RESOURCE AND PATIENT MANAGEMENT SYSTEM

Diabetes Management System

(BDM)

User Manual

Version 2.0
January 2019

Office of Information Technology
Division of Information Resource Management

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Version History

Version	Date	Author	Section	Page #	Summary of Change
1.1	12/20/2018	Lee Baliton, Lori Butcher, Chris Lamer, Karen Sheff, Skip Squires, and Mark Williams			Patch 12 updates to the menus and workflow in addition to supporting the 2019 Audit

Preface

This manual has been developed for physicians, mid-level practitioners, nurses, case managers, and diabetes coordinators responsible for the care of Native Americans with diabetes or conditions predisposing them for development of diabetes. It provides instructions for:

- The setup and maintenance of the Resource and Patient Management System (RPMS) Diabetes Management System, including:

    - Taxonomies of Medications, Lab Tests, Health Factors, and Education Topics.
    - Identifying patients with a diagnosis of diabetes or pre-diabetes for local registers.
    - Identifying those health care providers who will be allowed to use the system for monitoring patients with diabetes or pre-diabetes.
    - Modifying flow sheets for the care of patients with diabetes.

- Setting up automatic notification for patients newly diagnosed with diabetes, pre-diabetes conditions, or diabetic complications.

- Entry of data items into the Patient Care Component (PCC) for optimizing patient care and reporting capabilities.

- Performing an electronic Diabetes or Pre-Diabetes Audit.

- Generating a variety of reports for patient and program management.

> **Note:** RPMS software, including the Diabetes Management System, is subject to periodic updates based on IHS Diabetes Standards of Care. This manual provides documentation for those standards in effect as of November 2018.

1.0   Introduction

Within Indian and Alaska Native populations, diabetes exacts a great toll in both morbidity and mortality. The Diabetes Management System (DMS) of the IHS Resource and Patient Management System (RPMS) provides a unique capability for improving the care and management of patients with this significant health problem.

The Diabetes Management System is continually reviewed and updated to reflect current standards of care for patients with diabetes or conditions predisposing patients to develop this disease. The Diabetes Management System is designed to provide the capability to monitor the overall effectiveness of a diabetes program using an automated audit system and as a supplement to the Case Management System and PCC Management Reports which have been used together in the past to meet these needs.

Long-standing features of the Diabetes Management System include:

- A Diabetes Register using the PCC Case Management System.

- A Diabetes Flow Sheet included on the PCC Health Summary.

- Monitoring and prompting of health maintenance reminders on the Health Summary.

- Standard nomenclature for recording diabetes exams and education on PCC forms.

- An automated Diabetes Program Audit report.

- Case Management System report options.

- E-mail bulletins identifying newly diagnosed diabetic patients or those with new complications.

In addition, the system provides for:

- Automatic installation of the IHS Diabetes Register if it has not already been installed at a site.

- Installation of the IHS Pre-Diabetes Register if it has not already been installed at a site.

- Simplified population of taxonomies of medications, laboratory tests, education topics, and health factors required by the Diabetes Management System.

- An automated Program Audit report that can be generated for an individual patient, a template of patients, the entire IHS Diabetes Register at a facility, or for a random sample of patients from the Register.

- An automated Pre-Diabetes Program Audit report that can be generated for an individual patient, a template of patients, the entire IHS Pre-Diabetes Register at a facility, or for a random sample of patients from the Register.

- A Diabetes Patient Care Summary.

- Entry of a Register as the Subject for QMan searches.

- A menu of follow-up reports for identifying patients with unmet standards of care.

New features introduced in Version 2 Patch 12 for the 2019 Audit include:

- Redesigned menu layout

- Added Lower Extremity Amputation Rates as a new data element for reporting

- "Screened for HCV at least once (ever)" replaces "Screening ever for Hepatitis C if the patient is born between 1945 and 1965"

The logic used in determining these new items can be found in the audit logic listing in Appendix A: .

- Individual Audit Form/Audit Logic

  - LOWER LEG AMPUTATION (EVER): The patient's electronic record is scanned for documentation of any of the following items:

    - The purpose of visits are scanned for any diagnosis in the BGP DM BTK AMP DXS or the BGP DM ATK AMP DXS taxonomies. If a diagnosis is found a value of 1 - Yes is assigned.

    - The problem list is scanned for a diagnosis in the BGP DM BTK AMP DXS or BGP DM ATK AMP DXS taxonomies or a SNOMED in the PXRM BGP DM BTK AMP or PXRM BGP DM ATK AMP SNOMED subsets.

    - The procedures are scanned for a procedure in the BGP DM BTK AMP PROCS or BGP DM ATK AMP PROCS taxonomies.

    - The CPT codes are scanned for a CPT in the BGP DM BTK AMP CPTS or BGP DM ATK AMP CPTS taxonomies.

  - HEPATITIS B COMPLETE SERIES EVER: Data is scanned for hepatitis B vaccine any time prior to the Audit date.

    - HEP B (2 DOSE SERIES) is determined by:

      - CVX code 189 Hep B, adjuvanted

  - HEPATITIS C - SCREENED EVER: If the patient has a diagnosis of Hepatitis C this item is skipped.

    - Hepatitis C Screening (Ab Test) is determined by the following:

      - BGP HEP C TEST LOINC CODES taxonomy; site-populated lab test taxonomy BGP HEP C TEST TAX.

      - The V LAB file is scanned for any test contained in the lab test and LOINC taxonomies. The V CPT file is scanned for CPT 86803.

- Cumulative Audit Report

  – An existing section on Hepatitis C screening (ever) has been modified

  – An existing section on Hepatitis B complete series ever has been modified

  – A new section on Lower Extremity Amputation has been added

- Audit Export file

  – Lower Extremity Amputation has been added to the export file

  – Items have been reordered to accommodate the above new item

- Diabetes Patient Care Supplement (DPCS)

  – Lower Extremity Amputation has been added to the DPCS

  – Hepatitis C Screening (Ever) has been modified

  – Hepatitis B Complete Series Ever has been modified

- Other DMS Application Changes

  – Hepatitis C Screening Ever has been modified to the Follow Up report for ever

- New DATA QUALITY CHECK Report

  – This new report can be run from the DM19 Run 2019 Diabetes Audit menu option in DMS or from the Visual DMS system. This report should be run prior to running your 2019 audit export to the Web Audit. This report will list potential errors that you may encounter when your data is uploaded to the web audit. By running this report, you can review the errors and if the data is a true error correct the data before you do the web audit export. The list of errors that are checked for can be found in Appendix C:

The system capitalizes on data contained in the PCC and minimizes redundant data entry for local Diabetes Coordinators. Detailed instructions for implementing and utilizing the Diabetes Management System's features are included in this manual.

2.0   Orientation

Throughout this manual, sample computer dialogues are included to illustrate the performance of various steps. Within these dialogues, computer-generated text appears in gray-shaded boxes. User responses in the dialog appear in bold type (Figure 2-1).

You will be required to press the Enter key for accepting default values and entering data. Within the sample computer dialogues that appear in this manual, the Enter key will be indicated as [ENT] (Figure 2-1).

```
Select Taxonomy Maintenance Option: BUL  Enter Bulletin For A Taxonomy
Select TAXONOMY NAME: NEW DIABETICS           DIABETIC TAXONOMY
Select MAIL GROUP: DIABETES TEAM
  Are you adding 'DIABETES TEAM' as a new MAIL GROUP (the 15TH)? No// Y
(Yes) [ENT]
    MAIL GROUP COORDINATOR: USER,DAVID K          DKR
  Are you adding 'DIABETES TEAM' as a new MAIL GROUP (the 1ST for this
BULLETIN)
? No// Y  (Yes) [ENT]
Select MEMBER: USER,DAVID K          DKR
Are you adding 'ROSS,DAVID K' as a new MEMBER (the 1ST for this MAIL
GROUP)? No// Y  (Yes) [ENT]
Select MEMBER: USER,BETSY
```

Figure 2-1:Sample computer screen

List Manager (ListMan)

This version of the Diabetes Management System uses a screen display called List Manager to display options for review and entry of data. Data displays in a window-type screen. Menu options for editing, displaying, or reviewing the data display in the bottom portion of the window. Even though you may be using a personal computer as an RPMS terminal, you cannot use the mouse for pointing and clicking to select a menu option. Additional menu options for displaying, printing, or reviewing data can be displayed by typing two question marks (**??**) at the "Select Option" prompt. Entering the symbol or letter mnemonic for an action at the "Select Action" prompt will result in the indicated action.

> **Note**:   In the example Screen Display on the next page (Figure
> 2-2). two question marks (**??**) have been typed at the
> "Select Action" prompt to display the list of secondary
> options available to the user.

```
Register Data               Nov 13, 2018 15:14:01      Page:  1 of 1
      PATIENT: DEMO,KARLA KAY                          AGE: 29
      ADDRESS: 1400 W 3RD STREET,ALB,NM,87119          DOB: 08/03/1989
        PHONE: 555-555-3538                            HRN: 135272
PRIM CARE PROV: DOCTOR,DONNA                           RES: CONTRA
COSTA
        STATUS: DECEASED
```

```
WHERE FOLLOWED:
 REGISTER PROV:
      CASE MGR:
       CONTACT:
    ENTRY DATE: NOV 13,2018                     LAST EDITED:
     DIAGNOSIS: (NO DIAGNOSIS ON FILE FOR THIS PATIENT)
COMMENTS:
LOCAL OPTION:
LOCAL OPTION TEXT:
- Previous Screen    QU Quit         ?? for More Actions
1  Register Status     6  Comments            11 Health Summary
2  Where Followed      7  Local Option Entry  12 DM Care Summary
(DPCS)
3  Case Manager        8  Last Visit          13 Print Letter
4  Client Contact      9  Review Appointments  Q  Quit
5  DX/Date of Onset    10 Audit Status


The following actions are also available:
+    Next Screen         <    Shift View to Left   PS   Print Screen
-    Previous Screen     FS   First Screen          PL   Print List
UP   Up a Line           LS   Last Screen           SL   Search List
DN   Down a Line         GO   Go to Page            ADPL Auto
Display(On/Off)
>    Shift View to Right  RD   Re Display Screen     Q    Quit

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

Figure 2-2: Sample ListMan screen

Table 2-1: Menu Options

Menu Option	Description
+	In a display that fills more than one page, typing a plus sign (**+**) at Select Action displays the next full screen
-	If you reviewed several screens in a display, return to the previous screen(s) by typing a hyphen (**-**) at Select Action.
↑	Press the up arrow key at Select Action to move back one line at a time.
↓	Press the down arrow key at Select Action to move forward one line at a time.
→	Press the right arrow key at Select Action to move the screen display to the right.
←	Press the left arrow key at Select Action to move to the left.
FS	In a multi-page display type FS at Select Action to return to the First Screen of the display.
LS	In a multi-page display, type LS at Select Action to go to the Last Screen in the display.
GO	If you know which page of a multi-screen display you wish to review, type **GO** at Select Action to go directly to that screen.
RD	Type **RD** at Select Action to redisplay the screen.

Menu Option	Description
PS	Type **PS** to print what is currently displayed on the screen to a selected device.
PL	Type **PL** to print an entire single or multi-screen display (called a List) to a selected device.
SL	Typing **SL** prompts you to enter a word that you wish to search for in the List. Type the word to search for and press Enter to display any entries containing that word. For example, if you were many pages into a patient's face sheet and wanted to know the patient's age, you can type **SL**, **AGE**, and press Enter to return to the age entry.
ADPL	Auto display (On/Off) — Selecting this option allows the user to either display or hide the list of menu options at the bottom of the screen.
QU	Entering **QU** at Select Action: closes the screen and returns you to the menu.

> **Note**:   All other RPMS conventions are applicable:

For certain types of data fields, primarily those that utilize lists of possible entries—such as facilities, diagnoses, communities, or patients—press the spacebar, Enter to insert the last entry used for that field.

The Caret: Use the caret, also known as the up-hat (^, Shift-6), a special control character, to exit from a particular activity or data entry sequence. Typing the caret at any prompt will usually return you to the proceeding prompt or menu level. Use the caret also to exit from long data displays such as vendor lists that usually involve many screens.

Any time a possible answer is followed by double forward slashes (//), pressing the Enter key will default to the entry displayed. If an alternative response is desired it must be typed after the double slashes (//).

Example:

```
   Enter new result? Y// [ENT]
        New Result:  153
         Enter new result? Y// N [ENT]
      Enter new patient?  Y//
```

Figure 2-3: Accepting a default entry

Help can be obtained at any data entry caption by typing one, two, or three question marks (**?**, **??**, or **???**).

Typing three question marks (**???**) at the prompt for selecting a menu option will display a brief summary of each of the options in that menu.

2.1 System Requirements

Please consult the latest Installation Guide for RPMS system requirements and Visual DMS special requirements.

2.2 Security Keys

System users will require the following Security Keys:

Diabetes Management System:

BDMZMENU
BDMZ REGISTER MAINTENANCE
BDMZ SWITCH OLD DX ENTRIES

Case Management System:

ACMZMENU

PCC Management Reports:

APCLZMENU
APCLZ TAXONOMY SETUP

QMan

AMQQZMENU
AMQQZCLIN
AMQQZRPT

Health Summary (Generate Multiple Health Summaries)

APCHSMGR

Automatic notification of the case manager or diabetes coordinator of all newly diagnosed cases of diabetes or patients with glucose values indicative of impaired fasting glucose or impaired glucose tolerance enhances effective use of the Diabetes Management System. VA FileMan can be used for setting up the Diabetes Mail group and identifying members of the mail group who should receive the bulletins. A brief overview of setting up notification bulletins for patients newly diagnosed with diabetes, diabetic complications, or abnormal glucose values is provided in Appendix A: .

3.0　The IHS Diabetes Register & Pre-Diabetes Register

The standard **IHS Diabetes Register** and the standard **IHS Pre-Diabetes Register** are tools for maintaining a list of your patients with diabetes or pre-diabetes, their disease type, complications, family members, and case review dates. Both Registers facilitate the addition, inactivation, and removal of patients from the list; entry of data to be monitored for patients on the list; printing of case summaries; generation of reports; and retrieval of virtually all clinical data entered into the PCC for patients on the register.

The Standard **IHS Diabetes Register** is installed automatically with installation of the Diabetes Management System (BDM Version 1.0) if not already present. Because this is Version 2.0 Patch 12, please install necessary updates through Patch 12. It provides a core set of data items with predefined lists and standard definitions. It also permits you to establish your own lists and definitions in support of these data items. The IHS Diabetes Register helps simplify the process of creating a Case Management-based register, but you are in no way limited to this core set of data items and the lists that accompany them. Remember that you always have access to all existing PCC demographic and clinical data without keeping these items in the Diabetes Register.

The Standard **IHS Pre-Diabetes Register** can be automatically installed using the Case Management System Version 2.0, Patch 12. Because this is Version 2.0 Patch 12, please install necessary updates through Patch 12. If a Pre-Diabetes Register already exists, the user is provided with directions on how to update the existing Register with the IHS standards. It provides a core set of data items with predefined lists and standard definitions. It also permits you to establish your own lists and definitions in support of these data items. The IHS Pre-Diabetes Register helps simplify the process of creating a Case Management-based register, but you are in no way limited to this core set of data items and the lists that accompany them. Remember that you always have access to all existing PCC demographic and clinical data without keeping these items in the Diabetes Register.

You may wish to create additional registers. Using the Create Register option in the Case Management System, you may create new registers or change the name of the existing register, perhaps to maintain multiple registers for communities or facilities within a single service unit. However, in order for the Diabetes Management software to work with a register, the word **Diabetes** must be in the name of the register. If you change the name of an existing register, you will be asked if you wish to re-index files. You must answer **Yes**.

The following data items are automatically included in the I**HS Diabetes Register**:

Table 3-1: IHS Diabetes Register data items

Patient Status
Active
Inactive
Transient
Unreviewed
Deceased
Non-IHS
Lost to follow-up
Noncompliant

Diagnosis	
Gestational DM	
Type 1	**Onset Date:** (for Complication)
Impaired Glucose Tolerance	
Type 2	**Primary Provider:** (display only)
Onset Date: (for Diagnosis)	**Register Provider:**

Entry Date:	Case Mgr:
Date entered in Register	
	Last Review Date:
Last Edited Date:	
	Next Review Date:
Contact:	
Where followed:	

Upon installation of the Diabetes Management System, the Case Management System is no longer required for entry of the Diabetes-related data items in the list above. However, if you elect to maintain data elements that are not contained in the list above, you must enter those data elements using the data entry option in the Case Management System.

3.1   IHS Pre-Diabetes Register

The installation of the new IHS Pre-Diabetes Register takes place within the Case Management System Version 2.0. Patch 6 includes the installation instructions for this Register.

```
                    **************************************
                    **      CASE MANAGEMENT SYSTEM      **
                    **************************************
                                  VERSION 2.0
                                   SELLS HOSP

                                   MAIN MENU

   CR     Create/Modify Register Structure
   AU     Add Authorized Users
   BL     Build Supporting Lists
   DL     Display Supporting Lists ...
   AD     Add/Delete Patients ...
   DE     Data Entry
   RG     Report Generation ...
   RD     Resource Directory ...
   QM     Q-Man (PCC Query Utility)
   DEL    Delete Entire Register
   LTR    Manage Recall Letters ...
   PDM    Install Pre-Diabetes Register
          Install IHS Diabetes Register


Select Case Management System menu option:  PDM   Install Pre-Diabetes
Register

This option will guide the User through the following:"

        A = Installing the IHS National Pre-Diabetes Register"
            if you currently are not using a Pre-Diabetes Register."

    OR

        B = Converting an existing Case Management-based register to the
"IHS
            Pre-Diabetes Register, renaming your register and adding the
            following Elements:

"Register Data, Case Review Dates, Diagnoses, Complications,
 Diagnostic Criteria, and Risk Factors included in the IHS standard."

      Answer NO if you have an existing Pre-Diabetes Register."

    Answer YES if want the IHS National Pre-Diabetes Register
    installed."
```

The following data items are automatically included in the **IHS Pre-Diabetes Register:**

Table 3-2: IHS Pre-Diabetes Register data items

Patient Status
Active
Inactive
Transient
Unreviewed

Patient Status
Deceased
Non-IHS
Lost to follow-up
Noncompliant

	Diagnostic Criteria

	Pre-Diabetes
	  75 Gram OGTT 140-199 mg/dl
	  FPG 100-125 mg/dl

Diagnosis
 	
  Impaired Fasting Glucose (IFG)
  Impaired Glucose Tolerance
    (IGT)
  Other Abnormal Glucose
	Metabolic Syndrome
	  Men – Waist Circumference >4 0
	  Women – Waist Circumference >35
	   TG > 150 mg/dl
	    HDL < 40 mg/dl – Men
	    HDL < 50 mg/dl – Women
	    BP > 130/85 mm Hg
	    FPG > 100 mg/dl

	Onset Date: (for Complication)
	Primary Provider: (display only)
Onset Date: (for Diagnosis)	**Register Provider:**

Entry Date:	Case Mgr:
Date entered in Register	
	Last Review Date:
Last Edited Date:	
	Next Review date
	Risk Factors: BMI > 25 Family HX - Type 2 Diabetes Hx of Gestational Diabetes Mother - Gestational Diabetes Polycystic Ovary Disease
Where followed:	

4.0   Register Maintenance (RM)

The Register Maintenance option of the Main Menu is used for customizing the Diabetes Management System to meet the needs of your program. Before you begin using the Diabetes Register, you must define members of the Diabetes Team who will be using the Register, identify the patients who will be included in the Register, and set up lists of medications, exams, lab tests, complications and other parameters you will be using to monitor the patients in your population with diabetes. This must be done at the facility level because of variations in terminology and file entries at various facilities.

Each of the options within the Register Maintenance Menu will be described in this section and examples will be given on how to use the option.

- To Select the Register Maintenance menu, type **RM** at the "Select Diabetes Management System Option" prompt.

```
          THIS SYSTEM CONTAINS CONFIDENTIAL PATIENT INFORMATION COVERED
          BY THE PRIVACY ACT.  UNAUTHORIZED USE OF THIS DATA IS ILLEGAL
               ****************************************************
               **             DIABETES MANAGEMENT SYSTEM        **
               ****************************************************
                            VERSION 2.0 (Patch 12)
                                 DEMO HOSPITAL
                                   MAIN MENU


   RM      Register Maintenance ...
   AS      Audit Setup ...
   AR      Audit Reporting ...
   PDM     Prediabetes Audit ...


Select Diabetes Management System Option: RM
```

Figure 4-1: Selecting the RM option

4.1   User Setup (US)

User Setup allows you to identify those members of the diabetes team who will be allowed access to the Register. For security reasons, only users with Manager Authority can add other authorized users or modify register components. A sample dialog for adding authorized users is provided.

Adding a new user to DMS

```
          **             DIABETES MANAGEMENT SYSTEM        **
          ****************************************************
                           VERSION 2.0
                        2013 DEMO HOSPITAL
                        REGISTER MANAGEMENT
```

```
    RM      Register Management ...
    PM      Patient Management
    AP      Add Patients from Template
    DEL     Delete Patient from the Register
    RR      Register Reports ...


Select Register Management Option: RM  Register Management
```

Figure 4-2: Navigating to User Setup

1. Type **US** at the "Select Register Maintenance Option" prompt from the Register Maintenance menu.

2. Type **1** (Add/Remove DMS Authorized Users) at the "Which one" prompt.

3. Type the user's name at the "Select NEW DMS User" prompt. The process of adding/deleting occurs in a single step. If the system detects that the person is not currently an authorized user, it adds them immediately.

4. Type **YES** or **NO** at the "Remove USER as a user of the Diabetes Management System?" prompt, where USER is the user's name you typed in step 3.

5. Type **YES** or **NO** at the "Allow USER Register Manager Authority?" prompt, where USER is the user's name you typed in step 3.

6. This process can be repeated until all authorized users of the Register have been entered.

```
         **              DIABETES MANAGEMENT SYSTEM          **
         ****************************************************
                           VERSION 2.0
                        2013 DEMO HOSPITAL
                        REGISTER MANAGEMENT


   US     User Setup
   FS     Flow Sheet Setup
   LM     ADD/EDIT DMS Letters



Select Register Management Option: US  User Setup

     Select one of the following:

         1          Add/Remove DMS Authorized User
         2          List Current DMS Authorized Users

Which one: 1  Add/Remove DMS User

Select NEW DMS User: USER,BENJAMIN P            BPC

USER,BENJAMIN P is an Authorized User
of the Diabetes Management System.
```

```
Remove USER,BENJAMIN P as a user
of the Diabetes Management System? NO// [ENT]

Allow USER,BENJAMIN P's REGISTER MANAGER AUTHORITY? NO// Y
```

Figure 4-3: Adding a new user to DMS

Listing Current DMS Users

1. Type **US** at the "Select Register Maintenance Option" prompt from the Register Maintenance menu.

2. Type **2** (List Current DMS Users) at the "Which one" prompt.

3. The system will display a list of current DMS Authorized users.

```
    Current DMS Authorized Users  Manager Authority
    ----------------------------  -----------------
    USER,BENJAMIN P               YES
    USER,BETSY                    YES
```

Figure 4-4: Listing the current DMS users

4.2   Flow Sheet Setup (FS)

The **Flow Sheet Setup** option allows selection of those diabetes-related measurements or values to be displayed in a table format either in a stand-alone report or as an attachment to a Health Summary.

A Flow Sheet table is designed to print on a single sheet of paper 80 columns wide. It will be divided into columns with a header over each column. You will need to determine the type of data to display in each column, the labels for each column, and which data items to display in each column.

```
         **              DIABETES MANAGEMENT SYSTEM           **
         ****************************************************
                           VERSION 2.0
                        2013 DEMO HOSPITAL
                        REGISTER MANAGEMENT


  US     User Setup
  FS     Flow Sheet Setup
  LM     ADD/EDIT DMS Letters



Select Register Management Option: FS  Flow Sheet Setup

    Select one of the following:

Flow Sheet List                Nov 13, 2018 12:16:29       Page:   1 of
1
    NO. Flow sheet
```

```
       --- -------------------------------
       1    DIABETES
       2    DIABETIC FLOWSHEET
       3    EXAMFLOW
       4    Health Factor
       5    MEDICATIONS
       6    SAMPLE001


             - Prev Screen   QU Quit   ?? More Actions
1     SELECT Flow Sheet     2     ADD Flow Sheet
Select ACTION: Quit// 1    SELECT Flow Sheet

Which Flow Sheet:  (1-6): 2
```

Figure 4-5: Adding a new user to DMS

Overview of Process

1. Print the Flow Sheet (or a health summary displaying a Flow Sheet) for an existing diabetes patient.

2. Flow Sheets may be modified or added to the system using the RPMS Health Summary Maintenance Menu or the Diabetes Management System.

3. When using the Diabetes Management System, select **FS** from the Register Maintenance Main Menu.

4. A list of the current Flow Sheets available in your system will display.

5. You will be given options to ADD a new Flow Sheet or Select an existing Flow Sheet.

6. Select the existing Diabetes Flow Sheet.

7. Then select the menu option to Review the components of the Diabetes Flow sheet.

Figure 4-6 shows an example of an original diabetes Flow Sheet.

```
FLOW SHEET Components          Nov 13, 2018 12:20:21     Page:    1 of  2
      DIABETIC FLOWSHEET

      Flowsheet Components
      NO.   ORDER   TYPE                    LABEL                 WIDTH
      ---   -----   -------------------     --------------------  -----
      1      5      MEASUREMENT             Wt.                      3
                    WEIGHT
      2     10      LAB RESULT              DM Labs                  8
                    _GLUCOSE
                    _PS A1c
                    _GLUCOSE
                    URINE Protein (POCT)
                    _SQL Glucose,Body Fluid
      3     15      MEASUREMENT             BP                       7
                    BLOOD PRESSURE
```

```
     4     20     EXAMINATION          Foot Chk.              9
                  FOOT INSPECTION
     5     25     MEDICATION           DM Meds                20
+         - Prev Screen  QU Quit  ?? More Actions
1    EDIT Component                      3     REVIEW Component Members
2    DELETE Component

Select ACTION: Next Screen//
```

Figure 4-6: Example of an original diabetes Flow Sheet

4.2.1   Reviewing Flow Sheet Components

The design for the original Diabetes Flow sheet is demonstrated by using the option for Reviewing Flow Sheet Components for the Diabetes Flow Sheet. In reviewing the Diabetes Flow Sheet on the next page, you will note that it consists of four columns, each of which is identified as a NO. (The number identifies the placement of that data element on the Flow Sheet, e.g., 1 means that data element will be in column 1 on the Flow Sheet.)

The first row contains weight and has a label of Wt., and is three spaces wide. The second row column contains lab results, has a label of DM Labs, and is 815 spaces wide. The only labs chosen to display are _GLUCOSE, PS A1c; _GLUCOSE, URINE Protein (POCT), _SQL Glucose, Body Fluid cholesterol, LDL cholesterol, HDL, Hemoglobin A1C, glucose, glucose, other, triglyceride, and urine protein. The third row contains blood pressure, has a label of BP, and is seven spaces wide. The fourth row contains foot inspection, has a label of Foot Chk., and is nine spaces wide. The fifth row contains medication, has a label of DM Meds, and is 20 spaces wide. The second column contains examinations, has a label of Foot Chk., and is 10 spaces wide. It contains only one exam, the Diabetic Foot Check.

```
FLOW SHEET Components         Nov 05, 2018 13:56:39   Page: 1 of 2
DIABETIC FLOW SHEET

    Flowsheet Components
    NO.   ORDER  TYPE                 LABEL                WIDTH
    ---   -----  --------------------  --------------------  -----
    1     5      MEASUREMENT          Wt.                   3
                 WEIGHT
    2     10     LAB RESULT           DM Labs               8
                 _GLUCOSE
                 _PS A1c
                 _GLUCOSE
                 URINE Protein (POCT)
                 _SQL Glucose,Body Fluid
    3     15     MEASUREMENT          BP                    7
                 BLOOD PRESSURE
    4     20     EXAMINATION          Foot Chk.             9
                 FOOT INSPECTION
    5     25     MEDICATION           DM Meds               20

+         - Prev Screen  QU Quit  ?? More Actions
1    EDIT Component                      3     REVIEW Component Members
2    DELETE Component
```

```
Select ACTION: Next Screen// 3
```

Figure 4-7: Reviewing Flow Sheet components

4.2.2   Deleting a Component

1. To edit the existing Diabetes Flow Sheet, type **2** at the "Select Action" prompt.

2. Remove each of the four components on the Diabetes Flow Sheet.

```
+           - Prev Screen  QU Quit  ?? More Actions
1    EDIT Component                    3    REVIEW Component Members
2    DELETE Component
Select ACTION: Next Screen// 2
```

Figure 4-8: Deleting a component

4.2.3   Designing a new Diabetes Flow Sheet

The original Diabetes Flow Sheet often became lengthy and hard to read. A new Diabetes Flow Sheet may be designed as follows by choosing the option to ADD Flow Sheet from the previous menu once the original components have been removed. In the example, the Diabetes Flow Sheet is redesigned to display Weight, Blood Pressure, Hgb A1C, Glucose, Cholesterol, Creatinine, Urine Protein, and Triglyceride.

```
FLOW SHEET Components         Nov 05, 2018 14:41:14   Page:  1 of  1
DIABETIC FLOW SHEET

    Flowsheet Components
    NO.  ORDER  TYPE                  LABEL               WIDTH
    ---  -----  ------------------    -----------------   -----

- Prev Screen  QU Quit  ?? More Actions

1    EDIT Component                    3    REVIEW Component Members
2    DELETE Component
Select ACTION: Quit//  1
```

Figure 4-9: Designing a new Diabetes Flow Sheet

On the subsequent screen to enter new components, you will be prompted to enter:

1. The order the item should appear in the display (which column).

2. The data type of the item. Type one question mark (**?**)to review the data types available to use on the Flow Sheet.

3. The label or header to be used at the top of each column.

4. The width of the column.

```
DIABETES FLOW SHEET              Components
  ORDER        TYPE                 LABEL              WIDTH

   ┌──┐ ┌──────────────┐  ┌──────────────┐  ┌──────────────┐
   │  │ │              │  │              │  │              │
   │ _│ │              │  │              │  │              │
   │  │ │              │  │              │  │              │
   │  │ │              │  │              │  │              │
   │  │ │              │  │              │  │              │
   └──┘ └──────────────┘  └──────────────┘  └──────────────┘

  COMMAND:                  Press <PF1>H for help     Insert
```

Figure 4-10: Designing a new Diabetes Flow Sheet (steps 1-4)

Example

1. Type **1** for the order (of display) of the first component at the blinking cursor.

    a. Press the Tab key to move to the **Data Item Type** field.

    b. Type the first data type as **Measurement**.

    c. Press the Tab key to move to the **LABEL** field.

    d. Type **WT** to indicate this column will be Weight.

    e. Press the Tab key to move to the **WIDTH** field.

    f. Type a value of **10** for the width of this field.

2. Press the Tab key to return to the order of the next component and type **2**.

    a. Press the Tab key to move to the **Data Item Type** field.

    b. Type **Measurement** again to indicate the data type for Blood Pressure.

    c. Press the Tab key to move to the **LABEL** field.

    d. Type **BP** as a header for this column.

    e. Press the Tab key to move to the **WIDTH** field.

    f. Type a value of **10** for the width of the field..

3. Press the Tab key to return to the order of the next component and type **3**.

    a. Press the Tab key to move to the **Data Item Type** field.

    b. Type **Lab** to indicate the data type for Hgb A1C.

    c. Press the Tab key to move to the **LABEL** field.

      d. Type **A1C** as a header for this column.

      e. Press the Tab key to move to the **WIDTH** field.

      f. Enter a value of **10** for the width of the field.

4. Continue this process until all eight components have been defined for the modified Diabetes Flow Sheet.

```
DIABETIC FLOW SHEET                    Components
   ORDER          TYPE                    LABEL              WIDTH

      1        MEASUREMENT           WT                        10
      2        MEASUREMENT           BP                        10
      3        LAB RESULT            A1C                       10
      4        LAB RESULT            GLUCOSE                   10
      5        LAB RESULT            CHOL                      10
      6        LAB RESULT            CREAT                     10
      7        LAB RESULT            UR PROT                   10
      8        LAB RESULT            TRIG                      10



   COMMAND:             Press <PF1>H for help      Insert
```

Figure 4-11: Designing a new Diabetes Flow Sheet (example)

5. To exit this screen, press the F1 and E keys.

4.2.4   Defining Items

The next step in the Flow Sheet development is to identify the data to be displayed under each Label. It is recommended that only a single data type or member be selected for each component of the Flow Sheet.

1. Begin by selecting option **3**, Review component members, by typing **3** at the "Select Action" prompt.

2. Begin with the first column or component by typing **1** at the "Which Flow Sheet Component(s)" prompt.

```
    DIABETIC FLOWSHEET

    Flowsheet Components
    NO.  ORDER  TYPE                 LABEL                 WIDTH
    ---  -----  -------------------  --------------------  -----
     1     5    MEASUREMENT          Wt.                     3
                WEIGHT
     2    10    LAB RESULT           DM Labs                 8
                _GLUCOSE
                _PS A1c
                _GLUCOSE
```

```
                  URINE Protein (POCT)
                  _SQL Glucose,Body Fluid
     3     15     MEASUREMENT          BP                        7
                  BLOOD PRESSURE
     4     20     EXAMINATION          Foot Chk.                 9
                  FOOT INSPECTION
     5     25     MEDICATION           DM Meds                   20

- Prev Screen  QU Quit  ?? More Actions
1    EDIT Component                     3     REVIEW Component Members
2    DELETE Component
Select ACTION: Next Screen// 3   REVIEW Component Members

Whick Flow Sheet Component(s):  (1-6): 1
```

Figure 4-12: Defining Flow Sheet items (steps 1-2)

3. Type **1** at the "Select Action" prompt to add members for each component of the Flow Sheet. This process is similar to how you added members to the taxonomies of drugs and medications in the taxonomy setup section.

```
Component Members       Nov 05, 2018 15:08:39        Page:  1 of  1


MEASUREMENT
--------------------------
1     WEIGHT

- Prev Screen  QU Quit  ?? More Actions

1    ADD Member          2     DELETE Member
Select ACTION: Quit// 1
```

Figure 4-13: Defining Flow Sheet items (step 3)

4. The first measurement in the example given will be WT. Type **WT** at the "Which Measurement" prompt. When WT is added it will be displayed in the list of component members under the MEASUREMENT component. Only the one measurement of WT will be displayed for this component.

```
     Select
     MEASUREMENT          to add to the
     MEASUREMENT          component of the
     DIABETIC FLOWSHEET   Flow Sheet

Which MEASUREMENT: WT
```

Figure 4-14: Defining Flow Sheet items (step 4)

5. To quit, press Enter at the "Select Action: Quit" prompt.

6. Choose to review Flow Sheet component 2. Add a single member of BP.

7. Continue with this process to add members for each of the eight Flow Sheet Components.

8. As the components and their members are defined, not all of the data can be displayed on one screen. Press Enter at the "Select Action: Next Screen" prompt to display the rest of the components and members. The plus (+) and minus (-) signs may be used to move between the first and second screens of the display, as well.

9. When the process is complete, display the Diabetes Flow Sheet once more to ensure that all components, labels, and members have been defined correctly. Also, display a health summary for a patient known to have diabetes to ensure that the Flow Sheet is displayed correctly. If the column widths are too wide, the data on the Flow Sheet will "wrap" and it will be difficult to read. This may be corrected by changing one or more of the column widths to a smaller number.

