN-VISUALLY IMPAIRED	VISUALLY IMPAIRED
SELF MONITORING BLOOD GLUCOSE-NO	NO
SELF MONITORING BLOOD GLUCOSE-REFUSED	REFUSED
SELF MONITORING BLOOD GLUCOSE-YES	YES
LEARNING PREFERENCE-DO/PRACTICE	DO/PRACTICE
LEARNING PREFERENCE-READ	READ
LEARNING PREFERENCE-SMALL GROUP	SMALL GROUP

OLD NAME	NEW NAME
LEARNING PREFERENCE-TALK	TALK
LEARNING PREFERENCE-VIDEO	MEDIA
RUBELLA IMMUNE	IMMUNE
RUBELLA NON-IMMUNE	NON-IMMUNE
RUBELLA STATUS INDETERMINATE	STATUS INDETERMINATE
TB-TX COMPLETE	TX COMPLETE
TB-TX INCOMPLETE	TX INCOMPLETE
TB-TX UNKNOWN	TX UNKNOWN
TB-TX UNTREATED	TX UNTREATED

Added the following Health Factors: (CR#234)

FACTOR	CATEGORY
CHANGE IN WEATHER	ASTHMA TRIGGERS
MENSES	ASTHMA TRIGGERS
OTHER TRIGGER	ASTHMA TRIGGERS
STRONG EMOTIONAL EXPRESSION	ASTHMA TRIGGERS
VIRAL INFECTION	ASTHMA TRIGGERS
LESS THAN 6 TH GRADE EDUCATION	ASTHMA TRIGGERS
RETIRED	OCCUPATION
TX IN PROGRESS	TB STATUS

Inactivated the following Health Factors: (CR#234)

FACTOR
BARRIERS TO LEARN-COGNITIVE IMPAIRMENT
DOES NOT SPEAK ENGLISH
EMOTIONAL IMPAIRMENT
BARRIERS-SIGN INTERPRETER NEEDED
READINESS TO LEARN-NOT READY
READINESS TO LEARN-PAIN
READINESS TO LEARN-RECEPTIVE
READINESS TO LEARN-SEVERITY OF ILLNESS
READINESS TO LEARN-UNRECEPTIVE
7-FOOD AND EXERCISE (MAINTAIN)

2.7 Other Changes

2.7.1 Asthma Severity Conversion

A conversion is done to move the asthma severity from the V POV file to the Problem List. (CR#207)

2.7.2 Taxonomies

The following national taxonomies were added for use with the Asthma Supplement, Action Plan and Best Practice Prompts:

- BAT ASTHMA SHRT ACT RELV NDC (reliever)
- BAT ASTHMA SHRT ACT RELV MEDS (reliever)
- BAT ASTHMA SHRT ACT INHLR NDC (reliever)
- BAT ASTHMA SHRT ACT INHLR MEDS (reliever)
- BAT ASTHMA LEUKOTRIENE NDC (controller)
- BAT ASTHMA LEUKOTRIENE MEDS (controller)
- BAT ASTHMA CONTROLLER NDC (controller)
- BAT ASTHMA INHLD STEROIDS NDC (controller)

2.7.3 New APIs for the VA Reminders

New APIs for the VA Reminders package to get last of each item (CR#172).

New APIs for the VA Reminders package to get last of each item (CR#172).

Each of the calls is in the same format:

S X=\$\$linelabel^APCLAPIR(dfn,beginning date, ending date) where:

Dfn= Patient DFN

Beginning Date is the internal FileMan date to begin searching for the item, if blank DOB will be used.

Ending Date is the internal FileMan date to end searching for the item, if blank DT (today's date) will be used.

Output:

1 or 0^date^text of item found^value if appropriate^visit ien^File found in^ien of file found in piece

- 1: 1 if item found, 0 if no item found in the date range
- 2: date of last item
- 3: text of item found
- 4: value - result
- 5: visit ien on which item found
- 6: file item found in (usually a V File #)
- 7: ien of V File entry found

- Alcohol Screening: \$\$REMAALSC^APCLAPIR
- Depression Screening: \$\$REMDEPS^APCLAPIR
- Assessment of Function: \$\$REMAOF^APCLAPIR
- Blood Pressure: \$\$REMBP^APCLAPIR
- Breast Exam: \$\$REMBRST^APCLAPIR
- Cholesterol: \$\$REMCHOL^APCLAPIR
- Dental Exam: \$\$REMDENT^APCLAPIR
- Diabetes Screening: \$\$REMGLUC^APCLAPIR
- Intimate Partner Violence Screening: \$\$REMIPVS^APCLAPIR
- EPSDT Screening: \$\$REMEPSDT^APCLAPIR
- Head Circumference: \$\$REMHHC^APCLAPIR
- Hearing Exam: \$\$REMHEAR^APCLAPIR
- Height: \$\$REMHT^APCLAPIR
- Influenza Immunization: \$\$REMFLU^APCLAPIR
- Mammogram: \$\$REMMAMM^APCLAPIR
- Osteoporosis Screening: \$\$REMOSTEO^APCLAPIR
- Pap Smear: \$\$REMPAP^APCLAPIR
- Pelvic Exam: \$\$REMPEVL^APCLAPIR
- Physical Exam: \$\$REMPHYS^APCLAPIR
- Pneumovax: \$\$REMPNEU^APCLAPIR
- Rectal Exam: \$\$REMRECT^APCLAPIR
- Rubella: \$\$REMRUBEL^APCLAPIR
- TD: \$\$REMTD^APCLAPIR
- Tobacco Screening: \$\$REMTOBS^APCLAPIR
- Tonometry: \$\$REMTON^APCLAPIR
- Visual Acuity Exam: \$\$REMVAE^APCLAPIR
- Weight: \$\$REMWT^APCLAPIR

2.7.4 Family History Data Conversion

A post init routine was written to do the following: (CR#199 and CR#321)

- Convert the relationship and status data from the Family History file and move it to the new Family History Family Member file.
- Stuff a family member of UNKNOWN into the Family member field for all entries that currently has no Relation/Family member entered.
- Convert the existing numeric diagnosis onset age (if any) to the new age of onset set of codes.

2.7.5 Reproductive History String Conversion

If the existing Reproductive History field is populated with a number, including the “0” option, copy any existing values in the string to new fields as follows:

G = Gravida

P = Full Term

LC = Living Children

SA = Spontaneous Abortions

TA = Therapeutic Abortions

3.0 Demographic Attributes

If you want to find what attribute categories are available to you, enter three question marks at the “Attribute of LIVING PATIENTS” prompt, as shown below:

```
***** SEARCH CRITERIA *****  
  
What is the subject of your search?  LIVING PATIENT(S) //  
  
    Subject of search: PATIENTS  
        ALIVE TODAY    [SER = .01]  
  
Attribute of LIVING PATIENTS:??? <Enter>
```

Figure 3-1: Sample of search criteria screen

The screen will then display all of the attribute categories:

```
***** ATTRIBUTE CATEGORIES *****  
  
Select one of the following:  
  
    1      DEMOGRAPHICS  
    2      DENTAL CODES  
    3      DIAGNOSES  
    4      EXAMS  
    5      INPATIENT  
    6      IMMUNIZATIONS  
    7      LAB  
    8      MEASUREMENTS  
    9      MEDICATIONS  
   10      PATIENT ED  
   11      PROCEDURES  
   12      PROVIDERS  
   13      SKIN TESTS  
   14      TREATMENTS  
   15      VISIT INFO  
  
Your choice: 1 <Enter>  DEMOGRAPHICS
```

Possible choices:	
ADA CODE	MAILING ADDRESS-STATE
AGE	MAILING ADDRESS-STREET
ALIVE	MAILING ADDRESS-ZIP
AREA	MEDICAID PLAN NAME
BIRTH CERTIFICATE NUMBER	MEDICAID POLICY HOLDER
CAUSE OF DEATH	MEDICAID RELATIONSHIP TO INSUR
CHART NUMBERS (SECONDARY)	MEDICAID STATE
CLASSIFICATION/BENEFICIARY	MEDICARE ELIG DATE
CONTRACT SERVICES	MEDICARE NUMBER
CURRENT COMMUNITY	MEDICARE SUFFIX
DATE OF LAST RECORD UPDATE	MEMBERSHIP VERIFIED
DATE RECORD ESTABLISHED	MOTHER
DEAD	NAME
DEATH AGE	OFFICE PHONE NUMBER
DEATH CERTIFICATE NUMBER	PATIENT ED TOPIC
DENTAL OP. SITE	PROBLEM LIST DIAGNOSIS
DISTRICT	PROCEDURE (MEDICAL)
DOB	PROVIDER
DOD	RX
ELIGIBILITY	SERVICE UNIT
EMPLOYMENT STATUS	SEX
HOME PHONE NUMBER	SSN
INDIAN BLOOD QUANTUM	TREATMENT
INITIALS	TRIBAL BLOOD QUANTU
MAILING ADDRESS	TRIBAL ENROLLMENT NUMBER
MAILING ADDRESS-CITY	TRIBE OF MEMBERSHIP

Figure 3-2: Sample of attribute categories

3.1 Age

You work at a small service unit. The community health nurse wants to start a developmental screening program for all children under the age of three. She needs to know who the children are and where they live. The two demographic attributes that enter into this search are age and current community. The search would appear as shown in the following example.

```
***** SEARCH CRITERIA *****

What is the subject of your search?  LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: AGE <Enter>
Condition: LESS THAN <Enter>
Age: 3 <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    AGE LESS THAN 3    [SER = 7.33]

Attribute of LIVING PATIENTS: CURRENT COMMUNITY <Enter>

Enter COMMUNITY: SAN XAVIER <Enter>          PIMA      ARIZONA      065
0410065
Enter ANOTHER COMMUNITY: SANTA ROSA <Enter>
   1  SANTA ROSA          PIMA      ARIZONA      034      0410034
   2  SANTA ROSA          SONOMA     CALIFORNIA    858      0649858
   3  SANTA ROSA RANCH.   AREA      KINGS        CALIFORNIA
376      0616376
   4  SANTA ROSA RCH      PIMA      ARIZONA      060      0410060
CHOOSE 1-4: 1 <Enter>
Enter ANOTHER COMMUNITY: <Enter>

The following have been selected =>

  SAN XAVIER
  SANTA ROSA

Want to save this COMMUNITY group for future use? NO// <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    AGE LESS THAN 3    [SER = 7.33]
    CURRENT COMMUNITY (SAN XAVIER/SANTA ROSA)  [SER = 15.67]

Attribute of LIVING PATIENTS: <Enter>
```

```
***** Q-MAN OUTPUT OPTIONS *****

Select one of the following:

1      DISPLAY results on the screen
2      PRINT results on paper
3      COUNT 'hits'
4      KEEP 'hits' in a FM search template
5      STORE search logic for future use
6      R-MAN special report generator
9      HELP
0      EXIT
Your choice: DISPLAY// <Enter>

PATIENTS      CHART  COMMUNITY      AGE
(Alive)      NUMBER
-----
GREEN, JAMES   101902 SANTA ROSA      2
MILLER, JUSTIN 101944 SANTA ROSA      2
GREEN, KRISTIN 102015 SANTA ROSA      1
JEFFERSON, MARYBE 102016 SANTA ROSA      1
Total: 4
```

Figure 3-3: Sample of search based on age

3.2 Current Community

You work at a service unit that is located near a large urban area. Some of your patients live on the reservation and the rest live in town. You want a list of all patients who do not live in the city.

```

What is the subject of your search?  LIVING PATIENTS //

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS:  CURRENT COMMUNITY <Enter>

Enter COMMUNITY:  TUCSON <Enter>
Enter ANOTHER COMMUNITY:  NULL <Enter>
I take it you want me to find only those LIVING PATIENTS whose
COMMUNITY is NOT in this taxonomy? YES// <Enter>
Enter ANOTHER COMMUNITY:  <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    CURRENT COMMUNITY(INVERSE SET)    [SER = .09]

PATIENTS          CHART  COMMUNITY
(Alive)          NUMBER
-----
-----

ADAMS, AMANDA      101500  SIL  NAKYA
ADAMS, ANDY        101926  SELLS
ADAMS, BARNEY      101988  SAN  SIMON
ADAMS, BRIAN       101981  PAPAGO  FARMS
ADAMS, BRUCE       101765  QUIJOTOA
ADAMS, CALVIN      101945  SAN  SIMON
<>

```

Figure 3-4: Sample of search based on current community

3.3 Tribe

There is one predominant tribe at your service unit. You want to conduct a mail-in survey of those patients who are not members of the predominant tribe. Note the following example.

```
What is the subject of your search?  LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: TRIBE OF MEMBERSHIP <Enter>

Enter TRIBE: TOHO <Enter> NO O'ODHAM NATION OF ARIZO  NA          096
Enter ANOTHER TRIBE: NULL <Enter>
I take it you want me to find only those LIVING PATIENTS whose
TRIBE is NOT in this taxonomy? YES// <Enter>

Enter ANOTHER TRIBE: <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    TRIBE OF MEMBERSHIP(INVERSE SET)  [SER = 9]

Attribute of LIVING PATIENTS: <Enter>
Enter ANOTHER TRIBE: <Enter>
Computing Search Efficiency Rating

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    TRIBE OF MEMBERSHIP(INVERSE SET)  [SER = 9]

Attribute of LIVING PATIENTS: ADDRESS <Enter>  (MAILING)
Condition: ALL// <Enter>
Computing Search Efficiency Rating.....
```

Subject of search: PATIENTS				
ALIVE TODAY [SER = .01]				
TRIBE OF MEMBERSHIP(INVERSE SET) [SER = 9]				
MAILING ADDRESS EXISTS [SER = .04]				
PATIENTS (Alive)	CHART NUMBER	TRIBE	ADDRESS	

ADAMS,BRIAN 88776	101981	PASCUA YAQUI TRIBE	1266 TURQUOISE PL.	SASABE,AZ
ADAMS,FRANCIS	101913	NON-INDIAN BENEFIC	P.O. BOX 998	CATALINA,AZ 88776
ANTONE,JUDY ANNE	21099	GILA RIVER PIMA MA	P.O. BOX 234	SACATON,AZ 85775
APKAW,GARRISON K	21183	GILA RIVER PIMA MA	P.O. BOX 1554	SELLS,AZ 85634
APKAW,WAYLON DER	20996	GILA RIVER PIMA MA	P.O. BOX 1213	SACATON,AZ 85247
BEGAY,GERALDINE	21004	CHIPPEWA (OBJIBWAY	908 PUEBLO DR	TUCSON,AZ 85222
BROEN,EVE	101841	CREEK NATION OF OK	467 CHERRY LANE	YUMA,AZ 88776
BROEN,FRANCES	102045	GROS VENTRE-3 AFF	98 FILLMORE LANE	MESA,AZ 88776
<>				

Figure 3-5: Sample of search based on Tribe

3.4 Blood Quantum

The Area Office is concerned with patient eligibility. They ask you to find out how many patients at the service unit have a blood quantum of less than 1/8.

```

What is the subject of your search?  LIVING PATIENTS// <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: BLOOD QUANTUM <Enter>
  1  BLOOD QUANTUM, INDIAN
  2  BLOOD QUANTUM, TRIBAL

CHOOSE 1-2: 1 <Enter>
Condition: LESS THAN <Enter>
Blood Quantum: 1/8 <Enter>                (always state as a fraction)
Computing Search Efficiency Rating

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    INDIAN BLOOD QUANTUM LESS THAN 1/8    [SER = .98]

Attribute of LIVING PATIENTS: <Enter>
What is the subject of your search?  LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

PATIENTS          CHART  INDIAN
(Alive)           NUMBER QUANTUM
-----
WINKERBEAN, GENE  102184 NONE
Total: 1

