RESOURCE AND PATIENT MANAGEMENT SYSTEM

EHR Optimization for Million Hearts Blood Pressure Management

User Guide

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1.0 Introduction

This guide provides the Clinical Application Coordinator (CAC) tools necessary to optimize the Electronic Health Record (EHR) Graphical User Interface (GUI) for Blood Pressure Management (Million Hearts). Sites may choose to deploy one, some, or all optimizations offered.

The toolkit includes new Clinical Reminders and Text Integration Utility (TIU) templates for the Integrated Problem List (IPL) care planning feature. Step by step instructions for numerous optimizations are included.

Population management is supported in iCare and via Reminder Reports.

2.0 Overview of Configuration Steps

2.1 Essential options

Option	Configuration
1	Create Hypertension Management order menu and add to Medication menu(s) (Section 3.0)
2	Add IHS Hypertension Management algorithm to EHR (Section 4.0)
3	Configure iCare panels (Section 10.2)
4	Install, test and deploy IHS-MH Hypertension Control 2015 reminder tools * (Section 8.0) * currently deployed Clinical Reminder sites requires options 8 and 9

2.2 Additional options

Option	Configuration
5	Install IHS-MH Hypertension 2015 Recall reminder *** used as reminder report (Section 10.1)
6	Set up Public Views for Graphing tool (Section 5.0)
7	Set up Lab Worksheets (Section 6.0)
8	Create Indian Health Service (IHS) Flowsheets and Measurement Panels (Section 7.0)
9	Create VA Health Summaries and TIU Objects (HYPERTENSION CONTROL) from flowsheets and measurement panels (Section 7.4)
10	Create Health Summary Button (Section 7.4.3)
11	Configure IPL with TIU Templates for IPL Goals, Care Plans and Visit Instructions (Section 9.0)

3.0 Order Menus

- Order menu may be developed to support Hypertension Management Protocol.
- Organize by Therapeutic Lifestyle Interventions, First Line Medications, Additional Medications, Lab Monitoring.
- Within groups, provide organization by drug class.
- Add to Medication Menus.
- Refer to the EHR CAC Setup Guide v1.1 for instructions on how to build quick orders and menus (http://www.ihs.gov/ehr/index.cfm?module=cac).

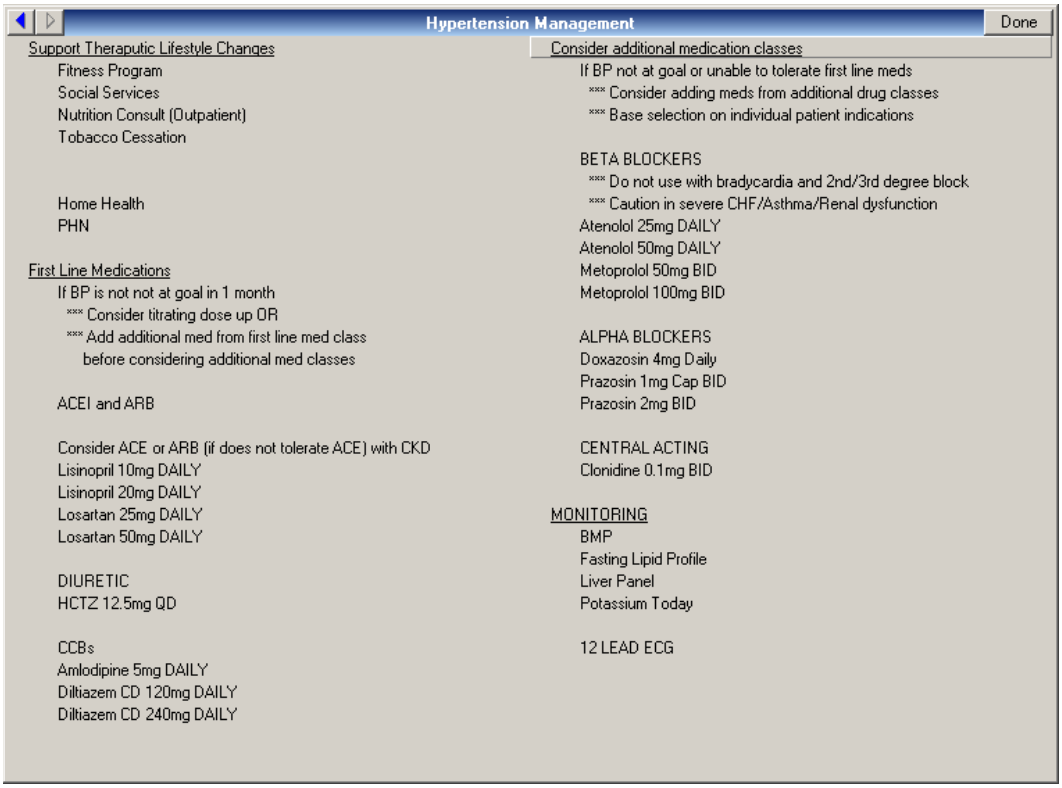


Figure 3-1: Sample **Hypertension Management** order menu

4.0 Add Hypertension Web Links to EHR

You may add a web page that defaults to the IHS Hypertension Protocol and the IHS National Pharmacy and Therapeutics Committee resources.

4.1 Design Mode Configuration

Refer to the EHR CAC Setup Guide v1.1 for details on how to use Design Mode (http://www.ihs.gov/ehr/index.cfm?module=cac).

4.2 Add a Web Page to a Tab

1. In Design mode, select the tab in which to place the algorithm. It may be in a tree node or group bar placed on a tab. In the following example, a group was added to a group bar.

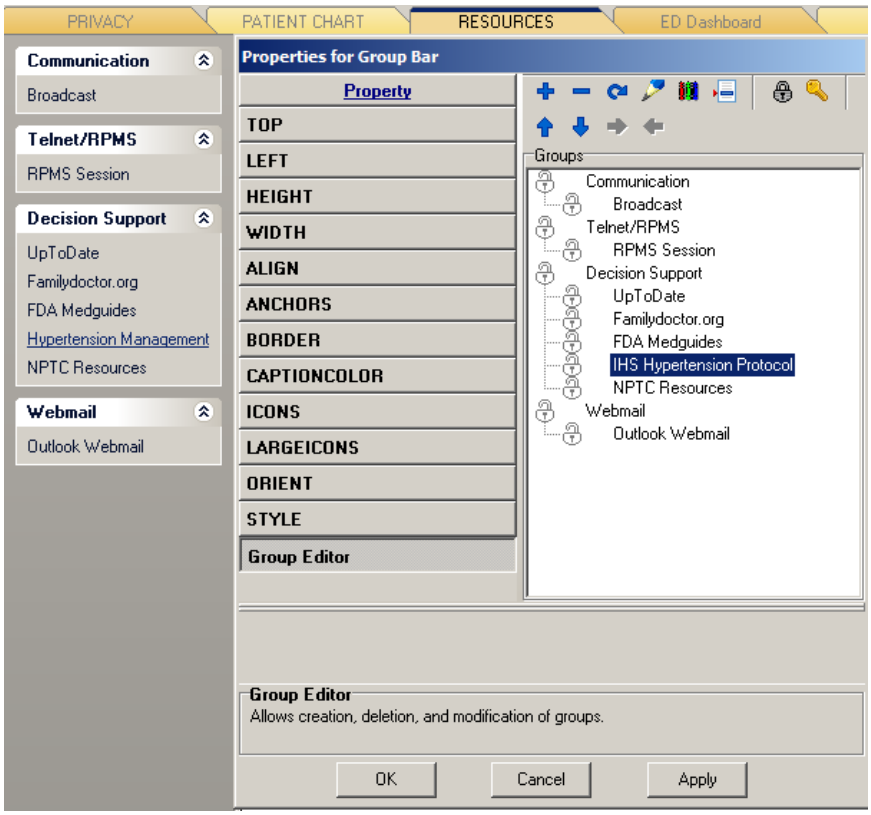


Figure 4-1: Adding an item to a Group Bar

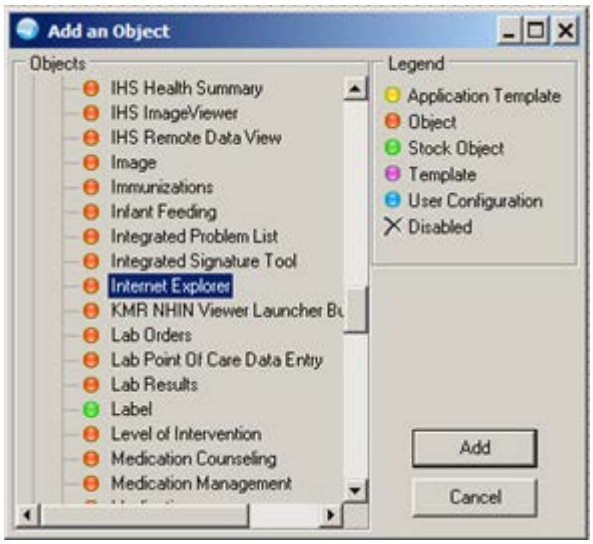


Figure 4-2: Adding Internet Explorer object to EHR Template

2. Add the **Internet Explorer** object to the group selection.

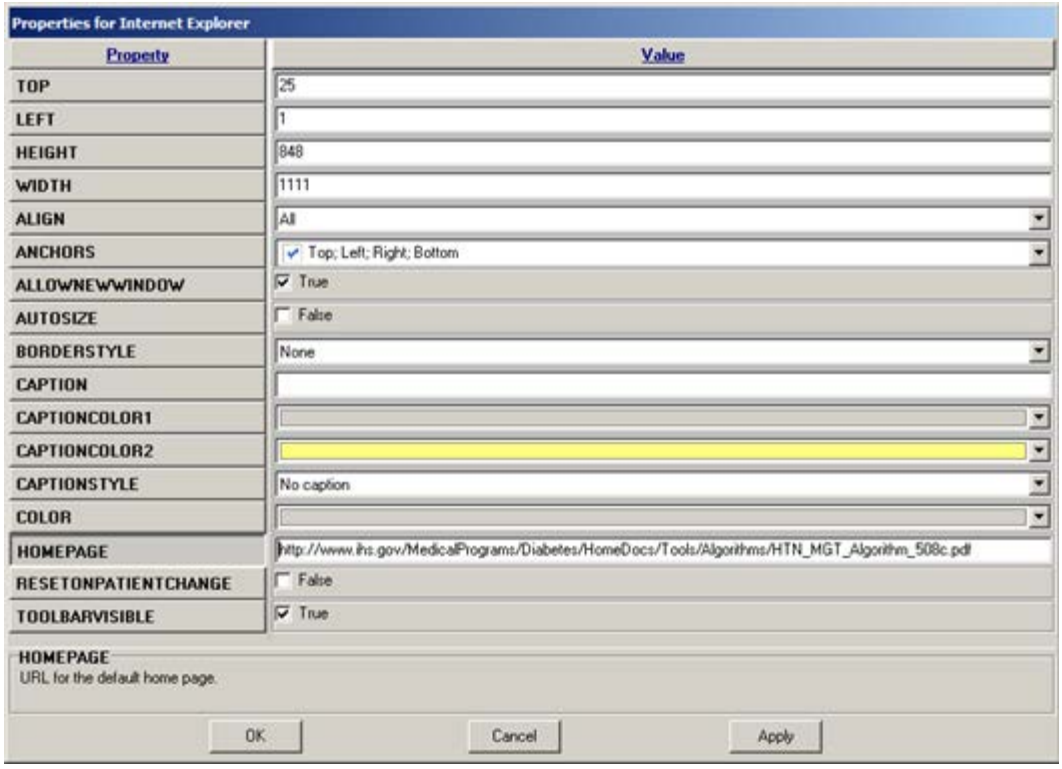


Figure 4-3: Adding the default URL to the **HOMEPAGE** field

3. Edit the properties of the **Internet Explorer** object.

4. Place the following URL in the **HOMEPAGE** field:
   http://www.ihs.gov/MedicalPrograms/Diabetes/HomeDocs/Tools/Algorithms/HTN_MGT_Algorithm_508c.pdf

   The selection defaults to the IHS Hypertension Management algorithm.

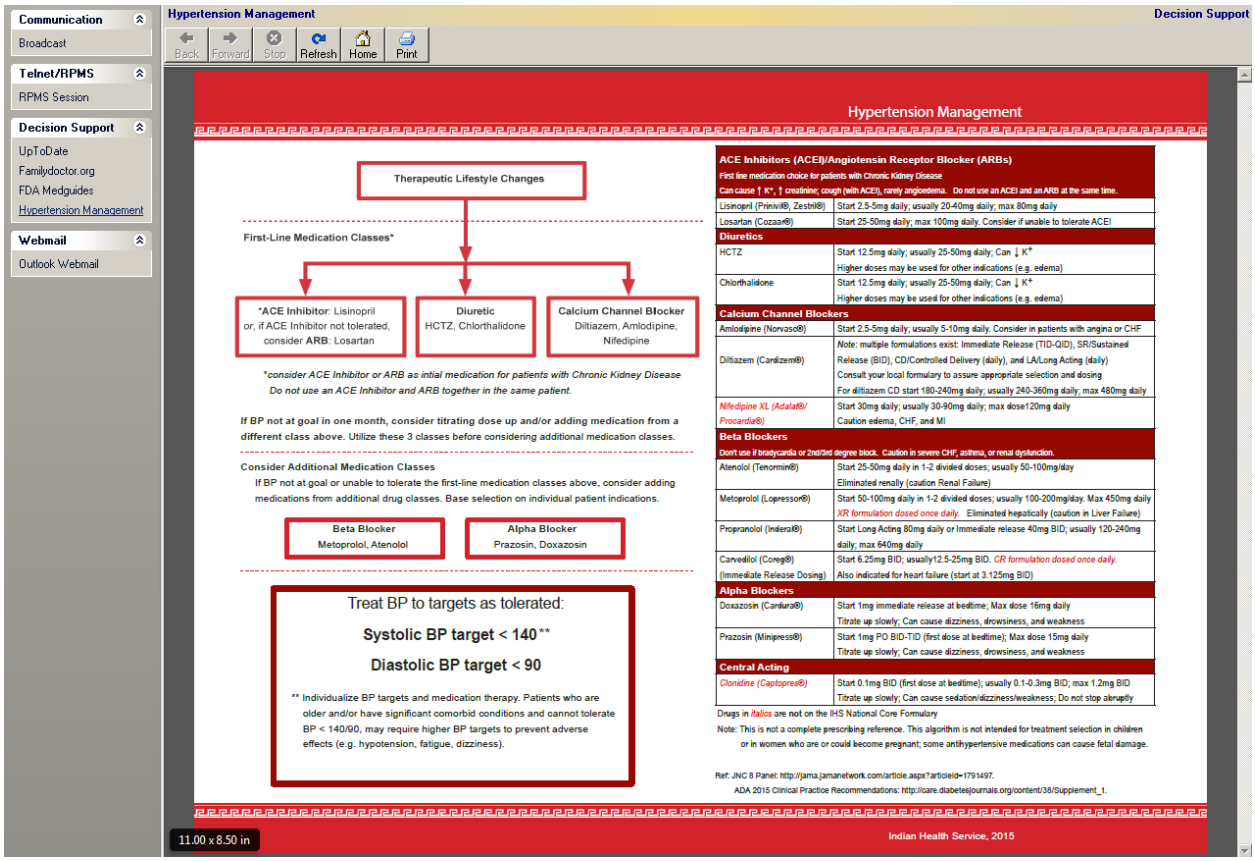


Figure 4-4: IHS Hypertension Management Protocol displayed in EHR

5. Repeat Steps 1 through 4 to add an option for NPTC Resources, placing the following link in the Homepage field:

   http://www.ihs.gov/NPTC/index.cfm?module=dsp_nptc_resources

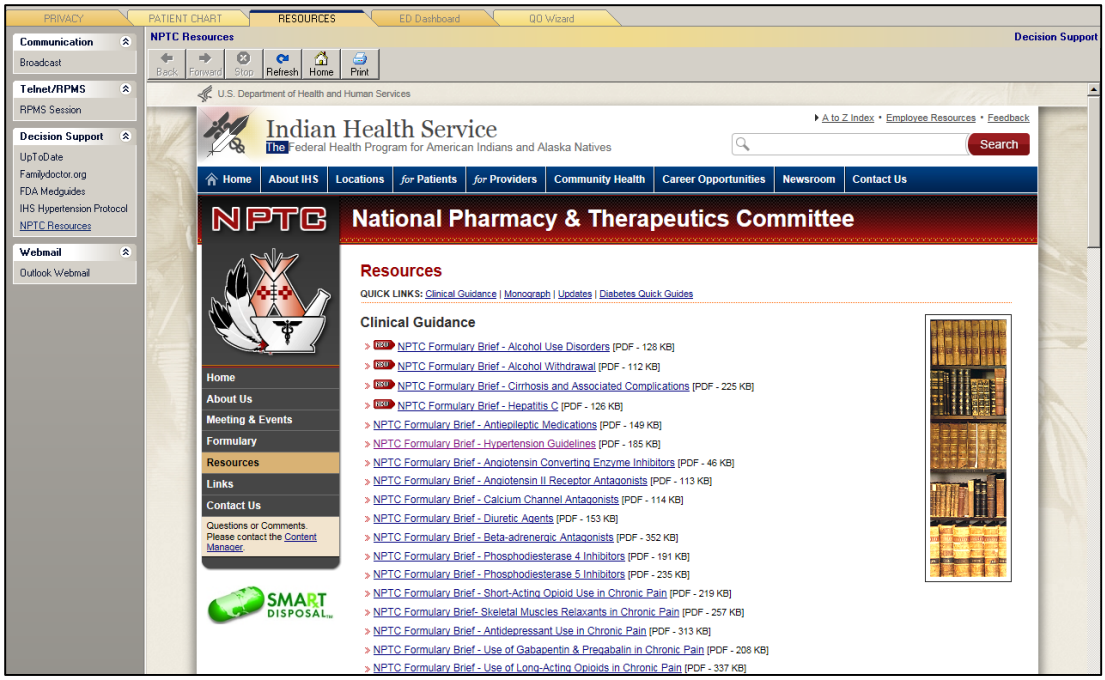


Figure 4-5: **National Pharmacy & Therapeutics Committee Resources** displayed in EHR

4.3 Add a Web Page using the Program Launcher Button

To configure a program launcher button to add a web page:

1. Select the location at which to add access to a web page.

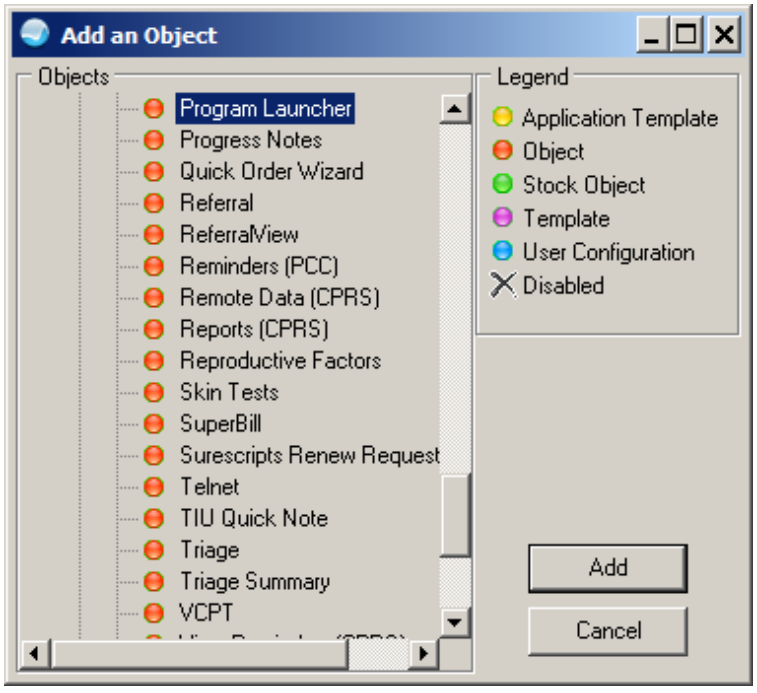


Figure 4-6: **Add an Object** dialog; adding **Program Launcher** button

2. In Design Mode, add the **Program Launcher** object.

3. Edit the properties for a specific web page to launch.

Property	Value
Align	Usually aligned right or left
Anchors	Top, left, bottom
Caption (button name)	HTN Protocol
Command line	Web URL you want to launch
EXE name	Launches search, look in program files and select iexplore application

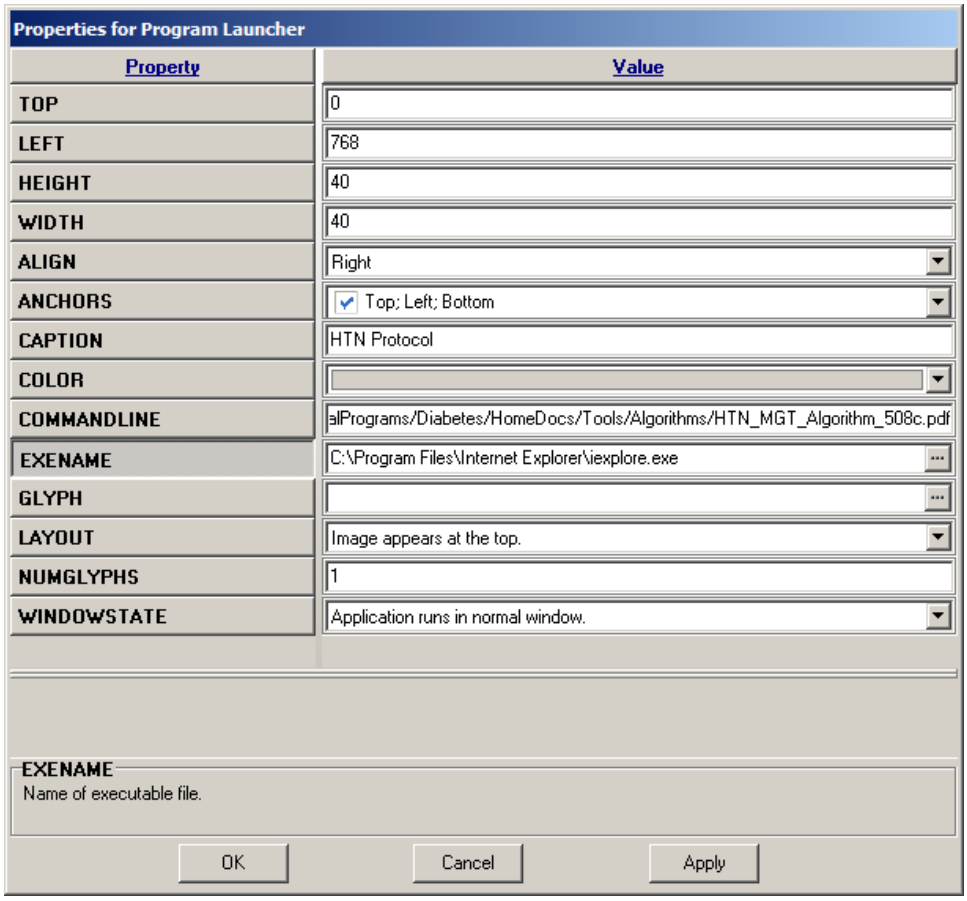


Figure 4-7: **Properties for Program Launcher** dialog

4. Click **Apply** to save.

5. Click **OK** to exit. A button is displayed on the toolbar (Figure 4-8) that when clicked will launch a web page in a new window.

Figure 4-8: Program Launcher button on Toolbar

4.4 Save Template Settings in Design Mode

To save template settings and exit design mode:

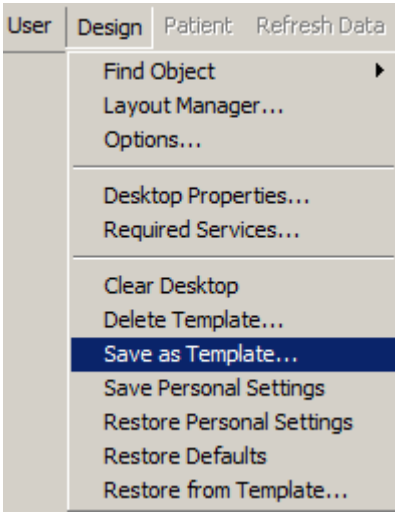


Figure 4-9: **Design** menu

1. Select **Save as Template** from the **Design** menu. The **Save As Template** dialog (Figure 4-10) is displayed.

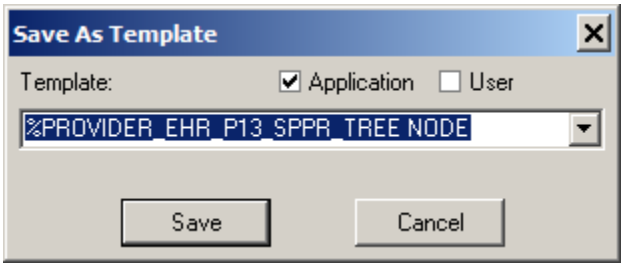


Figure 4-10: **Save As Template** dialog

2. Select the **Template** name.
3. Click **Save**.

5.0 Graphing

Graphing includes the ability to view multiple data types on one graph. Users may also view each data type in separate graphs. Graph views which contain one or more types of data may be saved and shared among users.

5.1 Configuration

Set ORWG GRAPH PUBLIC EDITOR CLASS parameter

The ORWG GRAPH PUBLIC EDITOR CLASS is the parameter that enables a class (usually the CLINICAL COORDINATOR class) to define Public views. Once this has been set up, the CAC can create default public settings and perhaps several views for the users.

The CAC can set up a public view for one or more Hypertension views.

See Section 6 of EHR p11 patch guide for details on Graphing configuration and use.

http://www.ihs.gov/RPMS/PackageDocs/EHR/ehr_0110.11o.pdf

See also Help contents in EHR. The graphing information is listed under the Reports and Lab Results help sections

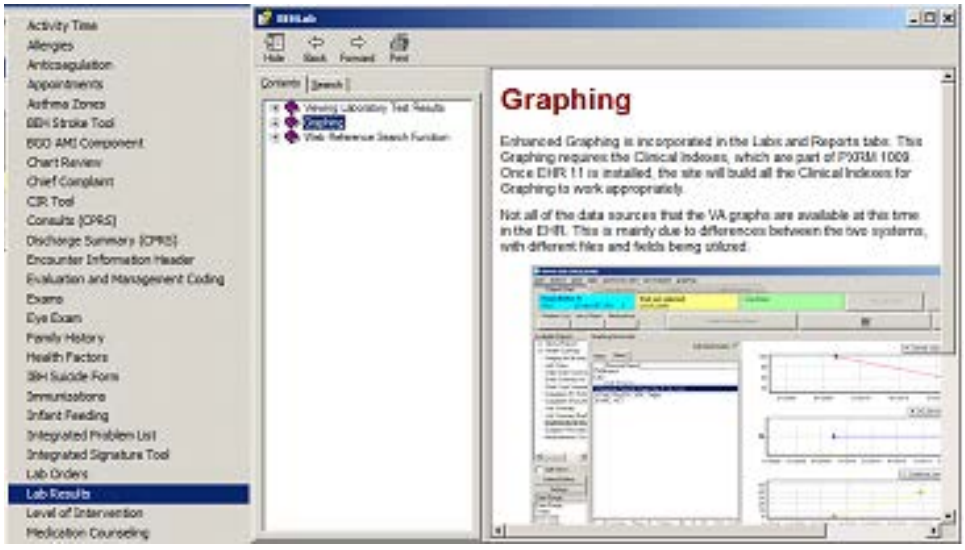


Figure 5-1: Graphing Help

5.2 Graph Views

1. Click the Select/Define button to display the **Select Items and Define Views** dialog (Figure 5-2).

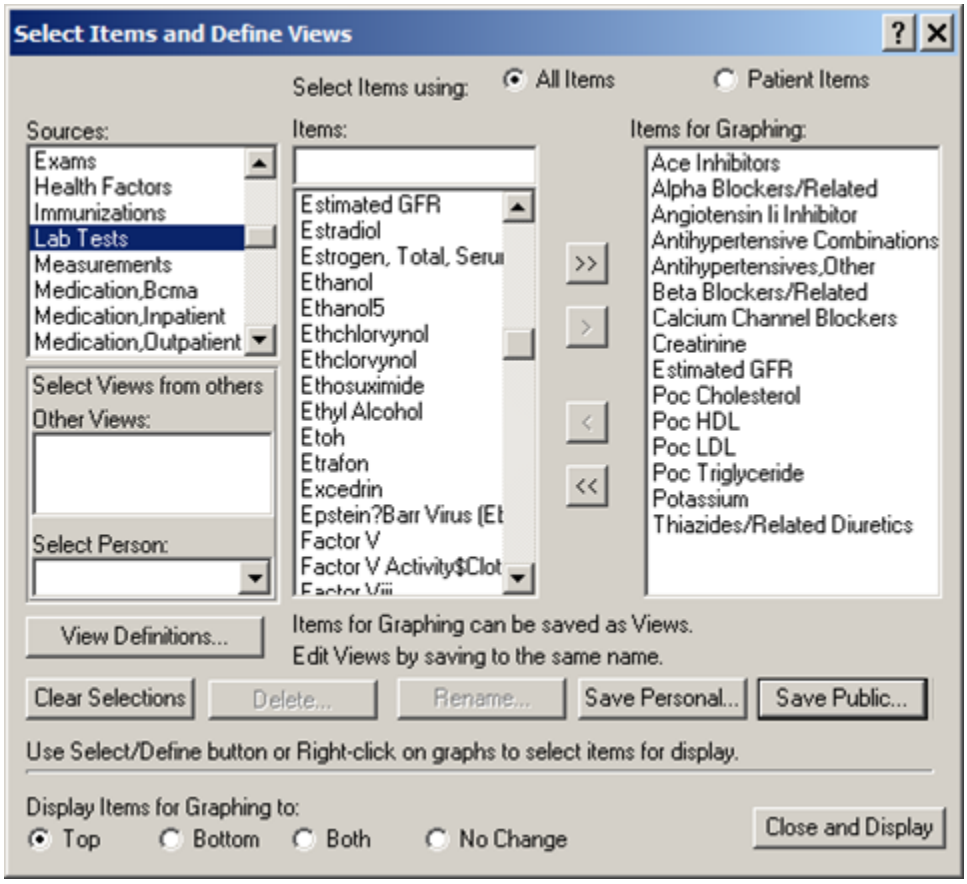


Figure 5-2: **Select Items and Define Views** dialog

2. Make the necessary selections in the various fields of the dialog.
3. Do one of the following:

   - Click **Save Personal** to save this view as a personal view.
   - Click **Save Public** to save this as a public view (if authorized). The **Save this Public View** dialog (Figure 5-3) is displayed.