```
FLOW SHEET Components      Nov 05, 2018 11:30:14     Page: 1 of  2

     DIABETIC FLOWSHEET

     Flowsheet Components
     NO.  ORDER  TYPE                    LABEL               WIDTH
     ---  -----  ------------------      --------------      -----
     1     5     MEASUREMENT             Wt.                 3
                 WEIGHT
     2     10    LAB RESULT              DM Labs             8
                 _GLUCOSE
                 _PS A1c
                 _GLUCOSE
                 URINE Protein (POCT)
                 _SQL Glucose,Body Fluid
     3     15    MEASUREMENT             BP                  7
                 BLOOD PRESSURE
     4     20    EXAMINATION             Foot Chk.           9
                 FOOT INSPECTION
     5     25    MEDICATION              DM Meds             20

+          - Prev Screen   QU Quit  ?? More Actions

1    EDIT Component                    3    REVIEW Component Members
2    DELETE Component
Select ACTION: Next Screen//
```

Figure 4-15: Defining Flow Sheet items (step 9)

10. The resulting Flow Sheet will be similar to Figure 4-16.

```
** CONFIDENTIAL PATIENT INFORMATION -- JAN 25,2000 11:40 AM  [DKR] **
** PATIENT,RAE #100003  (DMS DIABETIC FLOW SHEET SUMMARY)  pg 1 *******

PATIENT,RAE    DOB: NOV 10,1973
DEMO HOSPITAL HEALTH RECORD NUMBER: 100003
777 N. 33RD ST.,TOMBSTONE,AZ,88776

------------------------ FLOW SHEETS (max 1 year) ----------------------
---

DIABETIC FLOW SHEET
            WT     BP      A1C    GLUCOSE CHOL  CREA   UR PROT  TRIG
```

```
----------------------------------------------------------------------
05/10/05  : 235  :145/80 : 9.2H :       :       : .3   : NEGAT :
          :      :        :      :       :       :      : IVE   :
----------------------------------------------------------------------
11/03/04  : 240  :150/85 : 9.5H :  n/r :  250H:       :       : 310H
```

Figure 4-16: Resulting Flow Sheet

> **Note**: If a laboratory test has been ordered but no results are
>   available for display, "n/r" will display under the
>   appropriate header for that date. See the Glucose column in
>   the above sample Flow Sheet.

4.3   Add Patients from Template (AP)

This option allows you to add patients with a diagnosis of diabetes to the Diabetes
Register as a group. It may also be used to periodically add a template of patients
newly diagnosed with diabetes. This process will not result in duplication of patients
already in the Register.

Adding to the template

1. Type **AP** at the "Select Register Maintenance Option" prompt.

```
    RM      Register Management ...
    PM      Patient Management
    AP      Add Patients from Template
    DEL     Delete Patient from the Register
    RR      Register Reports ...

Select Register Maintenance Option: AP
```

Figure 4-17: Adding to the template (step 1)

2. Type the name of the template of patients, which is to be added to the Register at
    the "Which Search Template" prompt.

3. Type **YES** or **NO** at the "Is that what you want?" prompt. If you type **YES**, the
    patients will be added in an Active Status.

```
Which SEARCH TEMPLATE: DKR NEW DM DX

CHOOSE 1-2: 2  DKR A1C>9      (Feb 29, 2016)       User #2852 File #9000001
INQ
        There are 350 patients in this SEARCH TEMPLATE.
        The following transfer has been selected:

        From SEARCH TEMPLATE: DKR A1C>9
          To CMS register:  2017 DIABETES REGISTER
        Transfer Status:    A - ACTIVE
```

```
                    Is that what you want? No// Y  (Yes)
```

Figure 4-18: Adding to the template (steps 2–3)

4.4   Add/Edit DMS Letters (LM)

Use this option to develop custom letters. A personalized letter may be sent to an
individual patient using the **ADD/EDIT DMS Letters** option in the Register
Management (**RM**) Menu option. In addition, using the Follow-Up Needed (**FU**)
option, in the Register Reports (**RR**) menu, you may generate letters to a group of
patients with the same follow-up needs. This option will allow you to edit an existing
letter, add a new letter, delete a letter type, or list letter inserts.

The *Education Text Follow up Inserts* will print the follow up item needed and then
will automatically print the associated Education for that follow up item. Using the
Follow Up Insert Item will print only the follow up items due and not the associated
education text.

You can insert each text follow-up individually, or for each follow up item needed
you can use the item |TEXT FOLLOW UP|.

1. To access the Add/Edit DMS letter option, type **LM** at the "Select Register
    Maintenance Option" prompt.

```
    US     User Setup
    FS     Flow Sheet Setup
    LM     ADD/EDIT DMS Letters


Select Register Maintenance Option: LM
```

Figure 4-19: Selecting the LM option

2. The system will display the available options at the bottom of the screen.

```
DMS Letters                   Nov 05, 2018 11:30:14      Page: 1 of  1
NO.  LETTER
---  ------------------------------
1     DIABETES LETTER 1




- Previous Screen   QU Quit   ?? for More Actions
1  EDIT Letter            3  DELETE Letter
2  ADD Letter             4  List Letter Inserts
Select Action: Quit//  4
```

Figure 4-20: Available options for the LM option

Before attempting to review or develop any custom letters it is highly recommended that you determine what kind of word-processing editor was assigned to you when you were set up as a user in RPMS. Please review Section 4.4.1 of this manual to set your text editor to screen editor instead of line editor. After making this alteration, when you encounter the word-processing field for developing letter text, a window should open, and text may be entered in the open window. The list of word-processing commands available for developing a letter is included in Appendix B: .

Begin by selecting option **4**, List Letter Inserts. The Letter inserts (First Name, Last Name, Address, Provider Name, Chart, Date, Follow up, and Education Follow up) can be inserted automatically by the system when the letter is generated. Letter inserts may be entered by text (upper case must be used) or number. This option provides you with basic instructions on how to use these within the body of a letter. See Figure 4-26.

```
NO.  INSERT
---  --------------------
1         FIRST NAME
2         LAST NAME
3         ADDRESS
4         PRIMARY CARE PROVIDER
5         REGISTER PROVIDER
6         FOLLOW UP
7         CHART
8         DATE
9         EDUCATE
10        FOOT EXAM EDUCATION
11        EYE EXAM EDUCATION
12        DENTAL EXAM EDUCATION
13        FLU SHOT EDUCATION
14        PNEUMO EDUCATION
15        TETANUS EDUCATION
16        TB TEST EDUCATION


+         Enter ?? for more actions
I  Individual Insert Information      -  Previous Screen
H  General Insert Information         Q  Quit
+  Next Screen
Select Action: +//
```

Figure 4-21: Basic instructions for editing a letter

The **EDIT letter** option allows you to review the structure of a letter. In the example on the next page, option **1 EDIT** was selected to show the structure of Diabetes Letter 1.

Note that the letter inserts 1, 2, and 3 were used to put the patient's name and address in the header as well as the patient's first name in the greeting. The body of the letter was typed and where follow-up needs are to be displayed, the letter insert 5 was used to indicate the system was to generate those entries into the letter. If letter insert 4, **Primary Care Provider**, is used in the salutation, the name of the provider identified as the patient's primary provider will be inserted.

If you plan to develop a number of letters and some of them will be lengthy, you may find it easier to use a personal computer on which a standard word processing program like MS Word can be run in one window while RPMS is running in another window. The letters can be developed in Word and the text copied and pasted into the open word processing field in the RPMS application. Technical assistance can be provided if you wish to use this technique for letter development.

> **Note**:   There are no security locks on letters. It is highly
>   recommended that one user not alter another user's letters.

```
==[ WRAP ]==[ INSERT ]=============<  >==============[ <PF1>H=Help ]====

|DATE|


|FIRST NAME| |LAST NAME|
|ADDRESS|

Dear |FIRST NAME|:

I have recently reviewed your records and note that you have missed your
last three appointments.  The records indicate that you are overdue for
a number of healthcare items which are important in ensuring that you are
not developing any complications associated with your diabetes.  Please
call Mary Smith, our Clinic Diabetes Coordinator, to schedule an
appointment during the month of October.  Her telephone number is 743-7865.
The records show that you have the following healthcare needs:

|TEXT FOLLOW UP|

Sincerely,
|PROVIDER NAME|

Press F1 followed by E to exit this screen.
<======T=======T=======T=======T=======T=======T=======T=======T=======
```

Figure 4-22: Sample letter setup

The above letter setup resulted in the following letter:

```
MAY 20, 2003


RAE PATIENT
777 N. 33RD ST.
TOMBSTONE, AZ  88776


Dear RAE:

I have recently reviewed your records and note that you have missed your
last three appointments.  The records indicate that you are overdue for a
number of healthcare items which are important in ensuring that you are not
developing any complications associated with your diabetes.  Please call
Mary Smith, our Clinic Diabetes Coordinator, to schedule an appointment
during the month of October.  Her telephone number is 555-7865.
```

```
The records show that you have the following healthcare needs:

     CREATININE               *NO* CREATININE on record.

A CREATININE level is done at least yearly and is included as a part of a
group of tests run on one blood sample that helps indicate the health of
your kidneys, liver and other organs.  This information helps guide your
medical provider to recommend the most effective treatment to help keep you
healthy and lower your risk of complications caused by diabetes.

     INFLUENZA                *NO* INFLUENZA on record.

A FLU SHOT is recommended yearly for all people with diabetes and is
usually given starting in September.  People do not become infected with
flu from flu shots - though they can have a mild fever or muscle aches for
a day or two as the body clears the vaccine.

     PNEUMO                   *NO* PNEUMO on record.

PNEUMONIA VACCINATION is recommended at least once for people with diabetes
to help prevent pneumonia - a Booster is often given at age 65 if it has
been more than 5 years since your last pneumonia vaccination.


Sincerely,

BENJAMIN USER
```

Figure 4-23: Sample letter

4.4.1   Choosing a Word Editing Editor

It is highly recommended that you review an existing letter before attempting to
develop a new one. The example letters shown in this section use VA Screen Editor.
If you currently are using VA Line Editor, you will be unable to develop the custom
letters as described in this section. If you see the following (Figure 4-24) when
entering a word processing field, your default editor has been set to the RPMS line
editor. Change to the full screen editor as follows.

```
1>
```

Figure 4-24: Line Editor screen

1. At any prompt for a menu option, type **TBOX**. ToolBox is a secondary menu
   option that all users have but do not normally see on their screen. See Figure 4-25.

2. Type **EDIT** at the "Select User's Toolbox Option" prompt. The system will open
   a window.

```
    DE     Behavioral Health Data Entry Menu ...
    RPTS   Reports Menu ...
    MUTL   Manager Utilities ...

Select Behavioral Health Information System Option: TBOX  User's Toolbox
```

```
            Display User Characteristics
            Edit User Characteristics
            Electronic Signature code Edit
            Menu Templates ...
            Spooler Menu ...
            Switch UCI
            TaskMan User
            User Help

Select User's Toolbox Option: Edit User Characteristics
```

Figure 4-25: Using TBOX

3. Press the down arrow key to move to the "Preferred Editor" field.

4. Type **SC** at the "Preferred Editor:" field and then press Enter to see the editor change to SCREEN EDITOR – VA FILEMAN.

5. Continue to press the down arrow until the cursor reaches the "Command" prompt.

6. Type **S** at the "Command" prompt and press Enter.

7. Type **E** at the "Command" prompt and press Enter to save and exit the screen. The Edit User Characteristics screen and fields are shown in Figure 4-26.

```
                    EDIT USER CHARACTERISTICS
NAME: PATIENT,SAMANTHA A                                    PAGE 1 OF 1
_____


              INITIAL: SAS                        PHONE:
            NICK NAME:                       OFFICE PHONE:
                                              VOICE PAGER:
                                            DIGITAL PAGER:


   ASK DEVICE TYPE AT SIGN-ON: DON'T ASK
                    AUTO MENU: YES, MENUS GENERATED
                   TYPE-AHEAD: ALLOWED
              TEXT TERMINATOR:
            PREFERRED EDITOR: SCREEN EDITOR - VA FILEMAN


Want to edit VERIFY CODE (Y/N):
_____
    Exit     Save     Refresh

Command:  Press E and answer "YES" when asked whether you wish to save
changes.

COMMAND: S [ENT]      Press <PF1>H for help    Insert
      E [ENT]
```

Figure 4-26: Setting Screen Editor

5.0   Entering/Deleting Patients on the Diabetes Register

There are four ways to add patients to the Diabetes Register:

- Enter patients manually, one at a time

- Transfer patients from a QMan-generated search template1

- Transfer patients from a File Manager file2

- Add patients to the Register using the Data Entry mnemonic, REG

1. QMan is a menu option in Diabetes Management. However, you will need three additional security keys to use QMan for Diabetes Management. See your Site Manager for assignment of the security keys: **AMQQZMENU**, **AMQQZCLIN**, and **AMQQZRPT**.

2. Transfer of patients from a File Manager file is seldom, if ever, required. It involves using FileMan to do a search for a file of patients with diabetes, creating a template of those patients, and then using the menu option for transferring this template of patients into the Diabetes Management System. If this functionality is required, please seek technical assistance from your local or area Information Systems personnel.

Each of the standard methods for entering patients into the Diabetes Register is described in Sections 5.1 through 5.5.

5.1   Entering Patients Manually

Enter the chart number or name (Last Name,First Name) of the patient to be added to the Register. If the patient is not currently a member of the Register you will be prompted to add the patient. See example in Figure 5-1.

```
    RM      Register Management ...
    PM      Patient Management
    AP      Add Patients from Template
    DEL     Delete Patient from the Register
    RR      Register Reports ...


Select Diabetes Management System Option: PM  Patient Management

Select PATIENT NAME: DEMO,LAURA MARIAN
                                    F 07-12-1988 XXX-XX-3297   TST
133250

    DEMO,LAURA MARIAN is not on
    the 2017 DIABETES REGISTER

Add this client to the Register? NO// Y
```

Figure 5-1: Entering patients manually

As soon as the Enter key has been pressed, the following screen will be displayed (Figure 5-2) and you may begin to display, edit, or print data on this patient.

```
Register Data            Nov 14, 2018 15:57:10          Page:  1 of 1
       PATIENT: DEMO,LAURA MARIAN                      AGE: 30
       ADDRESS: 1709 OCOTILLO AVENUE,ALB,NM,87119      DOB: 07/12/1988
         PHONE: 555-555-4108                           HRN: 133250
PRIM CARE PROV:                                        RES: RIVERSIDE
        STATUS: ACTIVE
WHERE FOLLOWED:
 REGISTER PROV:
      CASE MGR:
       CONTACT:
    ENTRY DATE: NOV 14,2018                    LAST EDITED:
     DIAGNOSIS: (NO DIAGNOSIS ON FILE FOR THIS PATIENT)
COMMENTS:
LOCAL OPTION:
LOCAL OPTION TEXT:




- Previous Screen        QU Quit          ?? for More Actions
1  Register Status       6  Comments              11 Health Summary
2  Where Followed        7  Local Option Entry    12 DM Care Summary
(DPCS)
3  Case Manager          8  Last Visit            13 Print Letter
4  Client Contact        9  Review Appointments   Q  Quit
5  DX/Date of Onset      10 Audit Status
Select Action: Quit//
```

Figure 5-2: Entering patients manually, screen 2

5.2   Transferring Patients from a QMan-Generated Search Template

This two-step process allows you to 1) quickly identify all diabetes patients who are active at your facility, based on PCC data, and 2) load them into your IHS Diabetes Register. For active IHS User population statistics, patients are generally considered to be active if they have had one or more visits for diabetes in the past three years. For the purposes of the Diabetes program, more stringent criteria more closely resembling GPRA criteria may be desired.

Each facility may have different criteria for identifying the patients who will be added to the template. In the following example, the search criteria used are that the patient had at least one diagnosis of diabetes codes as identified in the taxonomy SURVEILLANCE DIABETES, lived in the service unit area (GPRA taxonomy of communities), and had at least two visits to core medical clinics (01,06,10,12,13,20,24,28,57,70,80,89) in the last three years. This may result in patients inadvertently being added to the Register because of miscoding, but they can be easily recognized by age or chart review and removed.

> **Note**: Your facility may already have a taxonomy of communities
> in the service area used in GPRA reports. The site manager
> would know the name of this taxonomy.

The specific QMan dialogue to accomplish this search follows. User responses and
instructions are in bold type.

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

Subject: LIVING PATIENTS
Attribute of Living Patients:  DX
Enter DX:  [SURVEILLANCE DIABETES]

ICD codes in this range =>
   [QMan lists all codes  in the taxonomy]
Enter Another DX: [ENT]
Want to save this group for future use?  NO
First condition of Diagnosis:  SINCE
Exact Date:  (Enter the date 3 years ago)
Next condition of Diagnosis:  AT LEAST
Value:  1
Next condition of Diagnosis:  [ENT]
Attribute of Living Patients: COMMUNITY[ENT]
Community: GPRA COMMUNITIES [ENT]
   Members of GPRA Taxonomy =>

ADAIR
AFTON
BARTLESVILLE
BIXBY
BROKEN ARROW
CATOOSA
CHELSEA
CLAREMORE
JAY
LOCUST GROVE
MIAMI
PRYOR
SAPULPA

Enter ANOTHER COMMUNITY: [ENT]

The following have been selected =>

    ADAIR
    AFTON
    BARTLESVILLE
    BIXBY
    BROKEN ARROW
    CATOOSA
    CHELSEA
    CLAREMORE
    JAY
    LOCUST GROVE
    MIAMI
    PRYOR
    SAPULPA

Want to save this COMMUNITY group for future use? No//    (No)
```

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


  Subject of search: PATIENTS
     ALIVE TODAY
     CURRENT COMMUNITY (ADAIR/AFTON...)

Attribute of LIVING PATIENTS: VISIT

SUBQUERY: Analysis of multiple VISITS


First condition of "VISIT": CLINIC

Enter CLINIC: [CORE MEDICAL CLINICS

Members of CORE MEDICAL CLINIC Taxonomy =>

GENERAL
DIABETIC
INTERNAL MEDICINE
PEDIATRIC
WELL CHILD
FAMILY PRACTICE
WOMEN'S HEALTH SCREENING
URGENT CARE
EVENING CLINIC
IMMUNIZATION

Enter ANOTHER CLINIC: [ENT}

The following have been selected =>
     GENERAL
DIABETIC
INTERNAL MEDICINE
PEDIATRIC
WELL CHILD
FAMILY PRACTICE
WOMEN'S HEALTH SCREENING
URGENT CARE
EVENING CLINIC
IMMUNIZATION
DIABETIC

Want to save this CLINIC group for future use? No// [ENT]   (No)

Next condition of "VISIT": DURING THE PERIOD
Exact starting date: 6/1/15   (JUN 01, 2015)
Exact ending date: 6/1/18   (JUN 01, 2018)


        Subject of subquery: VISIT
        CLINIC (DIABETIC/INTERNAL MED...)
        BETWEEN BETWEEN JUN 1,2015 and JUN 1,2018@23:59:59

Next condition of "VISIT": AT LEAST
Enter the value which goes with AT LEAST _ EXIST; e.g., AT LEAST _ EXIST 3,
AT LEAST _ EXIST 10, etc.
Value: 2
```

```
        Subject of subquery: VISIT
        CLINIC (DIABETIC/INTERNAL MED...)
        BETWEEN BETWEEN JUN 1,2015 and JUN 1,2018@23:59:59
        AT LEAST 2 EXIST

Next condition of "VISIT": [ENT]

Computing Search Efficiency Rating....


   Subject of search: PATIENTS
      ALIVE TODAY
      CURRENT COMMUNITY (ADAIR/AFTON...)
      DIAGNOSIS (250.01/250.11...)
         Subject of subquery: VISIT
         CLINIC (DIABETIC/INTERNAL MED...)
         BETWEEN BETWEEN JUN 1,2015 and JUN 1,2018@23:59:59
         AT LEAST 2 EXIST


Attribute of LIVING PATIENTS: [ENT]

*** Q-Man Output Options ***
Select one of the following:
  1  DISPLAY results on the screen
  2  PRINT results on paper
  3  COUNT 'hits'
  4  STORE results of a search in a FM search template
  5  SAVE search logic for future use
  6  R-MAN special report generator
  9  HELP
  0  EXIT
Your choice:  4 - Store Results of Search in FileMan Template

Enter the name of the search template:  PTS FOR IHS DM REGISTER

Are you adding 'PTS FOR IHS DM REGISTER' as a new sort template?  YES
Description:  [ENT]

Want to run this task in background?  NO
```

Figure 5-3: Transferring Patients from a QMan-Generated Search Template

QMan will then display each patient that matches the specified criteria as it stores the patients in the template called PTS FOR IHS DM REGISTER. When finished, the number of patients stored is displayed.

A site setting up the Register for the first time may choose to include or exclude different attributes in selecting patients to transfer. For example, by selecting the additional attribute of Community, you may limit the patients in the Register only to the communities in your service population. Another way of delimiting the group of patients to be included in the template is to select DX of [SURVEILLANCE DIABETES] as an attribute with no time limitations, and then selecting VISIT with limiting conditions of clinics and time frames. Other sites may choose to restrict the patients in the template even more by selecting a QMan attribute of Classification and limiting the Class to Indian/Alaska Native.

For the next step of loading the patients into your Register, exit QMan and return to the Diabetes Management System main menu.

1. Type **RM** the "Select Diabetes Management System Option" prompt in the Register Maintenance menu option.

2. Type **AP** at the "Select Register Maintenance Option" prompt.

```
REGISTER MAINTENANCE


   RM      Register Management ...
   PM      Patient Management
   AP      Add Patients from Template
   DEL     Delete Patient from the Register
   RR      Register Reports ...

Select Register Maintenance Option: AP  Add Patients from Template
```

Figure 5-4: Transferring Patients from a QMan-Generated Search Template (steps 1–2)

3. Type **PTS FOR IHS DIABETES REGISTER** at the "Which Search Template" prompt. If the transfer is approved the system will then move all of the patients from the search template into the IHS Diabetes Register and assign them the status of ACTIVE.

```
              Select SEARCH TEMPLATE to transfer
              patients to the Diabetes Register


Which SEARCH TEMPLATE: 890926

(Jun 23, 2018)       User #2881 File #2    INQ


         There are 1 patients in this SEARCH TEMPLATE.

    SEARCH SPECIFICATION NOT ENTERED


         The following transfer has been selected:

         From SEARCH TEMPLATE: 890926
           To CMS register:  IHS DIABETES
         Transfer Status:    A - ACTIVE

         Is that what you want? No// Y



         Transfer of patients is complete.
         All patients should be reviewed and all
         patient data updated in the IHS DIABETES register
```

Figure 5-5: Transferring Patients from a QMan-Generated Search Template (step 3)

When this process is complete, you should review the patients transferred into the register to determine their appropriateness. You may delete patients or change their status to Inactive, Transient, Unreviewed, Deceased, Lost to Followup, Non-IHS, or Noncompliant using the **Edit Register Data** option under the Patient Management menu.

5.3   Adding Patients Using REG Mnemonic

If a provider notes that a patient is not on the Diabetes Register or a related Register, they may alert PCC Data Entry staff to add that patient to the appropriate Register. The provider must identify the Register to which they wish the patient added. For example, if a provider wishes a patient be added to the IHS DIABETES Register he/she would record REG- IHS DIABETES in the Chief Complaint section of the PCC Encounter Form. Data Entry staff may then use the REG mnemonic to add the patient to the specified register.

> **Note**: The REG mnemonic is distributed as Not Allowed in PCC
> Data Entry patch 8. In order to use this mnemonic, the Data
> Entry Supervisor will need to use the **MNE Update PCC
> Mnemonic's Allowed/Not Allowed** menu option to allow
> use of this mnemonic.

When using the REG mnemonic, Data Entry staff will need to select which type of Register will be updated. The Diabetes Registers are Case Management Registers. A sample dialogue of using the REG mnemonic is displayed below.

```
MNEMONIC: REG [ENT]      Add Patient to a Register    ALLOWED     NON-
VISIT/VISIT MNEMONIC
The following is a list of registers this patient can be added to.
If you choose a CASE MANAGEMENT REGISTER you will be prompted to
enter which of the 36 CMS registers to add the patient to.

 1) IMMUNIZATION REGISTER
 2) ASTHMA REGISTER
 3) WOMEN'S HEALTH REGISTER
 4) CASE MANAGEMENT REGISTER

Enter the REGISTER you wish to add WATERMAN,BECKY to: (1-99999): //4[ENT]
Enter the name of the CASE MANAGEMENT Register: IHS DIABETES [ENT]

        Adding WATERMAN,BECKY
            to the IHS DIABETES REGISTER CMS Register.

WATERMAN,BECKY has been added to the IHS DIABETES REGISTER Register.
```

Figure 5-6: Sample dialogue of using the REG mnemonic

5.4   Deleting Patients from the Register

This option may be used to remove a patient from the Register if the patient is no longer active, is deceased, or has moved. The recommendation is to use this option only to remove patients from the Register if they do not have a diagnosis of diabetes. Other patients may be moved into a different Status category as opposed to deleting them. Deleting a patient from the Register results in the loss of any data that may have been stored in the Register for that patient including diagnosis, date of onset, complications, date of onset of complications, or date added to the register.

To delete a patient from the register, type **DEL** at the "Select Diabetes Management System Option" prompt. When prompted, type the chart number or name of the patient to be deleted from the register. You will be warned that all data on that patient will be removed from the IHS Diabetes Register. If you are certain, type **YES**. The dialogue will indicate that deletion of that patient from the IHS Diabetes Register is complete.

```
    RM      Register Management ...
    PM      Patient Management
    AP      Add Patients from Template
    DEL     Delete Patient from the Register
    RR      Register Reports ...


Select Register Maintenance Option: DEL [ENT]

 DEL [ENT]
```

Figure 5-7: Deleting patients from the register

5.5   Periodic Addition of New Cases to Your Register

After your register is installed and your initial group of patients has been entered, enter newly diagnosed cases using the manual entry process described. It is critical that the local Diabetes Coordinator is notified as new patients are diagnosed or move into the service area. There are several mechanisms to identify patients newly diagnosed with diabetes, but no mechanism exists for adding patients automatically to the Register. The four methods of identification are described below.

Referral Copy of PCC Form

When a healthcare provider diagnoses a new case of diabetes, diagnoses a new complication, or is aware that the patient being seen for diabetes is new to the facility, the provider should indicate a referral to the Diabetes Coordinator in the lower right section of the PCC Encounter Form and forward the referral (yellow) copy of the form to the Diabetes Coordinator. Medical Records staff should be alert to these referrals and forward the yellow copy to the Diabetes Coordinator if the provider of service has not already done so. The provider may also make a notation on the PCC Encounter form for Data Entry staff to add this patient to the Diabetes Register. This may be accomplished by the Data Entry operator using the REG mnemonic for a Case Management Register.

Notation on Health Summary or Case Summary

Some facilities use the PCC Health Summary and/or the Case Management System Case Summary as turn-around documents. Following review of the Health Summary or Case Summary, the provider may make notations on the Summary regarding new diabetes cases or new diabetes complications and forward the Summary to the Diabetes Coordinator for updating the register.

QMan Search

Using QMan, you can print a list of newly diagnosed cases or new complications since your last update of the register. The list should be reviewed by the Diabetes Coordinator and appropriate entries made in the register. The following QMan dialogue (Figure 5-8) is used to find new cases or complications. User responses and instructions are in bold type.

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


    Subject: LIVING PATIENTS
    Attribute of Living Patients:   DX
    ENTER DX: [SURVEILLANCE DIABETES]
Enter Another DX:  [ENT]
Want to save this group for future use?  YES
Enter name for this taxonomy:  DM & COMPLICATIONS CODES
First condition of Diagnosis:  FIRST
How many?  1
Next condition of Diagnosis:  SINCE
Exact Date:  (Enter date you last updated register with new cases and/or
complications.)
Next condition of Diagnosis:  [ENT]
Attribute of Living Patients: [ENT]

*** Q-Man Output Options ***
Select one of the following:
  1  DISPLAY results on the screen
  2  PRINT results on paper
  3  COUNT 'hits'
  4  STORE results of a search in a FM search template
  5  SAVE search logic for future use
  6  R-MAN special report generator
```

```
   9  HELP
   0  EXIT
Your choice:  2 - Print Results
Device:  (Enter printer device number.)
```

Figure 5-8: QMan search

After you have printed the results of your QMan search, you can review charts and manually add the patients on your list to the Diabetes Register using the PM Patient Management menu option.

Mailman Bulletin

Each time a diagnosis of diabetes or one of the standard complications is entered into the PCC, a program will determine if this is a new case or new complication for the patient at your facility. If it is new, a Bulletin will be generated in the RPMS Mailman System announcing the new case. See the example in Figure 5-9:

```
Subj: DM NEW CASE  [#6732] 19 November 18 13:10  20 Lines
From: POSTMASTER  in 'IN' basket.   Page 1  **NEW**
---------------------------------------------------------------------
     Patient Name: TEST,PATIENT           SSN: 222-22-2222
     Chart No.: HC 27689   DOB: 10/12/1953

     This patient was seen on NOV 18, 2018 @14:04 at IHS FACILITY
     with the following diagnosis:

     ICD10 Code: E10.9  ICD Description: DM UNCOMPL/T-II/NIDDM,UNCONTR
     Provider Stated: DM TYPE 2 - UNCONTROLLED
     Patient's Community: IHS COMMUNITY
     Patient's Service Unit: IHS SERVICE UNIT
     Patient's Tribe: NON-INDIAN BENEFICIARY
     Tribal Blood Quantum: NONE


     Patient's Health Records:
This is the first time that this patient has been seen for the diabetes
diagnosis listed above.  Please take appropriate follow up action.


Select MESSAGE Action: IGNORE (in IN basket)/ /
```

Figure 5-9: MailMan bulletin

The Bulletin, or Mail Message, will be automatically routed to the local Diabetes Coordinator. Each time the Coordinator signs on to RPMS, the Coordinator will be notified that new mail messages are waiting to be read. If you are not already using Mailman within your facility, you will need to discuss this capability with your Site Manager.

> **Note**: See Appendix B: for directions on setting up this automatic
> notification system.

6.0   Patient Management

The IHS Diabetes Register has been designed to minimize the data entry required for maintenance. One key to achieving this goal is to optimize the use of data entered through the PCC process. Another key is to limit the non-PCC data maintained in the register to as few items as possible and to items that require infrequent updating after initial entry into the register.

```
All data items are entered or modified on the Patient Screen that is
displayed when the main menu option, PM Patient Management is selected.  To
initiate an interactive session, enter the patient name or chart number.
   RM      Register Management ...
   PM      Patient Management
   AP      Add Patients from Template
   DEL     Delete Patient from the Register
   RR      Register Reports ...




Select Register Maintenance Option: PM

Select PATIENT NAME: PATIENT,BARRY
```

Figure 6-1: Selecting the PM option

6.1   Edit Register Data

If the patient is a new addition to the Register, only demographic data from Registration will display as shown in Figure 6-2 may be added or updated using option **1 Edit Register Data**.

```
Register Data              Nov 14, 2018 12:17:06        Page:  1 of  1
      PATIENT: TEST,PATIENT TEN                         AGE: 18
      ADDRESS:                                          DOB: 01/01/2000
        PHONE:                                          HRN: 123456
PRIM CARE PROV:                                         RES: TOPPENISH
CY
       STATUS: ACTIVE
WHERE FOLLOWED:
 REGISTER PROV:
     CASE MGR:
      CONTACT:
   ENTRY DATE: NOV 14,2018                     LAST EDITED:
    DIAGNOSIS: (NO DIAGNOSIS ON FILE FOR THIS PATIENT)
COMMENTS:
LOCAL OPTION:
LOCAL OPTION TEXT:

- Previous Screen       QU Quit          ?? for More Actions
1  Register Status      6  Comments              11 Health Summary
2  Where Followed       7  Local Option Entry    12 DM Care Summary
(DPCS)
3  Case Manager         8  Last Visit            13 Print Letter
4  Client Contact       9  Review Appointments   Q  Quit
5  DX/Date of Onset     10 Audit Status
```

```
Select Action: Quit// 1
```

Figure 6-2: Editing register data

Very few data items are included in the register itself. These items should be entered when you add patients to the register and modified as needed.

You may enter data into each field beginning with the **Status** field. Press Enter after recording data or press Tab to move through the fields to be edited.

Typing one question mark (**?**) at each field will display the choices or the type of data to be entered:

STATUS:

A   Active – Patients who receive their primary health care at your facility and who have had care at your facility within the last year.

I   Inactive – Patients not seen within the last two years.

T   Transient – Patients seen at your clinic within the past year who do *not* receive their primary diabetic care at your facility, but only visit your clinic periodically for medications, or other services.

U   Unreviewed – Patients on the Register who have not had a chart audit and medical review.

D   Deceased – Patients who are deceased. Note that this status will be automatically updated if a date of death is recorded in Registration. However, if a patient's status is changed to deceased in the Register, the patient registration file is not automatically updated.

N   Non-IHS - Non-Indian patients who receive their diabetic care at your facility.

L   Lost to Follow-up – patients seen at your facility within the past two years but who have not had a visit in the last year.

N   Noncompliant – Patients with repeated documented refusals of recommended services.

> **Note**:   Most of the register reports include only active patients.

WHERE FOLLOWED: (Optional) **2 Where Followed** – If the service unit has one or more field clinics, health clinics, or health stations, it may be of value identifying the facility where the patient routinely goes for health care.

REGISTER PROV: (Optional) This is the provider that has been assigned (has assumed responsibility) for a patient's Diabetes care. The Register Provider is not necessarily the same person as the patient's Primary Care Provider. The provider may be entered by entering Last Name, First Name.

CASE MGR: (Optional) – **3 Case Manager** This is the nurse or health care provider that has been assigned or has assumed responsibility for managing a patient's health care.

CONTACT: (Optional) – **4 Client Contact** Type Name of Contact. This is a free text entry of 1–30 characters to identify an alternative contact if a patient does not have a telephone.

ENTRY DATE: This date is entered automatically when the patient is added to the Register. You may override this date with a date from your records.

LAST EDITED: This field is filled automatically by the system with the date you or another authorized system user last entered or modified any data.

DIAGNOSIS: Enter the Diabetes diagnosis from the list. Make sure that the same Diabetes diagnosis is on the patient's Integrated Problem List (IPL), sot that other clinicians can see it.

ONSET DATE: Enter the Date of Onset for the Diabetes diagnosis. Make sure that the Date of Onset is also documented on the patient's Integrated Problem List (IPL), so that other clinicians can see it.

If you wish to return to a field to modify the data, you may type a caret (^) followed by the name of that field or caption to return. When all data is entered, at the "Command" prompt, type **S** and press Enter to save your entries. Then, type **E** and press Enter to exit the **Edit Register Data** option.