```

Figure 3-6: Sample of searched based on blood quantum

3.5 Others

3.5.1 Eligibility

You are the service unit director at an isolated site. The local health board complains that too many non-beneficiaries are receiving care at your clinic. You want to find out how many patients at the service unit are not eligible for care.

```
What is the subject of your search? LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: ELIGIBILITY <Enter>

Enter ELIGIBILITY: ??? <Enter>

You may select one or more of the following =>

    INELIGIBLE
    DIRECT ONLY
    CHS & DIRECT
    PENDING VERIFICATION
Enter ELIGIBILITY: INELIGIBLE <Enter>

  Your choice: DISPLAY// 3 <Enter> COUNT 'hits'

COUNTING....
Total: 6
Search time: 9 SECONDS
```

Figure 3-7: Sample of search based on eligibility

You then check how many patients are eligible for care. Note the following example.

```
What is the subject of your search? LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: ELIGIBILITY <Enter>

Enter ELIGIBILITY: DIRECT ONLY <Enter>
Enter ANOTHER ELIGIBILITY: CHS & DIRECT <Enter>
Enter ANOTHER ELIGIBILITY: <Enter>
  The following have been selected =>

    DIRECT & CHS IF AUTHORIZED
    DIRECT

Want to save this ELIGIBILITY group for future use? NO// <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    ELIGIBILITY (DIRECT & CHS/DIRECT)  [SER = .72]

Attribute of LIVING PATIENTS: <Enter>
  Your choice: DISPLAY// 3 <Enter> COUNT 'hits'

COUNTING....
Total: 254
Search time: 15 SECONDS
```

Figure 3-8: Sample of search based on eligibility

3.5.2 Date of Death

The morbidity and mortality committee asks you to review the charts of patients who died before their 30th birthday during a certain time period. Remember, select “patients,” not “living patients,” as the subject of your search.

```

What is the subject of your search?  LIVING PATIENTS // PATIENTS
<Enter>
Attribute of PATIENT: DEATH AGE <Enter>
Condition: LESS THAN <Enter>
Age: 30 <Enter>
Computing Search Efficiency Rating.....

      Subject of search: PATIENTS
                DEATH AGE LESS THAN 30      [SER = 99]

Attribute of PATIENT: DOD <Enter>
Condition: AFTER <Enter>
Exact date: 1980 <Enter>  ( 1980)
Computing Search Efficiency Rating.....

      Subject of search: PATIENTS
                DEATH AGE LESS THAN 30      [SER = 99]
                DOD AFTER 1980              [SER = 99]

Attribute of PATIENT: <Enter>
Your choice: DISPLAY// <Enter>

PATIENTS          CHART  AGE          DEATH DATE
                   NUMBER AT DEATH
-----
WASHINGTON, HOWAR 60116  12          JUN  1, 1987
WATERMAN, CLIFFOR 60142  23          SEP 26, 1987
Total: 2
Press RETURN to continue or '^' to exit:

```

Figure 3-9: Sample of search based on date of death

3.5.3 Phone Numbers

The clinical director wants to start a phone-in appointment system. Some staff members are concerned because they feel that most patients do not have telephones. You are asked to sample the database to determine what proportions of the patients have telephones.

```
What is the subject of your search? LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: PHONE NUMBER <Enter>
  1  PHONE NUMBER (HOME)
  2  PHONE NUMBER (OFFICE)
CHOOSE 1-2: 1 <Enter>
Condition: ALL//
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    HOME PHONE NUMBER EXISTS  [SER = .12]
```

Figure 3-10: Sample of search based on phone number

Choose the output option that will count the number of “hits.”

```
COUNTING....
Total: 1256
Search time: 27 SECONDS
```

Figure 3-11: Sample of search based on phone number

Now determine the number of patients who do not have telephones. Note the following example screen.

```
What is the subject of your search? LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: PHONE NUMBER <Enter>
  1  PHONE NUMBER (HOME)
  2  PHONE NUMBER (OFFICE)
CHOOSE 1-2: 1 <Enter>
Condition: ALL// NULL <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    HOME PHONE NUMBER: NONE EXIST    [SER = .88]

Attribute of LIVING PATIENTS:
Your choice: DISPLAY// 3 <Enter> COUNT 'hits'

COUNTING....
Total: 114
Search time: 43 SECONDS
```

Figure 3-12: Sample of search based on phone number

3.5.4 Phone Number: Natural Language Interface

One of your patients has an abnormal lab test result, and you need to reach her immediately by phone. You can use QMan option 2 “FAST Facts (natural language interface)” to obtain her phone number.

```

***** Q-MAN OPTIONS *****

Select one of the following:

    1      SEARCH PCC Database (dialogue interface)
    2      FAST Facts (natural language interface)
    3      SCRIPT Utilities (programmers interface)
    4      VIEW Taxonomies and Search Templates
    9      HELP
    0      EXIT

Your choice: SEARCH// 2 <Enter>

Tell me what you want: SHOW ME RAE WATERMAN'S PHONE NUMBER <Enter>

...HMMM, I'M WORKING AS FAST AS I CAN.

    1  WATERMAN,RAE                F 11-10-30 *000102642*    SE 100003
    2  WATERMAN,RAE                F 11-03-56 112421124    SE 102772
CHOOSE 1-2: 2 <Enter>

    1  PHONE NUMBER (HOME)
    2  PHONE NUMBER (OFFICE)
CHOOSE 1-2: 2 <Enter>

PATIENTS          CHART  PHONE (H)
                   NUMBER
-----
WATERMAN,RAE*     102772 602-555-1124
Total: 1

```

Figure 3-13: Sample of search based on phone number

3.5.5 Chart Facility

The attribute “Chart Facility” is used to identify patients who have a chart at least one of the indicated facilities. If you wanted to receive information about patients who have a chart at a particular facility (remember, they might have a chart at other facilities in your area as well), this attribute is then used to screen for patients who have a health record number at the indicated facility. This is a demographic type attribute and does not indicate where the patient visit(s) occurred that can be retrieved via a QMan search. How would you select patients that have a chart at more than one facility? Right! You would create two separate queries within your search, each one with chart facility as the attribute, and each chart facility would be “and’ed” together.

```

***** SEARCH CRITERIA *****

What is the subject of your search?  LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY      [SER = .02]

Attribute of LIVING PATIENTS:  CHART <Enter>
    1  CHART FACILITY
    2  CHART NUMBERS (SECONDARY)
    3  CHART SERVICE UNIT
CHOOSE 1-3: 1 <Enter>

Enter FACILITY LOCATION: SELLS HOSPITAL/CLINIC      TUCSON      SELLS
Enter ANOTHER FACILITY LOCATION:

The following have been selected =>

    SELLS HOSPITAL/CLINIC

  Subject of search: PATIENTS
    ALIVE TODAY      [SER = .02]
    CHART LOCATION (SELLS HOSPIT)  [SER = -.1]

Attribute of LIVING PATIENTS:

```

Figure 3-14: Sample of search based on the chart facility attribute

3.5.6 Chart Service Unit

Notice in the example above that one of the choices for an attribute when CHART was entered was CHART SERVICE UNIT. When you select this attribute, QMan will find for you all patients who have a chart number at all facilities located within the selected service unit.

4.0 Measurements, Tests, & Screenings

The following measurement choices are available in QMan:

- ABDOMINAL GIRTH (cms.)
- BP
- DIASTOLIC BP
- FHT
- FUNDAL HEIGHT (cms.)
- HEAD CIRC.(cms)
- HEAD CIRC.(ins)
- HEIGHT(cms)
- HEIGHT(ins)
- PULSE
- SYSTOLIC BP
- TEMPERATURE (F.)
- VISION(corr.)
- VISION(uncorr.)
- WEIGHT(kgs)
- WEIGHT(lbs)

The skin test choices are shown below:

- COCCI READING
- PPD READING

The lab result choices are shown below:

- GLUCOSE
- RHEUMATOIC FACTOR
- SERUM HCG
- URING GLUCOSE,DIPSTICK
- URINE HCG

Please note: You can only use a particular lab test as an attribute when passing data from the VA Lab System to the PCC.

The clinical examination choices are as follows:

ABDOMEN EXAM
AUDIOMETRIC SCREENING EXAM
AUDIOMETRIC THRESHOLD EXAM
BREAST EXAM
CHEST EXAM
DEVELOPMENT EXAM (SEX)
DIABETIC EXAM
EAR EXAM
EYE EXAM
EYE MUSCLE BALANCE EXAM
GENERAL DEVELOPMENT EXAM
HEARING EXAM
HEART EXAM
HERNIA EXAM
MOUTH EXAM
NECK EXAM
NEUROLOGICAL EXAM
ORTHO EXAM
OTO EXAM
PELVIC EXAM
RECTAL EXAM
SCOLIOSIS SCREENING EXAM
TONOMETRY EXAM
TYMPANOGRAM EXAM
VISION EXAM

4.1 Blood Pressure

A pediatrician on your staff is interested in hypertension in the teenage population. You want to find all teenagers who come to your clinic who have had abnormal blood pressure readings during a certain time period. An example appears in following example.

```

What is the subject of your search?  LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: AGE <Enter>
Condition: BETW <Enter> EEN,AGES (inclusive)
Start with (and include) AGE: 13 <Enter>
End with (and include) AGE: 20 <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    AGE BETWEEN,AGES (inclusive) 13 and 20      [SER = 7.33]

Attribute of LIVING PATIENTS:
Attribute of LIVING PATIENTS: BP <Enter>
  1  BP DIASTOLIC
  2  BP SYSTOLIC
  3  BP(systolic and diastolic)
CHOOSE 1-3: 3 <Enter>
If you want to limit the search to certain values, enter the word 'VALUE'.

SUBQUERY: Analysis of multiple BPS

First condition/attribute of "BP": OVER <Enter>

SYSTOLIC BP
Value limiting condition for BP: GREATER THAN// <Enter>
Value: 139 <Enter>

DIASTOLIC BP
Value limiting condition for BP: GREATER THAN// <Enter>
Value: 89 <Enter>

When I analyze the result =>

  1) Both systolic and diastolic BPs must meet your criteria
  2) Either systolic or diastolic BP must meet your criteria

Your choice (1-2): 1// 2 <Enter>

```

```
Next condition/attribute of "BP": BETWEEN <Enter>
  1  BETWEEN DATES (inclusive)
  2  BETWEEN,BP RANGE (inclusive)
CHOOSE 1-2: 1 <Enter>
Exact starting date: 5/7/90 <Enter>  (MAY 07, 1990)
Exact ending date: 5/7/91 <Enter>  (MAY 07, 1991)

      Subject of subquery: BP
      S>139 or D>89
      BETWEEN MAY 7,1990 and MAY 7,1991

Next condition/attribute of "BP":
Computing Search Efficiency Rating.....

      Subject of search: PATIENTS
      ALIVE TODAY  [SER = .01]
      AGE BETWEEN,AGES (inclusive) 13 and 20      [SER = 7.33]
      Subject of subquery: BP
      S>139 or D>89
      BETWEEN MAY 7,1990 and MAY 7,1991

Attribute of LIVING PATIENTS:
Your choice: DISPLAY// 1 <Enter> DISPLAY results on the screen

You have 2 options for listing BPS =>

      1) For ea. patient, list all BPS which match your
         criteria
      2) List all PATIENTS with BPS meeting your criteria,
         but do not list the individual values of ea. BP

Your choice (1 or 2): 1// 2 <Enter>

...EXCUSE ME, LET ME PUT YOU ON 'HOLD' FOR A SECOND...

Please note:  Patients whose names are marked with an "*" may have aliases.
```

Figure 4-1: Sample screens of search based on blood pressure

A list of patients that are found as a result of the record search will be displayed on your screen.

4.2 Vision Screening

The elementary school nurse calls you because she is concerned about children who might need eyeglasses. You need a list of all children between the ages of 5 and 12 with refractive errors. Note the following example.

```
What is the subject of your search?  LIVING PATIENTS // <Enter>
```

```
Subject of search: PATIENTS
ALIVE TODAY    [SER = .01]
```

```
Attribute of LIVING PATIENTS: VIS <Enter>
```

- 1 VISION EXAM
- 2 VISION(corr.)
- 3 VISION(uncorr.)
- 4 VISIT

```
CHOOSE 1-4: 3 <Enter>
```

```
SUBQUERY: Analysis of multiple VISIONS
```

```
First condition/attribute of "VISION": WORSE THAN <Enter>
```

```
Visual acuity: 20/40 <Enter>
```

```
When I analyze the results =>
```

- 1) Vision in BOTH eyes must meet your criteria
- 2) Vision in AT LEAST ONE eye must meet your criteria

```
Your choice (1-2): 1// 2 <Enter>
```

```
Next condition/attribute of "VISION":
```

```
Computing Search Efficiency Rating.....
```

```
Subject of search: PATIENTS
ALIVE TODAY    [SER = .01]
Subject of subquery: VISION(uncorr.)
R>20/40 or L>20/40
```

```
Attribute of LIVING PATIENTS: AGE <Enter>
```

```
Condition: BETWEEN, AGES <Enter> (inclusive)
```

```
Start with (and include) AGE: 5 <Enter>
```

```
End with (and include) AGE: 12 <Enter>
```

```
Computing Search Efficiency Rating.....
```

```

Subject of search: PATIENTS
  ALIVE TODAY    [SER = .01]
    Subject of subquery: VISION(uncorr.)
      R>20/40 or L>20/40
        AGE BETWEEN, AGES (inclusive) 5 and 12      [SER = 7.33]

Attribute of LIVING PATIENTS: <Enter>

PATIENTS          CHART  AGE  VISION(unc.)  DATE OF VU
(Alive)           NUMBER      R & L
-----
CARPENTER, CLAREN 101601 12   20/70  20/70      JAN 29, 1990
CARPENTER, CLAREN 101601 12   20/50  20/50      NOV  1, 1985
GREEN, LANA       101568 10   20/200 20/200     JUN 12, 1989
Total: 3

```

Figure 3-6: Sample screens

4.3 Serum Glucose

The Area Diabetes Coordinator wants to do a study on patients who are poorly controlled. You want a list of patients who have visited the clinic from 1988 through 1990 who have blood sugar readings over 300.