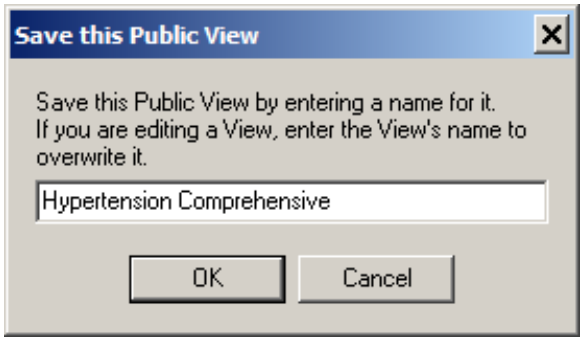


Figure 5-3: **Save this Public View** dialog

     – Type the name of the public view.

– Click **OK**. The new view is now available on the graphing tool.

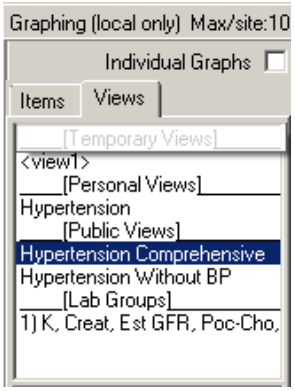


Figure 5-4: Graph Personal and Public Views

Figure 5-5 shows is a very data dense graph.

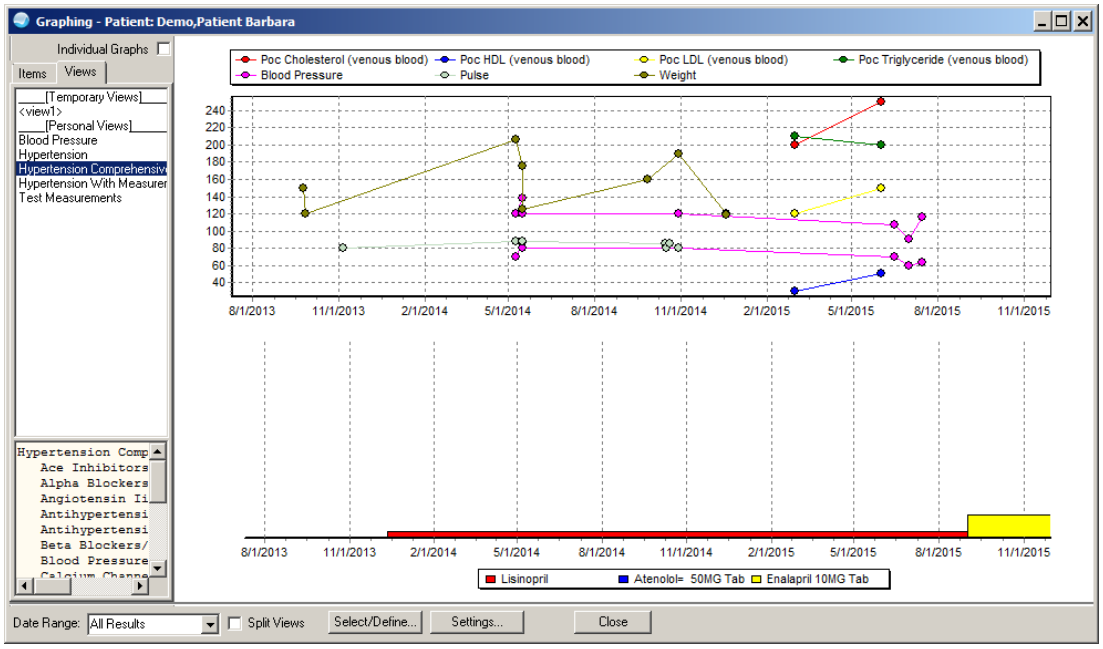


Figure 5-5: Graph example 1

Optionally, display fewer data points in a different graph by creating a different view:

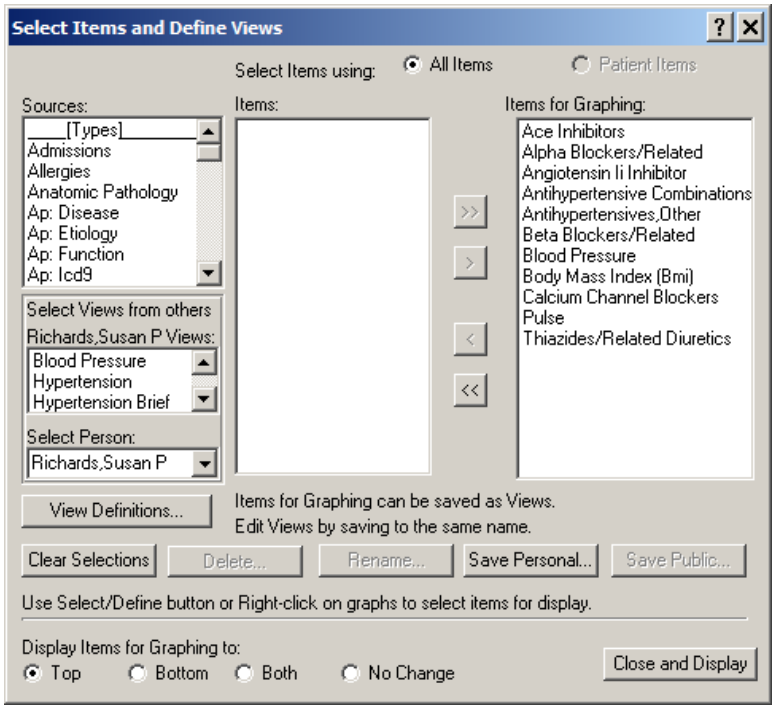


Figure 5-6: **Select Items and Define Views** dialog for brief hypertension

Note a less cluttered graph:

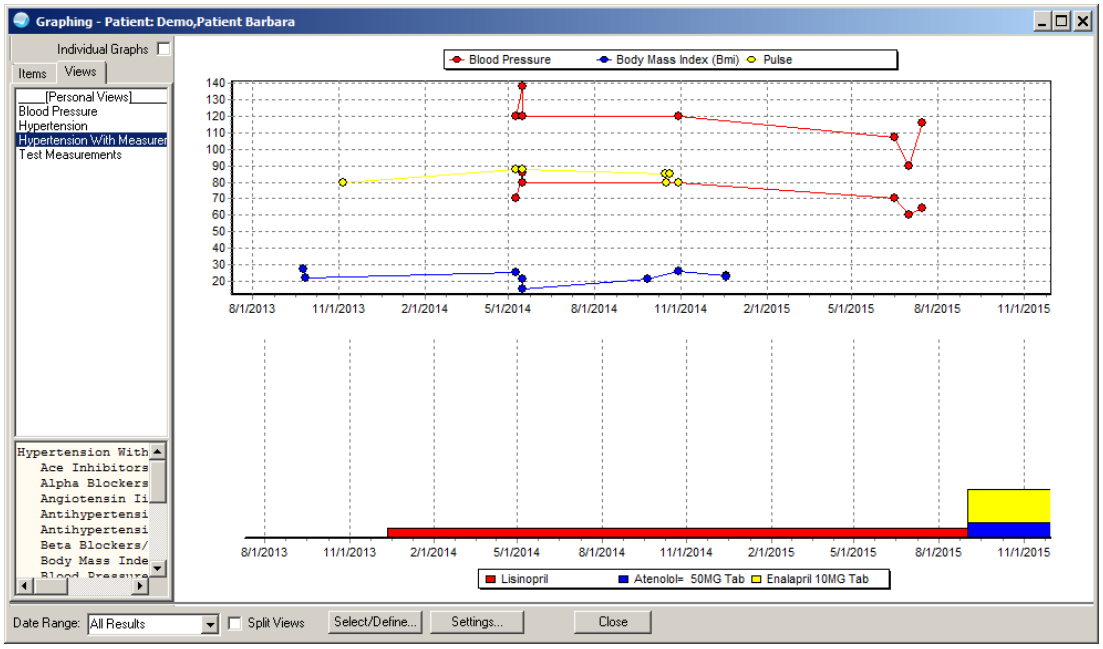


Figure 5-7: Graph example 2

Display details of the graphed data. Click on the graph legend to display a summary of the contents of the graph (Figure 5-8).

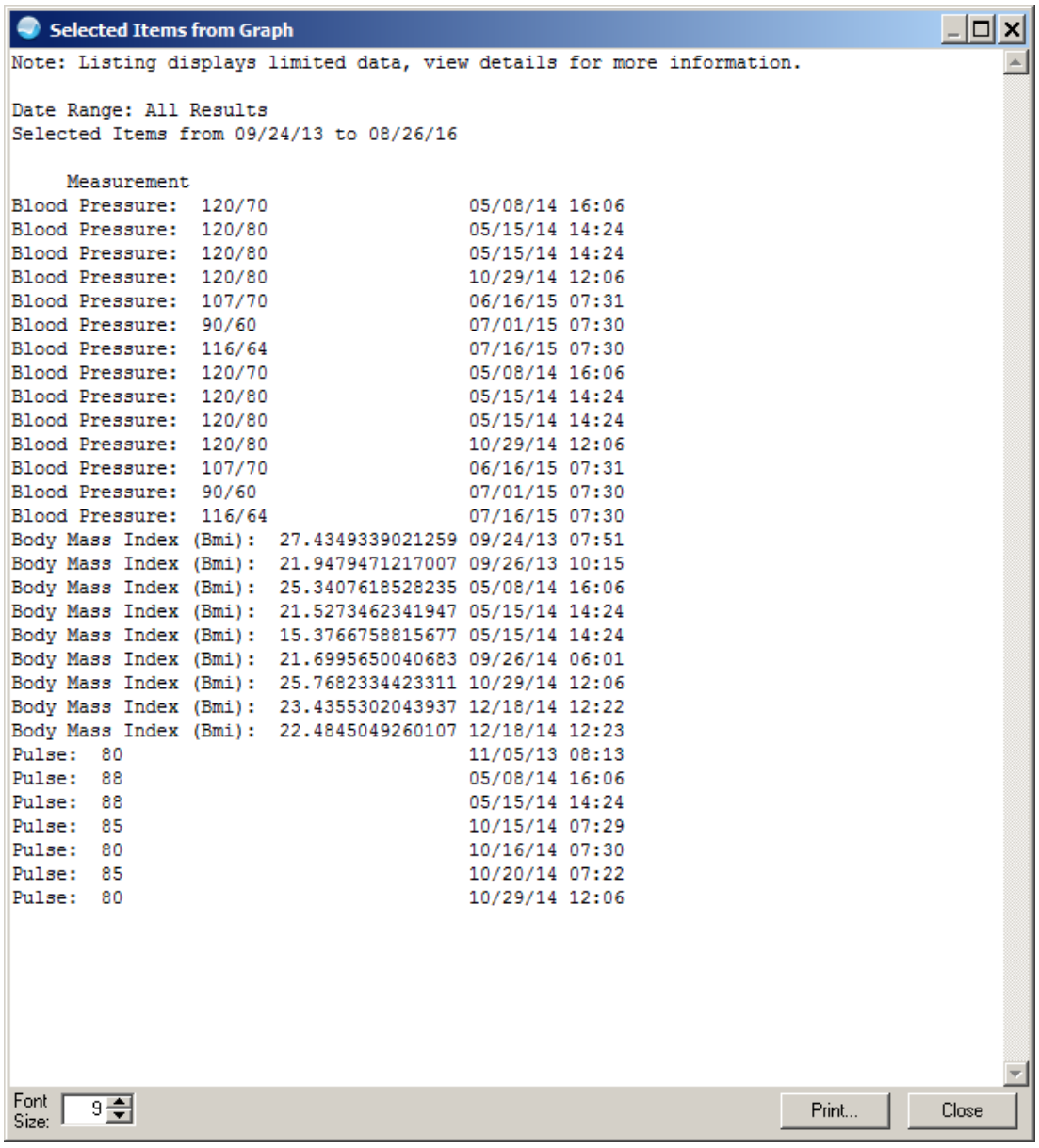


Figure 5-8: **Selected Items from Graph** example 2

Click the medication legend to display medication detail:

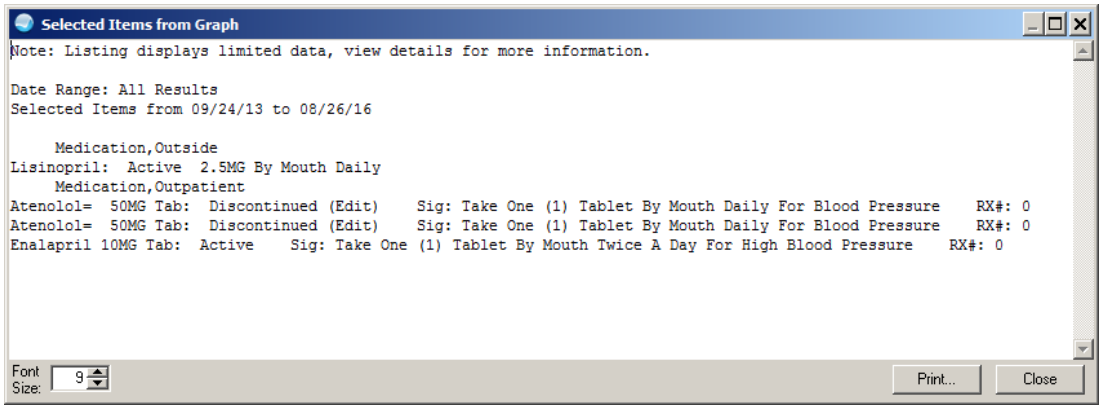


Figure 5-9: **Selected Items from Graph** example 2

Display individual graphs:

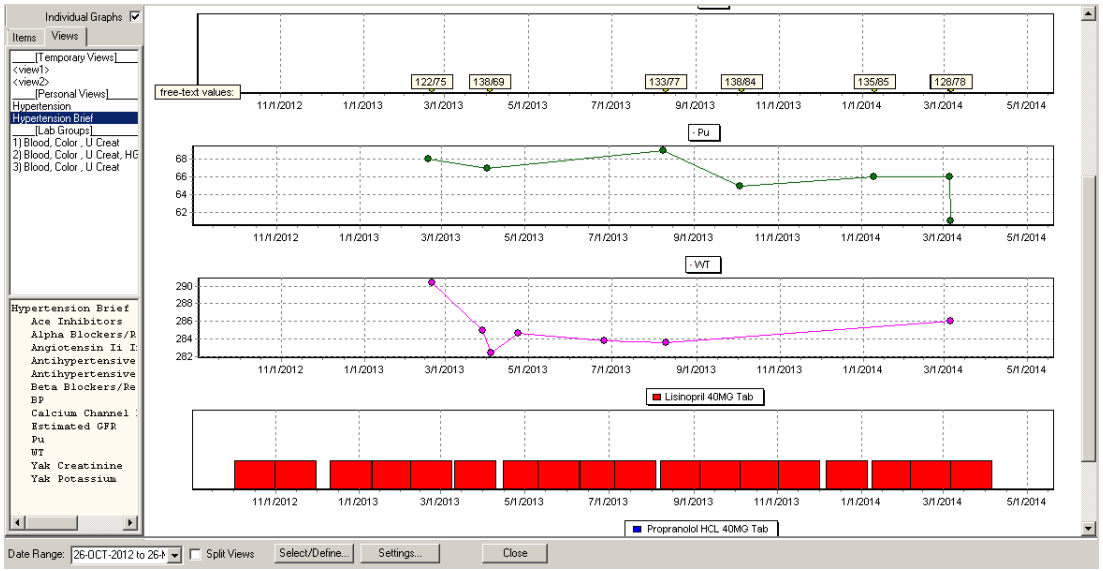


Figure 5-10: Individual graph display

6.0 Lab Worksheets

The lab worksheet tool provides the ability to display up to seven labs for a selected period of time for quick review of a patient's condition. It is possible to select and display another user's worksheets.

> **Note**: The CAC can create the worksheet and users may use the **persons with defined Test Groups** dropdown to select the CACs name, select the group they want to use.

1. Select **Worksheet** from the **Lab Results** list (Figure 6-1).

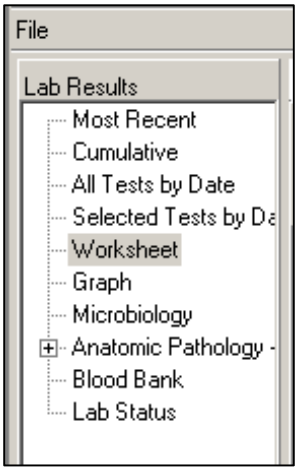


Figure 6-1: **Lab Results** list

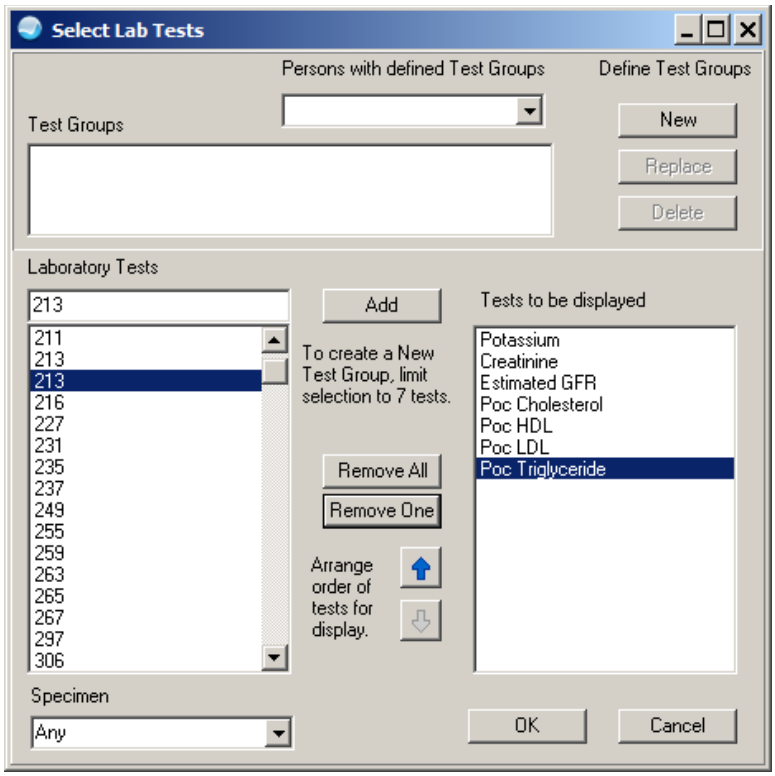


Figure 6-2: **Select Lab Tests** dialog

2. To select labs for the worksheet:

   a. Click to highlight each lab wanted in the **Laboratory Tests** pane.

   b. Click Add to add the selected test to the **Test to be displayed** pane.

3. Click **NEW**.

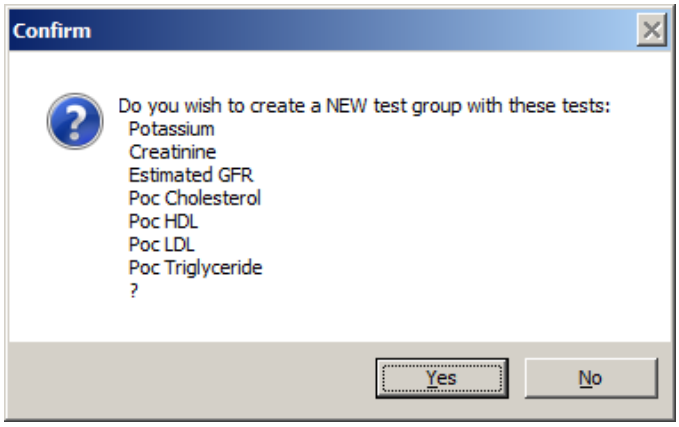


Figure 6-3: Confirmation dialog

4. Click **Yes**. Note that the group is available to display (Figure 6-4).

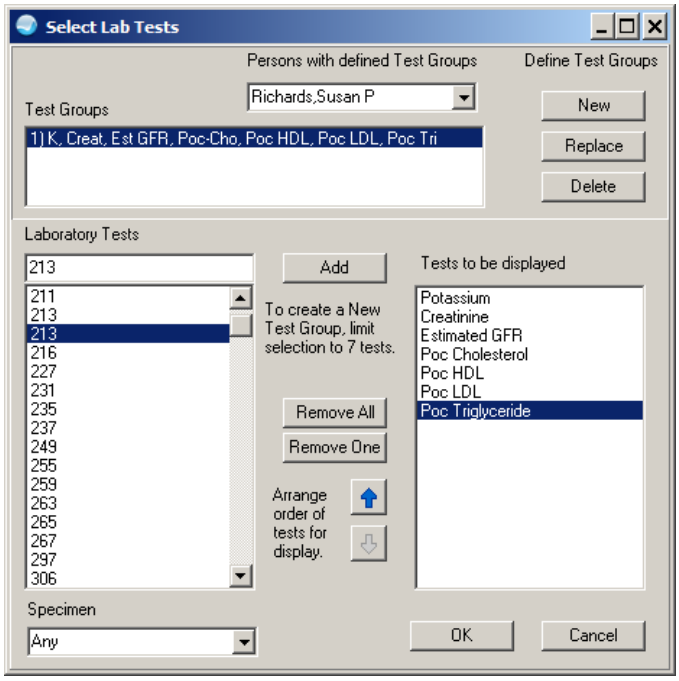


Figure 6-4: **Select Lab Tests** dialog

The worksheet is displayed in a grid format and may be expanded or limited by timeframes:

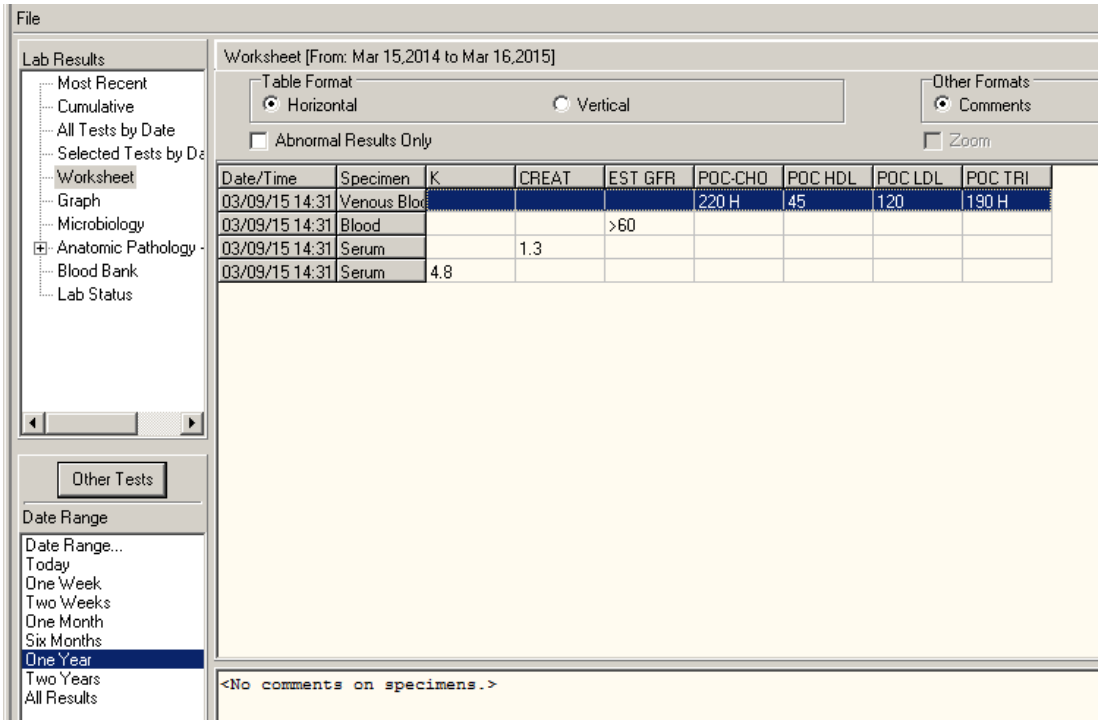


Figure 6-5: **Worksheet** display

7.0 IHS and VA Health Summary tools

VA Health Summary Components package (BHS) allows the CAC to build brief health summaries and uses these as reports or as TIU objects. The Flowsheets component and Measurement Panels component in the VA Health Summary allow the use of the IHS Health Summary Flowsheets and Measurement Panel to create reports and objects.

Tip:	The Resource and Patient Management System (RPMS) Master Configuration menus for reports are cumbersome to navigate recommend site manager assigns the CAC the IHS and VA health summary maintenance menus: IHS Health Summary Maintenance Menu IHS Health Summary Maintenance Menu [APCHSMAINT] VA Health Summary Maintenance Menu Health Summary Maintenance Menu [GMTS IRM/ADPAC MENU]

7.1 Create Measurement Panels in IHS Health Summary

The CAC can use this functionality to create measurement panels to display recurrent data for a set period of time or set number of occurrences. You can combine these into a report or TIU object using the VA Health Summary Components and TIU applications. The display is limited to 25 characters per item in width before it wraps. It's advisable to limit it to approximately 70 characters in width for optimal display in TIU Notes.

Create a Measurement Panel

At the "Select Health Summary Maintenance Option" prompt [APCHSMAINT], select **MM** (Create/Modify Measurement Panel).

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

                              2011 DEMO HOSPITAL

   IS     Inquire About a Health Summary Type
   HM     Health Maintenance Reminders ...
   PP     Print Health Maintenance Item Protocols
   LS     List Health Summary Types
   LC     List Health Summary Components
   LM     List Measurement Panel Types
   LF     List Health Summary Flowsheets
   LI     List Health Summary Flowsheet Items
   MS     Create/Modify Health Summary Type
```

```
   MM     Create/Modify Measurement Panel
   MF     Create/Modify Flowsheet
   MI     Create/Modify Flowsheet Item
   DS     Delete Health Summary Type
   DM     Delete Measurement Panel Definition
   DF     Delete Health Summary Flowsheet
   DI     Delete Health Summary Flowsheet Item
   HS     Generate Health Summary
   BP     Best Practice Prompt Menu ...
   FMMT   Create/Modify Health Summary Type using Fileman
   HSSP   Update Health Summary Site parameters
   IPT    Update the Minor Procedures CPT Taxonomy
   MPT    Update the Major Procedures CPT Taxonomy
   PWH    Patient Wellness Handout Menu ...