6.2   6Adding Diagnosis

To add or modify Diagnosis for a patient, choose **5 Diagnosis** from the menu screen. You will have the option to edit an existing Diagnosis, add a new Diagnosis, or delete a Diagnosis.

```
Register Data              Nov 16, 2018 14:20:36        Page: 1 of 1
      PATIENT: TEST,PATIENT TEN                          AGE: 18
      ADDRESS:                                           DOB: 01/01/2000
        PHONE:                                           HRN: 123456
PRIM CARE PROV:                                          RES: TOPPENISH
CY
       STATUS: ACTIVE
WHERE FOLLOWED:
 REGISTER PROV:
      CASE MGR:
       CONTACT:
```

```
     ENTRY DATE: NOV 14,2018                  LAST EDITED: NOV 16,2018
      DIAGNOSIS: (NO DIAGNOSIS ON FILE FOR THIS PATIENT)
COMMENTS:
LOCAL OPTION:
LOCAL OPTION TEXT:

- Previous Screen         QU Quit          ?? for More Actions
1  Register Status        6  Comments              11 Health Summary
2  Where Followed         7  Local Option Entry    12 DM Care Summary
(DPCS)
3  Case Manager           8  Last Visit            13 Print Letter
4  Client Contact         9  Review Appointments   Q  Quit
5  DX/Date of Onset       10 Audit Status


Select Action: Quit// 5
```

Figure 6-3: Adding complications, screen 1

In the patient example given, **Impaired Glucose Tolerance** is currently listed. So, another Diagnosis will be added, **Type 2**.

```
Complications           Sep 21, 1999 14:32:44      Page:  1 of  0
Register Diagnoses           Nov 16, 2018 08:10:58       Page:   1 of
1
Make sure that the date of onset is also documented on the
patient's problem list so other clinician's can see it.
Problem list entries can be modified using EHR.

DIABETES RELATED PROBLEMS ON THE PROBLEM LIST
PROB #  DX          PROVIDER NARRATIVE                  DATE OF ONSET
STATUS
-------------------------------------------------------------------------------
----
None on file

    Register Diagnosis
    NO.  Diagnosis                     ONSET DATE
    ---  ------------------------------ ----------
    1    IMPAIRED GLUCOSE TOLERANCE     NOV 15,2018



- Previous Screen         QU Quit         ?? for More Actions
1 Add Diagnosis   2  Edit Diagnosis    3  Delete Diagnosis
Select Action: Quit// 1
```

Figure 6-4: Adding complications, screen 2

You will be given the choice of entering one or more of the following Diagnoses.

> **Note**: This display is the Diagnosis List created under Register
>   Maintenance.

```
1    IMPAIRED GLUCOSE TOLERANCE
2    GESTATIONAL DM
3    TYPE 1
```

```
4     TYPE 2
```

Figure 6-5: Diagnosis, screen 3

When prompted for Which DIAGNOSIS (1-4):, enter the number.

To add Onset Date and other details for each Diagnosis, choose option, **2 Edit**.

You will be prompted to choose the number of the Diagnosis you wish to edit. A window will display with prompts for DATE OF ONSET, SEVERITY. Use the Tab key to move between fields. To display the list of Diagnosis Severity, at the caption, SEVERITY: type one question mark (**?**). A list of four choices will be displayed for you to select from. Diagnosis Severity is not a required entry.

```
N       NORMAL
M       MILD
MO      MODERATE
S       SEVERE
Diagnosis
    NO.  Diagnosis                        ONSET DATE
    ---  ----------------------------     ----------
    1    IMPAIRED GLUCOSE TOLERANCE       NOV 2018

- Previous Screen        QU Quit          ?? for More Actions
1  Add Diagnosis    2  Edit Diagnosis    3   Delete Diagnosis
Select Action: Quit// [ENT]
```

6.3   Add Case Comments

Free text case comments may be added to the Register indicating either nursing care plans, patient history or other information relevant to a patient's care. Select option **6 Comments.**

```
Register Data              Nov 14, 2018 15:48:20      Page: 1 of  1
      PATIENT: TEST,PATIENT TEN                        AGE: 18
      ADDRESS:                                         DOB: 01/01/2000
        PHONE:                                         HRN: 123456
PRIM CARE PROV:                                        RES: TOPPENISH
CY
        STATUS: ACTIVE
WHERE FOLLOWED:
 REGISTER PROV:
      CASE MGR:
       CONTACT:
    ENTRY DATE: NOV 14,2018                   LAST EDITED: NOV 16,2018
     DIAGNOSIS: (NO DIAGNOSIS ON FILE FOR THIS PATIENT)
COMMENTS:
LOCAL OPTION:
LOCAL OPTION TEXT:
- Previous Screen        QU Quit          ?? for More Actions
1  Register Status      6  Comments              11 Health Summary
2  Where Followed       7  Local Option Entry    12 DM Care Summary
(DPCS)
3  Case Manager         8  Last Visit            13 Print Letter
```

```
4  Client Contact          9  Review Appointments    Q  Quit
5  DX/Date of Onset        10 Audit Status
Select Action: Quit// 6
```

Figure 6-6: Adding case comments, screen 1

To add Comments, select option **1 Edit Comments**. A window will open, displaying the patient's name. To enter free-text comments, press Enter at the "Comments" prompt to open a word-processing field.

```
PATIENT: GREENJEANS,BARRY

 (Press the Enter key to edit COMMENTS or <TAB> to skip.)
 COMMENTS:  [ENT]


Exit     Save     Refresh
Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND:                               Press <PF1>H for help    Insert
```

Figure 6-7: Adding case comments, screen 2

Enter free-text comments just as you would using any word processor. The lines will wrap automatically. Press F1 followed by the H key to display all the options for editing text.

```
==[ WRAP ]==[ INSERT ]======< CASE COMMENTS >======[ <PF1>H=Help ]====
This 36 year old patient was brought in by his wife because of recent
excessive weight loss, lack of energy, and loss of appetite.  By his own
account, he is a heavy drinker and smoker.  He is employed as a long
distance driver for a trucking firm.  DKR 05/2/03
```

Figure 6-8: Adding case comments, screen 3

Neither the date of the comment entry nor the identity of the person entering the text is stored with a comment. Therefore, it is recommended that any comment entry be accompanied by date and initials. When all comments have been entered, press the F1 key (PF1) followed by E to close the word processing window. You may save and exit from the comment option by typing **S** and pressing Enter, followed by typing E and pressing Enter. Exit the Comment window by typing **Q** to Quit or pressing Enter.

> **Note**:   The Case Summary is the only option that allows display of case comments entered via this menu option.

6.4   Local Option Entry

The local option entry may be edited by selecting **7 Local Option Entry**. Enter 0–9 at the prompt then enter the appropriate text.

6.5   Last Visit

The last visit the patient has made to your healthcare facility may be displayed by selecting **8 Last Visit**. All visit-related data for that date will be displayed including purpose of visit, providers, measurements, exams, and labs.

6.6   Review Appointments

To review future appointments for a patient, select **9 Review Appointments**. This option will display future appointments only if the RPMS Scheduling Package is used at your facility.

6.7   Audit Status

The status of compliance with the IHS Diabetes Standards of Care can be monitored at any time for a single patient by selecting **10 Audit Status**. You will be prompted to enter a date. This date will be considered the ending date of the audit period. For most data items, all data for the period one year prior to this date will be reviewed. This allows the provider to determine which standards of diabetes care have not been met prior to the date of this visit. Future dates may be used.

6.8   Health Summary

The Health Summary for the patient may be displayed by selecting **11 Health Summary**. You will be prompted for Health Summary Type and may select any of the standard IHS distributed Health Summaries or a custom site-developed Health Summary. All of the secondary menu options discussed in Table 2-1 of this manual may be used for searching, displaying, or printing data from this health summary.

6.9   Case Summary

The Case Summary for a patient may be displayed by selecting option **12 Case Summary**. You will be prompted as to whether you want to also display the PCC Health Summary. The display of the Case Summary may require several screens, therefore the display and print options described in Table 2-1 may be used. Typing two question marks (**??**) will display the choices.

> **Note**:   The Case Summary is the only menu option that allows
>   display of case comments.

```
Browse on Screen            Nov 16, 2018 10:39:51    Page:  1 of 2
********** CONFIDENTIAL PATIENT INFORMATION [LVB]  Nov 16, 2018 **********
DIABETES PATIENT CARE SUMMARY          Report Date:  11/16/2018


Patient: TEST,PATIENT TEN                HRN: 123456


DATE OF DEATH: 01/18/2015


Age:  DECEASED: 01/18/2015 (DOB 01/01/2Sex: FEMALE00)
CLASS/BEN: INDIAN/ALASKA NATIVE        Designated PCP:


Date of DM Diagnosis:
Diabetes type: (1 or 2):


BMI:        Last Height:  0.00
            Last Weight:


Tobacco Use:


+         Enter ?? for more actions
+   NEXT SCREEN          -    PREVIOUS SCREEN      Q    QUIT
Select Action: +//
```

Figure 6-9: Adding case comments, screen 3

6.10   Print Letter

A custom letter to the patient can be generated by choosing menu option **13 Print Letter**. Developing letters suitable for different situations can be performed by using **Add/Edit DMS Letters** under the Register Maintenance Menu Option described in Section 4.1.

When the **Print Letter** option is selected, you will be prompted with a list of custom Diabetes Management Letters. Select the number of the letter you wish to print and enter the Device number of the printer you wish to use.

7.0   Register Reports (RR)

Numerous reports can be generated from the IHS Diabetes Register through the
Diabetes Management System's Register Reports option. These reports contain a
combination of demographic data, clinical data from the PCC, and register data that
you have entered.

To generate reports of your register data, use the **RR** Register Reports option on the
Diabetes Management System main menu.

```
          THIS SYSTEM CONTAINS CONFIDENTIAL PATIENT INFORMATION COVERED
          BY THE PRIVACY ACT.  UNAUTHORIZED USE OF THIS DATA IS ILLEGAL
              ****************************************************
              **              DIABETES MANAGEMENT SYSTEM         **
              ****************************************************
                            VERSION 2.0 (Patch 12)
                          2013 DEMO HOSPITAL (CMBA)
                            REGISTER MAINTENANCE


   RM      Register Management ...
   PM      Patient Management
   AP      Add Patients from Template
   DEL     Delete Patient from the Register
   RR      Register Reports ...


 Select Register Maintenance Option: RR  Register Reports
```

Figure 7-1: Selecting the RR option

By selecting **RR Register Reports** you can choose to display or print register data in
a number of different ways. The reports listed in Figure 7-2 are available.

```
          THIS SYSTEM CONTAINS CONFIDENTIAL PATIENT INFORMATION COVERED
          BY THE PRIVACY ACT.  UNAUTHORIZED USE OF THIS DATA IS ILLEGAL
              ****************************************************
              **              DIABETES MANAGEMENT SYSTEM         **
              ****************************************************
                            VERSION 2.0 (Patch 12)
                          2013 DEMO HOSPITAL (CMBA)
                            REGISTER REPORTS MENU

   CS      Individual Register Patient Case Summary
   MS      Multiple Register Patient Case Summaries
   ML      Master List
   GEN     Register Patient General Retrieval (Lister)
   PR      Patient and Statistical Reports
   LPRA    List Patients on a Register w/an Appointment
   NDOO    DM Register Pts w/no recorded DM Date of Onset
   FU      Follow-up Needed

 Select Register Reports Option:
```

Figure 7-2: Register Reports Menu

7.1   Individual Register Patient Case Summary (CS)

The Case Summary displays or prints all data contained in the Diabetes Management System for a single patient. For the IHS Diabetes Register, this includes demographic information, register status data, diabetes diagnosis, complications, review dates, and any case comments that have been entered. The Case Summary also includes the patient's PCC Problem List. To produce an individual Case Summary, select the **Individual Case Summary** menu option and enter the patient's name or chart number. The Case Summary is generated instantaneously. You have the option of including a PCC Health Summary at the end of the Case Summary. For this report, you may retrieve data for all patients on the Diabetes Register regardless of status.

```
     Select DIABETES Register


     ---  -----------------------------
     1    2017 DIABETES REGISTER
     2    IHS DIABETES
     3    IHS PRE-DIABETES
     4    LORI'S DIABETES REGISTER
     5    MOHAVE DIABETES REGISTER
     6    PARKER DIABETES REGISTER

Which REGISTER:  (1-6):
```

Figure 7-3: Select Register

7.2   Multiple Register Patient Case Summaries (MS)

This option allows you to produce Case Summaries (Section 7.1) for all patients or a subset of patients in your IHS Diabetes Register. After selecting the option, you will be asked to specify a sorting order for the Case Summaries. You may sort by Patient (alphabetical order), Community of Residence, Facility where Followed, Case Manager, or Next Review Date. After selecting the sort order, you will specify whether to retrieve data for everyone in the register or for a subset of patients. For example, if you select Community for the sort order, you can print all patients in the register grouped by community, or you can choose a specific community in order to print only those patients within that particular community. Likewise, if you select Next Review Date as your sort order, you can specify a time period and list only those patients whose next review date falls in that range or list all patients in the register in the order of their next review date. This option retrieves only active patients. All other patients are excluded. You may save your report results in a search template for later data retrievals.

```
                    2013 DEMO HOSPITAL (CMBA)
                          DEMO,SKIP


              DIABETES REGISTER MULTIPLE PATIENTS SUMMARIES

This report will print patient summaries for a selected set of patients.
You may select individual patients by name/HRN or you may select a group
```

```
of patients by any combination of the following attributes:- Register
Status
     - Community of Residence
     - Case Manager
     - Where Followed
     - Next Review Date


Enter the Name of the Register: 2017 DIABETES REGISTER

     Select one of the following:

          I          Individual Patient Names/HRNs
          A          Group of Patients by Attribute

Select Patients By: I// ndividual Patient Names/HRNs
Select PATIENT NAME: demo
   1    DEMO,ALISTER LANE          <A>   M 05-20-1980 XXX-XX-4693   TST
124625
   2    DEMO,ASHLEY                <A>   F 02-25-1930 XXX-XX-5631   TST
114649
   3    DEMO,BENJAMIN SR                 M 08-06-2012 XXX-XX-9932   TST
893856
   4    DEMO,DEJON                       M 11-27-2002 XXX-XX-0095   TST
115569
   5    DEMO,FERN                  <A>   M 01-01-1960 XXX-XX-1230   TST
142601
ENTER '^' TO STOP, OR
CHOOSE 1-5: 2
  DEMO,ASHLEY                      <A>   F 02-25-1930 XXX-XX-5631   TST
114649
Select PATIENT NAME:

Include PCC HEALTH SUMMARY? NO//
DEVICE: HOME//   Virtual
```

Figure 7-4: Multiple Register Patient Case Summaries Prompts

```
     ********** CONFIDENTIAL PATIENT INFORMATION  **********
***************  2017 DIABETES REGISTER     REGISTER
********************
     CLIENT:  DEMO,ASHLEY                         CHART:  114649
                                PRIMARY CARE PROVIDER: DEMO,DONNA
        DOB: FEB 25,1930                          AGE: 88 YRS
    CONTACT: NOT STATED                      COMMUNITY: PARKER
                                            HOME PHONE: 555-555-9833
************************   INSURANCE INFORMATION
**************************
INSURANCE                     NUMBER     SUFF COV  EL DATE  SIG DATE END
DATE

     ********************   PATIENT INFORMATION
************************
     STATUS: ACTIVE                      CASE PRIORIT: NOT STATED
     REGISTER PRV: NONE ASSIGNED         INIT ENTRY: FEB 8,2018
     CASE MANAGER: NONE ASSIGNED         WHERE FLWD: NOT STATED
     PUB HLTH NRS:NONE ASSIGNED

End of report for ASHLEY DEMO
```

```
Press <ENTER> to continue.....
```

Figure 7-5: Patient Summary

7.3   Master List (ML)

The Diabetes Management Master List produces a list of all active patients and displays their Chart Number, Case Manager, Public Health Nurse, and Next Review Date. You can sort the list by Patient Name (alphabetical order), Age, Community of Residence, Case Manager, Public Health Nurse, Sex, Status*, or Facility where Followed. You may also sort by a combination of these register items, for example, alphabetical order by Patient Name by Community. The report output may be stored in a search template to be used for additional data retrievals.

> **Note**: Inactive, Transient, Unreviewed, Deceased, Lost to Follow-up, Non-IHS, and Noncompliant patients are included when the Master List is sorted by Status. If you choose to sort patients by Status, you may list patients for one or more of the status categories. This is the only report in Diabetes Management, other than Individual Case Summary and General Retrieval that displays patients who are not classified as Active.

```
                        2013 DEMO HOSPITAL (CMBA)
                              DEMO,SKIP

                        DIABETES REGISTER MASTER LIST

This report will list all patients on the Diabetes Register.
You will be able to select which patients will be included on the list
based on any of the following:
     - Register Status
     - Age
     - Community of Residence
     - Gender
     - Case Manager
     - Where Followed


Enter the Name of the Register: 2017 DIABETES REGISTER
Do you want to select register patients with a particular status? Y// ES
Select status: A// ACTIVE
Select another status:

Would you like to restrict the master list by Patient age range? NO//

     Select one of the following:

          O          One particular Community
          A          All Communities
          S          Selected Set of Communities (Taxonomy)

Include Patients: A// ll Communities
```

```
        Select one of the following:

             M          MALES
             F          FEMALES
             U          UNKNOWN
             A          ALL Genders

Include which Gender(s): A// LL Genders
Do you want to select register patients with a particular CASE MANAGER? N//
O
Do you want to select patients with a particular facility WHERE FOLLOWED?
N// O

This list can be sorted by a primary and optionally a secondary sort value.


        Select one of the following:

             P          Patient Name
             S          Register Status
             A          Age
             C          Community
             G          Gender
             M          Case Manager
             W          Where Followed

Select Primary Sort Value: Patient Name
You can optionally sort by a second sort value.  If you do not pick a
secondary sort value it will default to patient name.


        Select one of the following:


             S          Register Status
             A          Age
             C          Community
             G          Gender
             M          Case Manager
             W          Where Followed

Select Secondary Sort Value: Age

        Select one of the following:

             P          Print the List
             B          Browse the List on the Screen
             S          Save as a Search Template

Output Type: P// Browse the List on the Screen

        Select one of the following:

             I          Include ALL Patients
             E          Exclude DEMO Patients
             O          Include ONLY DEMO Patients

Demo Patient Inclusion/Exclusion: E// Include ALL Patients
```

Figure 7-6: Diabetes Register Master List Prompts

```
OUTPUT BROWSER                 Nov 12, 2018 14:33:47        Page:    1 of
3

             ********** CONFIDENTIAL PATIENT INFORMATION **********
SHS                                                                    Page
1
                         2013 DEMO HOSPITAL (CMBA)
                         DIABETES REGISTER MASTER LIST
             Total number of patient selected for this report: 34


                                             LAST        LAST       NEXT
HRN     PATIENT                 CASE MANAGER  VISIT       REVIEW     NEXT
REVIEW
------------------------------------------------------------------------
----

894038  DEMO,CARRIE                          12/01/17
101465  DEMO,MARIE                           11/04/18  01/23/17
04/24/17
106581  DEMORADO,PHYLLIS N                   02/07/16
890625  DEMOSO,MONICA                        12/15/15
115425  DEMOA,GARRETT WILLIA                 11/19/16
+       Enter ?? for more actions
>>>
+    NEXT SCREEN         -    PREVIOUS SCREEN    Q    QUIT
Select Action: +//
```

Figure 7-7: Diabetes Register Master List Output

7.4   Register Patient General Retrieval (Lister) (GEN)

This report produces a list of patients on the Diabetes Register by the criteria that you choose. The report format is extremely flexible; you can specify the selection criteria, the data items to be printed, and the sorting order. You can print a detailed patient list or just counts of those patients that match the criteria you select. The first page of the report output is a summary page that displays the selection criteria, print items, and sort variable that you have requested.

> **Note**: Only the items selected as a Component Item of your
>   Register will appear as a choice of selection.

After selecting the report option, enter the name of a previously defined report or press Enter to bypass the first prompt. Then, in three separate steps, you will be prompted to identify your selection criteria, data items to print for each patient, and the sorting order. All of the selections are listed in Figure 7-8. You may save the selected variables for future use by entering **YES** when prompted to save them and then naming the report template.

If you design a report that is 80 characters or fewer in width, it can be displayed on the screen or printed. If your report is 81 to 132 characters wide, it must be printed on a printer capable of producing 132-character lines or a printer set up for condensed print.

Selection Criteria

```
REGISTER:  IHS DIABETES

                CASE MANAGEMENT REGISTER PATIENT GENERAL RETRIEVAL


This report will produce a listing of Patients on a Register selected by the
user.  You will be asked (in three separate steps) to identify your
selection criteria; what you wish displayed for each patitent; and the
sorting order for your list.  You may save the logic used to produce the report
for future use.  If you design a report that is 80 characters or less in width,
it can be displayed on your screen or printed.  If your report is 81-132
characters wide, it must be printed - and only on a printer capable of
producing 132 character lines.




Do you want to use a PREVIOUSLY DEFINED REPORT? N//


The Patients displayed can be SEARCHED based on any of the following criteria:

1)   Patient Name         14)  Class/Beneficiary    27)  Next Review Date
2)   Patient Sex          15)  Cause of Death       28)  Where PT Followed
3)   Patient DOB          16)  Medicare Eligibility 29)  Date Last Edited
4)   Birth Month          17)  Medicaid Eligibility 30)  Register Provider
5)   Patient Age          18)  Priv Ins Eligibility 31)  Care-Plan Comment
6)   Patient DOD          19)  Primary Care Provide 32)  Complications
7)   Mlg Address-State    20)  Register Status      33)  Complication Comment
8)   Mlg Address-Zip Code 21)  Initial Entry Date   34)  Diagnoses
9)   Living Patients      22)  Inactivation Date    35)  Date of Onset
10)  Chart Facility       23)  Case Priority        36)  Recall Date
11)  Patient Community    24)  Case Manager
12)  Patient Tribe        25)  PHN
13)  Eligibility Status   26)  Last Review

        <Enter a list or a range.  E.g. 1-4,5,20 or 10,12,20,30>
        <<HIT RETURN to conclude selections or bypass screens>>

      Select Patients based on which of the above:  (1-34):
```

Figure 7-8: Register Patient General Retrieval (Lister)

After pressing Enter to use all the patients in the Register or entering specific selection criteria, you can choose to select one of the following:

T Total Count Only

S Sub-counts and Total Count

D Detailed Patient Listing

F Delimited Export File

If the delimited export file option is chosen, a file name will be assigned by the system. This file will be written and reside on the main RPMS server. Make a note of the file name as you will have to request that this file be emailed, sent via FTP, or returned to you on a floppy disk, CD, or USB device by your site manager. If you choose to continue, you can select from the list of fields to be included in the file. The resulting file can be imported into Excel, ACCESS, SAS, or a variety of PC-based programs used for data analysis.

```
      Choose Type of Report: D// F  Delimited Export File


I am going to create a file called ACM612.5 which will reside in
the C:\EXPORT directory.
Actually, the file will be placed in the same directory that the data
export globals are placed.  See your site manager for assistance in finding
the file after it is created.  PLEASE jot down and remember the following
file name:
                **********   ACM612.5    **********

The records that are generated will be '^' delimited.  The fields
will be the fields you select in the next screen and will be in the order
that you select them.


Do you want to continue?? Y// [ENT]


REGISTER:  2017 DIABETES REGISTER    USER:  DEMO,SKIP
                            PRINT Data Items Menu
The following data items can be selected to be output to a '^' delimited
file.
Choose the data items in the order you want them to be output.

1)   Patient Name          13)   Home Phone           25)   Case Priority
2)   Patient Chart #       14)   Mother's Name        26)   Case Manager
3)   Patient Sex           15)   Patient Community     27)   PHN
4)   Patient SSN           16)   Patient Tribe         28)   Last Review Date
5)   Patient DOB           17)   Eligibility Status    29)   Next Review Date
6)   Birth Month           18)   Class/Beneficiary     30)   Where PT Followed
7)   Patient Age           19)   Cause of Death        31)   Date Last Edited
8)   Patient DOD           20)   Patient's Last Visit  32)   Client Contact
9)   Mlg Address-Street    21)   Primary Care Provide  33)   Register Provider
10)  Mlg Address-State     22)   Register Status
11)  Mlg Address-City      23)   Initial Entry Date
12)  Mlg Address-Zip Code  24)   Inactivation Date
        <Enter a list or a range.  E.g. 1-4,5,18 or 10,12,18,30>
        <<HIT RETURN to conclude selections or '^' to exit>>
Select print item(s):  (1-33):
     Items selected for flat file output:
           Patient Name
           Patient Chart #
           Patient Sex
           Patient SSN
           Patient DOB
           Classification/Beneficiary

 Would you like to select additional PRINT criteria? NO//
```

Figure 7-9: Register Patient General Retrieval (Lister), screen 2

```
REGISTER:  2017 DIABETES REGISTER     USER:  DEMO,SKIP

The Patients displayed can be SORTED by any one of the following:

    1)   Patient Name                    15)   Next Review Date
    2)   Patient Age                     16)   Date Last Edited
    3)   Patient Community               17)   Case Priority
    4)   Patient Sex                     18)   Case Manager
    5)   Patient Tribe                   19)   PHN
    6)   Patient Chart #                 20)   Where PT Followed
    7)   Primary Care Provider (PCC)     21)   Register Provider
    8)   Classification/Beneficiary      22)   Inactivation Date
    9)   Eligibility Status              23)   Initial Entry Date
    10)  Cause of Death                  24)   Mlg Address-Zip Code
    11)  Patient DOB                     25)   Mlg Address-State
    12)  Patient DOD                     26)   Birth Month
    13)  Register Status
    14)  Last Review Date

<<If you don't select a sort criteria the report will be sorted by Patient
Name.>>

Sort Patients by which of the above:  (1-26):
```

Figure 7-10: Register Patient General Retrieval (Lister), screen 3

If you do not select a sort criterion the file will be sorted alphabetically by Patient Name.

Users can seek assistance from Area Diabetes Consultants for importing this flat file, delimited by the caret (^), into a PC-based software program.

If the option to print a Total Count is chosen, the total number of patients meeting the search criteria is displayed. If the option for Sub-counts and Total Counts is chosen, you will be prompted to indicate how you would like to have the counts sorted. For example, if you would like to do a count of your diabetic register patients sorted by community, you can press Enter on the Search screen, then select Community on the Sort screen. The resulting report would display total and sub-counts as shown in Figure 7-11.

```
                          REPORT SUMMARY


    CMS REGISTER PATIENT Selection Criteria:

    Items selected for flat file output:
          Patient Name
          Patient Chart #
          Patient Sex
          Patient SSN
          Patient DOB
          Classification/Beneficiary

    CMS REGISTER PATIENT SORTING Criteria:
          CMS REGISTER PATIENTS will be sorted by:  Patient Name
```

```
DEVICE: HOME//    Virtual


CMS File being generated....

DOS File Being Created'
Please Standby - Copying Data to DOS File X:\EXPORT\ACM2963.4
```

Figure 7-11: Register Patient General Retrieval (Lister), screen 4

If the option for a detailed patient listing is chosen, you will be prompted to identify which data items to printed and how you would like them sorted. Print items are shown in Figure 7-12.

```
1)   Patient Name           12)  Home Phone          23)   Inactivation Date
2)   Patient Chart #        13)  Mother's Name       24)   Case Priority
3)   Patient Sex            14)  Patient Community    25)   Case Manager
4)   Patient SSN            15)  Patient Tribe        26)   PHN
5)   Patient DOB            16)  Eligibility Status   27)   Last Review Date
6)   Patient Age            17)  Class/Beneficiary    28)   Next Review Date
7)   Patient DOD            18)  Cause of Death       29)   Where PT Followed
8)   Mlg Address-Street     19)  Patient's Last Visit 30)   Date Last Edited
9)   Mlg Address-State      20)  Primary Care Provide 31)   Client Contact
10)  Mlg Address-City       21)  Register Status      32)   Register Provider
11)  Mlg Address-Zip Code   22)  Initial Entry Date
```

Figure 7-12: Print items

> **Note**:   Only one sort criterion may be used.

Sort Criteria are shown in Figure 7-13.

```
    1)   Patient Name                14)   Last Review Date
    2)   Patient Age                 15)   Next Review Date
    3)   Patient Community           16)   Date Last Edited
    4)   Patient Sex                 17)   Case Priority
    5)   Patient Tribe               18)   Case Manager
    6)   Patient Chart #             19)   PHN
    7)   Primary Care Provider (PCC) 20)   Where PT Followed
    8)   Classification/Beneficiary  21)   Register Provider
    9)   Eligibility Status          22)   Inactivation Date
    10)  Cause of Death              23)   Initial Entry Date
    11)  Patient DOB                 24)   Mlg Address-Zip Code
    12)  Patient DOD                 25)   Mlg Address-State
    13)  Register Status
```

Figure 7-13: Sort Criteria

> **Note**:   The numbers of the Select, Sort, and Print items will
>   correspond to the actual data item structure of the diabetes
>   register that you have created. The data items will be
>   limited to those you have included in your register and
>   those available from the PCC database.

For more information about using this report option, please refer to the Case Management (Version 2.0) User's Manual.

7.5   Patient and Statistical Reports (PR)

This report option produces patient lists or counts. It includes reports for the following seven categories:

> **Note**:   Only Active patients are included in this report.

- Register Data

- Complications

- Diagnoses

- Family Members

- PCC Problem List

- Case Review Date

- Case Comments

```
               *************************************
                    2017 DIABETES REGISTER REGISTER
               *************************************


                        STATISTICAL REPORTS

      1)   REGISTER DATA                 5)   PCC PROBLEM LIST
      2)   COMPLICATIONS                 6)   CASE REVIEW DATE
      3)   DIAGNOSES                     7)   CASE COMMENTS
      4)   FAMILY MEMBERS



      Report Option ==>
```

Figure 7-14: Statistical Reports

Most reports can be sorted by Patient Name, Community, Facility where Followed, Age, Sex, or a combination of these factors. Additionally, you can be selective in specifying which patients to retrieve. For example, you can select to retrieve only patients with a specific diagnosis or complication, then sort the list by any of the above factors. By indicating the patients you want to retrieve and the sorting variables, you can generate a specific report, for example, all patients with major amputations who live in Santa Fe and are between the ages of 40 and 50.

```
               *************************************
                    2017 DIABETES REGISTER REGISTER
               *************************************


                        REPORT SORTING UTILITY
```

```
        The DIAGNOSES report can be sorted by one or more
        of the following attributes.  '<==' indicates a mandatory
selection.

        1) AGE                                  5) SEVERITY
        2) CURRENT COMMUNITY                    6) SEX
        3) DIAGNOSIS                            7) WHERE FOLLOWED
        4) PATIENT

        Your choice:
```

Figure 7-15: Statistical Reports

When you request these reports, you will be asked whether you want a Patient or Statistical report. By responding with **P**, for patient, the system will generate a patient listing. A response of **S**, for statistical, will result in a display of counts without a patient listing.

You will also be asked whether you want to store the output from the report in a search template. If you respond **YES**, you will be asked to enter a name for the template. The name may be up to 30 characters long. After naming the template, the report will be generated and the patients will be stored in a template for use in QMan retrievals, as specified in the Retrieval of Clinical Data section of this manual. In Figure 7-16, a report is generated for all patients with Type 2 diabetes and stored as a search template for further queries.

> **Note**:   All patients in the Register must have an assigned diagnosis
>   to generate an accurate report.

```
        Your choice: 3   DIAGNOSIS

Do you want to sort by a particular DIAGNOSIS? No// Y  (Yes)

Which DIAGNOSIS: TYPE 2

Within DIAGNOSIS, want to sort by another attribute? No//    (No)

     'P'atient or 'S'tatistical report? ==> Patient

Store Report Result as Search Template? NO// YES

Search Template: TYPE 2 DM PTS
  Are you adding 'TYPE 2 DM PTS' as a new SORT TEMPLATE? No// Y  (Yes)

     An unduplicated patient list resulting from this report
     will be stored in the.........>

               **  TYPE 2 DM PTS  ** Search Template.

A brief report will be printed after the search template is complete.
You must enter a device for this report OR you may queue at this time.


DEVICE: HOME//   Virtual
```

```
...HMMM, JUST A MOMENT PLEASE...
CMS DIAGNOSIS FOR THE CLIENT STATISTICS          NOV 12,2018  17:01    PAGE 1
        DIAGNOSIS
-------------------------------------------------------------------------------
-----

COUNT     1


End of report.  Strike <CR> to continue.
```

Figure 7-16: Patient and statistical report

7.6   List Patients on a Register w/an Appointment (LPRA)

This option permits the diabetes coordinator to review appointments for all patients
entered in the Diabetes Register to ensure that the appropriate scheduling has
occurred. This option only works if the facility is using the RPMS Scheduling
Package. Select the **LPRA List Patients on a Register w/an Appointment** option.
Enter the beginning date for appointment review and the ending date.

```
This option will print a list of all patients on a register
e.g. Diabetes Register) who have an appointment in a date range
in any clinic or in a selected set of clinics.



You will be asked to enter the name of the register, the date range of the
appointments and the clinic names if selecting a set of clinics.


Enter the Name of the Register: 2017 DIABETES REGISTER

Enter Beginning Appointment Date:  10/1/2018  (OCT 01, 2018)
Enter Ending Appointment Date:  12/31/2018  (DEC 31, 2018)

     Select one of the following:

         A          ANY Clinic
         S          One or more selected Clinics

Include patients with Appointments to: A// [ENT] NY Clinic

     Select one of the following:

         P          PRINT the List
         B          BROWSE the List on the Screen

Output Type: P// [ENT] RINT the List

     Select one of the following:

         I          Include ALL Patients
         E          Exclude DEMO Patients
         O          Include ONLY DEMO Patients

Demo Patient Inclusion/Exclusion: E// Include ALL Patients
```

```
  DEVICE: HOME//   Virtual
```

Figure 7-17: Listing patient appointments

The report displays as shown in Figure 7-18.

```
   SHS                          Nov 12, 2018                         Page
1

        PATIENTS ON THE 2017 DIABETES REGISTER REGISTER WITH AN APPOINTMENT
                Appointment Dates: Oct 01, 2018 to Dec 31, 2018
                                 CLINICS: ANY

HRN     PATIENT NAME                      CLINIC NAME           DATE
TIME
-------------------------------------------------------------------------
--
999999 PATIENT,BARRY                     DIABETIC CLINIC       OCT 12,1999
10:00
888888 PATIENT,RAE                       INTERNAL MEDICINE (P  FEB 4,2000
08:15

End of report.  PRESS ENTER:
```

Figure 7-18: Listing patient appointments, screen 2

7.7   DM Register Pts w/no recorded DM Date of Onset (NDOO)

When calculating the duration of diabetes for the cumulative audit, the earliest of the date of onset from the diabetes register or the problem list date of onset is used. Duration of diabetes is calculated from that date to the date of the audit. If neither the date of onset in the register nor the date of onset in the problem list is recorded, the duration of diabetes is not calculated. A report to identify those patients on the Register who do not have a date of onset recorded may be run by selecting the **NDOO DM Register Pts w/no recorded DM Date of Onset** option.

```
                       2013 DEMO HOSPITAL (CMBA)
                             User, Demo

This report will list patients who are on the Diabetes Register who do not
have a date of diagnosis recorded in either the Register or on the problem
list.


Enter the Name of the Register: 2017 DIABETES REGISTER
Do you want to select register patients with a particular status? Y// ES
Which status: A// [ENT] ACTIVE

    Select one of the following:

         P          PRINT the List
         B          BROWSE the List on the Screen
```

```
Output Type: P// [ENT] RINT the List

     Select one of the following:

          I          Include ALL Patients
          E          Exclude DEMO Patients
          O          Include ONLY DEMO Patients

Demo Patient Inclusion/Exclusion: E// [ENT] xclude DEMO Patients
DEVICE: HOME// PRINTER NAME OR NUMBER
```

Figure 7-19: DM Register Pts w/no recorded DM Date of Onset

The resulting report not only lists those patients with no date of onset recorded but
also identifies whether the patients have a diagnosis of diabetes on the active problem
list.

```
           ********** CONFIDENTIAL PATIENT INFORMATION **********
SHS                                                                      Page
1
                       2013 DEMO HOSPITAL (CMBA)
    DIABETES REGISTER PATIENTS WITH NO RECORDED DATE OF ONSET OF DIABETES
              Patients on the 2017 DIABETES REGISTER Register

PATIENT NAME          HRN    DOB              LAST DM DX   #DM DXS DM ON
PL
--------------------------------------------------------------------------
----
DEMO,MONICA           890625 Jan 19, 1957  F  Mar 03, 2015    67         YES
DEMO,AARON V          144227 May 07, 1993  M                   0         NO
DEMO,BRAZ             103193 Sep 07, 2010  M                   0         NO
DEMO,JESSICA          101578 Jul 10, 1957  F  Nov 12, 2018    14         NO
DEMO,CHRISTIAN JA     135554 Nov 19, 1989  M                   0         NO
DEMO,DANIEL MICHA     135205 Feb 10, 1986  M                   0         NO
DEMO,RHIANNON RAIN    144277 Jan 20, 1995  F  Oct 28, 2015     4         NO
TEST,AMY              679458 Dec 23, 1934  F  Jan 06, 2017     3         YES
TEST,DONNA            13976  Feb 17, 1954  F  Dec 29, 2016     1         NO
End of report.  HIT RETURN:
```

Figure 7-20: DM Register Pts w/no recorded DM Date of Onset, report sample

Once these patients are identified, the charts may be reviewed, or the patients queried
to determine the date or estimated date of onset. An actual date, a month and a year,
or just a year can be used as a date of onset when updating Register data.