What is the subject of your search? LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY [SER = .01]

Attribute of LIVING PATIENTS: **GLUC** <Enter>

- 1 GLUCOSE
- 2 GLUCOSE,DIPSTICK URINE

CHOOSE 1-2: **1** <Enter>

The following tests will be included in the query =>

SERUM GLUCOSE 60 - 123 mg/dL [critical: <40 and >300]
PLASMA GLUCOSE 60 - 123 mg/dL [critical: <40 and >300]

SUBQUERY: Analysis of multiple GLUCOSES

First condition/attribute of "GLUCOSE": **OVER** <Enter>

Value: **300** <Enter>

Next condition/attribute of "GLUCOSE": <Enter>

Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY [SER = .01]
Subject of subquery: GLUCOSE
GREATER THAN 300

Attribute of LIVING PATIENTS: <Enter>

Next condition/attribute of "GLUCOSE": **BETW** <Enter>

- 1 BETWEEN DATES (inclusive)
- 2 BETWEEN,NUMERIC (inclusive)

CHOOSE 1-2: **1** <Enter>

Exact starting date: **1/1/88** <Enter> (JAN 01, 1988)

Exact ending date: **12/31/90** <Enter> (DEC 31, 1990)

Subject of subquery: GLUCOSE
GREATER THAN 300
BETWEEN JAN 1,1988 and DEC 31,1990

Next condition/attribute of "GLUCOSE": <Enter>

Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY [SER = .01]
Subject of subquery: GLUCOSE
GREATER THAN 300
BETWEEN JAN 1,1988 and DEC 31,1990

Attribute of LIVING PATIENTS: <Enter>

```

*****  Q-MAN OUTPUT OPTIONS  *****

Select one of the following:

1      DISPLAY results on the screen
2      PRINT results on paper
3      COUNT 'hits'
4      KEEP 'hits' in a FM search template
5      STORE search logic for future use
6      R-MAN special report generator
9      HELP
0      EXIT

Your choice: DISPLAY// 1 <Enter>  DISPLAY results on the screen

You have 3 options for listing GLUCOSE RESULTS =>

1) For ea. patient, list all RESULTS
2) For ea. patient, list all RESULTS and EXPANDED LAB REPORT
3) List all PATIENTS with RESULTS you specified, but DO NOT list
   individual RESULTS or EXPANDED LAB REPORT (FASTEST OPTION!!)

Your choice (1-3): 1// 2 <Enter>

PATIENTS          CHART  GLUCOSE          GLUCOSE DATE
(Alive)          NUMBER mg/dL
-----
THATCHER, VERNON  100003 301 H* 60-123          JUN 13, 1988
BURR, YVETTE*     100164 351 H* 60-123          OCT 11, 1989
BURR, YVETTE*     100164 322 H* 60-123          DEC 23, 1988
BURR, YVETTE*     100164 336 H* 60-123          JUL 15, 1988
BURR, YVETTE*     100164 322 H* 60-123          JUN 8, 1988
LINCOLN, CONSTAN* 100318 301 H* 60-123          MAR 23, 1988
GRANT, DOREEN*    100321 374 H* 60-123          DEC 8, 1989
. . .

GRANT, DOREEN*    100321 301 H* 60-123          MAY 4, 1988
GRANT, DOREEN*    100321 302 H* 60-123          MAR 2, 1988
COOLIDGE, YVONNE* 100329 301 H* 60-123          JUN 7, 1989
<>

```

Figure 4-2: Sample screens

4.4 Rheumatoid Factor

You're concerned that your patients have an abnormally high rate of rheumatoid arthritis. You want to do a chart review and search the records by looking for patients having a rheumatoid factor that is abnormal.

```

What is the subject of your search?  LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS:  RHEUM <Enter> ATOID FACTOR

SUBQUERY: Analysis of multiple RHEUMATOID FACTORS

First condition/attribute of "RHEUMATOID FACTOR":  OVER <Enter>
Titre:  1:10 <Enter>
Next condition/attribute of "RHEUMATOID FACTOR":
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    Subject of subquery: RHEUMATOID FACTOR
    GREATER THAN 1:10

Attribute of LIVING PATIENTS:  <Enter>

                                     At this point, we select display option 1,
                                     and are presented with three choices:

1) For ea. patient, list all RESULTS
2) For ea. patient, list all RESULTS and EXPANDED LAB REPORT
3) List all PATIENTS with RESULTS you specified, but DO NOT list
   individual RESULTS or EXPANDED LAB REPORT (FASTEST OPTION!!)

Your choice (1-3): 1// <Enter>

PATIENTS          CHART  RHEUMAT          RHEUMAT DATE
(Alive)          NUMBER
-----
GRANT,AUDREY*    100175 1:32          JAN 15,1988
REAGAN,SAMANTHA  100219 1:128          SEP 18,1987
CARPENTER,HANNAH 100150 1:1024         JAN 13,1988
Total: 3

```

Figure 4-3: Sample of rheumatoid factor

4.5 Pregnancy Test

You are interested in studying teenage pregnancy. You want to find all teenagers who became pregnant. This is an example of an attribute measured with a positive or negative value.

```

What is the subject of your search?  LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS:  HCG <Enter>
    1    HCG,SERUM
    2    HCG,URINE
CHOOSE 1-2:  2 <Enter>

  HCG

SUBQUERY: Analysis of multiple URINE HCGS

First condition/attribute of "URINE HCG":  IS <Enter>
Value:  POS <Enter>

Next condition/attribute of "URINE HCG":  <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    Subject of subquery: URINE HCG
    Result is POS

Attribute of LIVING PATIENTS:  AGE <Enter>
Condition:  BETW <Enter> EEN,AGES (inclusive)
Start with (and include) AGE:  12 <Enter>
End with (and include) AGE:  19
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    Subject of subquery: URINE HCG
    Result is POS
    AGE BETWEEN,AGES (inclusive) 12 and 19    [SER = 7.33]

```

Figure 4-4: Sample of pregnancy test

4.6 Breast Exam

Breast cancer is a major concern at your service unit. You want to track all patients who have had abnormal breast exams after 1985. Breast exam is another attribute with a positive or negative finding.

```
What is the subject of your search?  LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: BREAST EXAM <Enter>

SUBQUERY: Analysis of multiple BREAST EXAMS

First condition/attribute of "BREAST EXAM": POS <Enter>
Next condition/attribute of "BREAST EXAM": AFTER <Enter>
Exact date: 1/1/85 <Enter> (JAN 01, 1985)

      Subject of subquery: BREAST EXAM
      EQUALS POS
      AFTER JAN 1,1985

Next condition/attribute of "BREAST EXAM": <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
      Subject of subquery: BREAST EXAM
      EQUALS POS
      AFTER JAN 1,1985
```

Figure 4-5: Sample of breast exam

At this point, we select display option 1, and are presented with the choices shown in the following example.

```

You have 2 options for listing BREAST EXAMS =>

    1) For ea. patient, list all BREAST EXAMS which match your
       criteria
    2) List all PATIENTS with BREAST EXAMS meeting your criteria,
       but do not list the individual values of ea. BREAST EXAM

Your choice (1 or 2): 1// 2 <Enter>

PATIENTS          CHART  BREAST  SEX
                   NUMBER EXAM
-----
MILLER, SALLY*    100010 +      FEMALE
THATCHER, KATE*   100028 +      FEMALE
JEFFERSON, WENDY* 100279 +      FEMALE
BROEN, NORMA      100312 +      FEMALE
WASHINGTON, CHRI* 100640 +      FEMALE
BROEN, PAULA*     100693 +      FEMALE
THATCHER, DALE    100877 +      FEMALE
JEFFERSON, LORRAI 100916 +      FEMALE
KETCHUP, SYDNEY   102177 +      FEMALE
REAGAN, ERMAN*    102203 +      FEMALE
RUBBLE, MARCIA    102653 +      FEMALE
COOLIDGE, HEIDI   102818 +      FEMALE
JEFFERSON, LYNNE* 102904 +      FEMALE
ADAMS, ROSE*      103060 +      FEMALE
COOLIDGE, GERTRU* 103149 +      FEMALE
Total: 15

Attribute of LIVING PATIENTS:
  
```

Figure 4-6: Sample of breast exam

4.7 Skin Tests

The TB Control Officer is interested in finding the patients who have had a positive PPD in the past three years. A positive PPD is one that was 10 or more millimeters in size. We are looking for the size of the reading in this instance. For any of the skin tests, you have to put in a number; you cannot just ask for a positive or negative finding. Note the following example.

```
What is the subject of your search?  LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS:  PPD <Enter>  READING

SUBQUERY: Analysis of multiple PPD READINGS

First condition/attribute of "PPD READING":  OVER <Enter>
Value:  9 <Enter>
Next condition/attribute of "PPD READING":  <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    Subject of subquery: PPD READING
    GREATER THAN 9

Attribute of LIVING PATIENTS:
```

Figure 4-7: Sample of skin test

At this point, we select display option 1, and are presented with the following choices:

```
You have 2 options for listing PPD READINGS =>

  1) For ea. patient, list all PPD READINGS which match your
    criteria
  2) List all PATIENTS with PPD READINGS meeting your criteria,
    but do not list the individual values of ea. PPD READING

Your choice (1 or 2): 1// <Enter>

...HMMM, JUST A MOMENT PLEASE...

Please note:  Patients whose names are marked with an "*" may have
aliases.
```

Figure 4-8: Sample of skin test

A list of patients that are found as a result of the record search will be displayed on your screen.

5.0 Diagnoses and Problem List Entries

5.1 Diabetes

You are starting a diabetes clinic, and you need a list of all patients who have diabetes. In this case, the response that you will type in answer to the “Attribute of Living Patients” prompt will be DX or DIAGNOSIS or POV or PURPOSE OF VISIT rather than diabetes. It is usually most convenient to enter DX because it is brief. Then you are prompted to enter the specific diagnosis.

```
What is the subject of your search? LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: DX <Enter>      or
Attribute of LIVING PATIENTS: POV <Enter>     or
Attribute of LIVING PATIENTS: PURPOSE OF VISIT <Enter>
```

Figure 5-1: Sample of diabetes list

5.1.1 Synonyms

Let's look at some of the ways you can enter the diagnosis of diabetes. You can use various abbreviations as shown:

```
Enter DX: DM <Enter>

Enter DX: AODM <Enter>
250.00 (DIABETES UNCOMPL TYPE II/NIDDM)
DIABETES MELLITUS WITHOUT MENTION OF COMPLICATION/TYPE II/NONINSULIN
DEPENDENT/ADULT-ONSET

OK? Y//
```

Figure 5-2: Sample of synonyms

You can type in the narrative as shown in the following example.

```
Enter DX: DIABETES MELL <Enter> ( DIABETES|DIABETIC MELL/MELLITUS )
The following matches were found:

    1: 250.01 (DIABETES UNCOMPL TYPE I/IDDM)
        DIABETES MELLITUS WITHOUT MENTION OF COMPLICATION/TYPE
        I/INSULIN
        DEPENDENT/JUVENILE

    2: 250.11 (DIAB KETOACIDOSIS TYPE I/IDDM)
        DIABETES MELLITUS WITH KETOACIDOSIS/TYPE I/INSULIN
        DEPENDENT/JUVENILE

    3: 250.21 (DIAB HYPEROSM COMA TYPE I/IDDM)
        DIABETES MELLITUS WITH HYPEROSMOLAR COMA/TYPE I/INSULIN
        DEPENDENT/JUVENILE

    4: 250.31 (DIABETES COMA NEC TYPE I/IDDM)
        DIABETES MELLITUS WITH OTHER COMA/TYPE I/INSULIN
        DEPENDENT/JUVENILE

    5: 250.41 (DIAB RENAL MANIF TYPE I/IDDM)
        DIABETES MELLITUS WITH RENAL MANIFESTATIONS/TYPE I/INSULIN
        DEPENDENT/JUVENILE

Select 1-30:
```

Figure 5-3: Sample of synonyms

QMan goes into the diabetes diagnosis lookup and lists the possible ICD codes for diabetes from which you can choose. In this example, you are given 30 choices of ICD code. (The total number of possible choices available to you based on your entry is indicated by the last number in the “Select 1-30” prompt; this is true only in the diagnosis lookup.) As you press the Enter key, you will see all of the possible choices listed as though on a revolving index. If you press the Enter key repeatedly without entering a choice, the choices will begin to repeat. Our advice would be to familiarize yourself ahead of time with the ICD codes you might need.

5.1.2 ICD Code

You can enter a specific ICD code in response to the “DX” prompt.

```
Enter DX: 250.00 <Enter> 250.00          DIABETES UNCOMPL TYPE
II/NIDDM
...OK? YES//
```

Figure 5-4: Sample of ICD code

5.1.3 Range of ICD Codes

Another thing you can do is put in a range of ICD codes:

```
Enter DX: 250.00-250.51 <Enter>
250.00      DIABETES UNCOMPL TYPE II/NIDDM
...OK? YES// <Enter>
250.51      DIAB OPTHAL MANIF TYPE I/IDDM
...OK? YES// <Enter>
```

Figure 5-5: Sample of ICD code range

Here, QMan confirms the beginning of the range and the end of the range and then prints an inclusive list of all the diagnoses that are in that range.

```
ICD codes in this range =>

250.00      DIABETES UNCOMPL TYPE II/NIDDM
250.01      DIABETES UNCOMPL TYPE I/IDDM
250.10      DIAB KETOACID TYPE II/NIDDM
250.11      DIAB KETOACIDOSIS TYPE I/IDDM
250.20      DIAB HYPEROS COM TYPE II/NIDDM
250.21      DIAB HYPEROSM COMA TYPE I/IDDM
250.30      DIAB COMA NEC TYPE II/NIDDM
250.31      DIABETES COMA NEC TYPE I/IDDM
250.40      DIAB RENAL MANIF TYPE II/NIDDM
250.41      DIAB RENAL MANIF TYPE I/IDDM
250.50      DIAB OPTH MANIF TYPE II/NIDDM
250.51      DIAB OPTHAL MANIF TYPE I/IDDM
```

```
Press return to continue <Enter>
ICD Code Range(s) Selected So Far =>
```

```
1) 250.00 - 250.51
```

Figure 5-6: Sample of ICD code range

5.1.4 Removing a Diagnosis from a Set

Suppose you enter an ICD range of codes for the diagnosis but there is one diagnosis from the middle of the range that you don't want. Do you have to start from scratch and rebuild a list of codes? No, you can actually tell QMan which diagnosis you want to exclude from the range you have already indicated.

```
ICD Code Range(s) Selected So Far =>
```

```
1) 250.00 - 250.51
```

Figure 5-7: Sample of removing a diagnosis from a set

Let's say you want to exclude ICD code 250.31 from the range already indicated. At the "Enter ANOTHER DX" prompt you will enter a minus sign followed by the code(s) you wish to exclude:

```
Enter ANOTHER DX: -250.31 <Enter> 250.31          DIABETES COMA NEC
TYPE I/IDDM
...OK? YES// <Enter>

ICD Code Range(s) Selected So Far =>

1) 250.00 - 250.30
2) 250.40 - 250.51
```

Figure 5-8: Sample of removing a diagnosis from a set

At this point, QMan will show you the two range of codes you have created by excluding a code from the middle of the initial ICD range of codes.