Select Health Summary Maintenance Option: mm  Create/Modify Measurement
Panel

Select HEALTH SUMMARY MEAS PANEL NAME: Hypertension Measurements
  Are you adding 'Hypertension Measurements' as
    a new HEALTH SUMMARY MEAS PANEL (the 8TH)? No// Y  (Yes)
NAME: Hypertension Measurements  Replace
Select ORDER IN PANEL: 5
   ORDER IN PANEL PANEL COMPONENT: BP
     1   BP       BLOOD PRESSURE
     2   BPF       BEST PEAK FLOW
CHOOSE 1-2: 1  BP     BLOOD PRESSURE
  PANEL COMPONENT: BP//
  FIELD WIDTH: 8
  LABEL: BP
  TRANSFORM:
  NOTE TO DISPLAY:
Select ORDER IN PANEL: 10
   ORDER IN PANEL PANEL COMPONENT: WT       WEIGHT
  PANEL COMPONENT: WT//
  FIELD WIDTH: 8
  LABEL: Weight
  TRANSFORM:
  NOTE TO DISPLAY:
Select ORDER IN PANEL: 15
   ORDER IN PANEL PANEL COMPONENT: PU       PULSE
  PANEL COMPONENT: PU//
  FIELD WIDTH: 8
  LABEL: Pulse
  TRANSFORM:
  NOTE TO DISPLAY:
Select ORDER IN PANEL:

Select HEALTH SUMMARY MEAS PANEL NAME:
```

7.2 Create Flowsheets in IHS Health Summary

The CAC can use this functionality to create a flowsheet to display recurrent data for a set period of time or number of occurrences. Make several small flowsheets and combine them into a report or TIU object using the VA Health Summary Components and TIU applications. The display is limited to 25 characters per item in width before it wraps. It's advisable to limit it to approximately 70 characters in width for optimal display in TIU Notes.

For hypertension management, it may be helpful to create a Flowsheet to display labs and combine with the Measurement Panel for use in a health summary report and/or TIU object.

Create a Flowsheet

At the "Select Health Summary Maintenance Option" prompt [APCHSMAINT], select **MF** (Create/Modify Flowsheet).

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

                                 2011 DEMO HOSPITAL
IS     Inquire About a Health Summary Type
   HM     Health Maintenance Reminders ...
   PP     Print Health Maintenance Item Protocols
   LS     List Health Summary Types
   LC     List Health Summary Components
   LM     List Measurement Panel Types
   LF     List Health Summary Flowsheets
   LI     List Health Summary Flowsheet Items
   MS     Create/Modify Health Summary Type
   MM     Create/Modify Measurement Panel
   MF     Create/Modify Flowsheet
   MI     Create/Modify Flowsheet Item
   DS     Delete Health Summary Type
   DM     Delete Measurement Panel Definition
   DF     Delete Health Summary Flowsheet
   DI     Delete Health Summary Flowsheet Item
   HS     Generate Health Summary
   BP     Best Practice Prompt Menu ...
   FMMT   Create/Modify Health Summary Type using Fileman
   HSSP   Update Health Summary Site parameters
   IPT    Update the Minor Procedures CPT Taxonomy
   MPT    Update the Major Procedures CPT Taxonomy
   PWH    Patient Wellness Handout Menu ...

Select Health Summary Maintenance Option: MF  Create/Modify Flowsheet

Select HEALTH SUMMARY FLOWSHEET NAME: Hypertension Labs
  Are you adding 'Hypertension Labs' as a new HEALTH SUMMARY FLOWSHEET (the
11TH)? No// y  (Yes)
NAME: Hypertension Labs//
GENDER RESTRICTIONS:
```

```
LOWER AGE LIMIT:
UPPER AGE LIMIT:
Select ITEM ORDER: 1
   ITEM ORDER ITEM TYPE: lab RESULT
  ITEM TYPE: LAB RESULT//
  ITEM LABEL: K+
  ITEM WIDTH: 7
  TRANSFORM:
  Select MEMBERS: LAB.POTASSIUM

     Searching for a Lab test, (pointed-to by MEMBERS)

     Searching for a Lab test
  POTASSIUM
        ...OK? Yes// y  (Yes)
Select MEMBERS:
  TRANSFORM 2:
Select ITEM ORDER: 5
   ITEM ORDER ITEM TYPE: lab RESULT
  ITEM TYPE: LAB RESULT//
  ITEM LABEL: Creat
  ITEM WIDTH: 7
  TRANSFORM:
  Select MEMBERS: LAB.CREATININE

     Searching for a Lab test, (pointed-to by MEMBERS)

     Searching for a Lab test

     1   CREATININE
     2   CREATININE CLEARANCE
     3   CREATININE SPOT URINE  SPOT URINE CREATININE
     4   CREATININE, 24 HOUR URINE  _VMA CREAT UR
     5   CREATININE, 24 HOUR URINE  _24UR CREAT (R)
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1  CREATININE
  Select MEMBERS:
  TRANSFORM 2:
Select ITEM ORDER: 10
   ITEM ORDER ITEM TYPE: lab RESULT
  ITEM TYPE: LAB RESULT//
  ITEM LABEL: eGFR
  ITEM WIDTH: 7
  TRANSFORM:
  Select MEMBERS: LAB.estimated gfr

     Searching for a Lab test, (pointed-to by MEMBERS)

     Searching for a Lab test
  ESTIMATED GFR
        ...OK? Yes// y  (Yes)
  Select MEMBERS:
  TRANSFORM 2:
Select ITEM ORDER: 15
   ITEM ORDER ITEM TYPE: lab RESULT
  ITEM TYPE: LAB RESULT//
  ITEM LABEL: Chol
  ITEM WIDTH: 7
  TRANSFORM:
  Select MEMBERS: LAB.POC CHOL
```

```
     Searching for a Lab test
  POC CHOLESTEROL
        ...OK? Yes// y  (Yes)
  Select MEMBERS:
  TRANSFORM 2:
Select ITEM ORDER: 20
   ITEM ORDER ITEM TYPE: lab RESULT
  ITEM TYPE: LAB RESULT//
  ITEM LABEL: HDL
  ITEM WIDTH: 7
  TRANSFORM:
  Select MEMBERS: LAB.POC HDL

     Searching for a Lab test, (pointed-to by MEMBERS)

     Searching for a Lab test
  POC HDL
        ...OK? Yes// y  (Yes)
  Select MEMBERS:
  TRANSFORM 2:
Select ITEM ORDER: 25
   ITEM ORDER ITEM TYPE: lab RESULT
  ITEM TYPE: LAB RESULT//
  ITEM LABEL: LDL
  ITEM WIDTH: 7
  TRANSFORM:
  Select MEMBERS: LAB.POC LDL

     Searching for a Lab test, (pointed-to by MEMBERS)

     Searching for a Lab test
  POC LDL
        ...OK? Yes// y  (Yes)
  Select MEMBERS:
  TRANSFORM 2:
Select ITEM ORDER: 30
   ITEM ORDER ITEM TYPE: lab RESULT
  ITEM TYPE: LAB RESULT//
  ITEM LABEL: Trig
  ITEM WIDTH: 7
  TRANSFORM:
  Select MEMBERS: LAB.POC TRIG

     Searching for a Lab test, (pointed-to by MEMBERS)

     Searching for a Lab test
  POC TRIGLYCERIDE
        ...OK? Yes// y  (Yes)
    Select MEMBERS:
  TRANSFORM 2:
Select ITEM ORDER:
Select EVOKING CODES:
Select CLINIC DISPLAY RESTRICTIONS:

Select HEALTH SUMMARY FLOWSHEET NAME:
```

7.3 View Flowsheets and Other Components

These are created in the IHS Health Summary. Flowsheets and Measurement Panels can be displayed as part of an IHS Health Summary but are more often used to display in the Ad Hoc health.

1. In EHR select the **Reports** tab. The **Available Reports** pane (Figure 7-1) is displayed.

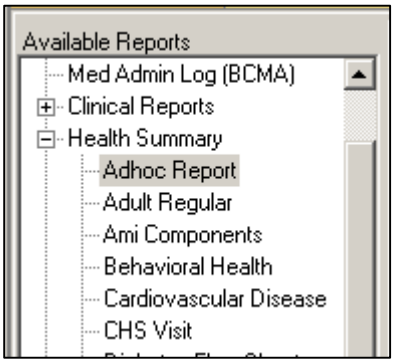


Figure 7-1: **Available Reports** pane

2. Expand **Health Summary** and select **Adhoc Report**. The **Ad Hoc Health Summary** dialog (Figure 7-2) is displayed.

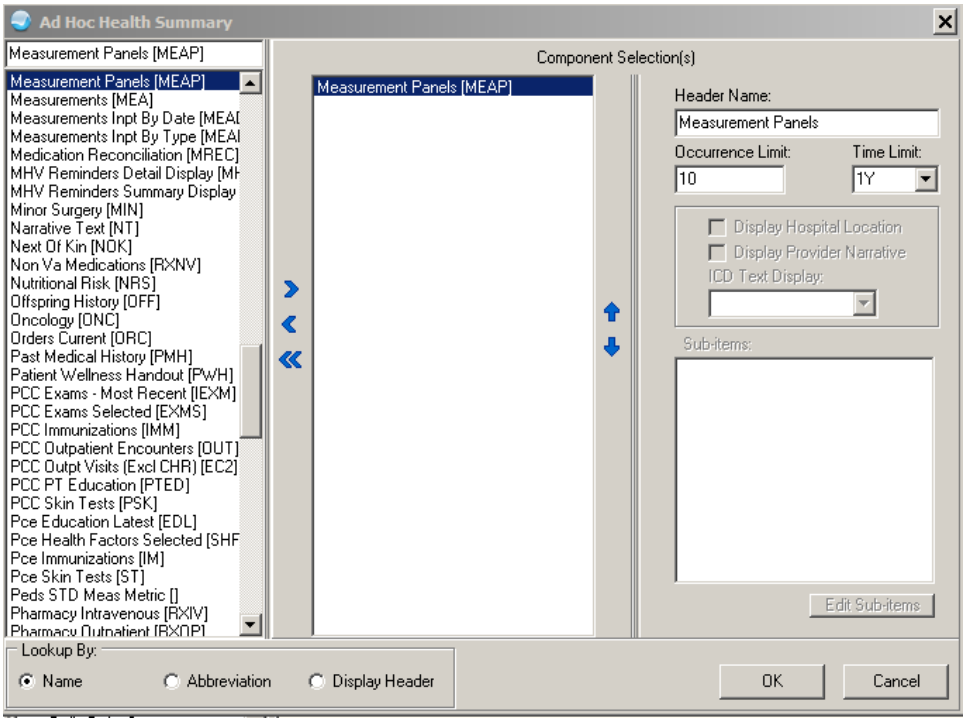


Figure 7-2: **Ad Hoc Health Summary** dialog

3. Select **Measurement Panels** to launch the **Measurement Panel** dialog (Figure 7-3).

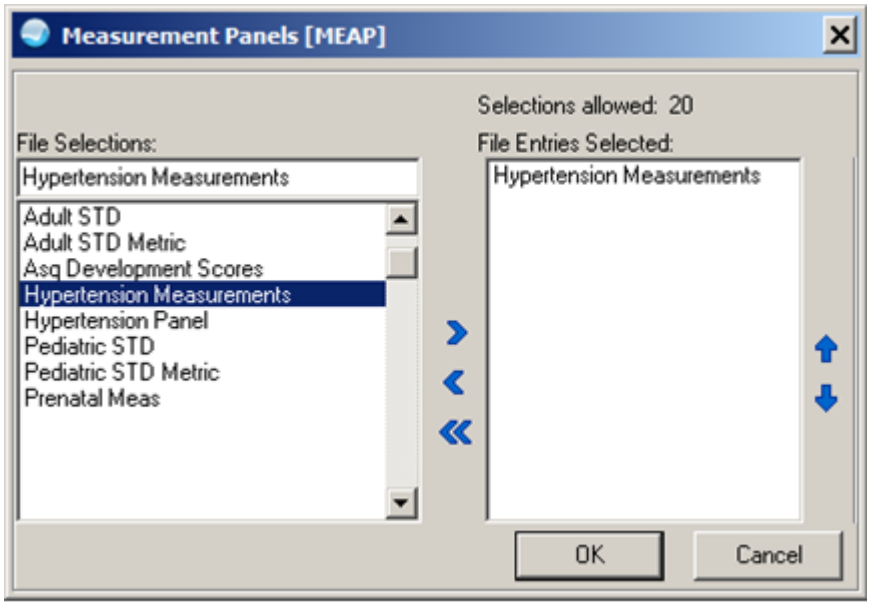


Figure 7-3: **Measurement Panels** dialog

4. Select the **Hypertension Measurements** panel created in an earlier step.

5. Click **OK** to return to the **Ad Hoc Health Summary** dialog (Figure 7-4).

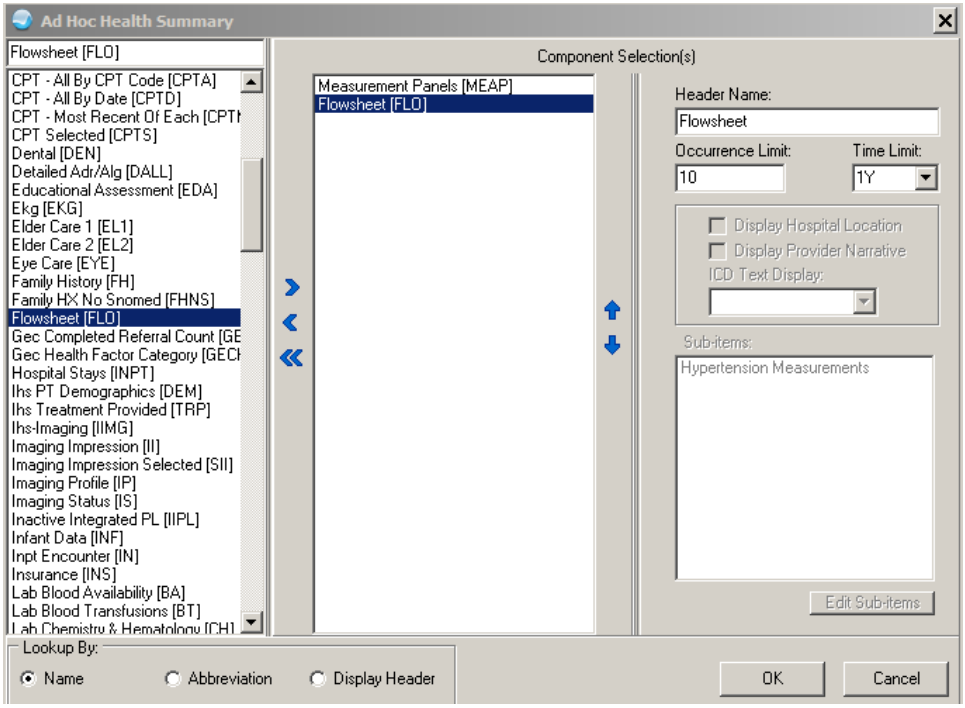


Figure 7-4: **Ad Hoc Health Summary** dialog

6. Select **Flowsheet** to launch the **Flowsheet** dialog (Figure 7-5).

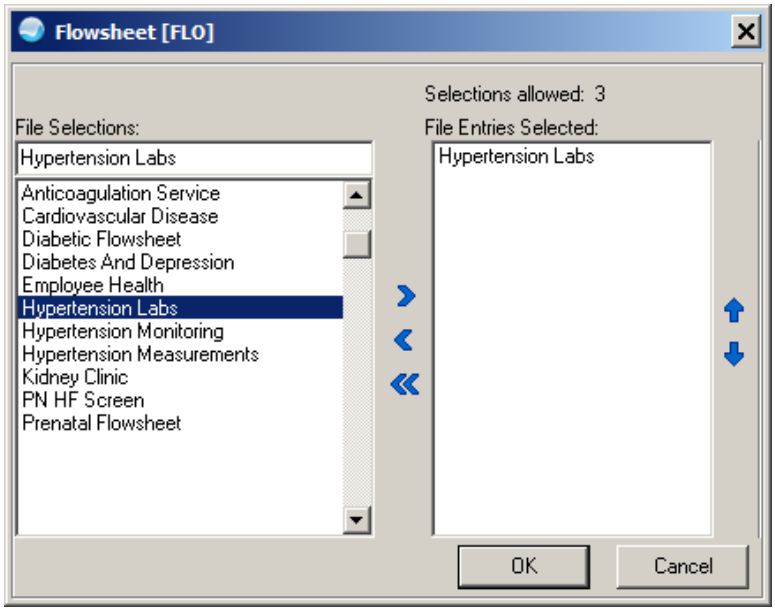


Figure 7-5: **Flowsheet** dialog

7. Select the **Hypertension Labs** flowsheet created in an earlier step.
8. Click **OK** to return to the Ad Hoc Heath summary dialog.
9. Click **OK** to display the report (Figure 7-6).

```
---------- MEAP - Measurement Panels (max 10 occurrences or 1 year) ----------


                    BP      Weight    Pulse
09/18/14 08:45      130/90                 99
09/18/14 06:00      120/90                 97
06/06/14 21:36              154.323582

--------------- FLO - Flowsheet (max 10 occurrences or 1 year) ---------------

Hypertension Labs
               K+       Creat    eGFR     Chol     HDL      LDL      Trig
  ------------------------------------------------------------------------
  03/30/2015 :4.6     :0.80    :>60     :200.0   :60.0    :99.0    :150.0
  ------------------------------------------------------------------------
```

Figure 7-6: Measurement Panel Ad Hoc report example

7.4 VA Health Summary for TIU object

Use the VA Heath Summary Components to build a health summary. Use the health summary to create TIU objects. It is necessary to create a TIU Health Summary object to use in the IHS-MH Hypertension Control 2015 reminder dialog.

7.4.1 Create a VA Health Summary named Hypertension Control

Use the VA Health Summary menu to create a new heath summary reports.

Health Summary Maintenance Menu [GMTS IRM/ADPAC MENU]

```
    1    Health Summary (Available with PCC only)  [ADEMHSOP]
    2    Health Summary Configuration  [BEHORPHS MAIN]
    3    Health Summary Coordinator's Menu  [GMTS COORDINATOR]
    4    Health Summary Displaying CMS Register(s)  [APCHSUMR]
    5    Health Summary Enhanced Menu  [GMTS ENHANCED USER]
    6    Health Summary for Inactive Patient  [APCHSINA]
    7    Health Summary Maintenance Menu [GMTS IRM/ADPAC MAINT MENU]
    8    Health Summary Maintenance Menu  [BEHORPHS VHA MAINT MENU]
    9    Health Summary Maintenance  [APCHSMAINT]
    10   Health Summary Menu  [GMTS USER]
    11   Health Summary Menu  [APCHMENU]
    12   Health Summary Objects Menu  [GMTS OBJ MENU]
    13   Health Summary Objects Menu  [BEHORPHS VHA OBJ MENU]
    14   Health Summary Overall Menu  [GMTS MANAGER]

Type '^' to stop, or choose a number from 1 to 14 :7  Health Summary
Maintenance
 Menu

   1      Disable/Enable Health Summary Component
   2      Create/Modify Health Summary Components
   3      Edit Ad Hoc Health Summary Type
   4      Rebuild Ad Hoc Health Summary Type
   5      Resequence a Health Summary Type
   6      Create/Modify Health Summary Type
   7      Edit Health Summary Site Parameters
   8      Health Summary Objects Menu ...
   9      CPRS Reports Tab 'Health Summary Types List' Menu ...
   10     CPRS Health Summary Display/Edit Site Defaults ...

Select Health Summary Maintenance Menu Option: 6  Create/Modify Health
Summary Type

Select Health Summary Type: HYPERTENSION CONTROL

Are you adding 'HYPERTENSION CONTROL' as
    a new HEALTH SUMMARY TYPE (the 55th)?   No// y  YES
NAME: HYPERTENSION CONTROL  Replace
TITLE:
SUPPRESS PRINT OF COMPONENTS WITHOUT DATA:
LOCK:
OWNER: RICHARDS,SUSAN P//

Do you wish to copy COMPONENTS from an existing Health Summary Type? YES//
n  NO
Select COMPONENT: measurement panelS     MEAP
SUMMARY ORDER: 5// 5
OCCURRENCE LIMIT: 3 <<<< can use occurrence and/or time to limit display
TIME LIMIT:
HEADER NAME: Measurement Panels//

file type <Prefix.?>

Select SELECTION ITEM: Hy  <<< case sensitive, use the name of the
measurement panel you made for hypertension
```

```
     Searching for a Measurement Panel, (pointed-to by SELECTION ITEM)

     1   Hypertension Measurements
     2   Hypertension Panel
CHOOSE 1-2: 1  Hypertension Measurements
Select SELECTION ITEM:
Select COMPONENT: FLOWSHEET              FLO
SUMMARY ORDER: 10// 10
OCCURRENCE LIMIT: 3 <<<< can use occurrence and/or time to limit display
TIME LIMIT:
HEADER NAME: Flowsheet//

No selection items chosen.

Select new items one at a time in the sequence you want them displayed.
You may select up to 3 items.

Select SELECTION ITEM: Hyper

     Searching for a Flowsheet, (pointed-to by SELECTION ITEM)

     Searching for a Flowsheet

     1   Hypertension Labs
     2   Hypertension Monitoring
     3   Hypertension measurements
CHOOSE 1-3: 1  Hypertension Labs <<< case sensitive, use the name of the
flowsheet you made for hypertension labs

Select SELECTION ITEM:
Select COMPONENT:

Do you wish to review the Summary Type structure before continuing? NO//
<<< Yes if you want to review your selections
Please hold on while I resequence the summary order..
```

```
         Type Name:  HYPERTENSION CONTROL
             Title:
             Owner:  RICHARDS,SUSAN P
SUPPRESS PRINT OF COMPONENTS WITHOUT DATA:
SUPPRESS SENSITIVE PRINT DATA:  0

                                    Max        Hos  ICD   Pro  CPT
Abb   Ord    Component Name         Occ  Time  Loc  Text  Nar  Mod  Selection
-------------------------------------------------------------------------------
MEAP  5       Measurement Panels    3                                    Hypertension
Measurements
FLO   10      Flowsheet             3                                    Hypertension
Labs




               * = Disabled Components
Select COMPONENT:
```

Figure 7-7: VA Health Summary detail

7.4.2 Create TIU Health Summary Object Hypertension Control

Use the Create TIU/Health Summary Objects menu.

```
                          Document Definitions (Manager)

                                (2011 DEMO HOSPITAL)

   DDM1   Edit Document Definitions
   DDM2   Sort Document Definitions
   DDM3   Create Document Definitions
   DDM4   Create Objects
   DDM5   List Object Descriptions
   DDM6   Create TIU/Health Summary Objects
   DDM7   Title Headers/Footers

Select Health Summary Maintenance Menu Option: ^ddm6   Create TIU/Health
Summary

                                TIU Maintenance Menu

                          Document Definitions (Manager)

TIU Health Summary Object   Mar 30, 2015 14:15:14   Page:    1 of    2

     TIU Object Name              Health Summary Type
1    BRADEN SCALE 30D             No Health Summary Type Found
2    CCL-PRENATAL                      CCL-PRENATAL FLOWSHEET
+         Enter ?? for more actions
Create New TIU Object               Find
Detailed Display/Edit TIU Object  Detailed Display/Edit HS object
    Quit

                   --- Create TIU/Health Summary Object ---

Enter a New TIU OBJECT NAME: HYPERTENSION CONTROL

Object Name: HYPERTENSION CONTROL

Is this correct? YES// y  YES

Use a pre-existing Health Summary Object? NO// n  NO

Checking HYPERTENSION CONTROL (TIU) with Health Summary...

Creating Health Summary Object 'HYPERTENSION CONTROL (TIU)'

 Select Health Summary Type: HYPERTENSION

4 Health Summary Types found

   1.  Hypertension Control
   2.  Hypertension Management
   3.  Hypertension Review
   4.  Hypertension Monitoring

Select 1-4:  1  HYPERTENSION CONTROL <<< enter the Health Summary you just
created in the step above

 Do you want to overwrite the TIME LIMITS in the Health
```

```
 Summary Type 'HYPERTENSION CONTROL'?  N// n  NO

 Print standard Health Summary Header with the Object?  N// O

 Partial Header:
   Print Report Date?  N// O
   Print Confidentiality Banner?  N// O
   Print Report Header?  N// O
   Print the standard Component Header?  Y// NO
   Print the date a patient was deceased?  N// O

 Print a LABEL before the Health Summary Object?  N// O

 Suppress Components without Data?  N// O

OBJECT DESCRIPTION:
  No existing text
  Edit? NO//

Create a TIU Object named: HYPERTENSION CONTROL

Ok? YES//

TIU Object created successfully.
```

7.4.3 Configure the Health Summary Button

1. Identify the Internal Entry Number (IEN) for the Health Summary to display on a button in FileMan. Each site's IEN for this Health Summary will be different.

```
          VA FileMan Version 22.0
          Enter or Edit File Entries
          Print File Entries
          Search File Entries
          Modify File Attributes
          Inquire to File Entries
          Utility Functions ...
          Data Dictionary Utilities ...
          Transfer Entries
          Other Options ...
Select VA FileMan Option: inquire to File Entries
OUTPUT FROM WHAT FILE: V LAB// VA Health Summary
     1   VA HEALTH SUMMARY COMPONENT      (204 entries)
     2   VA HEALTH SUMMARY OBJECTS        (15 entries)
     3   VA HEALTH SUMMARY TYPE           (15 entries)
     4   VA HEALTH SUMMARY USER PREFERENCE    (1 entry)
CHOOSE 1-4: 3  VA HEALTH SUMMARY TYPE     (15 entries)
Select VA HEALTH SUMMARY TYPE NAME: Hypertension Control
ANOTHER ONE:
STANDARD CAPTIONED OUTPUT? Yes//   (Yes)
Include COMPUTED fields:  (N/Y/R/B): NO// BOTH Computed Fields and Record
Number
 (IEN)

NUMBER: 53 <<< IEN                    NAME: HYPERTENSION CONTROL
  OWNER: RICHARDS,SUSAN P
SUMMARY ORDER: 5                        COMPONENT NAME: MEASUREMENT PANELS
  OCCURRENCE LIMIT: 3                   HEADER NAME: Measurement Panels
```

```
SELECTION ITEM: Hypertension Measurements
SUMMARY ORDER: 10                        COMPONENT NAME: FLOWSHEET
  OCCURRENCE LIMIT: 3                    HEADER NAME: Flowsheet
SELECTION ITEM: Hypertension Labs
  TIMESTAMP: 63641,51300
```

2. Add a **Health Summary Report** button to the Toolbar in Design Mode

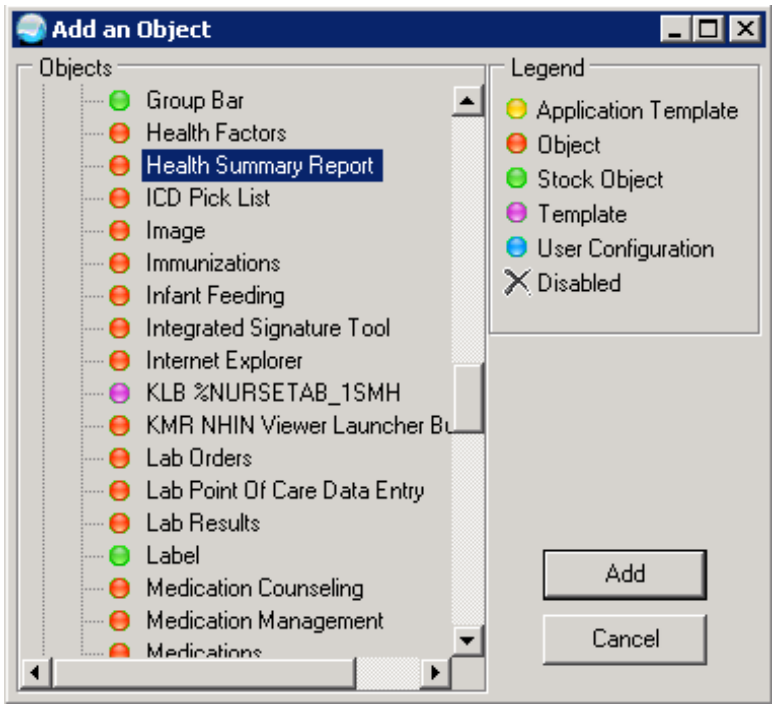


Figure 7-8: **Add an Object** dialog

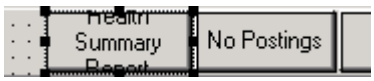


Figure 7-9: Health Summary Report

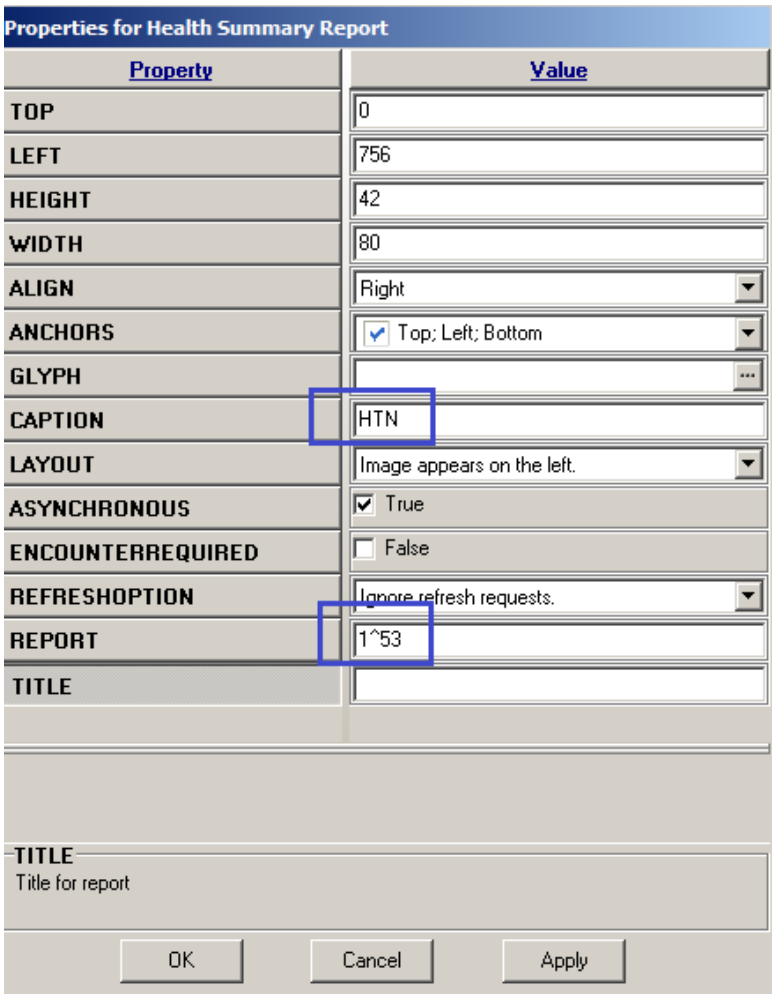


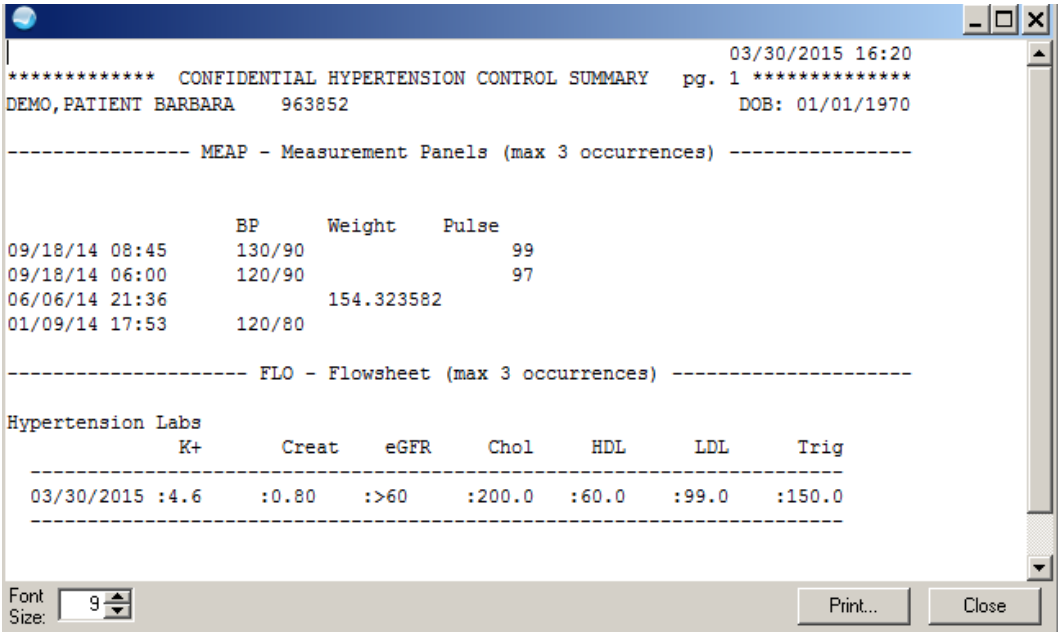
Figure 7-10: **Properties for Health Summary Report** dialog

3. Set the appropriate value for each **Property**

   - **CAPTION** is the name to be displayed on the button.
   - Format for the **REPORT** field is:
     - IHS^IEN of report (for IHS Health Summaries)
     - 1^IEN of report (for VA Health Summaries)

4. Click **OK**.

Figure 7-11: EHR ribbon



```
                                                                03/30/2015 16:20
*************  CONFIDENTIAL HYPERTENSION CONTROL SUMMARY   pg. 1 **************
DEMO,PATIENT BARBARA    963852                                    DOB: 01/01/1970

---------------- MEAP - Measurement Panels (max 3 occurrences) ----------------


                    BP      Weight    Pulse
09/18/14 08:45      130/90                  99
09/18/14 06:00      120/90                  97
06/06/14 21:36              154.323582
01/09/14 17:53      120/80

---------------------- FLO - Flowsheet (max 3 occurrences) ----------------------

Hypertension Labs
               K+       Creat    eGFR     Chol     HDL      LDL      Trig
  ------------------------------------------------------------------------------
  03/30/2015 :4.6     :0.80    :>60     :200.0   :60.0    :99.0    :150.0
  ------------------------------------------------------------------------------
```


Figure 7-12: Hypertension Control Health Summary

8.0 Deploy Million Hearts Clinical Reminders

There are two reminders:

- IHS-MH Hypertension Control 2015 is designed to be deployed in the EHR and includes a reminder dialog.
- IHS-MH Hypertension Recall 2015 is a reminder written specifically to create a recall list of patients who have essential hypertension (Section 10.0).