7.8   Follow-up Needed (FU)

The **Follow-up Needed** report option allows you to identify members of the Register
who are delinquent in receiving or have never had exams, procedures, patient
education, immunizations, vaccines, or lab tests identified by the Diabetes program.
A report of those patients identified as requiring follow-up may be generated, custom
letters may be generated, or both a report and letters may be generated.

You can choose to generate the report for all members of the Register, only Active patients, Inactive patients, Transient patients, Unreviewed patients, Non-IHS patients, Noncompliant, or Deceased patients. The report can be generated for all members of the Register, a template of patients, or patients with specific diagnoses. In addition, the report may be sorted by community, where the patients are followed, or by their register provider. In the following example (Figure 7-21), a report on active patients in the Register who do not have current PAP smears on record will be generated by selecting the **FU Follow-up Needed** option.

```
          DIABETES REGISTER - FOLLOW-UP NEEDED REPORTS
          (Patients due now or within the next 30 days.)

          1      ALL Exams/Procedures-----------------------------
            11   Foot Exam                 12   Eye Exam
            14   Depression Screening      18   Dental Exam
          2      ALL Patient Education-----------------------------
            21   Nutrition                 22   Physical Activity
            23   General Info
          3      ALL Immunizations/Vaccines-----------------------
            31   Seasonal Flu Shot         32   Pneumococcal
            33   Td/Tdap                   34   TB Test
            35   Hepatitis B
          4      ALL Lab Tests------------------------------------
            41   LDL Cholesterol           42   HDL Cholesterol
            43   Cholesterol               44   Triglyceride
            45   Creatinine                46   Hemoglobin A1c
            47   Estimated GFR             48   A/C Ratio
            49   Hepatitis C Screening

        Type 'ALL' to include ALL Follow-up Needed
        Which Report:

        Which Report: 3

      Select one of the following:

            1          Use Register Members
            2          Use A Search Template

Which Group: Use Register Members//  [ENT]

Select the Patient Status for this report

      Select one of the following:

            A          Active
            I          Inactive
            T          Transient
            U          Unreviewed
            D          Deceased
            N          Non-IHS
            NON        Noncompliant
            Z          All Register Patients

Which patients: Active//  [ENT]

Select the Diabetes Diagnosis for this report
```

```
      Select one of the following:

           1          Type 1
           2          Type 2
           3          Type 1 & Type 2
           4          Gestational DM
           5          Impaired Glucose Tolerance
           6          All Diagnoses

Which Diagnosis: All Diagnoses// 2  Type 2 <<Note: If a Register Diagnosis
has not been assigned to all patients, you must chose 6 All Diagnoses for
an accurate report. >>

Include list of patient's
upcoming appointments? NO// [ENT]

Print the Follow-up Report/Letters by


      Select one of the following:

           1          Community
           2          Primary Provider
           3          Where Followed

Which one: Community// [ENT]  <<Press Enter to select ALL Communities >>

(Press <ENTER> to select ALL Communities

Which Community:

Communities Selected:

           ALL

      Select one of the following:

           1          Follow-up Report
           2          Follow-up Letter
           3          Both

Which one: Follow-up Report// [ENT]

      Select one of the following:

           I          Include ALL Patients
           E          Exclude DEMO Patients
           O          Include ONLY DEMO Patients

Demo Patient Inclusion/Exclusion: E// [ENT] xclude DEMO Patients

DEVICE: HOME// << Enter name or number of printer >>
```

Figure 7-21: Using the FU option

The resulting report displays the patients, chart numbers, and date of last Pap smear. Only those patients who have not had a Pap smear in the last eleven months or are due for a Pap smear in the next 30 days are displayed. The report is sorted alphabetically by patient name within each community. Each of the follow-up reports can be limited to patients within a specific community or followed by a specific primary provider. To better coordinate the patients' care, an option to display future appointments is also included in the report.

```
FOLLOW-UP REPORT               Nov 12, 2018 18:29:53       Page:  1 of
1

     2017 DIABETES REGISTER Register - Active Patients
     Follow-up Report: ALL Immunizations/Vaccines          Page: 1
     (For ** TYPE 2 ** Diabetics Only.)
     (For Patients due now or within the next 30 days)
     REPORT DATE: NOV 12,2018

COMMUNITY        PATIENT                   HRN    STATUS
--------------- ---------------------- ------ --------------------
AJO         PATIENT,JILL             101476  *NO* IMM on record.
AJO         PATIENT,AMANDA           101422  last HEP B  MAY 16,1995
AKCHIN      PATIENT,ALLISON          101387  last PNEUMO AUG 29,1995
ANEGAM      PATIENT,JENNIFER         101321  last TDAP   OCT 10,1996
ANEGAM      PATIENT,DARLENE          101240  last FLU    JUL 13,1998
ARTESA      PATIENT,LAURA            100089  last FLU    AUG 21,1996
ARTESA      PATIENT,MAUDE            100047  last TDAP   DEC 11,1996
BIG FIELDS PATIENT,LRAINE            100266  last HEP B  AUG 13,1994




          - Previous Screen   Q Quit   ?? for More Actions

Select Action:Quit//
```

Figure 7-22: Using the FU option, screen 2

This option can be used again to generate a letter to each of these patients indicating that they are overdue for a Pap smear. When you choose the option to print a letter, you are prompted to select one of the letters set up in Register Maintenance. A custom letter can be designed for each of the follow-up Diabetic Care needs identified by this report.

8.0 Retrieval of Clinical Data from the PCC for Patients in the IHS Diabetes Register

Both PCC Management Reports and QMan can be used to retrieve a variety of data on patients in the IHS Diabetes Register.

8.1 PCC Management Reports

Use the Body Mass Index (BMI) Reports tool in PCC Management Reports to follow patients with diabetes. You can run the reports on all the patients in your Register or selected groups based on search templates using the Patient and Statistical Report option or QMan. In the following example (Figure 8-1), a BMI report will be run on the TYPE 2 DM PTS template. Begin by selecting the **BMI** menu option from the main PCC Management Report Menu.

```
                        DEMO HOSPITAL


    PLST    Patient Listings ...
    RES     Resource Allocation/Workload Reports ...
    INPT    Inpatient Reports ...
    QA      Quality Assurance Reports ...
    DM      Diabetes Program QA Audit ...
    APC     APC Reports ...
    PCCV    PCC Ambulatory Visit Reports ...
    BILL    Billing Reports ...
    BMI     Body Mass Index Reports ...
    ACT     Activity Reports by Discipline Group ...
    CNTS    Dx & Procedure Count Summary Reports ...
    IMM     Immunization Reports ...
    DR      PCC Patient Data Retrieval Utility
    RT      Report Template Utility ...
    STS     Search Template System ...
    QMAN    Q-Man (PCC Query Utility)
    FM      FileMan (General) ...
    TB      Tuberculosis Report

Select PCC Management Reports Option:  BMI
```

Figure 8-1: PCC management reports

There are several different report options for displaying Body Mass Index, but for the purpose of this example, a list of patients with height, weight and BMI sorted by BMI will be displayed. Therefore, the **Listing of Patients with Height/Weight/BMI (LPAT)** option has been selected.

```
          *****  RISK FOR OVERWEIGHT PREVALENCE REPORT  *****

                        PATIENT LIST
This report will produce a listing of all patients of the age and sex
that you specify.  The report will list their weight, height and BMI.
```

```
 Select one of the following:

          S          Search Template of Patients
          P          Search All Patients

Select List : Search Template of Patients [ENT]

Enter Visit SEARCH TEMPLATE name:    TYPE 2 DM PTS
                         (Sep 27, 1999)        User #605 File #9000001

     Select one of the following:

          M          Males
          F          Females
          B          Both

Report should include: B// [ENT]

Do you wish to include ONLY Indian/Alaska Native Beneficiaries? N// Y

Enter a Range of Ages (e.g. 5-12) [HIT RETURN TO INCLUDE ALL RANGES]:
[ENT]

No age range entered.  All ages will be included.

Select one of the following

          R          Report (Printed or Browsed)
          S          Sort Template

Type of Output: R//[ENT]

 Select one of the following:

          P          Patient Name
          A          Age of Patient
          B          BMI
Sort the report by: P// B

Do you wish to suppress patient identifying data (name,chart #)? N// [ENT]
DEVICE: HOME// Enter Printer number
```

Figure 8-2: PCC management reports, screen 2

The resulting report is displayed in Figure 8-3.

```
DKR                      DEMO HOSPITAL                      Page 1
                OVERWEIGHT/OBESITY PREVALENCE REPORT
                        PATIENT LISTING

             Report includes: MALES & FEMALES / ALL AGES
             Report Includes: INDIAN/ALASKA NATIVES ONLY
             Search Template of Patients: DM TYPE 2 PTS
                                                    >=      >=
                              DATE OF             NHANES NHANES
PATIENT NAME   HRN #  HEIGHT WEIGHT WEIGHT  AGE SEX  BMI   85TH%  95TH%
------------------------------------------------------------------
PATIENT,BARR   100005 63.8   222.1  01/24/97 33  M   39.6    N      Y
```

```
PATIENT,SALLY  100000 64.0  333.0  08/07/98 47  F   58.9    N      Y
```

Figure 8-3: PCC management reports, screen 3

8.2   QMan

QMan, the PCC query tool, provides virtually unlimited access to PCC clinical data for patients in your IHS Diabetes Register. Many of the follow-up reports formerly requiring QMan to generate are now available through the **Follow-up Report** menu option of the Diabetes Management System. In using QMan, all of the patients in your Register may be used as the subject of your query by entering **REGISTER** as the subject and IHS Diabetes (or the name of your local diabetes register) when prompted for a Register. You may also use QMan for retrieving clinical data on specific subsets of the patients in your register. These subsets of patients are referred to as cohorts or search templates.

You can use the **Master List** or **Patient and Statistical Reports** option to create templates of patients. Both of these options are accessed from the **Register Reports** menu in the Diabetes Management System. Using these report-generating options, you can create a template of all patients in your register, all active patients, patients in selected age groups or communities, patients with selected diagnoses or complications, or patients in other categories as needed.

> **Note**: It is extremely important to remember that if sorting by diagnosis, each patient in the Register must have been assigned a diagnosis or the resulting report will be invalid.

The process for generating templates is described in Section 7.5.

Formal QMan training for Diabetes Coordinators is essential to optimize use of the link between the Diabetes Register and the PCC. Instructions on using QMan will not be provided in this manual. The remainder of this section provides QMan dialogue for producing three QMan outputs. These outputs are representative of the many QMan searches of PCC clinical data that are available to you.

8.2.1   Using Register as the Subject of a Search

In this example, a list of the last Hemoglobin A1C for each patient in the Register will be created. User responses and instructions are in bold type.

1. Type **REGISTER** at the "What is the subject of your search" prompt.

2. Type the name of your Register at the "Which CMS Register" prompt.

3. Type the Status of the patients at the "Which Patients" prompt.

4. Type the Diabetes Diagnosis of the patients for this report at the "Which Diagnosis" prompt.

    Remember, you may only select a specific diagnosis if all of your patients have been assigned a Register diagnosis.

5. Type the desired attribute at the "Attribute of IHS Diabetes Register" prompt.

```
What is the subject of your search?  LIVING PATIENTS // REGISTER
Which CMS REGISTER: IHS DIABETES
      Select the Patient Status for this report

           1      Active
           2      Inactive
           3      Transient
           4      Unreviewed
           5      Deceased
           6      Non-IHS
           7      All Register

Which patients: 1// [ENT]

Select the Diabetes Diagnosis for this report

    Select one of the following:

           1          Type 1
           2          Type 2
           3          Type 1 & Type 2
           4          Gestational DM
           5          Impaired Glucose Tolerance
           6          All Diagnoses

Which Diagnosis: All Diagnoses//

Attribute of IHS DIABETES REGISTER: A1C
```

Figure 8-4: Using Register as the Subject of a Search (steps 1-4)

6. Type the first condition at the "First condition of attribute" prompt.

7. Type the value at the "Value" prompt.

8. Type another condition or press Enter to continue at the "Next condition of attribute" prompt.

9. Type a selection from the QMan Output Options at the "Your Choice" prompt.

10. If a clinical attribute was chosen, choose between values of the clinical attribute, an extended display of the values, or unduplicated patients by typing a number for the selection at the "Your Choice" prompt.

```
        SUBQUERY: Analysis of multiple HEMOGLOBIN A1CS
          First condition of "HEMOGLOBIN A1C": LAST
              Enter the value which goes with LAST; e.g., LAST 3, LAST
10,
```

```
                      etc.
                      Value: 1
               Next condition of "HEMOGLOBIN A1C": [ENT]


         Select one of the following:

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

   Your choice: DISPLAY// 1

   You have 3 options for listing HEMOGLOBIN A1C RESULTS =>

         1) List every RESULTS meeting search criteria.
         2) List every RESULTS and EXPANDED LAB REPORT meeting search
            criteria.
         3) List all PATIENTS with RESULTS you specified, but DO NOT list
            individual RESULTS or EXPANDED LAB REPORT (FASTEST OPTION!!)
            (Displays UNDUPLICATED list of PATIENTS)
   Your choice (1-3): 1// [ENT]
```

Figure 8-5: Using Register as the Subject of a Search (steps 5–9)

A section of the resulting report displays as shown in Figure 8-6.

```
PATIENTS            DEMO  A1C       A1C DATE
                    NUMBER %

------------------------------------------------------
PATIENT,SALLY*      100010    13.3 H    JAN 12,1997
PATIENT,BARRY       100035    10.8 H    SEP 22,1999
PATIENT,RUTH        100383    6.5       DEC 1,1997
PATIENT,MEGAN       100557    4.5       JUL 13,1998
PATIENT,BARBARA     100643    7.8 H     DEC 1,1997
PATIENT,MAXINE      100771    10.0 H    DEC 1,1997
PATIENT,DARLENE     101240    8.4 H     JUL 13,1998
PATIENT,ROSE        101599    6.0       JUL 13,1998
PATIENT,BARRY       101860    7.2 H     DEC 1,1997
```

Figure 8-6: Using Register as the subject of a search, sample report

8.2.2   Using a Template of Patients with Diabetes as an Attribute

In this example, a search will be made using the Type 2 DM Patients template as an
attribute and a query will be made to determine which of them have not been seen in
the dental clinic in the last year. To use a template of patients as an attribute, begin by
identifying your search subject as LIVING PATIENTS. When you are prompted for
an Attribute of the patients, type the left bracket symbol followed by the name of your
template: **[TYPE 2 DM PTS**. You will then be given four options related to your
template. Select option **1** to indicate that the patients to be searched must be members
of your template.

The following QMan examples (Figure 8-7 through Figure 8-9) will produce the list of patients who have not been seen in the Dental Clinic in the last year. User responses and instructions are in bold type.

1. Type subject of your search at the "What is the subject of your search" prompt.

2. Type the attribute at the "Attribute" prompt.

3. Type a number for the selection list at the "Your Choice" prompt.

```
What is the subject of your search?  LIVING PATIENTS // [ENT]

Attribute: [TYPE 2 DM PTS
Select one of the following =>

   1) LIVING PATIENTS must be a member of the TYPE 2 DM PTS
      cohort
   2) LIVING PATIENTS must NOT be a member of the TYPE 2 DM PTS
      cohort
   3) Select a random sample of the TYPE 2 DM PTS cohort
   4) Count the number of entries in the TYPE 2 DM PTS cohort

Your choice (1-4): 1// [ENT]
```

Figure 8-7: Using a Template of Patients with Diabetes as an Attribute (steps 1-3)

4. Type an attribute at the next "Attribute" prompt.

5. Type the first condition of the attribute, **During**, at the "First Condition/Attribute of VISIT" prompt.

6. Type the date or the date one year ago at the "Exact Date" prompt.

7. Type the next condition at the "Next Condition/Attribute of Visit" prompt.

8. Type the name of the clinic, **Dental**, at the "Clinic" prompt.

9. Type the name of another clinic or press the Enter key to continue at the next "Enter Clinic" prompt.

10. Type the next condition, **NULL**, at the "Next Condition/Attribute of Visit" prompt. Null means that the patient has not had a dental clinic visit in the past year.

11. Type the next condition or press Enter to continue at the "Next Condition/Attribute of Visit" prompt.

12. Type the next attribute or press Enter to continue at the "Next Attribute" prompt.

13. Type the number for the selection of QMan Output Options at the "Your Choice" prompt.

```
Attribute:  VISIT
```

```
First Condition/Attribute of VISIT:  SINCE
Exact Date:  T-365
Next Condition/Attribute of VISIT:  CLINIC
Enter Clinic:  DENTAL
Enter Clinic:  [ENT]
Next Condition/Attribute of VISIT:  NULL
Next Condition/Attribute of VISIT:  [ENT]
Next Attribute:  [ENT]

* * Q-Man Output Options * *
Select one of the following:
  1 DISPLAY results on the screen
  2 PRINT results on paper
  3 COUNT 'hits'
  4 STORE results of a search in a FM search template
    [ETC.]

Your Choice:  DISPLAY// 1
```

Figure 8-8: Using a Template of Patients with Diabetes as an Attribute (steps 4–13)

QMan will display the patients in your cohort who have not visited the dental clinic in the past year. A dash (-) in the Visit column indicates that no visit to the dental clinic within the designated time frame has occurred.

```
PATIENTS          DEMO  VISIT
(Alive)           NUMBER
-------------------------------------------------------------

PATIENT,RAE*      100003 -
PATIENT,SALLY*    100010 -
PATIENT,BARRY     100035 -
Total: 3
```

Figure 8-9: Using a template of patients with diabetes as an attribute, sample

8.2.3   More Complex QMan Search for Multiple Attributes

At times QMan can be used for more sophisticated retrievals like following liver function tests on patients in the Register taking drugs known to have a hepatotoxic effect.

In this example, the entire Register can be used as the subject, RX can be used as an attribute, and AST, ALT, GGT, or LDH can be used as additional attributes. It is difficult to perform QMan searches for multiple clinical attributes because of a limiting factor in display called "Rule of Last." Because of this limitation, only the value of the last clinical attribute listed will actually display. Therefore, lab values for more than one lab test cannot be displayed in a single query. In the following example (Figure 8-10), prescriptions of Glipizide issued during the last six months and SGOT values during that time frame will be displayed.

```
What is the subject of your search?  LIVING PATIENTS // REGISTER
Which CMS REGISTER: IHS DIABETES
Select the Patient Status for this report
```

```
      Select one of the following:

         A          Active
         I          Inactive
         T          Transient
         U          Unreviewed
         D          Deceased
         Z          All Register Patients
Which patients: Active// [ENT]
Attribute of IHS DIABETES REGISTER: RX


Enter RX: GLIPIZ
     1    GLIPIZIDE 10MG TAB
     2    GLIPIZIDE 5MG TAB
CHOOSE 1-2: 1
Enter ANOTHER RX: GLIP  << If more than one formula and concentration for a
drug exists, additional entries may be added one at a time by selecting the
next entry on the displayed list each time Enter ANOTHER RX is displayed.>>
     1    GLIPIZIDE 10MG TAB
     2    GLIPIZIDE 5MG TAB
CHOOSE 1-2: 2
Enter ANOTHER RX: [ENT]

The following have been selected =>

     GLIPIZIDE 5MG TAB
     GLIPIZIDE 10MG TAB
Want to save this RX group for future use? No// [ENT]
 SUBQUERY: Analysis of multiple RXS


First condition of "RX": Since
Exact Date: T-180


Attribute of IHS DIABETES REGISTER: AST
 SUBQUERY: Analysis of multiple AST
 First condition of "AST": SINCE
 Exact Date: T-180
 Next Condition of "AST":  ANY << forces results or lack of results to
display>>
Attribute of IHS DIABETES REGISTER: [ENT]
Select one of the following:

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

Your choice: DISPLAY// 2
```

Figure 8-10: More complex QMan search for multiple attributes

The report of patients in the Register taking Glipizide during the last six months and
their AST values during that time frame appears as shown in Figure 8-11.

```
PATIENTS         DEMO   RX                  AST      AST DATE
                 NUMBER                     U/L
```

```
----------------------------------------------------------------------
PATIENT,SALLY*     100010 +                        347   SEP 6,1999
PATIENT,SALLY*     100010 +                        150   FEB 9,1999
PATIENT,MEGAN      100557 +                        -     -
PATIENT,DARLENE    101240 +                        -     -
PATIENT,ROSE       101599 +                        38    SEP 11,1999
Total: 5
```

Figure 8-11: More complex QMan search for multiple attributes, report sample

VGEN in the PCC Management Reports option for Quality Assurance Reports can also be useful when trying to combine multiple clinical attributes without the limitations of QMan displays. In Figure 8-11, the list of patients taking Glipizide drugs can be saved in a template. This template of patients can then be used in VGEN to display all four of the laboratory values of interest during the desired time frame.

8.2.4   Special QMan Outputs

In addition to providing lists of your search results, QMan can also produce age-group reports, mailing labels, health summaries, or ASCII output to use on a personal computer for statistical analysis or graphics displays. To use these features, select the **6 R-Man Special Report Generator** option when presented with QMan Output Options.

Refer to QMan Volume 3 for specific instructions on how to obtain these outputs.

9.0   Diabetes Program Audit

Each year since 1986, the IHS Diabetes Program has conducted a medical records review of a sample of patients from the local diabetes registry. The audit measures 80–90 different items, some reflecting the process of diabetes care and others reflecting diabetes outcomes. The **DA Diabetes Audit** option in the Diabetes Management System allows you to either partially or fully automate the process of compiling the official IHS Diabetes Quality Assurance Audit Report. This section of the Diabetes Management System manual contains instructions for running the report, definitions and criteria for each audit item, a sample report, and directions for generating a patient template for use in the audit process.

Please refer to the 2019 DMS User Manual for details on the audit workflow.

10.0   Health Summary Tools for Diabetes Care

The tools described below – Diabetes Flow Sheet, Diabetes Patient Care Summary, Pre-Diabetes Patient Care Summary, Educational Assessment, Refusals, and DM Health Maintenance Reminders – can be included on any type of Health Summary. They are described in Section 10.1. However, it is strongly recommended that they be added to the routinely used adult health summary at your facility. At most facilities that would be the Adult Regular Health Summary or a locally developed version of the Adult Regular Summary. This recommendation is made so that these important diabetes care reminders are seen by providers at all visits, including ER and General Clinic, and not just visits to the Diabetic Clinic where the Diabetes Standard Health Summary may be used.

10.1   Diabetes Standard Summary

A special type of health summary for patients with diabetes is available: the Diabetes Standard Summary. There are several ways to display the Diabetes Standard Summary for a patient with diabetes. At the main Diabetes Management System menu, select **RM Register Maintenance** and then **PM Patient Management**. In the Patient Management dialog, option **11** will allow you to select a Health Summary type. When prompted for a health summary type, enter **DIABETES STANDARD**. The Health Summary will display on the terminal screen. This option permits the user to use the minus, plus, up arrow, and down arrow keys to scroll through the Health Summary or to return to review various items of interest.

This Health Summary is similar to the Adult Regular Summary except that it includes a Diabetes Flow Sheet at the end of the report as well as a Diabetes Patient Care Summary. The Flow Sheet contains items that have been identified for provider review at each Diabetic Clinic visit. In addition, the Diabetes Standard Summary includes a Diabetes Patient Care Summary which provides an overview of all IHS Diabetes Standards of Care for that patient. Both the Diabetic Flow Sheet and the Diabetes Patient Care Summary are triggered by the presence of a problem of Diabetes on the Active Problem list or a diagnosis of Diabetes in the last year by a primary provider. The Diabetes Standard Health Summary should be routinely printed by Health Records staff for all diabetic clinic visits.

An option can be set to automatically print the Diabetes Standard Health Summary for patients with Diabetes regardless of when or where the health summary is printed. The **Update Health Summary Site Parameters** option is included under the Health Summary Maintenance Menu. Instructions for setting up this feature are provided below.

1. In the Health Summary Maintenance Menu, select **HSSP Update Health Summary Site parameters**.

2. Identify the name of your facility.

3. Type **YES** at the "Auto-switch to DM Summary" prompt.

4. At the "Default DM Health Summary Type" prompt, type **DIABETES STANDARD**.

```
Select HEALTH SUMMARY SITE PARAMETERS SITE NAME: CIMARRON HOSPITAL [ENT]
SITE NAME: CIMARRON HOSPITAL// [ENT]
AUTO-SWITCH TO DM SUMMARY: YES [ENT]
DEFAULT DIABETES SUMMARY TYPE: DIABETES STANDARD [ENT]
```

A sample Diabetes Flow Sheet is shown in Figure 10-1. Remember that only data that has been entered into the PCC will display on the Health Summary Flow Sheet.

```
---------------- FLOW SHEETS (max 10 visits or 2 years) -----------------

DIABETES FLOW SHEET
          WT         BP          A1C      CHOL      CREAT     PROT      TRIG
-------------------------------------------------------------------------------
01/14/00  :196      :133/77      :        :         :         :         :
-------------------------------------------------------------------------------
01/12/00  :207      :104/66      :10.1     :         :         :         :
-------------------------------------------------------------------------------
10/22/99  :191      :            :12.9     :         :         :         :
-------------------------------------------------------------------------------
08/20/99  :193      :140/100     :10.9     :         :         :         :
-------------------------------------------------------------------------------
07/16/99  :194      :162/92      :        :         :         :         :
-------------------------------------------------------------------------------
06/04/99  :195      :158/92      :10.6     :         :         :         :
-------------------------------------------------------------------------------
04/16/99  :188      :173/99      :        :         :         :2        :
-------------------------------------------------------------------------------
03/05/99  :187      :136/77      :        :         :         :         :
-------------------------------------------------------------------------------
```

Figure 10-1: Diabetes Standard Summary

Note: The Flow Sheet will be displayed when a Diabetes Standard Health Summary is retrieved, but only for those patients with a diagnosis of diabetes on the PCC Problem List (ICD codes 250.00 – 250.93) or who have had a diagnosis of diabetes within the last year by a primary provider.

10.2   Diabetes Patient Care Summary

The Diabetes Patient Care Summary, also referred to as the Diabetes Supplement, was released with patch 3 to version 2.0 of the Health Summary. It provides a complete review of the patient's care in relation to the IHS National Diabetes Standards of Care. It includes virtually all data items used by the Diabetes Management System Audit Report. It is intended to alert providers to Diabetes Standards of Care for which the patient is deficient, each time the patient is seen, thus encouraging providers to attend to these needs prospectively during the course of the year. See Figure 10-2 for an example.

For more detail, please refer to the *Diabetes Audit User Addendum* for the logic and clinical data as it relates to the annual audit.

```
********** CONFIDENTIAL PATIENT INFORMATION [SHS]  Nov 21, 2018 **********
DIABETES PATIENT CARE SUMMARY              Report Date:  11/21/2018


Patient: DEMO,ASHLEY                    HRN: 114649
Age:  88 (DOB 02/25/1930)               Sex: FEMALE
CLASS/BEN: INDIAN/ALASKA NATIVE         Designated PCP: DOCTOR,DONNA


Date of DM Diagnosis: 02/05/2018 (Problem List)
Diabetes type: (1 or 2): 2


BMI: 25.6  Last Height:  55.00 inches  02/11/2016
           Last Weight:  110 lbs       02/11/2016


Tobacco Use:
   Last Screened:
   Current Status: Not Documented
            Counseled in the past year?  N/A

Electronic Nicotine Delivery System (ENDS) use:
   Last Screened:  Never
   Current Status:

HTN Diagnosed:  No
CVD Diagnosed:  No
Last 3 BP:      131/85   08/27/2011
(non ER)        139/79   02/06/2011
                125/78   10/06/2010

ACE Inhibitor or ARB prescribed (in past 6 monthsNo:
Aspirin or Other Anti-platelet/Anticoagulant prescribed (past 6 months):
No
Statin prescribed (in past 6 months):          No

Exams (in past 12 months):
   Foot:    No
   Eye:     No
   Dental:  No

Depression - Active problem: No
            If no, screened in past year:  Yes - DX: F33.0 01/23/2018

Immunizations:
   Influenza vaccine (since August 1st):No
```

```
      Pneumococcal vaccine (ever):          No
      Td/Tdap/DTAP/DT (in past 10 yrs):     No
      Tdap (ever):                          No
      Hepatitis B complete series (ever):   Yes

TB - Last Documented Test:
      TB Test Result:
      TB Treatment Completed:

Hepatitis C (HCV)
      Diagnosed with HCV ever: No
      Screened for HCV ever: Yes 06/07/2017 HEPATITIS C Antibody (R)

Retinopathy Diagnosed: No

Amputation
      Lower extremity (ever), any type (e.g., toe, partial foot, above or
      below knee):  Yes

Laboratory Results (most recent):                       RPMS LAB TEST NAME
      A1C:                               06/07/2017 _HGB A1C
      Next most recent A1C:              06/06/2017 _HGB A1C

      Serum Creatinine:      0.5 mg/dL   10/10/2018 _CREATININE,SERUM KR
      eGFR:               86.41 mL/min   10/10/2018 CKD-EPI 112016
      UACR (Quant A/C Ratio       :      06/07/2017 _MICROALB/CREAT.Rand
ur

      Total Cholesterol:                 06/07/2017 _CHOLESTEROL
      LDL Cholesterol:                   06/07/2017 _LDL-CHOLESTEROL
      HDL Cholesterol:                   06/07/2017 _HDL CHOLESTEROL
      Triglycerides:                     06/07/2017 _TRIGLYCERIDE

Education Provided (in past yr):
  Last Dietitian Visit (ever):

DEMO,ASHLEY                     DOB: 2/25/1930      Chart #TST 114649
```

Figure 10-2: Diabetes Patient Care Summary

Normally the Patient Care Summary prints after the Flow Sheet on the Diabetes Standard Health Summary. In the Patient Management dialog, the option **12 DM Care Summary (DPCS)** allows the user to display the DPCS to the terminal. This option permits the user to use the minus, plus, up arrow, and down arrow keys to scroll through the DPCS or to return to review various items. Some facilities choose to print these for each patient with diabetes prior to a clinic appointment and highlight overdue items as a reminder for the provider seeing the patient.

10.3   Pre-Diabetes Patient Care Summary

The Pre-Diabetes Patient Care Summary was distributed in Health Summary Version 2.0 Patch 12. It must be added under health summary maintenance as a supplement type to any health summaries that are routinely used at your health care facility. Printing of this supplement is triggered by a diagnosis of Impaired Glucose Tolerance, Impaired Fasting Glucose, or Metabolic Syndrome (Syndrome X) on the active problem list or made by a primary care provider in the past year. It will not print if the patient has a diagnosis of diabetes on the active problem list or a primary provider has used a diagnosis of diabetes in the past year. This supplement was designed as a tool for displaying those data items that are important in following patients who may be predisposed to developing diabetes. An example of a Pre-Diabetes Supplement is provided in Figure 10-3.

```
PRE-DIABETES PATIENT CARE SUMMARY                Report Date:  Jun 29,
2005
Patient Name:  DEMO,BECKY    HRN: 168923
Age:  61     Sex:  F    DOB:  Sep 23, 1943


Classification:
No    Impaired Fasting Glucose
No    Impaired Glucose Tolerance
Yes   Metabolic Syndrome:  Date of first DX in PCC:  Sep 09, 2004

Case Manager:
Primary Care Provider:

 Last Height:    66 inches        May 07, 2003
Last 3 Weight:  176 lbs          Sep 06, 2003  BMI: 28.3
                173 lbs          May 07, 2003  BMI: 28.0
                172 lbs          May 07, 2003  BMI: 27.8


Last Waist Circumference: 35    Feb 16, 2005


Last 3 non-ER BP:  140/65      Sep 06, 2003
                   146/81      May 07, 2003
                   131/65      May 07, 2003


Tobacco Use:  NON-TOBACCO USER  May 07, 2003

Pre-Diabetes Education Provided (in past yr):
  Last Dietitian Visit:   Oct 04, 2003  DIET CONSULTATION
  DM-PREVENTION           Sep 09, 2004

HTN Diagnosed:  Yes
ON ACE Inhibitor/ARB in past 6 months: No
Aspirin Use (in past yr):  No

On Metformin: No
On TZD: No
On Acarbose: No
On Lipid Lowering Drugs: No

Laboratory Results (most recent):
Last Fasting Glucose:      80          Sep 09, 2004  GTT, FASTING
Last 75 GM 2 hour Glucose: 175         Sep 09, 2004  2 HR PP GLUCOSE
```

```
Total Cholesterol:          228           Sep 06, 2003  CHOLESTEROL
 LDL Cholesterol:           130.8         Sep 06, 2003   LDL
 HDL Cholesterol:           62            Sep 06, 2003   HDL
    Triglycerides:

WATERMAN,BECKY                      DOB: 9/23/1943     Chart #CIMH 168923
*** END  CONFIDENTIAL PATIENT INFORMATION -- 6/29/2005  1:44 PM  [CMI]
******
```

Figure 10-3: Pre-Diabetes Patient Care Summary

10.4   Other Health Summary Components

There are four other health summary components that may be desirable for Diabetes programs:

- Patient Refusals – Groups all refusals of services.

- Educational Assessment – Displays the health factors for Learning Preference, Barriers to Learning, and Readiness to Learn. These are required data elements for the IHS Patient Education program.

- Medications – Displays medications for the patient.

- Laboratory Data – Displays lab tests and results for the patient.

These components may be added using the **Create/Modify a Summary Type** menu option under Health Summary Maintenance. A segment of a health summary showing these components is displayed in Figure 10-4.

```
----------------------- EDUCATIONAL ASSESSMENT -----------------
Most recent Health Factor recorded.
Learning Preference:  LEARNING PREFERENCE-VIDEO  Sep 09, 2004
Readiness to Learn:  READINESS TO LEARN-UNRECEPTIVE  Sep 09, 2004
Barriers to Learning:  BARRIERS TO LEARNING-NO BARRIERS  Sep 09, 2004
---------- PATIENT REFUSALS FOR SERVICE (max 10 visits or 2 years) ----------

   Jun 23, 2005  SCREENING MAMMOGRAM   (RADIOLOGY EXAM)
     Refusal Type:  REFUSED SERVICE
   Jun 22, 2005  ECG SUMMARY   (EKG)
     Refusal Type:  REFUSED SERVICE

*** END  CONFIDENTIAL PATIENT INFORMATION -- 6/28/2005  2:07 PM  [CMI] ******
```

Figure 10-4: Educational Assessment and Refusals of Service Components

11.0   2019 Pre-Diabetes Audit Logic

11.1   Audit Date

This is the date of the audit, supplied by the user. It is used as the ending date to calculate the time range when looking for values. For example, if the audit date is September 30, 2005 then data is examined during the year prior to this audit date (October 1, 2004 to September 30, 2005).