5.1.5 Inverse Set

Another very powerful thing you can do is invert the diagnosis set. Suppose you wish to identify the patients who don't have a diagnosis of diabetes. After you have entered all the codes in your taxonomy, you will type NULL. This forms an exclusionary search.

```
ICD Code Range(s) Selected So Far =>

1) 250.00 - 250.51

Enter ANOTHER DX: NULL <Enter>
I take it you want me to search for only those LIVING PATIENTS who
DO NOT have
any DXS in this taxonomy? YES// <Enter>
SUBQUERY: Analysis of multiple DIAGNOSES
```

Figure 5-9: Sample of inverse set

5.1.6 "And'ed" Taxonomies

Now suppose that you want to find all patients who have diagnoses of diabetes and hypertension to determine the effect of the diseases on their kidneys. Note the following example.

```

What is the subject of your search?  LIVING PATIENTS // <Enter>

    Subject of search: PATIENTS
        ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS:  DX <Enter>

Enter DX:  250.00-250.51 <Enter>
250.00      DIABETES UNCOMPL TYPE II/NIDDM
...OK? YES// <Enter>
250.51      DIAB OPTHAL MANIF TYPE I/IDDM
...OK? YES// <Enter>
ICD codes in this range =>

250.00      DIABETES UNCOMPL TYPE II/NIDDM
250.01      DIABETES UNCOMPL TYPE I/IDDM
250.10      DIAB KETOACID TYPE II/NIDDM
250.11      DIAB KETOACIDOSIS TYPE I/IDDM
250.20      DIAB HYPEROS COM TYPE II/NIDDM
250.21      DIAB HYPEROSM COMA TYPE I/IDDM
250.30      DIAB COMA NEC TYPE II/NIDDM
250.31      DIABETES COMA NEC TYPE I/IDDM
250.40      DIAB RENAL MANIF TYPE II/NIDDM
250.41      DIAB RENAL MANIF TYPE I/IDDM
250.50      DIAB OPTH MANIF TYPE II/NIDDM
250.51      DIAB OPTHAL MANIF TYPE I/IDDM

Press return to continue <Enter>
ICD Code Range(s) Selected So Far =>

1)  250.00 - 250.51

Enter ANOTHER DX:

```

Figure 5-10: Sample screen

Instead of entering another diagnosis here, you go on until you return to the “Attribute of Living Patient” prompt.

```
Want to save this DX group for future use? NO// <Enter>

SUBQUERY: Analysis of multiple DIAGNOSES

First condition/attribute of "DIAGNOSIS":
Computing Search Efficiency Rating.

    Subject of search: PATIENTS
        ALIVE TODAY    [SER = .01]
        DIAGNOSIS (250.01/250.11...) [SER = 20.84]
```

Figure 5-11: Sample screen

You return to the “Attribute of Living Patient” prompt and repeat the process of entering diagnosis (DX) as the attribute of the living patient and hypertension (HTN) as the diagnosis.

```
Attribute of LIVING PATIENTS: DX <Enter>

Enter DX: HTN <Enter>
401.9 (HYPERTENSION NOS)
UNSPECIFIED ESSENTIAL HYPERTENSION

    OK? Y// <Enter>
ICD Code Range(s) Selected So Far =>

1) 401.9

Enter ANOTHER DX: <Enter>
SUBQUERY: Analysis of multiple DIAGNOSES

First condition/attribute of "DIAGNOSIS": <Enter>
Computing Search Efficiency Rating.....

    Subject of search: PATIENTS
        ALIVE TODAY    [SER = .01]
        DIAGNOSIS (250.01/250.11...) [SER = 20.84]
        DIAGNOSIS (401.9) [SER = 24.37]

Attribute of LIVING PATIENTS:
```

Figure 5-12: Sample screen

5.1.7 Output Options

After indicating that you want the report to display to your terminal screen, you will be given three choices for listing the diagnoses.

```
You have 3 options for listing DIAGNOSES =>

1) For ea. patient, list all IC9 CODES
2) For ea. patient, list all IC9 CODES and PROVIDER NARRATIVES
3) List all PATIENTS with IC9 CODES you specified, but DO NOT list
   individual IC9 CODES or PROVIDER NARRATIVES (FASTEST OPTION!!)

Your choice (1-3): 1// 1 <Enter>
```

Figure 5-13: Sample output options

The first and third choices are fairly concise, but the second choice would give you an expanded report including the provider narratives. (Generally speaking, when you are presented with three options for listing the data, the second option will give you the most information.)

PATIENTS (Alive)	CHART NUMBER	DX/ICD9 #	DATE OF POV	DX/ICD9 #

GAMMA, RAE*	100003	401.9	MAR 18, 1991	+
GAMMA, RAE*	100003	401.9	MAR 8, 1991	+
GAMMA, RAE*	100003	401.9	JAN 9, 1991	+
GAMMA, RAE*	100003	401.9	DEC 17, 1990	+
GAMMA, RAE*	100003	401.9	DEC 4, 1990	+
GAMMA, RAE*	100003	401.9	NOV 28, 1990	+
GAMMA, RAE*	100003	401.9	OCT 19, 1990	+
GAMMA, RAE*	100003	401.9	OCT 9, 1990	+
GAMMA, RAE*	100003	401.9	AUG 21, 1990	+
GAMMA, RAE*	100003	401.9	AUG 20, 1990	+
GAMMA, RAE*	100003	401.9	JUL 24, 1990	+
GAMMA, RAE*	100003	401.9	JUN 19, 1990	+
GAMMA, RAE*	100003	401.9	NOV 18, 1987	+
GAMMA, RAE*	100003	401.9	SEP 2, 1987	+
GAMMA, RAE*	100003	401.9	FEB 6, 1987	+
GAMMA, RAE*	100003	401.9	JUN 4, 1986	+
GAMMA, RAE*	100003	401.9	NOV 13, 1985	+
OMICRON, MAND	100006	401.9	JUN 18, 1991	+
<>				

Figure 5-14: Sample output options

Note: In keeping with the “rule of last,” the ICD code for hypertension is given because it was the diagnosis that was entered last. The plus signs (+) in the last column merely indicate that the patients listed also had diagnoses of diabetes.

By now you might be tired of entering all the ICD9 codes, or the ICD9 range of codes, or all the diagnoses for diabetes. You can bypass some of this work by entering them once and saving the findings as a taxonomy.

Now that you've defined your taxonomy, it asks you for sub-query conditions. Suppose you wish to identify the patients who don't have a diagnosis of diabetes but have had a blood glucose of over 200 after January 1, 1987. Note the example on following screens.

What is the subject of your search? LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY [SER = .01]

Attribute of LIVING PATIENTS: **GLUC** <Enter>

- 1 GLUCOSE
- 2 GLUCOSE
- 3 GLUCOSE, DIPSTICK URINE

CHOOSE 1-3: **1** <Enter>

SUBQUERY: Analysis of multiple GLUCOSES

First condition/attribute of "GLUCOSE": **OVER** <Enter>
Value: **200** <Enter>

Next condition/attribute of "GLUCOSE": **AFTER** <Enter>
Exact date: **1/1/87** <Enter> (JAN 01, 1987)

Subject of subquery: GLUCOSE
GREATER THAN 200
AFTER JAN 1, 1987

Next condition/attribute of "GLUCOSE": <Enter>
Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY [SER = .01]
Subject of subquery: GLUCOSE
GREATER THAN 200
AFTER JAN 1, 1987

Attribute of LIVING PATIENTS: **DX** <Enter>

Enter DX: **250.00-250.51** <Enter>
ICD Code Range(s) Selected So Far =>

1) 250.00 - 250.51

Enter ANOTHER DX: **NULL** <Enter>
I take it you want me to search for only those LIVING PATIENTS who DO NOT have any DXS in this taxonomy? YES// <Enter>

Enter ANOTHER DX: <Enter>

```

First condition/attribute of "DIAGNOSIS": AFTER <Enter>
Exact date: 1/1/87 <Enter>
Next condition/attribute of "DIAGNOSIS": <Enter>

```

```

Subject of search: PATIENTS
  ALIVE TODAY    [SER = .01]
    Subject of subquery: GLUCOSE
    GREATER THAN 200
    AFTER JAN 1,1987
  DIAGNOSIS(INVERSE SET) [SER = -1]
    Subject of subquery: DIAGNOSIS
    AFTER JAN 1,1987

```

Figure 5-15: Sample of output options

Remember the rule of last. We won't be seeing every blood glucose reading because that attribute was not entered last.

5.2 Problem List Narrative

You want to find all patients who have diabetes on their active problem list. In this case you do not enter DX as the attribute because that will just tell you the purpose of visit; it will not give you the problem list diagnosis. Instead, you specifically ask for the problem list diagnosis as shown in the following example.

```

What is the subject of your search? LIVING PATIENTS // <Enter>

```

```

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

```

```

Attribute of LIVING PATIENTS: PROBLEM LIST <Enter>  DIAGNOSIS

```

```

Enter DX: 250.00-250.51 <Enter>

```

```

250.00      DIABETES UNCOMPL TYPE II/NIDDM
...OK? YES// <Enter> (YES)
  250.51      DIAB OPTHAL MANIF TYPE I/IDDM
...OK? YES// <Enter>

```

```

ICD codes in this range =>

```

```

250.00  DIABETES UNCOMPL TYPE II/NIDDM
250.01  DIABETES UNCOMPL TYPE I/IDDM
250.10  DIAB KETOACID TYPE II/NIDDM
250.11  DIAB KETOACIDOSIS TYPE I/IDDM
250.20  DIAB HYPEROS COM TYPE II/NIDDM
250.21  DIAB HYPEROSM COMA TYPE I/IDDM
250.30  DIAB COMA NEC TYPE II/NIDDM
250.31  DIABETES COMA NEC TYPE I/IDDM
250.40  DIAB RENAL MANIF TYPE II/NIDDM
250.41  DIAB RENAL MANIF TYPE I/IDDM
250.50  DIAB OPTH MANIF TYPE II/NIDDM
250.51  DIAB OPTHAL MANIF TYPE I/IDDM

```

```

Press return to continue <Enter>

```

```

Enter ANOTHER DX: <Enter>

Want to save this DX group for future use? NO// <Enter>
SUBQUERY: Analysis of multiple PROBLEM LIST DIAGNOSES

First condition/attribute of "PROBLEM LIST DIAGNOSIS":
Computing Search Efficiency Rating.....

    Subject of search: PATIENTS
        ALIVE TODAY    [SER = .01]
        PROBLEM LIST DIAGNOSIS (250.01/250.11...) [SER = 8.25]

Attribute of LIVING PATIENTS: <Enter>

You have 3 options for listing DIAGNOSES =>

    1) For ea. patient, list all ICD9 CODES
    2) For ea. patient, list all ICD9 CODES and PROBLEM LIST ENTRIES
    3) List all PATIENTS with ICD9 CODES you specified, but DO NOT list
        individual ICD9 CODES or PROBLEM LIST ENTRIES (FASTEST OPTION!!)

Your choice (1-3): 1// 2 <Enter>

PATIENTS          CHART  PROBLEM LIST ENTRY
(Alive)          NUMBER
-----
BETA,BROOKE*      100424 SE1(A)  DIABETES MELLITUS, I [250.01]
BETA,BROOKE*      100424 SE1(A)  DIABETES MELLITUS, I [250.01]
BETA,BROOKE*      100424 SE1(A)  DIABETES MELLITUS, I [250.01]
GAMMAAAA,RAE*     100003 SX2(A)  DIABETES MELLITUS TYPE II, ORAL MED [250.00]
RHORHOR,DIANE*    100018 2(A)   TYPE II DIABETES [250.00]
THETATHETAA,WALL  100026 SE2(A)  DIABETES MELLITUS, TYPE II, ORAL MED [250.00]
THETABBB,KATE*    100028 SE1(A)  DIABETES MELLITUS, TYPE II, ORAL MEDS [250.00]
LLAMBDAAAA,JOAN*  100050 SE4(A)  DIABETES MELLITUS, II, ORAL AGENT [250.00]
THETABBB,ELIZAB*  100072 SE1(A)  DIABETES MELLITUS, II, ORAL MEDS [250.00]
THETAVV,MARTHA*   100085 SE3(A)  DIABETES MELLITUS, TYPE II, ORAL MED [250.00]
THETADDDD,LAURA* 100089 SE9(A)  DIABETES MELLITUS TYPE II [250.00]
THETATHETAB,BARN 100092 SE1(A)  DIABETES MELLITUS, TYPE II ORAL MED [250.00]
THETATHETAB,BARN 100092 SE1(A)  DIABETES MELLITUS, TYPE II ORAL MED [250.00]
KAPPAAA,KELSEY    100119 SE3(A)  DIABETES MELLITUS, TYPE II, INSULIN [250.00]
LLAMDAD,CONNIE    100143 SE3(A)  DIABETES MELLITUS, TYPE II, ORAL MED [250.00]
RHORHORHORHOR,SY 100158 SE3(A)  DM, TYPE II, DIET [250.00]
GAMMAGAMMA,ELAIN 100161 SR2(A)  DIABETES MELLITUS, TYPE II DIET [250.00]
<>

```

Figure 5-16: Sample of problem list narrative

As you can see, selecting option 2 as the display option gives you the problem list number as well as the provider narrative and the associated ICD code.

As a quality assurance test you want to find all patients who were seen for diabetes but do not have diabetes on their problem list. How do you find a diagnosis that is listed on the problem list? Do not enter DX or diagnosis at the “Attribute of LIVING PATIENT” prompt, because that shows you the purpose of the visit. Use Problem List Diagnosis instead.

```

What is the subject of your search?  LIVING PATIENTS // <Enter>
  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS:  DX <Enter>

```

Figure 5-17: Sample of problem list narrative

First you want to identify all of the patients who were seen for diabetes, so you enter a synonym or ICD code range for diabetes in response to the DX prompt. If you had previously created a taxonomy of for patients with a diagnosis of diabetes, you could recall that taxonomy using the left bracket syntax, as shown.

```

Enter DX:  [DIABETES <Enter>    ALL DIABETICS]

Members of DIABETES Taxonomy =>

250.00 - 250.51

Enter ANOTHER DX:  <Enter>
Want to save this DX group for future use? NO// <Enter>

SUBQUERY: Analysis of multiple DIAGNOSES

First condition/attribute of "DIAGNOSIS":
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    DIAGNOSIS (250.01/250.11...) [SER = 20.84]

```

Figure 5-18: Sample of problem list narrative

Now you want to identify which of those diabetic patients do not have a problem list diagnosis of diabetes.

```
Attribute of LIVING PATIENTS: PROBLEM LIST <Enter> DIAGNOSIS
Enter DX: 250.00-250.51 <Enter>
  250.00      DIABETES UNCOMPL TYPE II/NIDDM
    ...OK? YES// <Enter>
  250.51      DIAB OPTHAL MANIF TYPE I/IDDM
    ...OK? YES// <Enter>
ICD codes in this range =>

250.00      DIABETES UNCOMPL TYPE II/NIDDM
250.01      DIABETES UNCOMPL TYPE I/IDDM
250.10      DIAB KETOACID TYPE II/NIDDM
250.11      DIAB KETOACIDOSIS TYPE I/IDDM
250.20      DIAB HYPEROS COM TYPE II/NIDDM
250.21      DIAB HYPEROSM COMA TYPE I/IDDM
250.30      DIAB COMA NEC TYPE II/NIDDM
250.31      DIABETES COMA NEC TYPE I/IDDM
250.40      DIAB RENAL MANIF TYPE II/NIDDM
250.41      DIAB RENAL MANIF TYPE I/IDDM
250.50      DIAB OPTH MANIF TYPE II/NIDDM
250.51      DIAB OPTHAL MANIF TYPE I/IDDM

Press return to continue <Enter>

Enter ANOTHER DX: NULL <Enter>
I take it you want me to search for only those LIVING PATIENTS who DO NOT
have any DXS in this taxonomy? YES// <Enter>
Enter ANOTHER DX: <Enter>

SUBQUERY: Analysis of multiple PROBLEM LIST DIAGNOSES

First condition/attribute of "PROBLEM LIST DIAGNOSIS": <Enter>
Computing Search Efficiency Rating.

  Subject of search: PATIENTS
    ALIVE TODAY      [SER = .01]
    DIAGNOSIS (250.01/250.11...) [SER = 20.84]
    PROBLEM LIST DIAGNOSIS(INVERSE SET) [SER = 8.25]

Attribute of LIVING PATIENTS: <Enter>
...HMMM, I'M WORKING AS FAST AS I CAN...

Please note:  Patients whose names are marked with an "*" may have aliases.
```


PATIENTS (Alive)	CHART NUMBER	DX/ICD9 #	PROBLEM LIST ENTRY

GAMMAGAMMA, PATR*	100292	+	-
GAMMABB, JOSEPH	100401	+	-
GAMMAGAMMA, LESLI	100621	+	-
PIPIPI, DANA	101062	+	-
RHORHOR, ALEXANDR	101729	+	-
GAMMA, KAIA	101743	+	-
RH0000, ISAAC	103048	+	-
BETAAAA, LORI ANN	345	+	-
GAMMAGAMMA, JEFFR	100604	+	-
SBETA, FAY*	100065	+	-
GAMMAGAMMB, MALC	100069	+	-
.	.	.	.