8.1 Install Reminders from the Reminder Exchange

8.1.1 IHS-MH-Hypertension Control 2015

Please refer to the PXRM 2.0 patch documentation pxrm0200.5.pdf. The PXRM v2.0 managers manual is available on the RPMS Clinical Document Repository under VA Clinical Reminders. Select the **user** link under **manuals**:

http://www.ihs.gov/RPMS/index.cfm?module=Applications&option=View&AC_ID=0

```
Clinical Reminder Exchange     Apr 09, 2015 16:56:09          Page:   12 of   18
Exchange File Entries.

+Item  Entry                              Source                    Date Packed
  106  IHS-MAMMOGRAM 75-100 2013          USER@DEMO HOSPITA         04/21/2014@14:45
  107  IHS-MAMMOGRAM 75-100 2014          USER@DEMO HOSPITA         11/20/2014@13:22
  108  IHS-MAMMOGRAM 75-100 2014          USER@DEMO HOSPITA         03/04/2015@12:47
  109  IHS-MED ED 2013                    USER@DEMO HOSPITA         04/21/2014@14:46
  110  IHS-MED THERAPY MNGT 2013          USER@DEMO HOSPITA         04/21/2014@14:46
  111  IHS-MENINGITIS IMMUN 2013          USER@DEMO HOSPITA         04/21/2014@14:46
  112  IHS-MH HYPERTENSION CONTROL        RICHARDS@2011 DEMO HO     04/08/2015@20:58
       2015
  113  IHS-NEWBORN HEARING 2013           USER@DEMO HOSPITA         04/21/2014@14:46
  114  IHS-NUTRITIONAL SCREENING 2013     USER@DEMO HOSPITA         04/21/2014@14:46
+          + Next Screen   - Prev Screen   ?? More Actions
CFE  Create Exchange File Entry          IH   Installation History
CHF  Create Host File                    LHF  Load Host File
CMM  Create MailMan Message              LMM  Load MailMan Message
DFE  Delete Exchange File Entry          LR   List Reminder Definitions
IFE  Install Exchange File Entry         RI   Reminder Definition Inquiry
Select Action: Next Screen//
```

Figure 8-1: Reminder Exchange Install Reminder

1. Use the IFE (install exchange file entry) option to install reminder.
2. At the "Select Action" prompt, select Next Screen// **112**.

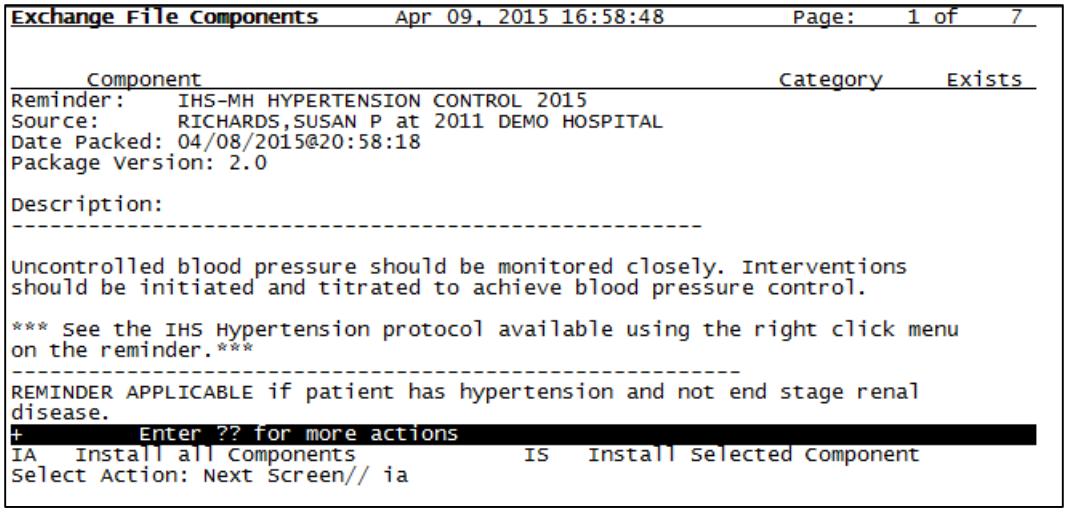


Figure 8-2: Reminder Exchange Install all option

Use IA (install all components option)

Select Action: Next Screen// **ia Install all Components**

The install process is semi-automated. The system checks to see if the component is on RPMS and if the one on the system is identical. If it is, it will skip. If it is missing or not identical, it will stop and prompt for the next action. Most of the time you will accept the defaults.

```
REMINDER TAXONOMY entry named IHS-END STAGE RENAL DISEASE already exists
and the packed component is identical, skipping.

REMINDER TAXONOMY entry named TEST-ESSENTIAL HYPERTENSION already exists
and the packed component is identical, skipping.

REMINDER TERM entry named IHS-HIGH BP 2007 already exists and the packed
component is identical, skipping.

REMINDER TERM entry named IHS-CONTROLLED BP 2015 already exists and the
packed component is identical, skipping.
```

When completed, you will see another screen and be asked to install the dialog.

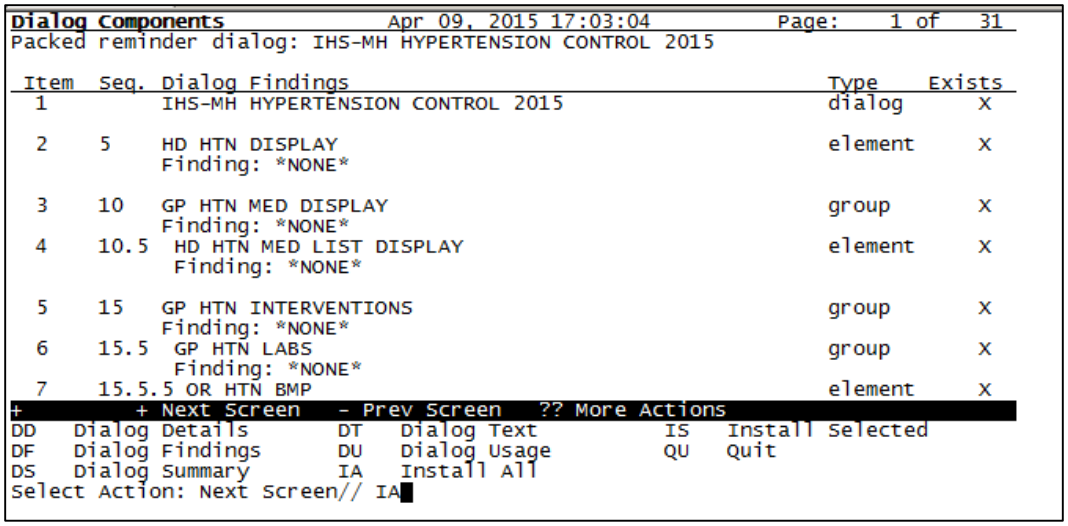


Figure 8-3: Reminder Exchange Install Dialog

Again choose IA (install all). The following components do not automatically import.

```
   Quick Orders: either make new ones with identical name or have ready
your local quick orders to replace them on install
LRZ BMP TODAY
LRZ LIPIDS
GMRCZ FITNESS PROGRAM
GMRCZ NUTRITION
GMRCZ TOBACCO CESSATION
GMRCZ SOCIAL SERVICES
   TIU Objects: you will need to make objects if you have not done so
already
Hypertension Control VA Health Summary for TIU object

Select Action: Next Screen// IA

Install reminder dialog and all components with no further changes:
Y//<enter>
```

Similar to the Reminder Installation, the system checks your RPMS to see if there is each element and if found if it is identical. If not, it will stop and prompt you for the next action.

```
Install reminder dialog and all components with no further changes: Y// ES
REMINDER DIALOG entry named OR HTN SMOKING CESSATION already exists and the
packed component is identical, skipping.

REMINDER DIALOG entry named OR HTN SOCIAL SERVICES already exists and the
packed component is identical, skipping.

REMINDER DIALOG entry named OR HTN PHN already exists and the packed
component is identical, skipping.

REMINDER DIALOG entry named OR HTN NUTRITION already exists and the
packed component is identical, skipping.
```

```
REMINDER DIALOG entry named OR HTN HOME HEALTH already exists and the
packed component is identical, skipping.

REMINDER DIALOG entry named OR HTN EXERCISE already exists and the
packed component is identical, skipping.
```

If you do not have the identical quick orders on your system, it will prompt you to enter your local quick orders.

Once the dialog instillation is complete, you will need to Enable the dialog. They are disabled on import from the exchange.

Navigate to the Reminder Dialog menus. **BEH>REM>DLG>DLG**

```
Dialog List                    Apr 09, 2015 17:26:18          Page:   11 of   17
REMINDER VIEW (ALL REMINDERS BY NAME)

+Item Reminder Name                          Linked Dialog Name & Dialog Status
 161  IHS-MAMMOGRAM 75-100 2013              IHS-MAMMOGRAM 75-100 2013
 162  IHS-MAMMOGRAM 75-100 2014              IHS-MAMMOGRAM 75-100 2014     Disabled
 163  IHS-MED ED 2013                        IHS-MED ED 2013
 164  IHS-MED THERAPY MNGT 2013              IHS-MED THERAPY MGNT 2013
 165  IHS-MENINGITIS IMMUN 2008              IHS-MENINGITIS IMMUN 2008
 166  IHS-MENINGITIS IMMUN 2013              IHS-MENINGITIS IMMUN 2013
 167  IHS-MH HYPERTENSION CONTROL 2015       IHS-MH HYPERTENSION CONTROL   Disabled
 168  IHS-MH HYPERTENSION RECALL 2015
 169  IHS-NEWBORN HEARING 2013               IHS-NEWBORN HEARING 2013
 170  IHS-NUTRITIONAL SCREENING 2013         IHS-NUTRITIONAL SCREENING 2
 171  IHS-OSTEOPOROSIS SCREEN 2013           IHS-OSTEOPOROSIS SCREEN 201
 172  IHS-OSTEOPOROSIS SCREEN 2014           IHS-OSTEOPOROSIS SCREEN 201   Disabled
 173  IHS-OSTEOPOROSIS SCREENING
 174  IHS-PAP SMEAR                          IHS-PAP SMEAR                 Disabled
 175  IHS-PAP SMEAR 2008                     IHS-PAP SMEAR 2008            Disabled
 176  IHS-PAP SMEAR 2009                     IHS-PAP SMEAR 2009
+         + Next Screen   - Prev Screen   ?? More Actions                        >>>
AR   All reminders          LR   Linked Reminders      QU   Quit
CV   Change View            RN   Name/Print Name
Select Item: Next Screen//

DFE  Delete Exchange File Entry          LR   List Reminder Definitions
IFE  Install Exchange File Entry         RI   Reminder Definition Inquiry
Select Action: Next Screen//
```

Figure 8-4: Reminder Dialog menu

This is the Dialog List in the Reminder View. The name of the Reminder Definition is on the left and the linked dialog if present is on the right. To enable the dialog you will select the item number – in this example 167.

```
Select Item: Next Screen//167

At the next screen you will select 1 to edit the dialog.
```

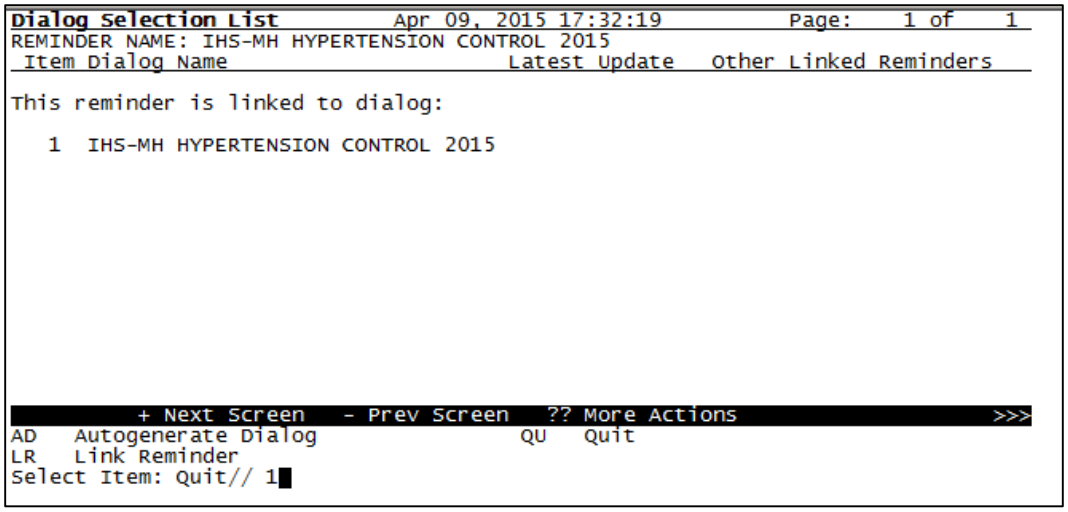


Figure 8-5: Dialog Selection List

```
Select Item: Quit//1
```

The next screen is the Dialog Edit List and you will Edit the dialog

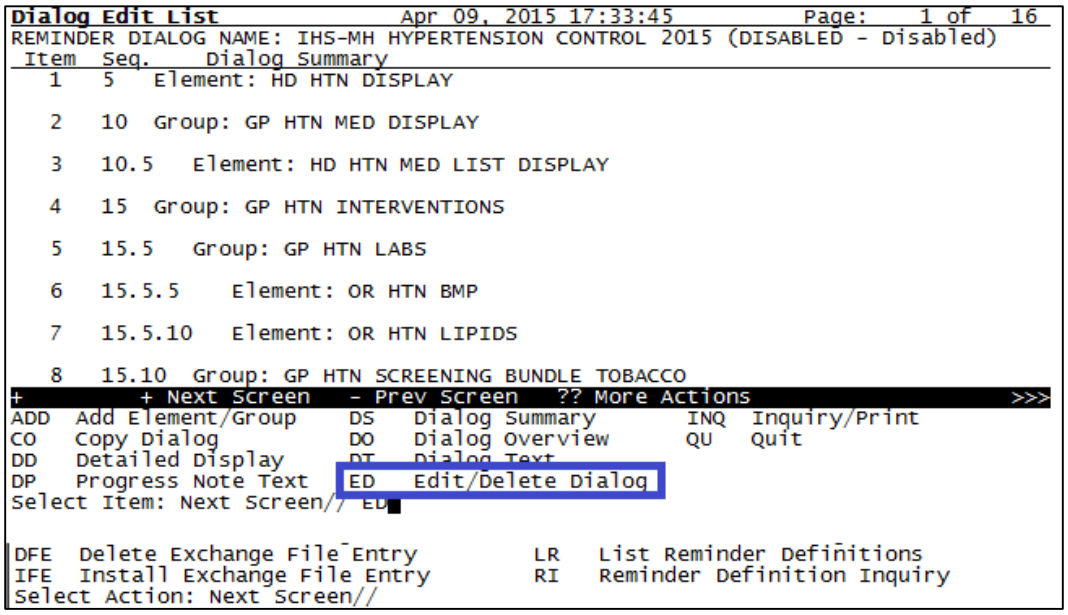


Figure 8-6: Dialog Edit List

```
Select Next Item: Next Screen//ED Edit/Delete Dialog
NAME: IHS-MH HYPERTENSION CONTROL 2015 Replace
DIASBLE: Disabled//@ <<< this removes the text. Any text or spaces here
will disable the dialog
  SURE YOU WANT TO DELETE? Y (Yes)
CLASS: LOCAL// ^ <<< you can just jump out from here
```

8.1.2 IHS-MH Hypertension Recall 2015

Repeat the installation process in Section 8.1.1. This reminder will not have a dialog. This reminder is only to be used to generate Reminder Reports and not deployed in the EHR GUI.

8.2 Configure Reminder and Dialog in EHR

To configure reminders in the GUI, set the PXRM EHR CONFIGURATION parameter.

```
BEH → REM→ PAR →    CFG -  Allow EHR Configuration in GUI
     100 User          USR    [choose from NEW PERSON]
     200 Class         CLS    [choose from USR CLASS]
     300 Division      DIV    [DEMO HOSPITAL]
     400 System        SYS    [DEMO.MEDSPHERE.COM]

Enter selection: 100  User   NEW PERSON ←set for user or CAC class
Select NEW PERSON NAME: user,demo  USER,DEMO
-- Setting Can configure reminders within GUI  for User: USER,DEMO ---
Can configure reminders within GUI: YES//
```

1. Log on to EHR.
2. Select a patient.
3. Click the reminder icon. The **Available Reminders** dialog (Figure 8-7) is displayed.

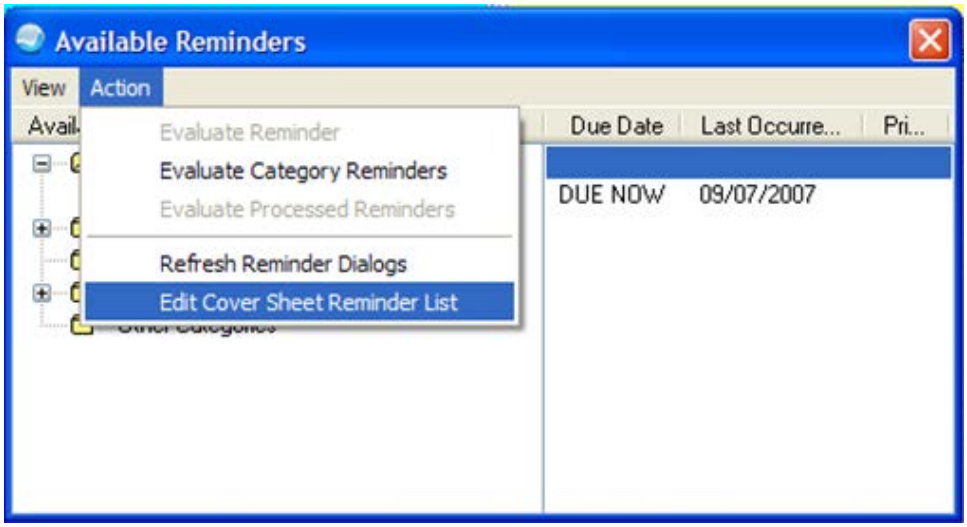


Figure 8-7: **Available Reminders** dialog

4. Select the **Action** menu.
5. Select **Edit Cover Sheet Reminder List**. The **Clinical Reminders and Reminder Categories Displayed on Cover Sheet** dialog (Figure 8-8) displays.

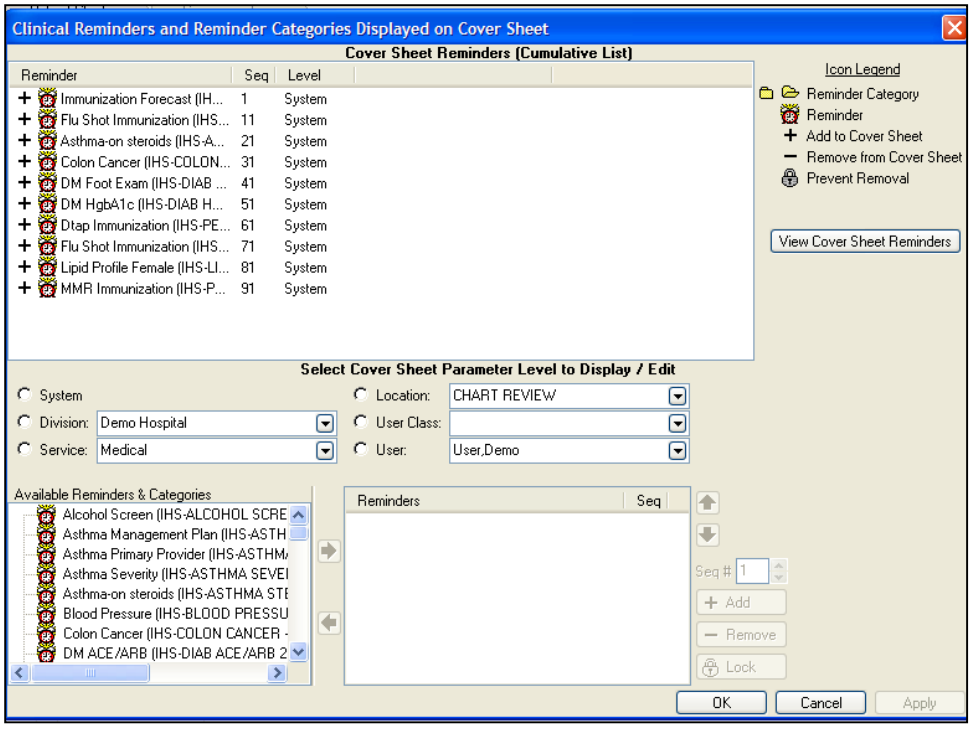


Figure 8-8: **Clinical Reminders and Reminder Categories Displayed on Cover Sheet** dialog

- The top section shows how the reminders are set up.
- The middle section allows the CAC to assign reminders by the different groups.
- The left lower area is the list of available reminders.
- The right lower area is the assignment for the chosen level.

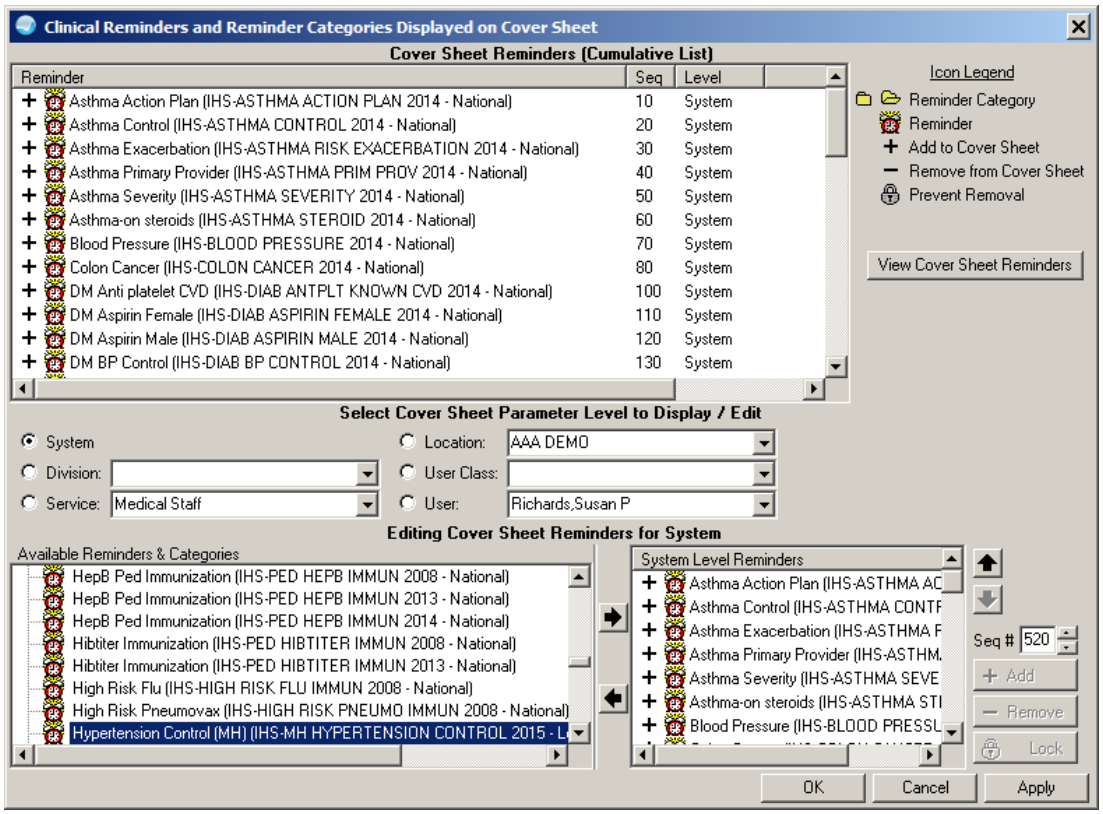


Figure 8-9: **Clinical Reminders and Reminder Categories Displayed on Cover Sheet** dialog

6. Select **System** to deploy to all users (test this at the User level first).
7. Select to highlight the **Hypertension Control (MH)** reminder.
8. Use the right arrow to move it to the **System Level Reminders**.
9. Click **Apply** to save.
10. Click **OK** to exit.
11. Select a patient with Hypertension.
12. Click the Reminders icon on the toolbar and if the reminder is due, it will display on the **Available Reminders** dialog (Figure 8-10) and on the notes tab (Figure 8-11).