Individual Audit: The audit date displays (e.g., SEPTEMBER 30, 2005).

Cumulative Audit: N/A

11.2   Reviewer

Initials of the person who ran the audit.

Individual Audit: The initials displays.

Cumulative Audit: N/A

11.3   Facility Name

This is the name of the facility at which the audit is being run.

Individual Audit: The name of the facility displays.

Cumulative Audit: N/A

11.4   Area

This is the two-digit IHS Area code for this facility, taken from the **Location** table.

Individual Audit: The area code displays (e.g., 10).

Cumulative Audit: N/A

11.5   Service Unit

This is the two-digit IHS Service Unit code for this facility, taken from the **Location** table.

Individual Audit: The service unit code displays (e.g., 10).

Cumulative Audit: N/A

11.6 Facility Code

This is the two-digit facility code for this facility.

Individual Audit: The facility code displays (e.g., 01).

Cumulative Audit: N/A

11.7 # of Patients on Pre-Diabetes Register

This is the number of active patients on the pre-diabetes register. The user is prompted to enter the name of their register.

Individual Audit: The total number of active patients in the register displays.

Cumulative Audit: The total number of active patients in the register displays.

11.8 Tribal Affiliation

The patient's tribe code as entered in Patient Registration.

Individual Audit: Three-digit tribe code and name of tribe display.

Cumulative Audit: N/A

11.9 Community

This is the community in which the patient resides at the time of the audit.

Individual Audit: State-county-community code and community name display.

Cumulative Audit: N/A

11.10 Chart

Health record number of the patient at the facility at which the audit is run.

Individual Audit: The chart number displays.

Cumulative Audit: N/A

11.11 DOB

The patient's date of birth.

Individual Audit: The date of birth displays.

Cumulative Audit: The age of the patient is calculated from the audit date and used in the age tally on the cumulative audit.

11.12 Gender

Gender of the patient.

Individual Audit: Male or Female

Cumulative Audit: A tally by gender displays on the cumulative audit.

11.13 Primary Care Provider

The name of the primary care (designated) provider documented in RPMS.

Individual Audit: The name of the primary care provider displays.

Cumulative Audit: N/A

11.14 Classification

Classification is determined in the following manner:

1. Impaired Fasting Glucose

   The system first looks at the problem list for a documented problem with ICD code 790.21 - IMPAIRED FASTING GLUCOSE. If one is found, it will display "Problem List:" with the date of onset, if the date of onset is documented. The system then looks at all of a patient's purpose of visits for code 790.21. If it finds one, it displays the dates of the earliest one found and the latest one found.

2. Impaired Glucose Tolerance

   The system first looks at the problem list for a documented problem with ICD code 790.22 - IMPAIRED GLUCOSE TOLERANCE. If one is found, it will display "Problem List" with the date of onset, if the date of onset is documented.

   The system then looks at all of a patient's purpose of visits for code 790.22. If it finds one, it displays the dates of the earliest one found and the latest one found.

3. Metabolic Syndrome

   The system first looks at the problem list for a documented problem with ICD code 277.7 - DYSMETABOLIC SYNDROME X. If one is found, it will display "Problem List" with the date of onset if the date of onset is documented.

The system then looks at all of a patient's purpose of visits for code 277.7. If it finds one, it displays the dates of the earliest one found and the latest one found.

4. Other Abnormal Glucose

The system first looks at the problem list for a documented problem with ICD code 790.29 - OTHER ABNORMAL GLUCOSE. If one is found, it will display "Problem List" with the date of onset if the date of onset is documented.

The system then looks at all of a patient's purpose of visits for code 790.29. If it finds one, it displays the dates of the earliest one found and the latest one found.

5. CMS Register Diagnoses

The system will display all diagnoses documented in the Pre-Diabetes register for this patient. The date of onset recorded will also display.

In addition, the system searches for a diagnosis of Diabetes on the problem list and in the purpose of visits recorded for the patient. If any are found they are displayed along with the date of the diagnosis.

Sample output on audit sheet:

```
CLASSIFICATION (all that apply):
 1 IFG – No
 2 IGT – Yes
   Last POV in PCC: 790.22  Date: May 01, 2004
   First POV in PCC: 790.22  Date: Mar 17, 2004
 3 METABOLIC SYNDROME – No
 OTHER ABNORMAL GLUCOSE (790.29) – No
 CMS Register DX: May 01, 2004 IMPAIRED GLUCOSE TOLERANCE
 PLEASE NOTE:  Diabetes is on the Problem list for this patient
 PLEASE NOTE:  Diabetes has been used as a diagnosis in PCC: Apr 02, 2005
```

11.15 Height

The last recorded height value and the date the height was taken.

Individual Audit: The height must have been recorded any time prior to the audit date and displays with the date the height was recorded.

Cumulative Audit: N/A

11.16 Weight

The last three recorded weight values on a non-prenatal visit and the date the weight was recorded.

Individual Audit: The weight must have been recorded prior to the audit date and not be on a visit on which one of the diagnoses was prenatal care.

Cumulative Audit: N/A (See BMI)

11.17 Waist Circumference

The last recorded Waist Circumference measurement on or before the audit date displays with the date recorded.

Individual Audit: The waist circumference value and date recorded are displayed.

Cumulative Audit: N/A

11.18 Last 3 BP'S

The last three recorded blood pressure (BP) values and dates. BPs taken in the ER (ER Clinic) are skipped.

Individual Audit: The last three BPs in the year prior to the audit date that were taken on non-ER clinic visits are displayed.

Cumulative Audit: If the patient has three documented BPs they are used to determine blood pressure control in the cumulative audit.

11.19 Hypertension Documented

Is a diagnosis of hypertension documented? If hypertension is on the problem list or the patient has at least three visits with a diagnosis of hypertension.

Individual Audit: A Yes or No displays.

Cumulative Audit: Used in the ACE Inhibitor tally.

11.20 Diet Instruction

Has diet instruction been given?

The values in the audit are:

- 1   RD
- 2   Other
- 3   Both RD & Other
- 4   None
- 5   Refused

Logic:

All visits in the year prior to the audit date are examined.

If there is a visit on which a Dietician or Nutritionist is the provider and no other visit with a diet patient education topic documented, a value of 1 - RD is assigned. No further processing is done.

If there is a visit for which a Dietician or Nutritionist is the provider and another visit for which a patient education topic in the DM AUDIT DIET EDUC TOPICS taxonomy, a topic ending in "-N" or a topic ending in "-DT" is documented and the provider is not a dietician or nutritionist then the value is 3 - Both RD & OTHER. No further processing is done.

If there is a visit for which a patient education topic in the DM AUDIT DIET EDUC TOPICS taxonomy, a topic ending in "-N" or a topic ending in "-DT" is documented and no visit to a DIETICIAN or NUTRITIONIST then a 2 -Other is assigned. No further processing is done.

If a refusal of one of these education topics is documented, the value is 5 – Refused.

If none of the above is documented, the value is 4 – None.

Individual Audit: The value calculated as described above displays.

Cumulative Audit: Percentages are calculated of who had diet instruction includes values 1–3. The percentage of the patients who refused also displays.

11.21   Exercise Instruction

Has exercise instruction been given?

The values in the audit are:

1   Yes   2   No   3 Refused

Logic:

All visits in the year prior to the audit date are examined.

If there is a visit on which a patient education topic in the DM AUDIT EXERCISE EDUC TOPICS taxonomy, or any topic ending in "-EX" is documented then a 1 - Yes. No further processing is done.

All visits in the year prior to the audit date are examined for a POV of V65.41, and if one is found, 1 - Yes displays.

If a refusal of one of these education topics is documented the value is 3 – Refused.

If neither of the above is documented, the value is 2 – None.

Individual Audit: The value calculated as described above is displayed.

Cumulative Audit: Percentages are calculated of who had exercise instruction includes value of 1. The percentage of the patients who refused is also displayed.

11.22   Tobacco Use

Tobacco-use status of the patient. The tobacco use is determined in the following way:

1. The last TOBACCO health factor recorded on or before the audit date is found. This is done using the DM AUDIT TOBACCO HLTH FACTORS taxonomy. If the health factor contains "CURRENT" or "CESS," the patient is assumed to be a current user and a value of 1 - Current user is assumed, if any of the other TOBACCO health factors are recorded then a value of 2 - Not a current user is used.

2. If no health factor has been recorded, the PCC problem list is scanned for smoking related diagnoses. If the diagnosis recorded is 305.13 - Tobacco Use in Remission then the patient is assumed to be 2- Not a current user. All other diagnoses fall into 1 - Current User.

3. If no health factor and no smoking diagnosis is found on the problem list, all PCC purpose of visits in the year prior to the audit date are scanned. If any of the diagnoses is a smoking related diagnosis the same logic used in the problem list is used.

4. The V Dental file is searched for documentation of ADA code 1320 in the year prior to the audit date. If it is found the value 1 - Current User is assigned.

5. If none of the above is found, a 3 - Not documented is used.

Individual Audit: The logic described above is used to display one of the following three statements:

- 1   Current User
- 2   Not a current user
- 3   Not Documented

Cumulative Audit: The logic above is used to tally tobacco use.

11.23   Referred for Cessation Counseling

Did the patient have cessation counseling?

Logic used:

1. A documented health factor that resides in the DM AUDIT CESSATION HLTH FACTOR taxonomy is searched for in the year prior to the audit date. If one is found the value is YES.

2. A documented Patient Education topic that resides in the DM AUDIT SMOKING CESS EDUC taxonomy is searched for in the year prior to the audit date. If one is found, a Yes is assumed.

3. A documented refusal of cessation patient education is searched for in the year prior to the date of the audit. If one is found then REFUSED is used as the value.

Individual Audit:

- If a health factor is found a YES and the date it was recorded is displayed.

- If an education topic is found a YES and the date if was recorded is displayed.

- If a refusal is found, the word Refused is displayed.

- If none of the above, a No is displayed.

Cumulative Audit:

If the patient is documented as a tobacco user (value of 1 in tobacco use) the number counseled (YES value), the number not counseled (NO or REFUSED value) are tallied in the cumulative audit. (There is not a separate tally of refused in the official 2001 audit).

11.24   DM Therapy

All Visits in the 6 months prior to the audit date are reviewed. If any medication in the taxonomy specified is found, then an 'X' is placed by the therapy name. If no medications are found then all documented medication refusals in the past year are reviewed to see if any med within any of the below listed taxonomies was refused. If it was an X is placed beside item 9 - Unknown/Refused. If no medications or refusals are found then the Diet & Exercise Alone item is marked with an 'X'.

We are unable to calculate the Unknown/Refused group.

Therapy	Taxonomy Name
Sulfonylurea	DM AUDIT SULFONYLUREA DRUGS
Metformin	DM AUDIT METFORMIN DRUGS
Acarbose	DM AUDIT ACARBOSE DRUGS

Therapy	Taxonomy Name
Glitazones	DM AUDIT TROGLITAZONE DRUGS

Individual Audit:

Each therapy found will display with an X next to it. If a refusal is found the Unknown/Refused column will have an X next to it. If none are found, then the X is placed beside Unknown/Refused.

Cumulative Audit:

The patient is put in the appropriate category depending on what therapies are found:

- **Metformin**: If metformin is found.

- **Acarbose**: If Acarbose is found.

- **Glitazone**: If glitizones found.

- **Sulfonylurea**: If sulfonylurea is found.

- **Unknown/Refused**   : If no meds are found or a refusal is found.

11.25 ACE Inhibitor

If any drug in the DM AUDIT ACE INHIBITORS taxonomy has been prescribed in the 6 months prior to the audit date a Yes is displayed. If any of the drugs in the DM AUDIT ACE INHIBITORS taxonomy is documented as refused then it is counted as "Refused". A not medically indicated documentation is considered a No.

If none of the above criteria is met, a **No** displays.

Individual Audit: A **Yes**, **No**, or **Refused** displays.

Cumulative Audit: Used in the calculation of those with hypertension and those with proteinuria.

11.26 Aspirin/Anti-Platelet Therapy

If any drug in the DM AUDIT ASPIRIN DRUGS taxonomy has been prescribed in the year prior to the audit date, the term "Aspirin" is displayed. If a drug in the DM AUDIT ANTI-PLATELET DRUGS taxonomy is prescribed the term "Other" is displayed. If both are prescribed the term "Both" is displayed. If a refusal is on file the term "Refused" is displayed.

Otherwise, a No is displayed.

Cumulative Audit:

Used in the calculation of those Daily Aspirin Therapy totals. Only the Yes and No are calculated. We cannot calculate the 'Undetermined' category.

11.27 Lipid Lowering Agent

If any drug in the DM AUDIT LIPID LOWERING DRUGS or DM AUDIT STATIN DRUGS taxonomy has been prescribed in the 6 MONTHS prior to the audit date the following values will be displayed:

- 1 - Statin

- 2 - Other

- 3 – Both

If a refusal of any drug within the above-mentioned taxonomies is documented the value 5- Refused is displayed, Otherwise, a No is displayed.

Cumulative Audit:

Used in the calculation of those with TOTAL CHOLESTEROL >=240 (if total cholesterol is documented and result can be determined.) Used in the calculation of those with LDL cholesterol > 100 (if LDL is documented and LDL value can be determined).

11.28 EKG

The date of the last EKG before the audit date.EKG is searched for the following ways:

ECG Summary in the V DIAGNOSTIC PROCEDURE file. (This is populated by the EKG mnemonic in data entry).

ICD OPERATION/PROCEDURE codes 89.51, 89.52 or 89.53

CPT Codes: 93000-93024, 93040-93042, 93224-93237, 93268-93268, 93270-93272, 93278-93278

Individual Audit: The date of last EKG is displayed

Cumulative Audit: The date is used to determine % performed in past 3 years, past 5 years and ever.

11.29   Fasting Glucose

The last Fasting Glucose test in the V LAB file are found. The taxonomy used to find these tests is the DM AUDIT FASTING GLUCOSE TESTS lab taxonomy. If no test in that taxonomy is found, then the V LAB file is searched for a LOINC code in the DM AUDIT FASTING GLUC LOINC code taxonomy.

Individual Audit: The date and result of the test is displayed. If there is no result, the result will be blank, but the date will display.

Cumulative Audit: A tally of those with a fasting glucose test and those without will be displayed.

11.30   75 GM 2 Hour Glucose

The last lab test in the year prior to the audit date that is a member of the DM AUDIT 75GM 2HR GLUCOSE taxonomy is found in V LAB. If no test in that taxonomy is found, then the V LAB file is searched for a LOINC code in the DM AUDIT 75GM 2HR LOINC code taxonomy.

Individual Audit: The date of the test and the result are displayed.

Cumulative Audit: A tally of those who had the test done and those who did not is displayed.

11.31   Total Cholesterol

The last lab test in the year prior to the audit date that is a member of the DM AUDIT TOTAL CHOLESTEROL TAX taxonomy is found in V LAB. If no test in that taxonomy is found, then the V LAB file is searched for a LOINC code in the BGP CHOLESTEROL LOINC code taxonomy.

Individual Audit: The date and result of the test is displayed. If there is no result, the result will be blank, but the date will display.

Cumulative Audit: The result of the test is examined and is put into the following categories. If the result is blank OR the 1st digit of the result is not a number then it is put in the Unable to determine result category since we cannot interpret the result. For example, if the value is "cancelled," it will fall into unable to determine.

- Desirable (<200 mg/dl)

- Borderline (200-239 mg/dl)

- High (240 mg/dl or more)

- Unable to determine result

- Not tested

11.32 HDL Cholesterol

The last lab test in the year prior to the audit date that is a member of the DM AUDIT HDL CHOLESTEROL TAX taxonomy is found in V LAB. If no test in that taxonomy is found, then the V LAB file is searched for a LOINC code in the BGP HDL LOINC codes taxonomy.

Individual Audit: The date and result of the test is displayed. If there is no result, the result will be blank, but the date will display.

Cumulative Audit: The result of the test is examined and is put into the following categories. If the result is blank OR the 1st digit of the result is not a number then it is put in the Unable to determine result category since we cannot interpret the result. For example, if the value is "cancelled", it will fall into unable to determine.

- HDL <35 mg/dl
- HDL 35-45 mg/dl
- HDL 46-55 mg/dl
- HDL >55
- Unable to determine result
- Not tested

11.33 LDL Cholesterol

The last lab test in the year prior to the audit date that is a member of the DM AUDIT LDL CHOLESTEROL TAX taxonomy is found in V LAB. If no test in that taxonomy is found, then the V LAB file is searched for a LOINC code in the BGP LDL LOINC codes taxonomy.

Individual Audit: The date and result of the test is displayed. If there is no result, the result will be blank, but the date will display.

Cumulative Audit: The result of the test is examined and is put into the following categories. If the result is blank OR the 1st digit of the result is not a number then it is put in the Unable to determine result category since we cannot interpret the result. For example, if the value is "cancelled", it will fall into unable to determine.

- LDL <100 mg/dl
- LDL 100-129 mg/dl
- LDL 130-160 mg/dl

- LDL >160

- Unable to determine result

- Not tested

11.34   Triglycerides

The last lab test in the year prior to the audit date that is a member of the DM AUDIT TRIGLYCERIDES TAX taxonomy is found in V LAB. If no test in that taxonomy is found, then the V LAB file is searched for a LOINC code in the BGP TRIGLYCERIDE LOINC codes taxonomy.

Individual Audit: The date and result of the test is displayed. If there is no result, the result will be blank, but the date will display.

Cumulative Audit: The result of the test is examined and is put into the following categories. If the result is blank OR the 1st digit of the result is not a number then it is put in the Unable to determine result category since we cannot interpret the result. For example, if the value is "cancelled", it will fall into unable to determine.

- TG <150 mg/dl

- TG 150-199 mg/dl

- TG 200-400 mg/dl

- TG >400 mg/dl

- Unable to determine result

- Not tested

Appendix A: Bulletin System for Notification of Newly Diagnosed Patients

The RPMS MailMan system can be used to generate bulletins to members of a Diabetes Team, so that newly diagnosed diabetic patients, those with new complications, those with abnormal fasting glucose values, or those with abnormal 2-hour glucose tolerance test results are not lost to follow-up. The bulletins are added automatically to the facility Bulletin file during installation of the PCC Management Reports Package.

The bulletins are:

- APCL DIABETES REG COMPLICATION

- APCL DIABETES REG NEW CASE

- APCL IFG NOTIFICATION

> **Note:** You must have Fasting Glucose lab tests added as members to the DM AUDIT FASTING GLUCOSE lab test taxonomy.

- APCL IGT NOTIFICATION

> **Note:** You must have the 2 Hr Post 75 Gm Glucose test added as a member to the DM AUDIT 75GM 2HR GLUCOSE lab test taxonomy.

Please seek assistance from your local or area IS staff if you do not have FileMan security to set up a new Mail Group, Add Members, and add that Mail Group to the PCC Management Reports Bulletins.

It is currently recommended that only the bulletins for patients newly diagnosed with Diabetes, IGT, or IFG be set up. If the complications on the complication list have been appropriately linked to ICD-9 codes as described on page X, the patients on the Diabetes Register will automatically be updated with their complications via provider POV recording and data entry coding.

A Mail Group for the Diabetes Team may already exist on your system. If not, one may be set up as follows:

```
VA Fileman Version 21.0

Select VA FileMan Option: Enter or Edit File Entries

INPUT TO WHAT FILE: MAIL GROUP//
EDIT WHICH FIELD: ALL//
Select MAIL GROUP NAME: DIABETES TEAM
Are you adding 'DIABETES TEAM' as a new MAIL GROUP (the 17TH)? No// Y  (Yes)
   MAIL GROUP COORDINATOR: USER,DAVID K           DKR
Select MEMBER: USER,BETTY        BM
  Are you adding 'USER,BETTY' as a new MEMBER (the 1ST for this MAIL GROUP)? No// Y
(Yes)
Select MEMBER: USER,DAVID K
Are you adding 'USER,DAVID' as a new MEMBER (the 2ND for this MAIL GROUP)? No// Y
(Yes)
DESCRIPTION:
  No existing text
  Edit? NO//Y
==[ WRAP ]==[ INSERT ]=====< DESCRIPTION >======[ <PF1>H=Help ]====
THIS GROUP RECEIVES BULLETINS FOR NEWLY DIAGNOSED DIABETICS AND THOSE WITH NEW
COMPLICATIONS.

TYPE: PRIVATE
ORGANIZER: USER,DAVID K
COORDINATOR: USER,DAVID K
Select AUTHORIZED SENDER:
ALLOW SELF ENROLLMENT?: NO
REFERENCE COUNT:
LAST REFERENCED:
RESTRICTIONS: 0
```

Figure A-1: Setting up a mail group for the Diabetes team

Additional entries to the mail group may be made for remote members outside the local facility but will require assistance from the IHS National Mailman Coordinator.

Once the mail group and members have been defined, all that remains is assigning this mail group to the desired APCL Bulletins:

```
VA Fileman Version 21.0

Select VA FileMan Option: Enter or Edit File Entries

INPUT TO WHAT FILE: BULLETIN
EDIT WHICH FIELD: ALL// [ENT]


Select BULLETIN NAME: APCL
     1   APCL DIABETES REG COMPLICATION
     2   APCL DIABETES REG NEW CASE
CHOOSE 1-2: 2  APCL DIABETES REG NEW CASE
NAME: APCL DIABETES REG NEW CASE  Replace
SUBJECT: DM NEW CASE// [ENT]
Select MAIL GROUP: DIABETES TEAM   ROSS,DAVID K
Are you adding 'DIABETES TEAM' as a new MAIL GROUP (the 1ST for this BULLETIN)
? No// Y
Select MAIL GROUP:
DESCRIPTION:
This bulletin will be sent to diabetes control officer when a patient is seen for
the first time for a dm diagnosis

  Edit? NO//
MESSAGE:. . .
       . . .
was seen on |3| at |15|
with the following diagnosis:
     ICD9 Code: |1|  ICD Description: |8|
     Provider Stated: |4|
 This is the first time that this patient has been seen for the
diabetes diagnosis listed above.  This patient/visit may require
your follow-up.  Please review the patient's medical record at your
earliest convenience for further information.

  Edit? NO// [ENT]
```

Figure A-2: Assigning a mail group to the desired APCL Bulletins

> Repeat the process for the bulletins APCL DIABETES REG COMPLICATION, APCL IFG NOTIFICATION, and APCL IGT NOTIFICATION.
>
> To be sure that the bulletin system works correctly, add a new diabetic complication as a Purpose of Visit to a DEMO, PATIENT in your facility database. If the Mail Groups and Bulletins have been set up correctly, you should see, within a few minutes of entering the complication as a Purpose of Visit, a notice that you have a new mail message when signing on to RPMS.

Appendix B: Word Processing Commands

This appendix lists the commands used in the ScreenMan word processing fields. These commands can be accessed at any time in the word processing screen by pressing **F1**(**PF1** on some keyboards) followed by the **H** key.

B.1   Summary of Key Sequences

Navigation

```
Incremental movement             Arrow keys
One word left and right          <Ctrl-J> and <Ctrl-L>
Next tab stop to the right       <Tab>
Jump left and right              <PF1><Left> and <PF1><Right>
Beginning and end of line        <PF1><PF1><Left> and <PF1><PF1><Right>
Screen up or down                <PF1><Up> and <PF1><Down>
                                      or: <PrevScr> and <NextScr>
                                      or: <PageUp>  and <PageDown>
Top or bottom of document        <PF1>T and <PF1>B
Go to a specific location        <PF1>G
```

Exiting/Saving

```
Exit and save text               <PF1>E
Quit without saving              <PF1>Q
Exit, save, and switch editors   <PF1>A
Save without exiting             <PF1>S
```

Deleting

```
Character before cursor          <Backspace>
Character at cursor              <PF4>  or  <Remove>  or  <Delete>
From cursor to end of word       <Ctrl-W>
From cursor to end of line       <PF1><PF2>
Entire line                      <PF1>D
```

Settings/Modes

```
Wrap/nowrap mode toggle          <PF2>
Insert/replace mode toggle       <PF3>
Set/clear tab stop               <PF1><Tab>
Set left margin                  <PF1>,
Set right margin                 <PF1>.
Status line toggle               <PF1>?
```

Formatting

```
Join current line to next line   <PF1>J
Reformat paragraph               <PF1>R
```

Finding

```
Find text                        <PF1>F  or  <Find>
Find next occurrence of text     <PF1>N
Find/Replace text                <PF1>P
```

Cutting, Copying, and Pasting

```
Select (Mark) text                  <PF1>M at beginning and end of text
Unselect (Unmark) text         <PF1><PF1>M
Delete selected text                <Delete> or <Backspace> on selected text
Cut and save to buffer           <PF1>X on selected text
Copy and save to buffer       <PF1>C on selected text
Paste from buffer                    <PF1>V
Move text to another location   <PF1>X at new location
Copy text to another location   <PF1>C at new location
```

Appendix C: Visual DMS

A graphical user interface (GUI) or Windows-based version is available for the Diabetes Management System (DMS) software. The GUI version of the software contains most of the existing functionality of the traditional "roll and scroll" RPMS application, including patient management, register maintenance, running reports, and running the Diabetes Audit.

To avoid redundancy, this section only includes the steps for using the Visual DMS I and does not include background information such as how to use the patient management list manager, setting up taxonomies, adding or deleting users, or running reports. This information is included in prior sections of the User Manual.

C.1   Getting Started

1. After the DMS GUI is installed, a shortcut will be placed on the Windows desktop that is labeled **Visual DMS**. Double-click that icon to open the DMS GUI.
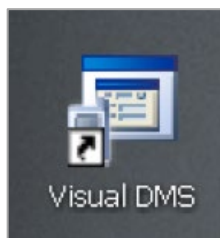
Figure C-1: Visual DMS shortcut
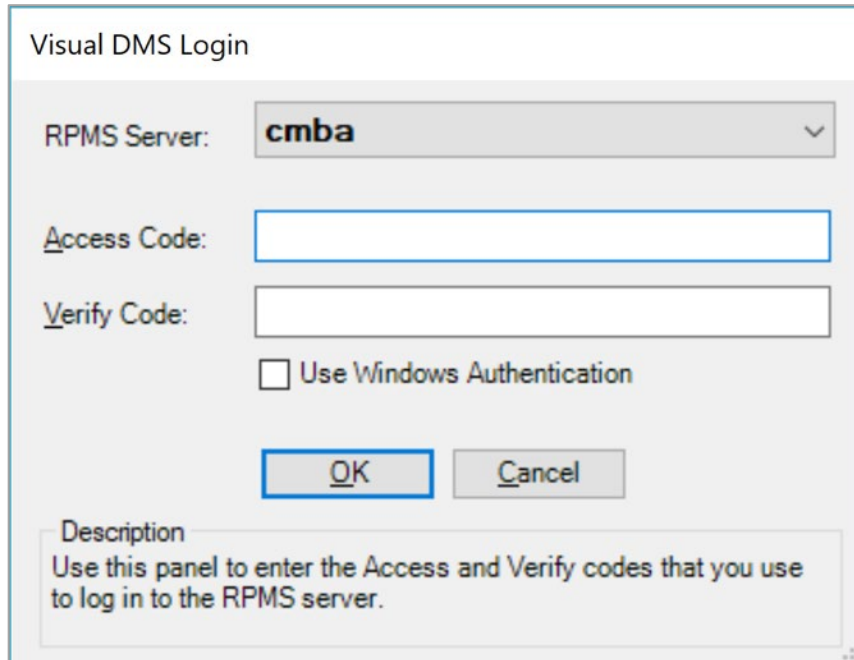
2. The program screen will display briefly before you are prompted to enter a RPMS server and port.

Figure C-2: Visual DMS splash screen

3. On the RPMS server address screen, select the server you want to connect to from the list and enter your access and verify codes. Click **OK**.

> **Note:**   This information will be saved and will not need to be changed unless you change servers.

Figure C-3: Visual DMS Login screen

4. If you are a multidivisional site the following box will display. Select the appropriate division from this list.

Figure C-4: Select Initial Division screen

5. A list of Registers for which you are an authorized user will display. Click on the Register that you wish to use.
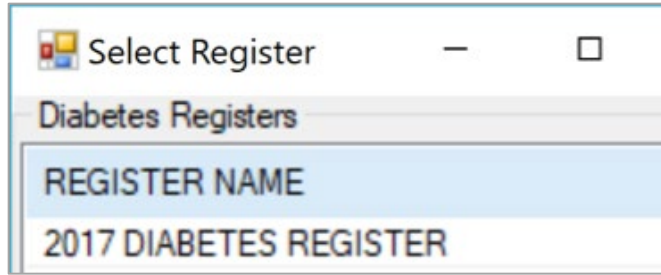
Figure C-5: Select Register list

6. The **Visual DMS** window displays as shown in Figure C-6.
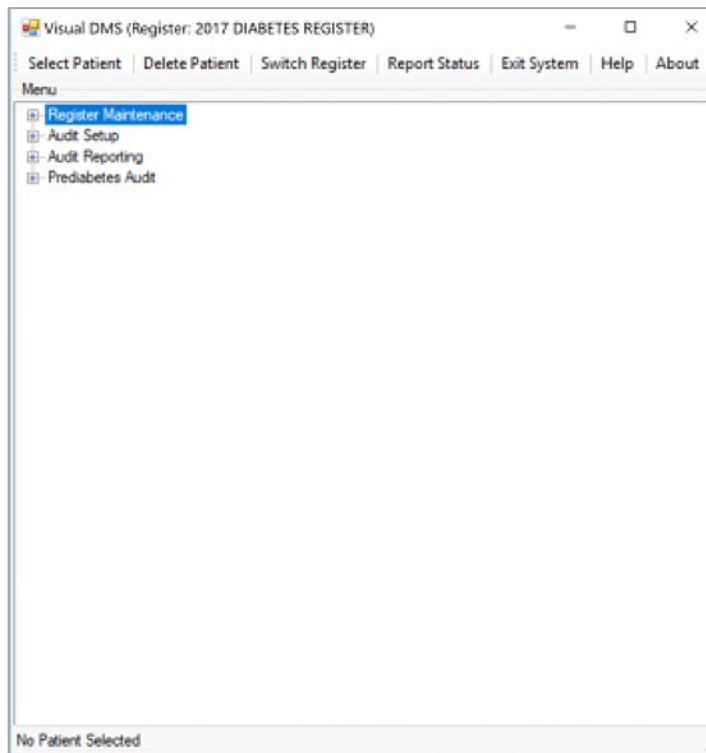
Figure C-6: Visual DMS main menu

Select a Register to begin using either the listed options or select from the toolbar at the top of the window. The name of the Register that you are currently using displays in the title bar of the window.

The window can be enlarged by either clicking on the box in the upper right corner of the screen or using the mouse to resize. To use the mouse, point it at the lower right-corner of the screen, hold down the left mouse button, and drag to resize the window.

A plus sign (+) in a box preceding a menu indicates more menu options in that category. Display the options by clicking the plus sign.

C.2   Toolbar Options

There are seven toolbar options and four main menu options. The seven toolbar options are described in the following sections.

C.2.1   Select Patient

Click the **Select Patient** button to select a patient and use any of the **Patient Management** options. Patients can be entered by Last Name, First Name, Date of Birth, or Chart Number.

Click the **Display** button or press **Enter** to view a list of matching patients. If the list is too long to display on a single page, use the scroll bar or click the **More** button to view additional names. Click to select a patient.
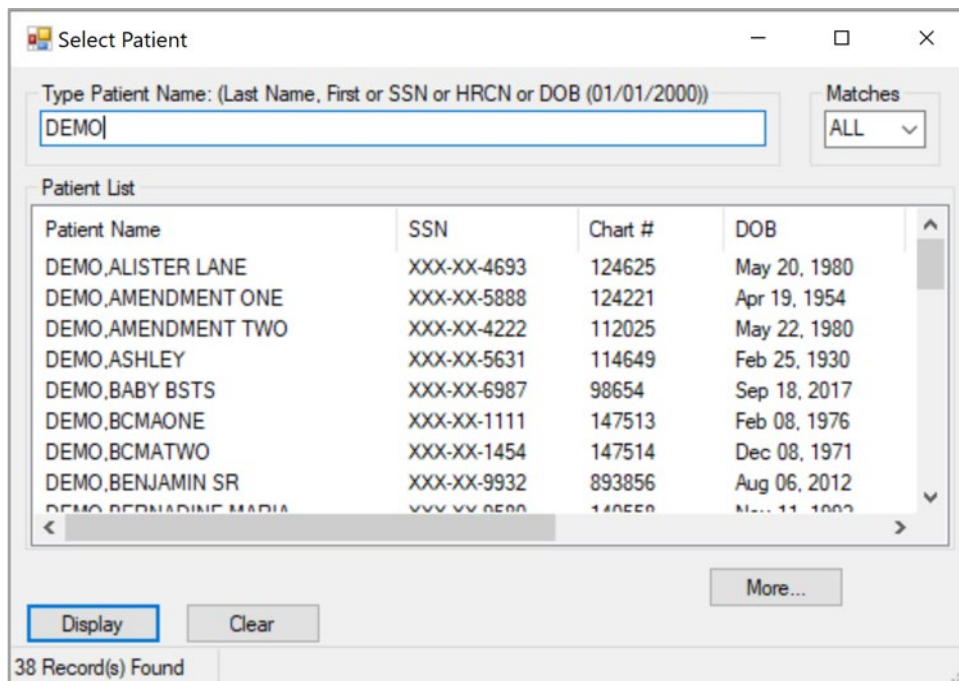
Figure C-7: Select Patient window

If you select a patient who is not currently a member of the Register, you will be asked if you wish to add the patient to the Register. Click **Yes** to add the patient to the Register.

If you click on the Select Patient toolbar button while working on another patient, a warning box will ask if you wish to switch patients. Click **Yes** to switch or **No** to continue working with the same patient.

The Register with which you are currently working always displays in the title bar at the top of the window. If you have a patient currently selected, that patient displays in the gray bar at the bottom of the window. See Figure C-8.
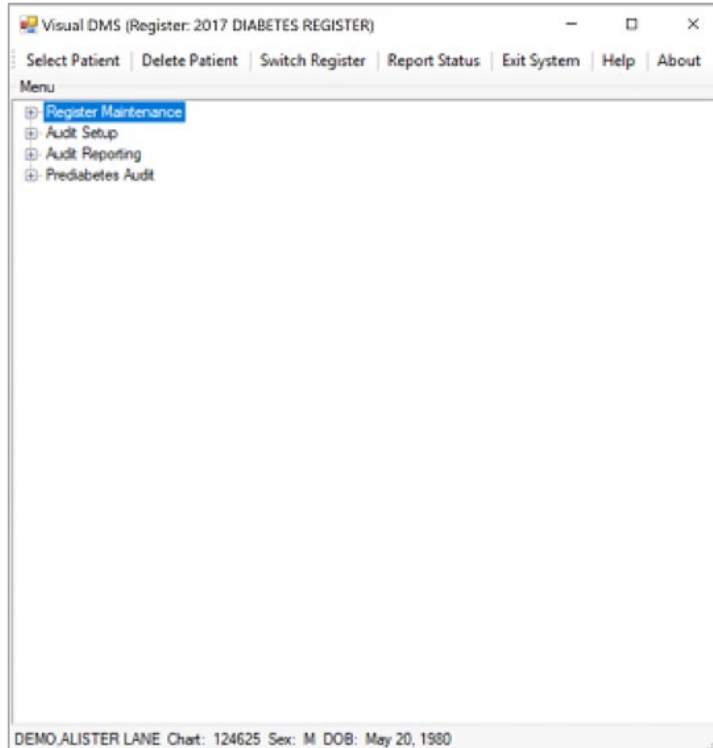
Figure C-8: Visual DMS with patient selected

C.2.2   Delete Patient

To delete a patient from the Register, click the **Delete Patient** option. If you click this option while working with a patient (the name displays at bottom of the window), the program will assume that you wish to delete this patient. Click **Yes** to delete this patient.