Figure 5-19: Sample of problem list narrative

5.3 ICD Entries

You are studying the prevalence of diabetes in your community and you want to find all patients who have a *purpose of visit* of diabetes and/or a *problem list entry* of diabetes. You can obtain this by entering ICD in response to “Attribute of LIVING PATIENTS” prompt. ICD covers **both** the purpose of visit and the problem list diagnosis. This is how you do prevalence studies.

What is the subject of your search? LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY [SER = .01]

Attribute of LIVING PATIENTS: **ICD** <Enter> (PROBLEM OR POV)

Enter DX: **250.00-250.51** <Enter>

250.00 DIABETES UNCOMPL TYPE II/NIDDM
...OK? YES// <Enter> (YES)

250.51 DIAB OPTHAL MANIF TYPE I/IDDM
...OK? YES// <Enter>

ICD codes in this range =>

250.00 DIABETES UNCOMPL TYPE II/NIDDM
250.01 DIABETES UNCOMPL TYPE I/IDDM
250.10 DIAB KETOACID TYPE II/NIDDM
250.11 DIAB KETOACIDOSIS TYPE I/IDDM
250.20 DIAB HYPEROS COM TYPE II/NIDDM
250.21 DIAB HYPEROSM COMA TYPE I/IDDM
250.30 DIAB COMA NEC TYPE II/NIDDM
250.31 DIABETES COMA NEC TYPE I/IDDM
250.40 DIAB RENAL MANIF TYPE II/NIDDM
250.41 DIAB RENAL MANIF TYPE I/IDDM
250.50 DIAB OPTH MANIF TYPE II/NIDDM
250.51 DIAB OPTHAL MANIF TYPE I/IDDM

Press return to continue <Enter>
ICD Code Range(s) Selected So Far =>

1) 250.00 - 250.

Enter ANOTHER DX: <Enter>

Want to save this DX group for future use? NO// <Enter> (NO)
Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY [SER = .01]
ICD (PROBLEM OR POV) (250.01/250.11...) [SER = .08]

Attribute of LIVING PATIENTS: <Enter>

PATIENTS (Alive)	CHART NUMBER	ICD

DELTA AAA, ELIZAB*	100072	+
DELTABB, MARTHA*	100085	+
KAPPAAA, HORTENC*	100113	+
THETAAA, YOLANDA	100123	+
BETA, YVETTE*	100164	+
GAMMAGAMMA, PATR*	100292	+
GAMMA, DOREEN*	100321	+
DELTAA, KIMBERLY*	100394	+
EPSILON, JOSEPH	100401	+
BETA, BROOKE*	100424	+
THETAAA, INGRID	100543	+
GAMMAGAMMA, LESLI	100621	+
GAMMABB, PEARL	100704	+
GAMMAGAMMA, DREW*	100717	+
OMICRONN, MARY J*	100725	+
BETABB, YVETTE	100736	+
RHOEHOO, ROBERTA	100751	+
GAMMABB, LEAH	100900	+
<>		

Figure 5-20: Sample of ICD entries

6.0 Prescriptions & Patient Education

6.1 Prescription

You want to find all patients who are on hydrochlorothiazide diuretics. Note the example below.

```

What is the subject of your search? LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY [SER = .01]

Attribute of LIVING PATIENTS: RX <Enter>

Enter RX: HCTZ <Enter>
1 HCTZ HYDROCHLOROTHIAZIDE 50MG
2 HCTZ HYDROCHLOROTHIAZIDE 50MG TAB 30S
3 HCTZ HYDROCHLOROTHIAZIDE 25MG TAB N/F
4 HCTZ HYDROCHLOROTHIAZIDE 50MG TAB 60S
5 HCTZUD HYDROCHLOROTHIAZIDE 50MG TAB UD
CHOOSE 1-5: 1 <Enter> HYDROCHLOROTHIAZIDE 50MG
Enter ANOTHER RX: HCTZ <Enter>
1 HCTZ HYDROCHLOROTHIAZIDE 50MG
2 HCTZ HYDROCHLOROTHIAZIDE 50MG TAB 30S
3 HCTZ HYDROCHLOROTHIAZIDE 25MG TAB N/F
4 HCTZ HYDROCHLOROTHIAZIDE 50MG TAB 60S
5 HCTZUD HYDROCHLOROTHIAZIDE 50MG TAB UD
CHOOSE 1-5: 2 <Enter> HYDROCHLOROTHIAZIDE 50MG TAB 30S
Enter ANOTHER RX: HCTZ <Enter>
1 HCTZ HYDROCHLOROTHIAZIDE 50MG
2 HCTZ HYDROCHLOROTHIAZIDE 50MG TAB 30S
3 HCTZ HYDROCHLOROTHIAZIDE 25MG TAB N/F
4 HCTZ HYDROCHLOROTHIAZIDE 50MG TAB 60S
5 HCTZUD HYDROCHLOROTHIAZIDE 50MG TAB UD
CHOOSE 1-5: 3 <Enter> HYDROCHLOROTHIAZIDE 25MG TAB
Enter ANOTHER RX: HCTZ <Enter>
1 HCTZ HYDROCHLOROTHIAZIDE 50MG
2 HCTZ HYDROCHLOROTHIAZIDE 50MG TAB 30S
3 HCTZ HYDROCHLOROTHIAZIDE 25MG TAB N/F
4 HCTZ HYDROCHLOROTHIAZIDE 50MG TAB 60S
5 HCTZUD HYDROCHLOROTHIAZIDE 50MG TAB UD
CHOOSE 1-5: 4 <Enter> HYDROCHLOROTHIAZIDE 50MG TAB 60S
Enter ANOTHER RX: HCTZ <Enter>
1 HCTZ HYDROCHLOROTHIAZIDE 50MG
2 HCTZ HYDROCHLOROTHIAZIDE 50MG TAB 30S
3 HCTZ HYDROCHLOROTHIAZIDE 25MG TAB N/F
4 HCTZ HYDROCHLOROTHIAZIDE 50MG TAB 60S
5 HCTZUD HYDROCHLOROTHIAZIDE 50MG TAB UD
CHOOSE 1-5: 5 <Enter> HYDROCHLOROTHIAZIDE 50MG TAB UD
Enter ANOTHER RX: <Enter>

```

```
The following have been selected =>

    HYDROCHLOROTHIAZIDE 50MG
    HYDROCHLOROTHIAZIDE 50MG TAB 30S
    HYDROCHLOROTHIAZIDE 25MG TAB
    HYDROCHLOROTHIAZIDE 50MG TAB 60S
    HYDROCHLOROTHIAZIDE 50MG TAB UD

Want to save this RX group for future use? NO// <Enter>
SUBQUERY: Analysis of multiple RXS

First condition/attribute of "RX": <Enter>
Computing Search Efficiency Rating.....

    Subject of search: PATIENTS
        ALIVE TODAY    [SER = .01]
        RX (HYDROCHLOROT/HYDROCHLOROT...) [SER = 22.96]

Attribute of LIVING PATIENTS: <Enter>

You have 3 options for listing RxS =>

    1) For ea. patient, list all RxS
    2) For ea. patient, list all RxS and Quant/SIGs
    3) List all PATIENTS with RxS you specified, but DO NOT list
        individual RxS or Quant/SIGs (FASTEST OPTION!!)

Your choice (1-3): 1// 1 <Enter>
```

Figure 6-1: Sample of prescription

6.1.1 Synonyms

As you can see in the previous example, you can enter HCTZ or HYDROCHLOROTHIAZIDE interchangeably. Similarly, many prescriptions are available in a variety of formulations under more than one name. For example, ibuprofen is the generic name for Motrin, Nuprin, and Advil. Acetaminophen is the generic name for Tylenol.

6.1.2 Taxonomies

Now you conduct the same search using taxonomies that have already been created:

What is the subject of your search? LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY [SER = .01]

Attribute of LIVING PATIENTS: DX <Enter>

Enter DX: [DIAB <Enter> ETES ALL DIABETICS]

Members of DIABETES Taxonomy =>

250.00 - 250.51

Enter ANOTHER DX: <Enter>

Want to save this DX group for future use? NO// <Enter>

SUBQUERY: Analysis of multiple DIAGNOSES

First condition/attribute of "DIAGNOSIS": <Enter>

Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY [SER = .01]
DIAGNOSIS (250.01/250.11...) [SER = 20.84]

Attribute of LIVING PATIENTS: RX <Enter>

Enter RX: [HCTZ <Enter>

Members of HCTZ Taxonomy =>

HYDROCHLOROTHIAZIDE 50MG
HYDROCHLOROTHIAZIDE 50MG TAB 30S
HYDROCHLOROTHIAZIDE 25MG TAB
HYDROCHLOROTHIAZIDE 50MG TAB 60S
HYDROCHLOROTHIAZIDE 50MG TAB UD

Enter ANOTHER RX: <Enter>

The following have been selected =>

HYDROCHLOROTHIAZIDE 50MG
HYDROCHLOROTHIAZIDE 50MG TAB 30S
HYDROCHLOROTHIAZIDE 25MG TAB
HYDROCHLOROTHIAZIDE 50MG TAB 60S
HYDROCHLOROTHIAZIDE 50MG TAB UD

Want to save this RX group for future use? NO// <Enter>

SUBQUERY: Analysis of multiple RXS

```

First condition/attribute of "RX": <Enter>
Computing Search Efficiency Rating.....

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]
    DIAGNOSIS (250.01/250.11...) [SER = 20.84]
    RX (HYDROCHLOROT/HYDROCHLOROT...) [SER = 22.96]

Attribute of LIVING PATIENTS:

```

Figure 6-2: Sample of taxonomies

6.1.3 Output Options

Previously generated taxonomies can save a lot of time in your search. Keep in mind, however, that taxonomies are attribute-specific. A taxonomy that was created for the attribute of diagnosis (DX) or purpose of visit (POV) cannot be used for problem list diagnosis.

```

You have 3 options for listing RxS =>

  1) For ea. patient, list all RxS
  2) For ea. patient, list all RxS and Quant/SIGs
  3) List all PATIENTS with RxS you specified, but DO NOT list
     individual RxS or Quant/SIGs (FASTEST OPTION!!)

Your choice (1-3): 1// <Enter>
...EXCUSE ME, JUST A MOMENT PLEASE...

Please note: Patients whose names are marked with an "*" may have
aliases.

```

Figure 5-3: Sample of output options

6.2 Patient Education

The Service Unit Director wants to hire a patient educator to conduct diabetes education classes. You are asked to provide some data to estimate what the new educator's workload might be. In this case the attribute is patient education.

```

What is the subject of your search? LIVING PATIENTS // <Enter>

  Subject of search: PATIENTS
    ALIVE TODAY    [SER = .01]

Attribute of LIVING PATIENTS: PATIENT ED TOP <Enter> IC

Enter TOPIC: ??? <Enter>

```

Figure 5-4: Sample of patient education

If you are not sure what choices are available, enter three question marks at the “Choose From” prompt and a list will appear.

Then the following prompts appear:

```

Enter TOPIC: DM <Enter>
  1  DM-COMPLICATIONS
  2  DM-DIET
  3  DM-DISEASE PROCESS
  4  DM-EXERCISE
  5  DM-FOLLOW UP
  6  DM-FOOT CARE
  7  DM-LIFESTYLE ADAPTATIONS
  8  DM-MEDICATIONS
CHOOSE 1-8: 2 <Enter>
Enter ANOTHER TOPIC: DM <Enter>
CHOOSE 1-8: 6 <Enter>
Enter ANOTHER TOPIC: DM <Enter>
CHOOSE 1-8: 1 <Enter>
Enter ANOTHER TOPIC: <Enter>

The following have been selected =>

    DM-DIET
    DM-FOOT CARE
    DM-COMPLICATIONS

Want to save this TOPIC group for future use? NO// <Enter>
SUBQUERY: Analysis of multiple PATIENT ED TOPICS

First condition/attribute of "PATIENT ED TOPIC": AFTER <Enter>
Exact date: 1/1/90 <Enter>

Next condition/attribute of "PATIENT ED TOPIC": <Enter>
Computing Search Efficiency Rating.....

    Subject of search: PATIENTS
      ALIVE TODAY    [SER = .01]
      PATIENT ED TOPIC (DM-DIET/DM-FOOT CARE...) [SER = 26.76]
        Subject of subquery: PATIENT ED TOPIC
          AFTER JAN 1,1990

Attribute of LIVING PATIENTS: <Enter>

You have 2 options for listing PATIENT ED TOPICS =>

    1) For ea. patient, list all PATIENT ED TOPICS which match your
       criteria
    2) List all PATIENTS with PATIENT ED TOPICS meeting your criteria,
       but do not list the individual values of ea. PATIENT ED TOPIC

```

Figure 6-3: Sample prompts

7.0 Immunizations

The following immunization choices are available in QMan:

- DPT
- DPT/DT/TT [ALL PED. TYPES]
- DPT/DT/Td/TT [ALL TYPES]
- DT [PEDS]
- HEPATITIS B VACCINE
- HIB VACCINE
- INFLUENZA VACCINE
- MEASLES IMMUNIZATION
- MEASLES IMMUNIZATIONS [ALL TYPES]
- MMR
- MR
- MUMPS IMMUNIZATION
- MUMPS IMMUNIZATIONS [ALL TYPES]
- OPV
- PNEUMOVAX
- RABIES VACCINE
- RUBELLA IMMUNIZATION
- RUBELLA IMMUNIZATIONS [ALL TYPES]
- TETANUS TOXOID
- Td [ADULT]
- Td/TT [ALL ADULT TYPES]

7.1 DPT

The public health nurse is concerned that one of the villages might have a very low DPT immunization rate and would like some concrete data to back up her suspicions.

```

What is the subject of your search?  LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]

Attribute of LIVING PATIENTS:  CURR <Enter> ENT COMMUNITY

Enter COMMUNITY:  SELLS <Enter>
Enter ANOTHER COMMUNITY: <Enter>

The following have been selected =>

    SELLS
    Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
CURRENT COMMUNITY (SELLS)[SER = 3.55]

Attribute of LIVING PATIENTS:  AGE <Enter>
Condition:  OVER <Enter>
Age:  1 <Enter>
Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
CURRENT COMMUNITY (SELLS)[SER = 3.55]
AGE GREATER THAN 1  [SER = .06]

Attribute of LIVING PATIENTS:  DPT <Enter>
    1DPT
    2DPT/DT/TT [ALL PED. TYPES]
    3DPT/DT/Td/TT [ALL TYPES]
CHOOSE 1-3:  1 <Enter>

Select series (1-5, BOOSTER, COMPLETE, ALL, UNSPECIFIED): ALL//  3 <Enter>

Next condition/attribute of "DPT":  NULL <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
CURRENT COMMUNITY (SELLS)[SER = 3.55]
AGE GREATER THAN 1  [SER = .06]
DPT: NONE EXIST[SER = -.1]

```

Figure 7-1: Sample of DPT

This forms the search logic for this inquiry. There aren't any special output options for this immunization.