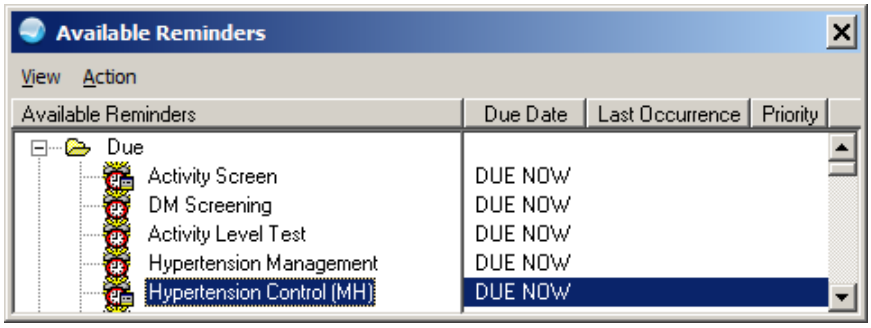


Figure 8-10: **Available Reminders** dialog

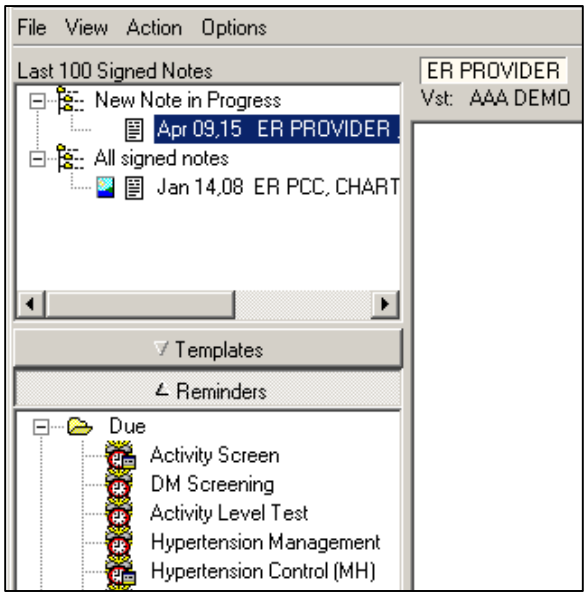


Figure 8-11: **Reminders** pane on the **Notes** tab

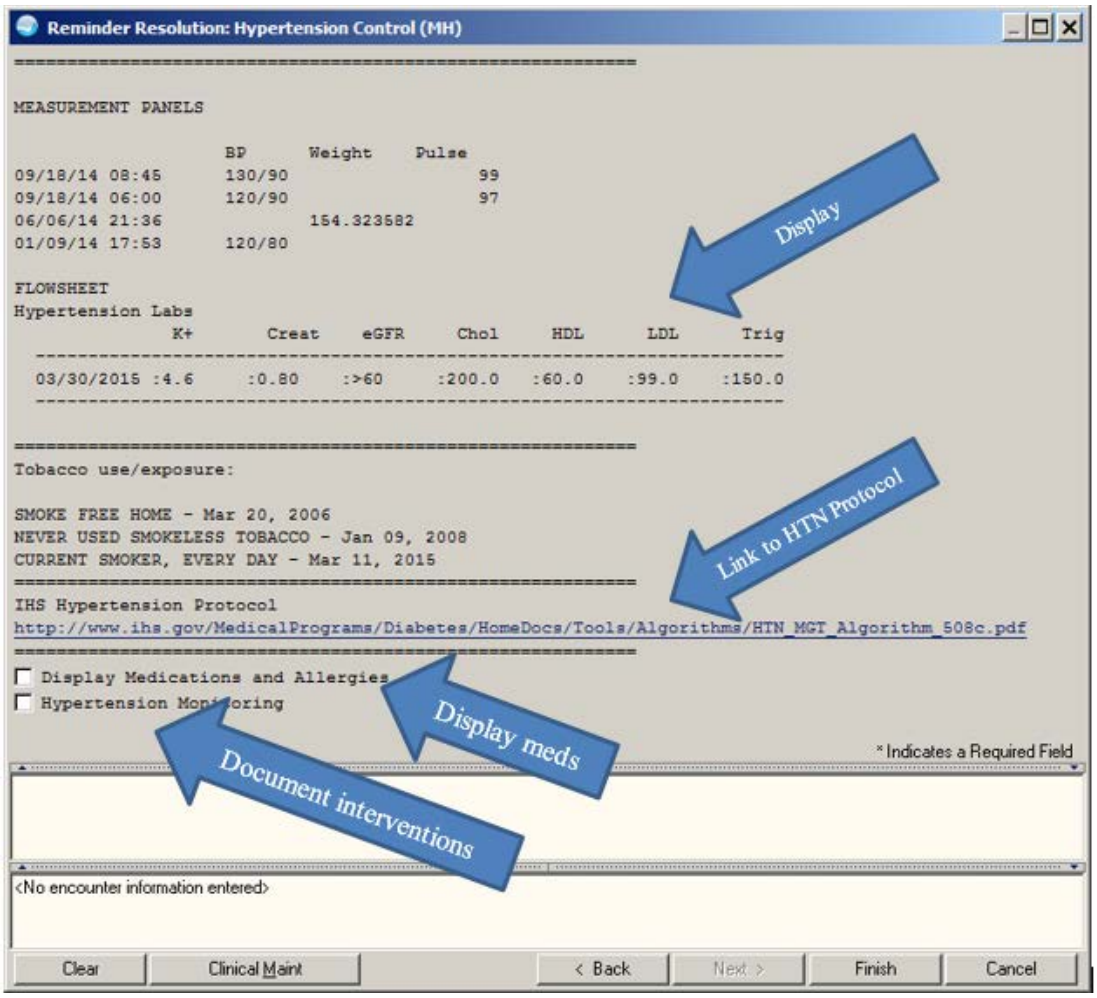


Figure 8-12: **Reminder Resolution** dialog

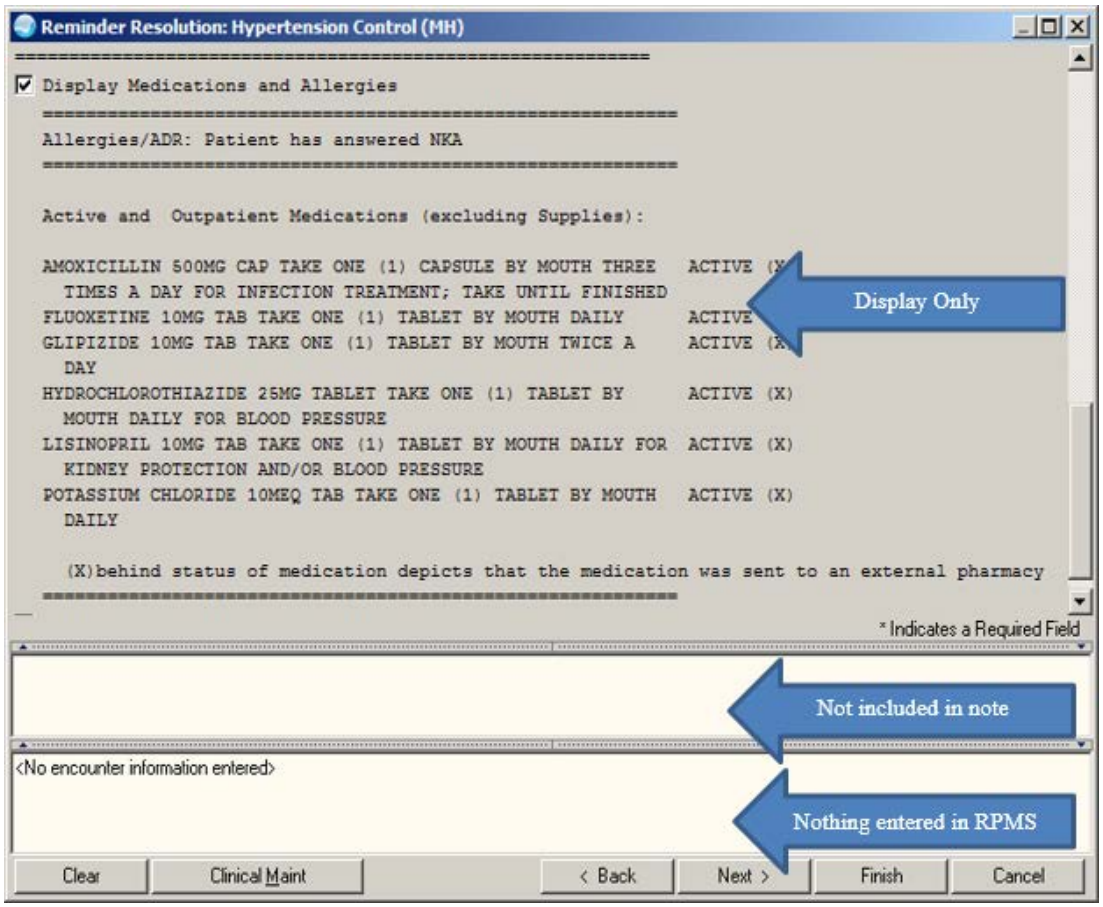


Figure 8-13: **Reminder Resolution** dialog; display meds

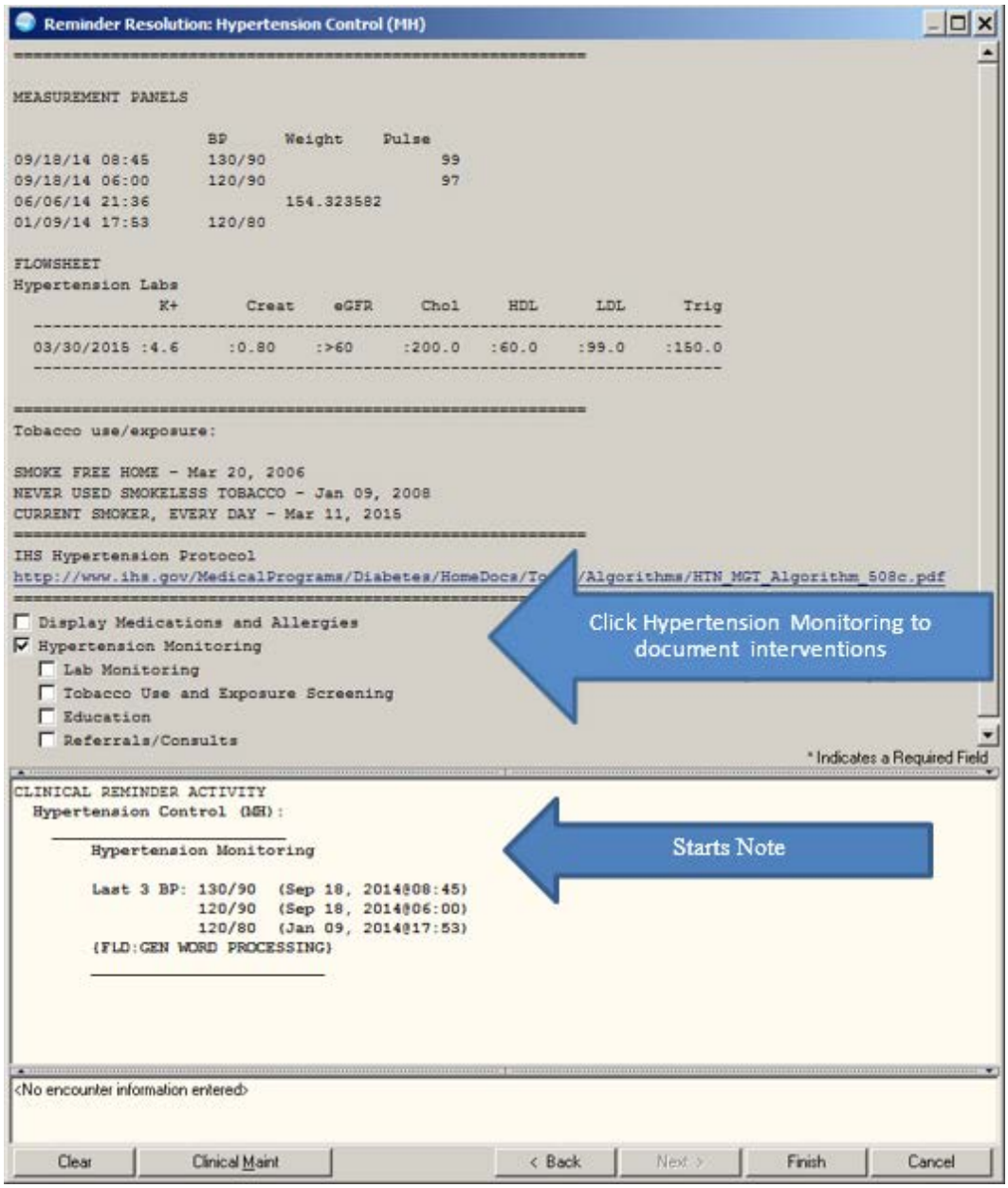


Figure 8-14: **Reminder Resolution** dialog; note start

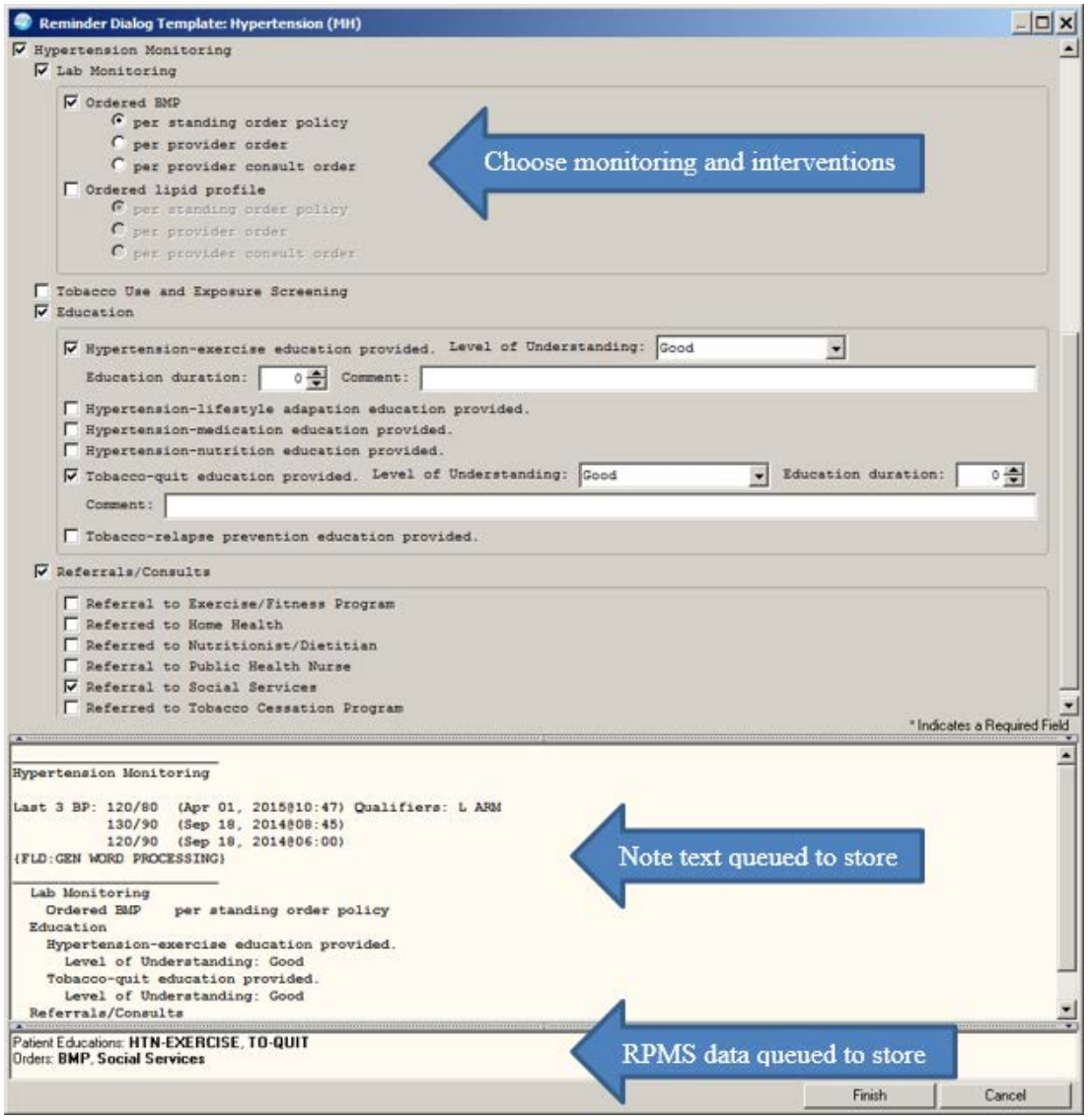


Figure 8-15: **Reminder Dialog Template**; enter interventions

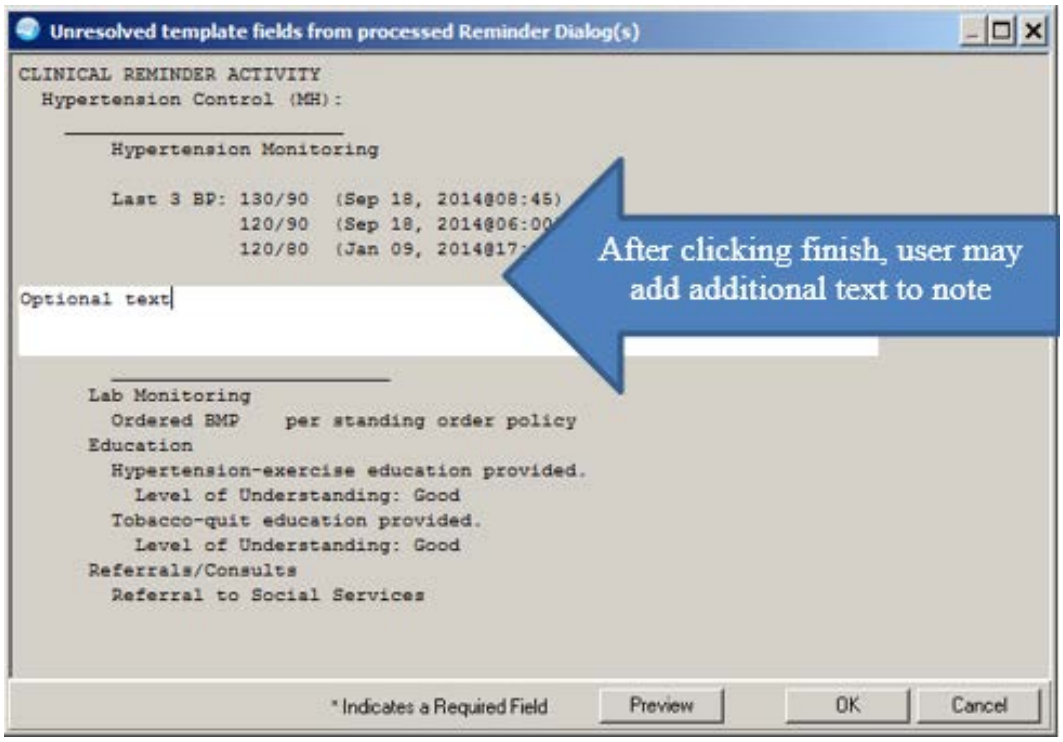


Figure 8-16: **Unresolved template fields from processed Reminders** dialog

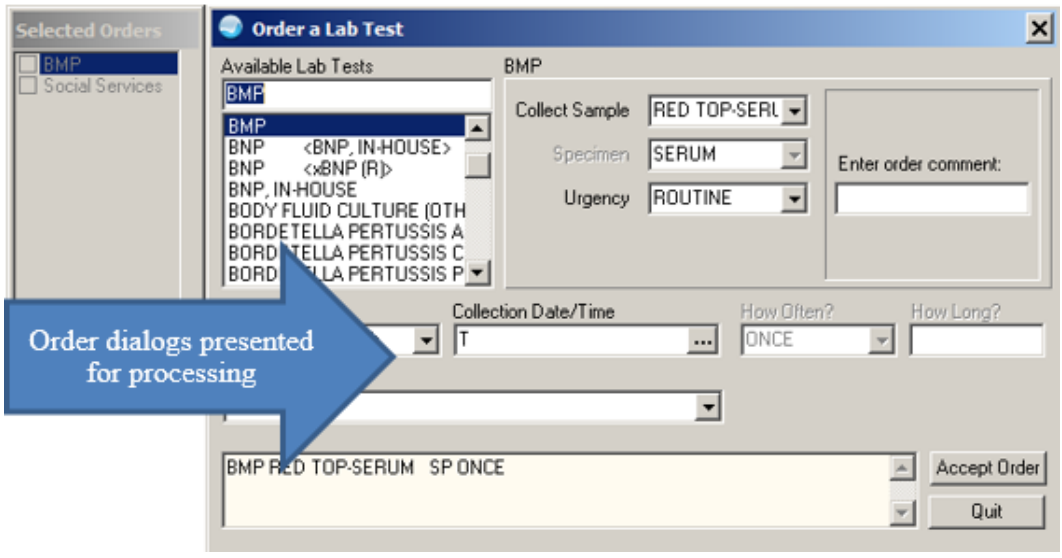


Figure 8-17: **Order a Lab Test** dialog

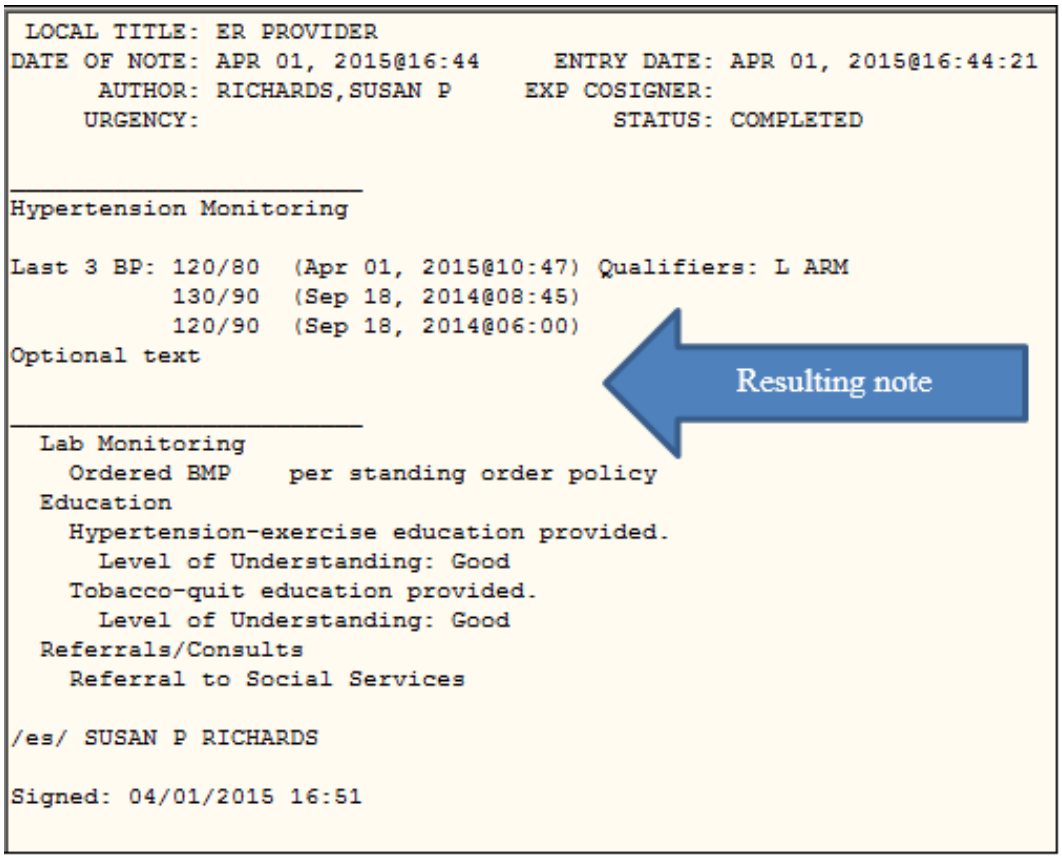


Figure 8-18: Resulting TIU note

	Service	Order
	Consults	SOCIAL SERVICES Cons Consultant's Choice Indication: Benign hypertension | *UNSIGNED*
	Lab	BMP RED TOP-SERUM SP ONCE Indication: Benign hypertension | *UNSIGNED*

Figure 8-19: Stored Orders

Education Show Standard

Visit Date	Education Topic	Comprehension
03/31/2015	Hypertension-Lifestyle Adaptations	GOOD

Figure 8-20: Education Topics

9.0 Configure IPL Care Planning

Sites may configure IPL care planning to use TIU templates.

9.1 Import TIU Templates

Importing template are quick and simple using either the sample TIU templates provided or ones received from another facility. Template fields import, but TIU objects do not. Either create TIU objects of the identical name, or replace the TIU objects with local ones using the Template editor.

To use TIU templates for IPL Care Planning, they must be in SHARED templates and may not be in a Template Folder. We recommend using a naming convention to easily identify these types of templates:

- IPL Goal Diabetes
- IPL Plan Diabetes
- IPL Instructions Diabetes

1. Place template files on the workstation's desktop.
2. Navigate to the **Notes** tab (Figure 9-1).

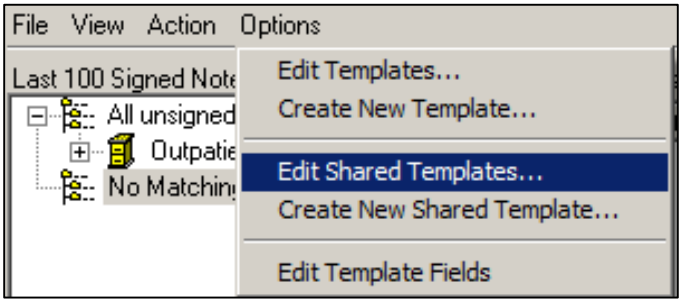


Figure 9-1: **Options** menu accessing the shared template editor

3. Select the **Options** menu.
4. Select **Edit Shared Templates** to open the **Template Editor** dialog (Figure 9-2).

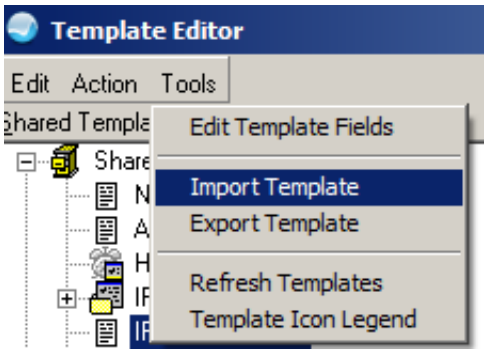


Figure 9-2: **Template Editor** dialog with **Tools** menu displayed.

5. Click in the **Shared Templates** pane.
6. Select the **Tools** menu.
7. Select **Import Template**. The Template File Selection dialog (Figure 9-3) is displayed.

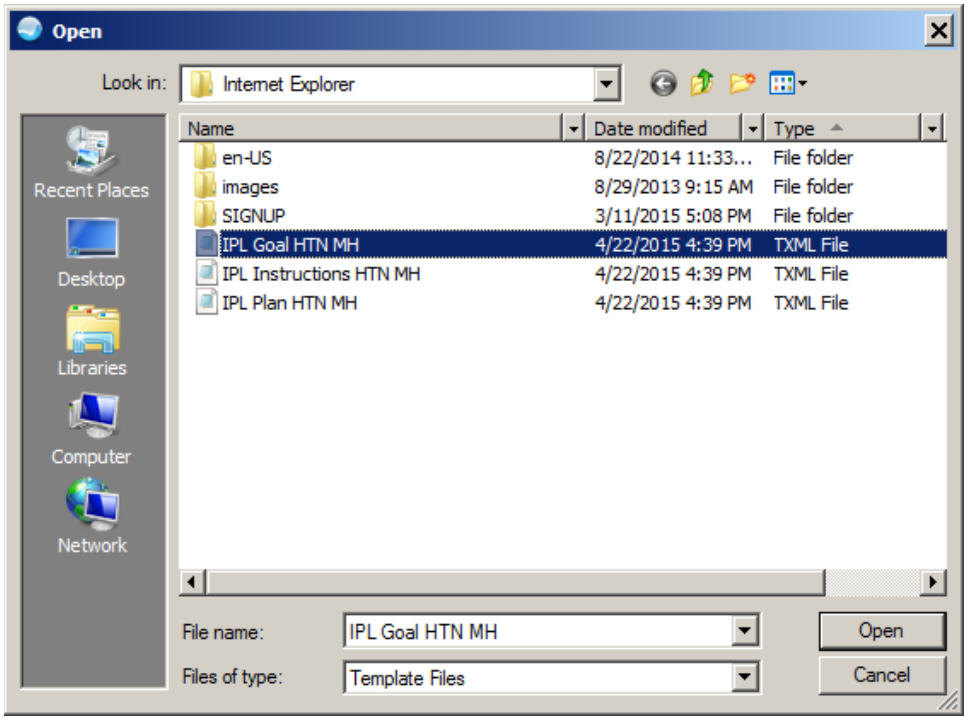


Figure 9-3: Template File Selection dialog

8. Select a TXML file and click **Open**. The file is imported into the shared template folder.

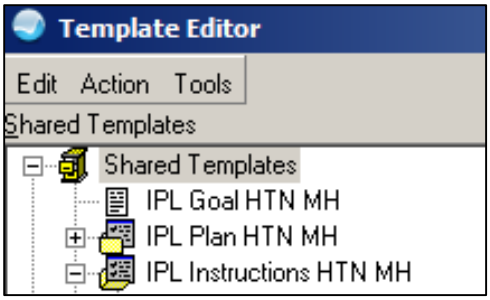


Figure 9-4: **Template Editor** after import

9. Repeat for the remaining template files. Successfully imported files will be listed in the **Shared Templates** pane.

10. Click **APPLY**.

11. Click **OK**.

9.2 Parameter Setup

1. Set the three parameters to make the templates available on the IPL and POV care planning dialogs as shown in the following sequence:

```
XX     General Parameter Tools ...
Select General Parameter Tools Option: ep  Edit Parameter Values
                         --- Edit Parameter Values ---

Select PARAMETER DEFINITION NAME:    BGO IPL CARE TEMPLATE   List of TIU
Templates for IPL Care Notes

BGO IPL CARE TEMPLATE may be set for the following:

     100 User          USR    [choose from NEW PERSON]
     700 Division      DIV    [2011 DEMO HOSPITAL]
     800 System        SYS    [2011 DEMO-HO.ABQ.IHS.GOV]


Enter selection: 800  System   2011 DEMO-HO.ABQ.IHS.GOV

--- Setting BGO IPL CARE TEMPLATE  for System: 2011 DEMO-HO.ABQ.IHS.GOV ---
Select Sequence: 5
Are you adding 5 as a new Sequence? Yes// y  YES

Sequence: 5//    5
Template Name: IPL Goal HTN MH
Select Sequence:

Repeat this for:
   Parameter:  BGO IPL CARE TEMPLATE
Template: IPL Plan HTN MH template

Parameter: BGO IPL VISIT TEMPLATE
Template: IPL Instruction HTN MH template
```

2. Log off then log on to RPMS.

9.3 Use Care Plan Templates

Templates can be accessed from either of the following:

- The **Add/Edit Problem** dialog if **Use as POV** is checked.
- The **POV** dialog.

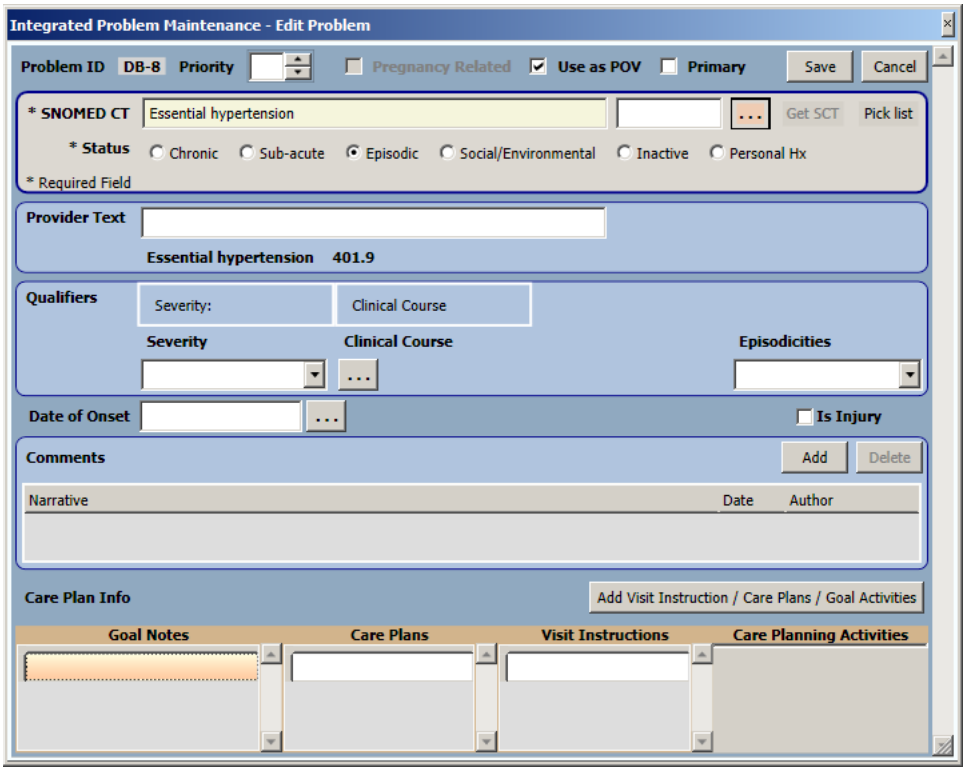


Figure 9-5: **Edit Problem** dialog

1. Access the **Care Planning** dialog:

   a. Select **Use as POV** on the **Edit Problem** dialog.

   b. Click **Add Visit Instruction/Care Plans/Goal Activities**. The Care Planning dialog (Figure 9-6) is displayed.