If no patient is selected and you click the **Delete Patient** option, you will be prompted to enter the patient you wish to delete (patient's Last Name, First Name, Chart Number, or Date of Birth). Click on the patient to immediately delete the record from the Register.

> **Warning:** Deletion is final. Any Register data associated with this patient will be deleted as well.

C.2.3   Switch Register

If you are an authorized user of other Registers, click on the Toolbar option to switch to another Register. Click on the Register you wish to view from the displayed list.

C.2.4   Report Status

Click the **Report Status** button to display any reports that are currently running or that have been completed. You can click on a report to automatically open it in Microsoft Word. Reports can be printed or saved as with any other Word document. If a report is no longer needed, delete it by clicking to place a check mark in the box in front of the report, then clicking the **Delete** button on the toolbar.

C.2.5   Exit System

Clicking the **Exit System** button on the toolbar, will result in the display of pop-up that displays: "Are You Sure You Want to Exit?". Click **Yes** or **No** as appropriate. Click the **X** in the upper right corner of the window to exit.

C.2.6   Help

Click the **Help** button on the toolbar to display the online help. Help is also available on each applicable form.

C.2.7   About

Click the **About** button on the toolbar to display the current version of Visual DMS. Click **OK** to close the window.

C.3   Menu Options

There are four main menu options in Visual DMS that correspond to the traditional RPMS Diabetes Management System Menu options. These options will be explained in the following sections.
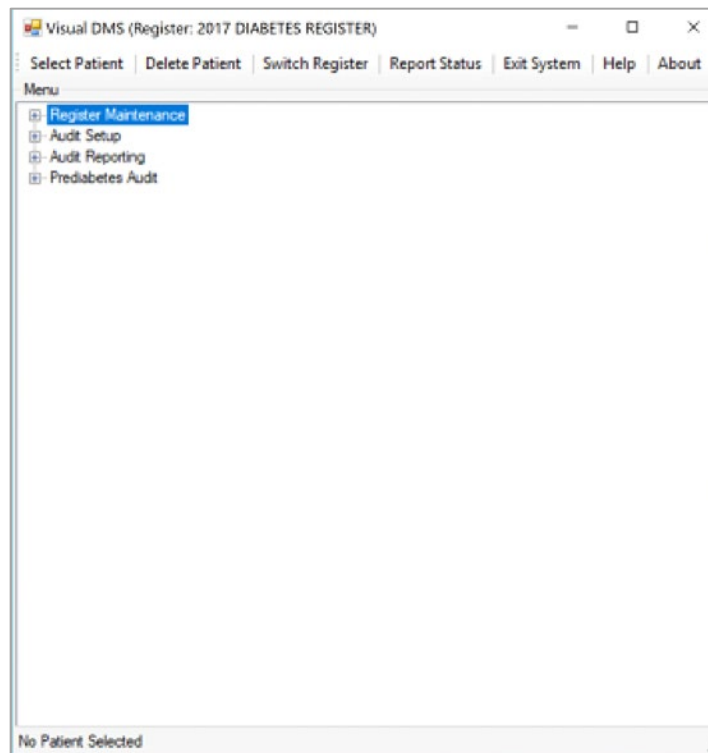
Figure C-9: Visual DMS main menu

C.3.1   Register Maintenance

1. Open the **Register Maintenance Menu** by clicking the plus sign (+) in front of Register Maintenance.

2. A menu with the following options displays: **Register Management**, **Patient Management**, **Add Patients from Template**, and **Register Reports**. These options correspond to the same menu options in RPMS.
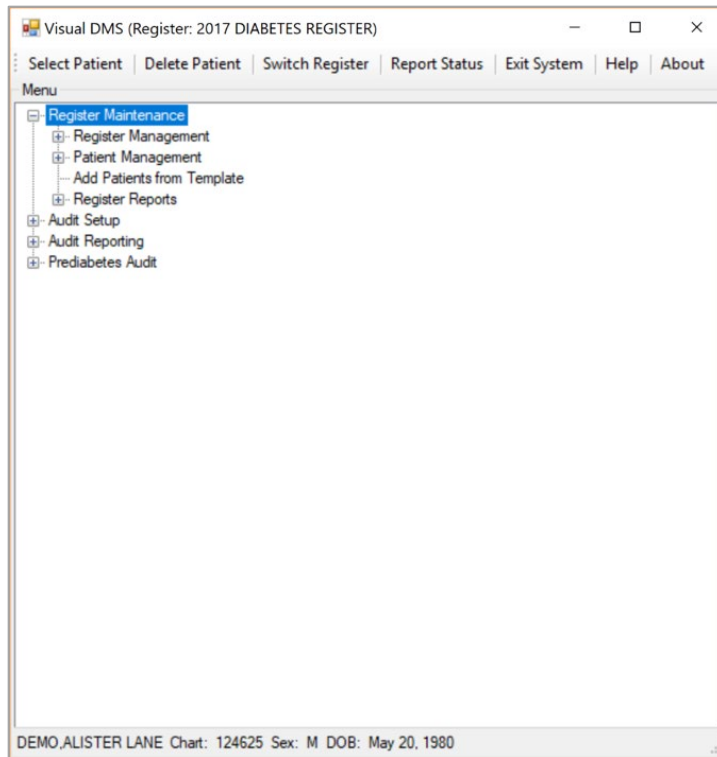
Figure C-10: Register Maintenance Menu option

3. The **Patient Management** options are disabled until a patient is selected using the **Select Patient** option on the toolbar.

4. The selected patient's name will display in the gray bar at the bottom of the window.

5. The menu options will be described below.

6. When finished with the **Register Maintenance Menu**, click the minus sign (**-**) in front of **Register Maintenance** to close the menu.

C.3.1.1   Register Management

Click the plus sign (**+**) in front of **Register Management** to expand this menu. The available option is **User Setup**.
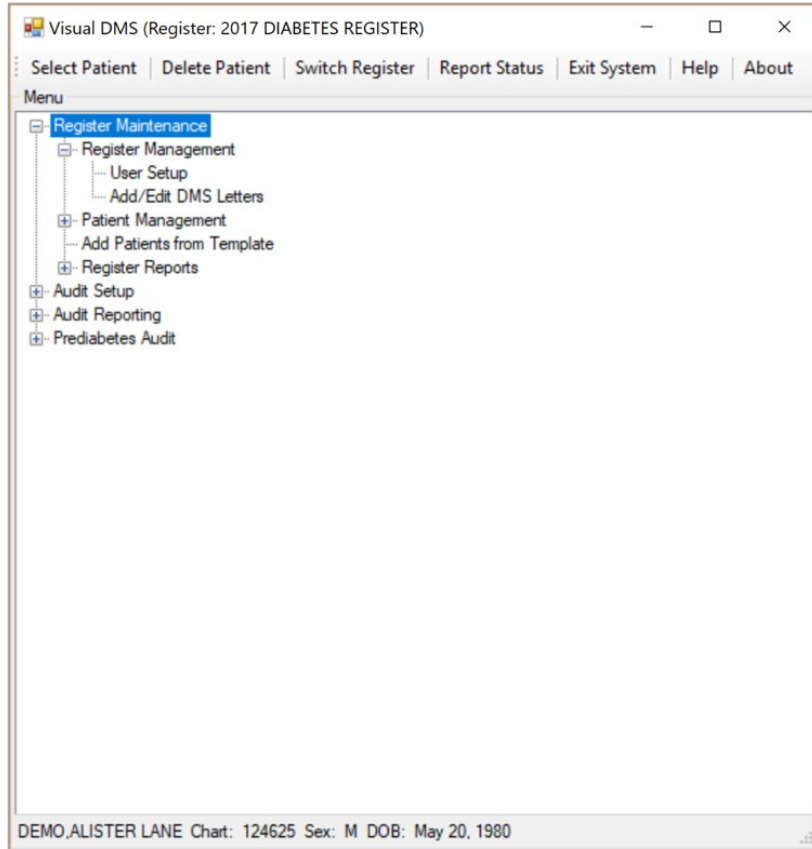
Figure C-11: Register Management

C.3.1.2   User Setup

Click **User Setup** to review current authorized users of the Register and update the list.
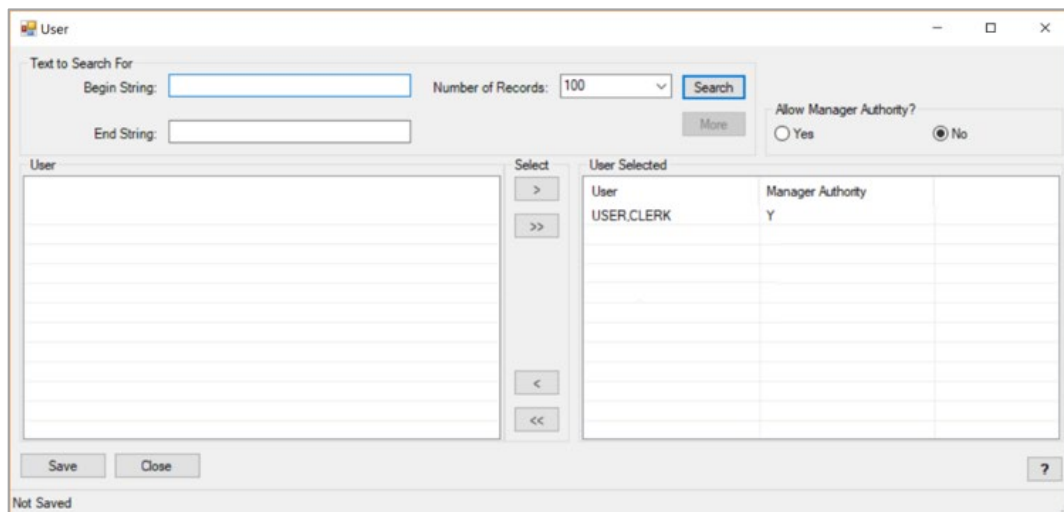
Figure C-12: User selection

1. Current users of the Register will be listed in the **User Selected** list. Those who have Manager authority will have a **Y** in the **Manager Authority** column.

2. If additional authorized users are to be added to the Register, type the first few letters of that user's last name in the Begin String box. A list of matching entries will be displayed. Either click and drag a user's name from the **User** list to the **User Selected** list or highlight the user and click the right arrow to move them into the **User** list. If User(s) are to be removed from the **User Selected** list, either drag their name back to the **User** list or highlight their name and click on the left arrow (<).

3. If a user is to be give manager authority, click the **Yes** button under **Allow Manager Authority?**, and then click the User's name. Manager authority may be removed in a similar manner, by clicking the **No** button under **Allow Manager Authority?** And then click the name(s) of user(s) who will not be allowed manager authority.

4. When the list of authorized users has been updated, click the **Save** button to save changes. Close the **User** window.

C.3.2   Patient Management

Click the plus sign (+) next to **Patient Managemen**t to open the **Patient Management** menu.
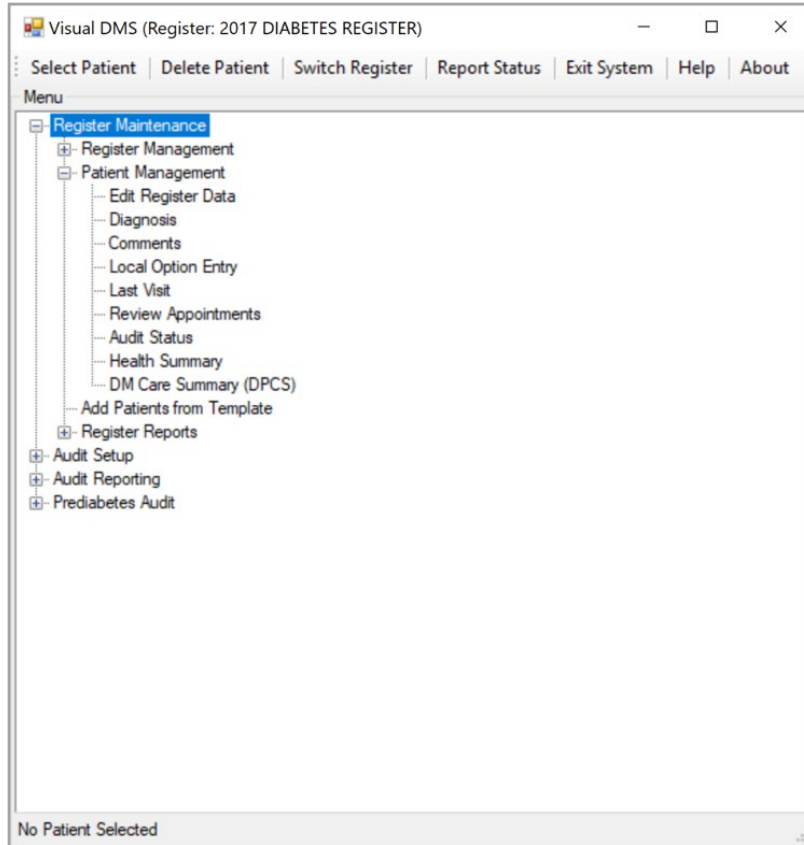
Figure C-13: Patient Management options

C.3.2.1   Edit Register Data

1. Use the **Patient Profile** dialog may be used to change **Register Status**, **Where Followed**, **Case Manager**, **Contact**, **Last Review**, and **Next Review Date**.

Figure C-14: Patient Profile dialog

2. Change date fields by clicking on the date (month, day, or year) and using the up or down arrows to change the month, date, or year. The date and year can also be changed by typing the desired new date or year to replace the one displayed. Alternatively, click the arrow to open a calendar and browsed to a date by scrolling, using the right and left arrows. Click a date on the calendar to select it.

3. The **Contact** field is a free text field in which to enter patient contact information.

4. Click the **Select** button to the right of the field **Case Manager** to display a list. Browse the list to find the desired entry is found and click on it.

5. The **Where Followed** field requires a match on the name of a facility. Type the first few letters of the facility name in the **Begin String** box and click **Search**.

6. Click on the name of the facility where the patient is followed.

7. When all data entry is complete, click **Save** to exit. Then click the **X** in the upper right corner of the window to close the **Patient Profile** dialog and stop editing the register data.

C.3.2.2   Diagnosis

Click the **Diagnosis** menu option to open the **Diagnosis** dialog.

Please note that if your site also utilizes Certified EHR (Electronic Health Record) and the Integrated Problem List (IPL), the diagnoses entered here with date of onset should also be entered into the IPL, so that all clinicians will be aware of the diagnoses.

Figure C-15: Diagnosis dialog

1. To add a new diagnosis, select a **Diagnosis** from the list. Then, select the severity from the **Severity** list and enter an **Onset Date**. Click **Add** to add it to the **Diagnosis List** box.

2. To delete a diagnosis, select the check box next to the one to delete and click the **Delete Checked Items** button. Click **Yes** to proceed at the following dialog.

Figure C-16: Delete diagnosis confirmation

3. Click the **X** in the upper right corner to close the diagnosis dialog.

C.3.2.3   Comments

1. Enter case comments by clicking the **Comments** option.

2. Enter any comments in the free text field and click **Save** when the entry is complete. The "Not Saved" text in the gray bar at the bottom of the window is replaced by "Saved."

3. Close the screen by clicking the **X** in the window's upper right corner or click **Close**.
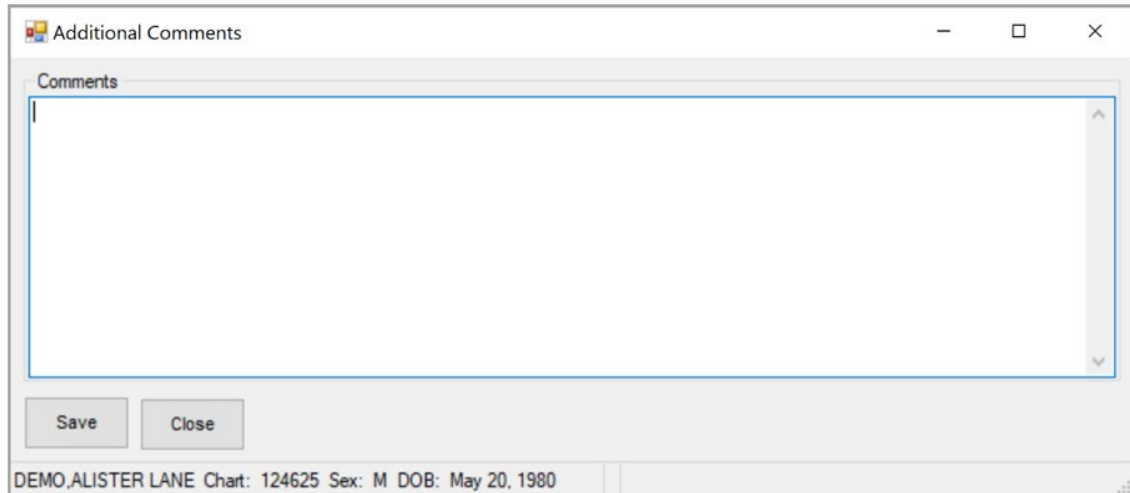
Figure C-17: Additional Comments dialog

C.3.2.4   Local Option Entry

Click the **Local Option Entry** menu option to open the **Local Option Entry** window.

1. Enter the **DM Audit Local Option** code and text click **OK** to save.

2. Click **Close** or close the dialog to exit the **Local Option Entry** form.
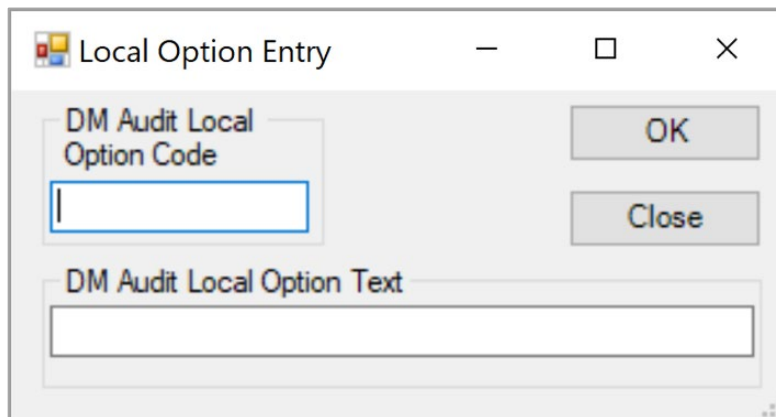
Figure C-18: Local Option Entry window

C.3.2.5   Last Visit

Click the **Last Visit** menu option to open the **Last Visit** window.

1. Display the patient's last visit by clicking the **Last Visit** menu option.

2. The visit record will open in Microsoft Word. Users can browse or print the visit record may be browsed or as needed.

3. When the record review is complete, close the Word window by clicking the **X** in the upper right corner.
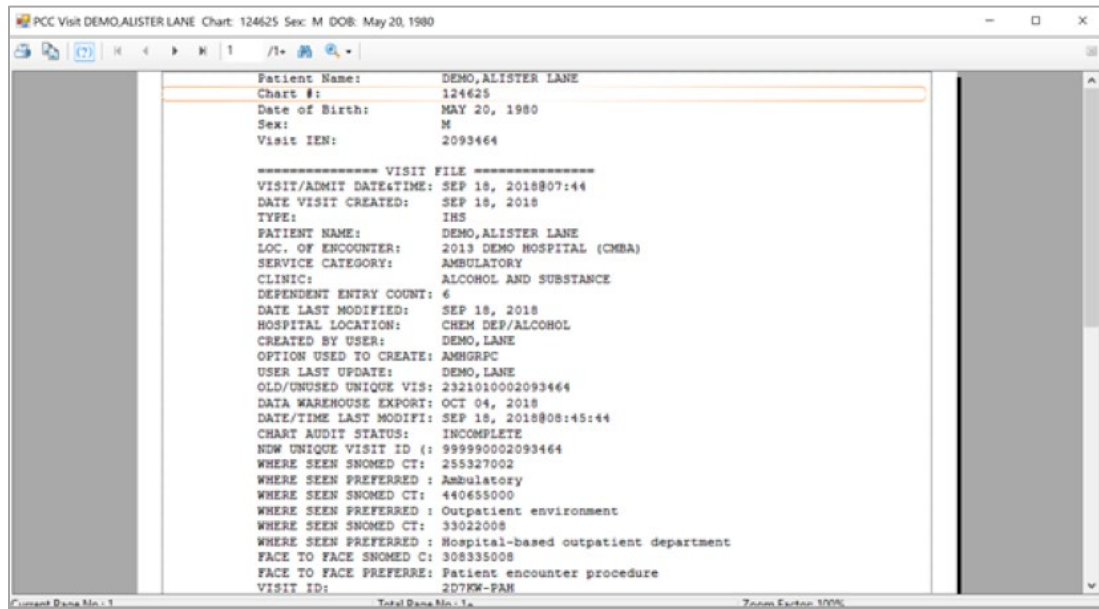
Figure C-19: Last Visit display

C.3.2.6   Review Appointments

Click the **Review Appointments** menu option to open the **Review Appointments** window.

1. This will display a list of scheduled appointments for the selected patient.

2. This list will only include appointments made in the IHS Scheduling or PIMS Scheduling modules.

3. The list will display in a Crystal Reports document.

4. The user can print or browns the list as needed.

5. Close the Crystal Reports document by clicking the **X** in the upper right corner when the review is complete.
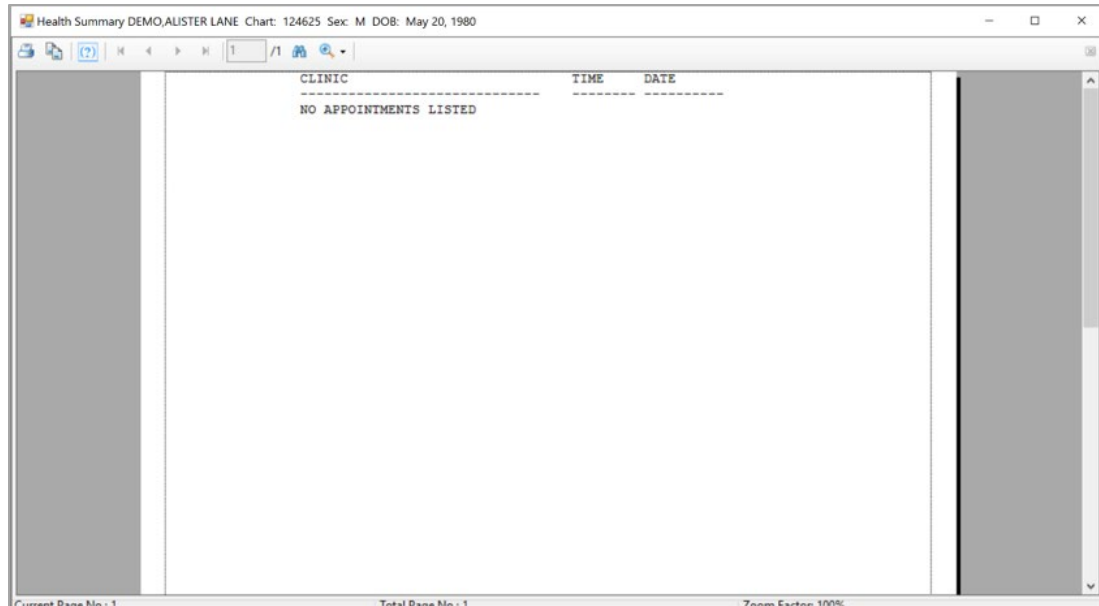
Figure C-20: Review appointments

C.3.2.7   Audit Status

Click the **Audit Status** menu option to display the **Audit Status** screen.

1. When the window for setting the audit parameters opens, use either the browsable calendar to select the audit date or change the date by changing the day, month, or year in the date window.

2. When entries are complete, click the **Print** button. The audit will display in a Crystal Reports document.

3. Browse of print the audit may as needed.

4. Close the Crystal Reports document by clicking the **X** in the upper right corner when the review is complete.
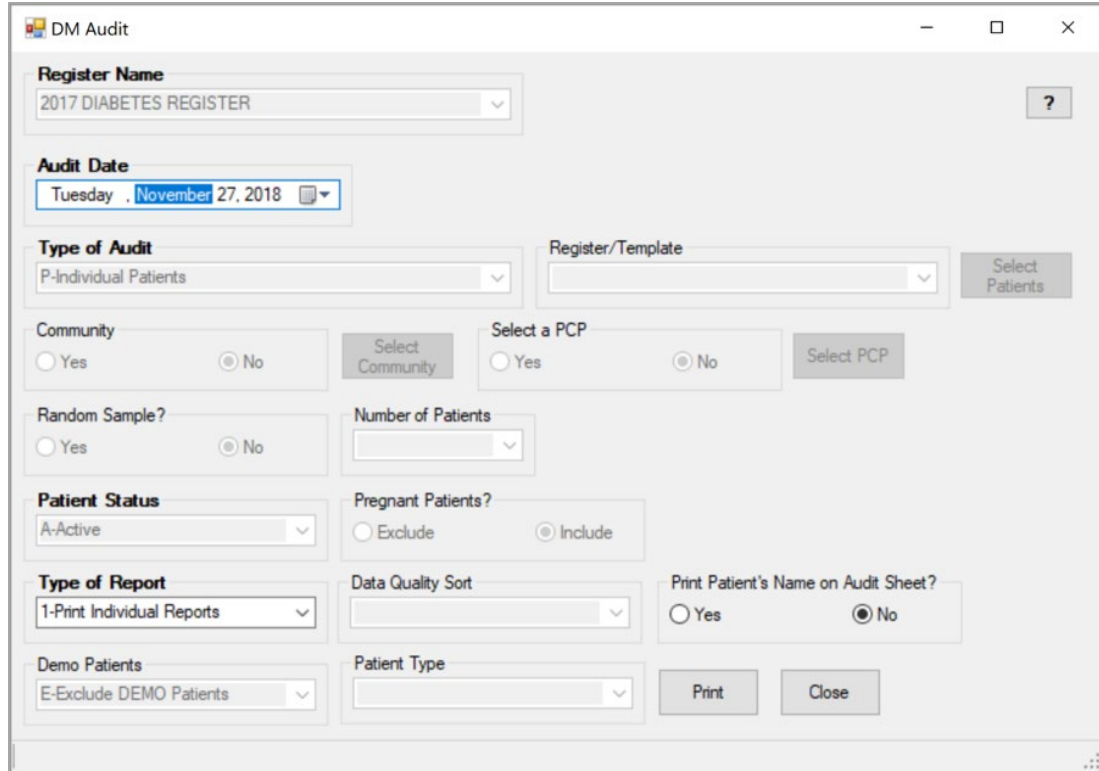
Figure C-21: DM Audit screen
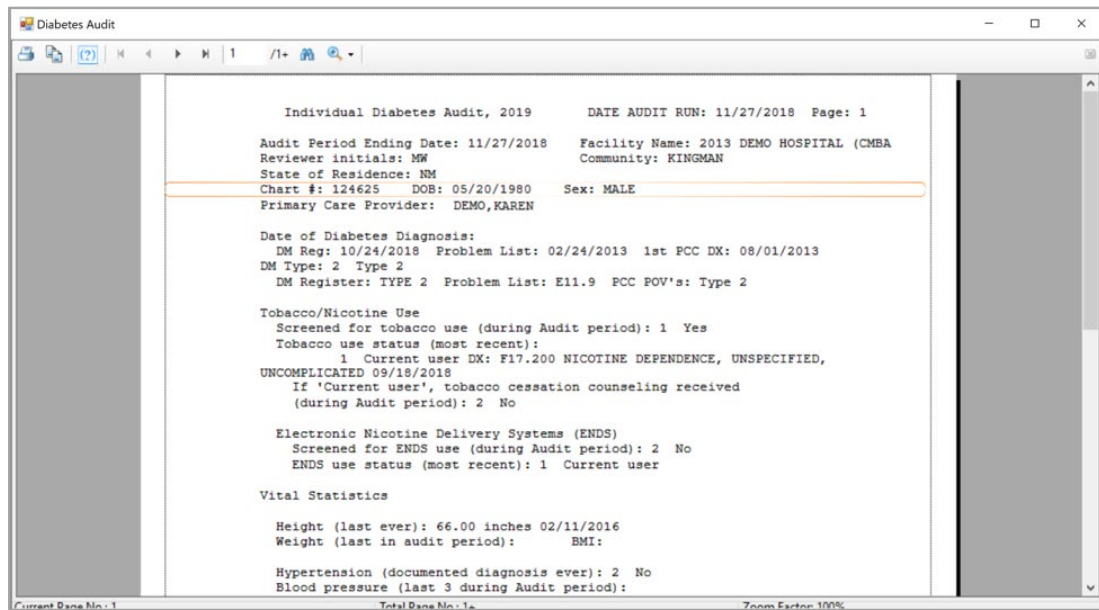
Figure C-22: Individual Audit

C.3.2.8   Health Summary

Click the **Health Summary** menu option to open **Health Summary** window.

1. Click the arrow next to **Health Summary/Flow Sheet Type** to display the available choices.
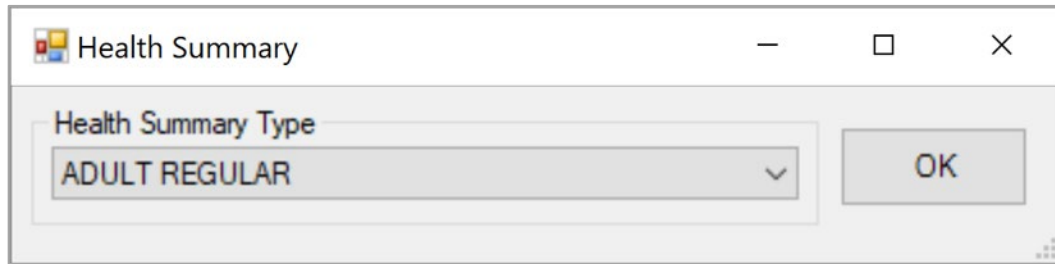
Figure C-23: Health Summary dialog

2. Select a health summary type and click **OK**.

3. The health summary will be displayed in Crystal Reports. Browse or print the health summary as needed.

4. Click the **X** in the upper right corner to close the **Health Summary** dialog.
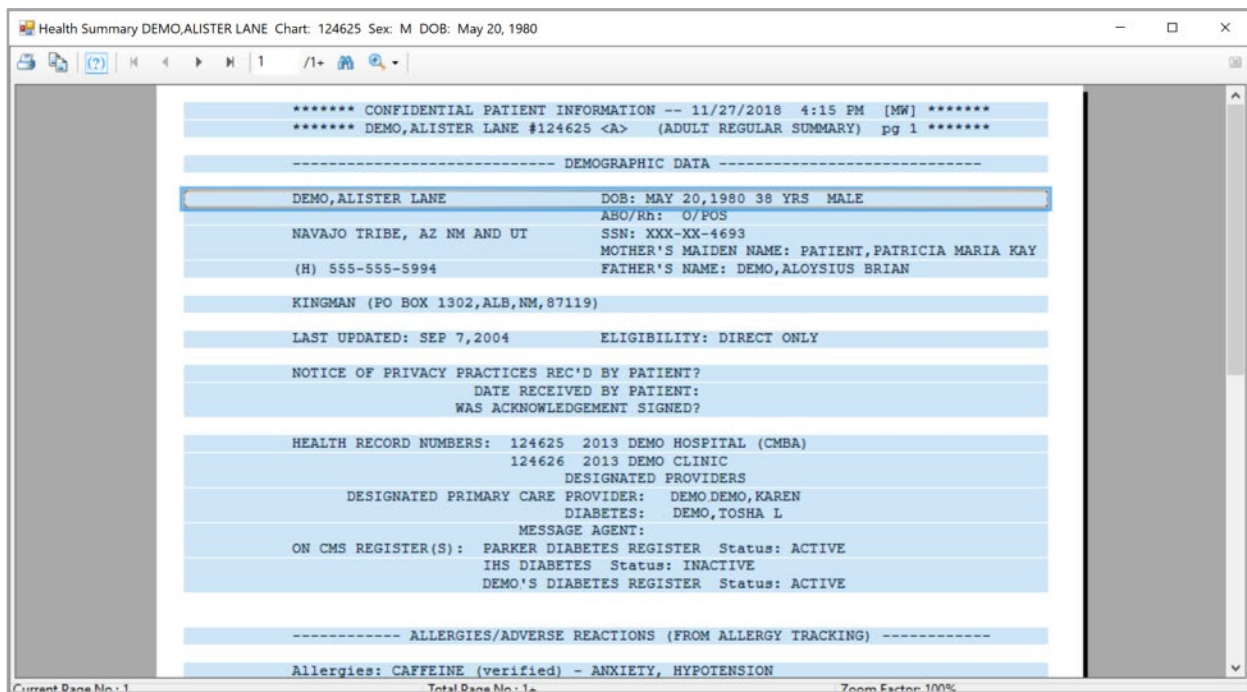
Figure C-24: Health Summary display

C.3.2.9   DM Care Summary (DPCS)

Click the **Diabetes Care Summary** (**DPCS**) menu item to open **Diabetes Care Summary** (**DPCS**).

A Crystal Reports document will open, displaying the Summary.

Click the **X** in the upper right corner to close the Crystal Reports document.

Figure C-25: DM Care Summary display

C.3.3   Add Patients from Template

1. Click the **Add Patients from Template** menu option, if you have a template of patients that you wish to add to the Register.

Figure C-26: Search Template dialog

2. Click the arrow next to the **Search Template** box to view a list of available templates. Select the desired template and click **OK**.

3. A pop-up window will display indicating if the patients have been added successfully. Click **OK** to close the pop-up window.