7.2 Pneumovax

The public health nurse is doing follow-ups on elderly patients who have received their pneumovax vaccine during the last six months.

```
What is the subject of your search?  LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]

Attribute of LIVING PATIENTS: PNEU <Enter> MOCOCCAL VACCINE

Note that you do not have to enter the word 'immunization'; you can enter
the name of the immunization directly.

First condition/attribute of "PNEUMOVAX": AFTER <Enter>
Exact date: T-182 <Enter>

Next condition/attribute of "PNEUMOVAX":
```

Figure 7-2: Sample of pneumovax

This vaccine is not in a group or a series, so you are not presented with any additional choices as you are for DPT or some other immunizations.

```
Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
Subject of subquery: PNEUMOVAX
AFTER JAN 15,1991

Next attribute of LIVING PATIENTS: <Enter>

You have 2 options for listing PNEUMOVAXS =>

  1) For ea. patient, list all PNEUMOVAXS which match your
  criteria
  2) List all PATIENTS with PNEUMOVAXS meeting your criteria,
  but do not list the individual values of ea. PNEUMOVAX

Your choice (1 or 2): 1//
```

Figure 7-3: Sample of pneumovax

The Area Office has a preventive medicine initiative and they would like to know all patients over the age of 65 who have **not** received the pneumovax vaccination.

```
What is the subject of your search?  LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]

Attribute of LIVING PATIENTS:  PNEU <Enter> MOCOCCAL VACCINE

First condition/attribute of "PNEUMOVAX":  NULL <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
PNEUMOVAX: NONE EXIST[SER = -.1]

Attribute of LIVING PATIENTS:  AGE <Enter>
Condition:  OVER <Enter>
Age:  65 <Enter>

Computing Search Efficiency Rating.....
Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
PNEUMOVAX: NONE EXIST[SER = -.1]
AGE GREATER THAN 65  [SER = 24]

Attribute of LIVING PATIENTS:
```

Figure 7-4: Sample of pneumovax

8.0 Dental and Medical Procedures

8.1 Extraction

The dentist wants to know how many extractions were done in the last six months on patients who have diabetes.

```

What is the subject of your search?  LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]

Attribute of LIVING PATIENTS: DX <Enter>

Enter DX: [DIAB <Enter> ETES ALL DIABETICS]

Members of DIABETES Taxonomy =>

250.00 - 250.51

Enter ANOTHER DX: <Enter>

Want to save this DX group for future use? NO// <Enter>

SUBQUERY: Analysis of multiple DIAGNOSES

First condition/attribute of "DIAGNOSIS":
Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
DIAGNOSIS (250.01/250.11...) [SER = 20.84]

Attribute of LIVING PATIENTS: ADA CODE <Enter>

Enter ADA CODE: EXTRACTION <Enter>
  1EXTRACTION FOR CARIES  7111  EXTRACTION FOR CARIES
  2EXTRACTION FOR ORTHO  7113  EXTRACTION FOR ORTHO
  3EXTRACTION FOR PERIO  7112  EXTRACTION FOR PERIO
  4EXTRACTION SINGLE TOOTH (ANY R  7110 EXTRACTION SINGLE TOOTH (ANY REASON)
CHOOSE 1-4: 3 <Enter> 7112
Enter ANOTHER ADA CODE: <Enter>

following have been selected =>

  7112

SUBQUERY: Analysis of multiple ADA CODES

First condition/attribute of "ADA CODE": AFTER <Enter>
Exact date: T-182 <Enter> (JAN 15, 1991)

Next condition/attribute of "ADA CODE": <Enter>
Computing Search Efficiency Rating.....

```

```

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
DIAGNOSIS (250.01/250.11...) [SER = 20.84]
ADA CODE (7112) [SER = 3]
Subject of subquery: ADA CODE
AFTER JAN 15,1991

Attribute of LIVING PATIENTS: <Enter>

You have 3 options for listing ADA CODES =>

1) For ea. patient, list all ADA CODES
2) For ea. patient, list all ADA CODES and SERVICE DESCRIPTIONS
3) List all PATIENTS with ADA CODES you specified, but DO NOT list
   individual ADA CODES or SERVICE DESCRIPTIONS (FASTEST OPTION!!)

Your choice (1-3): 1//

```

Figure 8-1: Sample of extraction

8.2 Therapeutic Abortions

In order to comply with Federal regulations, the Service Unit Director would like to know how many therapeutic abortions were performed at his facility in the last 12 months. In this case the attribute entered is OPERATION or PROCEDURE.

```

What is the subject of your search? LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]

Attribute of LIVING PATIENTS: OPERATION <Enter>

Enter PROCEDURE: THERAPEUTIC ABORTION <Enter> ( ABORTION THERAPEUTIC )

69.51 (ASPIRAT CURET-PREG TERMI)
ASPIRATION CURETTAGE OF UTERUS FOR TERMINATION OF PREGNANCY

OK? Y// <Enter>

ICD Code Range(s) Selected So Far =>

1) 69.51

Enter ANOTHER PROCEDURE: <Enter>

SUBQUERY: Analysis of multiple PROCEDURES

First condition/attribute of "PROCEDURE": AFTER <Enter>
Exact date: T-365 <Enter> (JUL 16, 1990)

Next condition/attribute of "PROCEDURE":
Computing Search Efficiency Rating.....

```

```
Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
PROCEDURE (MEDICAL) (69.51) [SER = 26.76]
Subject of subquery: PROCEDURE (MEDICAL)
AFTER JUL 16,1990

Attribute of LIVING PATIENTS: <Enter>

You have 3 options for listing PROCEDURES =>

  1) For ea. patient, list all ICD CODES
  2) For ea. patient, list all ICD CODES and PROVIDER NARRATIVES
  3) List all PATIENTS with ICD CODES you specified, but DO NOT list
    individual ICD CODES or PROVIDER NARRATIVES (FASTEST OPTION!!)

Your choice (1-3): 1// 1 <Enter>

...HMMM, I'M WORKING AS FAST AS I CAN...

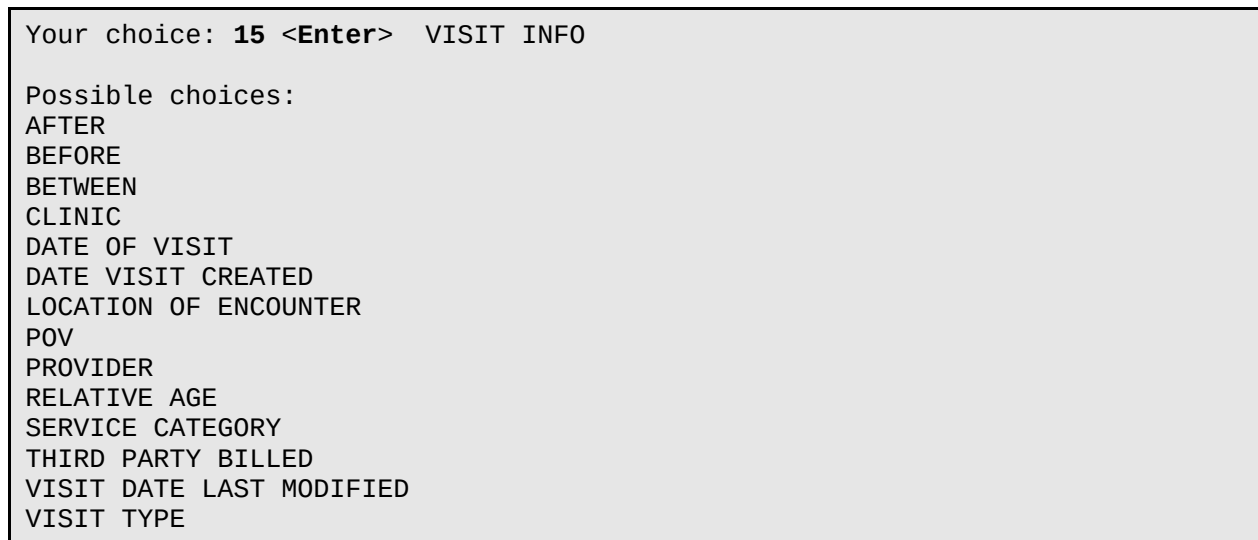
Please note:  Patients whose names are marked with an "*" may have aliases.
```

Figure 8-2: Sample of therapeutic abortions

A list of patients that are found as a result of the record search will be displayed on your screen.

This search will give you the number of patients who have had therapeutic abortions (TAS) as well as you being able to indicate the range of visit dates during which the TAS occurred. If you wanted to know the number of TAS a patient might have had, use the attribute "THERAPEUTIC ABORTION." See the section on pregnancy history for more detailed information.

9.0 Visits and Providers



```
Your choice: 15 <Enter>  VISIT INFO

Possible choices:
AFTER
BEFORE
BETWEEN
CLINIC
DATE OF VISIT
DATE VISIT CREATED
LOCATION OF ENCOUNTER
POV
PROVIDER
RELATIVE AGE
SERVICE CATEGORY
THIRD PARTY BILLED
VISIT DATE LAST MODIFIED
VISIT TYPE
```

Figure 9-1: Sample of visit information

9.1 Providers and Provider Workload

The Service Unit is conducting a productivity study. You are asked to provide information on how many colds were treated by the pharmacist as a primary provider. In this case, the subject of the search is “visit” and the attribute of the visit is diagnosis (DX). Note the example below.

What is the subject of your search? LIVING PATIENTS // **VISIT** <Enter>
Attribute of VISIT: **DX** <Enter>

Enter DX: **URI** <Enter>

465.9 (ACUTE URI NOS)

ACUTE UPPER RESPIRATORY INFECTIONS OF UNSPECIFIED SITE

OK? Y// <Enter>

ICD Code Range(s) Selected So Far =>

1) 465.9

Enter ANOTHER DX: <Enter>

Computing Search Efficiency Rating.....

Subject of search: VISIT

POV (465.9)[SER = 1.33]

Attribute of VISIT: <Enter>

***** PROVIDER-RELATED CRITERIA *****

You can either specify one or more providers by NAME, or.....
you can specify one or more PROVIDER ATTRIBUTES (affiliation, specialty,
etc.) to be used as selection criteria.

Select one of the following:

1NAME(S) of providers

2ATTRIBUTE(S) of providers

Your choice: NAME(S)// **2** <Enter>

Attribute of PROVIDER: **DISCIPLINE** <Enter>

Enter CLASS: **PHARM** <Enter>

1PHARMACIST

2PHARMACY PRACTITIONER

CHOOSE 1-2: **1** <Enter>

Enter ANOTHER CLASS: **PHARM** <Enter>

1PHARMACIST

2PHARMACY PRACTITIONER

CHOOSE 1-2: **2** <Enter>

Enter ANOTHER CLASS: <Enter>

The following have been selected =>

PHARMACIST

PHARMACY PRACTITIONER

Want to save this CLASS group for future use? NO// <Enter>

Attribute of PROVIDER: <Enter>

When I check the providers from each encounter, you can limit my analysis to the PRIMARY provider only, SECONDARY providers, or ALL providers.

Select one of the following:

- 1PRIMARY provider only
- 2SECONDARY providers only
- 3ALL providers

Your choice: ALL// 1 <Enter> PRIMARY provider only

Subject of search: VISIT

POV (465.9)[SER = 1.33]

PROVIDER ATTRIBUTES AS SPECIFIED [SER = -.1]

Attribute of VISIT: <Enter>

VISIT NO.VISIT DATE DX PRIMARY
AND TIMEPROVIDER

```
-----
4004  JAN 14,1986@10:22+MCGHEE,ROGER
6183  JAN 22,1988@12:12+WOODFORD,MICHAEL
7009  JUL  4,1986@10:04 +PHARMACIST,IHS
12631 DEC 29,1986@13:00+PHARMACIST,IHS
14645 JAN 17,1990@14:45+MYERS,JIM
20897 FEB  6,1986@13:00 +MYERS,JIM
.    .    .
```

Figure 9-2: Sample of provider screens

9.2 Clinic

Dr. Logan wants to know how many patient visits he has had in the emergency room in the past 12 months.

```
What is the subject of your search?  LIVING PATIENTS // VISIT <Enter>
Attribute of VISIT: CLINIC <Enter>

Enter CLINIC: EMERG <Enter>  ENCY MEDICINE 30
Enter ANOTHER CLINIC: <Enter>

The following have been selected =>

    EMERGENCY MEDICINE
Computing Search Efficiency Rating.....

Subject of search: VISIT
CLINIC (EMERGENCY ME)[SER = .92]

Attribute of VISIT: PROV <Enter>

***** PROVIDER-RELATED CRITERIA *****

You can either specify one or more providers by NAME, or.....
You can specify one or more PROVIDER ATTRIBUTES (affiliation, specialty etc)
to be used as selection criteria.

    Select one of the following:

    1NAME(S) of providers
    2ATTRIBUTE(S) of providers

    Your choice: NAME(S)// <Enter>

Enter PROVIDER: LOGAN,DAVID <Enter>
Enter ANOTHER PROVIDER: <Enter>

The following have been selected =>

    LOGAN,DAVID

When I check the providers from each encounter, you can limit my analysis
to the PRIMARY provider only, SECONDARY providers, or ALL providers.
```

```
Select one of the following:

1PRIMARY provider only
2SECONDARY providers only
3ALL providers

Your choice: ALL// 1 <Enter> PRIMARY provider only
Computing Search Efficiency Rating.....

Subject of search: VISIT
CLINIC (EMERGENCY ME)[SER = .92]
PROVIDER ATTRIBUTES AS SPECIFIED [SER = 1.64]

Attribute of VISIT: AFTER <Enter>
Exact date: T-365 <Enter> (JUL 16, 1990)
Computing Search Efficiency Rating.....

Subject of search: VISIT
CLINIC (EMERGENCY ME)[SER = .92]
PROVIDER ATTRIBUTES AS SPECIFIED [SER = 1.64]
AFTER JUL 16,1990 [SER = 99]

Attribute of VISIT:

Your choice: DISPLAY// 3 <Enter> COUNT 'hits'

COUNTING....
Total: 0
Search time: 13 SECONDS

Press RETURN to continue or '^' to exit:
```

Figure 9-3: Sample of clinic

9.3 Type

The Service Unit Director wants to know how many visits were non-IHS visits.

```

What is the subject of your search? LIVING PATIENTS // VISIT <Enter>
Attribute of VISIT: TYPE <Enter> OF VISIT

Enter VISIT TYPE: ??? <Enter>

You may select one or more of the following =>

  IHS
  CONTRACT
  TRIBAL
  OTHER
  638 PROGRAM
  VA
Enter VISIT TYPE: IHS <Enter>
Enter ANOTHER VISIT TYPE: NULL <Enter>
I take it you want me to find only those VISITS whose
VISIT TYPE is NOT in this taxonomy? YES// <Enter>

Enter ANOTHER VISIT TYPE: <Enter>
Computing Search Efficiency Rating.....

Subject of search: VISIT
VISIT TYPE(INVERSE SET)[SER = .37]

Attribute of VISIT: <Enter>

VISIT NO.VISIT DATE VISIT TYPE
AND TIME
-----

70708 JAN 1,1937@12:00 638 PROGRA
70532 DEC 8,1960@12:00 OTHER
48118 DEC 27,1984CONTRACT
47532 JAN 2,1985 CONTRACT
27627 JAN 3,1985 CONTRACT
18868 JAN 11,1985CONTRACT
12572 JAN 13,1985CONTRACT
12576 JAN 13,1985CONTRACT
12574 JAN 17,1985CONTRACT
12575 JAN 17,1985CONTRACT
46246 JAN 17,1985CONTRACT
5154 JAN 20,1985CONTRACT
5157 JAN 20,1985CONTRACT
3889 JAN 22,1985CONTRACT
57328 JAN 23,1985CONTRACT
57343 JAN 23,1985CONTRACT
15424 JAN 25,1985CONTRACT
15425 JAN 25,1985CONTRACT
<>