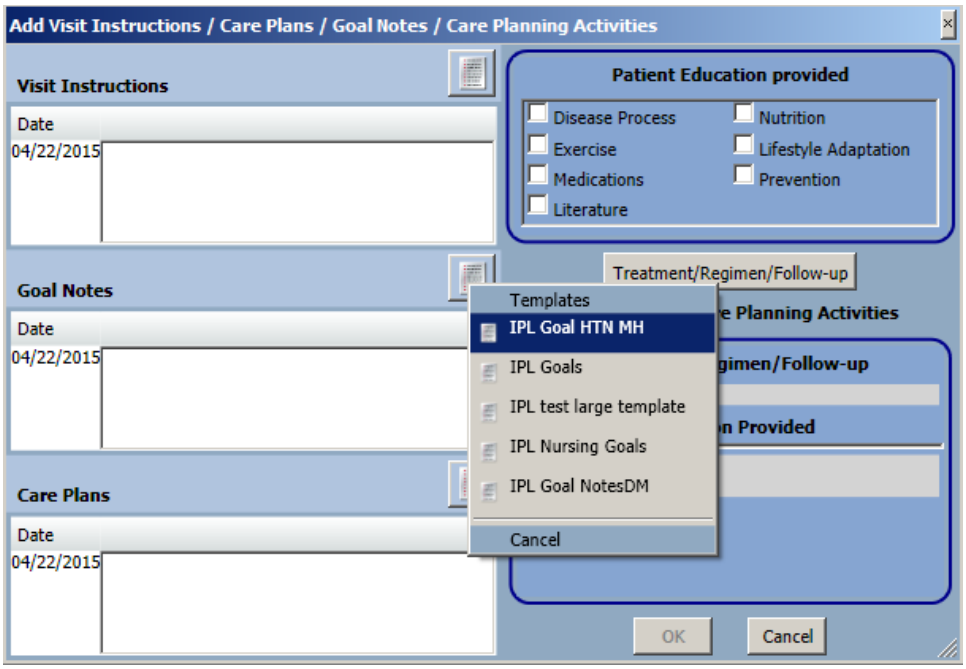


Figure 9-6: Care Planning dialog, template selection

2. Click the template icon of any of the care plan sections to set up the template selections in the parameters display.

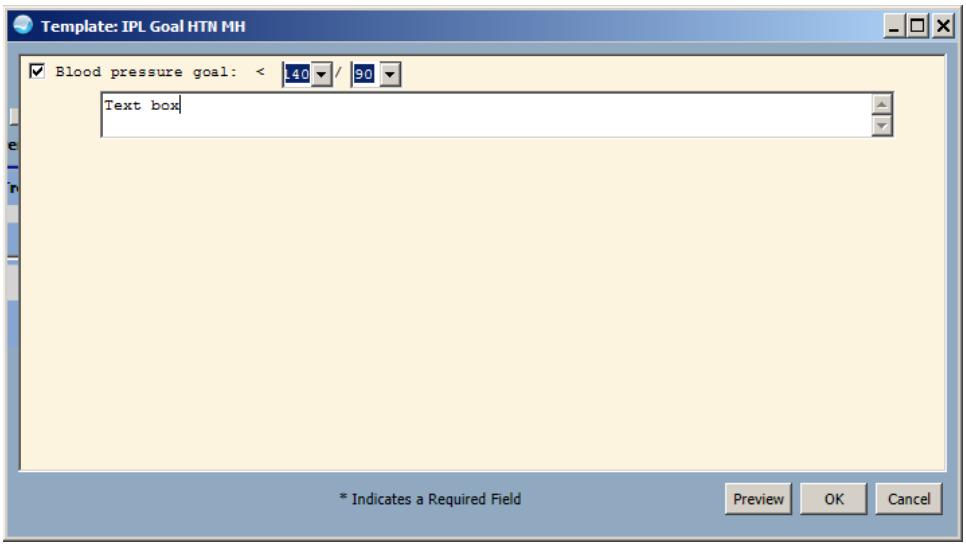


Figure 9-7: Template dialog

Care planning templates may also be launched from the POV selection dialog:

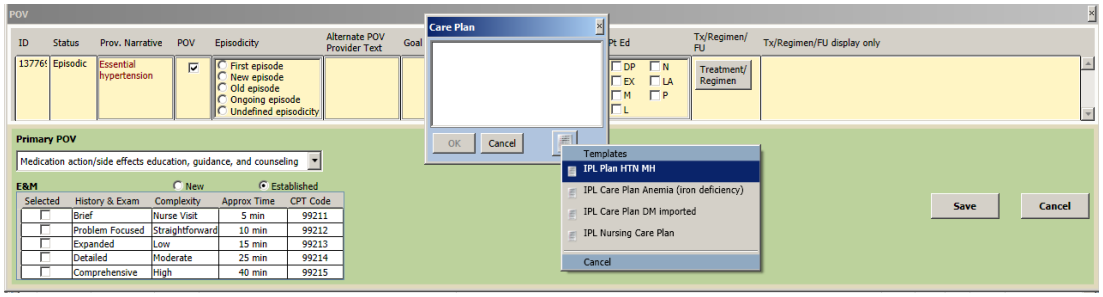


Figure 9-8: Care planning dialog selected from POV dialog

1. Right click **Add**.
2. Click the template icon.

9.4 Sample IPL templates

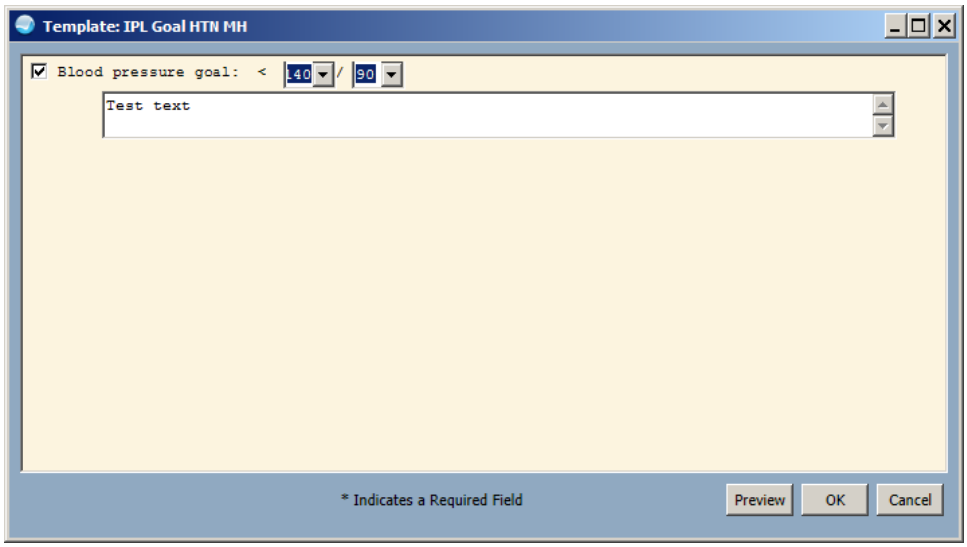


Figure 9-9: **IPL Goal HTN MH** template

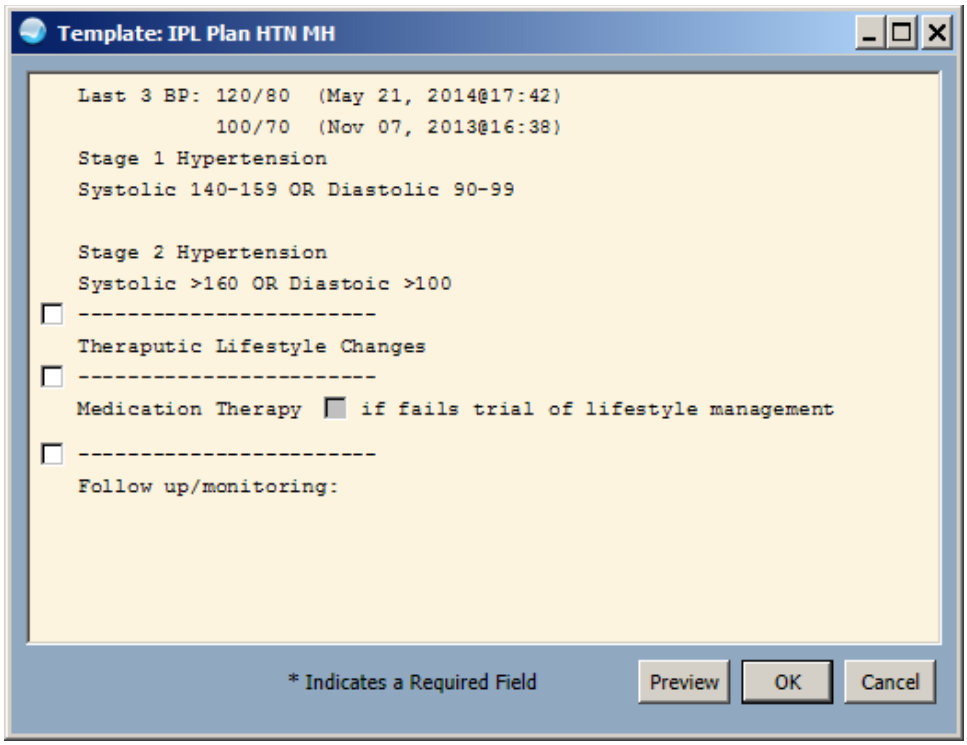


Figure 9-10: **IPL Plan HTN MH** template

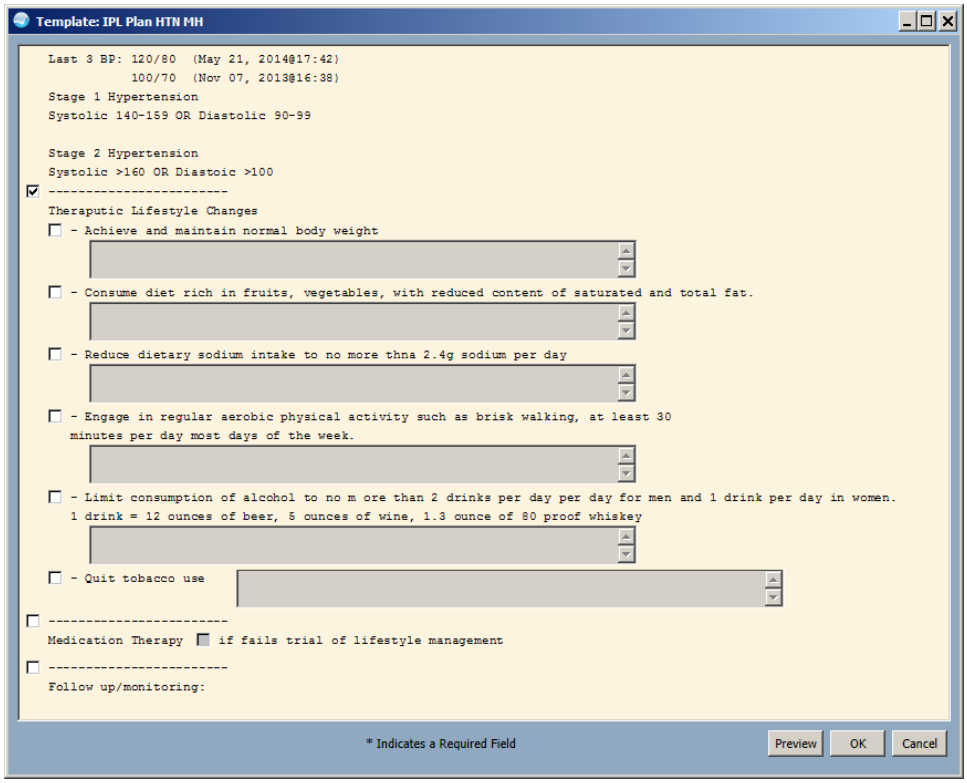


Figure 9-11: Plan template - Lifestyle mod section

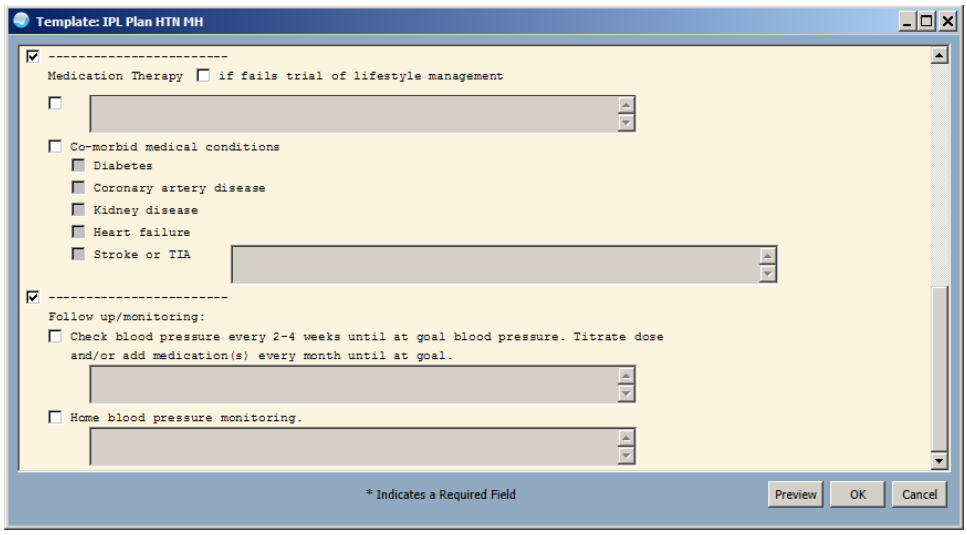


Figure 9-12: Plan template - medication and follow up sections

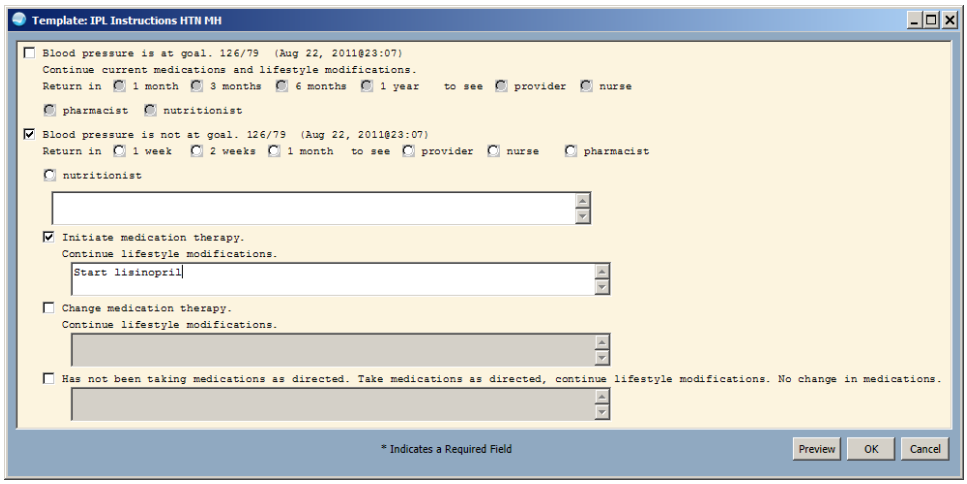


Figure 9-13: IPL Instructions HTN MH template

10.0 Population Health

10.1 Reminder Reports

IHS-MH Hypertension Recall 2015 is a reminder written specifically to create a recall list of patients who have essential hypertension and either of the following is true:

- Their last BP was controlled but was last done more than one year ago.
- Their last BP was not controlled and was last done over one month ago.

From the RPMS-Master Configuration menu BEH>REM>RPT

```
DUE    Reminders Due Report
REV    Review Date Report
TPL    User Report Templates
USR    Reminders Due Report (User)
```

Reminder reports may be run for a facility, for a clinic, or by provider.

10.2 iCare

10.2.1 Reminders in iCare

iCare will automatically pick up the new IHS-MH Hypertension Recall 2015 when it is installed and activated in EHR. The iCare nightly background job always searches for new reminders and sets them up to be accessed in iCare.

The return value of the EHR reminder is **DUE NOW**, which translates to the current date when viewed in iCare. This means that for Reminder Notifications, any patient with a **DUE NOW** value is considered to be overdue.

Other reminders associated with the Million Hearts campaign can be viewed by setting up a specific Million Hearts reminder template. See Section 10.2.3 for instructions to create a Public Template that can be applied by all users. The reminder template can show the new reminder as well as other reminders that could be related to the Million Hearts initiative.

Reminder Notifications Panel

Once the reminder has been activated and reminder data calculated, a panel of patients can be created with overdue Million Hearts Hypertension Control.

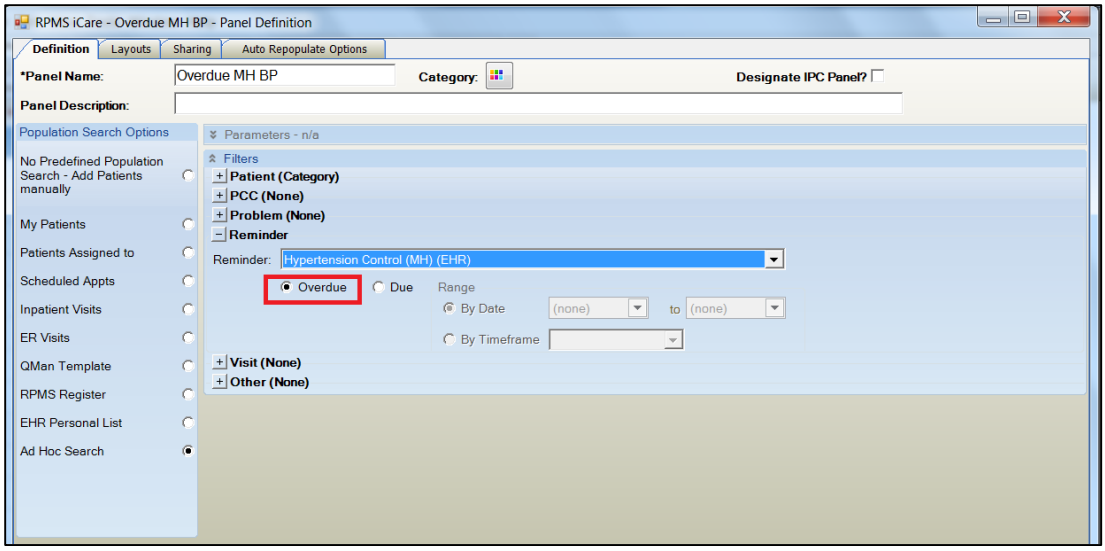


Figure 10-1: iCare Panel Definition

Results can be sorted and filtered by Communication Preference, Reminder Due, etc. making it easier to identify patients who need work on controlling their blood pressure. Sending patient notifications via iCare counts towards the MU Stage 2 Patient Reminders measure.

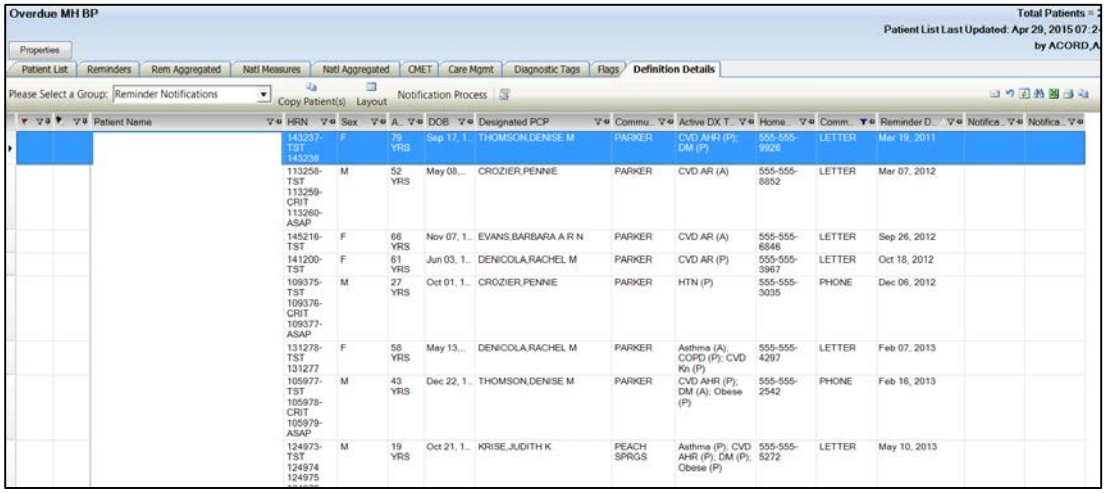


Figure 10-2: Hypertension Panel display

10.2.2 CRS in iCare

When CRS Version 15.1 is released, iCare will recognize the CRS Measure - MH: Controlling High BP. It is available from the Main View, Panel View and Patient View.

A specific Million Hearts Natl Measures template may be set up to view other CRS measures associated with the Million Hearts campaign. The template can show LDL assessed (there are several measures for LDL assessed), Tobacco Screening and Cessation Counseling, and other measures that may be significant to the Million Hearts initiative. See Section 10.2.3 for instructions to create a Public Template that can be applied by all users.

10.2.3 Template Management

The templates mentioned previously can be created by one person in iCare and uploaded to Public Templates for use by anyone.

10.2.3.1 Reminders Template

1. Select **Template Management** from the **Tools** menu.
2. Click **Add**; the **Add Template** dialog (Figure 10-3) is displayed.

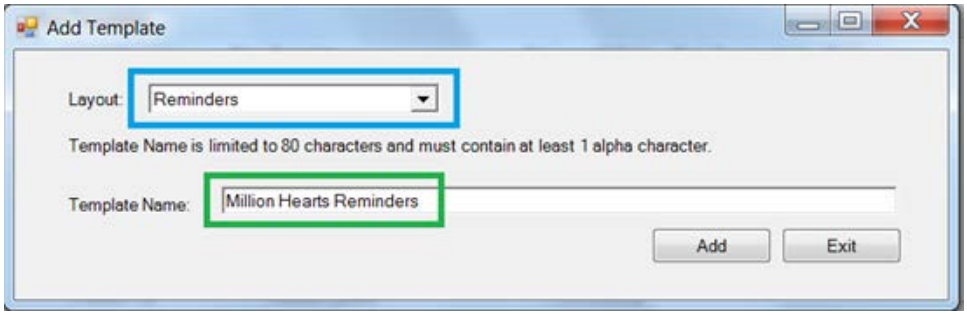


Figure 10-3: **Add Template** dialog

3. Select **Reminders** from the **Layout** field.
4. Type a unique **Template Name** in the field.
5. Click **Add**; the **Reminders Template** dialog (Figure 10-4) is displayed.

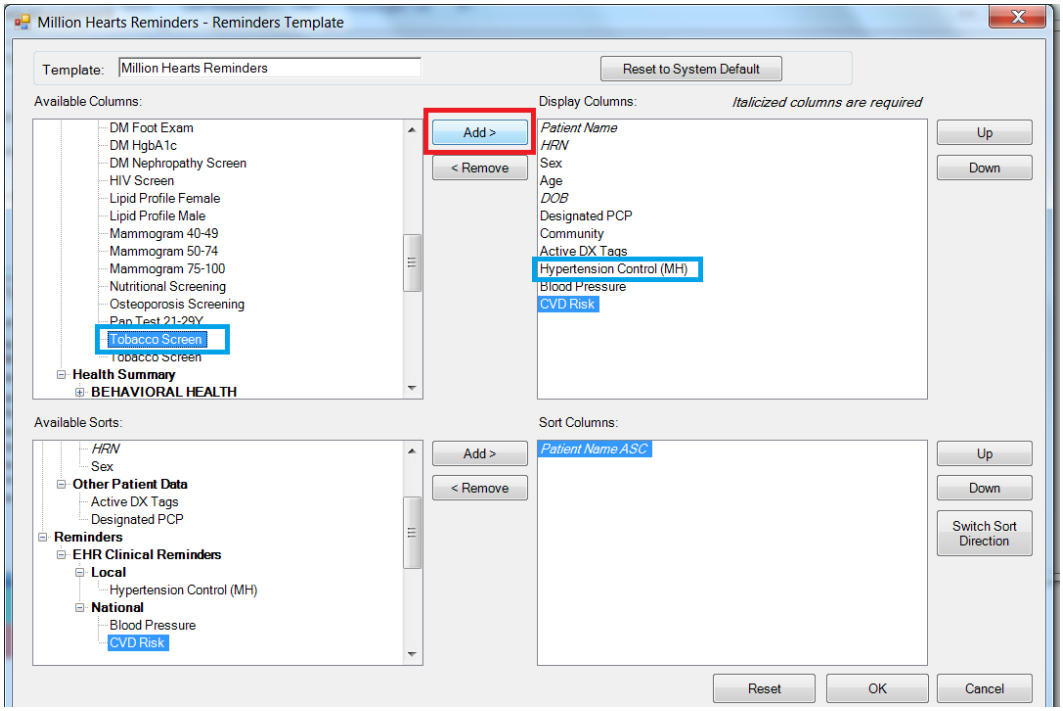


Figure 10-4: Reminders Template

6. Select the specific reminders to include as part of the Million Hearts initiative from the **Available Columns** pane.

7. Click **Add** to move the reminders to the **Display Columns** pane.

8. To change the order of the columns:

   a. Select a reminder in the **Display Columns** pane.

   b. Click **Up** or **Down**.

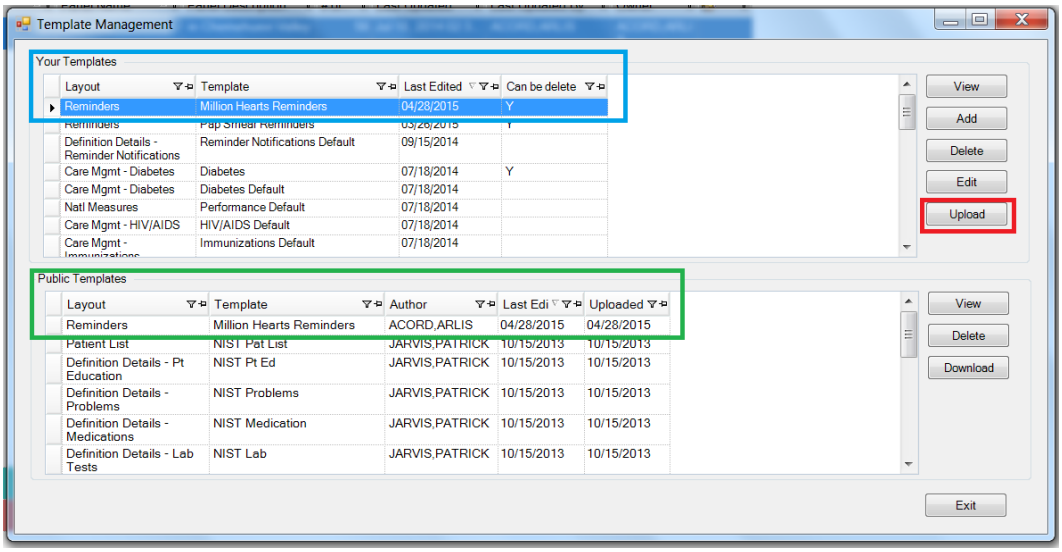


Figure 10-5: **Template Management** Upload

9. Click **Upload** to create a new template and make it available for other users.

10. Select an existing panel of patients or create a new panel of patients based on any desired criteria.

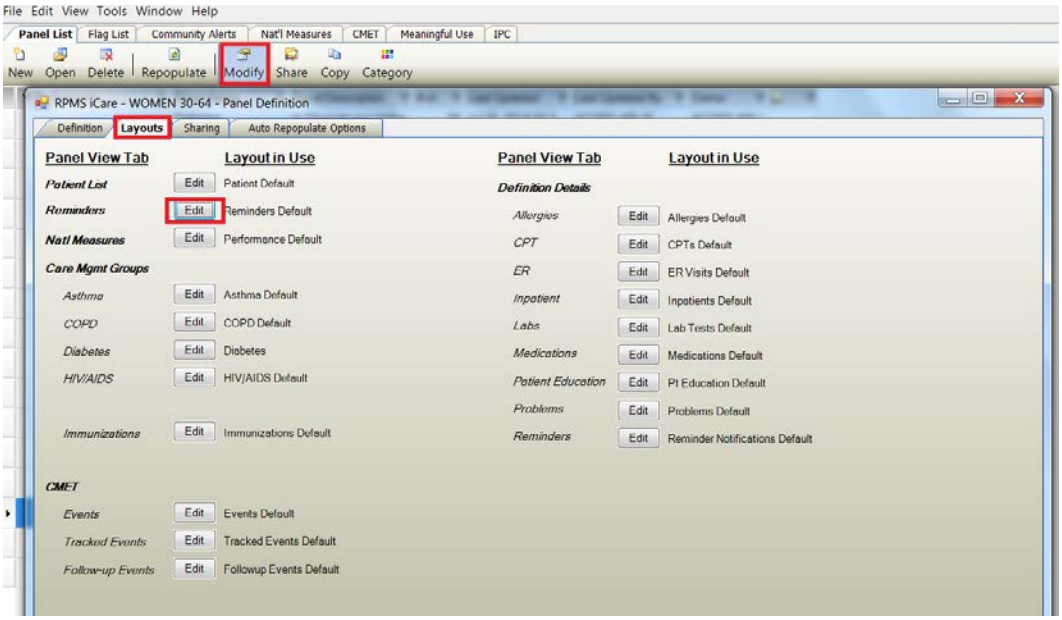


Figure 10-6: Modify Layout

11. Click **Modify**.

12. Select the **Layouts** tab.

13. Click **Edit** to change the **Layout in Use** from **Reminders Default** to the newly created template. The **Reminders Layout** dialog (Figure 10-7) is displayed.