C.3.4   Register Reports

Click the plus sign (+) in front of Reports to display the **Register Reports** options. No patient needs to be selected to run reports.
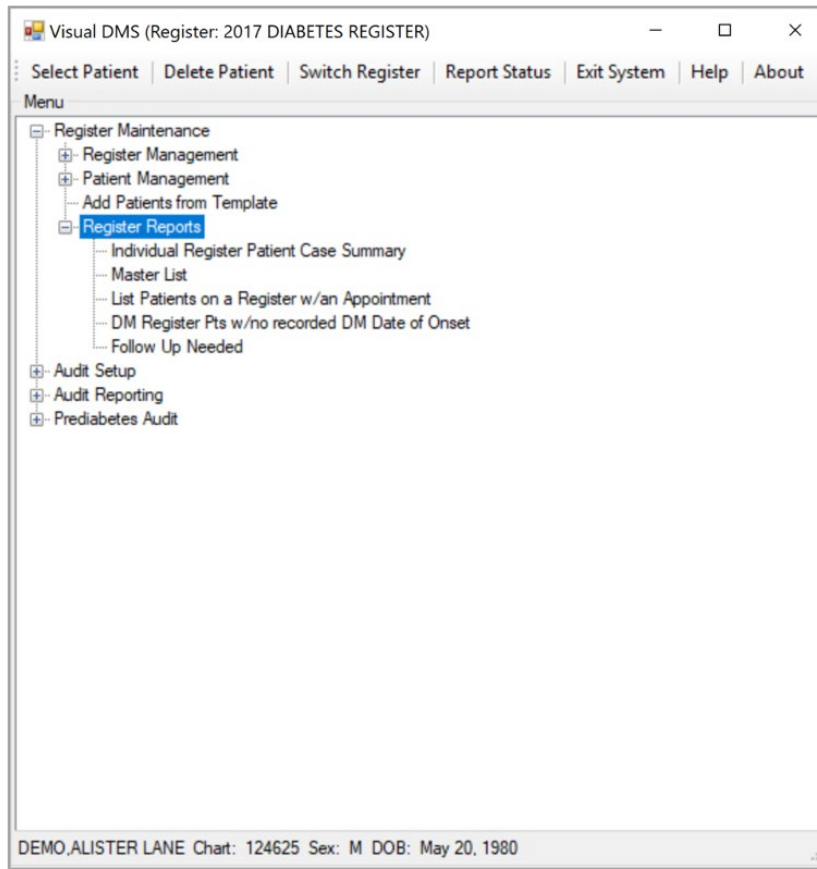
Figure C-27: Register Reports options

C.3.4.1   Individual Register Patient Case Summary

1. To review the Individual Case Summary, click the **Individual Register Patient Case Summary** menu option.

2. The case summary will display as a Microsoft Word document that the user can browse or print.

3. Close the document when the review is complete.
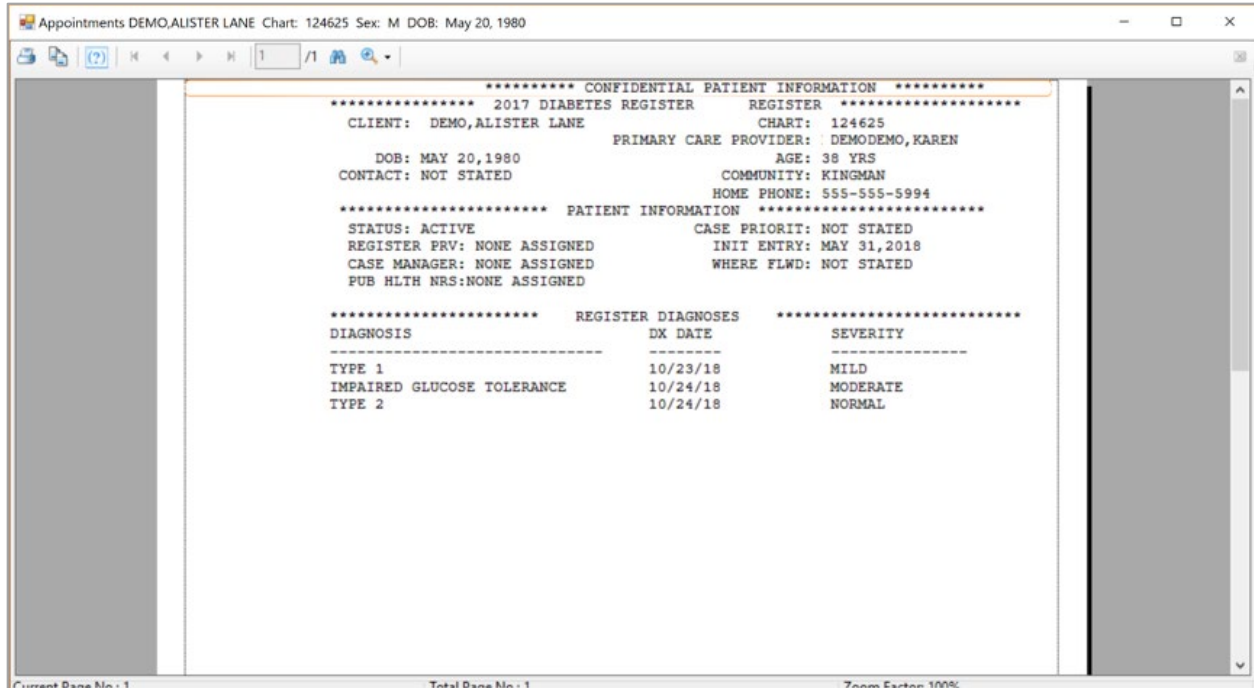
Figure C-28: Individual Register Case Summary

C.3.4.2   Master List

Click the Master List menu item to open the **Master List** dialog.
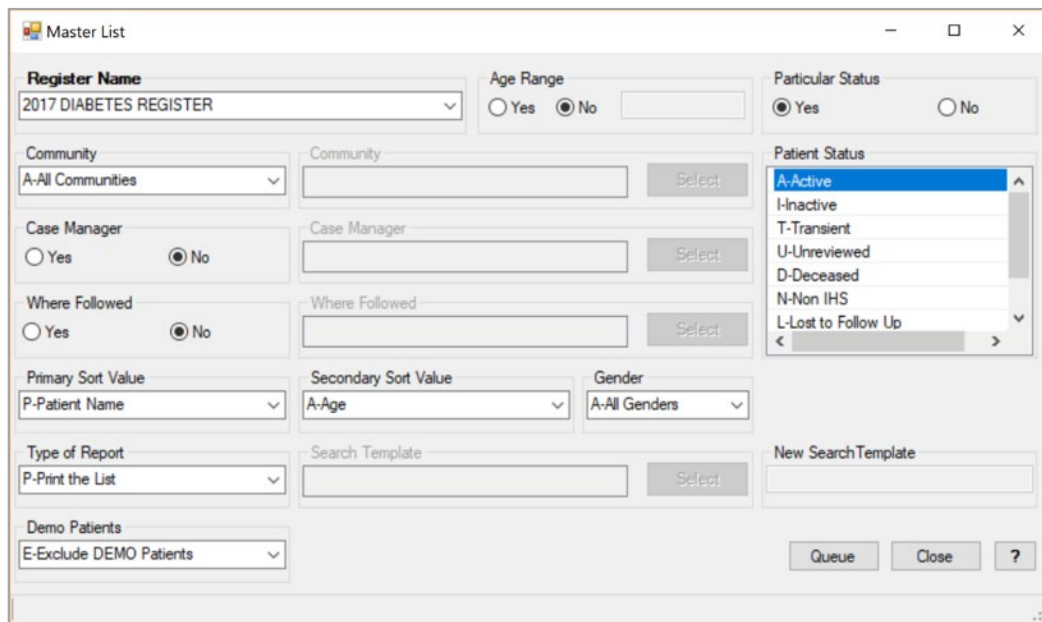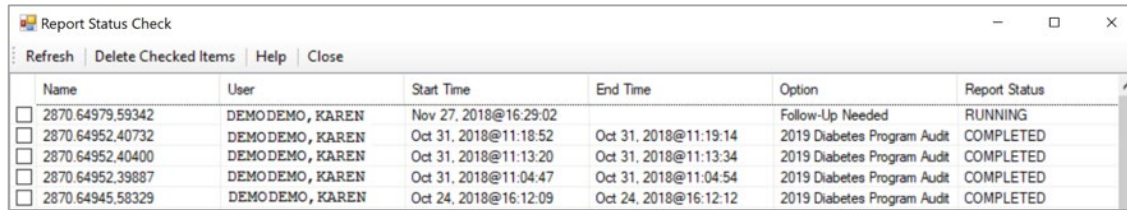
Figure C-29: Master List parameters

1. Select the **Register Name** from the list and specify any other parameters you would like to select the master list by.

2. Click **Queue** to queue the report.

3. Once the report is queued to run, click the **Report Status** option on the main window toolbar to review the report progress.

	Name	User	Start Time	End Time	Option	Report Status
☐	2870.64979,59342	DEMODEMO, KAREN	Nov 27, 2018@16:29:02		Follow-Up Needed	RUNNING
☐	2870.64952,40732	DEMODEMO, KAREN	Oct 31, 2018@11:18:52	Oct 31, 2018@11:19:14	2019 Diabetes Program Audit	COMPLETED
☐	2870.64952,40400	DEMODEMO, KAREN	Oct 31, 2018@11:13:20	Oct 31, 2018@11:13:34	2019 Diabetes Program Audit	COMPLETED
☐	2870.64952,39887	DEMODEMO, KAREN	Oct 31, 2018@11:04:47	Oct 31, 2018@11:04:54	2019 Diabetes Program Audit	COMPLETED
☐	2870.64945,58329	DEMODEMO, KAREN	Oct 24, 2018@16:12:09	Oct 24, 2018@16:12:12	2019 Diabetes Program Audit	COMPLETED

Figure C-30: Report Status Check

4. Click a report to review it.

5. The report will display in a Crystal Reports document that the user can save or print.

When review of the report is complete, close the Crystal Reports document by clicking the **X** in the upper right corner.

If a report is no longer needed, select the check box to the right of the report name. Then, click the **Delete Checked Items** option on the toolbar to delete all checked reports.

C.3.4.3   List Patients on a Register w/an Appointment

This report will allow you to print a list of patients on a Register with appointments within a specified date range in all or in select clinics.

1. Begin by clicking the **List Patients on a Register w/an Appointment** menu option.

2. When the **List Patients on Register with An Appointment** window opens, click the arrow next to the **Register Name** box to display a list of Registers. Select the desired Register for the report.

3. List Patients on Register with an Appointment window.

Figure C-31: List Patients on Register with an Appointment window

4. Use the browsable calendars displayed by clicking the arrows next to the
   Appointment Begin Date and **Appointment End Date** to select the appointment
   dates desired. The month, day, or year may be changed by clicking on each and
   using the up or down arrows to set the beginning appointment date or ending
   appointment date.

5. If you wish to see all appointments, regardless of clinic, select **Any** under **Select a
   Clinic**. If you wish to only review appointments for one or more particular clinics,
   click the **Select Clinic** button.

   Type the first three letters of the clinic with a scheduled appointment in the
   beginning string box. When the list of matching clinics displays, the desired clinic
   may be highlighted and dragged into the column on the right. You may also
   highlight the clinic and click on the right arrow (>) button to move the clinic into
   the right column. When all desired clinics have been added to the **Clinic Selected
   List**, click on the **Save** button.

6. Click the **Queue** button to run the report. A pop-up window will notify you that
   the report has been queued. Close the pop-up window by clicking the **X** in the
   upper right corner.

7. The report status can be checked by clicking on the **Report Status** button on the toolbar. See the Master List for complete instructions.

C.3.4.4   DM Register Pts w/no Recorded DM Date of Onset

This report may be run to identify patients on the Register who do not have a date of onset of Diabetes recorded in RPMS.

1. Begin by clicking on the menu option, DM Register Pts with No Recorded DM Onset. A window will display that allows selection of the Register to be reviewed and identify, if necessary, the status of the patients who will be reviewed for the report.

Figure C-32: DM Patients with No Date of Onset

2. Click the arrow next to **Register Name**. Select a **Register Name** from the list displayed.

3. Click on **Yes** or **No** in the **Select a Status** box.

4. Use the arrow next to the **Patient Status** box to display the list of statuses. Click to select the desired status.

5. Click the **Queue** button to run the report. A pop-up window will notify you that the report has been queued. Close the pop-up window by clicking the **X** in the upper right corner.

6. The report status can be checked by clicking the Report Status button on the toolbar. See C.3.4.2 for complete instructions.

C.3.4.5   Follow Up Needed

This option will allow the user to generate a report of patients that are due now or within the next 30 days for specific diabetes care needs.

1. Begin by clicking the **Follow up Needed** menu option.

Figure C-33: Follow Up Report dialog

2. Identify which follow-up report is needed. Either highlight the option in the **Report Types** list and click the arrow to move it to the **Reports Type Selected** box or drag it from the list on the left to the list on the right.

3. Determine whether the report will be run for members of your register or for a preselected group of patients stored in a search template. If **Search Template** is chosen, use the list of search templates to identify the desired search template of patients for the report.

4. Use the list to identify the patient status for the report. Click to select the desired status.

5. Use the list to identify the diagnoses of the patients that will be included in this report.

6. If you are using the IHS Scheduling Package or PIMS, determine whether you wish to see a list of patient appointments for patients on the report by clicking on **Yes** or **No** in the **Include Patient Appointment** box.

7. If you wish to see scheduled appointments, indicate the beginning date for the appointments, as well as the end date for appointments, by browsing the calendar displayed. Click the arrow to change the month or day or use the up and down arrow keys.

8. The report may be printed by **Community**, **Primary Provider**, or **Where Followed**. Make your selection by using the arrow next to the **Print by** box and clicking the desired selection.

9. If choosing community, you may indicate that you wish all communities by clicking on that option or by selected communities. If **Selected Communities** is chosen, a window will open where the first few letters of the desired community may be chosen by typing them in the Begin String box. Click the right arrow (>) button to move the desired community into the **Communities Selected** box. This process may be repeated as many times necessary to identify all communities to be included in the report. When all communities have been selected, click the **Save** button. Close the **Community** window.
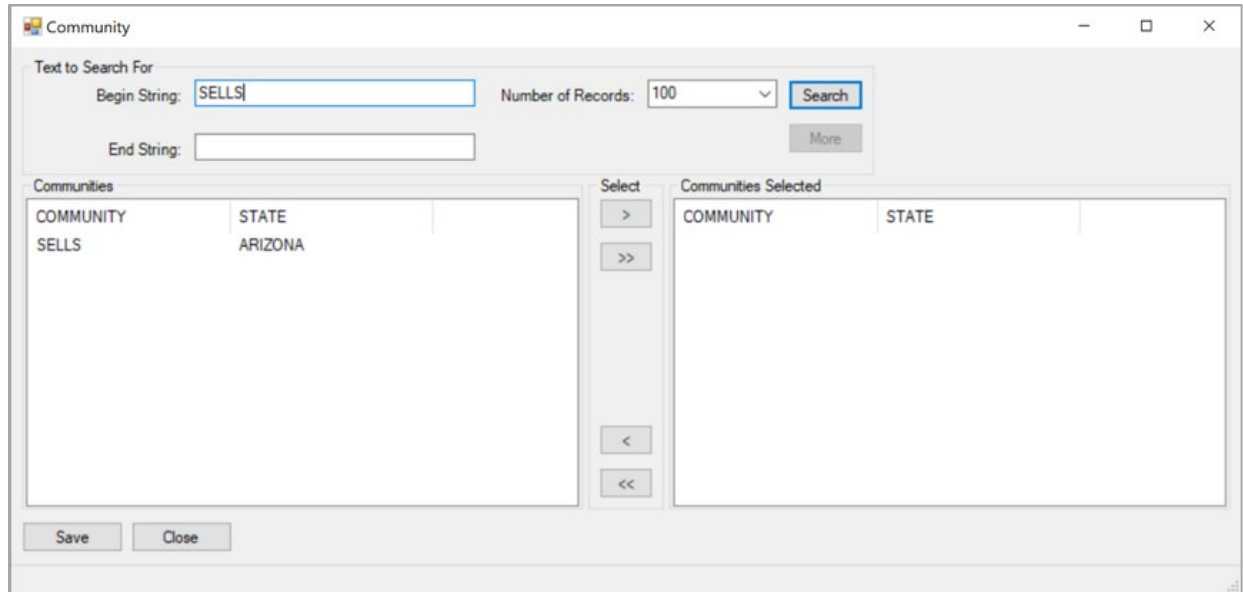
Figure C-34: Community dialog

10. Click the box next to **Type of Report** to select the **Follow Up Report**.

11. Select **the Report Run Date/Time** by using the browsable calendar.

12. When all desired entries are made, click the **Queue** button to initiate the report generation.

13. Once the report is queued to run, click the **Report Status** option on the toolbar of the main window to review the progress of the report.

C.3.5   Audit Setup

Click the plus sign (+) next to the **Audit Setup Menu** option to open the menu.
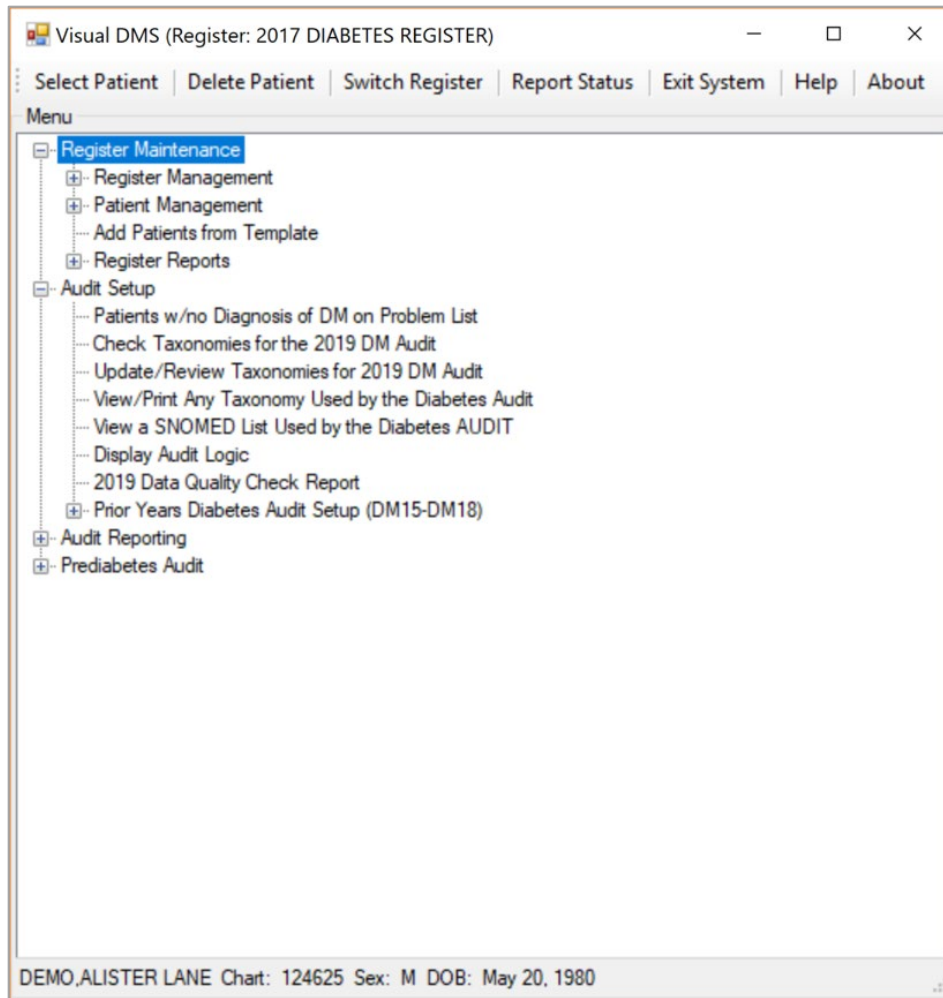
Figure C-35: Audit Setup options

C.3.5.1   Patients w/no Diagnosis of DM on Problem List

A report may be run to determine which patients on your register or who have x number of diagnosis of diabetes do not have a diagnosis of diabetes on their problem list.

1. Begin by clicking the **Patients with No DX of DM on Problem List** menu option.

2. A window will open which will allow defining the criteria for the report.

Figure C-36: DM Patients with No Dx of DM on Problem List

3. Click either **Those who are members of a Register** or **Those with N Diabetes Diagnoses**. N refers to the number of diabetes diagnoses a patient has had.

4. If you select **Those with N Diabetes Diagnoses**, you will need to click the arrow next to the **Number of Dx** box to make that selection. If you select **Those who are members of a Register**, you will need to use the arrow next to the **Register Name** box, and then select the Name of the Register included in the report.

5. To restrict your list to only those patients whose most recent diabetes diagnosis is since a certain date, click the arrow next to the **Restrict to recent Diabetes DX?** box to display a browsable calendar. Click on the desired date of how far back you wish to look at diagnoses. You can also click on the month, date, or year and use the up or down arrows to change those entries.

6. When selections are completed, click the **Queue** button. A pop-up window will notify you that the report has been queued. Close the pop-up window by clicking the **X** in the upper right corner.

7. You can check the report status by clicking on the **Report Status** button on the toolbar.

C.3.5.2   Check Taxonomies for the 2019 DM Audit

1. Click the **Check Taxonomies for the 2019 DM Audit** menu option to determine whether any taxonomies have not been populated. The result of the taxonomy check will display in a result box.

2. Close the box by clicking the **X** in the upper right corner.


```
Result                                                        —    □    ×

Result


In order for the 2019 DM AUDIT Report to find all necessary data, several
taxonomies must be established.  The following taxonomies are missing or have
no entries:
LABORATORY TEST taxonomy  [BGP GPRA ESTIMATED GFR TAX] contains a panel test: SQL R...
LABORATORY TEST taxonomy  [BGP HEP C TESTS TAX] contains a panel test: HEPATITIS C ...
DRUG taxonomy  [DM AUDIT AMYLIN ANALOGUES] has no entries
DRUG taxonomy  [DM AUDIT COLESEVELAM DRUGS] has no entries
LABORATORY TEST taxonomy  [DM AUDIT CREATININE TAX] contains a panel test: CMP (R) ...
DRUG taxonomy  [DM AUDIT GLP-1 ANALOG DRUGS] has no entries
LABORATORY TEST taxonomy  [DM AUDIT HGB A1C TAX] contains a panel test: HA1c + EAG ...
DRUG taxonomy  [DM AUDIT SGLT-2 INHIBITOR DRUG] has no entries
DRUG taxonomy  [DM AUDIT SULFONYLUREA-LIKE] has no entries


                              OK
```

Figure C-37: Check Taxonomies for the 2019 DM Audit

C.3.5.3   Update/Review Taxonomies for 2019 DM Audit

Click the menu option, **Update/Review Taxonomies for 2019 DM Audit**, to open the taxonomy update window.
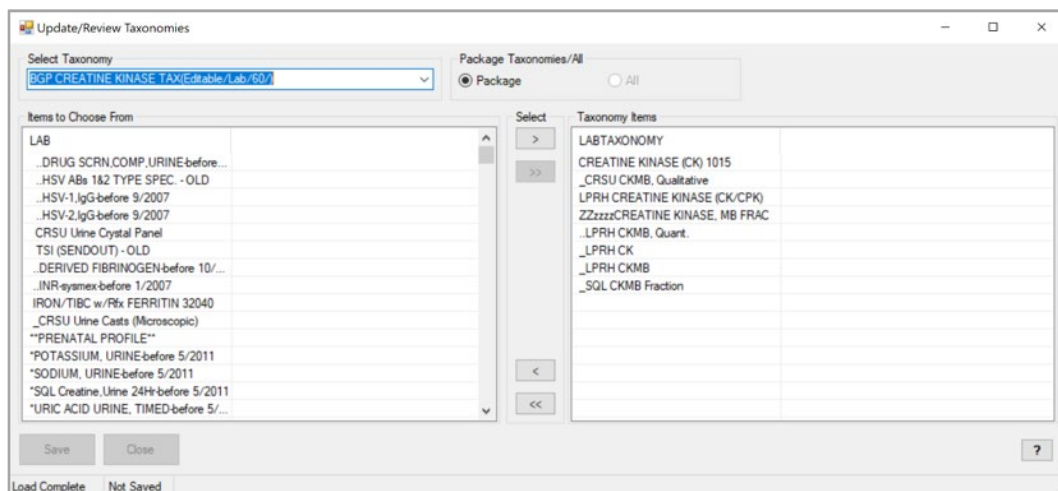
Figure C-38: Update/Review Taxonomies for 2019 DM Audit

1. Select the taxonomy to update from the list.

2. Select the items you want in the taxonomy from the left column titled **Items to Choose From** and click the right arrow button (>) to move them to the **Taxonomy Items** column on the right, click **Save**.

3. To remove an item from the taxonomy, select the item(s) to remove in the Taxonomy Items List View and click the left arrow button (<) button to remove them. Click **Save**.

4. Click Close or the **X** to exit.

C.3.5.4 View/Print Any Taxonomy Used by the Diabetes Audit

Click the View/Print Any Taxonomy used by the Diabetes Audit.

1. Select the Audit Year and Taxonomy to print, click **Print**.
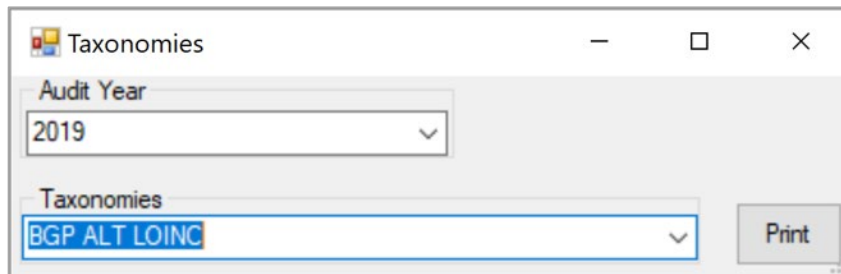
Figure C-39: Audit and Taxonomy Selection

2. The taxonomy displays in Crystal Reports.

Figure C-40: Taxonomy Listing

3. Click **Close** or the **X** to exit.

C.3.5.5   View a SNOMED List Used by the Diabetes AUDIT

Click the View a SNOMED List Used by the Diabetes AUDIT.

1. Select the Audit Year and Taxonomy to print, click **Print**.
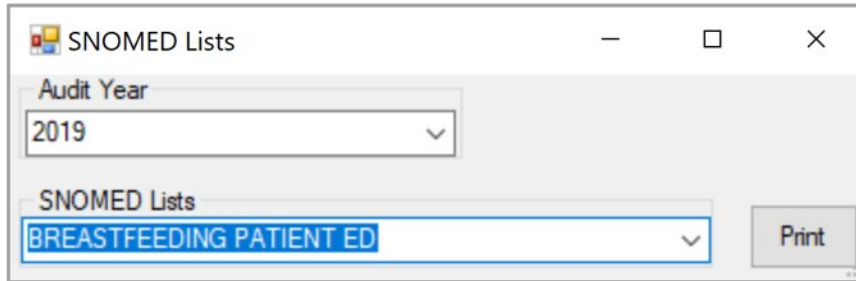
Figure C-41: Audit Year and SNOMED Subset Selection

2. The SNOMED list displays in Crystal Report, click the **X** to close the display.
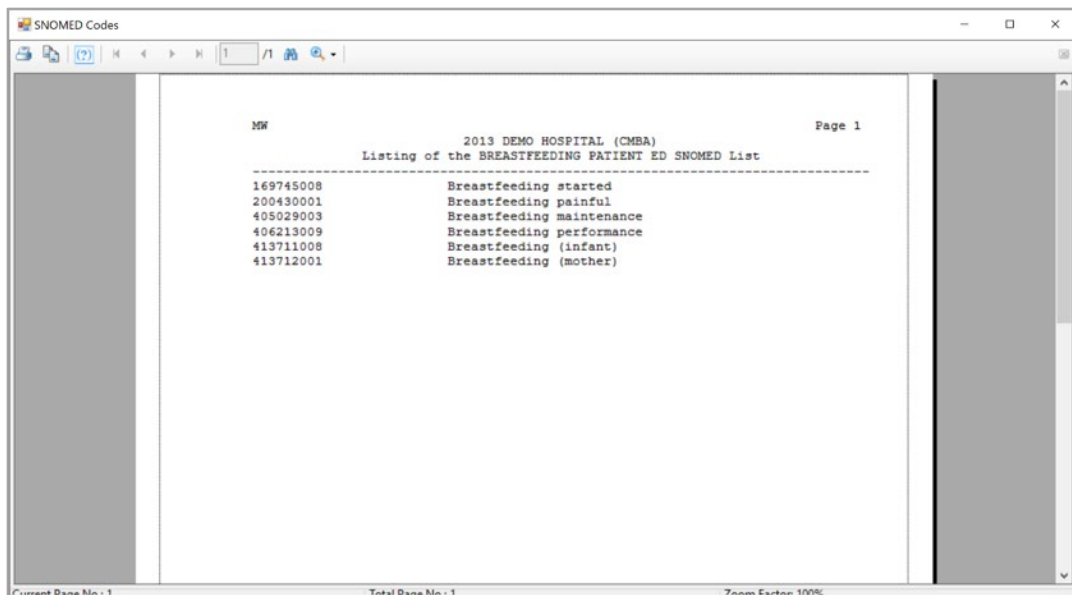
Figure C-42: SNOMED Lists

C.3.5.6   Display Audit Logic

1. Click the **Display Audit Logic** menu item.

2. Select the Audit Year from the list.
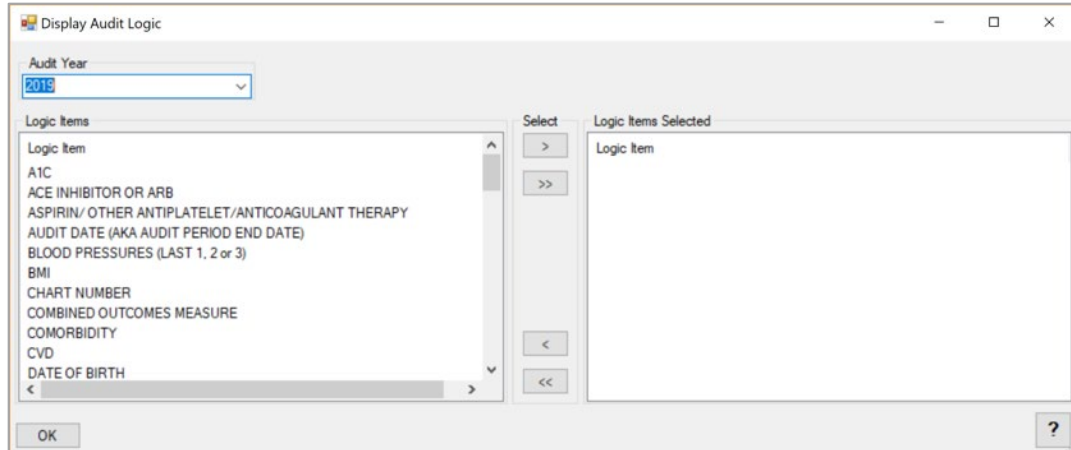
Figure C-43: Display Audit Logic parameters

3. Select the Logic Item to display from the Logic Items List View box, and click the right arrow button (>). To display all Logic Items, click the double-right arrow (>>) button. Click **OK**.

4. The result is displayed in Crystal Reports. Click the **X** in the upper right corner to close the display.
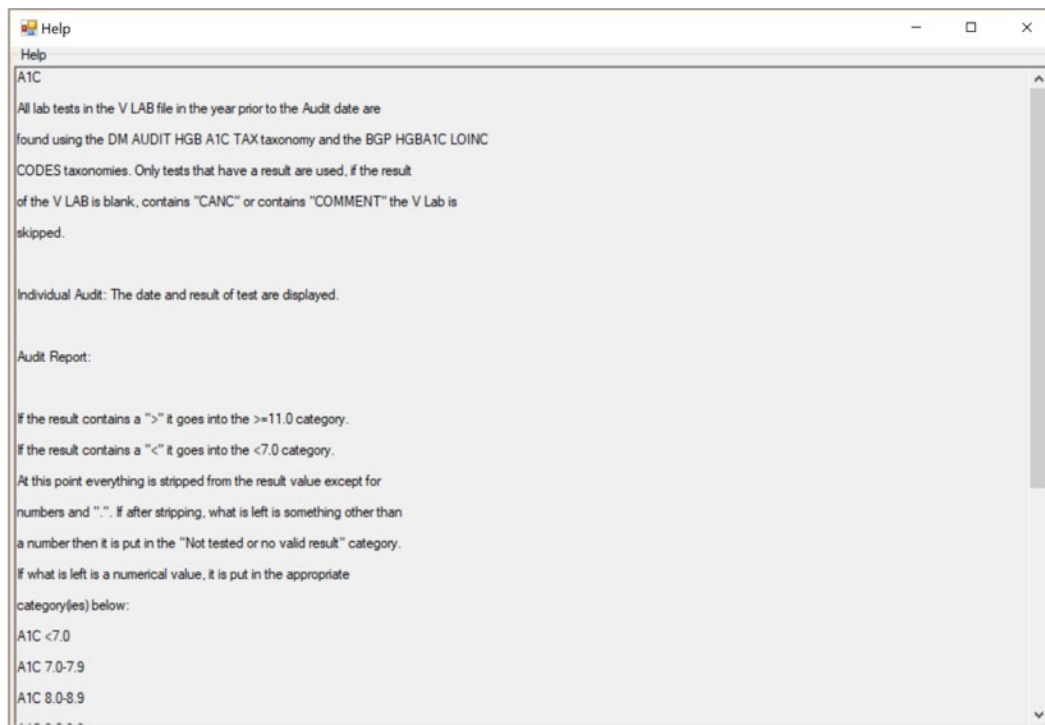
Figure C-44: Display Audit Logic

C.3.5.7   2019 Data Quality Check Report

1. Click the **2019 Data Quality Check Report** menu item to display the Taxonomy Check.
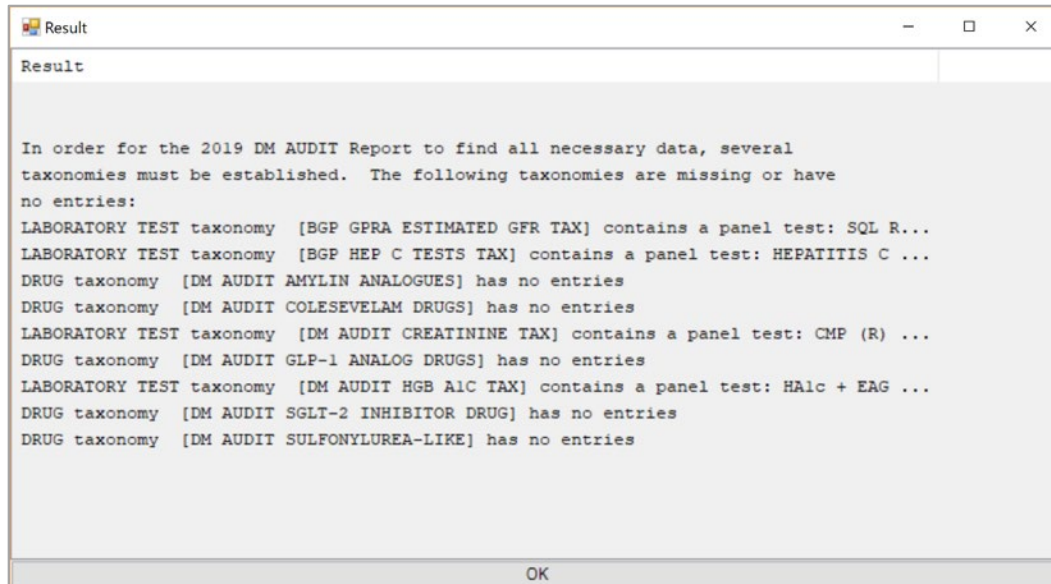
Figure C-45: Taxonomy Check Results

2. The **Data Quality Report** dialog displays.
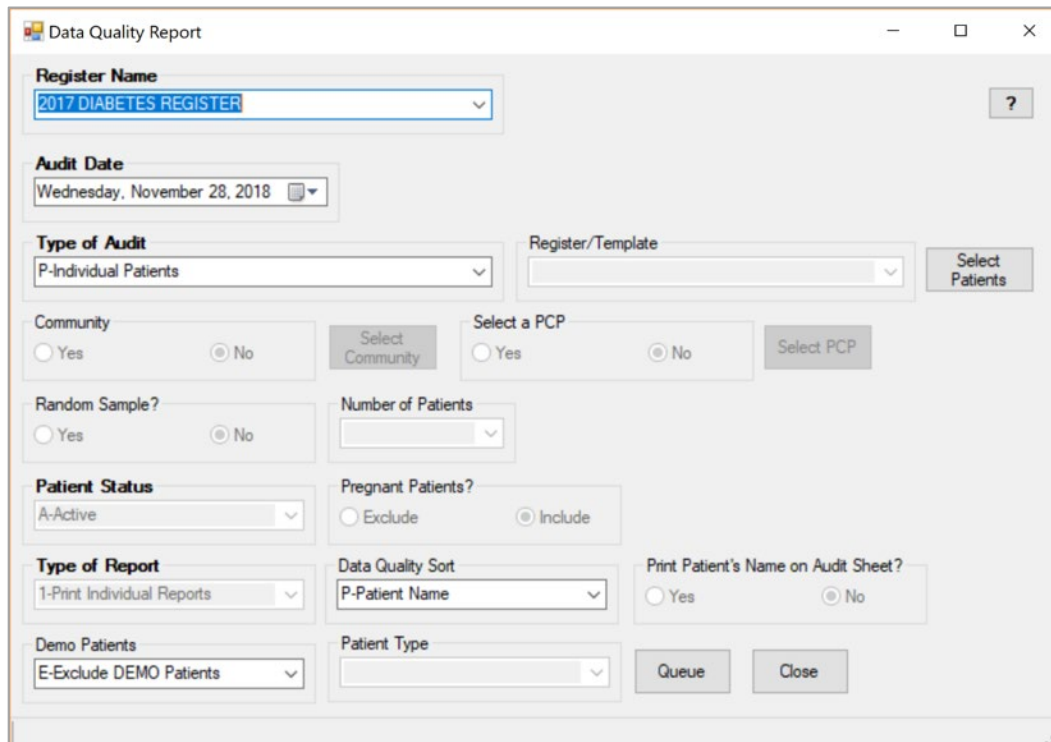
Figure C-46: Data Quality Report parameters

3. Select the **Register Name** from the box, the **Audit Date** from the calendar control, the **Type of Audit**, and any other parameters. Click **Queue**.