```

Figure 9-4: Sample of type

9.4 Location

The Service Unit Director wants to know how many patients were seen at one of your field clinics in the last month.

```

What is the subject of your search?  LIVING PATIENTS // VISIT <Enter>
Attribute of VISIT: AFTER <Enter>
Exact date: T-30 <Enter>
Computing Search Efficiency Rating.....

Subject of search: VISIT
AFTER JUN 16,1991  [SER = 99]

Attribute of VISIT: LOCATION <Enter> OF ENCOUNTER

Enter ENCOUNTER LOCATION: SAN XAVIER <Enter> HEALTH CENTER TUCSON SELLS 11
Enter ANOTHER ENCOUNTER LOCATION: <Enter>

The following have been selected =>

    SAN XAVIER

Computing Search Efficiency Rating.....

Subject of search: VISIT
AFTER JUN 16,1991  [SER = 99]
LOCATION OF ENCOUNTER (SAN XAVIER)[SER = 49]

Attribute of VISIT: <Enter>

VISIT NO.VISIT DATE ENCOUNTER
AND TIME  LOCATION
-----
70739 JUL 1,1991@14:22 SAN XAVIER
70748 JUL 8,1991@13:00 SAN XAVIER
70749 JUL 8,1991@13:00 SAN XAVIER
Total: 3

Press RETURN to continue or '^' to exit:

```

Figure 9-5: Sample of location

10.0 Hospitalizations and Contract Health Service

10.1 Date of Admission

The contract care officer wants a summary of all admissions to a certain hospital in the last 12 months.

```
What is the subject of your search? LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]

Attribute of LIVING PATIENTS: CHS <Enter>

Enter VENDOR: TMC <Enter> FAMILY MEDICAL CENTER1860481730 TUCSON
Enter ANOTHER VENDOR: <Enter>

The following have been selected =>

    TMC FAMILY MEDICAL CENTER

SUBQUERY: Analysis of multiple CONTRACT SERVICES

First condition/attribute of "CONTRACT SERVICES": AFTER <Enter>
Exact date: T-365 <Enter> (JUL 16, 1990)

Next condition/attribute of "CONTRACT SERVICES": <Enter>
Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
CONTRACT SERVICES (TMC FAMILY M) [SER = 26.76]
Subject of subquery: CONTRACT SERVICES
AFTER JUL 16,1990

Attribute of LIVING PATIENTS: <Enter>

You have 3 options for listing CONTRACT SERVICES =>

    1) For ea. patient, list all VENDORS
    2) For ea. patient, list all VENDORS and CHS SUMMARY
    3) List all PATIENTS with VENDORS you specified, but DO NOT list
       individual VENDORS or CHS SUMMARY (FASTEST OPTION!!)

Your choice (1-3): 1// 2 <Enter>
```

PATIENTSCHART CHS SUMMARY
(Alive) NUMBER

WATERMAN,RAE* 100003 #624 MAR 8,1991 TMC FAMILY M \$4000
WATERMAN,RAE* 100003 #622 JAN 3,1991 TMC FAMILY M \$3000
WATERMAN,RAE* 100003 #621 SEP 25,1990 TMC FAMILY M (20 days) \$50000
KENNEDY,HORTENC* 100113 #620 NOV 21,1990 TMC FAMILY M \$999999.99
BUSH,CALVIN100148 #619 NOV 11,1990 TMC FAMILY M (20 days) \$99999.33
Total: 5
Press RETURN to continue or '^' to exit:

Figure 10-1: Sample of date of admission

10.2 Vendor

The infection control officer needs a list of all the patients admitted to the hospital within the last year.

```
What is the subject of your search?  LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]

Attribute of LIVING PATIENTS: INPATIENT <Enter> ADMISSION

SUBQUERY: Analysis of multiple HOSPITAL ADMISSIONS

First condition/attribute of "HOSPITAL ADMISSION": AFTER <Enter>
Exact date: T-365 <Enter> (JUL 16, 1990)

Next condition/attribute of "HOSPITAL ADMISSION": <Enter>
Computing Search Efficiency Rating....

Subject of search: PATIENTS
ALIVE TODAY[SER = .01]
Subject of subquery: HOSPITAL ADMISSION
AFTER JUL 16,1990

Attribute of LIVING PATIENTS: <Enter>

You have 3 options for listing ADMISSIONS =>

    1) For ea. patient, list all ADMITTING DATES
    2) For ea. patient, list all ADMITTING DATES and DISCHARGE INFO
    3) List all PATIENTS with ADMITTING DATES you specified, but DO NOT list
       individual ADMITTING DATES or DISCHARGE INFO (FASTEST OPTION!!)

Your choice (1-3): 1//  2 <Enter>
```

PATIENTSCHART DISCHARGE SUMMARY
(Alive) NUMBER

BUSH,CALVIN100148 DEC 22,1990=>JAN 2,1991 (11 days) INTERNAL M
Case,Lower 123456 JAN 27,1991=>JAN 28,1991 (1 days) GENERAL ME
FLINTSTONE,MARTI 103009 NOV 20,1990=>NOV 21,1990 (1 days) NEWBORN
FLINTSTONE,MARTI 103009 NOV 20,1990=>NOV 21,1990 (1 days) PEDIATRICS
FLINTSTONE,MARTI 103009 NOV 10,1990=>NOV 17,1990 (7 days) NEWBORN
GRANT,DOREEN* 100321 SEP 3,1990=>SEP 4,1990 (1 days) OBSTETRICS
JEFFERSON,BEATRI 100289 JUN 13,1991=>JUN 17,1991 (4 days) GENERAL ME
RUBBLE,BETH* 100823 NOV 6,1990=>NOV 7,1990 (1 days) GENERAL MEDI
WATERMAN,RAE* 100003 NOV 10,1990=>NOV 21,1990 (11 days) GYNECOLOG
WATERMAN,RAE* 100003 OCT 18,1990=>OCT 29,1990 (11 days) GENERAL M
WATERMAN,RAE* 100003 SEP 5,1990=>SEP 6,1990 (1 days) INTERNAL MED
WATERMAN,RAE* 100003 AUG 20,1990=>AUG 21,1990 (1 days) OBSTETRICS
WATERMAN,RAE* 100003 AUG 19,1990=>AUG 20,1990 (1 days) OBSTETRICS
Total: 13
Press RETURN to continue or '^' to exit:

Figure 10-2: Sample of vendor

11.0 Contraception Methods & Pregnancy History

11.1 Contraceptive Methods

We want to find females between the ages of 15 and 25 and print out their method of contraception.

```

***** SEARCH CRITERIA *****

What is the subject of your search? LIVING PATIENTS // <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .02]

Attribute of LIVING PATIENTS: CONTRACEPTION <Enter> METHOD

Enter METHOD: ??? <Enter>

You may select one or more of the following =>

  EDUCATION ONLY
  ORAL CONTRACEPTIVES
  INTRAUTERINE DEVICE
  SURGICAL STERILIZATION
  BARRIER METHODS
  PARTNER STERILIZED
  NATURAL TECHNIQUES
  MENOPAUSE
  NONE
  OTHER
  HORMONAL IMPLANT
Enter METHOD: ANY <Enter>
Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY[SER = .02]
CONTRACEPTION METHOD ANY VALUE INCLUDING NULL[SER = .99]

Attribute of LIVING PATIENTS: AGE <Enter>
Condition: BETWEEN, AGES <Enter> (inclusive)
Start with (and include) AGE: 15 <Enter>
End with (and include) AGE: 25 <Enter>
Computing Search Efficiency Rating.....

```

```

Subject of search: PATIENTS
ALIVE TODAY[SER = .02]
CONTRACEPTION METHOD ANY VALUE INCLUDING NULL[SER = .99]
AGE BETWEEN,AGES (inclusive) 15 and 25 [SER = 5.25]

Attribute of LIVING PATIENTS: SEX <Enter>
CHOOSE FROM:
  M MALE
  F FEMALE
Value: F <Enter> FEMALE
Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY[SER = .02]
CONTRACEPTION METHOD ANY VALUE INCLUDING NULL[SER = .99]
AGE BETWEEN,AGES (inclusive) 15 and 25 [SER = 5.25]
SEX IS FEMALE [SER = 1.17]

Attribute of LIVING PATIENTS: <Enter>

PATIENTSCHART  AGE  SEX  CONTRACEPTION
(Alive)  NUMBER  METHOD
-----
---
*****1111    25FEMALE  ORAL CONTRACEPTIVES
*****22222   25FEMALE  EDUCATION ONLY
*****33333   25FEMALE  ORAL CONTRACEPTIVES
*****44444   25FEMALE  NONE
*****5555    25FEMALE  BARRIER METHOD
*****6666    25FEMALE  NONE
*****7777    25FEMALE  ORAL CONTRACEPTIVES
*****8888    25FEMALE  ORAL CONTRACEPTIVES
*****99999   25FEMALE  SURGICAL STERILIZATIO
*****8889    25FEMALE  NONE
*****88889   25FEMALE  ORAL CONTRACEPTIVES
*****78787   25FEMALE  EDUCATION ONLY
*****1112    25FEMALE  INTRAUTERINE DEVICE
*****22223   25FEMALE  NONE
*****4445    25FEMALE-
*****8899    25FEMALE  ORAL CONTRACEPTIVES
*****8877    25FEMALE  NONE
*****6565    25FEMALE  SURGICAL STERILIZATION
Total: 18
Press RETURN to continue or '^' to exit:

```

Figure 10-1: Sample of contraceptive methods

11.2 Pregnancy History

A toxic waste dump has been discovered adjacent to the community water supply. A public health nurse wants to investigate the number of women in the community who have experienced a spontaneous abortion.

```
***** SEARCH CRITERIA *****

What is the subject of your search?  LIVING PATIENTS //LIVING
PATIENTS <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .08]

Attribute of LIVING PATIENTS:  CURRENT COMMUNITY <Enter>

Enter COMMUNITY:  ANYTOWN <Enter> MARICOPAARIZONA
Enter ANOTHER COMMUNITY:  <Enter>

The following have been selected =>

    ANYTOWN
Computing Search Efficiency Rating.

Subject of search: PATIENTS
ALIVE TODAY[SER = .08]
CURRENT COMMUNITY (ANYTOWN)[SER = 49]

Attribute of LIVING PATIENTS:  SEX <Enter>
CHOOSE FROM:
    M MALE
    F FEMALE
Value:  F <Enter> FEMALE
Computing Search Efficiency Rating.....

Subject of search: PATIENTS
ALIVE TODAY[SER = .08]
CURRENT COMMUNITY (ANYTOWN)[SER = 49]
SEX IS FEMALE  [SER = 1.17]

Attribute of LIVING PATIENTS:  SPONTANEOUS ABORTION <Enter>
Condition:  GREATER THAN <Enter>
Value:  0 <Enter>

Subject of search: PATIENTS
ALIVE TODAY[SER = .08]
CURRENT COMMUNITY (ANYTOWN)[SER = 49]
SEX IS FEMALE  [SER = 1.17]
SAB GREATER THAN 0  [SER = -.1]
```

```
Attribute of LIVING PATIENTS: <Enter>

PATIENTSCHART  COMMUNITYSEX  SAB
(Alive) NUMBER
-----
ALPHHAAA,RAE  1111ANYTOWN FEMALE 3
BETAAA, SALLY 2222ANYTOWN FEMALE 1
DELTA, SAMAN  3333ANYTOWN FEMALE 1
RHO, CINDY 4444ANYTOWN FEMALE 1
CHI, CAPE RAE 5555ANYTOWN FEMALE 2
Total: 5
Press RETURN to continue or '^' to exit:
```

Figure 11-1: Sample of pregnancy history

Note: Other attributes related to pregnancy history are
GRAVIDA
LIVE CHILDREN
PARITY
THERAPEUTIC ABORTION

12.0 Appendix A: RPMS Rules of Behavior

The information in this required section was written by the IHS Office of Information Technology. It does not contain any information about the functionality of the software.

12.1 All RPMS Users

In addition to these rules, each application can include additional RoBs, which can be defined within the individual application's documentation (e.g., PCC, Dental, Pharmacy).

12.1.1 Access

RPMS Users shall:

- Only use data for which you have been granted authorization.
- Only give information to personnel who have access authority and have a need to know.
- Always verify a caller's identification and job purpose with your supervisor or the entity provided as employer *before* providing any type of information system access, sensitive information, or non-public agency information.
- Be aware that personal use of information resources is authorized on a limited basis within the provisions Indian Health Manual Chapter 6 OMS Limited Personal Use of Information Technology Resources TN 03-05," August 6, 2003.
- Users Shall Not:
 - Retrieve information for someone who does not have authority to access the information.
 - Access, research, or change any user account, file, directory, table, or record not required to perform your OFFICIAL duties.
 - Store sensitive files on a PC hard drive, or portable devices or media, if access to the PC or files cannot be physically or technically limited.
 - Exceed their authorized access limits in RPMS by changing information or searching databases beyond the responsibilities of their job or by divulging information to anyone not authorized to know that information

12.1.2 Logging On to the System

RPMS Users shall:

- Have a unique User Identification/Account name and password.
- Be granted access based on authenticating the account name and password entered.
- Be locked out of an account after 5 successive failed login attempts within a specified time period (e.g., one hour).

12.1.3 Information Accessibility

RPMS shall restrict access to information based on the type and identity of the user. However, regardless of the type of user, access shall be restricted to the minimum level necessary to perform the job.

Users Shall:

- Access only those documents they created and those other documents to which they have a valid need-to-know and to which they have specifically granted access through an RPMS application based on their menus (job roles), keys, and FileMan access codes. Some users might be afforded additional privileges based on the function they perform such as system administrator or application administrator.
- Acquire a written preauthorization in accordance with IHS policies and procedures prior to interconnection to or transferring data from RPMS.
- Behave in an ethical, technically proficient, informed, and trustworthy manner.
- Logout of the system whenever they leave the vicinity of their PC.
- Be alert to threats and vulnerabilities in the security of the system.
- Report all security incidents to their local Information System Security Officer (ISSO)
- Differentiate tasks and functions to ensure that no one person has sole access to or control over important resources.
- Protect all sensitive data entrusted to them as part of their government employment.
- Shall abide by all Department and Agency policies and procedures and guidelines related to ethics, conduct, behavior and IT information processes

12.1.4 Accountability

Users Shall:

- Behave in an ethical, technically proficient, informed, and trustworthy manner.

- Logout of the system whenever they leave the vicinity of their PC.
- Be alert to threats and vulnerabilities in the security of the system.
- Report all security incidents to their local Information System Security Officer (ISSO)
- Differentiate tasks and functions to ensure that no one person has sole access to or control over important resources.
- Protect all sensitive data entrusted to them as part of their government employment.
- Shall abide by all Department and Agency policies and procedures and guidelines related to ethics, conduct, behavior and IT information processes.

12.1.5 Confidentiality

Users Shall:

- Be aware of the sensitivity of electronic and hardcopy information, and protect it accordingly.
- Store hardcopy reports/storage media containing confidential information in a locked room or cabinet.
- Erase sensitive data on storage media, prior to reusing or disposing of the media.
- Protect all RPMS terminals from public viewing at all times.
- Abide by all HIPAA regulations to ensure patient confidentiality

Users Shall Not:

- Allow confidential information to remain on the PC screen when someone who is not authorized to that data is in the vicinity.
- Store sensitive files on a portable device or media without encrypting

12.1.6 Integrity

Users Shall:

- Protect your system against viruses and similar malicious programs.
- Observe all software license agreements.
- Follow industry standard procedures for maintaining and managing RPMS hardware, operating system software, application software, and/or database software and database tables.
- Comply with all copyright regulations and license agreements associated with RPMS software.