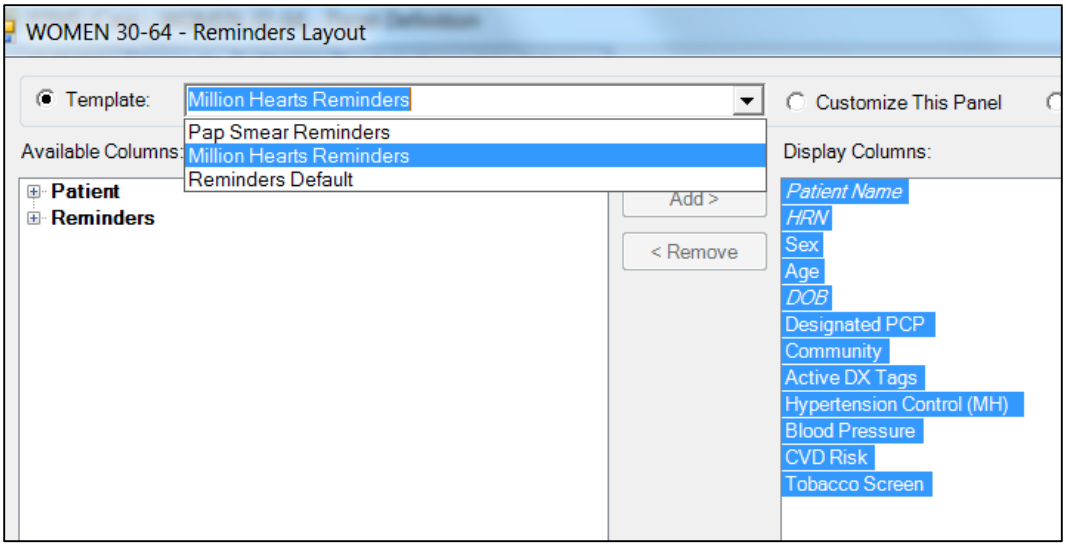


Figure 10-7: **Reminders Layout** dialog

14. Open the panel and select the **Reminders** tab (Figure 10-8) to view the patients and their respective reminder information.

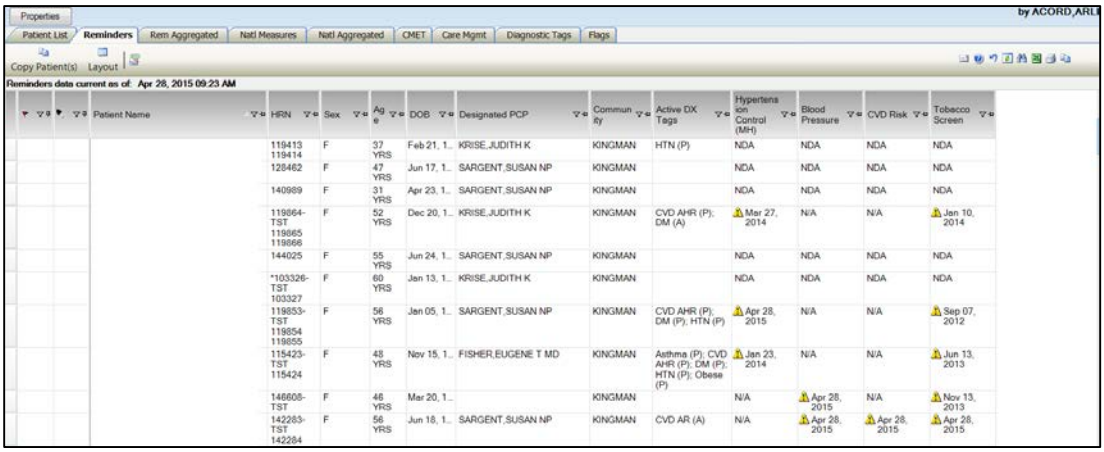


Figure 10-8: **Reminders** tab

Note:	Remember after enabling the new EHR reminder, IHS-MH Hypertension Recall 2015, the iCare nightly job will need to update the system with the new reminder. You may also need to ask your RPMS system manager to set up the BQI UPDATE ALL REMINDERS task to run overnight in order to get data for the new reminder. The value of NDA may mean that the patient does not have reminders calculated yet. The value of N/A means the patient did not meet the criteria for the reminder.

10.2.3.2 National Measures Template

1. Select **Template Management** from the **Tools** menu.
2. Click **Add**; the **Add Template** dialog (Figure 10-9) is displayed.

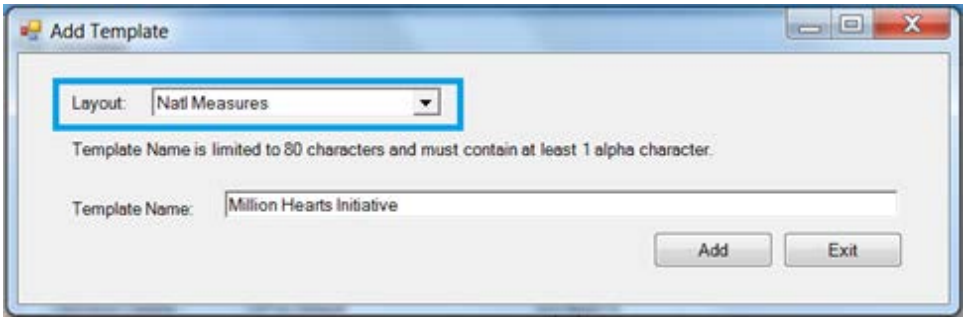


Figure 10-9: **Add Template** dialog

3. From the **Layout** list, select **Natl Measures**.
4. Type a unique **Template Name** in the field.
5. Click **Add**: the **Natl Measures Template** dialog (Figure 10-10) is displayed.

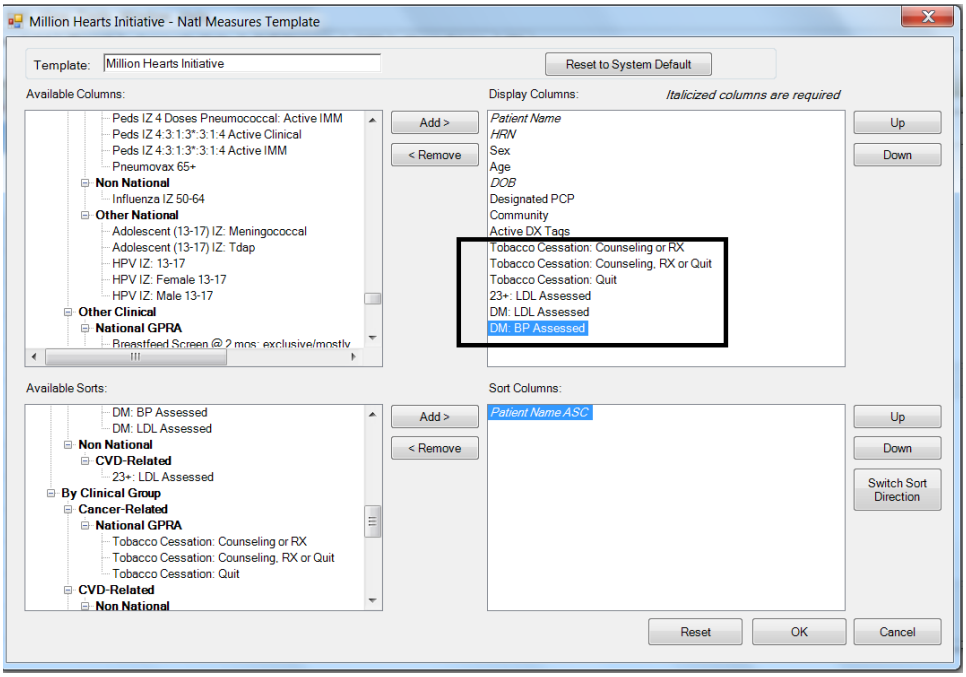


Figure 10-10: **National Measures Template** dialog

> **Note**: If CRS Version 15.1 is not installed, you will not have the measure, MH: Controlling High BP in your system. Look over and select other measures that may help with the Million Hearts initiative.

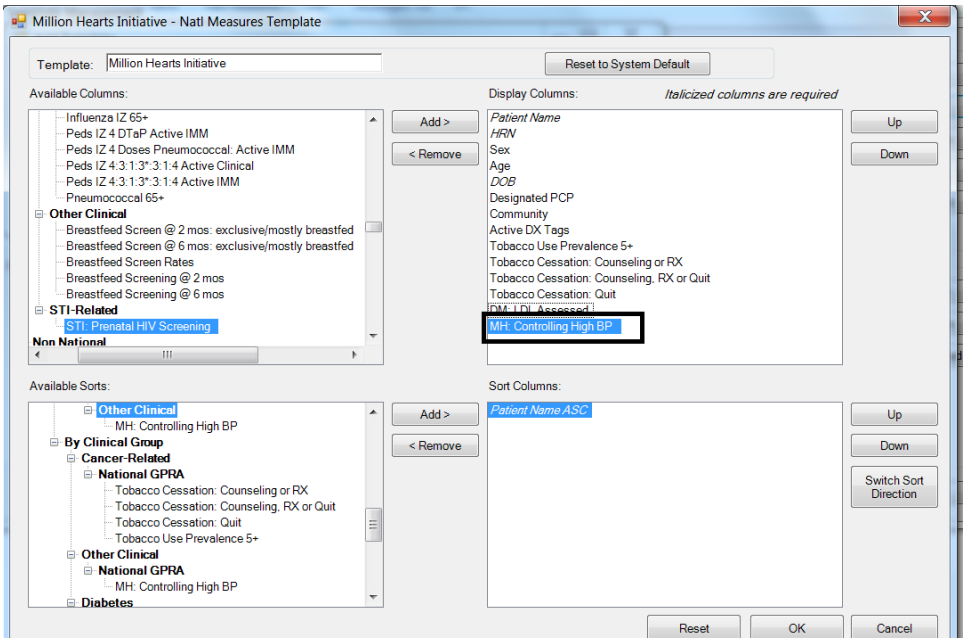


Figure 10-11: Edit **National Measures Template**

6. Select the specific reminders to include as part of the Million Hearts initiative from the **Available Columns** pane.
7. Click **Add** to move the reminders to the **Display Columns** pane.
8. To change the order of the columns:
   a. Select a reminder in the **Display Columns** pane.
   b. Click **Up** or **Down**.

Appendix A: Sample Layouts

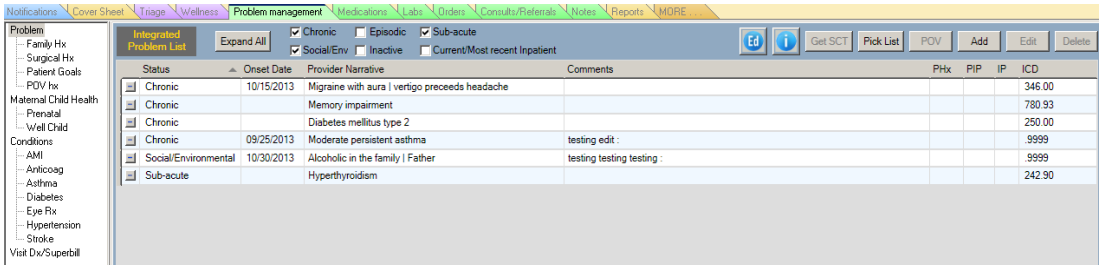


Figure A-1: Problem and visit data using Tree Node

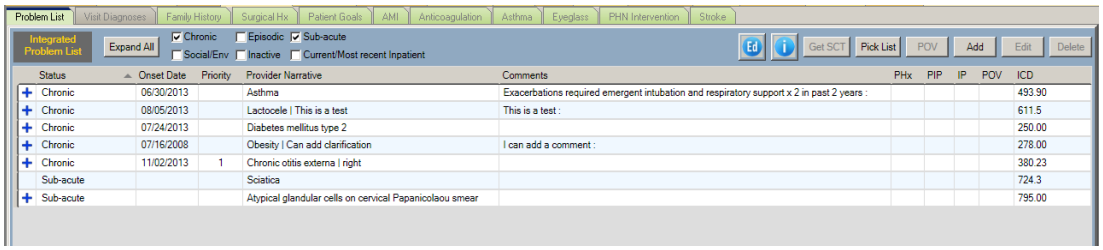


Figure A-2: Problem and visit data using Tabbed Notebook

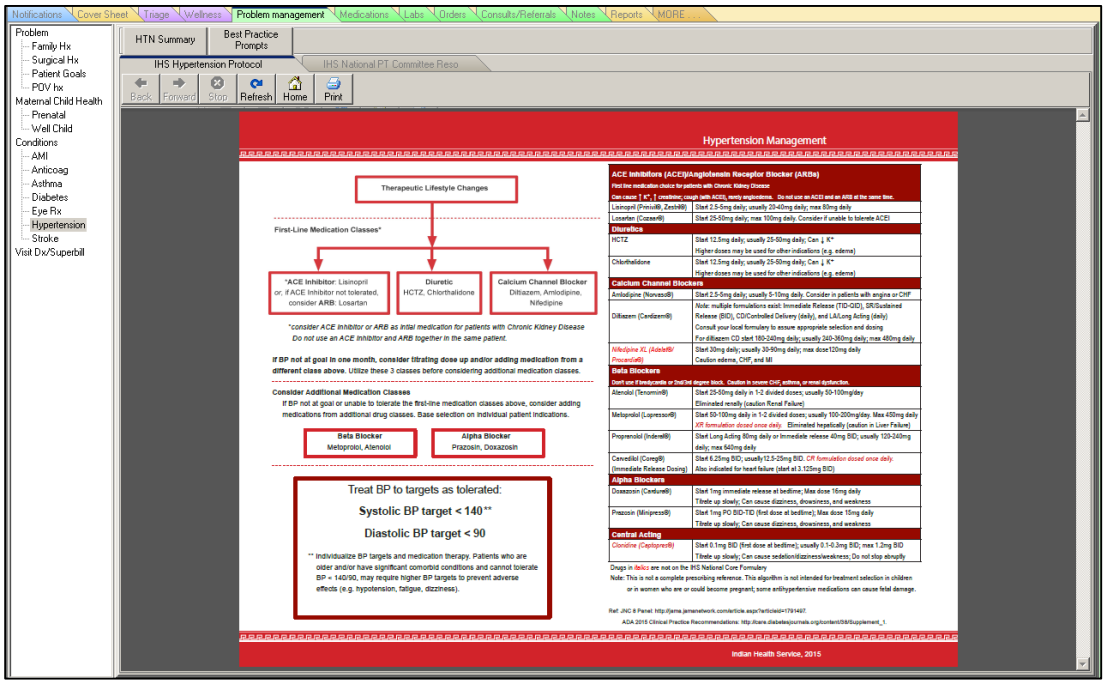


Figure A-3: Hypertension tab with web sites and health summary buttons

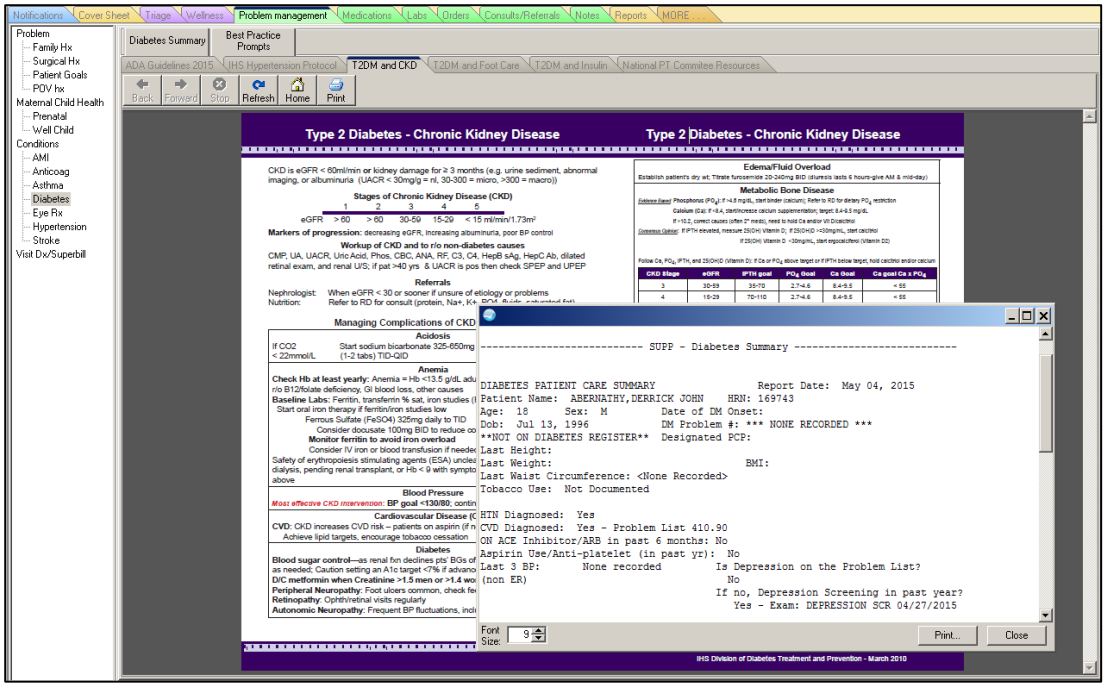


Figure A-4: Diabetes tab with websites and health summaries

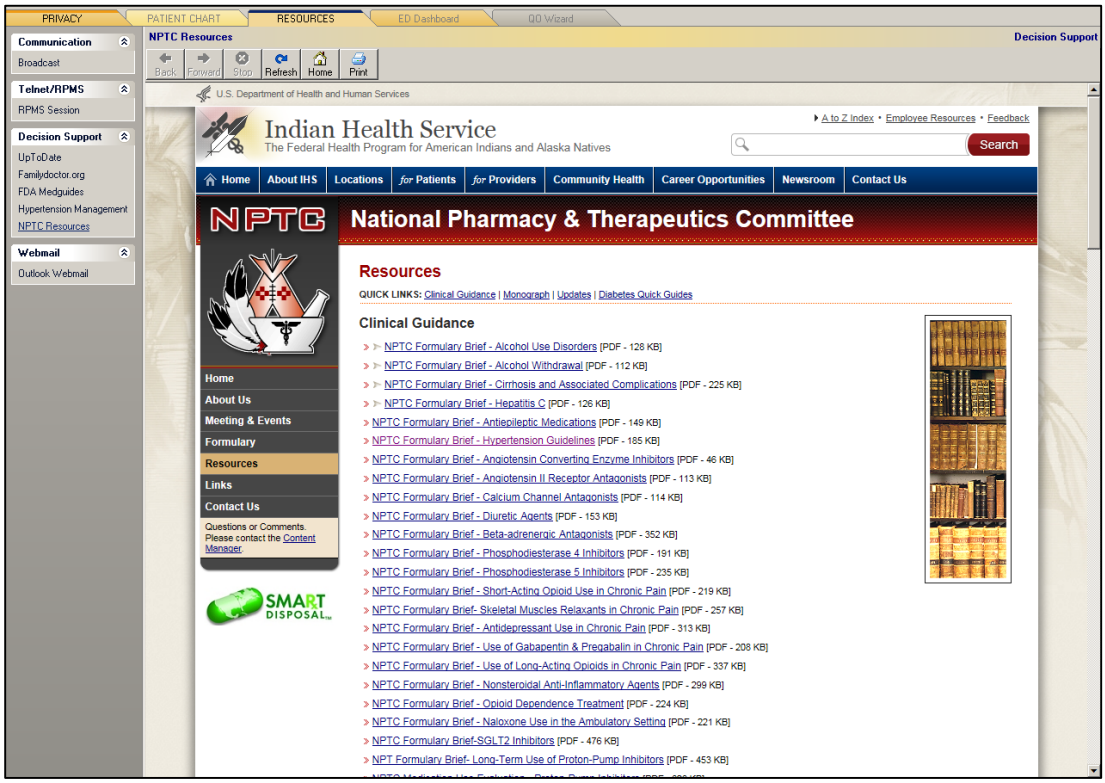


Figure A-5: Resources tab

Appendix B: Sample Health Summaries

B.1 Best Practice Prompts

Consider exposing the PCC Best Practice Prompts in a report. This provides clinical guidance based on iCare CVD tags. Please see the IHS PCC Suite (BJPC) documentation, PCC Health Summary User Manual Appendix B for logic: http://www.ihs.gov/RPMS/index.cfm?module=Applications&option=View&AC_ID=0

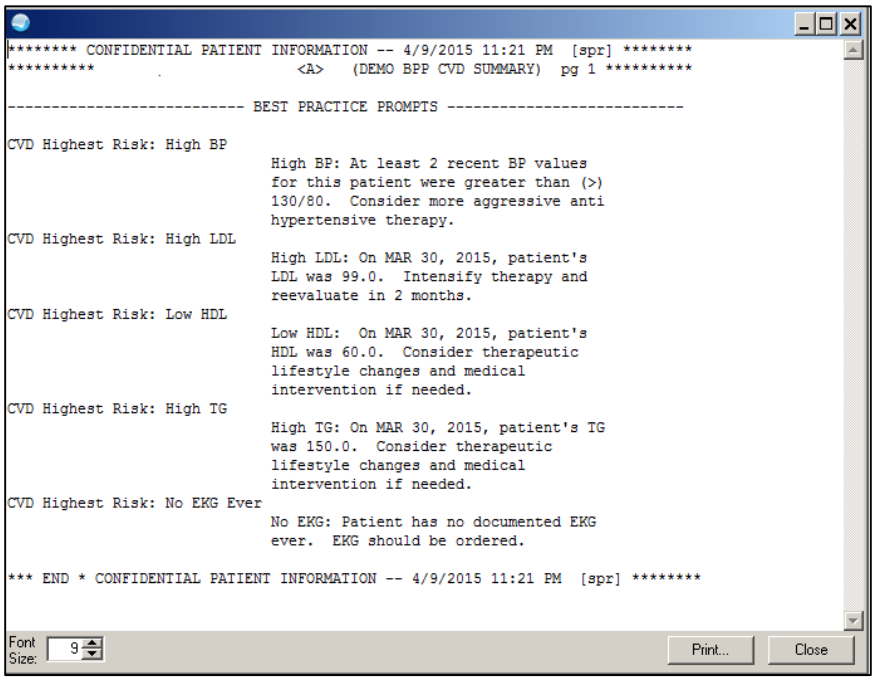


Figure B-1: Health Summary Button with CVD Best Practice Prompts

B.2 Diabetes Summary

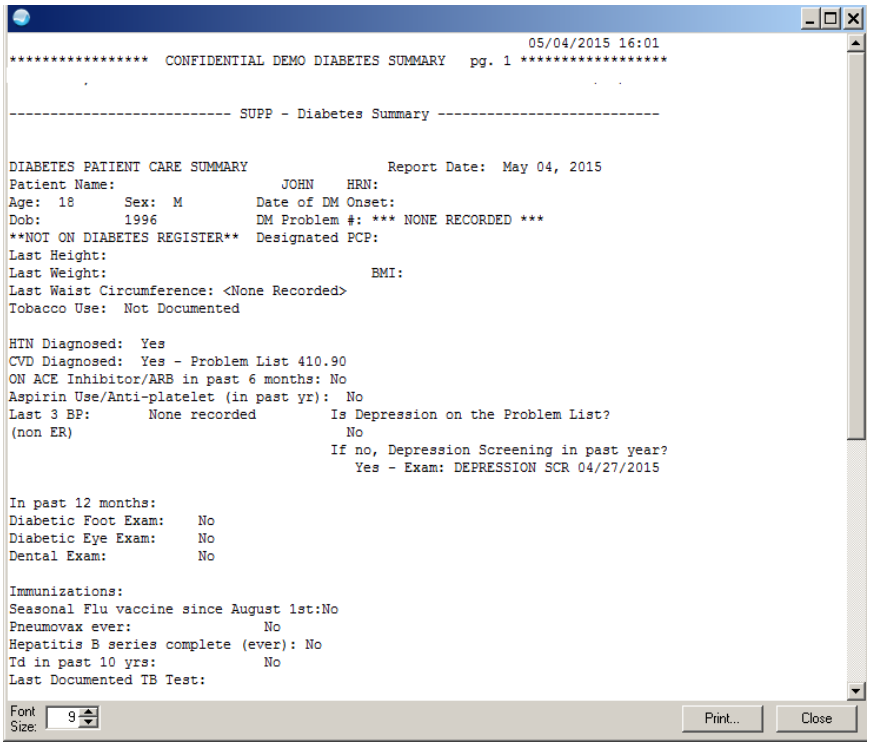


Figure B-2: Health Summary Button with Diabetes Summary

Appendix C: Clinical Reminder Logic

C.1 IHS-MH Hypertension Control 2015

```
    ------------------------------------------------------
    REMINDER APPLICABLE if patient has hypertension and not end stage renal
    disease.
    REMINDER DUE if:
      Blood pressure is not controlled (SBP>139 OR DBP >89)
        OR
      Blood pressure is controlled (SBP <140 AND DBP<90) but no BP
      documented in past year.
    ------------------------------------------------------
    ==============================================
    Bibliographic citation:  Million Hearts, IHS Hypertension Protocol 2015
    Developer: IHS Office of Information Technology Funding Source:  Indian
    Health Service Release:  2015
    ==============================================
Baseline Frequency:

      Do In Advance Time Frame:  Wait until actually DUE
                  Sex Specific:
                Ignore on N/A:
       Frequency for Age Range:  1 year for all ages
                   Match Text:
                No Match Text:

Findings:

  ---- Begin: IHS-ESSENTIAL HYPERTENSION  (FI(1)=RT(100)) -----------------
                  Finding Type: REMINDER TERM
   Use in Patient Cohort Logic: AND

                      Mapped Findings:
                   Mapped Finding Item: TX.IHS-ESSENTIAL HYPERTENSION

                   Mapped Finding Item: CF.IHS-SNOMED
              Computed Finding Parameter: PXRM ESSENTIAL HYPERTENSION

  ---- End: IHS-ESSENTIAL HYPERTENSION -----------------------------------

  ---- Begin: IHS-CONTROLLED BP 2015  (FI(2)=RT(98)) ----------------------
                  Finding Type: REMINDER TERM
       Use in Resolution Logic: OR
              Occurrence Count: 1

                      Mapped Findings:
                   Mapped Finding Item: MT.BP
                             Condition: I
($P(V,"/",1)<140)&($P(V,"/",2)<90)

  ---- End: IHS-CONTROLLED BP 2015 ---------------------------------------

  ---- Begin: IHS-ESRD 2015  (FI(3)=RT(99)) ------------------------------
                  Finding Type: REMINDER TERM
   Use in Patient Cohort Logic: AND NOT

                      Mapped Findings:
                   Mapped Finding Item: TX.IHS-END STAGE RENAL DISEASE
```

```
  ---- End: IHS-ESRD 2015 ------------------------------------------------

    ---- Begin: IHS-HIGH BP 2007  (FI(4)=RT(12)) -------------------------
                  Finding Type: REMINDER TERM

                       Mapped Findings:
                     Mapped Finding Item: MT.BP
                            Condition: I ($P(V,"/",1)>139)!($P(V,"/",2)>89)

  ---- End: IHS-HIGH BP 2007 ---------------------------------------------
```

C.2 IHS-MH Hypertension Recall 2015

(Reminder Report)

```
Baseline Frequency:

      Do In Advance Time Frame:  Wait until actually DUE
                  Sex Specific:
                 Ignore on N/A:
       Frequency for Age Range:  1 year for all ages
                    Match Text:
                 No Match Text:

Findings:

  ---- Begin: IHS-HYPERTENSION 2014  (FI(1)=RT(39)) ----------------------
                  Finding Type: REMINDER TERM
   Use in Patient Cohort Logic: AND

                       Mapped Findings:

                     Mapped Finding Item: TX.IHS-HYPERTENSION 2007
                     Beginning Date/Time: T-3Y

                     Mapped Finding Item: CF.IHS-SNOMED
                     Beginning Date/Time: T-3Y
               Computed Finding Parameter: PXRM HYPERTENSION

  ---- End: IHS-HYPERTENSION 2014 ----------------------------------------

  ---- Begin: IHS-CONTROLLED BP 2015  (FI(2)=RT(98)) ---------------------
                  Finding Type: REMINDER TERM
       Use in Resolution Logic: OR

                       Mapped Findings:
                     Mapped Finding Item: MT.BP
                                Condition: I
($P(V,"/",1)<140)&($P(V,"/",2)<90)
  ---- End: IHS-CONTROLLED BP 2015 ---------------------------------------
```

C.3 Additional relevant Clinical Reminders

- IHS-Lipid Female 2014

- IHS-Lipid Male 2014
- IHS-CVD 2013
- IHS-Tobacco Screen 2013

Appendix D: Controlling High Blood Pressure – Million Hearts

(CRS Measure)

Owner and Contact

Dr. Dena Wilson, Chris Lamer, PharmD, and Mark Veazie

National Reporting

NATIONAL (included in National GPRA/GPRAMA Report; reported to OMB and Congress)

Denominators

1. GPRA: Million Hearts (NQF 0018): User Population patients ages 18 through 85 years diagnosed with hypertension and no documented history of ESRD or current diagnosis of pregnancy.

Numerators

1. GPRA: Million Hearts (NQF 0018): Patients with BP less than (<) 140/90, i.e., the systolic value is less than (<) 140 AND the diastolic value is less than (<) 90.

Definitions Age

Age of the patient is calculated at end of the Report period.

Hypertension

Diagnosis (POV or Problem List entry where the status is not Inactive or Deleted) ICD-9: 401.*; ICD-10: I10 ever through the first 6 months of the Report Period, and at least 1 hypertension POV during the report period.