4. The report is queued. Use the **Report Status Toolbar** button from the **Main Menu** to view a list of reports. Click to display the report.

Figure C-47: Data Quality Check Report

C.3.5.8   Prior Years Diabetes Audit Setup (DM15-DM18)

Click the plus sign (+) next to **Prior Years Diabetes Audit Setup (DM15-DM18)** to open the menu.
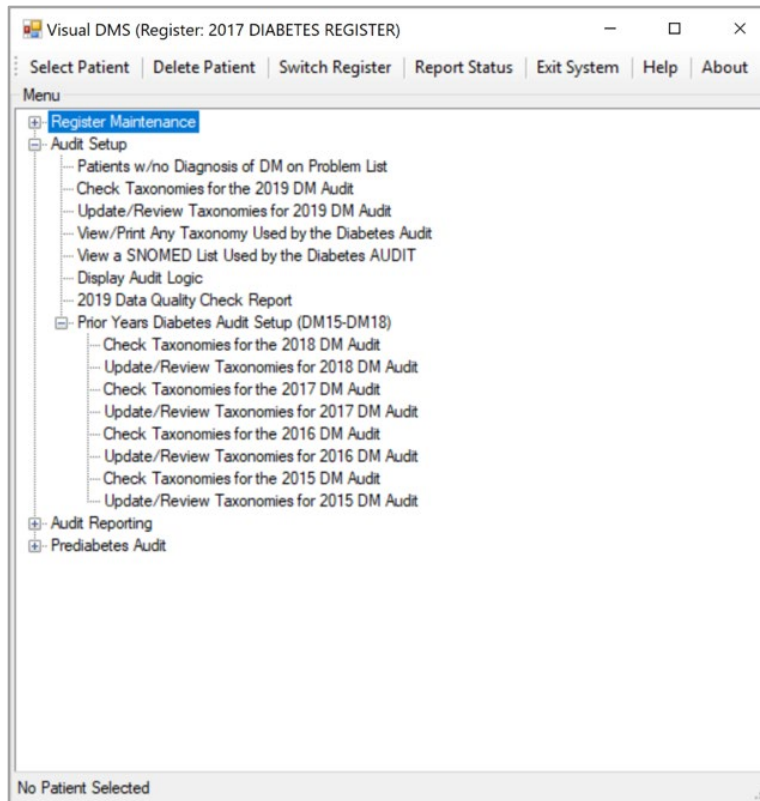
Figure C-48: Prior Years Options

Select any of the menu options. The options work the same as the **Check Taxonomies for the 2019 DM Audit** and **Update/Review Taxonomies for the 2019 DM Audit**.

C.3.6   Audit Reporting

Click the plus sign (+) in front of **Audit Reporting** to open this menu.
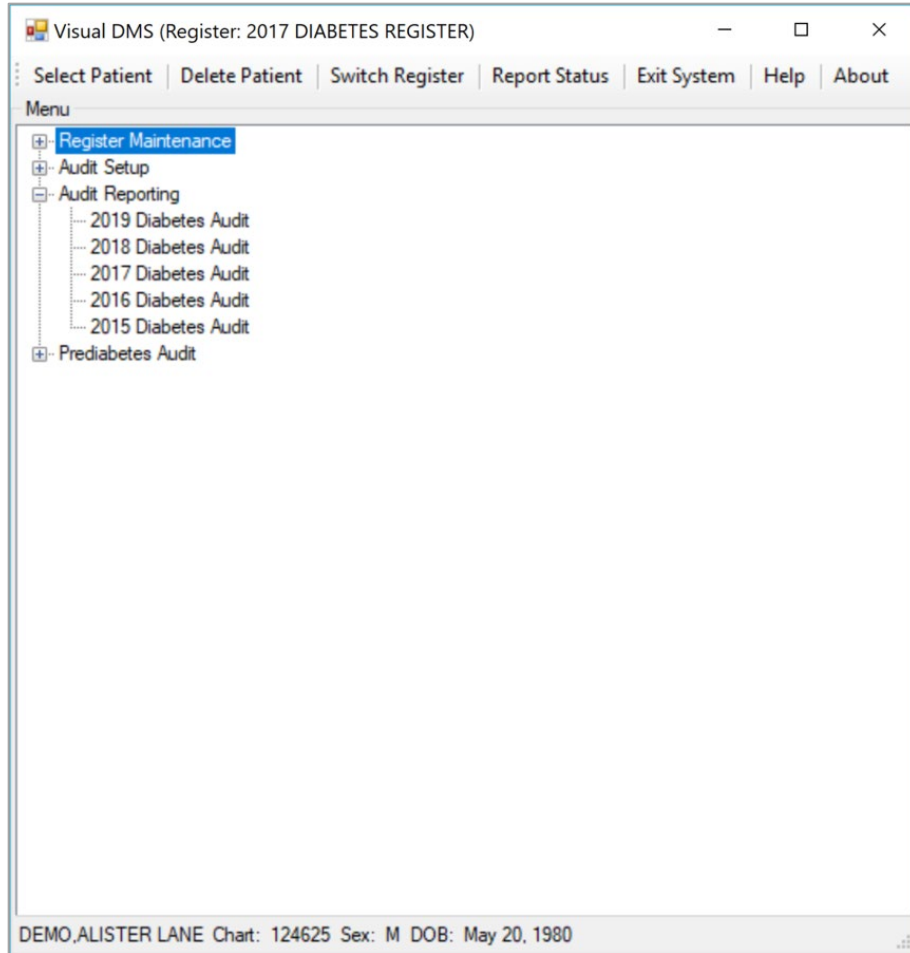
Figure C-49: Audit Reporting options

C.3.6.1   2019 Diabetes Audit

1. Click on the **2019 Diabetes Audit** menu option to run the 2019 audit. Before the audit window opens, a taxonomy check will run, and the results will display on the screen.
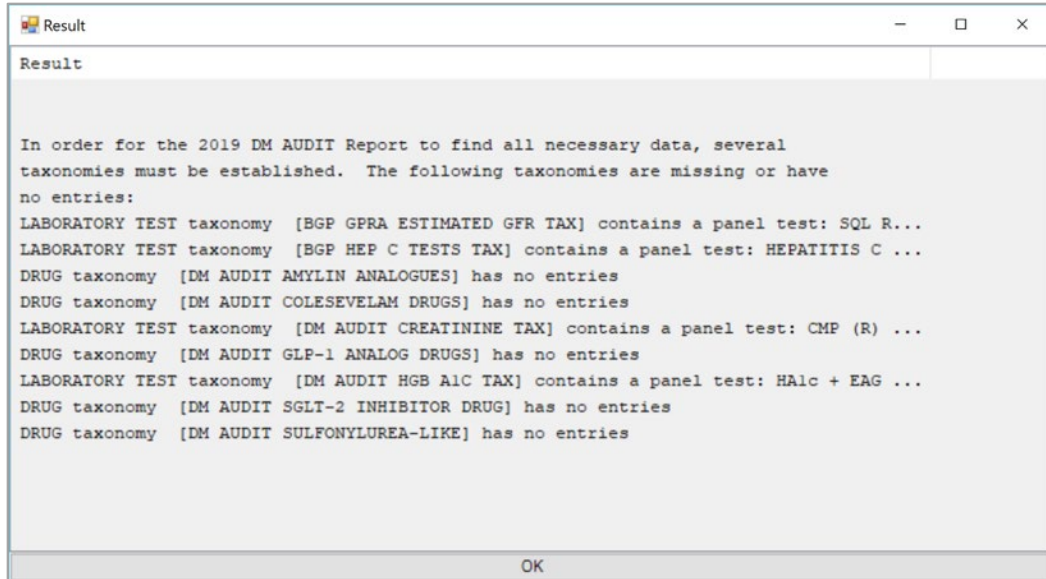
Figure C-50: Taxonomy Check Results

2. Close the **Taxonomy Result Check** screen.
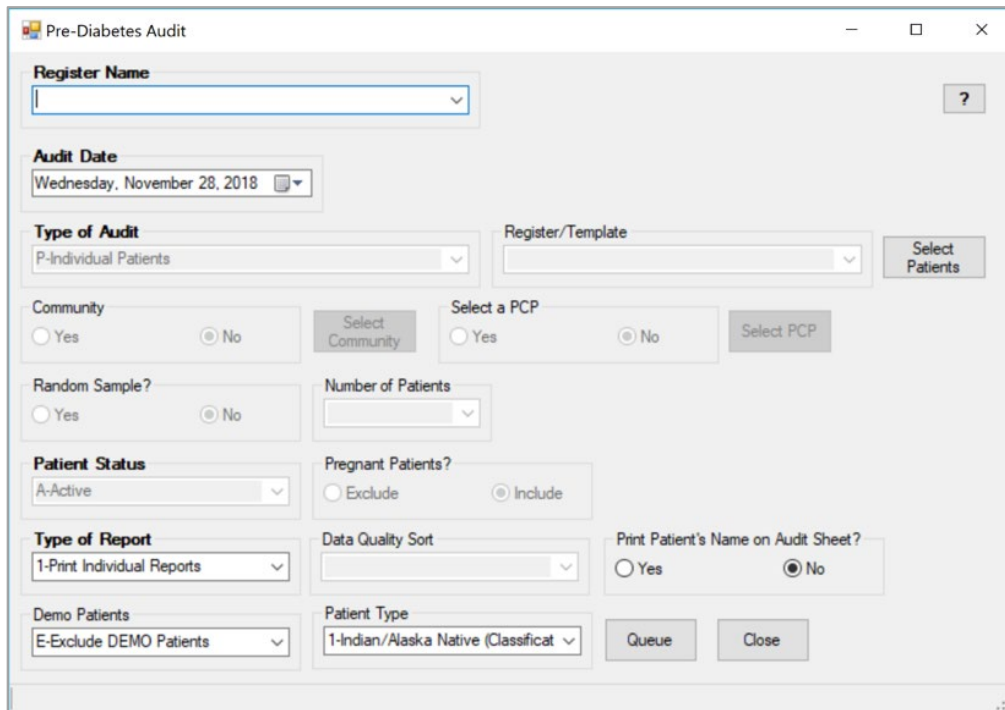
Figure C-51: Pre-Diabetes Audit parameters

3. Use the list next to the **Register Name** box to display a list of available registers. Click the Register that is to be audited.

4. Use the arrow to review a browsable calendar and select the Audit Date. Alternatively, use the up or down arrow keys to select the month, day, or year to change the audit date.

5. Use the arrow to identify the Type of Audit as one of the following:

   - **P** – Individual Patients

   - **S** – Search Template of Patients

   - **C** – Members of a CMS Register

   - **E** – E Audit (predefined set of patients)

   Click to select the Type of Audit.

6. If you choose Individual Patients, you must select the patients to be included in the audit by clicking the **Select Patients** button that is highlighted when this selection is made. Enter patients one at a time by chart number, last name, first name, or date of birth on the patient selection screen. If you only enter a last name, the entire list of matching patients may be displayed by clicking on the **Display** button. Click on patients who you wish to include in the audit. Their names will appear on the **Patients Selected** screen. Repeat the process until all desired patients are identified for the audit. Click the **Save** button when the list is complete.

7. If you choose **Search Template of Patients**, a box will display to select the search template. Use the arrow next to the box to see the available choices and click on the desired search template.

8. If you choose **Members of a CMS Register**, the selected register will be used.

9. If you choose **E Audit**, you will see a check box asking if you want "Only ACTIVE members of the register selected, and you will need to select a Community Taxonomy.

10. If you wish to run the audit on patients that live in a particular community, click **Yes** in the **Select a Community** box. A window will display where you can type the first few letters in the community name in the **Begin String** box. When the list of communities displays, click on the desired community.

11. If you wish to run the audit on patients with a particular primary care provider, click on **Yes** in the **Select a PCP** box. A window will open where you can type the first few letters of the primary care provider's last name in the **Begin String** box. When the list of providers displays, click on the desired provider's name.

12. If you chose the run the audit on **Members of a CMS Register**, you will may answer **Yes** or **No** in the **Select a Random Sample** box. If you select **Yes**, you will be prompted to enter the **Number of Patients**. Use the arrow to identify the number of patients in the random sample.

13. Use the arrow next to the **Patient Status** box to identify the status of the patients to be included in the audit. Click the desired status in the displayed list.

14. Choose whether to exclude or include pregnant patients.

15. Use the arrow next to the **Type of Report** box to identify what type of report is to be generated. Click on the desired report format.

   - **1** – Print Individual Reports

   - **2** – Create Audit Export File

   - **3** – Cumulative Audit Only

   - **4** – Both Individual and Cumulative Audit

   - **5** – SDPI RKM Report

16. Choose whether to exclude DEMO patients.

17. Select **Patient Type**.

18. When all selections are made for the DM Audit, click the **Queue** button. A pop-up window will notify you that the report has been queued. Close the pop-up window by clicking the **X** in the upper right corner.

19. The report status may be checked by clicking the **Report Status** button on the toolbar.

20. The **Individual** or **Cumulative Audit** may be opened by clicking on the report when it shows a status of complete.

21. It will open in a Crystal Reports document.

22. The report can be printed, or browsed. The document may be closed when review is complete by clicking the **X** in the upper right corner.

C.3.6.2   2015 - 2018 Diabetes Audit

This is the same functionality as the 2019 Diabetes Audit. See the 2019 Diabetes Audit for complete instructions.

C.3.7   Prediabetes Audit

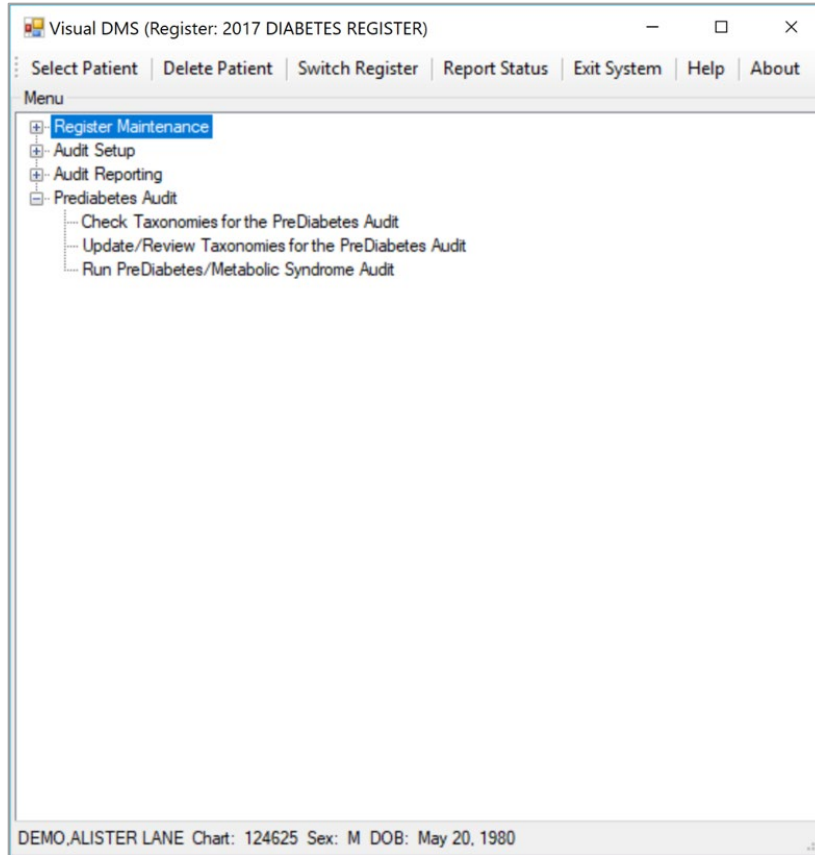Click the plus sign (+) next to the **Prediabetes Audit** menu.

Figure C-52: Prediabetes Audit Options

C.3.7.1   Check Taxonomies for the PreDiabetes Audit

Click on the Check Taxonomies for the PreDiabetes Audit menu option to determine whether any taxonomies have not been populated. The result of the taxonomy check will be displayed in a result box.
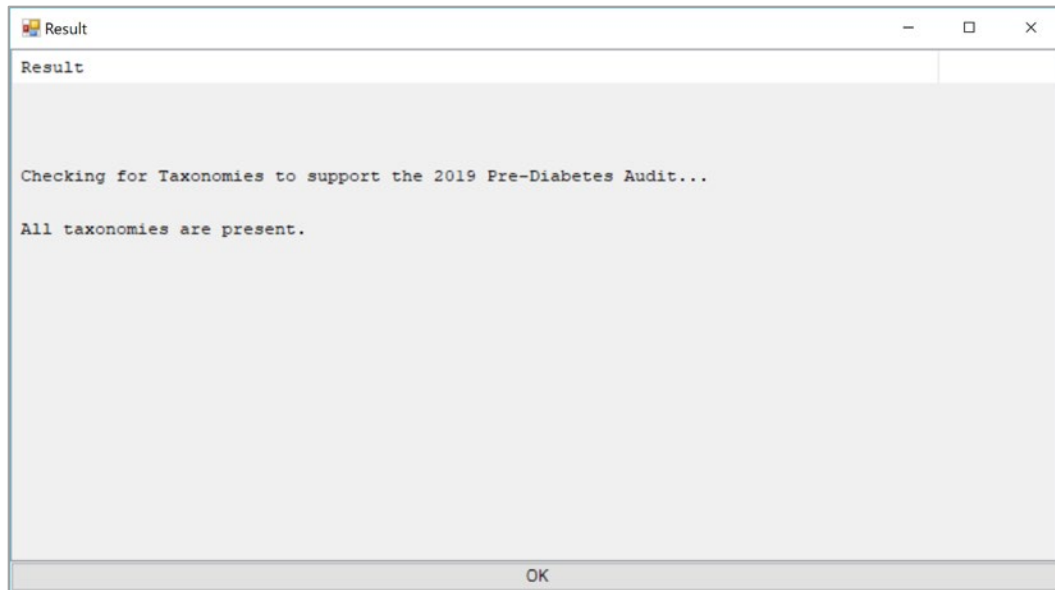
Close the box by clicking **X**.

Figure C-53: Taxonomy Check Results

C.3.7.2   Update/Review Taxonomies for the PreDiabetes Audit

1. Click the **Update/Review Taxonomies for the PreDiabetes Audit** menu option
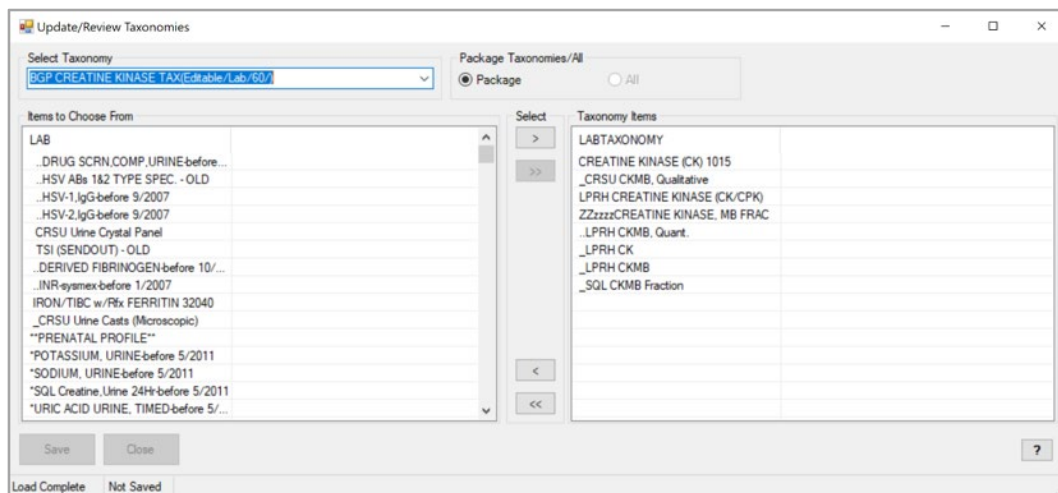   to open the **Update/Review Taxonomies** window.

Figure C-54: Update/Review Taxonomies

2. Select the taxonomy to update from the list.

3. Select the items for the taxonomy from the **Items to Choose From** list view and
    click the right arrow (**>**) button to move them to the **Taxonomy Items** list view.
    Click **Save**.

4. To remove items from the taxonomy, select the items in the **Taxonomy Items** list
    view and click the left arrow (**<**) button to remove them. Click **Save**.

5. Click **Close** or the **X** in the upper right corner to exit.

C.3.7.3   Run PreDiabetes/Metabolic Syndrome Audit

The PreDiabetes/Metabolic Syndrome Audit may be run if you have identified patients who have any of the conditions associated with an increased risk of developing diabetes and have added those patients to a PreDiabetes Register.

1. To begin, click the **Run PreDiabetes/Metabolic Syndrome Audit** menu option.

2. Before the audit window opens, a taxonomy check will be run, and the results displayed on the screen. Close the taxonomy result check screen.
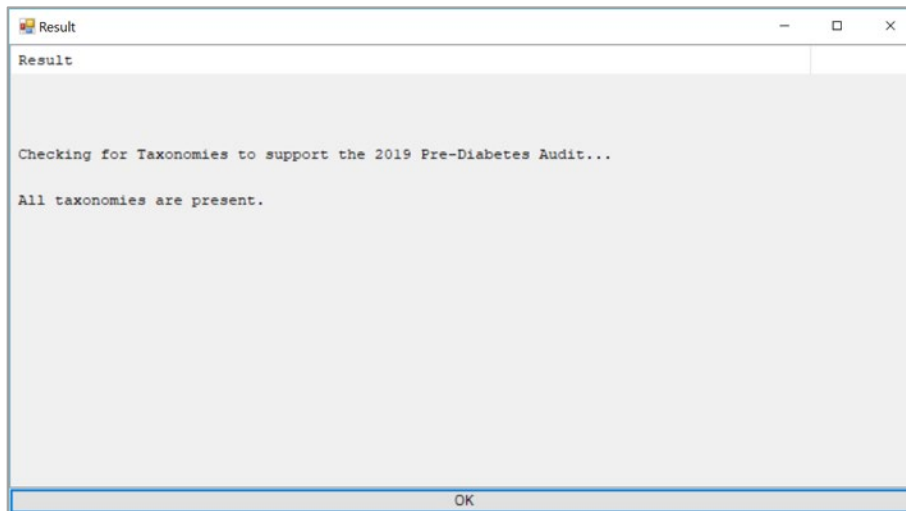

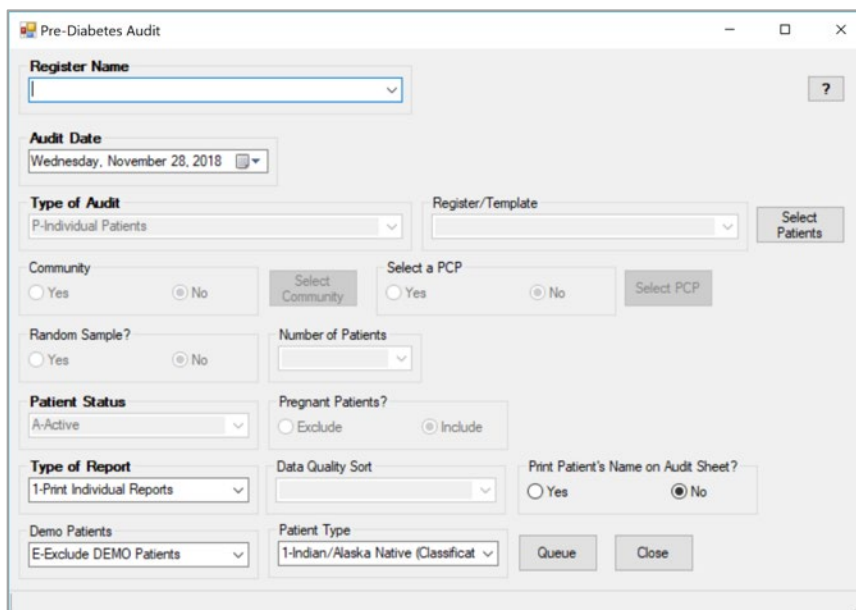Figure C-55: Taxonomy Check Results

Figure C-56: Pre-Diabetes Audit Parameters

3. Use the list next to the Register Name box to display a list of available registers. Click on the Register which is to be audited.

4. Click the arrow to display a browsable calendar and select the **Audit Date**. Alternatively, use the up or down arrow keys to change the month, day, or year of the audit date.

5. Click the arrow to select the **Type of Audit** as one of the following:

    - **P** – Individual Patients
    - **S** – Search Template of Patients
    - **C** – Members of a CMS Register

6. If you choose Individual Patients, you must select the patients to be included in the audit by clicking the **Select Patients** button that is highlighted when this selection is made. Enter patients one at a time by chart number, last name, first name, or date of birth on the patient selection screen. If you only enter last name, the entire list of matching patients may be displayed by clicking the **Display** button. Click on patients who you wish to include in the audit. Their names will display in the **Patients Selected** screen. The process may be repeated until all desired patients have been identified for the audit. Click the **Save** button when the list is complete.

7. If you choose **Search Template of Patients**, you will see a box to select the search template. Use the arrow next to the box to see the available choices and select the desired search template.

8. If you choose Members of a CMS Register, the selected register will be used.

9. If you choose **E Audit**, you will see a check box asking if you want "Only ACTIVE members of the register selected, and you will need to select a Community Taxonomy.

10. If you wish to run the audit on patients that live in a particular community, click **Yes** in the **Select a Community** box. A window will display where you can type the first few letters in the community name in the **Begin String** box. When the list of communities displays, click on the desired community.

11. If you wish to run the audit on patients with a particular primary care provider, click **Yes** in the **Select a PCP** box. A window will open where you can type the first few letters of the primary care provider's last name in the **Begin String** box. When the list of providers displays, click on the desired provider's name.

12. If you chose the run the audit on Members of a CMS Register, you will may answer **Yes** or **No** in the **Select a Random Sample** box. If you answer **Yes**, you will be prompted to enter the Number of Patients. Use the arrow to identify the number of patients in the random sample.

13. Use the arrow next to the **Patient Status** box to identify the status of the patients to be included in the audit. Click the desired status in the displayed list.

14. Choose whether to exclude or include pregnant patients.

15. Use the arrow next to the **Type of Report** box to identify what type of report is to be generated. Click on the desired report format.

    - 1 – Print Individual Reports

    - 2 – Cumulative Audit Only

    - 3 – Both Individual and Cumulative Audit

16. Choose whether to exclude DEMO patients.

17. Select Patient Type.

18. When all selections have been made for the DM Audit, click the **Queue** button. A pop-up window will notify you that the report has been queued. Close the pop-up window by clicking the **X** in the upper right corner.

19. The report status may be checked by clicking on the **Report Status** button on the toolbar.

20. The Individual or Cumulative Audit may be opened by clicking on the report when it shows a status of complete.

21. It will open in a Crystal Reports document.

22. The report may be printed, or browsed. The document may be closed when the review is complete by clicking the **X** in the upper right corner.

Glossary

Amputation

To cut a limb from the body.[i]

Caret (^)

A caret, also known as a circumflex, up-hat, or hat, is used as a piece delimiter in a global. The caret is denoted as "^" and typed by pressing **Shift-6** on the keyboard.

CRS

Clinical Reporting System: A RPMS program for running standard reports for facility or service unit performance on GPRA indicators.

CVA

Short for Cerebrovascular accident, also known as a stroke.

Default Response

A suggested response that can be activated simply by pressing the Return key . For example: "Do you really want to quit? No//." Pressing the Return key tells the system you do not want to quit. "No//" is considered the default response.

Device

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

Diabetes

Referring to Diabetes Mellitus, a variable disorder of carbohydrate metabolism caused by a combination of hereditary and environmental factors and usually characterized by inadequate secretion or utilization of insulin, by excessive urine production, by excessive amounts of sugar in the blood and urine, and by thirst, hunger, and loss of weight1

Discharge

To release a patient from care

DOB

Date of Birth

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[i] Merriam Webster Medical Dictionary, www.intelihealth.com

DOS

Date of Service

Enter Key

Used interchangeably with the Return key. Press Enter to show the end of an entry such as a number or a word. Press Enter each time you respond to a computer prompt. If you want to return to the previous screen, press Enter without entering a response. This will return you to the previous menu screen. The Enter key on some keyboards is shown as the Return Key. Whenever you see [ENT] or the Enter key, press the Enter or Return key.

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.

File

A set of related records or entries treated as a single unit.

FileMan

The database management system for RPMS.

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.

Full Screen Editor

A word processing system used by RPMS. In many ways, the Full Screen Text Editor works just like a traditional word processor. The lines wrap automatically, the up, down, right, and left arrows move the cursor around the screen, and a combination of uppercase and lowercase letters can be used.

Global

In MUMPS, global refers to a variable stored on disk (global variable) or the array to which the global variable may belong (global array).

GPRA Indicators

The Government Performance and Results Act (GPRA) requires Federal agencies to report annually on how the agency measured up against the performance targets set in its annual Plan. IHS GPRA indicators include measures for clinical prevention and treatment, quality of care, infrastructure, and administrative efficiency functions.

Hypertension

High arterial blood pressure.

I/T/U

Abbreviation referring to all IHS direct, tribal, and urban facilities. Using the abbreviation I/T/U generally means that all components of the Indian health care system are being referred to.

ICD Codes

One of several code sets used by the healthcare industry to standardize data. The International Classification of Disease is an international diagnostic coding scheme. In addition to diseases, ICD also includes several families of terms for medical-specialty diagnoses, health status, disablements, procedure and reasons for contact with healthcare providers. IHS currently uses ICD-9 for coding.

Imminent

Almost or ready to occur.

Interfaces

A boundary where two systems can communicate.

Kernel

The set of MUMPS software utilities that function as an intermediary between the host operating system and application packages, such as Laboratory and Pharmacy. The Kernel provides a standard and consistent user and programmer interface between application packages and the underlying MUMPS implementation. These utilities provide the foundation for RPMS.

Line Editor

A word-processing editor that allows to you edit text line by line.

Logic

The detailed definition, including specific RPMS fields and codes, of how the software defines a denominator or numerator.

MailMan

Short for Mail Manager, MailMan is a VA-based utility that facilitates messaging for a number of RPMS packages.

Mandatory

Required. A mandatory field is a field that must be completed before the system will allow you to continue.

Menu

A list of choices for computing activity. A menu is a type of option designed to identify a series of items (other options) for presentation to the user for selection. When displayed, menu-type options are preceded by the word "Select" and followed by the word "option" as in Select Menu Management option: (the menu's select prompt).

Microalbuminuria

Albuminuria characterized by a relatively low rate of urinary excretion of albumin typically between 30 and 300 milligrams per 24-hour period[ii]

Myocardial Infarction

Also known as a MI or heart attack; infarction of the myocardium that results typically from coronary occlusion, that may be marked by sudden chest pain, shortness of breath, nausea, and loss of consciousness, and that sometimes results in death.[iii]

Mnemonic

A short cut or code that is designated to access a particular menu option, data entry option, name, or facility.

Namespace

A unique set of two to four alpha characters that are assigned by the database administrator to a software application.

Narrative Description

A detailed description given using words rather than codes.

[ii] Ibid.

[iii] Ibid.

Option

An entry in the Option file. As an item on a menu, an option provides an opportunity for users to select it, thereby invoking the associated computing activity. Options may also be scheduled to run in the background, non-interactively, by TaskMan.

Outpatient Treatment

Treatment that occurs within a medical facility that does not involve an overnight stay.

Prompt

A field displayed onscreen indicating that the system is waiting for input. 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, physician's assistant).

Provider Codes

Codes that are assigned at the time a provider is added as a new user to RPMS and denotes the provider's discipline.

QMan

Short for Query Manager

Queuing

Requesting that a job be processed at a later time rather than within the current session.

Return key

Press the Return key to show the end of an entry such as a number or a word. Press the Return key each time you respond to a computer prompt. If you want to return to the previous screen, simply press the Return key without entering a response. This will take you back to the previous menu screen. The Return key on some keyboards are shown as the Enter Key. Whenever you see [RET] or the Return key, press the Return or Enter Key.

Retinopathy

Any of various noninflammatory disorders of the retina including some that cause blindness1

Routine

A program or sequence of instructions called by a program that may have some general or frequent use. MUMPS routines are groups of program lines that are saved, loaded, and called as a single unit via a specific name.

RPMS

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

Select

To choose one option from a list of options.

Site Manager

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

Submenu

A menu that is accessed through another menu.

Taxonomy

Grouping of functionally related data elements

Text Editor

A word processing program that allows you to enter and edit text.

Triage

Sorting patients by the urgency of their need for care

Type 1 Diabetes

Diabetes of a form that usually develops during childhood or adolescence and is characterized by a severe deficiency of insulin secretion resulting from atrophy of the islets of Langerhans and causing hyperglycemia and a marked tendency toward ketoacidosis. Also called insulin-dependent diabetes, *insulin-dependent diabetes mellitus*, *juvenile diabetes*, *juvenile-onset diabetes*, *type 1 diabetes mellitus*.[iv]

[iv] Ibid.

Type 2 Diabetes

Diabetes mellitus of a common form that develops especially in adults and most often in obese individuals and that is characterized by hyperglycemia resulting from impaired insulin utilization coupled with the body's inability to compensate with increased insulin production. Also called *adult-onset diabetes*, *late-onset diabetes*, *maturity-onset diabetes*, *non-insulin-dependent diabetes*, *non-insulin-dependent diabetes mellitus*, *type 2 diabetes mellitus*.[v]

Utility

A callable routine line tag or function. A universal routine usable by anyone.

Variable

A character or group of characters that refers to a value. MUMPS recognizes 3 types of variables: local variables, global variables, and special variables. Local variables exist in a partition of the main memory and disappear at sign-off. A global variable is stored on disk, potentially available to any user. Global variables usually exist as parts of global arrays.

Walk-In

A patient who walks into a medical facility seeking care but who does not have an appointment.

Word Processing Field

This is a field that allows the user to write, edit, and format text for letters, MailMan messages, etc.

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[v] Ibid.

Acronym List

Acronym	Term Meaning
CRS	Clinical Reporting System
CVA	Cerebrovascular Accident
DMS	Diabetes Management System
DOB	Date of Birth
DOS	Date of Service
GPRA	Government Performance and Results Act
GUI	Graphical User Interface
ICD	International Classification of Disease
IHS	Indian Health Service
MI	Myocardial Infarction
RPMS	Resource and Patient Management System
VA	Veteran's Administration

Contact Information

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

Phone: (888) 830-7280 (toll free)

Web: https://www.ihs.gov/helpdesk/

Email: support@ihs.gov