Users Shall Not:

- Violate Federal copyright laws.
- Install or use unauthorized software within the system libraries or folders.
- Use freeware, shareware or public domain software on/with the system without your manager's written permission and without scanning it for viruses first

12.1.7 Passwords

Users Shall:

- Change passwords a minimum of every 90 days.
- Create passwords with a minimum of eight characters.
- If the system allows, use a combination of alpha, numeric characters for passwords, with at least one uppercase letter, one lower case letter, and one number. It is recommended, if possible, that a special character also be used in the password.
- Change vendor-supplied passwords immediately.
- Protect passwords by committing them to memory or store them in a safe place (do not store passwords in login scripts, or batch files.
- Change password immediately if password has been seen, guessed or otherwise compromised; and report the compromise or suspected compromise to your ISSO.
- Keep user identifications (ID) and passwords confidential

Users Shall Not:

- Use common words found in any dictionary as a password.
- Use obvious readable passwords or passwords that incorporate personal data elements (e.g., user's name, date of birth, address, telephone number, or social security number; names of children or spouses; favorite band, sports team, or automobile; or other personal attributes).
- Share passwords/IDs with anyone or accept the use of another's password/ID, even if offered.
- Reuse passwords. A new password must contain no more than five characters per 8 characters from the previous password.
- Post passwords.
- Keep a password list in an obvious place, such as under keyboards, in desk drawers, or in any other location where it might be disclosed.
- Give a password out over the phone.

12.1.8 Backups

Users Shall:

- Plan for contingencies such as physical disasters, loss of processing, and disclosure of information by preparing alternate work strategies and system recovery mechanisms.
- Make backups of systems and files on a regular, defined basis.
- If possible, store backups away from the system in a secure environment

Users Shall Not:

- Violate Federal copyright laws.
- Install or use unauthorized software within the system libraries or folders.
- Use freeware, shareware or public domain software on/with the system without your manager's written permission and without scanning it for viruses first.

12.1.9 Reporting

Users Shall:

- Contact and inform your ISSO that you have identified an IT security incident and you will begin the reporting process by providing an IT Incident Reporting Form regarding this incident.
- Report security incidents as detailed in IHS SOP 05-03, Incident Handling Guide

Users Shall Not:

- Assume that someone else has already reported an incident. The risk of an incident going unreported far outweighs the possibility that an incident gets reported more than once.

12.1.10 Session Time Outs

RPMS system implements system-based timeouts that back users out of a prompt after no more than 5 minutes of inactivity.

Users Shall:

- Utilize a screen saver with password protection set to suspend operations at no greater than 10-minutes of inactivity. This will prevent inappropriate access and viewing of any material displayed on your screen after some period of inactivity.

12.1.11 Hardware

Users Shall:

- Avoid placing system equipment near obvious environmental hazards (e.g., water pipes).
- Keep an inventory of all system equipment.
- Keep records of maintenance/repairs performed on system equipment

Users Shall Not:

- Do not eat or drink near system equipment

12.1.12 Awareness

Users Shall:

- Participate in organization-wide security training as required.
- Read and adhere to security information pertaining to system hardware and software.
- Take the annual information security awareness.
- Read all applicable RPMS Manuals for the applications used in their jobs.

12.1.13 Remote Access

Each subscriber organization establishes its own policies for determining which employees can work at home or in other remote workplace locations. Any remote work arrangement should include policies that

- Are in writing.
- Provide authentication of the remote user through the use of ID and password or other acceptable technical means.
- Outline the work requirements and the security safeguards and procedures the employee is expected to follow.
- Ensure adequate storage of files, removal and non-recovery of temporary files created in processing sensitive data, virus protection, intrusion detection, and provides physical security for government equipment and sensitive data.
- Establish mechanisms to back up data created and/or stored at alternate work locations.

Remote Users Shall:

- Remotely access RPMS through a virtual private network (VPN) when ever possible. Use of direct dial in access must be justified and approved in writing and its use secured in accordance with industry best practices or government procedures

Remote Users Shall Not:

- Disable any encryption established for network, internet and web browser communications

12.2 RPMS Developers

Developers Shall:

- Always be mindful of protecting the confidentiality, availability, and integrity of RPMS when writing or revising code.
- Always follow the IHS RPMS Programming Standards and Conventions (SAC) when developing for RPMS.
- Only access information or code within the namespaces for which they have been assigned as part of their duties.
- Remember that all RPMS code is the property of the U.S. Government, not the developer.
- Shall not access live production systems without obtaining appropriate written access, shall only retain that access for the shortest period possible to accomplish the task that requires the access.
- Shall observe separation of duties policies and procedures to the fullest extent possible.
- Shall document or comment all changes to any RPMS software at the time the change or update is made. Documentation shall include the programmer's initials, date of change and reason for the change.
- Shall use checksums or other integrity mechanism when releasing their certified applications to assure the integrity of the routines within their RPMS applications.
- Shall follow industry best standards for systems they are assigned to develop or maintain; abide by all Department and Agency policies and procedures.
- Shall document and implement security processes whenever available

Developers Shall Not:

- Write any code that adversely impacts RPMS, such as backdoor access, “Easter eggs,” time bombs, or any other malicious code or make inappropriate comments within the code, manuals, or help frames.
- Grant any user or system administrator access to RPMS unless proper documentation is provided.
- Not release any sensitive agency or patient information.

12.3 Privileged Users

Personnel who have significant access to processes and data in RPMS, such as, system security administrators, systems administrators, and database administrators have added responsibilities to ensure the secure operation of RPMS.

Privileged Users Shall:

- Verify that any user requesting access to any RPMS system has completed the appropriate access request forms.
- Ensure that government personnel and contractor personnel understand and comply with license requirements. End users, supervisors, and functional managers are ultimately responsible for this compliance.
- Advise the system owner on matters concerning information technology security.
- Assist the system owner in developing security plans, risk assessments, and supporting documentation for the certification and accreditation process.
- Ensure that any changes to RPMS that affect contingency and disaster recovery plans are conveyed to the person responsible for maintaining continuity of operations plans.
- Ensure that adequate physical and administrative safeguards are operational within their areas of responsibility and that access to information and data is restricted to authorized personnel on a need to know basis.
- Verify that users have received appropriate security training before allowing access to RPMS.
- Implement applicable security access procedures and mechanisms, incorporate appropriate levels of system auditing, and review audit logs.
- Document and investigate known or suspected security incidents or violations and report them to the ISSO, CISO, and systems owner.
- Protect the supervisor, superuser or system administrator passwords.
- Avoid instances where the same individual has responsibility for several functions (i.e., transaction entry and transaction approval).

- Watch for unscheduled, unusual, and unauthorized programs.
- Help train system users on the appropriate use and security of the system.
- Establish protective controls to ensure the accountability, integrity, confidentiality, and availability of the system.
- Replace passwords when a compromise is suspected. Delete user accounts as quickly as possible from the time that the user is no longer authorized system. Passwords forgotten by their owner should be replaced, not reissued.
- Terminate user accounts when a user transfers or has been terminated. If the user has authority to grant authorizations to others, review these other authorizations. Retrieve any devices used to gain access to the system or equipment. Cancel logon IDs and passwords, and delete or reassign related active and back up files.
- Use a suspend program to prevent an unauthorized user from logging on with the current user's ID if the system is left on and unattended.
- Verify the identity of the user when resetting passwords. This can be done either in person or having the user answer a question that can be compared to one in the administrator's database.
- Shall follow industry best standards for systems they are assigned to; abide by all Department and Agency policies and procedures

Privileged Users Shall Not:

- Access any files, records, systems, etc., that are not explicitly needed to perform their duties.
- Grant any user or system administrator access to RPMS unless proper documentation is provided.
- Not release any sensitive agency or patient information.

13.0 Glossary

@ symbol

The “at” symbol (key combination of Shift+2) has two functions: (1) to delete an entry and (2) to separate a date and time.

Acute

Used to describe a condition that lasts for a short time. Used in contrast to *chronic*.

Append

To add additional data items to an existing visit, usually at the end of entering the data.

Billable Visit

A visit from a patient that has third party insurance coverage that a hospital/clinic can bill services.

Best Practice Prompts

Best Practice Prompts are a set of clinical messages related to procedures such as lab tests, immunizations, procedures etc. that are generally recommended for a subset of the population who share a common diagnosis (e.g. Asthma, CVD). They are displayed in a variety of places including the Health Summary, Supplements, and the Patient Record in both EHR and iCare.

Users can turn on (activate) and display BP Prompts on Health Summaries, similar to the Health Maintenance Reminder function.

Billable Visit

A visit from a patient that has third party insurance coverage that a hospital/clinic can then bill for services.

Caret (“Up Hat”)

The symbol ^ obtained by using the key combination Shift+6. Commonly used in RPMS character-based interfaces to exit out of a routine or to back up from the previous field.

Chart Number

A unique numerical identifier assigned to each patient. This is also referred to as Health Record Number.

Chronic

Used to describe a condition that has an indefinite duration or with a frequent occurrence. Used in contrast to *acute*.

Clinical

To do with treatment in or as a clinic: involving or concerned with direct observation and treatment of patients.

Command

The instructions you give the computer to record a certain transaction. For example, selecting “Payment” or “P” at the command prompt tells the computer you are applying a payment to a chosen bill.

Community of Service

The community where the encounter took place.

Community of Residence

The community where the patient resides.

CPT Code

Current Procedural Terminology code. Used to identify procedures provided during an encounter and for billing outpatient services provided.

Database

A database is a collection of files containing information that may be used for many purposes. Storing information in the computer helps in reducing the user’s paperwork load and enables quick access to a wealth of information. Databases are comprised of fields, records, and files.

Default Response

Many of the prompts in the RPMS applications contain responses that can be activated simply by pressing the Enter key . For example: “Do you really want to quit? No//.” Pressing the Enter key tells the system you do not want to quit. “No//” is considered the default response. The default is generally set to the most frequently used response for the prompt.

Designated Primary Care Provider (DPCP)

The primary care provider designated for the patient. This is distinguished from a primary or secondary visit provider for a specific visit.

Device

The name of the printer you want the system to use when printing information. *Home* means the computer screen.

DOB

Date of Birth

DOD

Date of Death

DOS

Date Of Service

DX

Common abbreviation for Diagnosis

EDC

Expected/estimated date of confinement, that is the expected/estimated due or delivery date for a pregnancy.

EDD

Expected/estimated date of delivery.

Export

To format data so it can be used by another application.

Fields

Fields are a collection of related information that comprises a record. Fields on a display screen function like blanks on a form. For each field, you will find a prompt requesting specific types of data. There are nine basic field types in RPMS programs, and each collects a specific type of information.

Free Text Field

This field type will accept numbers, letter, and most of the symbols on the keyboard. There may be restrictions on the number of characters you are allowed to enter.

Health Factors

Health Factors are data elements utilized by RPMS to record health status information about the patient. Current Smoker use is an example of a health factor in the Tobacco category. Health Factor data are recorded in the PCC V Health Factor file. For a current list of Health Factors, see the Health Summary User Manual.

Health Management Reminders (HMRs)

Health Maintenance Reminders are a set of clinical reminders related to procedures such as lab tests, immunizations, procedures etc. that are generally recommended for a subset of the population. They are displayed in a variety of places including the Health Summary, Supplements, and the Patient Record in both EHR and iCare.

Health Record Number (HRN)

A unique numerical identifier assigned to each patient. This is also referred to as a Chart Number.

Health Summary

The Health Summary is a patient report displaying related data built from the PCC V files such as laboratory and pharmacy. There are many different types of Health Summaries available to users at each site. Users are also able to design a health summary on-the-fly from the available components.

HRN#

Health Record Number, also referred to as a Chart Number

HS

Health Summary, a summary of a patient's medical care. The RPMS PCC is distributed with several standard health summaries, but can be customized. Examples of standard health summaries are: Adult Regular, Behavioral Health, CHR, Dental.

HX

Abbreviation for History. History is an event taking place in the past, such as surgery, immunizations, etc.

ICD

International Classifications of Diseases. This is a national coding system primarily used for: (1) classifying morbidity and mortality information for statistical purposes, (2) indexing of hospital records by disease and operations, and (2) data storage and retrieval. In addition, this is the coding system physicians must use for billing purposes of Medicare, Medicaid, and private insurance for services rendered.

Interfaces

A boundary where two systems can communicate. RPMS applications contain both character-based ("roll-and-scroll") and graphical user (GUI) interfaces. PCC Data Entry is an example of a character-based interface; RPMS EHR is an example of a GUI.

Menu

The menu is a list of different options you may select at a given time. To choose a specific task, select one of the items from the list by entering the established abbreviation or synonym at the appropriate prompt. A menu option followed by the ellipsis (...) indicates there are submenus.

Mnemonic

An abbreviation used to name a menu option or report used in the RPMS character-based packages. RPMS PCC data entry mnemonics to enter a data type can be two, three, or four characters, e.g., BP (blood pressure).

Narrative Description

A detailed description given using words rather than codes.

Patient Care Component (PCC)

PCC is the core of the RPMS applications and functions as a clinical data repository. Most RPMS applications “pass” key data elements to PCC, stored in V (visit) files, e.g., V Lab. Other data is entered directly into V files, e.g., V Patient Education, BP (blood pressure), WT (weight), HT (height), HC (head circumference) etc.

Patient Wellness Handout

The Patient Wellness Handout is a type of Health Summary that is directed to the patient. It displays personal medical information in easy to interpret language.

PCC Integrate Suite**Narrative Description**

A detailed description given using words rather than codes.

PGEN

Abbreviation for Patient General Retrieval Report. PGEN is the Patient General Retrieval report located in PCC Management Reports. The General Retrieval reports allow users to create on-the-fly reports by choosing specific data elements to select, print and sort by.

Problem List

A list of important/chronic medical, social, or psychiatric problems, related notes, and treatment plans for a patient that are recorded and updated as part of the patient’s health record. The Health Summary has two categories: Active and Inactive.

POV

Purpose of Visit - one or more diagnoses (ICD codes) that are identified as the reason for the patient's visit, recorded in the PCC V POV file.

Prompt

Text displayed onscreen indicating that the system is waiting for input to a field. Once the computer displays a prompt, it waits for you to enter some specific information.

Provider

One who provides direct medical care to a patient i.e., physician, nurse, mid-level provider).

Provider Narrative

A detailed description of the patient's conditions, using words rather than codes.

QMan

Short for Query Manager, QMan is a VA-based search utility that allows users to construct detailed searches of the RPMS database. QMan is part of the integrated PCC suite.

Retrieval

To obtain data from another location.

Roll-and-Scroll

The roll-and-scroll (character-based) data entry format captures the same information as the screen format but uses a series of prompts for recording data. This is typically the most efficient method for data entry.

RPMS

Resource and Patient Management System; a suite of integrated software packages used by IHS

Secondary Providers

A provider for a patient's visit other than the patient's primary visit provider. A patient visit might have multiple secondary providers, depending on the services provided.

Security 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.

Select

To choose one option from a list of options.

Site Manager

The person in charge of setting up and maintaining the technical aspects of the RPMS System at the facility or area level.

Site Parameters**Specialty Providers**

Defined through the Designated Specialty Provider Management (BDP) application.

Submenu

A menu that is accessed through another menu. A menu option followed by the ellipsis (...) indicates there are submenus.

Supplement

A Supplement is a type of modified Health Summary that is related to a specific condition such as Diabetes or HIV/AIDS. It displays personal medical information related to that condition.

Tally

To make a count, total, or subtotal a number of items.

VGEN

Short for Visit General Retrieval Report. VGEN is one of the search utilities that enable users to construct searches of the RPMS database. The General Retrieval reports allow users to create on-the-fly reports by choosing specific data elements to select, print and sort by.

14.0 Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

Phone: (505) 248-4371 or (888) 830-7280 (toll free)

Fax: (505) 248-4363

Web: <http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm>

Email: support@ihs.gov