ESRD

Any of the following ever:

- CPT 36145 (old code), 36147, 36800, 36810, 36815, 36818, 36819, 36820, 36821, 36831 through 36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, 90918 through 90925 (old codes), 90935, 90937, 90939 (old code), 90940, 90945, 90947, 90951 through 90970, 90989, 90993, 90997, 90999, 99512, 3066F, G0257, G0308 through G0327 (old codes), G0392 (old code), G0393 (old code), G9231, S2065, S9339
- POV ICD-9: 585.6, V45.1 (old code), V45.11 V45.12, V56.*; ICD-10: N18.6, Z48.22, Z49.*, Z91.15, Z94.0, Z99.2
- Procedure ICD-9: 38.95, 39.27, 39.42, 39.43, 39.53, 39.93 through 39.95, 54.98, 55.6*

Pregnancy Definition

At least two visits during the Report Period with POV or Problem diagnosis:

- ICD- 9: 640.*3, 641.*3, 642.*3, 643.*3, 644.*3, 645.*3, 646.*3, 647.*3, 648.*3, 649.*3, 651.*3, 652.*3, 653.*3, 654.*3, 655.*3, 656.*3, 657.*3, 658.*3, 659.*3, 660.*3, 661.*3, 662.*3, 663.*3, 665.*3, 668.*3, 669.*3, 671.*3, 673.*3, 674.*3, 675.*3, 676.*3, 678.*3, 679.*3, V22.0 through V23.9, V28.81, V28.82, V28.89, V72.42, V89.01 through V89.09; ICD-10: O09.00 through O10.02, O10.111 through O10.12, O10.211 through O10.22, O10.311 through O10.32, O10.411 through O10.42, O10.911 through O10.92, O11.1 through O15.1, O15.9 through O24.02, O24.111 through O24.12, O24.311 through O24.32, O24.41*, O24.811 through O24.82, O24.911 through O24.92, O25.10 through O25.2, O26.00 through O26.62, O26.711 through O26.72, O26.811 through O26.93, O29.011 through O30.93, O31.* through O48.*, O60.0*, O61.* through O66.*, O68, O69.*, O71.00 through O71.1, O71.89, O71.9, O74.0 through O75.81, O75.89, O75.9, O76 through O77.*, O88.011 through O88.02, O88.111 through O88.12, O88.211 through O88.22, O88.311 through O88.32, O88.811 through O88.82, O90.3, O91.011 through O91.019, O91.111 through O91.119, O91.211 through O91.219, O92.011 through O92.019, O92.20, O92.29, O98.011 through O98.02, O98.111 through O98.12, O98.211 through O98.22, O98.311 through O98.32, O98.411 through O98.42, O98.511 through O98.52, O98.611 through O98.62, O98.711 through O98.72, O98.811 through O98.82, O98.911 through O98.92, O99.011 through O99.02, O99.111 through O99.12, O99.210 through O99.214, O99.280 through O99.284, O99.310 through O99.314, O99.320 through O99.324, O99.330 through O99.334, O99.340 through O99.344, O99.350 through O99.354, O99.411 through O99.42, O99.511 through O99.52, O99.611 through O99.62, O99.711 through O99.72, O99.810, O99.814, O99.820, O99.824, O99.830, O99.834, O99.840 through O99.844, O99.89, O9A.111 through O9A.12, O9A.211 through O9A.22, O9A.311 through O9A.32, O9A.411 through O9A.42, O9A.511 through O9A.52, Z03.7*, Z32.01, Z33.1, Z34.*, Z36,

where the primary provider is not a CHR (Provider code 53). Pharmacy-only visits (clinic code 39) will not count toward these two visits. If the patient has more than two pregnancy- related visits during the Report Period, CRS will use the first two visits in the Report Period. The patient must not have a documented miscarriage or abortion occurring after the second pregnancy-related visit.

- Miscarriage definition:
  - – POV ICD-9: 630, 631, 632, 633*, 634*; ICD-10: O03.9
  - – CPT 59812, 59820, 59821, 59830
- Abortion definition:
  - – POV ICD-9: 635*, 636* 637*; ICD-10: O00.* through O03.89, O04.*, Z33.2

- – CPT 59100, 59120, 59130, 59136, 59150, 59151, 59840, 59841, 59850, 59851, 59852, 59855, 59856, 59857, S2260 through S2267,
- – Procedure ICD-9: 69.01, 69.51, 74.91, 96.49; ICD-10: 0WHR73Z, 0WHR7YZ, 10A0***, 3E1K78Z, 3E1K88Z

BP Values

Exclusions: When calculating all BPs, the following visits will be excluded:

- Service Category H (Hospitalization), I (In Hospital), S (Day Surgery), or O (Observation)
- Clinic code 23 (Surgical), 30 (ER), 44 (Day Surgery), C1 (Neurosurgery), or D4 (Anesthesiology)

CRS uses the last Blood Pressure documented during the Report Period.

GPRA 2015 Description

During FY 2015, achieve the target rate of 59.5% for the proportion of patients with BP less than (<) 140/90.

Patient List

List of patients with hypertension and BP value, if any.

Appendix E: IHS Mobile Health References

1. Launch the web browser on the mobile device.
2. Type the following address in the browser: http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=toolsDTTreatmentAlgorithm and press Enter.
3. When the ihs.gov website opens it should display the **Division of Diabetes Treatment and Prevention** mobile-friendly website (Figure E-1).

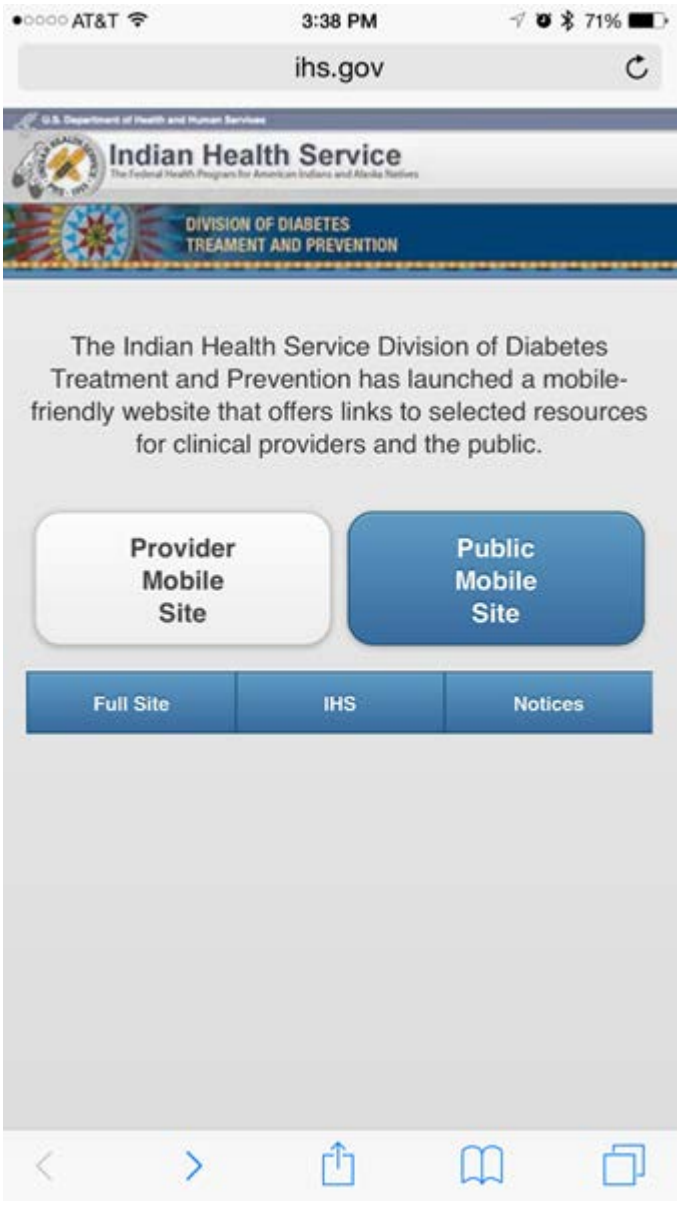


Figure E-1: **Division of Diabetes Treatment and Prevention** mobile-friendly website

4. At the bottom of the screen click the Menu button (appears as a blue square with an up arrow). The menu (Figure E-2) is displayed.

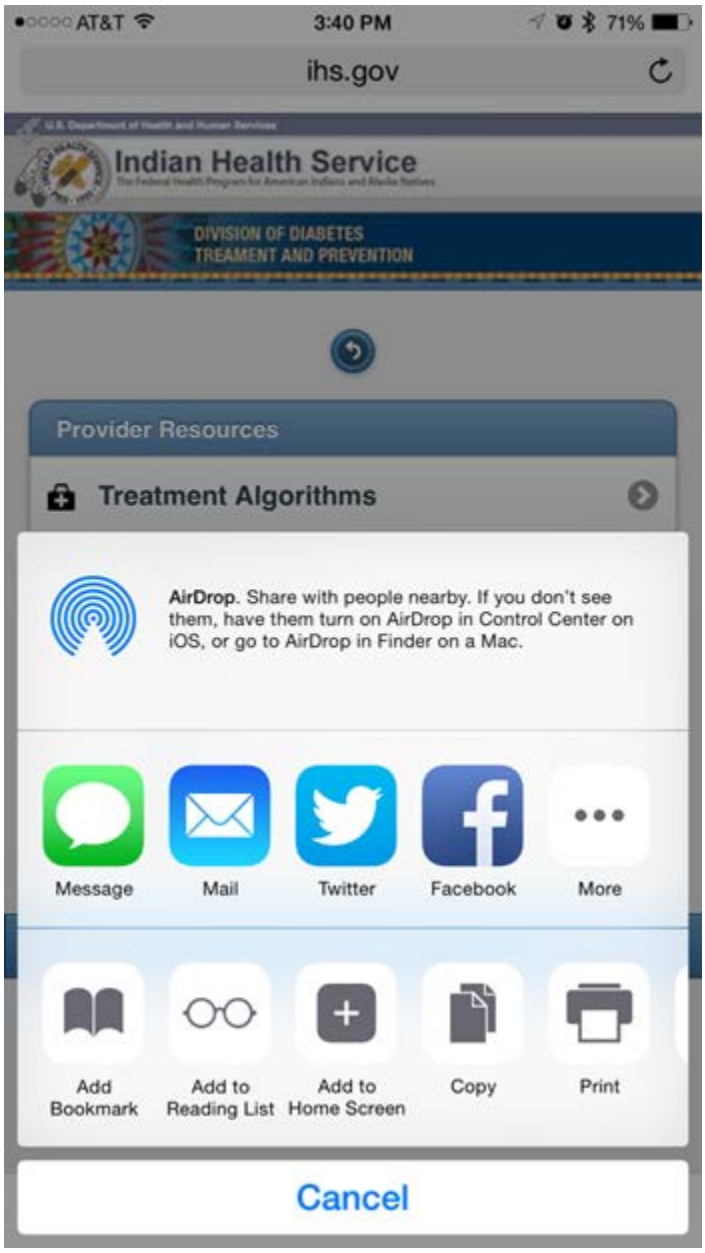


Figure E-2: Menu

5. Click **Add to Home Screen** (appears as a plus sign). The **Add to Home** page (Figure E-3) is displayed.

Figure E-3: **Add to Home** page

6. Type **Algorithms** in the input field
7. Click **Add** (located at the top right hand corner of the screen). The device's home screen redisplays (Figure E-4) with a new icon.

Figure E-4: Mobile device home screen

8. Click **Algorithms** to launch the mobile-friendly website.

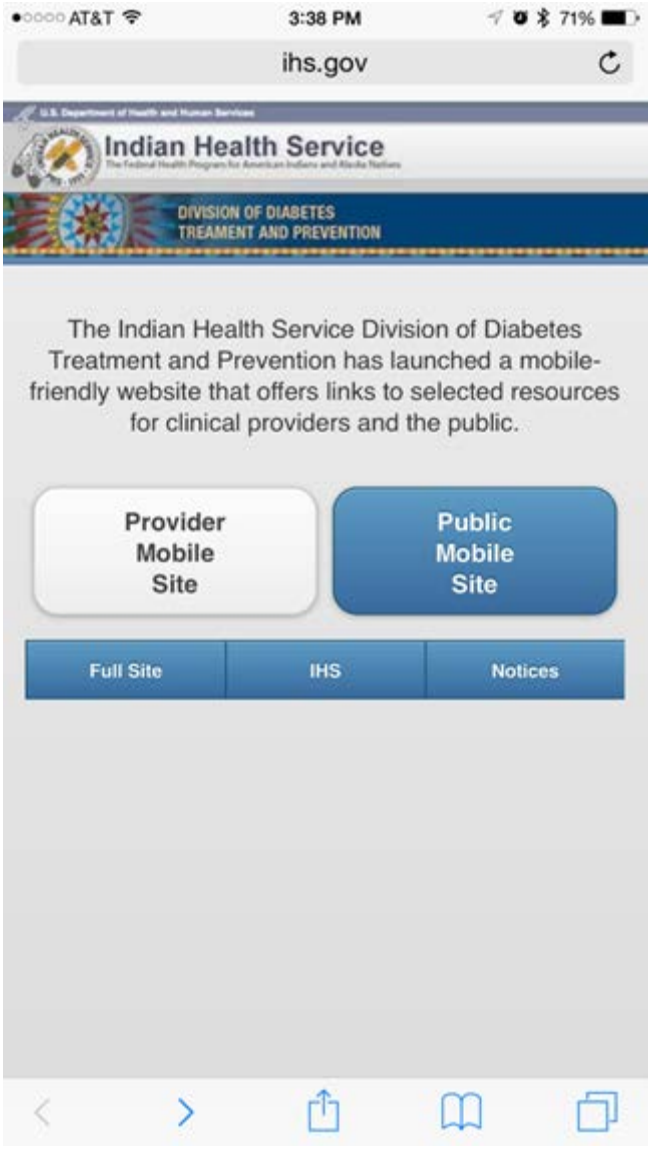


Figure E-5: Links page

9. To review the hypertension guidelines, click **Provider Mobile Site**. The Disclamer page (Figure E-6) displays.

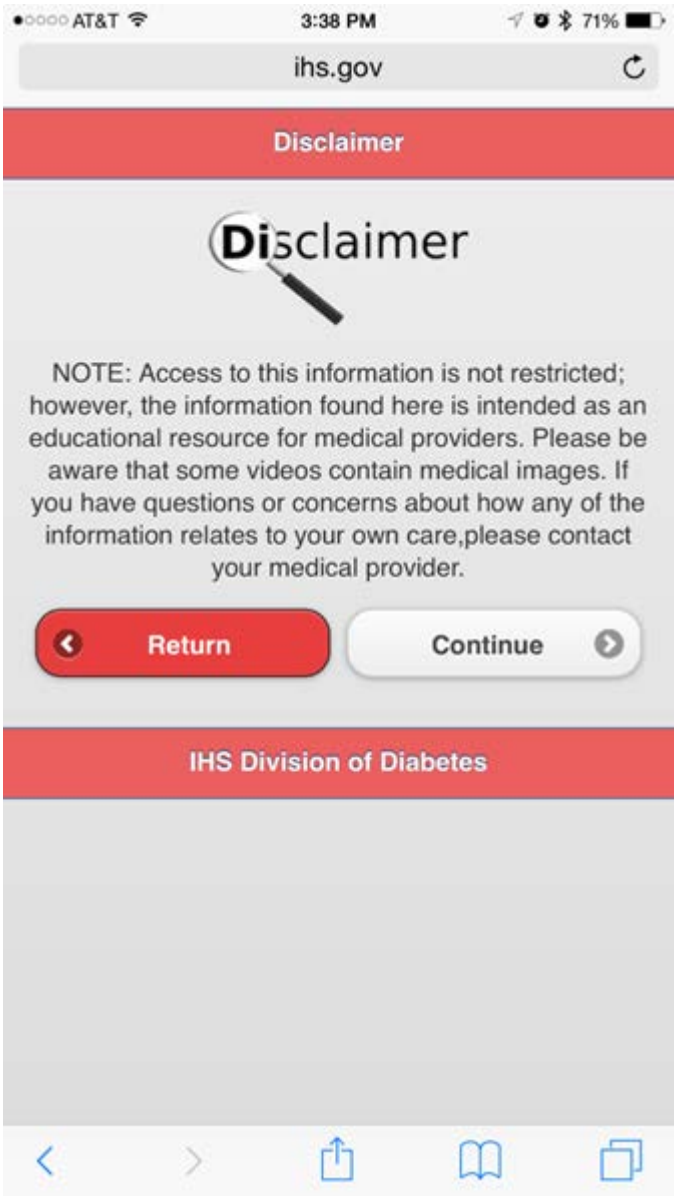


Figure E-6: Disclaimer page

10. To view the algorithm, accept the disclaimer by clicking **Continue**. The **Provider Resources** page (Figure E-7) is displayed.

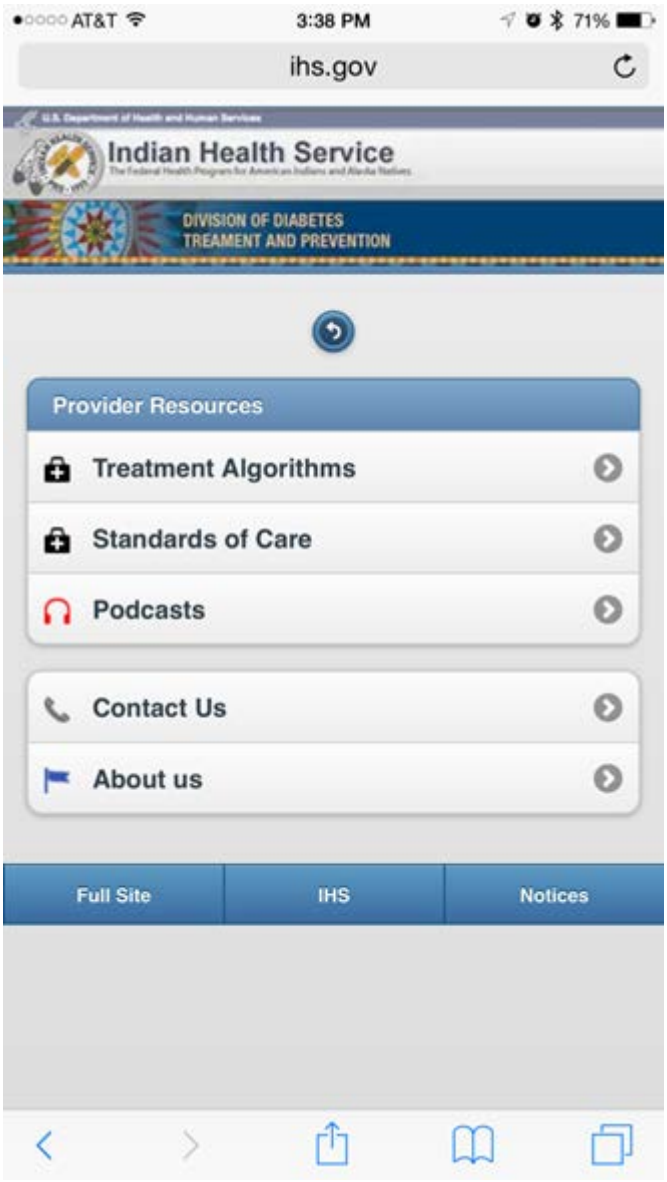


Figure E-7: **Provider Resources** page

11. Click **Treatment Algorithms**. The **Algorithm** page (Figure E-8) is displayed.

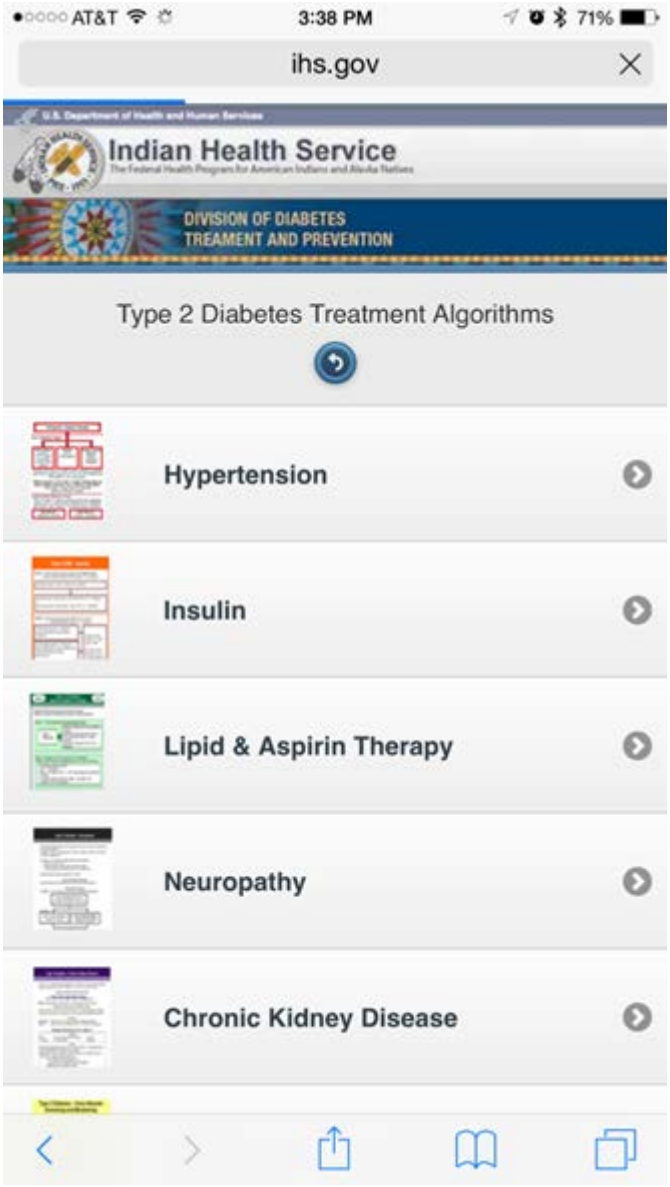


Figure E-8: Diabetes Treatment Algorithms page

12. Select **Hypertension** to display the **Hypertension Algorithm**. Do any of the following:

    - Click the Undo button (appears as an arrow curved to the left) to return to the **Provider Resources** page.
    - Click **Over** to display the back side of the **Hypertension Algorithm**.

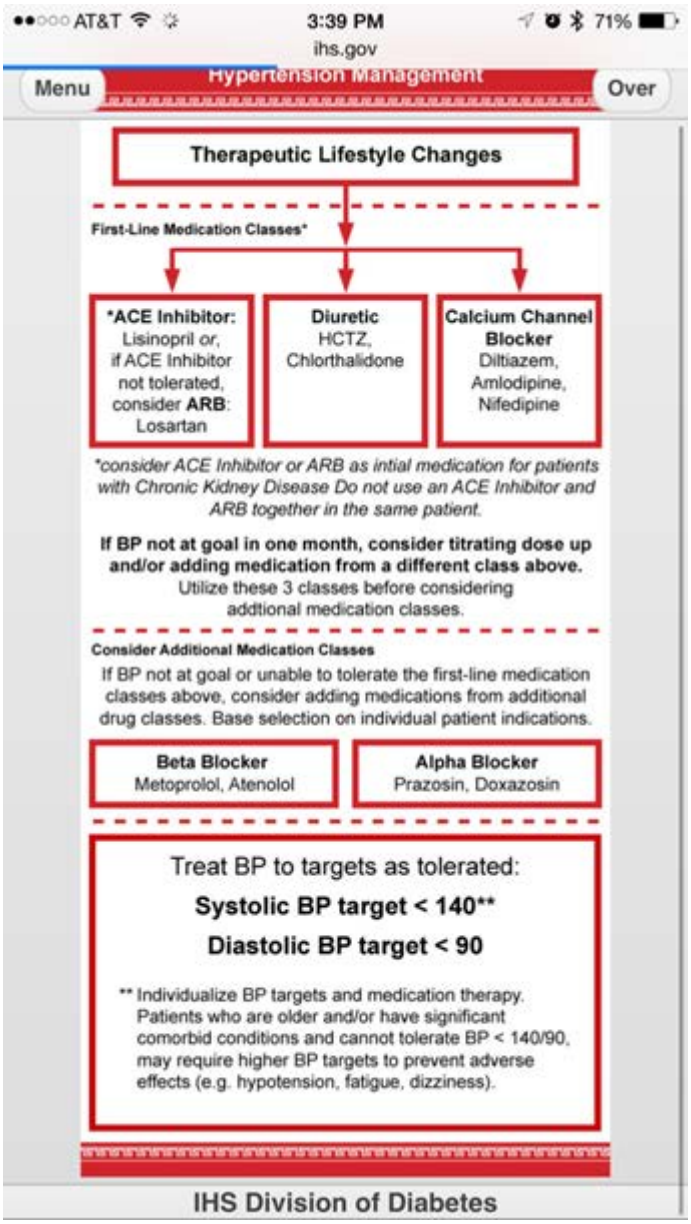


Figure E-9: **Hypertension Management** page

- Use your finger to scroll up and down through the algorithm.
- Use two fingers to zoom the algorithm.

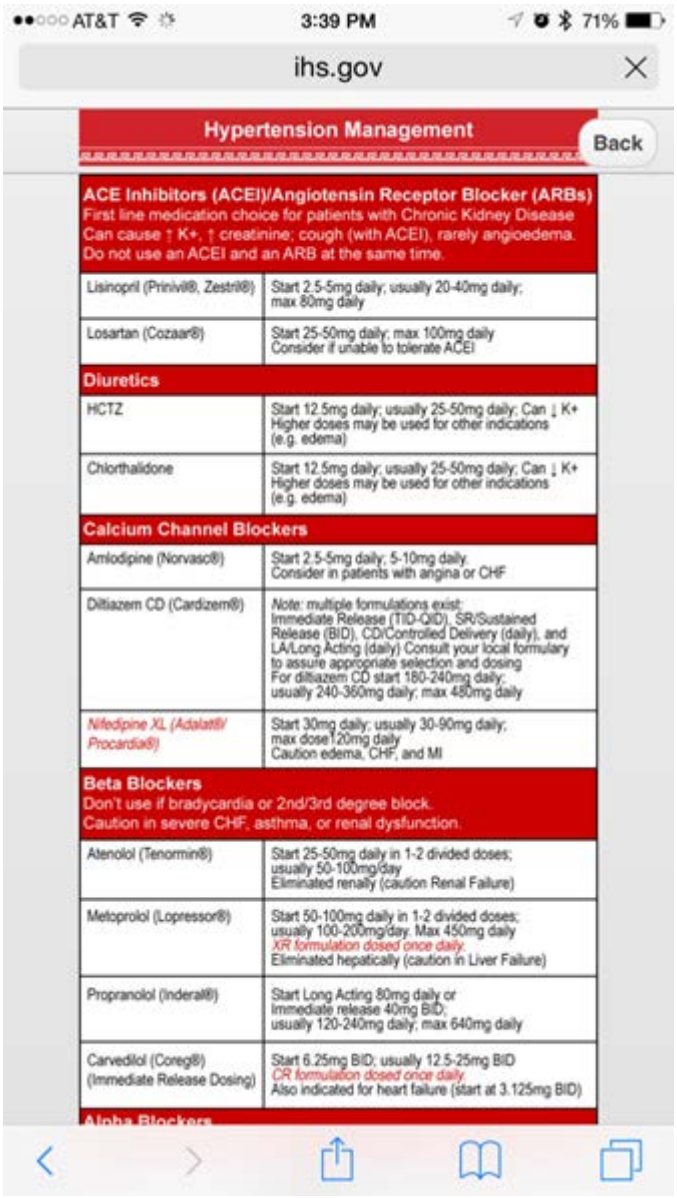


Figure E-10: **Hypertension Management** page

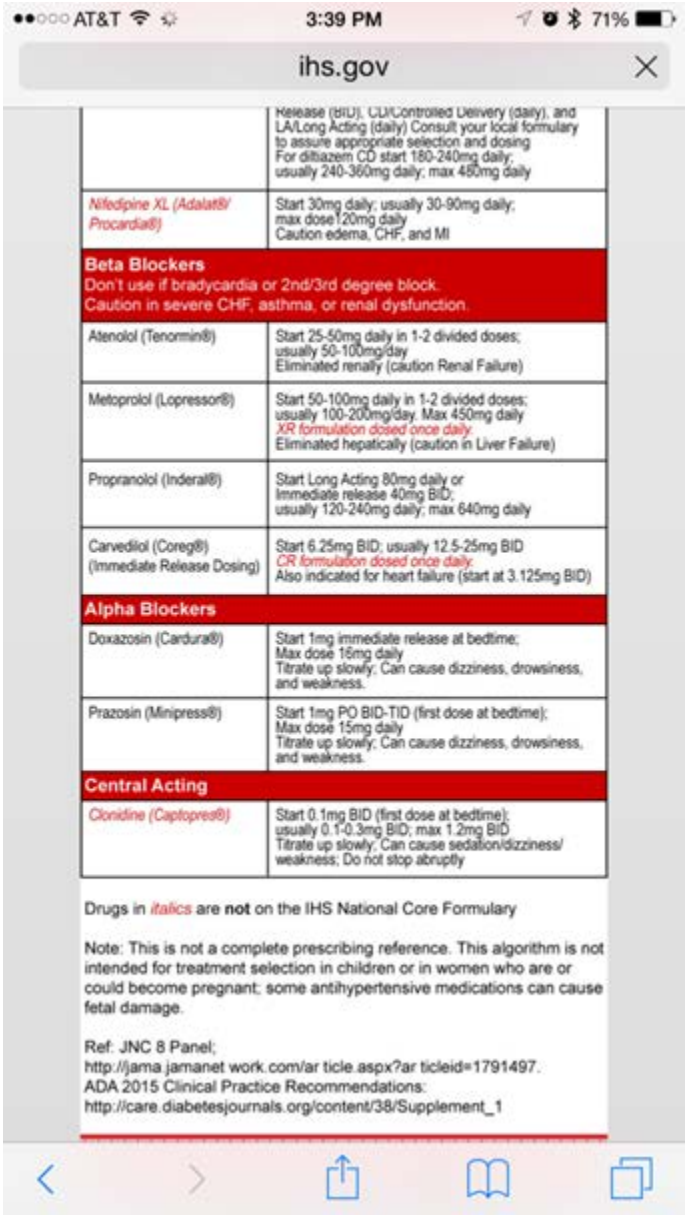


Figure E-11: **Hypertension Management** page

13. Click **Back** to return to the front of the Hypertension Algorithm:

Acronym List

Acronym	Meaning
CAC	Clinical Application Coordinator
EHR	Electronic Health Record
IEN	Internal Entry Number
IHS	Indian Health Service
IPL	Integrated Problem List
RPMS	Resource and Patient Management System
TIU	Text Integration Utility
VA	US Department of Veterans Affairs

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: http://www.ihs.gov/helpdesk/

Email: support@ihs.gov